

A Comparative Study of Modern Inference Techniques for Discrete Energy Minimization Problems

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Abstract

This is a PDF version of the results of our study, also available in a browse-able form at <http://hci.iwr.uni-heidelberg.de/opengm2/>. While the website will be updated and additional methods and models will be included, the following tables and plots show the results obtained in the study.

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1. Solvers

solvername	use data-structure	Restrictions to models	Reference
mrf-TRWS	OpenGm2, TL1, TL2 or TABLES	2nd-order, grid-N4, equal state-space	[43, 31, 39]
mrf-BPS	OpenGm2, TL1, TL2 or TABLES	2nd-order, grid-N4, equal state-space	[31, 39]
mrf-LBP	OpenGm2, TL1, TL2 or TABLES	2nd-order, grid-N4, equal state-space	[40, 39]
mrf-SWAP	OpenGm2, TL1, TL2 or TABLES	2nd-order, grid-N4, equal state-space, metric	[39]
mrf-EXPANSION	OpenGm2, TL1, TL2 or TABLES	2nd-order, grid-N4, equal state-space, semi-metric	[39]
TRWS	OpenGm2, TL1, TL2 or TABLES	2nd-order, equal state-space	[43, 31]
BPS	OpenGm2, TL1, TL2 or TABLES	2nd-order, equal state-space	[31]
SWAP	OpenGm2, TL1, TL2 or TABLES	2nd-order, equal state-space, metric	[15, 32]
EXPANSION	OpenGm2, TL1, TL2 or TABLES	2nd-order, equal state-space, semi-metric	[15, 32]
QPBO	Graph	2nd-order, binary	[37]
FastPD	Weighted Table	2nd-order, equal state-space, metric	[33]
MCBC	Graph	2nd-order, binary	[27]
MCR	Graph	higher order Potts functions	[30]
ogm-LBP	OpenGm2	none	[7]
ogm-TRBP	OpenGm2	none	[7]
ogm-ILP	IBM concern	none	[24]
ogm-LPLP	IBM concern	none	[24]
ogm-MCA	OpenGm2 and IBM concern	unary functions or functions that invariant to label permutation	[26]
ogm-DDBUNDLE	OpenGm2	none	[25]
ogm-DDSUBGRAD	OpenGm2	none	[25]
ogm-ASTAR	OpenGm2	none	[11]
FUSION	OpenGm2	none	[19]
BRAOBB	and-or-trees	none	[36]
FastPD-LF2	Weighted Table, OpenGm2	2nd-order, equal state-space, metric	[33, 6]
mrf-LBP-LF2	OpenGm2, TL1, TL2 or TABLES	2nd-order, grid-N4, equal state-space	[40, 39, 6]
TRWS-LF2	OpenGm2, TL1, TL2 or TABLES	2nd-order, equal state-space	[43, 31, 6]
ogm-LBP-LF2	OpenGm2	none	[7, 6]

1.1. Sequential Tree-Reweighted Message Passing (mrf-TRWS)

Description mrf-TRWS) is a block-coordinate method that solves a dual of the linear programming relaxation over the local polytope. The original problem has to be grid structured and is decomposed into two acyclic graphs including all horizontal and vertical pairs, respectively, that share a ordering. According to this ordering block coordinate updates are proceed. This leads to a very fast dual method. However, due to the non-smoothness of the dual, block-coordinate methods can get stucked in local fix points. Integer primal solutions are recovered from the duals and with respect to the ordering. See [39] and [31] for more details. The code we use is the one published with [39]. We stop the method after 1000 iterations, or the remaining gap is 0.

Data Structures TL1: Truncated linear differences of the labels $w_{ij} \min\{T, \|x_i - x_j\|\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TL2: Truncated squared differences of the labels $w_{ij} \min\{T, (x_i - x_j)^2\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TABLE: Arbitrary pairwise terms and arbitrary unary terms. The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW: Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- 2D grid structured model
- Equal number of labels for all variables

1.2. Sequential Loopy Belief Propagation(mrf-BPS)

Description mrf-BPS is a sequential belief propagation algorithm. Contrary to TRWS, the calculation is independent on the selection of spanning trees and it exists no connection to a linear programming relaxation. Messages are calculated in a fixed order, see [39] for more details. We stop the method after 1000 iterations.

Data Structures TL1 Truncated linear differences of the labels $w_{ij} \min\{T, \|x_i - x_j\|\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TL2 Truncated squared differences of the labels $w_{ij} \min\{T, (x_i - x_j)^2\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TABLE Arbitrary pairwise terms and arbitrary unary terms. The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- 2D grid structured model
- Equal number of labels for all variables

1.3. Loopy Belief Propagation(mrf-LBP)

Description mrf-LBP is a loopy version of Belief Propagation. For acyclic models it is optimal, for cyclic models it often gives good approximative results, see [39] for a detailed description. The code we use is the one published with [39]. Damping was set to 0.8, we stop the method after 1000 iterations.

Data Structures TL1: Truncated linear differences of the labels $w_{ij} \min\{T, \|x_i - x_j\|\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TL2: Truncated squared differences of the labels $w_{ij} \min\{T, (x_i - x_j)^2\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TABLE: Arbitrary pairwise terms and arbitrary unary terms. The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW: Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- 2D grid structured model
- Equal number of labels for all variables

1.4. α -beta-Swap(mrf-SWAP)

Description See [39] for a detailed description. The code we use is the one published with [39].

Data Structures **TL1:** Truncated linear differences of the labels $w_{ij} \min\{T, \|x_i - x_j\|\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TL2: Truncated squared differences of the labels $w_{ij} \min\{T, (x_i - x_j)^2\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TABLE: Arbitrary pairwise terms and arbitrary unary terms. The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW: Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- 2D grid structured model
- Equal number of labels for all variables
- Pairwise terms have to be a semi-metric

1.5. α -Expansion(mrf-EXPANSION)

Description See [39] for a detailed description. The code we use is the one published with [39].

Data Structures **TL1:** Truncated linear differences of the labels $w_{ij} \min\{T, \|x_i - x_j\|\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TL2: Truncated squared differences of the labels $w_{ij} \min\{T, (x_i - x_j)^2\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TABLE: Arbitrary pairwise terms and arbitrary unary terms.

The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW: Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- 2D grid structured model
- Equal number of labels for all variables
- Pairwise terms have to be a metric

1.6. Sequential Tree Re-Weighted Belief Propagation (TRWS)

Description TRWS is a block-coordinate method that solves a dual of the linear programming relaxation over the local polytope. The original problem is decomposed into a set of spanning trees, that share a ordering. According to this ordering block coordinate updates are proceed. This leads to a very fast dual method. However, due to the non-smoothness of the dual, block-coordinate methods can get stucked in local fix points. Integer primal solutions are recovered from the duals and with respect to the ordering. See [31] for more details. The code we use is the one published with [31]. We stop the method after 1000 iterations or the bound is 0.

Data Structures **TL1:** Truncated linear differences of the labels $w_{ij} \min\{T, \|x_i - x_j\|\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TL2: Truncated squared differences of the labels $w_{ij} \min\{T, (x_i - x_j)^2\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TABLE: Arbitrary pairwise terms and arbitrary unary terms. The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW: Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- Equal number of labels for all variables

1.7. Sequential Belief Propagation (BPS)

Description BPS is a sequential belief propagation algorithm. Contrary to TRWS, the calculation is independent on the selection of spanning trees and it exists no connection to a linear programming relaxation. Messages are calculated in a fixed order, see [31] for more details. We stop the method after 1000 iterations.

Data Structures TL1: Truncated linear differences of the labels $w_{ij} \min\{T, \|x_i - x_j\|\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TL2: Truncated squared differences of the labels $w_{ij} \min\{T, (x_i - x_j)^2\}$ for pairwise terms and arbitrary unary terms. The implementation for this type is highly optimized.

TABLE: Arbitrary pairwise terms and arbitrary unary terms. The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW: Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- Equal number of labels for all variables

1.8. α -beta-Swap(SWAP)

Description See [15, 32] for a detailed description. The code we use is the gco-v3.0 library by Olga Veksler and Andrew Delong.

Data Structures WEIGHTEDTABLE: Pairwise terms have to be proportional to each other, i.e. they have to be of the form $w_{ij}f(x_i, x_j)$, where f can be arbitrary but fixed. The implementation for this type is highly optimized.

TABLE: Arbitrary pairwise terms and arbitrary unary terms. The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW: Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- Equal number of labels for all variables
- Pairwise terms have to be a semi-metric

1.9. α -Expansion(EXPANSION)

Description See [15, 32] for a detailed description. The code we use is the gco-v3.0 library by Olga Veksler and Andrew Delong.

Data Structures WEIGHTEDTABLE: Pairwise terms have to be proportional to each other, i.e. they have to be of the form $w_{ij}f(x_i, x_j)$, where f can be arbitrary but fixed. The implementation for this type is highly optimized.

TABLE: Arbitrary pairwise terms and arbitrary unary terms. The implementation for this type is optimized, but requires more memory than TL1 and TL2 and is slower.

VIEW: Arbitrary pairwise terms and arbitrary unary terms. Direct access to OpenGM2 datastructures. It requires less memory than TABLE.

Limitations by Algorithm

- second order

Limitations by Implementation

- Equal number of labels for all variables
- Pairwise terms have to be a metric

1.10. Quadratic Pseudo Boolean Optimization (QPBO)

Description See [37] for a detailed description. The code we use the QPBO implementation (version 1.3) of Carsten Rother and Vladimir Kolmogorov.

Data Structures The problem is transformed into a max-flow instance.

Limitations by Algorithm

- second order
- binary label space

Limitations by Implementation

- no further limitations

1.11. FastPD (FastPD)

Description See [33] for a detailed description. The code we use is the one published with [33].

Data Structures The method uses arbitrary unary terms and weighted tables for pairwise terms of the form $w_{ij}f(x_i, x_j)$, where f can be arbitrary but fixed. The implementation for this type is highly optimized.

Limitations by Algorithm

- second order

Limitations by Implementation

- Equal number of labels for all variables
- Pairwise terms have to be proportional to each other

1.12. Loopy Belief Propagation(ogm-LBP)

Description We use the general implementation of Loopy Belief Propagation in OPENGM2 [4]. Messages were updated in a parallel fashion. Damping was set to 0.5, we stop the method after 1000 iterations or if the maximal L_∞ -distance between the old and new messages was less than 0.00001

Data Structures This algorithm directly works on the OpenGM2 data structure. Note that problem specific implementations are usually faster.

Limitations by Algorithm

- none

Limitations by Implementation

- none

1.13. Tree Reweighted Belief Propagation(ogm-TRBP)

Description We use the general implementation of Tree Reweighted Belief Propagation in OPENGM2 [4]. Messages were updated in a parallel fashion. The spanning trees are calculated in a greedy fashion. Damping was set to 0.5, we stop the method after 1000 iterations or if the maximal L_∞ -distance between the old and new messages was less than 0.00001

Data Structures This algorithm directly works on the OpenGM2 data structure. Note that problem specific implementations are usually faster.

Limitations by Algorithm

- none

Limitations by Implementation

- none

1.14. Integer Linear Programming (ogm-ILP)

Description A general representation of discrete optimization problems are integer linear programs. Additional to the constraints of linear program relaxations over the local polytope, which are common in computer vision, it contains integer constraints that enforce consistency to the original integer problem. This method is implemented in [4]. During optimization a sequence of linear programs is solved and integer constraints are enforced iteratively by applying cutting-plane or branch-and-bound techniques. The code is publicly available under the MIT license and uses the commercial optimization library CPLEX, which is free for academic use.

Data Structures The objective function is reformulated into a linear objective (i.e. a vector). Additionally, a system of linear inequalities has to be stored. During optimization further memory is allocated.

Limitations by Algorithm

- none

Limitations by Implementation

- memory restrictions - only applicable on medium sized problems

1.15. Breadth-Rotating AND/OR Branch-and-Bound (BRAOBB)

Description Otten et al. suggested a depth-first search branch-and-bound algorithm over AND/OR search spaces using mini-bucket heuristics for bounding [36]. Contrary to naive depth-first search which processes one branch of the tree after another, BRAOBB processes all branches “simultaneously” in a round-robin style. This leads to a better any-time behavior. In the Probabilistic Inference Challenge [2], BRAOBB is currently the leading method and the source code is freely available under the GPL.

Data Structures The problem is reformulated into a and-or-search-tree. This involves in the current implementation an explicit representation of the function, making the method not applicable to large scale data.

Limitations by Algorithm

- none

Limitations by Implementation

- memory restrictions for medium sized problems
- current version has a bug such that we do not get the labeling

1.16. Max Cut via Branch-and-Cut (MCBC)

Description Recently, a method was developed for solving max cut problems to optimality using a branch-and-cut framework. In addition to using the standard cycle relaxation for the cut polytope they employ special separation and lifting techniques for deriving further inequalities that tighten the relaxation. The algorithm is in particular very well suited for sparse graphs. The code is not publicly available, but the authors kindly provided us with the possibility to run our experiments.

Data Structures Problem is transformed into a max cut instance. For using unary terms an additional auxiliary node is introduced.

Limitations by Algorithm

- second order
- binary label space

Limitations by Implementation

- only applicable to small problems

1.17. Linear Programming (ogm-LP-LP)

Description A general representation of the relaxation of the discrete optimization problems over the local polytope. This method is implemented in [4] and uses CPLEX for solving the linear program. The code is publicly available under the MIT license and uses the commercial optimization library CPLEX, which is free for academic use.

Data Structures The objective function is reformulated into a linear objective (i.e. a vector). Additionally, a system of linear inequalities has to be stored.

Limitations by Algorithm

- none

Limitations by Implementation

- memory restrictions - only applicable on medium sized problems

1.18. Multicut (MCA)

Description Recently, Kappes et al. [26] suggested a transformation of generalized Potts models into a multiway cut problem and introduced a cutting-plane framework for optimization. While this method is restricted to models that contain only arbitrary first order terms and second order terms that are invariant to label permutations, it nevertheless covers many computer vision applications and provides a compact problem representation. The authors kindly provided us the original code used in [26].

Data Structures The objective function is reformulated into a linear objective (i.e. a vector), that takes the sparse structure of the objective function into account. Additionally, a system of linear inequalities has to be stored, which is increased in each iteration by violated constraints.

Limitations by Algorithm

- functions depending on more than one variable have to be invariant to label permutations
- number of labels = number of variables

Limitations by Implementation

- equal number of labels for all variables
- can deal with arbitrary terms to an order of 5 and arbitrary order Potts function that take the same value if at least one label does not coincide with a other one.

1.19. Multicut Relaxation(MCR)

Description The multicut relaxation was suggested in [30]. The authors kindly provide us binaries to run their code.

Contrary to MCA, MCR solves an LP and iterative add violated cycle and odd-wheel constraints. In the end this leads to a fractional solution which have to be mapped to an vertex of the multicut polytope.

Data Structures The objective function is reformulated into a linear objective (i.e. a vector), that takes the sparse structure of the objective function into account. Additionally, a system of linear inequalities has to be stored, which is increased in each iteration by violated constraints.

Limitations by Algorithm

- arbitrary order Potts function that take the same value if at least one label does not coincide with a other one.
- no unary terms
- number of labels = number of variables

Limitations by Implementation

- none

1.20. Dual Decomposition Bundle (ogm-BUNDLE-A,ogm-BUNDLE-H)

Description While the linear objective of the linear programming relaxation over the local polytope is often to large to handle it, a large family of methods consider a related dual problem, that is obtained by a decomposition into spanning (hyper-)trees. Dual variables corresponds to primal constraints that enforce that duplicates of variables have to take the same value. Since the dual function is non-smooth, it exist points with no unique gradient.

A common way in combinatorial optimization to tackle such problems are bundle methods. They build a local approximation of the function by a set of linear functions, which is updated as long as a serial step is made an the

working point, which builds the center of the local approximation, moves forward to the optimal solution of the relaxed problem.

We use the implementation provided in OpenGM2. We use an aggregated bundle and the trust region term was restricted to [0.1, 1000000000]. We stop after 1000 iterations or if the progress was less than 0.0000000001 and so optimization no longer numerical stable. We test both adaptive and heuristic update sequences as suggested in [25].

Data Structures The method uses the OPENGM2 data structure.

Limitations by Algorithm

- none

Limitations by Implementation

- none

1.21. Dual Decomposition Subgradient Method (ogm-SUBGRAD-A)

Description While the linear objective of the linear programming relaxation over the local polytope is often to large to handle it, a large family of methods consider a related dual problem, that is obtained by a decomposition into spanning (hyper-)trees. Dual variables corresponds to primal constraints that enforce that duplicates of variables have to take the same value. Since the dual function is non-smooth, it exist points with no unique gradient.

A simple way to solve such problems are subgradient methods. They make in each iteration a step in direction of a subgradient. While step size sequences exist that guarantee convergence, these are typically to slow. We use an adaptive method that thake the current gap between the best integer solution and lower bound into account.

We use the implementation provided in OpenGM2, for details see [25].

Data Structures The method uses the OPENGM2 data structure.

Limitations by Algorithm

- none

Limitations by Implementation

- none

1.22. AStar Search (ogm-ASTAR)

Description AStar [11] is a best-first-search method that uses an admissible tree-based heuristic. We use the implementation provided in OPENGM2. Practically, the method is only applicable on small scaled problems up to a few dozen variables.

Data Structures The method uses the OPENGM2 data structure.

Limitations by Algorithm

- none

Limitations by Implementation

- none

2. Models

2.1. Stereo matching

Abbreviation: mrf-stereo
Number of instances: 3
Number of variables: a variable per pixel in the left image
Number of labels: 16, 20, or 60
Number of factors: a factor per pair of neighboring pixels in the left image (4-connectivity is assumed)
Order: 2
Function type: Potts, truncated linear, or truncated quadratic

Description In stereo matching a pair of left and right images is given as input and the goal is to find a disparity map (e.g., see Fig. 1) that specifies the value of the horizontal displacement for each pixel of the left image (in all our tests the left and right images are assumed to have been previously rectified, which means that only an horizontal displacement exists between corresponding pixels in the two input images).

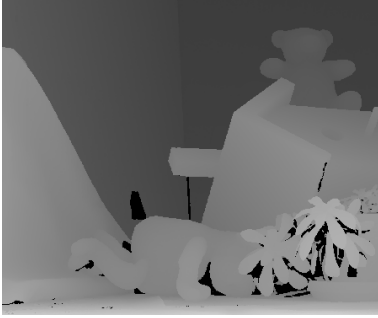


Figure 1: A ground truth disparity map for the ‘Teddy’ stereo pair from the Middlebury dataset.

Objective / Learning The above task can be formulated as an MRF optimization problem, where MRF nodes correspond to pixels of the left image and labels correspond to disparities. For the unary and pairwise potentials, we used the same settings as in [39]. More specifically, for the unary potentials the cost by Birchfield and Tomasi [12] has been used, which measures the absolute color differences between corresponding pixels and is also robust to image sampling. For the pairwise potentials we used the following smoothing costs $\varphi_{pq}(x_p, x_q)$:

- **‘Tsukuba’:** $\varphi_{pq}(x_p, x_q) = w_{pq} \min(|x_p - x_q|, 2)$, where w_{pq} equals 2 if $\nabla_{pq} \leq 8$ and equals 1 otherwise.
- **‘Venus’:** $\varphi_{pq}(x_p, x_q) = \min(|x_p - x_q|^2, 7)$.

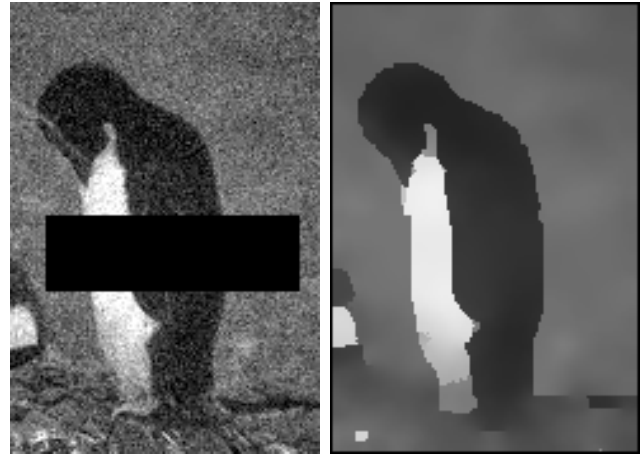
- **‘Teddy’:** $\varphi_{pq}(x_p, x_q) = w_{pq} \min(|x_p - x_q|, 1)$, where w_{pq} equals 3 if $\nabla_{pq} \leq 10$ and equals 1 otherwise.

In the above, ∇_{pq} denotes the intensity gradient in the left image. No learning has been applied in this case.

2.2. Image Inpainting

Abbreviation: mrf-inpainting
Number of instances: 2
Number of variables: ~ 50000
Number of labels: 256
Number of factors: ~ 150000
Order: 2
Function type: (Truncated) Quadratic Smoothness

Description Image inpainting is a restoration task where given a noisy input image with missing pixels in certain regions, the goal is to denoise the image and fill in missing pixel values. Figure. 2 shows an example from Felzenszwalb and Huttenlocher [18]. Each pixel is a variable and each intensity value (0-255) is a label. Pixels are connected in a 4-connected grid.



(a) Input Image.

(b) Result.

Figure 2: Image Inpainting

Objective / Learning The objective function consists of unary and pairwise:

$$J(x) = \sum_{v \in V} \varphi_i(x_i) + w_p \sum_{(i,j) \in E} \varphi_{ij}(x_i, x_j). \quad (1)$$

The unary cost for each pixel is the squared difference between the label and the observed intensity, except in the

obscured portions, where the cost is 0 for all intensities:

$$\varphi_i(x_i) = \begin{cases} (I(i) - x_i)^2 & \text{if } I(i) \text{ is known.} \\ 0 & \text{else,} \end{cases} \quad (2)$$

where $I(i)$ is the intensity of pixel i . The pairwise energy is a truncated quadratic smoothness term:

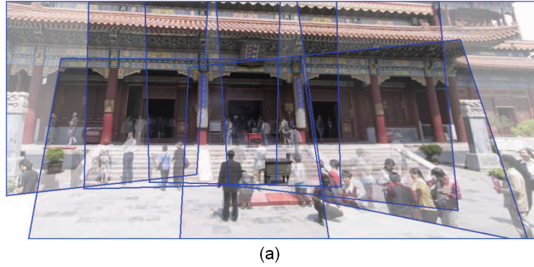
$$\varphi_{ij}(x_i, x_j) = \min((x_i - x_j)^2, E_{max}) \quad (3)$$

where $E_{max} = 200$ and $w_p = 25$ are set by hand.

2.3. Photomontage

Abbreviation: mrf-photomontage
Number of instances: 2
Number of variables: ~ 500000
Number of labels: 5,7
Number of factors: ~ 1200000
Order: 2
Function type: Potts

Description Photomontage is a combining process of multiple photographs to form a seamless composite image [3]. Here, we perform photomontage on two benchmarks: panorama stitching and group photo merging [39] (see Figs. 3). Given n source images S_1, \dots, S_n , a label x_p



(a)



(b)

Figure 3: Photomontage benchmarks. (a) Panorama stitching. (b) Group photo merging.

for each pixel p is defined such that $x_p = n$ if the p th pixel color of an output image comes from that of n th input image. The photomontage process minimizes visually noticeable seams in the composite image.

Objective / Learning The energy function $J(x)$ consists of the data term $\varphi_p(x_p)$ over all pixels p and the smoothness term $\varphi_{pq}(x_p, x_q)$ over all pairs of neighboring pixels p and q .

$$J(x) = \sum_p \varphi_p(x_p) + \sum_{p,q} \varphi_{pq}(x_p, x_q) \quad (4)$$

The data term $\varphi_p(x_p)$ is defined such that $\varphi_p(x_p) = 0$ if pixel p is underneath the user-defined stroke and x_p equals the user-indicated image index, $\varphi_p(x_p) = 0$ if pixel p is not underneath the user-defined stroke and p is in the field of view of image S_{x_p} , and $\varphi_p(x_p) = \infty$ otherwise. The smoothness term is defined as

$$\varphi_{pq}(x_p, x_q) = \frac{|S_{x_p}(p) - S_{x_q}(p)| + |S_{x_p}(q) - S_{x_q}(q)|}{|\nabla_{pq} S_{x_p}| + |\nabla_{pq} S_{x_q}|}, \quad (5)$$

where $\nabla_{pq} S$ is the gradient between neighboring pixels p and q in image S . This context-dependent smoothness term encourages seams along strong edges [39].

2.4. Color Segmentation

Abbreviation: color-seg
Number of instances: 3
Number of variables: 21000, 424720
Number of labels: 3, 4
Number of factors:
Order: 2
Function type: potts

Description The `color-seg` instances describe the segmentation of 2D color images. A discrete random variable with k labels is introduced for each pixel and their configuration is interpreted as the segmentation of the image into k disjoint sets. The quality of the segmentation is characterized by an energy function that trades off boundary against region terms given some sparse external labels of the desired segments.

Objective / Learning The energy to be minimized takes the following form:

$$E(\mathbf{x}) = \sum_{i \in \mathcal{Y}} \phi_i(x_i) + \sum_{\{i,j\} \in \mathcal{N}} \phi_{ij}(x_i, x_j) \quad (6)$$

The unary region terms $\phi_i(x_i)$ are defined in term of the RGB distributions $\mathcal{H}_a, a = 1, \dots, l_k$ for the k segments as

$$\phi_i(x_i) = -\log p(x_i = a | \mathcal{H}_a) \quad (7)$$

The distributions are estimated from the externally provided labels.

The pairwise boundary terms $\phi_{ij}(x_i, x_j)$ operate on a 8-pixel neighborhood \mathcal{N} . They take the form of a Generalized Potts model:

$$\phi_{ij}(x_i, x_j) = \begin{cases} \lambda_1 + \lambda_2 \exp\left(\frac{-g^2(i, j)}{2\sigma^2}\right) \frac{1}{\text{dist}(i, j)} & \text{if } x_i \neq x_j \\ 0 & \text{if } x_i = x_j \end{cases} \quad (8)$$

The terms $g(i, j)$ and $\text{dist}(i, j)$ represent the distance in the RGB values and the spatial distance respectively. The following parameter settings are used: $\lambda_1 = 5$, $\lambda_2 = 100$, and $\sigma = 5$.

2.5. Multiclass color-based segmentation

Abbreviation: color-seg-n4/color-seg-n8
Number of instances: 9
Number of variables: $\sim 10^5$ (360 × 240)
Number of labels: 4–12
Number of factors: $\sim 2.5 \times 10^5$ (n4), $\sim 4.3 \times 10^4$ (n8)
Order: 2
Function type: Potts

Description Segmentation of various images into 4–12 classes. The unary potentials are computed as the ℓ_1 -distance to prototypical class color vectors that were found using hierarchical clustering. The `snail` example uses statistics over user-selected regions and a weighted distance in HSV space. The synthetic `fourcolors` example contains a mix of round structures to test isotropy as well as straight lines in various angles with sharp junctions.

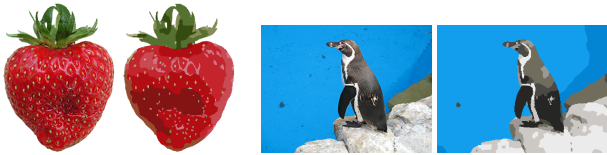


Figure 4: Multi-class color-based segmentation: Input (left), exemplary segmentation into classes corresponding to 12 different colors (right). The colors for the individual classes were pre-selected using a hierarchical clustering method.

Objective / Learning The objective function is

$$J(x) = \sum_{v \in V} \varphi_i(x_i) + \sum_{ij \in E} \varphi_{ij}(x_i, x_j). \quad (9)$$

which discretizes the continuous functional

$$J(u) = \int_D \|c_{u(x)} - I(x)\| dx + \lambda \mathcal{L}(u), \quad (10)$$

where $u : \Omega \rightarrow \{0, \dots, n\}$ is the label function and $\mathcal{L}(u)$ is the total boundary length. The employed norm $\|\cdot\|$ varies between instances (see above). The regularization weights λ were set manually.

The Potts regularizer has been implemented using pairwise potentials with 4-neighborhoods (-n4) and 8-neighborhoods (-n8) with the pairwise factor weight chosen optimally according to [13].

2.6. Three-class triple junction inpainting

Abbreviation: inpainting-n4/inpainting-n8
Number of instances: 2
Number of variables: $\sim 1.4 \times 10^4$ (120 × 120)
Number of labels: 3+1 for boundary
Number of factors: $\sim 4 \times 10^4$ (n4), $\sim 7 \times 10^4$ (n8)
Order: 2
Function type: Potts

Description Three-class inpainting in circular domain, modified from [16]. The data term is given only at the boundary, i.e., inside the ring. The problem is extended to a rectangular domain by introducing a fourth label for the outside pixels to make it easily accessible for solvers that rely on a rectangular grid. The analytical solution is unique and has a single triple junction at the center where the three interfaces meet at 120 degree angle.

The problem set also contains the “inverted” problem where the signs of the unary potentials haven been flipped. This model is difficult for solvers that rely on convex relaxation, since it permits (in the continuous formulation) arbitrarily many globally optimal solutions. For every solution an equally good but different solution can be obtained by permuting the labels.



Figure 5: Three-class inpainting problem. Left to right: input with inpainting region marked in black, exemplary result, input corresponding to the “inverse” variant, exemplary result. The “inverse” variant has many equally good minimizers.

Objective / Learning The objective function is

$$J(x) = \sum_{v \in V} \varphi_i(x_i) + \sum_{ij \in E} \varphi_{ij}(x_i, x_j). \quad (11)$$

which discretizes the continuous functional

$$J(u) = \int_D \|c_{u(x)} - I(x)\|_2 dx + \lambda \mathcal{L}(u), \quad (12)$$

where $u : \Omega \rightarrow \{0, 1, 2\}$ is the label function, $\mathcal{L}(u)$ is the total boundary length, and $D \subseteq \Omega$ is the inpainting domain, and we additionally enforce $u(x) = I(x)$ outside on $\Omega \setminus D$. The regularization weight λ was set manually.

The Potts regularizer has been implemented using pairwise potentials with 4-neighborhoods (-n4) and 8-neighborhoods (-n8) with the pairwise factor weight chosen optimally according to [13].

2.7. Object-based Segmentation

<i>Abbreviation:</i>	object-seg
<i>Number of instances:</i>	5
<i>Number of variables:</i>	68160
<i>Number of labels:</i>	4-8
<i>Number of factors:</i>	
<i>Order:</i>	2
<i>Function type:</i>	potts

Description The `object-seg` model enables the simultaneous detection, recognition, and segmentation of object classes in photographs. Every pixel of a photograph is associated with a discrete random variable that takes labels like `grass`, `tree`, or `sky`. The distribution over these variables is modeled as a Conditional Random Field (CRF) depending on image features. The final segmentation is obtained from the MAP configuration of the CRF.

Objective / Learning The problem is formulated in the energy domain modeling the distribution of the class labels \mathbf{c} given an image \mathbf{x} :

$$\begin{aligned} \log P(\mathbf{c}|\mathbf{x}, \theta) = & \\ & \sum_i \psi_i(c_i, \mathbf{x}; \theta_\psi) + \pi(c_i, \mathbf{x}_i; \theta_\pi) + \lambda(c_i, i; \theta_\lambda) \\ & + \sum_{(i,j) \in \mathcal{E}} \phi(c_i, c_j, \mathbf{g}_{ij}(\mathbf{x}); \theta_\phi) - \log Z(\theta, \mathbf{x}) \end{aligned} \quad (13)$$

The single-site potentials ψ_i , π , and λ model shape-texture, color, and location respectively. The pairwise potentials ϕ are contrast sensitive Potts models. Z is the partition function. The parameters θ are learned using a boosting procedure with textons and shape filter features. We refer the reader to [38] for more details.

2.8. Brain Segmentation

<i>Abbreviation:</i>	brain
<i>Number of instances:</i>	5
<i>Number of variables:</i>	785540 – 7109137
<i>Number of labels:</i>	5
<i>Number of factors:</i>	3094923 – 28325233
<i>Order:</i>	2
<i>Function type:</i>	Potts

Description The brain segmentation dataset includes 5 instances of simulated 3d MRI-brain data [1]. This should be segmented into five classes corresponding to modes in the intensity histogram. We choose a T1 pulse sequence with 3% noise relative to the brightest tissue and 20% intensity non-uniformity. The simulated slice thickness was set to 1,3,5,7, and 9mm, producing a $181 \times 217 \times 181$, 60, 36, 26, 20 voxel volume, respectively, Fig. 6 shows the original simulated noisy volume (left) and the segmentation (right).



Figure 6: Original simulated noisy volume (left) and the segmentation (right).

Objective / Learning The objective function includes unary data terms and second order Potts terms that approximate a boundary regularisation [14]. The local data terms are given by the L1-distance of the voxel intensity to the prototypical class intensities (4, 45, 105, 150, and 204), i.e.

$$\varphi_i(x_i) = \|I(i) - C_{x_i}\|_1 \quad \forall i \in V \quad (14)$$

Furthermore, we use a pairwise Potts term to penalize the boundary length using the 6-neighbourhood in the 3D-grid. The penalty strength β was set to 10 for the boundary term

$$\varphi_{ij}(x_i, x_j) = \begin{cases} 0 & \text{if } x_i = x_j \\ \beta & \text{else} \end{cases} \quad \forall ij \in E. \quad (15)$$

Here $E \subset V \times V$ defines the neighborhood relation on the 3D-grid on the variables.

Overall this leads to the following objective function

$$J(x) = \sum_{v \in V} \varphi_v(x_v) + \sum_{ij \in E} \varphi_{ij}(x_i, x_j). \quad (16)$$

The parameters of the brain segmentation dataset are fully hand tuned and no learning is applied.

2.9. DTF-Chinese

Abbreviation:	dtf-chinesechar
Number of instances:	100
Number of variables:	4992–17856 (median 8920)
Number of labels:	2
Number of factors:	16–64 times the number of variables
Order:	2
Function type:	explicit

Description The problem addressed is that of inpainting occluded regions of an image of a handwritten Chinese character. The problem is an artificial task and was constructed so that higher-order structure between binary variables needs to be modelled in order to successfully solve the task.

The character originate from the KAIST Hanja2 database and were originally extracted from student admission forms. We selected random disjoint subsets of 300 training and 100 test characters; almost all characters are disjoint between the sets in that they appear in only one of the sets.

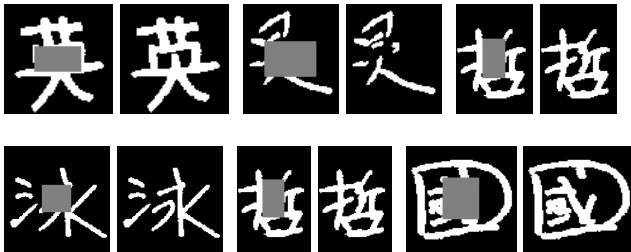


Figure 7: Input and ground truth output for a number of test instances. The input image consists of only three possible input intensities: $\{0, 127, 255\}$.

Objective / Learning We use a set of *factor types* $T = T_1 \cup T_2$ that instantiate a replicated set of interactions φ_t around each variable. Each interaction is conditioned on the image content I and the image position i . This yields the following energy.

$$J(x) = \sum_{t \in T_1} \sum_{i \in V} \varphi_t(x_i; I, i) + \sum_{t \in T_2} \sum_{i \in V} \varphi_t(x_i, x_{j(t)}; I, i), \quad (17)$$

As set T we use an 8-neighborhood at one and two pixels distance away, as well as a set of 27 neighbors at relative offsets $(-9, 0)$, $(-9, 3)$, $(-9, 6)$, $(-9, 9)$, $(-6, 0)$, \dots , $(9, 9)$.

For each factor type the energies $\varphi_t(\cdot; I, i)$ are represented explicitly using learned decision trees. All parameters in the model are learned from a fully-observed training set using the maximum pseudolikelihood estimator from 300 training images. Because the energies depend on the local image content, the resulting field is heterogeneous.

The learned energies are interesting in that short range interactions tend to be submodular, whereas longer range interactions tend to be supermodular. The mix of these two types of interactions at different ranges yields challenging energy minimization problems.

2.10. Scene-Decomposition

Abbreviation:	scene-decomposition
Number of instances:	715
Number of variables:	100-200
Number of labels:	8
Number of factors:	500-1000
Order:	2
Function type:	explicit

Description The task is to segment a natural image into eight semantic categories. The original source of the data set is [22], and the data set was obtained from the Stanford DAGS group website.¹

The standard evaluation procedure on this data set is five-fold cross validation and I trained five factor graph models on superpixel graphs. The instances included are the respective test sets, totalling 715 instances. The superpixelizations have been created using superpixels1.1 [42].

Because the original data set includes a few unlabeled pixels, a simple preprocessing step is performed to assign each unlabeled pixel the nearest spatial label in the ground truth. In addition, because we use superpixels, we assign to the superpixel the ground truth label that appears most frequently in all the pixels covered by the superpixel segment.

Objective / Learning Each superpixel factor graph is composed of a set of superpixels V and has unary and pairwise factors composing an overall energy as follows.

$$J(x; w, I) = \sum_{i \in V} \langle w_u(x_i), F_u(I, i) \rangle + \sum_{(i, j) \in \mathcal{E}} \langle w_p(x_i, x_j), F_p(I, i, j) \rangle,$$

where $\mathcal{E} \subset V \times V$ is the set of adjacent superpixels and w and F are parameters and feature maps, respectively. All terms in the energy depend on the observed image and therefore the above energy is a conditional random field.

The unary feature map F_u is composed of the following image features per superpixel: SIFT bag-of-words histograms (512 dimensions), gradient histogram (24 dimensions), k-means quantized color histograms (195 dimensions), and histograms of spatial location (42 dimensions).

¹<http://dags.stanford.edu/projects/scenedataset.html>

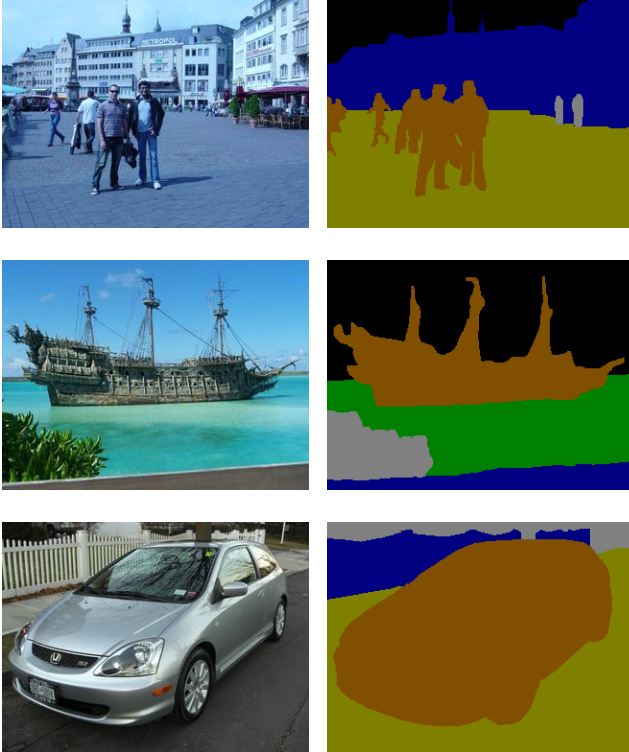


Figure 8: Three images with ground truth annotation. The orange label is the foreground object class.

Together these are 773 feature dimensions for each superpixel and there is one weight vector w_u for each class label $x_i \in \{1, 2, \dots, 8\}$, hence there are $773 \cdot 8 = 6184$ parameters in this factor type.

Each pair of superpixels that is adjacent in the image plane has a data-dependent pairwise factor, again with linear energy parametrization. The features $F_p(I, i, j)$ encode a number of image-dependent pairwise properties in a low-dimensional vector: mean gradient magnitude along the edge of the two superpixels, symmetrized KL-divergence between two multivariate Normals describing the color distribution in both superpixels, and a quantized angle between the line connecting the centers of the two superpixel and the horizon. The feature vector has a dimension of 40, for a total of $8 \cdot 8 \cdot 40 = 2560$ pairwise parameters.

The total number of model parameters is 8744. For each of the five models from each cross validation fold we estimate the parameters using regularized maximum pseudo-likelihood, using L-BFGS numerical minimization for 750 iterations, taking less than one hour each for training. Because the energy is linear in the parameters this is a convex optimization problem. We place priors on the unary factors (multivariate Normal, $\sigma = 100$), and the pairwise factors (multivariate Normal, $\sigma = 0.01$). The MAP predictions of these models achieve 77.41% accuracy (MPM predic-

tions 77.35%), whereas the best reported literature result is 79.42% in [34]. A model without pairwise factors but identical unary factors achieves 75.2% accuracy and this indicates that almost all the predictive performance comes from having good superpixel image features.

The energy minimization instances are obtained by evaluating the effective energies for each factor instance, thus the original features and learned weights are not included with the instances.

2.11. Geometric Labelling 3

<i>Abbreviation:</i>	geo-surf-3
<i>Number of instances:</i>	300
<i>Number of variables:</i>	29-1133
<i>Number of labels:</i>	3
<i>Number of factors:</i>	64-3987
<i>Order:</i>	2 and 3
<i>Function type:</i>	(Shared) Dense Factor Tables

Description This dataset contains 300 instances of a geometric labelling problem, proposed by Hoiem et al. [23] and formulated as a higher-order MRF by Gallagher et al. [21]. The goal is to label each superpixel in the image as one of three classes – ground, vertical or sky. The graph-structure is an adjacency graph over superpixels.

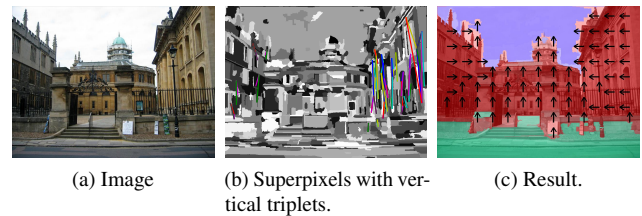


Figure 9: Geometric Labelling.

Objective / Learning The objective function consists of unary, pairwise and triplet terms.

$$J(x) = \sum_{v \in V} \varphi_v(x_v) + w_p \sum_{(i,j) \in E} \varphi_{ij}(x_i, x_j) \quad (18)$$

$$+ w_t \sum_{(i,j,k) \in T} \varphi_{ijk}(x_i, x_j, x_k) \quad (19)$$

The unary term for each state is the negative log of the estimated probability of that superpixel belonging to that

class, as output by the logistic regression Adaboost classifiers trained by Hoeim et al. [23]:

$$\varphi_i(x_i) = -\log \tilde{P}(x_i) \quad (20)$$

The edge and triplet energies are negative log co-occurrence counts from the training dataset.

$$\varphi_{ij}(x_i, x_j) = -\log \tilde{P}(x_i, x_j) \quad (21)$$

$$\varphi_{ijk}(x_i, x_j, x_k) = -\log \tilde{P}(x_i, x_j, x_k) \quad (22)$$

The triplets terms consist of nearly vertical columns of superpixels and their potentials force these triplets to avoid bad labellings like – ground, sky, ground for three nearly vertical superpixels. The relative weights of the three terms were set by hand to be $w_p = w_t = 0.05$.

2.12. Geometric Labelling 7

<i>Abbreviation:</i>	geo-surf-7
<i>Number of instances:</i>	300
<i>Number of variables:</i>	29-1133
<i>Number of labels:</i>	7
<i>Number of factors:</i>	64-3987
<i>Order:</i>	2 and 3
<i>Function type:</i>	(Shared) Dense Factor Tables

Description This dataset is the same as geo-surf-3, except that each variable can now take 7 states – ground, sky, vertical-left, vertical-right, vertical-center, vertical-porous, vertical-solid.

Objective / Learning The objective function still consists of unary, pairwise and triplet terms.

$$J(x) = \sum_{v \in V} \varphi_i(x_i) + w_p \sum_{(i,j) \in E} \varphi_{ij}(x_i, x_j) \quad (23)$$

$$+ w_t \sum_{(i,j,k) \in T} \varphi_{ijk}(x_i, x_j, x_k) \quad (24)$$

The unary terms are again based on outputs of classifiers trained for each of the 7 classes. Edge and triplet terms are also analogous to geo-surf-3.

2.13. Correlation Clustering

<i>Abbreviation:</i>	correlation-clustering
<i>Number of instances:</i>	715
<i>Number of variables:</i>	~300

<i>Number of labels:</i>	~300
<i>Number of factors:</i>	~300
<i>Order:</i>	~300
<i>Function type:</i>	Potts

Description Correlation Clustering (CC) is a graph-partitioning algorithm that infers the edge labels of the graph by simultaneously maximizing intra-cluster similarity and inter-cluster dissimilarity by optimization of a global objective function. In order to capture long-range dependencies of distant nodes in a global context, [29] proposes higher-order CC to incorporate higher-order relations over hyper-graph, and the CC was shown to be effective in image segmentation [29]. For this image segmentation, [29] defined the CC problem over a superpixel-based hyper-graph in which an edge referred to as hyperedge can connect to two or more nodes (superpixels). For example, as shown in Figure 10, one can introduce binary labels for each adjacent vertices forming a triplet such that $x_{ijk} = 1$ if all vertices in $\{i, j, k\}$ are in the same cluster; otherwise, $x_{ijk} = 0$. Define a hyper-graph $\mathcal{HG} = (\mathcal{V}, \mathcal{E})$ where \mathcal{V} is the set of all nodes (superpixels) and \mathcal{E} is the set of all hyperedges (subsets of \mathcal{V}) such that $\bigcup_{e \in \mathcal{E}} e = \mathcal{V}$. Here, a hyperedge e has at least two nodes, i.e. $|e| \geq 2$. Therefore, the hyperedge set \mathcal{E} can be divided into two disjoint subsets: pairwise edge set $\mathcal{E}_p = \{e \in \mathcal{E} \mid |e| = 2\}$ and higher-order edge set $\mathcal{E}_h = \{e \in \mathcal{E} \mid |e| > 2\}$ such that $\mathcal{E}_p \cup \mathcal{E}_h = \mathcal{E}$.

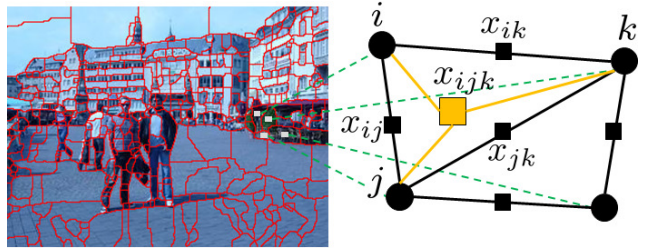


Figure 10: Illustration of a part of the triplet graph built on superpixels.

In this paper, we perform CC for image segmentation on the Stanford background dataset [22] (SBD). The SBD consists of 715 outdoor images with corresponding pixel-wise annotations such that each pixel is labeled with either one of 7 background classes or a generic foreground class. From the given pixel-wise ground-truth annotations, we obtain a ground-truth segmentation for each image. From a given image, a hyper-graph is constructed as follows. First, unsupervised multiple partitionings are obtained by merging not pixels but superpixels with different image quantizations using the ultrametric contour maps [10]. Then, the obtained regions are used to define hyperedges of the hyper-graph.

Objective / Learning The CC can be formulated as a linear objective function which allows for approximate polynomial-time inference by linear programming. An image segmentation is to infer the hyperedge label, \hat{x} , over the hyper-graph $\mathcal{H}\mathcal{G}$ by minimizing J such that

$$\hat{x} = \operatorname{argmin}_{x \in X(\mathcal{H}\mathcal{G})} J(x) \quad (25)$$

$$= \operatorname{argmin}_{x \in X(\mathcal{H}\mathcal{G})} \sum_{e \in \mathcal{E}} \varphi_e(x_e) \quad (26)$$

$$= \operatorname{argmin}_{x \in X(\mathcal{H}\mathcal{G})} \sum_{e \in \mathcal{E}} \langle w, \phi_e \rangle x_e \quad (27)$$

$$= \operatorname{argmin}_{x \in X(\mathcal{H}\mathcal{G})} \sum_{e_p \in \mathcal{E}_p} \langle w_p, \phi_{e_p} \rangle x_{e_p} + \sum_{e_h \in \mathcal{E}_h} \langle w_h, \phi_{e_h} \rangle x_{e_h} \quad (28)$$

where $X(\mathcal{H}\mathcal{G})$ is the set of $\{0, 1\}^{\mathcal{E}}$ that corresponds to a *valid segmentation* and the homogeneity measure among nodes in e , φ_e , is the inner product of the weight vector $w = [w_p; w_h]$ and the feature vector ϕ_e and takes values of both signs such that a large negative value indicates strong homogeneity while a large positive value indicates high degree of non-homogeneity. Here, we construct a 771-dimensional feature vector $\phi_e = [\phi_{e_p}; \phi_{e_h}]$ by concatenating several visual cues with different quantization levels and thresholds and estimate w by structured support vector machine [29]. The relaxed polytope to approximately solve (25) by linear programming is defined by the following three inequalities.

1. **Cycle inequality:** Let $\text{Path}(j, k)$ be the set of paths between nodes j and k . The cycle inequality is a generalization of the triangle inequality [17] and is defined as

$$(1 - x_{jk}) \leq \sum_{(s,t) \in p} (1 - x_{st}), \quad p \in \text{Path}(j, k). \quad (29)$$

2. **Odd-wheel inequality:** Let a q -wheel be a connected subgraph $\mathcal{S} = (\mathcal{V}_s, \mathcal{E}_s)$ with a central vertex $j \in \mathcal{V}_s$ and a cycle of q vertices in $\mathcal{C} = \mathcal{V}_s \setminus \{j\}$. For every odd $q(\geq 3)$ -wheel, a valid segmentation x satisfies

$$\sum_{(s,t) \in \mathcal{E}(\mathcal{C})} (1 - x_{st}) - \sum_{k \in \mathcal{C}} (1 - x_{jk}) \leq \lfloor \frac{1}{2}q \rfloor, \quad (30)$$

where $\mathcal{E}(\mathcal{C})$ denotes the set of all edges in the outer cycle \mathcal{C} .

3. **Higher-order inequality:**

$$\begin{aligned} x_{e_h} &\leq x_{e_p}, \quad \forall e_p \in \mathcal{E}_p | e_p \subset e_h, \\ (1 - x_{e_h}) &\leq \sum_{e_p \in \mathcal{E}_p | e_p \subset e_h} (1 - x_{e_p}). \end{aligned} \quad (31)$$

The higher-order inequalities reflect valid relations between higher-order edge labels and pairwise edge labels.

2.14. Image Segmentation by Graph Partitioning

<i>Abbreviation:</i>	image-seg
<i>Number of instances:</i>	100
<i>Number of variables:</i>	156 – 3764
<i>Number of labels:</i>	equal to the number of variables
<i>Number of factors:</i>	439 – 10970
<i>Order:</i>	2
<i>Function type:</i>	Potts

Description Image segmentation can be understood as a graph partitioning problem w.r.t. an adjacency graph of pixels or superpixels [5, 26]. This benchmark contains the 100 graphical models described in [5], one for every test image in the Berkeley segmentation dataset [35]. Each of these models assigns an objective value to every possible partition of a given superpixel adjacency graph.

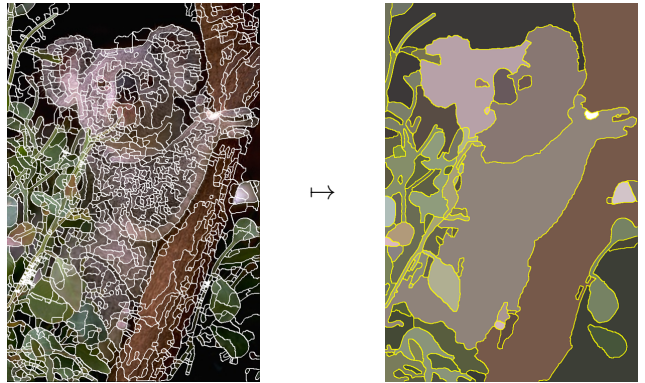


Figure 11: This benchmark contains models for segmenting superpixel segmentations of the 100 test images of the Berkeley segmentation dataset [35] by means of graph partitioning [5].

Objective / Learning For the purpose of this benchmark, these models are provided in their dual form in which there is one variable x_v for every superpixel $v \in V$. Every variable can assume as many labels as there are superpixels, i.e. labels $0, \dots, |V| - 1$.

For every pair $\{v, w\} \in E$ of superpixels which are neighbors in the superpixel adjacency graph (V, E) , there is one second-order term

$$\varphi_{vw}(x_v, x_w) = \begin{cases} \theta_{vw} \in \mathbb{R} & \text{if } x_v \neq x_w \\ 0 & \text{otherwise} \end{cases}. \quad (32)$$

The parameters θ which can be positive or negative are differences of log-likelihoods that are learned independently from empirical training data as described in [5]. There are no first-order terms in the objective function

$$J(x) = \sum_{\{i,j\} \in E} \varphi_{ij}(x_i, x_j) . \quad (33)$$

2.15. 3D Segmentation for Connectomics

Abbreviation: seg-3d
Number of instances: 2
Number of variables: 7958, 101220
Number of labels: 7958, 101220
Number of factors: 291460, 4343230
Order: 2
Function type: Potts

Description Connectomics is a long-term effort in computer vision and neurobiology to automatically reconstruct neural circuits from large volume images [8, 9, 20, 41].

This benchmark includes the two graphical models that have been used in [9] to partition 3D images of 10^9 voxels into a previously unknown number of segments, based on a learned likelihood of merging adjacent supervoxels. The images were acquired at different laboratories using different electron microscopy techniques.

Objective / Learning For the purpose of this benchmark, these models are provided in their dual form in which there is one variable x_v for every supervoxel $v \in V$. Every variable can assume as many labels as there are supervoxels, i.e. labels $0, \dots, |V| - 1$.

For every pair $\{v, w\} \in E$ of supervoxels which are neighbors in the supervoxel adjacency graph (V, E) , there is one second-order term

$$\varphi_{vw}(x_v, x_w) = \begin{cases} \theta_{vw} \in \mathbb{R} & \text{if } x_v \neq x_w \\ 0 & \text{otherwise} \end{cases} . \quad (34)$$

The parameters θ which can be positive or negative are differences of log-likelihoods that are learned independently from empirical training data as described in [9]. There are no first-order terms in the objective function

$$J(x) = \sum_{\{i,j\} \in E} \varphi_{ij}(x_i, x_j) . \quad (35)$$

2.16. Non-rigid point matching

Abbreviation: matching
Number of instances: 4
Number of variables: 19 or 20
Number of labels: 19 or 20
Number of factors: fully connected or sparse
Order: 2
Function type: general pairwise potential

Description The matching dataset contains 4 instances of a non-rigid registration task between geometric point sets. A source and a target set of 2D points are given as input in this case, where the target set is assumed to have been generated by applying a non-rigid deformation to the source points (see Fig. 12 for an example). One then seeks to recover a mapping \mathcal{T} between these two point sets.

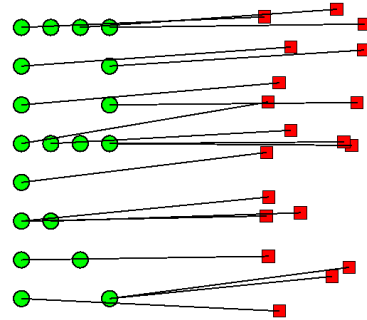


Figure 12: An example of non-rigid point matching. Target points (red) were generated by applying a global rigid motion plus a random non-rigid perturbation to the source points (green).

Objective / Learning The above task can be formulated as a multi-label MRF optimization problem, where source vertices correspond to MRF sites and target vertices correspond to possible labels. In this case, the unary potentials are all set to zero, whereas the pairwise potentials measure the geometric distortion for each pair of source points p, p' as follows:

$$\varphi_{pp'}(\mathcal{T}(p), \mathcal{T}(p')) = \begin{cases} \frac{|d(p, p') - d(\mathcal{T}(p), \mathcal{T}(p'))|}{d(p, p')} , & \text{if } \mathcal{T}(p) \neq \mathcal{T}(p') \\ M, & \text{otherwise} \end{cases} \quad (36)$$

where $d(\cdot, \cdot)$ denotes Euclidean distance and M is a large constant used for not permitting many-to-one matchings. No learning has been applied in this case.

2.17. Cell Tracking

Abbreviation: cell-tracking
Number of instances: 1
Number of variables: 41134
Number of labels: 2
Number of factors: 42909
Order: 9
Function type: explicit

Parameters were learned by exhaustive search on a manually labeled dataset.

Description The cell tracking dataset contains one instance of a tracking-by-assignment problem in the context of cell tracking (cf. [28] et al). The model comprises two kinds of binary random variables: detection and assignment. The former distinguish between true cells and misdetections due to noise. The latter describe possible assignments between objects in consecutive timesteps. Consistency is ensured by assigning zero probability to biologically implausible configurations (for instance, a cell dividing into more than two descendants).

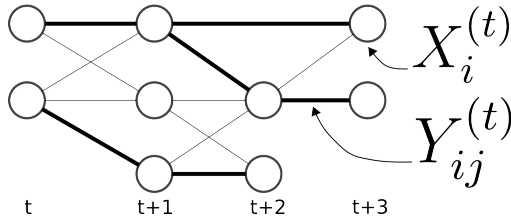


Figure 13: **Tracking-by-assignment.** Assignment variables $Y_{ij}(t)$ model possible assignments between objects in consecutive timesteps. Detection variables $X_{ij}(t)$ label objects either as false positive or as true positive detections.

Objective / Learning The model is implemented as a chain graph. Conditional random fields describe the assignments between consecutive timesteps and are depending on prior potentials that model the true positive vs. false positive probabilities of detections (see Fig. 13). The objective is to find the minimum energy configuration (that is the most likely tracking):

$$E(\mathcal{X}, \mathcal{Y}) = \sum_{t=1}^T \sum_{X_i^{(t)} \in \mathcal{X}^{(t)}} E_{\text{det}}(X_i^{(t)}) + \sum_{t=1}^{T-1} \left(\sum_i E_{\text{out}}(X_i^{(t)}, \mathcal{Y}_{i \rightarrow}) + \sum_j E_{\text{in}}(\mathcal{Y}_{\rightarrow j}^{(t)}, X_j^{(t+1)}) \right)$$

The energy domain was chosen to allow linear programming-based inference methods. Inconsistent configurations are assigned a very high energy to approximate zero probability.

3. Evaluation per Model

3.1. Stereo Matching (mrf-stereo)

Table 1: mrf-stereo (3 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	4.47 sec	1614255.00	-Inf	0.00	0.00
FastPD-LF2	296.38 sec	1611484.33	-Inf	0.00	0.00
mrf-LBP-LF2	387.97 sec	1633343.00	-Inf	0.00	0.00
mrf-BPS	312.89 sec	1738696.00	-Inf	0.00	0.00
mrf-EXPANSION	13.04 sec	1614353.00	-Inf	33.33	0.00
mrf-SWAP	14.98 sec	1667460.67	-Inf	0.00	0.00
mrf-TRWS	296.22 sec	1587928.67	1584746.53	0.00	0.00
ogm-BUNDLE-A	8458.49 sec	1610985.00	1584776.15	33.33	33.33
ogm-BUNDLE-H	8468.24 sec	1604944.00	1584788.28	33.33	0.00
ogm-SUBGRAD-A	8533.41 sec	1752958.00	1578421.00	33.33	33.33
ogm-LBP	32284.76 sec	1646280.00	-Inf	0.00	0.00
TRWS-LF2	668.47 sec	1587040.00	1584746.53	33.33	0.00

3.2. In-Painting (mrf-inpainting)

Table 2: mrf-inpainting (2 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	12.14 sec	32939430.00	-Inf	0.00	0.00
mrf-LBP-LF2	837.78 sec	26597364.50	-Inf	0.00	0.00
mrf-BPS	902.90 sec	26612532.50	-Inf	0.00	0.00
mrf-EXPANSION	39.50 sec	27334014.50	-Inf	0.00	0.00
mrf-SWAP	135.20 sec	27348538.50	-Inf	0.00	0.00
mrf-TRWS	828.00 sec	26464865.00	26462450.59	0.00	0.00
TRWS-LF2	4444.38 sec	26463829.00	26462450.59	100.00	0.00

3.3. Photo-montage (mrf-photomontage)

Table 3: mrf-photomontage (2 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
mrf-LBP	924.11 sec	438611.00	-Inf	0.00	0.00
mrf-BPS	242.01 sec	2217579.50	-Inf	0.00	0.00
mrf-EXPANSION	8.54 sec	168220.00	-Inf	100.00	0.00
mrf-SWAP	11.35 sec	180345.00	-Inf	0.00	0.00
mrf-TRWS	253.20 sec	1243144.00	166827.07	0.00	0.00
ogm-BUNDLE-A	5003.17 sec	676079.00	112183.66	0.00	0.00
ogm-BUNDLE-H	4771.35 sec	599206.00	111100.35	0.00	0.00
ogm-SUBGRAD-A	4734.20 sec	3846787.00	26005.24	0.00	0.00
TRWS-LF2	431.34 sec	735193.00	166827.12	0.00	0.00

3.4. Color Segmentation (color-seg)

Table 4: color-seg (3 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	0.45 sec	308472275.00	-Inf	66.67	0.00
BPS	110.02 sec	308733349.67	-Inf	0.00	0.00
EXPANSION	6.42 sec	308472275.67	-Inf	66.67	0.00
FastPD-LF2	14.85 sec	308472275.00	-Inf	66.67	0.00
ogm-BUNDLE-A	3097.51 sec	308472333.33	308472261.45	33.33	0.00
ogm-BUNDLE-H	3024.98 sec	308472439.67	308472264.89	33.33	0.00
ogm-SUBGRAD-A	3068.16 sec	308486445.00	308471847.77	0.00	0.00
ogm-LBP	1252.89 sec	308492950.67	-Inf	0.00	0.00
MCA	149.43 sec	308472274.33	308472274.33	100.00	100.00
ogm-TRBP	4476.64 sec	308492909.67	-Inf	0.00	0.00
SWAP	6.50 sec	308472292.33	-Inf	66.67	0.00
TRWS	150.47 sec	308472310.67	308472270.43	66.67	33.33
TRWS-LF2	140.43 sec	308472294.33	308472270.43	66.67	33.33

3.5. Color Segmentation 4 (color-seg-n4)

Table 5: color-seg-n4 (9 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	0.35 sec	20034.80	-Inf	0.00	0.00
FastPD-LF2	13.61 sec	20033.21	-Inf	0.00	0.00
mrf-LBP-LF2	63.82 sec	20053.25	-Inf	0.00	0.00
mrf-BPS	32.92 sec	20094.03	-Inf	0.00	0.00
mrf-EXPANSION	1.24 sec	20031.81	-Inf	0.00	0.00
mrf-SWAP	0.86 sec	20049.90	-Inf	0.00	0.00
mrf-TRWS	33.15 sec	20012.18	20012.14	88.89	77.78
ogm-BUNDLE-A	692.39 sec	20024.78	20012.01	77.78	77.78
ogm-BUNDLE-H	1212.24 sec	20012.44	20012.13	77.78	22.22
ogm-SUBGRAD-A	1179.62 sec	20027.98	20011.57	66.67	11.11
ogm-LBP	1887.89 sec	20054.26	-Inf	0.00	0.00
MCA	982.36 sec	20527.37	19973.25	88.89	88.89
MCA-6h	1244.30 sec	20012.14	20012.14	100.00	100.00
ogm-TRBP	2516.54 sec	20054.06	-Inf	0.00	0.00
TRWS-LF2	89.83 sec	20012.17	20012.14	77.78	77.78

3.6. Color Segmentation 8 (col-seg-n8)

Table 6: color-seg-n8 (9 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	0.59 sec	20011.14	-Inf	0.00	0.00
BPS	100.60 sec	20120.79	-Inf	0.00	0.00
EXPANSION	11.44 sec	20011.13	-Inf	0.00	0.00
FastPD-LF2	48.70 sec	20010.28	-Inf	0.00	0.00
ogm-BUNDLE-A	2683.46 sec	20031.18	19990.30	44.44	11.11
ogm-BUNDLE-H	2736.01 sec	19991.96	19991.11	33.33	0.00
ogm-SUBGRAD-A	2677.05 sec	20410.75	19978.46	11.11	11.11
ogm-LBP	4826.06 sec	20087.13	-Inf	0.00	0.00
MCA	752.23 sec	20809.70	19779.04	88.89	88.89
MCA-6h	6386.51 sec	20474.58	19948.33	88.89	88.89
ogm-TRBP	5821.28 sec	20087.00	-Inf	0.00	0.00
SWAP	13.85 sec	20038.26	-Inf	0.00	0.00
TRWS	133.00 sec	19991.39	19991.16	22.22	22.22
TRWS-LF2	172.59 sec	19991.27	19991.16	44.44	22.22

3.7. In-Painting 4 (inpainting-n4)

Table 7: inpainting-n4 (2 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	0.02 sec	454.75	-Inf	50.00	0.00
FastPD-LF2	0.37 sec	454.75	-Inf	50.00	0.00
mrf-LBP-LF2	5.33 sec	475.56	-Inf	50.00	0.00
mrf-BPS	2.13 sec	454.35	-Inf	100.00	0.00
mrf-EXPANSION	0.02 sec	454.35	-Inf	100.00	0.00
mrf-SWAP	0.02 sec	454.75	-Inf	50.00	0.00
mrf-TRWS	2.19 sec	490.48	448.09	50.00	50.00
ogm-BUNDLE-A	76.84 sec	455.25	448.23	50.00	0.00
ogm-BUNDLE-H	36.55 sec	455.25	448.22	50.00	50.00
ogm-SUBGRAD-A	47.20 sec	455.25	447.76	50.00	50.00
ogm-ILP	1816.11 sec	454.75	450.36	50.00	50.00
ogm-LBP	76.21 sec	480.27	-Inf	50.00	0.00
MCA	1810.59 sec	4618.38	448.07	50.00	50.00
MCA-6h	12262.31 sec	474.38	450.03	50.00	50.00
ogm-TRBP	90.46 sec	480.27	-Inf	50.00	0.00
TRWS-LF2	4.68 sec	489.30	448.09	50.00	50.00

3.8. In-Painting 8 (inpainting-n8)

Table 8: inpainting-n8 (2 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	0.12 sec	465.02	-Inf	100.00	0.00
BPS	10.53 sec	468.21	-Inf	50.00	0.00
EXPANSION	0.57 sec	465.02	-Inf	100.00	0.00
FastPD-LF2	1.29 sec	465.02	-Inf	100.00	0.00
ogm-BUNDLE-A	183.20 sec	465.26	455.43	50.00	0.00
ogm-BUNDLE-H	187.91 sec	465.34	455.43	0.00	0.00
ogm-SUBGRAD-A	192.12 sec	466.81	454.78	0.00	0.00
ogm-ILP	2842.55 sec	272771.78	455.74	50.00	50.00
ogm-LBP	165.01 sec	495.52	-Inf	50.00	0.00
MCA	2206.21 sec	6321.25	449.36	50.00	50.00
MCA-6h	19661.77 sec	467.05	457.13	50.00	50.00
ogm-TRBP	191.63 sec	495.52	-Inf	50.00	0.00
SWAP	0.47 sec	465.02	-Inf	100.00	0.00
TRWS	12.92 sec	500.09	453.96	50.00	0.00
TRWS-LF2	12.59 sec	499.30	453.96	50.00	0.00

3.9. Object Segmentation (object-seg)

Table 9: object-seg (5 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	0.17 sec	31317.60	-Inf	80.00	0.00
FastPD-LF2	2.88 sec	31317.60	-Inf	80.00	0.00
mrf-LBP-LF2	41.26 sec	32400.01	-Inf	0.00	0.00
mrf-BPS	15.72 sec	35775.27	-Inf	0.00	0.00
mrf-EXPANSION	0.43 sec	31317.23	-Inf	100.00	0.00
mrf-SWAP	0.34 sec	31323.18	-Inf	40.00	0.00
mrf-TRWS	16.21 sec	31317.23	31317.23	100.00	100.00
ogm-BUNDLE-A	215.68 sec	31317.31	31317.08	80.00	60.00
ogm-BUNDLE-H	346.56 sec	31317.23	31316.88	100.00	0.00
ogm-SUBGRAD-A	365.16 sec	31424.55	31312.21	20.00	0.00
ogm-ILP	788.71 sec	33884.39	-Inf	80.00	80.00
ogm-LBP	445.85 sec	32663.86	-Inf	0.00	0.00
MCA	278.51 sec	31317.23	31317.23	100.00	100.00
ogm-TRBP	856.63 sec	32663.86	-Inf	0.00	0.00
TRWS-LF2	28.43 sec	31317.23	31317.23	100.00	100.00

3.10. MRI Brain Segmentation (brain)

Table 10: brain (5 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
FastPD	8.69 sec	28394880.80	-Inf	0.00	0.00
BPS	1119.97 sec	28407033.20	-Inf	0.00	0.00
EXPANSION	256.38 sec	28394414.60	-Inf	0.00	0.00
MCA	15109.80 sec	30894778.60	26233876.30	60.00	60.00
SWAP	332.56 sec	28395523.60	-Inf	0.00	0.00
TRWS	1448.56 sec	28392607.40	28392431.40	40.00	0.00

3.11. Chinese Character Inpainting (dtf-chinesechar)

Table 11: dtf-chinesechar (100 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
BPS	72.85 sec	-49537.08	-Inf	19.00	0.00
MCBC	2053.89 sec	-49550.10	-49612.38	91.00	56.00
ogm-ILP	3580.93 sec	-49536.59	-50106.17	8.00	0.00
QPBO	0.16 sec	-49501.95	-50119.38	0.00	0.00
SA	NaN sec	-49533.02	-Inf	13.00	0.00
TRWS	100.13 sec	-49496.84	-50119.41	2.00	0.00
TRWS-LF2	106.94 sec	-49519.44	-50119.41	11.00	0.00

3.12. Scene Labeling (scene-decomposition)

Table 12: scene-decomposition (715 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
BPS	0.17 sec	-866.73	-Inf	79.16	0.00
BRAOBB	28.31 sec	-866.93	-Inf	100.00	99.86
ogm-LBP-LF2	0.32 sec	-866.76	-Inf	80.56	0.00
FUSION	0.07 sec	-866.85	-Inf	82.10	0.00
ogm-BUNDLE-A	3.29 sec	-866.93	-866.93	99.86	48.95
ogm-BUNDLE-H	0.91 sec	-866.93	-866.93	100.00	94.13
ogm-SUBGRAD-A	3.77 sec	-866.93	-866.94	99.58	30.77
ogm-ILP	0.11 sec	-866.93	-866.93	100.00	100.00
ogm-LBP	0.29 sec	-866.76	-Inf	80.56	0.00
ogm-LP-LP	0.09 sec	-866.92	-866.93	99.58	99.58
ogm-TRBP	1.29 sec	-866.84	-Inf	89.51	0.00
TRWS	0.17 sec	-866.92	-866.93	99.58	99.58
TRWS-LF2	0.19 sec	-866.93	-866.93	99.86	99.58

3.13. Geometric Scene Labeling 3 (geo-surf-3)

Table 13: geo-surf-3 (300 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
BRAOBB	1.03 sec	132.14	132.14	100.00	100.00
ogm-LBP-LF2	0.35 sec	132.17	-Inf	91.33	0.00
FUSION	0.09 sec	132.14	-Inf	98.00	0.00
ogm-BUNDLE-A	44.70 sec	132.14	132.14	100.00	13.67
ogm-BUNDLE-H	18.63 sec	132.14	132.14	100.00	92.33
ogm-SUBGRAD-A	51.28 sec	132.14	132.14	100.00	57.00
ogm-ILP	0.08 sec	132.14	132.14	100.00	100.00
ogm-LBP	0.34 sec	132.17	-Inf	90.67	0.00
ogm-LP-LP	0.58 sec	132.14	132.14	100.00	100.00
ogm-TRBP	5.60 sec	132.16	-Inf	94.33	0.00

3.14. Geometric Scene Labeling 7 (geo-surf-7)

Table 14: geo-surf-7 (300 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
BRAOBB	1031.34 sec	478.96	-Inf	82.67	74.33
ogm-LBP-LF2	3.67 sec	498.44	-Inf	22.00	0.00
FUSION	0.28 sec	477.83	-Inf	85.67	0.00
ogm-BUNDLE-A	128.90 sec	477.08	476.11	87.00	3.33
ogm-BUNDLE-H	97.91 sec	476.95	476.86	99.67	60.00
ogm-SUBGRAD-A	129.24 sec	479.26	473.16	53.33	4.00
ogm-ILP	0.87 sec	476.95	476.95	100.00	100.00
ogm-LBP	3.51 sec	498.45	-Inf	22.00	0.00
ogm-LP-LP	2.27 sec	476.95	476.94	99.67	99.67
ogm-TRBP	44.83 sec	486.42	-Inf	40.00	0.00

3.15. Hierarchical Image Segmentation (correlation-clustering)

Table 15: correlation-clustering (715 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
MCR	0.38 sec	-624.35	-629.03	16.36	10.21
MCA	1.14 sec	-628.16	-628.16	100.00	100.00
MCA-fdo	1.04 sec	-628.16	-628.16	100.00	100.00

3.16. Image Segmentation (image-seg)

Table 16: image-seg (100 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
MCA	2.78 sec	4442.64	4442.64	100.00	100.00
MCA-fdo	2.20 sec	4442.64	4442.64	100.00	100.00

3.17. 3D Neuron Segmentation (seg-3d)

Table 17: seg-3d (2 instances)

algorithm	mean run time	mean value	mean bound	best	ver. opt
MCA	2017.83 sec	415007.12	413515.53	50.00	50.00
MCA-6h	5056.85 sec	413536.00	413536.00	100.00	100.00
MCA-fdo	1862.99 sec	414470.20	413503.06	50.00	50.00

Table 21: mrf-stereo

mrf-stereo		ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-LBP	TRWS-LF2
ted-gm	value	1395627.00	1817227.00	1410301.00	1343593.00
	bound	1337274.20	1318961.32	-Inf	1337092.22
	runtime	20260.92	20341.80	80436.93	1407.95
tsu-gm	value	369218.00	369218.00	410334.00	369244.00
	bound	369216.38	369218.00	-Inf	369217.58
	runtime	1683.89	1741.15	5374.38	153.87
ven-gm	value	3049987.00	3072429.00	3118205.00	3048283.00
	bound	3047874.27	3047083.67	-Inf	3047929.80
	runtime	3459.90	3517.29	11042.98	443.58
mean energy		1604944.00	1752958.00	1646278.00	1587040.00
mean bound		1584788.28	1578421.00	-Inf	1584746.53
mean runtime		8468.24	8533.41	32284.76	668.47
best value		33.33	33.33	0.00	33.33
best bound		33.33	33.33	0.00	33.33
verified opt		0.00	33.33	0.00	0.00

4.2. In-Painting (mrf- inpainting)

Table 22: mrf- inpainting

mrf- inpainting		FastPD	mrf-LBP-LF2	mrf-BPS	mrf-EXPANSION	mrf-SWAP	mrf-TRWS	TRWS-LF2
house-gm	value	49321973.00	37634558.00	37676160.00	38615327.00	37871302.00	37580728.00	37580556.00
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	37580520.06	37580520.06
	runtime	20.53	1225.99	1317.21	68.56	233.13	1218.24	6634.57
penguin-gm	value	16556887.00	15560171.00	15548905.00	16052702.00	16825775.00	15349002.00	15347102.00
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	15344381.12	15344381.12
	runtime	3.74	449.57	488.59	10.43	37.27	437.77	2254.19
mean energy		32939430.00	26596968.00	26612532.50	27334014.50	27348538.50	26464759.00	26463829.00
mean bound		-Inf	-Inf	-Inf	-Inf	-Inf	26462450.59	26462450.59
mean runtime		12.14	837.78	902.90	39.50	135.20	828.00	4444.38
best value		0.00	0.00	0.00	0.00	0.00	0.00	100.00
best bound		0.00	0.00	0.00	0.00	0.00	100.00	100.00
verified opt		0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.3. Photo- montage (mrf- photomontage)

Table 23: mrf- photomontage

mrf- photomontage		mrf-LBP	mrf-BPS	mrf-EXPANSION	mrf-SWAP	mrf-TRWS	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A
family-gm	value	623583.00	3594545.00	185505.00	197263.00	2310411.00	969043.00	709119.00	4543719.00
	bound	-Inf	-Inf	-Inf	-Inf	184540.79	177885.82	176721.06	40146.49
	runtime	665.23	154.79	9.14	9.25	165.17	3850.86	3747.21	3564.81
pano-gm	value	253639.00	840614.00	150935.00	163427.00	175877.00	383115.00	489293.00	3149855.00
	bound	-Inf	-Inf	-Inf	-Inf	149113.34	46481.50	45479.65	11864.00
	runtime	1182.99	329.23	7.94	13.44	341.23	6155.47	5795.50	5903.60
mean energy		438611.00	2217579.50	168220.00	180345.00	234150.50	676079.00	599206.00	3846787.00
mean bound		-Inf	-Inf	-Inf	-Inf	166827.07	112183.66	111100.35	26005.24
mean runtime		924.11	242.01	8.54	11.35	253.20	5003.17	4771.35	4734.20
best value		0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
best bound		0.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00
verified opt		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 24: mrf- photomontage

mrf- photomontage		TRWS-LF2
family-gm	value	1302495.00
	bound	184540.91
	runtime	266.48
pano-gm	value	167891.00
	bound	149113.34
	runtime	596.19
mean energy		735193.00
mean bound		166827.12
mean runtime		431.34
best value		0.00

mrf-photomontage		TRWS-LF2
best bound		100.00
verified opt		0.00

4.4. Color Segmentation (color-seg)

Table 25: color-seg

color-seg		FastPD	BPS	EXPANSION	FastPD-LF2	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-LBP
colseg-cow3	value	455392947.00	455739908.00	455392947.00	455392947.00	455393027.00	455393058.00	455400064.00	455421935.00
	bound	-Inf	-Inf	-Inf	-Inf	455392928.68	455392939.71	455392737.21	-Inf
	runtime	0.54	150.72	7.70	16.56	4329.66	4177.46	4290.69	1028.76
colseg-cow4	value	451816855.00	452230314.00	451816855.00	451816855.00	451816952.00	451817240.00	451852229.00	451846264.00
	bound	-Inf	-Inf	-Inf	-Inf	451816837.20	451816834.94	451815785.80	-Inf
	runtime	0.76	170.63	11.11	26.68	4754.03	4687.06	4708.47	2699.84
colseg-garden4	value	18207023.00	18229827.00	18207025.00	18207023.00	18207021.00	18207021.00	18207042.00	18210653.00
	bound	-Inf	-Inf	-Inf	-Inf	18207018.48	18207020.03	18207020.28	-Inf
	runtime	0.04	8.71	0.44	1.32	208.85	210.42	205.32	30.06
mean energy		308472275.00	308733349.67	308472275.67	308472275.00	308472333.33	308472439.67	308486445.00	308492950.67
mean bound		-Inf	-Inf	-Inf	-Inf	308472261.45	308472264.89	308471847.77	-Inf
mean runtime		0.45	110.02	6.42	14.85	3097.51	3024.98	3068.16	1252.89
best value		66.67	0.00	66.67	66.67	33.33	33.33	0.00	0.00
best bound		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
verified opt		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 26: color-seg

color-seg		MCA	ogm-TRBP	SWAP	TRWS	TRWS-LF2
colseg-cow3	value	455392947.00	455421935.00	455392947.00	455392947.00	455392947.00
	bound	-Inf	-Inf	-Inf	455392939.55	455392939.55
	runtime	159.91	5616.79	7.47	193.25	180.34
colseg-cow4	value	451816855.00	451846264.00	451816855.00	451816964.00	451816915.00
	bound	-Inf	-Inf	-Inf	451816850.76	451816850.76
	runtime	283.58	7443.81	11.59	246.41	229.67
colseg-garden4	value	18207021.00	18210530.00	18207075.00	18207021.00	18207021.00
	bound	-Inf	-Inf	-Inf	18207021.00	18207021.00
	runtime	4.80	369.31	0.45	11.75	11.28
mean energy		308472274.33	308492909.67	308472292.33	308472294.33	308472294.33
mean bound		308472274.33	-Inf	-Inf	308472270.43	308472270.43
mean runtime		149.43	4476.64	6.50	150.47	140.43
best value		100.00	0.00	66.67	66.67	66.67
best bound		100.00	0.00	0.00	66.67	66.67
verified opt		100.00	0.00	0.00	33.33	33.33

4.5. Color Segmentation 4 (color-seg-n4)

Table 27: color-seg-n4

color-seg-n4		FastPD	FastPD-LF2	mrf-LBP-LF2	mrf-BPS	mrf-EXPANSION	mrf-SWAP	mrf-TRWS	ogm-BUNDLE-A
clownfish-small	value	14825.99	14823.07	14821.31	14820.14	14826.29	14833.28	14817.47	14817.48
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	14817.46	14817.46
	runtime	0.41	19.72	79.58	43.77	1.93	1.11	43.80	1707.05
crops-small	value	11933.90	11932.01	11932.53	11932.78	11934.36	11943.50	11923.91	11923.91
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	11923.91	11923.91
	runtime	0.44	19.05	78.55	44.01	1.94	1.01	44.03	614.96
fourcolors	value	69522.02	69521.07	69526.16	69539.44	69521.44	69522.26	69520.53	69520.53
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	69520.53	69520.53
	runtime	0.23	1.81	34.39	10.47	0.36	0.38	10.80	279.16
lake-small	value	14318.29	14317.54	14317.26	14317.37	14319.19	14321.48	14311.95	14311.95
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	14311.95	14311.95
	runtime	0.41	19.00	79.32	43.46	1.35	0.99	43.92	390.97
palm-small	value	12271.70	12270.09	12277.18	12490.49	12271.30	12281.69	12236.92	12236.92
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	12236.92	12236.92
	runtime	0.41	19.24	76.08	43.19	1.44	1.03	43.50	633.80
penguin-small	value	8240.09	8239.76	8245.53	8246.37	8239.67	8243.17	8234.64	8234.64
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	8234.64	8234.64
	runtime	0.22	7.34	50.70	24.96	0.60	0.49	25.22	184.17
pfau-small	value	24355.73	24350.18	24474.40	24598.67	24328.62	24408.74	24234.08	24347.45
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	24233.71	24232.57
	runtime	0.55	17.41	77.54	38.70	1.90	1.64	38.99	1492.34

color-seg-n4		FastPD	FastPD-LF2	mrf-LBP-LF2	mrf-BPS	mrf-EXPANSION	mrf-SWAP	mrf-TRWS	ogm-BUNDLE-A
snail	value	13104.93	13104.93	13105.06	13105.19	13104.93	13104.99	13104.90	13104.90
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	13104.90	13104.90
	runtime	0.09	1.29	31.19	9.19	0.15	0.14	9.39	60.02
strawberry-glass-2-small	value	11740.51	11740.26	11779.78	11795.83	11740.49	11790.01	11725.19	11725.19
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	11725.19	11725.19
	runtime	0.43	17.68	67.01	38.50	1.51	0.94	38.73	869.07
mean energy		20034.80	20033.21	20053.19	20094.03	20031.81	20049.90	20012.17	20024.78
mean bound		-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	20012.14	20012.01
mean runtime		0.35	13.61	63.82	32.92	1.24	0.86	33.15	692.39
best value		0.00	0.00	0.00	0.00	0.00	0.00	88.89	77.78
best bound		0.00	0.00	0.00	0.00	0.00	0.00	77.78	77.78
verified opt		0.00	0.00	0.00	0.00	0.00	0.00	77.78	77.78

Table 28: color-seg-n4

color-seg-n4		ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-LBP	MCA	MCA-6h	ogm-TRBP	TRWS-LF2
clownfish-small	value	14817.48	14817.50	14822.01	14817.47	14817.47	14822.01	14817.48
	bound	14817.46	14817.46	-Inf	14817.47	14817.47	-Inf	14817.46
	runtime	1701.58	1730.58	2813.20	63.27	65.59	3324.07	114.45
crops-small	value	11923.91	11924.52	11931.91	11923.91	11923.91	11931.91	11923.91
	bound	11923.91	11923.89	-Inf	11923.91	11923.91	-Inf	11923.91
	runtime	1682.81	1743.00	1830.35	75.04	77.11	2172.79	114.29
fourcolors	value	69520.53	69520.53	69529.88	69520.53	69520.53	69529.88	69520.53
	bound	69520.53	69520.50	-Inf	69520.53	69520.53	-Inf	69520.53
	runtime	394.90	423.30	536.06	21.39	22.57	633.43	39.56
lake-small	value	14311.95	14311.95	14317.35	14311.95	14311.95	14317.35	14311.95
	bound	14311.95	14311.95	-Inf	14311.95	14311.95	-Inf	14311.95
	runtime	1727.35	1749.66	2633.59	37.31	38.84	3113.63	113.81
palm-small	value	12236.92	12236.92	12282.88	12236.92	12236.92	12282.88	12236.92
	bound	12236.92	12236.92	-Inf	12236.92	12236.92	-Inf	12236.92
	runtime	1652.73	1695.42	2066.91	199.06	197.39	4419.35	112.36
penguin-small	value	8234.64	8234.64	8248.01	8234.64	8234.64	8248.01	8234.64
	bound	8234.64	8234.64	-Inf	8234.64	8234.64	-Inf	8234.64
	runtime	400.51	872.37	479.31	20.36	22.13	1049.96	65.08
pfau-small	value	24236.41	24375.69	24471.08	28870.79	24233.78	24469.25	24233.96
	bound	24233.68	24228.64	-Inf	23883.70	24233.78	-Inf	24233.71
	runtime	1468.40	1526.28	3306.07	8250.44	10594.37	3872.46	110.03
snail	value	13104.90	13104.90	13105.27	13104.90	13104.90	13105.27	13104.90
	bound	13104.90	13104.90	-Inf	13104.90	13104.90	-Inf	13104.90
	runtime	371.98	402.28	55.95	6.99	7.44	198.14	39.20
strawberry-glass-2-small	value	11725.19	11725.19	11779.98	11725.19	11725.19	11779.98	11725.19
	bound	11725.19	11725.19	-Inf	11725.19	11725.19	-Inf	11725.19
	runtime	1509.92	473.66	3269.55	167.39	173.22	3865.02	99.69
mean energy		20012.44	20027.98	20054.26	20527.37	20012.14	20054.05	20012.17
mean bound		20012.13	20011.57	-Inf	19973.25	20012.14	-Inf	20012.14
mean runtime		1212.24	1179.62	1887.89	982.36	1244.30	2516.54	89.83
best value		77.78	66.67	0.00	88.89	100.00	0.00	77.78
best bound		22.22	11.11	0.00	88.89	100.00	0.00	77.78
verified opt		22.22	11.11	0.00	88.89	100.00	0.00	77.78

4.6. Color Segmentation 8 (col-seg-n8)

Table 29: color-seg-n8

color-seg-n8		FastPD	BPS	EXPANSION	FastPD-LF2	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-LBP
clownfish-small	value	14799.41	14803.92	14799.41	14798.17	14794.25	14794.49	14799.12	14804.61
	bound	-Inf	-Inf	-Inf	-Inf	14794.14	14794.14	14793.97	-Inf
	runtime	0.65	123.46	14.04	70.46	3645.48	3560.58	3580.54	7912.41
crops-small	value	11858.38	11871.15	11858.38	11857.94	11853.20	11853.35	11880.37	11877.34
	bound	-Inf	-Inf	-Inf	-Inf	11853.10	11853.09	11852.19	-Inf
	runtime	0.73	130.24	17.01	68.24	3657.53	3619.87	3587.14	7909.70
fourcolors	value	69551.86	69585.06	69551.84	69551.35	69550.59	69550.59	69550.61	69590.15
	bound	-Inf	-Inf	-Inf	-Inf	69550.47	69550.47	69550.45	-Inf
	runtime	0.37	54.11	3.13	5.70	937.41	938.71	959.40	114.84
lake-small	value	14331.34	14338.16	14331.34	14330.98	14327.98	14327.98	14339.57	14341.83
	bound	-Inf	-Inf	-Inf	-Inf	14327.97	14327.97	14327.56	-Inf
	runtime	0.69	124.15	11.39	69.68	3681.30	3769.91	3596.12	7932.15
palm-small	value	12281.38	12420.97	12281.38	12280.56	12254.11	12254.43	12547.29	12331.13
	bound	-Inf	-Inf	-Inf	-Inf	12253.69	12253.66	12243.70	-Inf
	runtime	0.68	123.53	17.07	70.12	3575.81	3502.90	3495.05	7880.12

color-seg-n8		FastPD	BPS	EXPANSION	FastPD-LF2	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-LBP
penguin-small	value	8261.19	8287.60	8261.19	8260.82	8258.62	8258.62	8315.45	8288.08
	bound	-Inf	-Inf	-Inf	-Inf	8258.62	8258.62	8256.92	-Inf
	runtime	0.37	73.83	6.62	26.11	1904.04	1920.43	1879.63	636.16
pfau-small	value	24130.45	24722.46	24130.45	24126.75	24369.44	24015.72	27146.40	24537.57
	bound	-Inf	-Inf	-Inf	-Inf	24002.59	24009.91	23916.48	-Inf
	runtime	0.96	114.85	15.96	62.29	3228.53	3170.91	3142.50	7040.74
snail	value	13105.90	13106.15	13105.90	13105.89	13105.86	13105.87	13105.86	13106.54
	bound	-Inf	-Inf	-Inf	-Inf	13105.86	13105.86	13105.86	-Inf
	runtime	0.14	54.45	2.58	3.96	300.50	927.99	702.39	122.06
strawberry-glass-2-small	value	11780.33	11951.63	11780.33	11780.02	11766.60	11766.57	12012.08	11906.93
	bound	-Inf	-Inf	-Inf	-Inf	11766.25	11766.25	11759.02	-Inf
	runtime	0.71	106.76	15.18	61.78	3220.57	3212.79	3150.69	3886.38
mean energy		20011.14	20120.78	20011.13	20010.28	20031.18	19991.96	20410.75	20087.09
mean bound		-Inf	-Inf	-Inf	-Inf	19990.30	19991.11	19978.46	-Inf
mean runtime		0.59	100.60	11.44	48.70	2683.46	2736.01	2677.05	4826.06
best value		0.00	0.00	0.00	0.00	44.44	33.33	11.11	0.00
best bound		0.00	0.00	0.00	0.00	11.11	0.00	11.11	0.00
verified opt		0.00	0.00	0.00	0.00	11.11	0.00	11.11	0.00

Table 30: color-seg-n8

color-seg-n8		MCA	MCA-6h	ogm-TRBP	SWAP	TRWS	TRWS-LF2
clownfish-small	value	14794.18	14794.18	14804.50	14802.36	14794.31	14794.20
	bound	14794.18	14794.18	-Inf	-Inf	14794.14	14794.14
	runtime	328.41	331.16	9228.22	15.33	157.87	221.42
crops-small	value	11853.12	11853.12	11877.34	11864.92	11853.20	11853.15
	bound	11853.12	11853.12	-Inf	-Inf	11853.09	11853.09
	runtime	355.36	356.67	9201.50	17.86	155.09	217.89
fourcolors	value	69550.59	69550.59	69590.15	69555.20	69550.75	69550.75
	bound	69550.59	69550.59	-Inf	-Inf	69550.47	69550.47
	runtime	65.76	62.75	156.27	2.97	74.73	70.62
lake-small	value	14327.98	14327.98	14341.78	14335.08	14327.99	14327.98
	bound	14327.98	14327.98	-Inf	-Inf	14327.97	14327.97
	runtime	113.13	114.12	9273.37	14.95	154.63	214.95
palm-small	value	12253.75	12253.75	12331.13	12317.79	12253.95	12253.88
	bound	12253.75	12253.75	-Inf	-Inf	12253.69	12253.69
	runtime	560.80	568.67	9368.71	23.39	160.64	221.63
penguin-small	value	8258.62	8258.62	8288.08	8262.15	8258.62	8258.62
	bound	8258.62	8258.62	-Inf	-Inf	8258.62	8258.62
	runtime	47.42	46.12	2218.63	10.44	103.11	122.00
pfau-small	value	31376.82	28360.76	24536.49	24286.99	24010.69	24010.57
	bound	22100.88	23624.52	-Inf	-Inf	24010.32	24010.32
	runtime	4799.39	55496.45	8223.45	20.45	160.96	211.66
snail	value	13105.86	13105.86	13106.54	13105.90	13105.86	13105.86
	bound	13105.86	13105.86	-Inf	-Inf	13105.86	13105.86
	runtime	17.18	17.28	140.84	2.73	81.10	74.65
strawberry-glass-2-small	value	11766.34	11766.34	11906.97	11813.98	11767.15	11766.44
	bound	11766.34	11766.34	-Inf	-Inf	11766.25	11766.25
	runtime	482.67	485.41	4580.59	16.49	148.91	198.49
mean energy		20809.70	20474.58	20086.95	20038.26	19991.30	19991.27
mean bound		19779.04	19948.33	-Inf	-Inf	19991.16	19991.16
mean runtime		752.23	6386.51	5821.28	13.85	133.00	172.59
best value		88.89	88.89	0.00	0.00	22.22	44.44
best bound		88.89	88.89	0.00	0.00	33.33	33.33
verified opt		88.89	88.89	0.00	0.00	22.22	22.22

4.7. In-Painting 4 (inpainting-n4)

Table 31: inpainting-n4

inpainting-n4		FastPD	FastPD-LF2	mrf-LBP-LF2	mrf-BPS	mrf-EXPANSION	mrf-SWAP	mrf-TRWS	ogm-BUNDLE-A
triplepoint4-plain-ring-inverse	value	424.90	424.90	466.53	424.12	424.12	424.90	496.37	425.90
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	411.59	411.87
	runtime	0.02	0.37	5.34	2.12	0.02	0.01	2.19	74.08
triplepoint4-plain-ring	value	484.59	484.59	484.59	484.59	484.59	484.59	484.59	484.59
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	484.59	484.59
	runtime	0.02	0.36	5.32	2.14	0.02	0.02	2.19	79.60
mean energy		454.75	454.75	475.56	454.35	454.35	454.75	454.75	455.25
mean bound		-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	448.09	448.23
mean runtime		0.02	0.37	5.33	2.13	0.02	0.02	2.19	76.84
best value		50.00	50.00	50.00	100.00	100.00	50.00	50.00	50.00

inpainting-n4		FastPD	FastPD-LF2	mrf-LBP-LF2	mrf-BPS	mrf-EXPANSION	mrf-SWAP	mrf-TRWS	ogm-BUNDLE-A
best bound		0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00
verified opt		0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00

Table 32: inpainting-n4

inpainting-n4		ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP	MCA	MCA-6h	ogm-TRBP	TRWS-LF2
triplepoint4-plain-ring-inverse	value	425.90	425.90	424.90	475.95	8752.18	464.17	475.95	494.02
	bound	411.84	410.92	416.13	-Inf	411.55	415.48	-Inf	411.59
	runtime	72.51	81.67	3585.41	115.47	3608.80	24512.29	137.01	4.62
triplepoint4-plain-ring	value	484.59	484.59	484.59	484.59	484.59	484.59	484.59	484.59
	bound	484.59	484.59	484.59	-Inf	484.59	484.59	-Inf	484.59
	runtime	0.58	12.72	46.81	36.95	12.39	12.32	43.92	4.75
mean energy		455.25	455.25	454.75	479.09	499.12	463.38	479.09	489.30
mean bound		448.22	447.76	450.36	-Inf	448.07	450.03	-Inf	448.09
mean runtime		36.55	47.20	1816.11	76.21	1810.59	12262.31	90.46	4.68
best value		50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
best bound		50.00	50.00	100.00	0.00	50.00	50.00	0.00	50.00
verified opt		50.00	50.00	50.00	0.00	50.00	50.00	0.00	50.00

4.8. In-Painting 8 (inpainting-n8)

Table 33: inpainting-n8

inpainting-n8		FastPD	BPS	EXPANSION	FastPD-LF2	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
triplepoint4-plain-ring-inverse	value	434.84	441.22	434.84	434.84	435.32	435.32	435.32	545048.37
	bound	-Inf	-Inf	-Inf	-Inf	415.83	415.80	414.69	416.28
	runtime	0.15	10.40	0.62	1.32	182.59	187.83	194.67	3584.17
triplepoint4-plain-ring	value	495.20	495.20	495.20	495.20	495.20	495.36	498.31	495.20
	bound	-Inf	-Inf	-Inf	-Inf	495.04	495.07	494.88	495.20
	runtime	0.09	10.65	0.51	1.26	183.82	188.00	189.56	2100.92
mean energy		465.02	468.21	465.02	465.02	465.26	465.34	466.81	272771.78
mean bound		-Inf	-Inf	-Inf	-Inf	455.43	455.43	454.78	455.74
mean runtime		0.12	10.53	0.57	1.29	183.20	187.91	192.12	2842.55
best value		100.00	50.00	100.00	100.00	50.00	0.00	0.00	50.00
best bound		0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00
verified opt		0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00

Table 34: inpainting-n8

inpainting-n8		ogm-LBP	MCA	MCA-6h	ogm-TRBP	SWAP	TRWS	TRWS-LF2
triplepoint4-plain-ring-inverse	value	495.84	12147.30	438.91	495.84	434.84	504.97	503.40
	bound	-Inf	403.53	419.05	-Inf	-Inf	413.20	413.20
	runtime	260.27	4169.32	39069.98	301.16	0.40	13.00	12.62
triplepoint4-plain-ring	value	495.20	495.20	495.20	495.20	495.20	495.20	495.20
	bound	-Inf	495.20	495.20	-Inf	-Inf	494.71	494.71
	runtime	69.75	243.10	253.56	82.09	0.55	12.84	12.56
mean energy		493.79	502.91	467.05	493.79	465.02	466.80	499.30
mean bound		-Inf	449.36	457.13	-Inf	-Inf	453.96	453.96
mean runtime		165.01	2206.21	19661.77	191.63	0.47	12.92	12.59
best value		50.00	50.00	50.00	50.00	100.00	50.00	50.00
best bound		0.00	50.00	100.00	0.00	0.00	0.00	0.00
verified opt		0.00	50.00	50.00	0.00	0.00	0.00	0.00

4.9. Object Segmentation (object-seg)

Table 35: object-seg

object-seg		FastPD	FastPD-LF2	mrf-LBP-LF2	mrf-BPS	mrf-EXPANSION	mrf-SWAP	mrf-TRWS	ogm-BUNDLE-A
objseg-349	value	2369.37	2369.37	3055.51	5529.63	2369.37	2369.37	2369.37	2369.77
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	2369.37	2368.63
	runtime	0.10	1.36	34.34	10.55	0.18	0.18	11.03	267.03
objseg-353	value	40635.99	40635.99	42880.28	46957.98	40634.11	40635.99	40634.11	40634.11
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	40634.11	40634.10
	runtime	0.29	3.94	46.06	19.41	0.81	0.69	19.81	378.68

object-seg		FastPD	FastPD-LF2	mrf-LBP-LF2	mrf-BPS	mrf-EXPANSION	mrf-SWAP	mrf-TRWS	ogm-BUNDLE-A
objseg-358	value	38019.34	38019.34	38669.97	42852.69	38019.34	38040.11	38019.34	38019.34
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	38019.34
	runtime	0.16	2.03	38.53	13.09	0.37	0.22	13.57	111.99
objseg-416	value	38160.79	38160.79	38807.48	44004.04	38160.79	38167.92	38160.79	38160.79
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	38160.79
	runtime	0.15	2.00	38.93	13.11	0.31	0.31	13.58	163.62
objseg-552	value	37402.52	37402.52	38586.81	39532.01	37402.52	37402.52	37402.52	37402.52
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	37402.52
	runtime	0.18	5.06	48.43	22.44	0.49	0.30	23.08	157.06
mean energy		31317.60	31317.60	32400.01	35775.27	31317.23	31323.18	31317.23	31317.31
mean bound		-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	31317.23	31317.08
mean runtime		0.17	2.88	41.26	15.72	0.43	0.34	16.21	215.68
best value		80.00	80.00	0.00	0.00	100.00	40.00	100.00	80.00
best bound		0.00	0.00	0.00	0.00	0.00	0.00	100.00	60.00
verified opt		0.00	0.00	0.00	0.00	0.00	0.00	100.00	60.00

Table 36: object-seg

object-seg		ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP	MCA	ogm-TRBP	TRWS-LF2
objseg-349	value	2369.37	2371.36	2369.37	3550.77	2369.37	3550.77	2369.37
	bound	2368.93	2364.57	2369.37	-Inf	2369.37	-Inf	2369.37
	runtime	269.41	291.88	48.76	430.07	37.42	542.67	20.00
objseg-353	value	40634.11	40984.66	53469.93	43435.07	40634.11	43435.07	40634.11
	bound	40633.06	40618.69	-Inf	-Inf	40634.11	-Inf	40634.11
	runtime	383.96	403.89	3589.75	357.25	1189.79	1063.19	33.77
objseg-358	value	38019.34	38019.34	38019.34	38903.29	38019.34	38903.29	38019.34
	bound	38019.31	38019.34	38019.34	-Inf	38019.34	-Inf	38019.34
	runtime	319.32	334.34	117.19	304.19	73.78	699.00	24.45
objseg-416	value	38160.79	38340.98	38160.79	38918.66	38160.79	38918.66	38160.79
	bound	38160.68	38156.11	38160.79	-Inf	38160.79	-Inf	38160.79
	runtime	320.22	343.94	96.01	559.42	61.35	690.31	25.15
objseg-552	value	37402.52	37406.43	37402.52	38511.49	37402.52	38511.49	37402.52
	bound	37402.41	37402.36	37402.52	-Inf	37402.52	-Inf	37402.52
	runtime	439.88	451.76	91.85	578.29	30.24	1287.98	38.80
mean energy		31317.23	31424.55	33884.39	32663.86	31317.23	32663.86	31317.23
mean bound		31316.88	31312.21	-Inf	-Inf	31317.23	-Inf	31317.23
mean runtime		346.56	365.16	788.71	445.85	278.51	856.63	28.43
best value		100.00	20.00	80.00	0.00	100.00	0.00	100.00
best bound		0.00	0.00	80.00	0.00	100.00	0.00	100.00
verified opt		0.00	0.00	80.00	0.00	100.00	0.00	100.00

4.10. MRI Brain Segmentation (brain)

Table 37: brain

brain		FastPD	BPS	EXPANSION	MCA	SWAP	TRWS
t1_icbm_normal_1mm_pn3_rf20	value	75665951.00	75721866.00	75665025.00	84871188.00	75668026.00	75661674.00
	bound	-Inf	-Inf	-Inf	67757808.00	-Inf	75661150.00
	runtime	34.68	3222.10	831.60	63869.76	993.08	4165.67
t1_icbm_normal_3mm_pn3_rf20	value	26600041.00	26601940.00	26599365.00	29898818.00	26600488.00	26597216.00
	bound	-Inf	-Inf	-Inf	23707686.50	-Inf	26597120.00
	runtime	3.60	1050.96	229.63	6219.48	324.29	1376.98
t1_icbm_normal_5mm_pn3_rf20	value	16965372.00	16966376.00	16965010.00	16963560.00	16965849.00	16963638.00
	bound	-Inf	-Inf	-Inf	16963560.00	-Inf	16963560.00
	runtime	2.17	567.30	108.92	3350.90	182.34	677.65
t1_icbm_normal_7mm_pn3_rf20	value	12663105.00	12663827.00	12662909.00	12661506.00	12663157.00	12661613.00
	bound	-Inf	-Inf	-Inf	12661506.00	-Inf	12661506.00
	runtime	1.80	396.77	53.25	1370.80	101.08	589.67
t1_icbm_normal_9mm_pn3_rf20	value	10079935.00	10081157.00	10079764.00	10078821.00	10080098.00	10078896.00
	bound	-Inf	-Inf	-Inf	10078821.00	-Inf	10078821.00
	runtime	1.21	362.74	58.51	738.04	62.00	432.85
mean energy		28394880.80	28407033.20	28394414.60	29919089.00	28395523.60	28392589.80
mean bound		-Inf	-Inf	-Inf	26233876.30	-Inf	28392431.40
mean runtime		8.69	1119.97	256.38	15109.80	332.56	1448.56
best value		0.00	0.00	0.00	60.00	0.00	40.00
best bound		0.00	0.00	0.00	60.00	0.00	100.00
verified opt		0.00	0.00	0.00	60.00	0.00	0.00

4.11. Chinese Character Inpainting (dtf-chinesechar)

Table 38: dtf-chinesechar

dtf-chinesechar		BPS	MCBC	ogm-ILP	QPBO	SA	TRWS	TRWS-LF2
TST_test_0001_88_115	value	-56525.74	-56545.58	-56538.92	-56501.15	-56545.58	-56511.42	-56545.40
	bound	-Inf	-56545.58	-56770.50	-56790.27	-Inf	-56790.36	-56790.36
	runtime	80.68	192.80	3580.62	0.11	NaN	109.90	106.24
TST_test_0002_88_105	value	-49305.09	-49329.55	-49303.76	-49300.12	-49255.31	-49300.12	-49323.71
	bound	-Inf	-49524.89	-50290.23	-50299.28	-Inf	-50299.28	-50299.28
	runtime	72.96	3605.18	3586.43	0.24	NaN	100.83	102.31
TST_test_0003_64_99	value	-31661.23	-31704.27	-31678.40	-31646.50	-31665.90	-31656.27	-31681.68
	bound	-Inf	-31954.55	-32716.76	-32726.76	-Inf	-32726.76	-32726.76
	runtime	45.24	3603.75	3590.08	0.27	NaN	63.32	66.27
TST_test_0004_88_97	value	-44480.08	-44497.71	-44493.83	-44481.97	-44473.90	-44433.56	-44453.64
	bound	-Inf	-44693.82	-45409.25	-45419.21	-Inf	-45419.36	-45419.36
	runtime	67.40	3601.30	3577.50	0.30	NaN	92.33	94.51
TST_test_0005_120_97	value	-62694.28	-62775.31	-62766.63	-62732.05	-62730.03	-62736.85	-62774.10
	bound	-Inf	-62945.43	-63688.33	-63698.27	-Inf	-63698.27	-63698.27
	runtime	98.46	3601.46	3567.87	0.25	NaN	135.68	135.53
TST_test_0006_112_99	value	-62506.54	-62506.84	-62487.51	-62487.51	-62506.84	-62487.51	-62492.72
	bound	-Inf	-62506.84	-62696.94	-62718.76	-Inf	-62718.76	-62718.76
	runtime	92.04	91.77	3563.53	0.10	NaN	127.52	123.89
TST_test_0007_88_112	value	-53665.84	-53665.85	-53660.33	-53647.26	-53652.40	-53611.02	-53617.44
	bound	-Inf	-53759.55	-54385.92	-54397.33	-Inf	-54397.33	-54397.33
	runtime	78.69	3602.54	3585.63	0.20	NaN	107.23	106.85
TST_test_0008_80_102	value	-44165.98	-44167.20	-44150.46	-44069.37	-44166.09	-44146.88	-44148.74
	bound	-Inf	-44167.20	-44565.27	-44572.52	-Inf	-44572.55	-44572.55
	runtime	63.14	948.01	3588.73	0.12	NaN	86.98	85.71
TST_test_0009_64_80	value	-25930.61	-25953.88	-25942.62	-25934.40	-25933.41	-25944.94	-25953.88
	bound	-Inf	-25961.34	-26658.73	-26666.34	-Inf	-26666.34	-26666.34
	runtime	35.88	3601.54	3588.76	0.17	NaN	50.16	50.63
TST_test_0010_80_109	value	-46825.69	-46827.55	-46816.01	-46792.45	-46821.27	-46797.42	-46813.55
	bound	-Inf	-46833.87	-47448.63	-47456.19	-Inf	-47456.19	-47456.19
	runtime	67.13	3600.25	3584.93	0.18	NaN	93.05	92.81
TST_test_0011_96_101	value	-51957.40	-51957.40	-51954.75	-51948.66	-51918.45	-51950.01	-51951.70
	bound	-Inf	-52056.09	-52761.82	-52769.34	-Inf	-52769.35	-52769.35
	runtime	78.57	3600.22	3582.51	0.22	NaN	106.74	108.08
TST_test_0012_88_103	value	-50428.21	-50429.23	-50423.73	-50423.73	-50428.99	-50369.56	-50400.54
	bound	-Inf	-50429.23	-50513.63	-50548.65	-Inf	-50548.65	-50548.65
	runtime	71.40	15.74	3560.85	0.07	NaN	98.98	100.30
TST_test_0013_64_94	value	-30665.33	-30674.62	-30636.05	-30618.63	-30668.11	-30625.58	-30635.70
	bound	-Inf	-30697.18	-31437.06	-31445.01	-Inf	-31445.01	-31445.01
	runtime	43.19	3602.07	3587.72	0.22	NaN	59.75	62.40
TST_test_0014_72_73	value	-27481.93	-27481.93	-27481.93	-27381.52	-27473.15	-27481.93	-27481.93
	bound	-Inf	-27481.93	-27883.43	-27900.14	-Inf	-27900.14	-27900.14
	runtime	38.30	1013.48	3589.15	0.10	NaN	52.81	53.21
TST_test_0015_80_73	value	-31467.93	-31513.61	-31503.83	-31502.75	-31513.61	-31502.75	-31509.00
	bound	-Inf	-31513.61	-31829.67	-31850.90	-Inf	-31851.00	-31851.00
	runtime	43.47	1137.89	3587.22	0.11	NaN	60.04	61.09
TST_test_0016_72_83	value	-29866.92	-29882.00	-29879.24	-29867.32	-29830.04	-29694.54	-29761.09
	bound	-Inf	-30060.46	-30835.60	-30846.48	-Inf	-30846.49	-30846.49
	runtime	43.65	3602.67	3588.98	0.24	NaN	61.35	64.40
TST_test_0017_112_101	value	-60401.72	-60419.19	-60365.33	-60341.70	-60420.77	-60363.60	-60383.51
	bound	-Inf	-60543.35	-61339.18	-61349.06	-Inf	-61349.06	-61349.06
	runtime	95.33	3605.06	3586.00	0.26	NaN	130.25	131.71
TST_test_0018_80_110	value	-49125.04	-49154.49	-49149.05	-49129.42	-49130.89	-49151.47	-49153.48
	bound	-Inf	-49154.49	-49401.00	-49427.13	-Inf	-49427.13	-49427.13
	runtime	67.69	175.80	3581.18	0.10	NaN	93.60	92.90
TST_test_0019_120_106	value	-70174.79	-70209.30	-70199.64	-70179.87	-70198.21	-70153.06	-70169.78
	bound	-Inf	-70209.30	-70585.52	-70593.85	-Inf	-70593.85	-70593.85
	runtime	109.37	486.54	3556.52	0.14	NaN	149.93	147.38
TST_test_0020_96_94	value	-50062.42	-50062.57	-50062.42	-49968.84	-50062.57	-50013.49	-50024.72
	bound	-Inf	-50062.57	-50175.63	-50207.54	-Inf	-50207.54	-50207.54
	runtime	72.30	29.77	3559.95	0.09	NaN	99.40	102.35
TST_test_0021_112_124	value	-76529.97	-76569.89	-76566.70	-76532.48	-76557.29	-76540.79	-76569.89
	bound	-Inf	-76677.09	-77370.52	-77377.42	-Inf	-77377.43	-77377.43
	runtime	118.77	3605.55	3552.64	0.24	NaN	161.60	164.01
TST_test_0022_80_85	value	-36674.44	-36687.25	-36682.33	-36643.09	-36678.66	-36661.59	-36686.06
	bound	-Inf	-36687.25	-37105.30	-37119.60	-Inf	-37119.60	-37119.60
	runtime	51.80	1088.44	3588.49	0.11	NaN	71.86	72.75
TST_test_0023_112_112	value	-68998.55	-68998.55	-68987.51	-68972.14	-68971.47	-68977.59	-68995.45
	bound	-Inf	-69094.31	-69769.55	-69776.42	-Inf	-69776.44	-69776.44
	runtime	105.24	3601.67	3579.65	0.25	NaN	144.00	143.35
TST_test_0024_88_126	value	-60034.07	-60034.07	-60025.04	-59793.06	-60032.75	-59850.84	-59886.11
	bound	-Inf	-60034.07	-60305.66	-60317.24	-Inf	-60317.24	-60317.24
	runtime	88.97	347.36	3586.57	0.12	NaN	122.36	123.13
TST_test_0025_64_92	value	-30858.74	-30860.19	-30848.94	-30832.81	-30855.37	-30829.19	-30852.66
	bound	-Inf	-30860.19	-31420.11	-31427.67	-Inf	-31427.67	-31427.67
	runtime	42.23	3026.35	3588.98	0.13	NaN	58.50	61.09

dtf-chinesechar		BPS	MCBC	ogm-ILP	QPBO	SA	TRWS	TRWS-LF2
TST_test_0026_56_92	value	-27063.42	-27071.86	-27064.52	-27013.38	-27065.64	-27031.53	-27056.74
	bound	-Inf	-27071.86	-27491.89	-27509.09	-Inf	-27509.09	-27509.09
	runtime	35.46	1215.59	3587.73	0.11	NaN	49.49	52.12
TST_test_0027_88_109	value	-52761.50	-52763.82	-52761.50	-52725.46	-52750.27	-52734.55	-52756.66
	bound	-Inf	-52763.82	-52926.58	-52948.71	-Inf	-52948.71	-52948.71
	runtime	75.78	47.68	3573.88	0.09	NaN	103.96	110.60
TST_test_0028_48_105	value	-25507.61	-25520.34	-25518.75	-25487.40	-25475.46	-25393.26	-25457.90
	bound	-Inf	-25520.34	-26181.66	-26189.10	-Inf	-26189.10	-26189.10
	runtime	33.05	3600.44	3589.94	0.17	NaN	46.84	56.52
TST_test_0029_96_117	value	-61515.74	-61516.13	-61495.42	-61486.34	-61489.68	-61383.15	-61428.23
	bound	-Inf	-61516.13	-62056.75	-62064.36	-Inf	-62064.36	-62064.36
	runtime	91.17	3461.10	3584.96	0.22	NaN	125.88	129.63
TST_test_0030_112_123	value	-72429.09	-72437.35	-72347.36	-72259.86	-72424.53	-72364.58	-72397.58
	bound	-Inf	-73004.60	-73900.69	-73907.93	-Inf	-73907.93	-73907.93
	runtime	117.19	3612.33	3581.58	0.35	NaN	159.26	163.77
TST_test_0031_64_78	value	-25495.10	-25495.64	-25492.47	-25442.72	-25476.44	-25493.06	-25493.69
	bound	-Inf	-25495.64	-26044.84	-26050.35	-Inf	-26050.35	-26050.35
	runtime	34.96	3173.63	3588.67	0.11	NaN	48.97	49.03
TST_test_0032_64_89	value	-28600.69	-28616.22	-28605.32	-28562.88	-28583.82	-28516.44	-28545.96
	bound	-Inf	-28752.29	-29495.72	-29501.70	-Inf	-29501.70	-29501.70
	runtime	40.38	3610.28	3587.49	0.20	NaN	56.65	58.56
TST_test_0033_88_84	value	-37712.51	-37748.30	-37695.80	-37651.99	-37752.21	-37584.59	-37682.60
	bound	-Inf	-37870.30	-38610.13	-38614.85	-Inf	-38614.85	-38614.85
	runtime	57.56	3603.33	3589.02	0.22	NaN	79.18	86.15
TST_test_0034_112_94	value	-58707.24	-58707.27	-58680.87	-58633.71	-58707.24	-58656.29	-58667.26
	bound	-Inf	-58707.27	-59001.91	-59015.01	-Inf	-59015.01	-59015.01
	runtime	87.02	275.39	3587.49	0.13	NaN	120.01	116.54
TST_test_0035_80_86	value	-37750.37	-37750.37	-37748.70	-37735.36	-37744.91	-37747.55	-37750.09
	bound	-Inf	-37750.37	-38034.40	-38053.35	-Inf	-38053.35	-38053.35
	runtime	52.78	368.39	3584.41	0.09	NaN	72.11	72.77
TST_test_0036_72_114	value	-45204.73	-45210.42	-45190.29	-45139.77	-45196.80	-45166.05	-45187.15
	bound	-Inf	-45210.42	-45500.33	-45514.85	-Inf	-45514.85	-45514.85
	runtime	61.74	295.77	3584.10	0.09	NaN	84.89	88.48
TST_test_0037_80_101	value	-44483.28	-44484.65	-44479.71	-44446.40	-44479.01	-44453.23	-44459.01
	bound	-Inf	-44484.65	-44659.97	-44685.54	-Inf	-44685.54	-44685.54
	runtime	62.85	67.61	3576.76	0.08	NaN	86.31	86.39
TST_test_0038_96_110	value	-58933.80	-58958.75	-58957.43	-58953.57	-58924.53	-58954.06	-58957.43
	bound	-Inf	-58958.75	-59418.64	-59428.75	-Inf	-59428.75	-59428.75
	runtime	84.46	1259.89	3585.64	0.14	NaN	115.02	115.52
TST_test_0039_80_99	value	-43001.66	-43002.72	-42992.33	-42992.33	-43001.60	-42992.33	-42992.33
	bound	-Inf	-43002.72	-43411.50	-43420.97	-Inf	-43420.99	-43420.99
	runtime	60.61	1366.51	3588.84	0.17	NaN	83.39	84.72
TST_test_0040_80_93	value	-40141.85	-40157.48	-40152.29	-40106.57	-40146.90	-40114.21	-40128.39
	bound	-Inf	-40157.48	-40499.10	-40511.61	-Inf	-40511.61	-40511.61
	runtime	57.24	357.32	3589.97	0.11	NaN	78.71	77.92
TST_test_0041_88_96	value	-47407.89	-47428.21	-47426.10	-47402.15	-47424.43	-47396.58	-47406.20
	bound	-Inf	-47428.21	-47551.56	-47583.63	-Inf	-47583.63	-47583.63
	runtime	66.29	29.07	3575.49	0.08	NaN	90.89	91.41
TST_test_0042_72_104	value	-39844.77	-39858.83	-39821.19	-39750.24	-39837.73	-39711.40	-39738.69
	bound	-Inf	-39858.83	-40386.18	-40393.71	-Inf	-40393.84	-40393.84
	runtime	56.20	2751.16	3587.82	0.16	NaN	77.07	81.25
TST_test_0043_72_106	value	-39283.02	-39285.19	-39269.48	-39264.66	-39284.24	-39223.09	-39255.58
	bound	-Inf	-39456.78	-40224.10	-40233.77	-Inf	-40233.87	-40233.87
	runtime	56.92	3603.13	3589.66	0.29	NaN	79.20	81.32
TST_test_0044_56_93	value	-26436.83	-26482.69	-26481.34	-26456.02	-26470.64	-26461.67	-26480.87
	bound	-Inf	-26498.08	-27127.13	-27136.17	-Inf	-27136.17	-27136.17
	runtime	35.55	3600.37	3587.82	0.17	NaN	50.21	52.41
TST_test_0045_80_120	value	-52970.59	-53007.66	-53003.06	-52984.62	-52966.20	-52985.15	-52987.41
	bound	-Inf	-53007.66	-53481.62	-53489.55	-Inf	-53489.55	-53489.55
	runtime	75.08	1429.66	3586.27	0.16	NaN	102.33	111.79
TST_test_0046_96_105	value	-55399.18	-55426.86	-55390.93	-55360.66	-55413.23	-55364.38	-55417.04
	bound	-Inf	-55426.86	-55867.85	-55876.30	-Inf	-55876.43	-55876.43
	runtime	81.88	1072.80	3587.49	0.16	NaN	112.58	116.51
TST_test_0047_112_121	value	-76660.12	-76660.12	-76660.12	-76648.67	-76660.12	-76656.48	-76660.12
	bound	-Inf	-76660.12	-76754.68	-76776.18	-Inf	-76776.21	-76776.21
	runtime	113.89	16.18	3585.77	0.11	NaN	157.36	153.42
TST_test_0048_72_98	value	-35960.15	-35956.00	-35929.73	-35885.92	-35943.40	-35881.54	-35917.97
	bound	-Inf	-36041.29	-36799.79	-36809.85	-Inf	-36809.85	-36809.85
	runtime	53.22	3601.80	3588.54	0.21	NaN	72.60	77.78
TST_test_0049_96_79	value	-41554.13	-41570.57	-41570.57	-41553.78	-41559.70	-41529.24	-41530.56
	bound	-Inf	-41570.57	-41779.99	-41805.15	-Inf	-41805.15	-41805.15
	runtime	60.00	105.70	3585.60	0.08	NaN	82.62	80.11
TST_test_0050_88_94	value	-43515.23	-43523.48	-43508.49	-43355.63	-43521.10	-43389.78	-43421.92
	bound	-Inf	-43549.37	-44243.00	-44253.05	-Inf	-44253.05	-44253.05
	runtime	65.05	3602.89	3587.50	0.19	NaN	88.59	89.54

dtf-chinesechar		BPS	MCBC	ogm-ILP	QPBO	SA	TRWS	TRWS-LF2
TST_test_0051_64_106	value	-35672.84	-35672.84	-35670.22	-35668.53	-35628.70	-35668.53	-35672.84
	bound	-Inf	-35676.23	-36302.16	-36311.14	-Inf	-36311.14	-36311.14
	runtime	48.88	3601.20	3589.35	0.17	NaN	68.06	69.82
TST_test_0052_96_107	value	-58145.78	-58145.78	-58142.87	-58134.25	-58145.78	-58112.69	-58115.43
	bound	-Inf	-58145.78	-58237.04	-58267.72	-Inf	-58267.72	-58267.72
	runtime	82.98	10.54	3545.31	0.07	NaN	114.95	113.61
TST_test_0053_88_118	value	-57883.93	-57884.28	-57879.37	-57847.83	-57883.17	-57856.18	-57858.18
	bound	-Inf	-57884.28	-58143.73	-58164.26	-Inf	-58164.27	-58164.27
	runtime	83.31	177.78	3585.58	0.11	NaN	113.04	114.50
TST_test_0054_88_106	value	-48951.29	-48950.13	-48929.98	-48906.38	-48939.71	-48866.78	-48893.57
	bound	-Inf	-49201.91	-50025.50	-50036.20	-Inf	-50036.32	-50036.32
	runtime	74.32	3608.72	3574.62	0.28	NaN	101.41	106.14
TST_test_0055_96_108	value	-55235.03	-55248.28	-55240.69	-55234.38	-55239.38	-55135.28	-55168.13
	bound	-Inf	-55296.95	-56005.52	-56013.82	-Inf	-56013.82	-56013.82
	runtime	84.04	3606.27	3584.06	0.21	NaN	115.57	117.68
TST_test_0056_88_112	value	-55035.30	-55055.94	-55055.94	-55053.40	-55009.53	-55055.94	-55055.94
	bound	-Inf	-55055.94	-55383.39	-55398.21	-Inf	-55398.21	-55398.21
	runtime	78.88	590.96	3586.16	0.11	NaN	107.82	105.32
TST_test_0057_80_95	value	-40054.23	-40054.23	-40045.26	-40042.89	-40024.79	-40045.26	-40045.29
	bound	-Inf	-40126.50	-40808.40	-40817.48	-Inf	-40817.71	-40817.71
	runtime	57.58	3602.79	3588.93	0.25	NaN	79.49	80.98
TST_test_0058_144_124	value	-99152.69	-99159.23	-99126.26	-99114.15	-99158.77	-99047.19	-99054.74
	bound	-Inf	-99163.60	-99705.83	-99713.25	-Inf	-99713.25	-99713.25
	runtime	160.44	3602.33	3556.78	0.20	NaN	219.31	244.16
TST_test_0059_104_73	value	-41793.77	-41794.15	-41793.99	-41720.14	-41793.99	-41756.26	-41761.08
	bound	-Inf	-41794.15	-41863.57	-41897.26	-Inf	-41897.26	-41897.26
	runtime	60.96	12.48	3568.54	0.06	NaN	82.72	87.84
TST_test_0060_80_111	value	-48666.82	-48676.40	-48655.98	-48605.54	-48656.88	-48661.58	-48666.41
	bound	-Inf	-48676.40	-49007.96	-49016.63	-Inf	-49016.63	-49016.63
	runtime	68.98	623.77	3582.11	0.11	NaN	94.32	106.97
TST_test_0061_88_86	value	-39725.58	-39753.52	-39722.92	-39697.64	-39713.85	-39707.74	-39734.86
	bound	-Inf	-39844.39	-40570.58	-40579.82	-Inf	-40579.82	-40579.82
	runtime	59.19	3602.92	3588.89	0.20	NaN	81.01	95.21
TST_test_0062_88_106	value	-48667.97	-48719.36	-48712.12	-48706.49	-48659.05	-48582.15	-48702.24
	bound	-Inf	-49141.58	-50008.23	-50012.64	-Inf	-50012.64	-50012.64
	runtime	74.00	3601.97	3589.95	0.27	NaN	100.93	124.54
TST_test_0063_120_108	value	-72563.46	-72570.44	-72557.00	-72523.48	-72570.42	-72530.77	-72567.80
	bound	-Inf	-72570.44	-72929.41	-72936.97	-Inf	-72936.97	-72936.97
	runtime	110.80	536.17	3581.01	0.13	NaN	152.25	165.65
TST_test_0064_80_103	value	-44990.16	-44992.22	-44966.50	-44952.03	-44991.82	-44951.06	-44967.36
	bound	-Inf	-44992.22	-45237.64	-45255.41	-Inf	-45255.41	-45255.41
	runtime	63.62	128.71	3583.46	0.08	NaN	88.34	98.33
TST_test_0065_104_94	value	-52858.93	-52896.64	-52882.65	-52880.71	-52874.89	-52880.57	-52884.36
	bound	-Inf	-52901.44	-53561.67	-53571.02	-Inf	-53571.02	-53571.02
	runtime	80.49	3600.57	3585.98	0.16	NaN	109.02	121.05
TST_test_0066_96_121	value	-64078.28	-64078.28	-64070.16	-63999.79	-64055.63	-64065.85	-64070.55
	bound	-Inf	-64078.28	-64344.32	-64354.44	-Inf	-64354.44	-64354.44
	runtime	94.72	207.92	3586.33	0.10	NaN	131.21	148.85
TST_test_0067_96_121	value	-65540.34	-65540.34	-65420.93	-65420.93	-65539.74	-65537.27	-65540.34
	bound	-Inf	-65540.34	-65648.00	-65675.92	-Inf	-65675.94	-65675.94
	runtime	94.72	45.27	3582.28	0.09	NaN	130.05	145.41
TST_test_0068_72_94	value	-33299.11	-33333.42	-33321.22	-33281.74	-33300.52	-33284.98	-33333.42
	bound	-Inf	-33685.90	-34502.95	-34514.05	-Inf	-34514.07	-34514.07
	runtime	50.31	3606.86	3588.05	0.35	NaN	69.24	80.57
TST_test_0069_96_109	value	-57481.74	-57486.46	-57482.66	-57430.32	-57437.57	-57324.73	-57358.81
	bound	-Inf	-57486.46	-57999.48	-58009.49	-Inf	-58009.49	-58009.49
	runtime	85.35	2000.34	3588.69	0.16	NaN	116.03	131.18
TST_test_0070_88_96	value	-47464.68	-47464.70	-47462.15	-47427.55	-47464.70	-47436.47	-47451.79
	bound	-Inf	-47464.70	-47534.13	-47572.26	-Inf	-47572.39	-47572.39
	runtime	66.62	10.21	3568.08	0.07	NaN	92.03	103.42
TST_test_0071_72_94	value	-36081.26	-36081.26	-36070.72	-36067.28	-36053.62	-36076.03	-36077.84
	bound	-Inf	-36081.26	-36532.50	-36546.05	-Inf	-36546.06	-36546.06
	runtime	50.13	1622.30	3590.29	0.15	NaN	69.17	79.77
TST_test_0072_96_113	value	-58526.75	-58545.36	-58539.11	-58532.61	-58486.27	-58533.79	-58545.59
	bound	-Inf	-58672.63	-59329.29	-59340.20	-Inf	-59340.20	-59340.20
	runtime	88.06	3602.58	3581.94	0.21	NaN	120.96	138.83
TST_test_0073_128_113	value	-82113.98	-82131.68	-82102.14	-82084.62	-82109.39	-82087.07	-82109.55
	bound	-Inf	-82131.68	-82416.18	-82428.17	-Inf	-82428.17	-82428.17
	runtime	125.57	249.16	3579.58	0.12	NaN	171.68	191.39
TST_test_0074_96_107	value	-56107.39	-56111.41	-56096.32	-55975.44	-56097.49	-55903.13	-56052.30
	bound	-Inf	-56111.41	-56681.82	-56691.31	-Inf	-56691.38	-56691.38
	runtime	83.91	2960.21	3584.54	0.17	NaN	115.43	133.63
TST_test_0075_88_92	value	-41114.36	-41115.97	-41105.57	-41090.51	-41099.03	-40903.31	-40952.44
	bound	-Inf	-41505.93	-42338.34	-42344.59	-Inf	-42344.59	-42344.59
	runtime	63.23	3600.46	3585.80	0.29	NaN	87.15	99.47

dtf-chinesechar		BPS	MCBC	ogm-ILP	QPBO	SA	TRWS	TRWS-LF2
TST_test_0076_80_93	value	-39648.86	-39655.20	-39648.18	-39607.03	-39647.20	-39489.98	-39555.45
	bound	-Inf	-39733.61	-40321.06	-40329.41	-Inf	-40329.49	-40329.49
	runtime	57.12	3602.66	3587.77	0.20	NaN	78.91	92.20
TST_test_0077_96_95	value	-49804.70	-49839.31	-49812.82	-49792.16	-49839.31	-49768.26	-49799.03
	bound	-Inf	-49839.31	-50234.25	-50241.66	-Inf	-50241.66	-50241.66
	runtime	73.69	562.46	3588.21	0.13	NaN	100.49	112.38
TST_test_0078_72_108	value	-42033.32	-42048.22	-42040.85	-42040.02	-42028.00	-42040.03	-42040.03
	bound	-Inf	-42048.22	-42528.06	-42535.31	-Inf	-42535.33	-42535.33
	runtime	58.65	1835.08	3590.80	0.14	NaN	80.59	88.84
TST_test_0079_88_81	value	-36513.51	-36522.68	-36491.35	-36469.57	-36505.86	-36401.46	-36439.31
	bound	-Inf	-36557.13	-37251.37	-37258.13	-Inf	-37258.13	-37258.13
	runtime	55.15	3603.50	3572.11	0.19	NaN	75.38	84.67
TST_test_0080_104_107	value	-61010.84	-61033.84	-61020.38	-61004.76	-61023.76	-61015.65	-61027.73
	bound	-Inf	-61074.08	-61736.76	-61745.57	-Inf	-61745.57	-61745.57
	runtime	91.81	3601.83	3555.92	0.19	NaN	126.40	141.12
TST_test_0081_112_96	value	-59439.29	-59446.88	-59404.52	-59388.36	-59446.08	-59388.36	-59393.61
	bound	-Inf	-59446.88	-59882.17	-59891.23	-Inf	-59891.36	-59891.36
	runtime	89.86	1070.89	3564.68	0.14	NaN	122.58	138.47
TST_test_0082_96_106	value	-56782.32	-56804.69	-56797.95	-56785.09	-56802.72	-56790.13	-56799.10
	bound	-Inf	-56804.69	-56995.50	-57015.27	-Inf	-57015.27	-57015.27
	runtime	82.94	70.46	3581.68	0.09	NaN	112.87	125.37
TST_test_0083_72_105	value	-40072.52	-40068.75	-40041.76	-40005.60	-40061.77	-39937.99	-40000.07
	bound	-Inf	-40088.43	-40739.60	-40747.30	-Inf	-40747.31	-40747.31
	runtime	56.92	3602.54	3587.63	0.18	NaN	78.72	95.46
TST_test_0084_120_115	value	-78131.23	-78135.33	-78134.34	-78134.34	-78132.13	-78134.34	-78134.34
	bound	-Inf	-78135.33	-78376.75	-78388.79	-Inf	-78388.82	-78388.82
	runtime	117.61	252.99	3586.04	0.15	NaN	161.00	180.41
TST_test_0085_64_126	value	-44219.29	-44219.29	-44217.81	-44216.57	-44175.77	-44216.57	-44219.29
	bound	-Inf	-44219.29	-44752.05	-44761.19	-Inf	-44761.20	-44761.20
	runtime	58.76	2950.33	3582.53	0.16	NaN	81.61	93.54
TST_test_0086_80_112	value	-47688.74	-47688.74	-47673.41	-47603.81	-47662.67	-47660.65	-47667.56
	bound	-Inf	-47688.74	-48290.78	-48296.44	-Inf	-48296.44	-48296.44
	runtime	69.89	3320.53	3578.00	0.13	NaN	96.28	106.11
TST_test_0087_88_124	value	-61036.08	-61043.79	-61028.47	-61014.71	-61043.48	-61024.14	-61030.28
	bound	-Inf	-61043.79	-61217.57	-61235.90	-Inf	-61235.90	-61235.90
	runtime	86.91	50.94	3564.93	0.09	NaN	119.37	133.52
TST_test_0088_104_107	value	-60067.30	-60088.43	-60072.73	-60039.87	-60030.60	-60049.77	-60078.47
	bound	-Inf	-60235.18	-60908.18	-60918.61	-Inf	-60918.61	-60918.61
	runtime	92.12	3603.26	3584.75	0.22	NaN	124.57	142.27
TST_test_0089_72_92	value	-36504.25	-36525.17	-36525.17	-36500.22	-36525.17	-36518.38	-36525.17
	bound	-Inf	-36525.17	-36770.14	-36795.87	-Inf	-36795.87	-36795.87
	runtime	49.30	306.15	3584.04	0.09	NaN	67.91	76.75
TST_test_0090_104_116	value	-64683.22	-64682.09	-64652.36	-64519.10	-64647.89	-64664.88	-64682.09
	bound	-Inf	-64788.13	-65574.42	-65578.49	-Inf	-65578.50	-65578.50
	runtime	100.15	3608.50	3584.59	0.22	NaN	138.03	155.21
TST_test_0091_136_95	value	-70995.81	-71005.43	-70998.66	-70979.13	-71005.10	-70989.97	-71002.13
	bound	-Inf	-71042.35	-71722.57	-71732.33	-Inf	-71732.33	-71732.33
	runtime	112.62	3601.06	3543.09	0.18	NaN	154.28	169.37
TST_test_0092_96_111	value	-59166.89	-59183.88	-59177.41	-59174.68	-59157.68	-59176.37	-59178.43
	bound	-Inf	-59183.88	-59538.29	-59546.60	-Inf	-59546.64	-59546.64
	runtime	86.56	382.25	3567.09	0.10	NaN	118.14	131.70
TST_test_0093_104_105	value	-59380.27	-59380.35	-59363.45	-59209.40	-59370.45	-59368.43	-59379.60
	bound	-Inf	-59380.35	-59795.73	-59806.47	-Inf	-59806.94	-59806.94
	runtime	89.78	979.29	3564.28	0.15	NaN	122.50	137.82
TST_test_0094_64_131	value	-42836.87	-42825.39	-42814.51	-42782.46	-42780.03	-42719.54	-42778.24
	bound	-Inf	-43210.84	-44071.98	-44082.66	-Inf	-44082.66	-44082.66
	runtime	62.04	3603.41	3587.79	0.24	NaN	86.28	102.64
TST_test_0095_128_109	value	-76108.21	-76109.29	-76091.30	-76065.55	-76110.22	-76070.38	-76089.71
	bound	-Inf	-76119.35	-76784.13	-76791.92	-Inf	-76791.92	-76791.92
	runtime	120.06	3600.88	3583.09	0.19	NaN	165.85	184.73
TST_test_0096_56_107	value	-28455.68	-28466.74	-28420.33	-28416.30	-28441.31	-28416.30	-28428.17
	bound	-Inf	-28899.09	-29750.34	-29760.56	-Inf	-29760.57	-29760.57
	runtime	41.59	3601.58	3588.98	0.26	NaN	57.38	66.13
TST_test_0097_56_111	value	-29516.03	-29618.83	-29615.49	-29611.93	-29567.56	-29418.69	-29494.88
	bound	-Inf	-30088.62	-30973.64	-30984.86	-Inf	-30984.86	-30984.86
	runtime	43.69	3600.25	3589.08	0.32	NaN	60.92	71.69
TST_test_0098_112_98	value	-60238.19	-60265.58	-60249.41	-60213.19	-60231.50	-60214.50	-60229.70
	bound	-Inf	-60284.03	-60934.37	-60939.87	-Inf	-60939.87	-60939.87
	runtime	90.42	3602.41	3582.50	0.16	NaN	124.67	135.55
TST_test_0099_72_105	value	-42242.42	-42242.61	-42241.97	-42146.73	-42242.31	-42167.24	-42223.18
	bound	-Inf	-42242.61	-42330.05	-42366.09	-Inf	-42366.11	-42366.11
	runtime	56.87	23.43	3569.80	0.07	NaN	78.15	91.69
TST_test_0100_80_102	value	-45097.45	-45097.93	-45097.93	-45047.21	-45097.93	-45055.66	-45064.04
	bound	-Inf	-45097.93	-45204.90	-45244.60	-Inf	-45244.60	-45244.60
	runtime	60.90	24.20	3564.43	0.07	NaN	86.43	95.14
mean energy		-49538.16	-49550.10	-49536.59	-49501.95	-49533.02	-49514.06	-49519.44
mean bound		-Inf	-49612.38	-50106.17	-50119.38	-Inf	-50119.41	-50119.41

dtf-chinesechar		BPS	MCBC	ogm-ILP	QPBO	SA	TRWS	TRWS-LF2
mean runtime		72.85	2053.89	3580.93	0.16	NaN	100.13	106.94
best value		19.00	91.00	8.00	0.00	13.00	2.00	11.00
best bound		0.00	100.00	0.00	0.00	0.00	0.00	0.00
verified opt		0.00	56.00	0.00	0.00	0.00	0.00	0.00

4.12. Scene Labeling (scene-decomposition)

Table 39: scene-decomposition

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
0000047	value	-848.29	-848.29	-848.29	-848.29	-848.29	-848.29	-848.29	-848.29
	bound	-Inf	-848.29	-Inf	-Inf	-848.29	-848.29	-848.29	-848.29
	runtime	0.17	2.10	0.29	0.08	1.84	0.21	2.79	0.11
0000051	value	-963.04	-963.04	-963.04	-963.04	-963.04	-963.04	-963.04	-963.04
	bound	-Inf	-963.04	-Inf	-Inf	-963.05	-963.04	-963.06	-963.04
	runtime	0.17	1.85	0.33	0.07	3.37	1.03	3.40	0.10
0000059	value	-940.11	-940.11	-940.11	-940.11	-940.11	-940.11	-940.11	-940.11
	bound	-Inf	-940.11	-Inf	-Inf	-940.11	-940.11	-940.11	-940.11
	runtime	0.18	1.75	0.32	0.06	4.76	0.80	4.65	0.13
0000072	value	-874.12	-874.12	-874.12	-874.12	-874.12	-874.12	-874.12	-874.12
	bound	-Inf	-874.12	-Inf	-Inf	-874.12	-874.12	-874.12	-874.12
	runtime	0.18	1.33	0.25	0.07	0.98	0.40	1.71	0.11
0000087	value	-811.78	-813.34	-811.78	-811.78	-813.34	-813.34	-813.34	-813.34
	bound	-Inf	-813.34	-Inf	-Inf	-813.34	-813.34	-813.35	-813.34
	runtime	0.18	7.26	0.41	0.06	4.65	0.60	4.65	0.13
0000176	value	-991.38	-991.38	-991.38	-991.38	-991.38	-991.38	-991.38	-991.38
	bound	-Inf	-991.38	-Inf	-Inf	-991.38	-991.38	-991.38	-991.38
	runtime	0.18	1.33	0.28	0.06	1.45	0.57	2.30	0.11
0000382	value	-785.74	-786.31	-785.74	-786.31	-786.31	-786.31	-786.31	-786.31
	bound	-Inf	-786.31	-Inf	-Inf	-786.32	-786.31	-786.32	-786.31
	runtime	0.15	10.25	0.29	0.06	3.91	0.51	3.87	0.11
0000631	value	-885.59	-885.59	-885.59	-885.59	-885.59	-885.59	-885.59	-885.59
	bound	-Inf	-885.59	-Inf	-Inf	-885.59	-885.59	-885.59	-885.59
	runtime	0.15	1.20	0.28	0.05	3.06	0.30	3.15	0.10
0000643	value	-758.21	-758.21	-758.21	-758.21	-758.21	-758.21	-758.21	-758.21
	bound	-Inf	-758.21	-Inf	-Inf	-758.21	-758.21	-758.21	-758.21
	runtime	0.17	20.30	0.25	0.07	4.24	0.45	4.32	0.12
0000697	value	-766.04	-766.04	-766.04	-766.04	-766.04	-766.04	-766.04	-766.04
	bound	-Inf	-766.04	-Inf	-Inf	-766.05	-766.04	-766.06	-766.04
	runtime	0.16	1.59	0.28	0.06	4.03	0.55	4.10	0.11
0000759	value	-780.15	-780.15	-780.15	-780.15	-780.15	-780.15	-780.15	-780.15
	bound	-Inf	-780.15	-Inf	-Inf	-780.16	-780.15	-780.20	-780.15
	runtime	0.15	5.24	0.26	0.05	3.86	0.57	3.85	0.10
0000794	value	-787.37	-787.50	-787.37	-787.50	-787.50	-787.50	-787.50	-787.50
	bound	-Inf	-787.50	-Inf	-Inf	-787.50	-787.50	-787.51	-787.50
	runtime	0.13	5.15	0.24	0.05	3.44	0.60	3.52	0.09
0000952	value	-752.58	-752.58	-752.58	-752.30	-752.58	-752.58	-752.58	-752.58
	bound	-Inf	-752.58	-Inf	-Inf	-752.58	-752.59	-752.58	-752.58
	runtime	0.18	142.67	0.41	0.08	3.66	4.91	4.55	0.13
0001677	value	-1037.97	-1037.97	-1037.97	-1037.97	-1037.97	-1037.97	-1037.97	-1037.97
	bound	-Inf	-1037.97	-Inf	-Inf	-1037.97	-1037.97	-1037.97	-1037.97
	runtime	0.16	1.25	0.29	0.06	3.47	0.39	4.23	0.11
0002136	value	-863.20	-863.52	-863.20	-863.05	-863.52	-863.52	-863.52	-863.52
	bound	-Inf	-863.52	-Inf	-Inf	-863.53	-863.52	-863.54	-863.52
	runtime	0.18	3.36	0.28	0.08	4.55	2.03	4.52	0.12
0002395	value	-1043.26	-1043.26	-1043.26	-1043.26	-1043.26	-1043.26	-1043.26	-1043.26
	bound	-Inf	-1043.26	-Inf	-Inf	-1043.26	-1043.26	-1043.26	-1043.26
	runtime	0.16	1.16	0.21	0.06	1.79	0.14	2.56	0.10
0002755	value	-679.76	-682.83	-682.83	-682.83	-682.83	-682.83	-682.83	-682.83
	bound	-Inf	-Inf	-Inf	-Inf	-682.83	-682.83	-682.85	-682.83
	runtime	0.17	3600.00	0.60	0.07	3.55	2.50	3.61	0.14
0003178	value	-582.61	-582.61	-582.61	-582.61	-582.61	-582.61	-582.61	-582.61
	bound	-Inf	-582.61	-Inf	-Inf	-582.62	-582.61	-582.65	-582.61
	runtime	0.16	558.73	0.34	0.05	3.22	3.38	3.27	0.12
0003423	value	-792.88	-795.51	-795.51	-795.42	-795.51	-795.51	-795.51	-795.51
	bound	-Inf	-795.51	-Inf	-Inf	-795.51	-795.51	-795.51	-795.51
	runtime	0.13	5.40	0.28	0.05	1.75	0.63	2.81	0.09
0003463	value	-573.17	-573.86	-573.18	-573.86	-573.86	-573.86	-573.86	-573.86
	bound	-Inf	-573.86	-Inf	-Inf	-573.86	-573.86	-573.86	-573.86
	runtime	0.15	1.63	0.21	0.05	1.60	3.93	3.82	0.10
0003728	value	-758.99	-758.99	-758.99	-758.99	-758.99	-758.99	-758.99	-758.99
	bound	-Inf	-758.99	-Inf	-Inf	-759.00	-758.99	-759.00	-758.99
	runtime	0.17	92.95	0.43	0.07	4.50	0.86	4.47	0.13

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
0003793	value	-862.13	-862.13	-862.13	-862.13	-862.13	-862.13	-862.13	-862.13
	bound	-Inf	-862.13	-Inf	-Inf	-862.13	-862.13	-862.13	-862.13
	runtime	0.16	1.18	0.23	0.06	0.67	0.06	1.45	0.10
0003957	value	-595.63	-595.63	-595.63	-595.63	-595.63	-595.63	-595.63	-595.63
	bound	-Inf	-595.63	-Inf	-Inf	-595.63	-595.63	-595.63	-595.63
	runtime	0.14	6.09	0.22	0.06	3.57	0.22	3.73	0.10
0004028	value	-849.36	-849.36	-849.36	-849.36	-849.36	-849.36	-849.36	-849.36
	bound	-Inf	-849.36	-Inf	-Inf	-849.36	-849.36	-849.36	-849.36
	runtime	0.16	1.25	0.26	0.06	2.38	0.73	4.11	0.10
0004069	value	-720.11	-720.11	-720.11	-720.11	-720.11	-720.11	-720.11	-720.11
	bound	-Inf	-720.11	-Inf	-Inf	-720.21	-720.11	-720.38	-720.11
	runtime	0.17	8.67	0.32	0.07	4.37	4.80	4.46	0.14
0004294	value	-622.15	-623.81	-622.15	-623.27	-623.81	-623.81	-623.81	-623.81
	bound	-Inf	-623.81	-Inf	-Inf	-623.81	-623.81	-623.81	-623.81
	runtime	0.15	47.83	0.27	0.06	2.85	0.27	3.15	0.11
0004498	value	-820.08	-821.13	-820.08	-821.13	-821.13	-821.13	-821.13	-821.13
	bound	-Inf	-821.13	-Inf	-Inf	-821.13	-821.13	-821.13	-821.13
	runtime	0.17	7.91	0.32	0.06	2.82	1.28	4.48	0.12
0004774	value	-830.55	-832.33	-830.55	-832.33	-832.33	-832.33	-832.33	-832.33
	bound	-Inf	-832.33	-Inf	-Inf	-832.33	-832.33	-832.33	-832.33
	runtime	0.14	4.81	0.36	0.05	2.42	0.34	3.58	0.09
0005074	value	-840.01	-840.01	-839.35	-840.01	-840.01	-840.01	-840.01	-840.01
	bound	-Inf	-840.01	-Inf	-Inf	-840.02	-840.01	-840.04	-840.01
	runtime	0.17	1.59	0.31	0.06	3.53	0.79	3.57	0.11
0005079	value	-694.17	-694.17	-694.17	-694.17	-694.17	-694.17	-694.17	-694.17
	bound	-Inf	-694.17	-Inf	-Inf	-694.17	-694.17	-694.17	-694.17
	runtime	0.15	5.22	0.26	0.07	3.45	0.21	3.86	0.10
0005633	value	-826.38	-826.38	-826.38	-826.25	-826.38	-826.38	-826.38	-826.38
	bound	-Inf	-826.38	-Inf	-Inf	-826.38	-826.38	-826.38	-826.38
	runtime	0.16	59.45	0.29	0.05	2.50	0.96	3.88	0.11
0006575	value	-718.73	-718.73	-718.73	-718.73	-718.73	-718.73	-718.73	-718.73
	bound	-Inf	-718.73	-Inf	-Inf	-718.73	-718.73	-718.73	-718.73
	runtime	0.18	6.65	0.29	0.10	2.07	0.22	3.80	0.12
0007323	value	-903.25	-903.25	-903.25	-903.25	-903.25	-903.25	-903.25	-903.25
	bound	-Inf	-903.25	-Inf	-Inf	-903.25	-903.25	-903.25	-903.25
	runtime	0.15	3.00	0.27	0.05	3.17	0.41	3.23	0.10
0007545	value	-694.04	-694.04	-694.04	-693.51	-694.04	-694.04	-694.04	-694.04
	bound	-Inf	-694.04	-Inf	-Inf	-694.04	-694.04	-694.04	-694.04
	runtime	0.14	5.09	0.21	0.08	2.05	0.32	2.93	0.09
0007932	value	-818.77	-818.77	-818.77	-817.60	-818.77	-818.77	-818.77	-818.77
	bound	-Inf	-818.77	-Inf	-Inf	-818.78	-818.77	-818.81	-818.77
	runtime	0.17	35.46	0.29	0.06	4.32	0.93	4.36	0.13
0009212	value	-691.39	-691.39	-691.39	-691.39	-691.39	-691.39	-691.39	-691.39
	bound	-Inf	-691.39	-Inf	-Inf	-691.41	-691.39	-691.44	-691.39
	runtime	0.14	1.52	0.33	0.07	3.67	0.76	3.70	0.11
0010830	value	-1019.89	-1019.89	-1019.89	-1019.89	-1019.89	-1019.89	-1019.89	-1019.89
	bound	-Inf	-1019.89	-Inf	-Inf	-1019.89	-1019.89	-1019.89	-1019.89
	runtime	0.17	1.62	0.43	0.08	1.40	0.94	2.97	0.12
0010950	value	-989.47	-989.47	-989.47	-989.47	-989.47	-989.47	-989.47	-989.47
	bound	-Inf	-989.47	-Inf	-Inf	-989.47	-989.47	-989.47	-989.47
	runtime	0.18	2.49	0.35	0.09	1.87	0.45	2.56	0.12
0011003	value	-742.54	-742.54	-742.54	-742.54	-742.54	-742.54	-742.54	-742.54
	bound	-Inf	-742.54	-Inf	-Inf	-742.54	-742.54	-742.54	-742.54
	runtime	0.14	1.06	0.19	0.05	1.53	0.09	2.87	0.08
0011033	value	-899.85	-899.85	-899.85	-899.85	-899.85	-899.85	-899.85	-899.85
	bound	-Inf	-899.85	-Inf	-Inf	-899.85	-899.85	-899.85	-899.85
	runtime	0.18	1.38	0.43	0.09	1.86	0.44	3.70	0.12
0011073	value	-939.95	-939.95	-939.95	-939.95	-939.95	-939.95	-939.95	-939.95
	bound	-Inf	-939.95	-Inf	-Inf	-939.95	-939.95	-939.95	-939.95
	runtime	0.17	1.25	0.23	0.05	2.09	0.68	2.40	0.10
0011088	value	-900.43	-900.43	-900.43	-900.43	-900.43	-900.43	-900.43	-900.43
	bound	-Inf	-900.43	-Inf	-Inf	-900.44	-900.43	-900.46	-900.43
	runtime	0.17	1.47	0.34	0.08	4.24	0.58	4.29	0.11
0011116	value	-871.04	-871.82	-871.04	-871.82	-871.82	-871.82	-871.82	-871.82
	bound	-Inf	-871.82	-Inf	-Inf	-871.86	-871.82	-871.99	-871.82
	runtime	0.17	1.62	0.33	0.07	3.53	0.60	3.59	0.12
0011154	value	-781.48	-781.48	-781.48	-781.19	-781.48	-781.48	-781.48	-781.48
	bound	-Inf	-781.48	-Inf	-Inf	-781.49	-781.48	-781.50	-781.48
	runtime	0.16	40.57	0.26	0.07	4.07	1.98	4.13	0.11
0100026	value	-694.22	-694.22	-694.00	-694.22	-694.22	-694.22	-694.22	-694.22
	bound	-Inf	-694.22	-Inf	-Inf	-694.24	-694.22	-694.33	-694.22
	runtime	0.15	6.15	0.30	0.07	3.17	1.22	3.23	0.10
0100030	value	-850.75	-850.75	-850.75	-850.75	-850.75	-850.75	-850.75	-850.75
	bound	-Inf	-850.75	-Inf	-Inf	-850.75	-850.75	-850.75	-850.75
	runtime	0.17	1.36	0.23	0.06	2.83	0.26	3.43	0.10

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
0100061	value	-734.38	-734.38	-733.86	-734.38	-734.38	-734.38	-734.38	-734.38
	bound	-Inf	-734.38	-Inf	-Inf	-734.38	-734.38	-734.38	-734.38
	runtime	0.14	5.33	0.23	0.06	2.32	0.30	3.57	0.09
0100091	value	-925.22	-928.18	-925.22	-928.18	-928.18	-928.18	-928.18	-928.18
	bound	-Inf	-928.18	-Inf	-Inf	-928.18	-928.18	-928.18	-928.18
	runtime	0.18	1.39	0.42	0.06	3.19	0.42	4.59	0.12
0100113	value	-718.54	-718.54	-718.54	-718.54	-718.54	-718.54	-718.54	-718.54
	bound	-Inf	-718.54	-Inf	-Inf	-718.54	-718.54	-718.54	-718.54
	runtime	0.14	5.29	0.31	0.05	1.69	0.50	3.63	0.09
0100132	value	-1089.51	-1089.51	-1088.13	-1089.51	-1089.51	-1089.51	-1089.51	-1089.51
	bound	-Inf	-1089.51	-Inf	-Inf	-1089.51	-1089.51	-1089.51	-1089.51
	runtime	0.16	1.18	0.25	0.07	4.08	0.17	4.12	0.10
0100164	value	-917.47	-917.47	-917.47	-917.47	-917.47	-917.47	-917.47	-917.47
	bound	-Inf	-917.47	-Inf	-Inf	-917.47	-917.47	-917.47	-917.47
	runtime	0.17	1.20	0.31	0.06	2.61	0.20	4.00	0.11
0100241	value	-851.31	-852.14	-852.14	-852.14	-852.14	-852.14	-852.14	-852.14
	bound	-Inf	-852.14	-Inf	-Inf	-852.14	-852.14	-852.14	-852.14
	runtime	0.17	4.46	0.23	0.11	3.46	0.99	3.48	0.12
0100477	value	-719.60	-719.91	-719.91	-719.91	-719.91	-719.91	-719.91	-719.91
	bound	-Inf	-719.91	-Inf	-Inf	-719.91	-719.91	-719.91	-719.91
	runtime	0.16	5.90	0.26	0.06	1.81	1.32	4.10	0.11
0100579	value	-955.86	-955.86	-955.86	-955.86	-955.86	-955.86	-955.86	-955.86
	bound	-Inf	-955.86	-Inf	-Inf	-955.86	-955.86	-955.86	-955.86
	runtime	0.15	1.09	0.25	0.06	3.77	0.91	3.82	0.09
0100628	value	-768.66	-769.19	-769.19	-769.19	-769.19	-769.19	-769.19	-769.19
	bound	-Inf	-769.19	-Inf	-Inf	-769.19	-769.19	-769.19	-769.19
	runtime	0.16	1.38	0.27	0.06	4.00	4.43	4.09	0.11
0100740	value	-850.59	-850.59	-850.40	-850.59	-850.59	-850.59	-850.59	-850.59
	bound	-Inf	-850.59	-Inf	-Inf	-850.59	-850.59	-850.59	-850.59
	runtime	0.16	18.02	0.28	0.08	2.57	0.92	4.24	0.10
0100787	value	-889.18	-889.18	-889.18	-888.77	-889.18	-889.18	-889.18	-889.18
	bound	-Inf	-889.18	-Inf	-Inf	-889.18	-889.18	-889.18	-889.18
	runtime	0.17	1.30	0.29	0.06	1.03	0.07	1.33	0.10
0100822	value	-872.82	-872.82	-872.82	-872.82	-872.82	-872.82	-872.82	-872.82
	bound	-Inf	-872.82	-Inf	-Inf	-872.82	-872.82	-872.82	-872.82
	runtime	0.17	1.33	0.28	0.07	2.56	0.31	4.40	0.12
0100851	value	-797.63	-797.63	-797.63	-797.63	-797.63	-797.63	-797.63	-797.63
	bound	-Inf	-797.63	-Inf	-Inf	-797.63	-797.63	-797.63	-797.63
	runtime	0.16	3.26	0.25	0.09	1.05	0.34	1.52	0.10
0100855	value	-1011.25	-1011.25	-1011.25	-1011.25	-1011.25	-1011.25	-1011.25	-1011.25
	bound	-Inf	-1011.25	-Inf	-Inf	-1011.25	-1011.25	-1011.25	-1011.25
	runtime	0.17	15.60	0.26	0.06	4.34	0.43	4.40	0.12
0100892	value	-703.38	-703.38	-703.38	-703.36	-703.38	-703.38	-703.38	-703.38
	bound	-Inf	-703.38	-Inf	-Inf	-703.38	-703.38	-703.38	-703.38
	runtime	0.17	1.98	0.30	0.07	3.58	0.81	3.62	0.12
0100935	value	-786.60	-786.60	-786.60	-786.60	-786.60	-786.60	-786.60	-786.60
	bound	-Inf	-786.60	-Inf	-Inf	-786.60	-786.60	-786.60	-786.60
	runtime	0.16	2.29	0.31	0.07	4.11	0.53	4.13	0.12
0101060	value	-707.59	-707.59	-707.59	-707.59	-707.59	-707.59	-707.59	-707.59
	bound	-Inf	-707.59	-Inf	-Inf	-707.59	-707.59	-707.59	-707.59
	runtime	0.14	1.11	0.22	0.05	3.75	0.30	3.81	0.10
0101121	value	-755.23	-755.23	-755.23	-754.56	-755.23	-755.23	-755.23	-755.23
	bound	-Inf	-755.23	-Inf	-Inf	-755.23	-755.23	-755.23	-755.23
	runtime	0.16	363.79	0.37	0.06	4.10	0.55	4.21	0.12
0101434	value	-758.23	-758.23	-758.23	-758.23	-758.23	-758.23	-758.23	-758.23
	bound	-Inf	-758.23	-Inf	-Inf	-758.23	-758.23	-758.23	-758.23
	runtime	0.16	1.79	0.30	0.08	4.08	1.11	4.07	0.11
0101463	value	-658.76	-658.77	-658.76	-658.37	-658.77	-658.77	-658.77	-658.77
	bound	-Inf	-658.77	-Inf	-Inf	-658.77	-658.77	-658.77	-658.77
	runtime	0.14	22.35	0.24	0.05	2.96	3.06	3.02	0.10
0101488	value	-923.24	-923.24	-923.24	-923.24	-923.24	-923.24	-923.24	-923.24
	bound	-Inf	-923.24	-Inf	-Inf	-923.24	-923.24	-923.24	-923.24
	runtime	0.14	4.93	0.20	0.07	2.80	0.59	3.04	0.09
0101492	value	-940.18	-940.18	-940.18	-940.18	-940.18	-940.18	-940.18	-940.18
	bound	-Inf	-940.18	-Inf	-Inf	-940.18	-940.18	-940.18	-940.18
	runtime	0.14	4.69	0.22	0.05	2.92	0.34	3.05	0.09
0101801	value	-827.65	-827.65	-827.65	-827.65	-827.65	-827.65	-827.65	-827.65
	bound	-Inf	-827.65	-Inf	-Inf	-827.65	-827.65	-827.65	-827.65
	runtime	0.17	4.50	0.34	0.06	3.10	1.63	4.47	0.11
0102039	value	-755.10	-755.10	-755.10	-755.10	-755.10	-755.10	-755.10	-755.10
	bound	-Inf	-755.10	-Inf	-Inf	-755.10	-755.10	-755.10	-755.10
	runtime	0.15	5.04	0.23	0.05	3.28	0.80	3.87	0.10
0102170	value	-809.68	-809.68	-809.68	-809.33	-809.68	-809.68	-809.68	-809.68
	bound	-Inf	-809.68	-Inf	-Inf	-809.68	-809.68	-809.68	-809.68
	runtime	0.17	1.43	0.24	0.06	3.52	0.33	3.56	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
0102234	value	-891.15	-891.15	-891.15	-891.15	-891.15	-891.15	-891.15	-891.15
	bound	-Inf	-891.15	-Inf	-Inf	-891.15	-891.15	-891.15	-891.15
	runtime	0.17	1.33	0.26	0.09	1.27	0.26	1.93	0.11
0102403	value	-793.05	-793.05	-793.05	-793.05	-793.05	-793.05	-793.05	-793.05
	bound	-Inf	-793.05	-Inf	-Inf	-793.05	-793.05	-793.05	-793.05
	runtime	0.18	9.21	0.26	0.06	3.60	0.34	3.60	0.11
0102435	value	-1260.14	-1260.14	-1260.14	-1260.14	-1260.14	-1260.14	-1260.14	-1260.14
	bound	-Inf	-1260.14	-Inf	-Inf	-1260.14	-1260.14	-1260.14	-1260.14
	runtime	0.17	1.31	0.23	0.07	2.09	0.17	3.63	0.10
0102436	value	-885.86	-885.86	-885.86	-885.86	-885.86	-885.86	-885.86	-885.86
	bound	-Inf	-885.86	-Inf	-Inf	-885.86	-885.86	-885.86	-885.86
	runtime	0.18	1.40	0.24	0.06	1.66	0.13	1.91	0.11
0102534	value	-793.86	-793.86	-793.86	-793.32	-793.86	-793.86	-793.86	-793.86
	bound	-Inf	-793.86	-Inf	-Inf	-793.86	-793.86	-793.86	-793.86
	runtime	0.15	5.33	0.24	0.05	3.01	0.18	3.05	0.09
0102544	value	-818.75	-819.76	-819.76	-819.76	-819.76	-819.76	-819.76	-819.76
	bound	-Inf	-819.76	-Inf	-Inf	-819.76	-819.76	-819.76	-819.76
	runtime	0.18	1.98	0.30	0.08	0.95	0.13	0.76	0.12
0102566	value	-886.43	-889.85	-889.85	-889.85	-889.85	-889.85	-889.85	-889.85
	bound	-Inf	-889.85	-Inf	-Inf	-889.85	-889.85	-889.85	-889.85
	runtime	0.16	1.60	0.26	0.06	2.23	0.27	3.37	0.10
0103256	value	-837.10	-837.10	-837.10	-837.10	-837.10	-837.10	-837.10	-837.10
	bound	-Inf	-837.10	-Inf	-Inf	-837.10	-837.10	-837.10	-837.10
	runtime	0.17	1.49	0.25	0.07	2.22	0.30	3.29	0.11
0103344	value	-700.96	-700.96	-700.96	-700.87	-700.96	-700.96	-700.96	-700.96
	bound	-Inf	-700.96	-Inf	-Inf	-700.96	-700.96	-700.96	-700.96
	runtime	0.15	5.17	0.22	0.07	3.32	2.04	3.93	0.10
0103420	value	-1058.04	-1058.04	-1058.04	-1057.85	-1058.04	-1058.04	-1058.04	-1058.04
	bound	-Inf	-1058.04	-Inf	-Inf	-1058.04	-1058.04	-1058.04	-1058.04
	runtime	0.17	1.37	0.28	0.06	4.25	2.96	4.24	0.10
0103468	value	-1005.07	-1005.07	-1005.07	-1005.07	-1005.07	-1005.07	-1005.07	-1005.07
	bound	-Inf	-1005.07	-Inf	-Inf	-1005.07	-1005.07	-1005.07	-1005.07
	runtime	0.16	1.16	0.18	0.06	0.78	0.05	1.01	0.09
0103740	value	-801.78	-803.77	-803.77	-803.77	-803.77	-803.77	-803.77	-803.77
	bound	-Inf	-803.77	-Inf	-Inf	-803.78	-803.77	-803.80	-803.77
	runtime	0.16	1.65	0.40	0.07	3.34	0.32	3.43	0.11
0104019	value	-937.50	-937.50	-937.50	-937.50	-937.50	-937.50	-937.50	-937.50
	bound	-Inf	-937.50	-Inf	-Inf	-937.50	-937.50	-937.52	-937.50
	runtime	0.18	2.09	0.34	0.06	4.70	3.72	4.65	0.13
0104194	value	-858.98	-858.98	-858.98	-858.98	-858.98	-858.98	-858.98	-858.98
	bound	-Inf	-858.98	-Inf	-Inf	-858.98	-858.98	-858.98	-858.98
	runtime	0.16	1.27	0.23	0.07	0.70	0.08	1.55	0.10
0104439	value	-967.48	-967.48	-967.48	-967.20	-967.48	-967.48	-967.48	-967.48
	bound	-Inf	-967.48	-Inf	-Inf	-967.49	-967.48	-967.51	-967.48
	runtime	0.13	5.36	0.19	0.05	3.45	0.59	3.50	0.09
0104463	value	-912.89	-912.89	-912.89	-912.89	-912.89	-912.89	-912.89	-912.89
	bound	-Inf	-912.89	-Inf	-Inf	-912.89	-912.89	-912.89	-912.89
	runtime	0.17	1.18	0.21	0.06	1.51	0.24	2.43	0.10
0104552	value	-1028.51	-1028.51	-1028.51	-1028.51	-1028.51	-1028.51	-1028.51	-1028.51
	bound	-Inf	-1028.51	-Inf	-Inf	-1028.51	-1028.51	-1028.51	-1028.51
	runtime	0.18	1.76	0.29	0.07	2.90	3.58	3.66	0.12
0104808	value	-970.07	-970.07	-970.07	-970.04	-970.07	-970.07	-970.07	-970.07
	bound	-Inf	-970.07	-Inf	-Inf	-970.07	-970.07	-970.08	-970.07
	runtime	0.17	1.43	0.30	0.06	4.29	2.22	4.35	0.11
0104958	value	-1097.99	-1097.99	-1097.99	-1097.99	-1097.99	-1097.99	-1097.99	-1097.99
	bound	-Inf	-1097.99	-Inf	-Inf	-1097.99	-1097.99	-1097.99	-1097.99
	runtime	0.13	5.18	0.19	0.05	2.30	0.25	3.52	0.08
0105003	value	-870.37	-870.37	-870.37	-870.37	-870.37	-870.37	-870.37	-870.37
	bound	-Inf	-870.37	-Inf	-Inf	-870.37	-870.37	-870.37	-870.37
	runtime	0.17	1.25	0.22	0.07	1.56	0.11	2.04	0.10
0105064	value	-874.74	-874.74	-874.74	-874.74	-874.74	-874.74	-874.74	-874.74
	bound	-Inf	-874.74	-Inf	-Inf	-874.74	-874.74	-874.76	-874.74
	runtime	0.17	6.18	0.27	0.06	3.48	1.00	3.52	0.11
0105146	value	-756.82	-756.82	-756.82	-756.82	-756.82	-756.82	-756.82	-756.82
	bound	-Inf	-756.82	-Inf	-Inf	-756.82	-756.82	-756.83	-756.82
	runtime	0.16	2.64	0.24	0.06	4.08	0.52	4.13	0.10
0105159	value	-951.69	-951.69	-951.69	-951.69	-951.69	-951.69	-951.69	-951.69
	bound	-Inf	-951.69	-Inf	-Inf	-951.69	-951.69	-951.69	-951.69
	runtime	0.17	1.28	0.27	0.07	4.41	0.90	4.48	0.10
0105305	value	-924.51	-925.32	-924.51	-925.32	-925.32	-925.32	-925.32	-925.32
	bound	-Inf	-925.32	-Inf	-Inf	-925.32	-925.32	-925.32	-925.32
	runtime	0.17	5.51	0.29	0.06	3.34	1.19	4.41	0.11
1000061	value	-925.14	-925.14	-925.14	-925.14	-925.14	-925.14	-925.14	-925.14
	bound	-Inf	-925.14	-Inf	-Inf	-925.14	-925.14	-925.15	-925.14
	runtime	0.16	1.43	0.32	0.06	4.34	0.69	4.38	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
1000063	value	-891.52	-892.40	-892.40	-892.40	-892.40	-892.40	-892.40	-892.40
	bound	-Inf	-892.40	-Inf	-Inf	-892.40	-892.40	-892.46	-892.40
	runtime	0.17	5.73	0.29	0.06	3.52	0.64	3.56	0.15
1000097	value	-749.65	-749.65	-749.65	-749.65	-749.65	-749.65	-749.65	-749.65
	bound	-Inf	-749.65	-Inf	-Inf	-749.65	-749.65	-749.65	-749.65
	runtime	0.18	3.22	0.25	0.08	4.12	0.31	4.63	0.11
1000105	value	-864.57	-864.57	-864.57	-864.57	-864.57	-864.57	-864.57	-864.57
	bound	-Inf	-864.57	-Inf	-Inf	-864.57	-864.57	-864.57	-864.57
	runtime	0.17	1.90	0.59	0.07	4.38	1.71	4.36	0.11
1000288	value	-922.55	-922.55	-922.55	-922.55	-922.55	-922.55	-922.55	-922.55
	bound	-Inf	-922.55	-Inf	-Inf	-922.55	-922.55	-922.55	-922.55
	runtime	0.17	1.24	0.26	0.08	3.45	0.33	3.48	0.10
1000351	value	-1113.20	-1113.20	-1113.20	-1113.20	-1113.20	-1113.20	-1113.20	-1113.20
	bound	-Inf	-1113.20	-Inf	-Inf	-1113.20	-1113.20	-1113.20	-1113.20
	runtime	0.16	1.21	0.20	0.07	0.59	0.05	1.20	0.09
1000413	value	-920.09	-920.09	-920.09	-920.09	-920.09	-920.09	-920.09	-920.09
	bound	-Inf	-920.09	-Inf	-Inf	-920.09	-920.09	-920.09	-920.09
	runtime	0.19	1.34	0.26	0.08	4.80	0.89	4.91	0.13
1000505	value	-819.76	-820.44	-819.76	-820.20	-820.44	-820.44	-820.44	-820.44
	bound	-Inf	-820.44	-Inf	-Inf	-820.44	-820.44	-820.44	-820.44
	runtime	0.17	4.41	0.38	0.06	3.17	0.37	3.54	0.12
1000580	value	-807.22	-807.22	-807.22	-807.15	-807.22	-807.22	-807.22	-807.22
	bound	-Inf	-807.22	-Inf	-Inf	-807.28	-807.27	-807.30	-807.22
	runtime	0.18	79.36	0.46	0.10	4.67	4.63	4.71	0.27
1000615	value	-935.67	-935.67	-935.67	-935.67	-935.67	-935.67	-935.67	-935.67
	bound	-Inf	-935.67	-Inf	-Inf	-935.67	-935.67	-935.67	-935.67
	runtime	0.16	1.20	0.21	0.06	2.46	4.18	3.28	0.10
1000731	value	-848.80	-848.80	-848.80	-848.80	-848.80	-848.80	-848.80	-848.80
	bound	-Inf	-848.80	-Inf	-Inf	-848.80	-848.80	-848.80	-848.80
	runtime	0.17	1.67	0.28	0.06	4.34	0.57	4.38	0.12
1000875	value	-959.34	-961.24	-959.34	-961.24	-961.24	-961.24	-961.24	-961.24
	bound	-Inf	-961.24	-Inf	-Inf	-961.24	-961.24	-961.24	-961.24
	runtime	0.18	1.97	0.39	0.06	2.78	0.39	3.75	0.12
1000882	value	-955.75	-955.75	-955.75	-955.75	-955.75	-955.75	-955.75	-955.75
	bound	-Inf	-955.75	-Inf	-Inf	-955.75	-955.75	-955.76	-955.75
	runtime	0.17	1.30	0.29	0.08	4.31	0.64	4.45	0.12
1000929	value	-903.40	-903.40	-903.40	-903.40	-903.40	-903.40	-903.40	-903.40
	bound	-Inf	-903.40	-Inf	-Inf	-903.40	-903.40	-903.40	-903.40
	runtime	0.17	1.20	0.25	0.06	2.08	0.35	3.49	0.11
1000947	value	-992.23	-992.23	-992.23	-992.23	-992.23	-992.23	-992.23	-992.23
	bound	-Inf	-992.23	-Inf	-Inf	-992.23	-992.23	-992.23	-992.23
	runtime	0.18	1.80	0.29	0.08	1.41	0.24	1.81	0.11
1000993	value	-890.24	-890.24	-890.24	-890.18	-890.24	-890.24	-890.24	-890.24
	bound	-Inf	-890.24	-Inf	-Inf	-890.24	-890.24	-890.24	-890.24
	runtime	0.16	1.25	0.31	0.07	3.39	0.63	3.43	0.10
1001184	value	-987.96	-987.96	-987.96	-987.96	-987.96	-987.96	-987.96	-987.96
	bound	-Inf	-987.96	-Inf	-Inf	-987.96	-987.96	-987.96	-987.96
	runtime	0.17	1.36	0.19	0.06	1.70	0.15	2.52	0.10
1001195	value	-732.85	-732.85	-732.85	-732.72	-732.85	-732.85	-732.85	-732.85
	bound	-Inf	-732.85	-Inf	-Inf	-732.86	-732.85	-732.88	-732.85
	runtime	0.14	4.81	0.34	0.05	3.66	0.32	3.75	0.10
1001252	value	-688.02	-688.02	-688.02	-688.02	-688.02	-688.02	-688.02	-688.02
	bound	-Inf	-688.02	-Inf	-Inf	-688.02	-688.02	-688.02	-688.02
	runtime	0.14	1.11	0.22	0.05	3.78	0.34	3.77	0.10
1001685	value	-708.02	-708.46	-708.46	-708.46	-708.46	-708.46	-708.46	-708.46
	bound	-Inf	-708.46	-Inf	-Inf	-708.46	-708.46	-708.46	-708.46
	runtime	0.17	4.32	0.29	0.08	4.28	0.43	4.37	0.12
1001688	value	-710.39	-711.48	-710.39	-711.48	-711.48	-711.48	-711.48	-711.48
	bound	-Inf	-711.48	-Inf	-Inf	-711.48	-711.48	-711.49	-711.48
	runtime	0.15	1.16	0.28	0.05	4.04	0.50	4.00	0.10
1001770	value	-681.18	-681.18	-681.18	-681.18	-681.18	-681.18	-681.18	-681.18
	bound	-Inf	-681.18	-Inf	-Inf	-681.18	-681.18	-681.18	-681.18
	runtime	0.14	1.11	0.18	0.07	1.05	0.11	1.99	0.09
1001794	value	-1091.20	-1091.20	-1091.20	-1091.20	-1091.20	-1091.20	-1091.20	-1091.20
	bound	-Inf	-1091.20	-Inf	-Inf	-1091.20	-1091.20	-1091.20	-1091.20
	runtime	0.17	1.20	0.22	0.06	2.19	0.19	2.54	0.11
1001875	value	-787.56	-787.56	-787.56	-787.56	-787.56	-787.56	-787.56	-787.56
	bound	-Inf	-787.56	-Inf	-Inf	-787.56	-787.56	-787.56	-787.56
	runtime	0.15	1.06	0.24	0.05	3.93	0.24	3.90	0.10
1001944	value	-746.76	-746.76	-746.76	-746.76	-746.76	-746.76	-746.76	-746.76
	bound	-Inf	-746.76	-Inf	-Inf	-746.76	-746.76	-746.76	-746.76
	runtime	0.16	1.36	0.24	0.06	1.56	0.12	2.00	0.11
1100001	value	-852.50	-852.50	-852.50	-852.50	-852.50	-852.50	-852.50	-852.50
	bound	-Inf	-852.50	-Inf	-Inf	-852.50	-852.50	-852.50	-852.50
	runtime	0.16	5.33	0.30	0.08	2.57	0.28	3.37	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
1100002	value	-703.77	-703.77	-703.77	-701.44	-703.77	-703.77	-703.77	-703.77
	bound	-Inf	-703.77	-Inf	-Inf	-703.77	-703.77	-703.80	-703.77
	runtime	0.17	2.80	0.41	0.09	4.30	0.56	4.31	0.12
1100003	value	-719.45	-719.45	-719.45	-719.45	-719.45	-719.45	-719.45	-719.45
	bound	-Inf	-719.45	-Inf	-Inf	-719.45	-719.45	-719.45	-719.45
	runtime	0.13	4.52	0.31	0.07	2.80	1.96	2.87	0.09
1100004	value	-771.91	-771.91	-771.91	-771.74	-771.91	-771.91	-771.91	-771.91
	bound	-Inf	-771.91	-Inf	-Inf	-771.91	-771.91	-771.91	-771.91
	runtime	0.15	7.80	0.22	0.06	1.86	0.52	2.05	0.10
1100005	value	-694.20	-694.20	-694.20	-694.20	-694.20	-694.20	-694.20	-694.20
	bound	-Inf	-694.20	-Inf	-Inf	-694.20	-694.20	-694.20	-694.20
	runtime	0.14	6.84	0.26	0.07	3.78	0.55	3.85	0.10
1100006	value	-614.79	-615.12	-614.79	-615.12	-615.12	-615.12	-615.12	-615.12
	bound	-Inf	-615.12	-Inf	-Inf	-615.12	-615.12	-615.21	-615.12
	runtime	0.14	425.34	0.30	0.07	2.96	1.03	2.97	0.11
1100007	value	-1010.03	-1010.03	-1010.03	-1010.03	-1010.03	-1010.03	-1010.03	-1010.03
	bound	-Inf	-1010.03	-Inf	-Inf	-1010.03	-1010.03	-1010.03	-1010.03
	runtime	0.17	1.33	0.23	0.06	1.58	2.24	3.19	0.10
1100008	value	-1011.71	-1011.71	-1011.71	-1011.71	-1011.71	-1011.71	-1011.71	-1011.71
	bound	-Inf	-1011.71	-Inf	-Inf	-1011.71	-1011.71	-1011.71	-1011.71
	runtime	0.15	1.15	0.23	0.05	3.95	0.31	3.93	0.10
1100009	value	-834.60	-834.60	-834.60	-834.60	-834.60	-834.60	-834.60	-834.60
	bound	-Inf	-834.60	-Inf	-Inf	-834.60	-834.60	-834.62	-834.60
	runtime	0.17	84.28	0.39	0.09	3.48	2.13	3.56	0.12
1100011	value	-693.35	-693.35	-693.35	-693.35	-693.35	-693.35	-693.35	-693.35
	bound	-Inf	-693.35	-Inf	-Inf	-693.35	-693.35	-693.35	-693.35
	runtime	0.15	1.12	0.27	0.07	3.10	0.10	3.12	0.10
1100013	value	-824.63	-824.63	-824.63	-824.63	-824.63	-824.63	-824.63	-824.63
	bound	-Inf	-824.63	-Inf	-Inf	-824.63	-824.63	-824.63	-824.63
	runtime	0.17	1.34	0.24	0.06	4.29	0.77	4.41	0.11
1100014	value	-1111.72	-1111.72	-1111.72	-1111.72	-1111.72	-1111.72	-1111.72	-1111.72
	bound	-Inf	-1111.72	-Inf	-Inf	-1111.72	-1111.72	-1111.72	-1111.72
	runtime	0.14	1.15	0.22	0.07	3.08	0.18	3.74	0.08
1100015	value	-1269.30	-1269.30	-1269.30	-1269.17	-1269.30	-1269.30	-1269.30	-1269.30
	bound	-Inf	-1269.30	-Inf	-Inf	-1269.30	-1269.30	-1269.30	-1269.30
	runtime	0.16	1.18	0.21	0.07	1.21	3.09	1.88	0.09
1100016	value	-779.24	-779.24	-779.24	-779.24	-779.24	-779.24	-779.24	-779.24
	bound	-Inf	-779.24	-Inf	-Inf	-779.24	-779.24	-779.24	-779.24
	runtime	0.16	3.05	0.39	0.07	3.26	0.31	4.22	0.12
1100017	value	-880.73	-881.54	-880.10	-881.54	-881.54	-881.54	-881.54	-881.54
	bound	-Inf	-881.54	-Inf	-Inf	-881.55	-881.54	-881.63	-881.54
	runtime	0.17	2.15	0.27	0.08	3.37	3.41	3.43	0.12
1100023	value	-906.00	-906.00	-906.00	-906.00	-906.00	-906.00	-906.00	-906.00
	bound	-Inf	-906.00	-Inf	-Inf	-906.00	-906.00	-906.00	-906.00
	runtime	0.17	1.36	0.25	0.07	3.52	1.16	4.50	0.11
1100025	value	-845.88	-845.88	-845.88	-845.55	-845.88	-845.88	-845.88	-845.88
	bound	-Inf	-845.88	-Inf	-Inf	-845.88	-845.88	-845.88	-845.88
	runtime	0.15	1.15	0.24	0.07	3.87	1.22	3.91	0.10
1100027	value	-792.82	-792.82	-792.82	-792.82	-792.82	-792.82	-792.82	-792.82
	bound	-Inf	-792.82	-Inf	-Inf	-792.82	-792.82	-792.82	-792.82
	runtime	0.17	1.30	0.22	0.09	1.49	0.07	3.51	0.11
1100029	value	-822.11	-822.11	-822.11	-821.76	-822.11	-822.11	-822.11	-822.11
	bound	-Inf	-822.11	-Inf	-Inf	-822.11	-822.11	-822.11	-822.11
	runtime	0.16	2.69	0.23	0.06	3.25	0.19	4.10	0.10
1100030	value	-831.21	-831.21	-831.21	-831.21	-831.21	-831.21	-831.21	-831.21
	bound	-Inf	-831.21	-Inf	-Inf	-831.21	-831.21	-831.21	-831.21
	runtime	0.16	1.97	0.30	0.09	4.25	1.28	4.28	0.11
1100031	value	-732.78	-732.78	-732.78	-732.78	-732.78	-732.78	-732.78	-732.78
	bound	-Inf	-732.78	-Inf	-Inf	-732.78	-732.78	-732.78	-732.78
	runtime	0.14	1.26	0.23	0.05	2.96	2.98	2.98	0.09
2000001	value	-757.05	-757.05	-757.05	-756.97	-757.05	-757.05	-756.97	-757.05
	bound	-Inf	-757.05	-Inf	-Inf	-757.05	-757.05	-757.25	-757.05
	runtime	0.18	50.58	0.37	0.08	3.62	1.64	3.64	0.16
2000002	value	-812.82	-813.18	-813.18	-812.93	-813.18	-813.18	-813.18	-813.18
	bound	-Inf	-813.18	-Inf	-Inf	-813.18	-813.18	-813.20	-813.18
	runtime	0.17	611.96	0.30	0.06	4.31	1.44	4.41	0.12
2000003	value	-900.58	-900.58	-900.58	-900.58	-900.58	-900.58	-900.58	-900.58
	bound	-Inf	-900.58	-Inf	-Inf	-900.58	-900.58	-900.58	-900.58
	runtime	0.18	1.63	0.25	0.07	1.07	0.15	1.94	0.12
2000004	value	-725.26	-725.75	-725.54	-725.44	-725.75	-725.75	-725.75	-725.75
	bound	-Inf	-725.75	-Inf	-Inf	-725.77	-725.75	-725.81	-725.75
	runtime	0.15	1.28	0.25	0.07	3.03	0.49	3.13	0.11
2000008	value	-755.03	-755.82	-755.82	-755.82	-755.82	-755.82	-755.82	-755.82
	bound	-Inf	-755.82	-Inf	-Inf	-755.82	-755.82	-755.82	-755.82
	runtime	0.15	3.37	0.23	0.08	3.02	2.45	3.85	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
2000012	value	-757.93	-757.93	-757.93	-757.93	-757.93	-757.93	-757.93	-757.93
	bound	-Inf	-757.93	-Inf	-Inf	-757.93	-757.93	-757.95	-757.93
	runtime	0.17	1.52	0.29	0.06	4.22	0.68	4.32	0.12
2000019	value	-779.58	-779.58	-779.58	-779.58	-779.58	-779.58	-779.58	-779.58
	bound	-Inf	-779.58	-Inf	-Inf	-779.58	-779.58	-779.58	-779.58
	runtime	0.15	1.12	0.21	0.06	3.86	1.03	3.83	0.09
2000022	value	-860.33	-860.33	-860.33	-860.33	-860.33	-860.33	-860.33	-860.33
	bound	-Inf	-860.33	-Inf	-Inf	-860.33	-860.33	-860.33	-860.33
	runtime	0.15	1.23	0.21	0.07	1.96	0.22	3.23	0.09
2000023	value	-1015.96	-1015.96	-1015.96	-1015.96	-1015.96	-1015.96	-1015.96	-1015.96
	bound	-Inf	-1015.96	-Inf	-Inf	-1015.96	-1015.96	-1015.96	-1015.96
	runtime	0.17	1.20	0.23	0.07	2.96	0.76	4.31	0.11
2000025	value	-828.49	-828.49	-828.49	-828.49	-828.49	-828.49	-828.49	-828.49
	bound	-Inf	-828.49	-Inf	-Inf	-828.51	-828.49	-828.57	-828.49
	runtime	0.17	24.94	0.26	0.06	4.41	4.43	4.52	0.13
2000028	value	-811.28	-811.28	-811.28	-811.06	-811.28	-811.28	-811.28	-811.28
	bound	-Inf	-811.28	-Inf	-Inf	-811.28	-811.28	-811.28	-811.28
	runtime	0.15	1.31	0.29	0.07	3.94	0.47	3.94	0.10
2000030	value	-843.04	-843.04	-843.04	-843.04	-843.04	-843.04	-843.04	-843.04
	bound	-Inf	-843.04	-Inf	-Inf	-843.04	-843.04	-843.05	-843.04
	runtime	0.17	1.45	0.26	0.10	4.25	0.47	4.37	0.11
2000031	value	-819.11	-819.11	-819.11	-819.11	-819.11	-819.11	-819.11	-819.11
	bound	-Inf	-819.11	-Inf	-Inf	-819.11	-819.11	-819.11	-819.11
	runtime	0.16	1.95	0.25	0.07	4.11	0.51	4.12	0.11
2000032	value	-773.57	-773.57	-773.57	-772.77	-773.57	-773.57	-773.57	-773.57
	bound	-Inf	-773.57	-Inf	-Inf	-773.57	-773.57	-773.57	-773.57
	runtime	0.18	1.89	0.28	0.08	1.87	0.31	2.71	0.12
2000033	value	-961.78	-961.78	-961.78	-961.78	-961.78	-961.78	-961.78	-961.78
	bound	-Inf	-961.78	-Inf	-Inf	-961.78	-961.78	-961.78	-961.78
	runtime	0.14	5.41	0.21	0.06	1.01	0.36	2.00	0.08
2000034	value	-867.92	-867.92	-867.92	-867.92	-867.92	-867.92	-867.92	-867.92
	bound	-Inf	-867.92	-Inf	-Inf	-867.94	-867.92	-867.98	-867.92
	runtime	0.18	1.56	0.41	0.07	4.66	0.76	4.73	0.13
2000035	value	-844.62	-844.62	-844.62	-844.62	-844.62	-844.62	-844.62	-844.62
	bound	-Inf	-844.62	-Inf	-Inf	-844.62	-844.62	-844.62	-844.62
	runtime	0.16	2.10	0.23	0.06	4.16	4.15	4.18	0.11
2000036	value	-875.37	-875.37	-875.37	-875.37	-875.37	-875.37	-875.37	-875.37
	bound	-Inf	-875.37	-Inf	-Inf	-875.37	-875.37	-875.37	-875.37
	runtime	0.17	1.33	0.28	0.06	2.89	0.16	4.46	0.11
2000037	value	-811.72	-811.72	-811.72	-811.72	-811.72	-811.72	-811.72	-811.72
	bound	-Inf	-811.72	-Inf	-Inf	-811.72	-811.72	-811.72	-811.72
	runtime	0.16	1.22	0.28	0.05	3.04	0.26	4.06	0.10
2000039	value	-769.97	-769.97	-769.97	-769.97	-769.97	-769.97	-769.97	-769.97
	bound	-Inf	-769.97	-Inf	-Inf	-769.97	-769.97	-769.97	-769.97
	runtime	0.16	1.36	0.71	0.08	4.00	1.26	4.08	0.10
2000041	value	-733.82	-734.97	-734.97	-734.97	-734.97	-734.97	-734.97	-734.97
	bound	-Inf	-734.97	-Inf	-Inf	-734.98	-734.97	-735.01	-734.97
	runtime	0.14	5.38	0.37	0.06	3.72	0.84	3.73	0.10
2000042	value	-832.89	-832.89	-832.89	-832.66	-832.89	-832.89	-832.89	-832.89
	bound	-Inf	-832.89	-Inf	-Inf	-832.89	-832.89	-832.89	-832.89
	runtime	0.17	13.42	0.33	0.07	3.64	0.68	4.48	0.12
2000043	value	-784.93	-784.93	-784.93	-784.93	-784.93	-784.93	-784.93	-784.93
	bound	-Inf	-784.93	-Inf	-Inf	-784.93	-784.93	-784.93	-784.93
	runtime	0.16	1.23	0.25	0.07	1.59	0.06	2.42	0.10
2000044	value	-807.85	-807.85	-807.85	-807.85	-807.85	-807.85	-807.85	-807.85
	bound	-Inf	-807.85	-Inf	-Inf	-807.85	-807.85	-807.86	-807.85
	runtime	0.15	1.16	0.84	0.05	3.98	1.32	3.98	0.10
3000072	value	-697.09	-698.50	-697.09	-698.50	-698.50	-698.50	-698.50	-698.50
	bound	-Inf	-698.50	-Inf	-Inf	-698.53	-698.50	-698.61	-698.50
	runtime	0.17	416.85	0.33	0.07	3.33	3.38	3.45	0.16
3000076	value	-797.61	-797.61	-797.61	-797.61	-797.61	-797.61	-797.61	-797.61
	bound	-Inf	-797.61	-Inf	-Inf	-797.61	-797.61	-797.61	-797.61
	runtime	0.16	1.18	0.24	0.06	1.30	0.25	3.33	0.10
3000099	value	-876.11	-877.44	-876.11	-877.44	-877.44	-877.44	-877.44	-877.44
	bound	-Inf	-877.44	-Inf	-Inf	-877.44	-877.44	-877.44	-877.44
	runtime	0.17	2.41	0.25	0.07	3.10	0.51	4.51	0.11
3000119	value	-1231.09	-1231.09	-1231.09	-1231.09	-1231.09	-1231.09	-1231.09	-1231.09
	bound	-Inf	-1231.09	-Inf	-Inf	-1231.09	-1231.09	-1231.09	-1231.09
	runtime	0.16	1.31	0.25	0.06	4.24	0.81	4.23	0.10
3000148	value	-812.21	-812.21	-812.21	-812.21	-812.21	-812.21	-812.21	-812.21
	bound	-Inf	-812.21	-Inf	-Inf	-812.21	-812.21	-812.23	-812.21
	runtime	0.16	5.44	0.26	0.07	4.20	0.36	4.29	0.11
3000299	value	-820.56	-820.56	-820.56	-820.56	-820.56	-820.56	-820.56	-820.56
	bound	-Inf	-820.56	-Inf	-Inf	-820.56	-820.56	-820.57	-820.56
	runtime	0.16	1.50	0.45	0.09	4.36	0.50	4.34	0.10

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
3000323	value	-1128.93	-1128.93	-1128.93	-1128.93	-1128.93	-1128.93	-1128.93	-1128.93
	bound	-Inf	-Inf	-Inf	-Inf	-1128.98	-1128.93	-1128.99	-1128.93
	runtime	0.16	1.27	0.25	0.06	4.27	0.45	4.38	0.10
3000454	value	-687.39	-687.39	-687.39	-687.39	-687.39	-687.39	-687.39	-687.39
	bound	-Inf	-687.39	-Inf	-Inf	-687.39	-687.39	-687.41	-687.39
	runtime	0.16	9.73	0.28	0.07	4.17	1.46	4.23	0.11
3000469	value	-1003.59	-1003.59	-1002.22	-1003.59	-1003.59	-1003.59	-1003.59	-1003.59
	bound	-Inf	-1003.59	-Inf	-Inf	-1003.59	-1003.59	-1003.60	-1003.59
	runtime	0.16	1.63	0.32	0.09	4.12	3.25	4.22	0.11
3000676	value	-1136.98	-1136.98	-1136.98	-1136.78	-1136.98	-1136.98	-1136.98	-1136.98
	bound	-Inf	-1136.98	-Inf	-Inf	-1136.98	-1136.98	-1136.98	-1136.98
	runtime	0.13	4.01	0.17	0.05	0.37	0.08	0.40	0.08
3000716	value	-611.27	-611.27	-611.27	-611.27	-611.27	-611.27	-611.27	-611.27
	bound	-Inf	-611.27	-Inf	-Inf	-611.27	-611.27	-611.27	-611.27
	runtime	0.15	5.30	0.21	0.05	0.72	0.06	1.80	0.10
3000759	value	-476.99	-476.99	-476.99	-476.99	-476.99	-476.99	-476.99	-476.99
	bound	-Inf	-476.99	-Inf	-Inf	-477.00	-476.99	-477.02	-476.99
	runtime	0.14	17.76	0.26	0.06	3.79	1.33	3.78	0.11
3000945	value	-717.01	-717.01	-717.01	-714.98	-717.01	-717.01	-717.01	-717.01
	bound	-Inf	-717.01	-Inf	-Inf	-717.01	-717.01	-717.02	-717.01
	runtime	0.14	5.24	0.25	0.05	3.67	0.28	3.75	0.09
3001004	value	-823.91	-823.91	-823.91	-823.91	-823.91	-823.91	-823.91	-823.91
	bound	-Inf	-823.91	-Inf	-Inf	-823.91	-823.91	-823.92	-823.91
	runtime	0.17	1.39	0.30	0.06	4.46	0.69	4.46	0.11
3001018	value	-629.62	-629.62	-629.62	-629.62	-629.62	-629.62	-629.62	-629.62
	bound	-Inf	-629.62	-Inf	-Inf	-629.62	-629.62	-629.62	-629.62
	runtime	0.15	4.97	0.41	0.06	2.10	0.15	3.10	0.10
3001061	value	-754.69	-754.82	-754.82	-754.82	-754.82	-754.82	-754.82	-754.82
	bound	-Inf	-754.82	-Inf	-Inf	-754.88	-754.82	-755.04	-754.82
	runtime	0.15	7.36	0.27	0.09	3.98	1.09	4.08	0.13
3001131	value	-764.33	-764.39	-764.33	-764.39	-764.39	-764.39	-764.39	-764.39
	bound	-Inf	-764.39	-Inf	-Inf	-764.39	-764.39	-764.39	-764.39
	runtime	0.15	1.51	0.28	0.07	3.98	1.95	3.98	0.10
3001230	value	-837.33	-837.36	-837.33	-837.36	-837.36	-837.36	-837.36	-837.36
	bound	-Inf	-837.36	-Inf	-Inf	-837.36	-837.36	-837.36	-837.36
	runtime	0.16	1.23	0.27	0.08	3.35	0.70	3.45	0.11
3001319	value	-949.87	-950.35	-950.35	-950.35	-950.35	-950.35	-950.35	-950.35
	bound	-Inf	-950.35	-Inf	-Inf	-950.35	-950.35	-950.35	-950.35
	runtime	0.17	1.31	0.26	0.06	1.37	0.27	4.24	0.11
3001336	value	-639.35	-639.35	-639.35	-639.35	-639.35	-639.35	-639.35	-639.35
	bound	-Inf	-639.35	-Inf	-Inf	-639.35	-639.35	-639.37	-639.35
	runtime	0.15	145.88	0.32	0.09	3.15	1.32	3.21	0.12
3001421	value	-944.28	-944.28	-944.28	-944.03	-944.28	-944.28	-944.28	-944.28
	bound	-Inf	-944.28	-Inf	-Inf	-944.29	-944.28	-944.45	-944.28
	runtime	0.17	16.10	0.39	0.06	3.57	1.08	3.61	0.13
3001460	value	-1036.59	-1037.29	-1035.81	-1037.29	-1037.29	-1037.29	-1037.29	-1037.29
	bound	-Inf	-1037.29	-Inf	-Inf	-1037.29	-1037.29	-1037.34	-1037.29
	runtime	0.19	80.23	0.35	0.12	4.73	0.73	4.84	0.13
3001555	value	-570.50	-570.50	-570.50	-570.50	-570.50	-570.50	-570.50	-570.50
	bound	-Inf	-570.50	-Inf	-Inf	-570.50	-570.50	-570.50	-570.50
	runtime	0.14	1.99	0.25	0.07	2.94	0.25	2.95	0.10
3001569	value	-938.69	-938.69	-938.69	-938.69	-938.69	-938.69	-938.69	-938.69
	bound	-Inf	-938.69	-Inf	-Inf	-938.69	-938.69	-938.69	-938.69
	runtime	0.16	1.12	0.27	0.06	4.10	0.39	4.23	0.09
3001667	value	-776.10	-776.10	-776.10	-776.10	-776.10	-776.10	-776.10	-776.10
	bound	-Inf	-776.10	-Inf	-Inf	-776.10	-776.10	-776.11	-776.10
	runtime	0.17	35.25	0.37	0.12	3.51	0.38	3.51	0.14
3001751	value	-656.34	-656.34	-656.34	-656.34	-656.34	-656.34	-656.34	-656.34
	bound	-Inf	-656.34	-Inf	-Inf	-656.35	-656.34	-656.35	-656.34
	runtime	0.15	2.72	0.29	0.05	3.15	0.35	3.16	0.10
3001767	value	-888.59	-888.59	-888.59	-888.59	-888.59	-888.59	-888.59	-888.59
	bound	-Inf	-888.59	-Inf	-Inf	-888.59	-888.59	-888.59	-888.59
	runtime	0.17	1.21	0.24	0.09	4.34	0.24	4.42	0.10
3001826	value	-694.78	-694.78	-694.78	-694.78	-694.78	-694.78	-694.78	-694.78
	bound	-Inf	-694.78	-Inf	-Inf	-694.78	-694.78	-694.78	-694.78
	runtime	0.17	37.81	0.27	0.06	4.51	0.53	4.56	0.12
3001891	value	-1169.91	-1169.91	-1169.91	-1169.91	-1169.91	-1169.91	-1169.91	-1169.91
	bound	-Inf	-1169.91	-Inf	-Inf	-1169.91	-1169.91	-1169.91	-1169.91
	runtime	0.17	1.31	0.19	0.06	1.01	0.05	1.43	0.10
3001976	value	-645.03	-645.03	-644.91	-644.89	-645.03	-645.03	-645.03	-645.03
	bound	-Inf	-645.03	-Inf	-Inf	-645.05	-645.03	-645.08	-645.03
	runtime	0.14	9.25	0.24	0.07	3.73	3.78	3.79	0.21
3002020	value	-935.50	-935.80	-935.80	-935.80	-935.80	-935.80	-935.80	-935.80
	bound	-Inf	-935.80	-Inf	-Inf	-935.80	-935.80	-935.81	-935.80
	runtime	0.16	1.22	0.24	0.08	4.24	0.32	4.28	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
3002059	value	-816.79	-816.79	-816.79	-816.79	-816.79	-816.79	-816.79	-816.79
	bound	-Inf	-816.79	-Inf	-Inf	-816.79	-816.79	-816.79	-816.79
	runtime	0.16	2.97	0.31	0.07	3.38	0.35	3.40	0.11
3002082	value	-641.62	-641.62	-641.62	-641.62	-641.62	-641.62	-641.62	-641.62
	bound	-Inf	-641.62	-Inf	-Inf	-641.62	-641.62	-641.62	-641.62
	runtime	0.14	5.69	0.21	0.06	3.11	0.25	3.14	0.10
3002154	value	-1031.79	-1031.99	-1031.79	-1031.50	-1031.99	-1031.99	-1031.99	-1031.99
	bound	-Inf	-1031.99	-Inf	-Inf	-1031.99	-1031.99	-1032.00	-1031.99
	runtime	0.17	1.29	0.32	0.06	4.31	0.52	4.37	0.11
3002206	value	-931.86	-931.86	-931.86	-931.86	-931.86	-931.86	-931.86	-931.86
	bound	-Inf	-931.86	-Inf	-Inf	-931.86	-931.86	-931.86	-931.86
	runtime	0.17	2.11	2.28	0.10	2.20	1.61	3.66	0.11
3002221	value	-626.08	-626.08	-626.08	-626.08	-626.08	-626.08	-626.08	-626.08
	bound	-Inf	-626.08	-Inf	-Inf	-626.08	-626.08	-626.08	-626.08
	runtime	0.14	7.34	0.30	0.08	3.72	0.31	3.71	0.10
3002340	value	-722.96	-723.09	-722.96	-721.40	-723.09	-723.09	-723.09	-723.09
	bound	-Inf	-723.09	-Inf	-Inf	-723.09	-723.09	-723.09	-723.09
	runtime	0.18	2.05	0.29	0.08	3.55	0.29	3.65	0.13
3002366	value	-806.39	-806.67	-806.39	-806.67	-806.67	-806.67	-806.67	-806.67
	bound	-Inf	-806.67	-Inf	-Inf	-806.67	-806.67	-806.67	-806.67
	runtime	0.16	1.25	0.27	0.08	1.79	0.32	4.13	0.11
3002411	value	-1054.59	-1054.59	-1054.59	-1054.50	-1054.59	-1054.59	-1054.59	-1054.59
	bound	-Inf	-1054.59	-Inf	-Inf	-1054.59	-1054.59	-1054.60	-1054.59
	runtime	0.14	5.09	0.22	0.06	3.70	1.88	3.75	0.09
3002594	value	-902.13	-902.13	-902.13	-900.21	-902.13	-902.13	-902.13	-902.13
	bound	-Inf	-902.13	-Inf	-Inf	-902.13	-902.13	-902.13	-902.13
	runtime	0.17	2.54	0.33	0.09	4.44	0.79	4.48	0.11
3002905	value	-596.72	-596.81	-596.72	-596.81	-596.81	-596.81	-596.81	-596.81
	bound	-Inf	-596.81	-Inf	-Inf	-596.81	-596.81	-596.81	-596.81
	runtime	0.14	5.29	0.26	0.05	3.07	0.38	3.09	0.10
3002909	value	-806.23	-806.23	-806.23	-806.23	-806.23	-806.23	-806.23	-806.23
	bound	-Inf	-806.23	-Inf	-Inf	-806.23	-806.23	-806.23	-806.23
	runtime	0.16	1.94	0.22	0.06	4.19	0.22	4.29	0.10
3003122	value	-959.80	-959.80	-959.80	-959.38	-959.80	-959.80	-959.80	-959.80
	bound	-Inf	-959.80	-Inf	-Inf	-959.81	-959.80	-959.81	-959.80
	runtime	0.17	2.84	0.35	0.07	4.50	3.38	4.48	0.11
3003322	value	-740.54	-740.54	-740.54	-740.54	-740.54	-740.54	-740.54	-740.54
	bound	-Inf	-740.54	-Inf	-Inf	-740.54	-740.54	-740.54	-740.54
	runtime	0.15	1.23	0.28	0.05	1.50	0.25	3.22	0.10
3003328	value	-809.39	-809.39	-809.39	-809.39	-809.39	-809.39	-809.39	-809.39
	bound	-Inf	-809.39	-Inf	-Inf	-809.39	-809.39	-809.39	-809.39
	runtime	0.15	1.09	0.74	0.05	1.01	0.25	3.12	0.09
3003356	value	-867.90	-867.90	-867.90	-867.90	-867.90	-867.90	-867.90	-867.90
	bound	-Inf	-867.90	-Inf	-Inf	-867.90	-867.90	-867.90	-867.90
	runtime	0.17	1.48	0.23	0.07	4.27	0.30	4.37	0.11
3003448	value	-1170.07	-1170.07	-1170.07	-1170.07	-1170.07	-1170.07	-1170.07	-1170.07
	bound	-Inf	-1170.07	-Inf	-Inf	-1170.08	-1170.07	-1170.12	-1170.07
	runtime	0.17	2.56	0.27	0.07	3.58	0.40	3.57	0.11
3003731	value	-803.31	-803.31	-803.31	-803.31	-803.31	-803.31	-803.31	-803.31
	bound	-Inf	-803.31	-Inf	-Inf	-803.31	-803.31	-803.31	-803.31
	runtime	0.17	1.28	0.23	0.06	1.79	0.55	3.75	0.11
3003791	value	-1332.08	-1332.08	-1332.08	-1332.08	-1332.08	-1332.08	-1332.08	-1332.08
	bound	-Inf	-1332.08	-Inf	-Inf	-1332.08	-1332.08	-1332.08	-1332.08
	runtime	0.16	5.37	0.25	0.08	2.56	0.28	3.30	0.10
3003817	value	-738.08	-738.08	-738.08	-737.69	-738.08	-738.08	-738.08	-738.08
	bound	-Inf	-738.08	-Inf	-Inf	-738.09	-738.08	-738.12	-738.08
	runtime	0.15	1.26	0.22	0.06	3.84	0.33	3.84	0.10
4000066	value	-1331.48	-1331.48	-1331.48	-1331.48	-1331.48	-1331.48	-1331.48	-1331.48
	bound	-Inf	-1331.48	-Inf	-Inf	-1331.48	-1331.48	-1331.48	-1331.48
	runtime	0.17	1.28	0.36	0.06	4.31	0.29	4.42	0.11
4000086	value	-1041.16	-1041.16	-1041.16	-1041.16	-1041.16	-1041.16	-1041.16	-1041.16
	bound	-Inf	-1041.16	-Inf	-Inf	-1041.16	-1041.16	-1041.16	-1041.16
	runtime	0.17	1.45	0.22	0.07	1.38	0.28	1.97	0.11
4100066	value	-917.25	-917.25	-917.25	-917.25	-917.25	-917.25	-917.25	-917.25
	bound	-Inf	-917.25	-Inf	-Inf	-917.25	-917.25	-917.25	-917.25
	runtime	0.16	1.17	0.21	0.05	4.02	0.27	4.06	0.10
4100246	value	-909.75	-909.75	-909.75	-909.75	-909.75	-909.75	-909.75	-909.75
	bound	-Inf	-909.75	-Inf	-Inf	-909.75	-909.75	-909.75	-909.75
	runtime	0.18	1.91	0.29	0.06	4.49	1.25	4.51	0.12
4100280	value	-917.09	-917.09	-917.09	-917.09	-917.09	-917.09	-917.09	-917.09
	bound	-Inf	-917.09	-Inf	-Inf	-917.09	-917.09	-917.09	-917.09
	runtime	0.17	1.34	0.24	0.06	4.03	1.05	4.47	0.11
5000016	value	-935.46	-935.46	-935.46	-935.46	-935.46	-935.46	-935.46	-935.46
	bound	-Inf	-935.46	-Inf	-Inf	-935.46	-935.46	-935.46	-935.46
	runtime	0.15	1.05	0.21	0.05	2.46	3.78	3.48	0.09

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
5000119	value	-844.45	-844.45	-844.45	-844.45	-844.45	-844.45	-844.45	-844.45
	bound	-Inf	-844.45	-Inf	-Inf	-844.45	-844.45	-844.45	-844.45
	runtime	0.14	1.06	0.20	0.05	1.50	0.23	2.52	0.09
5000120	value	-723.38	-723.38	-723.38	-722.62	-723.38	-723.38	-723.38	-723.38
	bound	-Inf	-723.38	-Inf	-Inf	-723.38	-723.38	-723.38	-723.38
	runtime	0.15	1.32	0.20	0.05	3.83	0.20	3.82	0.10
5000121	value	-854.91	-855.97	-854.91	-855.97	-855.97	-855.97	-855.97	-855.97
	bound	-Inf	-855.97	-Inf	-Inf	-855.97	-855.97	-855.97	-855.97
	runtime	0.16	1.14	0.39	0.05	2.25	1.22	3.33	0.11
5000122	value	-837.76	-837.81	-837.76	-837.81	-837.81	-837.81	-837.81	-837.81
	bound	-Inf	-837.81	-Inf	-Inf	-837.81	-837.81	-837.81	-837.81
	runtime	0.15	1.31	0.25	0.05	3.99	1.33	4.09	0.11
5000123	value	-839.72	-839.72	-839.72	-839.72	-839.72	-839.72	-839.72	-839.72
	bound	-Inf	-839.72	-Inf	-Inf	-839.72	-839.72	-839.72	-839.72
	runtime	0.15	1.17	0.25	0.07	4.00	3.98	4.03	0.11
5000124	value	-860.47	-860.64	-860.47	-860.64	-860.64	-860.64	-860.64	-860.64
	bound	-Inf	-860.64	-Inf	-Inf	-860.64	-860.64	-860.64	-860.64
	runtime	0.16	1.17	0.24	0.05	3.17	0.34	4.05	0.10
5000125	value	-922.68	-922.68	-922.68	-922.68	-922.68	-922.68	-922.68	-922.68
	bound	-Inf	-922.68	-Inf	-Inf	-922.68	-922.68	-922.68	-922.68
	runtime	0.16	1.22	0.23	0.05	2.52	0.52	3.25	0.10
5000126	value	-877.19	-877.19	-877.19	-876.68	-877.19	-877.19	-877.19	-877.19
	bound	-Inf	-877.19	-Inf	-Inf	-877.19	-877.19	-877.19	-877.19
	runtime	0.14	1.02	0.25	0.05	2.76	0.14	3.08	0.09
5000127	value	-770.08	-770.08	-770.08	-770.08	-770.08	-770.08	-770.08	-770.08
	bound	-Inf	-770.08	-Inf	-Inf	-770.08	-770.08	-770.08	-770.08
	runtime	0.14	5.11	0.21	0.05	0.81	0.17	1.67	0.09
5000128	value	-876.57	-876.57	-876.57	-876.57	-876.57	-876.57	-876.57	-876.57
	bound	-Inf	-876.57	-Inf	-Inf	-876.57	-876.57	-876.57	-876.57
	runtime	0.16	1.29	0.24	0.07	1.12	0.43	2.92	0.10
5000129	value	-766.76	-767.00	-766.76	-767.00	-767.00	-767.00	-767.00	-767.00
	bound	-Inf	-767.00	-Inf	-Inf	-767.00	-767.00	-767.00	-767.00
	runtime	0.14	1.13	0.23	0.06	3.63	0.62	3.64	0.09
5000130	value	-744.69	-744.69	-744.69	-744.69	-744.69	-744.69	-744.69	-744.69
	bound	-Inf	-744.69	-Inf	-Inf	-744.69	-744.69	-744.69	-744.69
	runtime	0.14	1.13	0.21	0.05	1.15	0.08	1.49	0.09
5000131	value	-823.56	-823.97	-823.56	-823.97	-823.97	-823.97	-823.97	-823.97
	bound	-Inf	-823.97	-Inf	-Inf	-823.97	-823.97	-823.97	-823.97
	runtime	0.15	1.15	0.22	0.06	1.36	0.22	3.05	0.10
5000132	value	-745.89	-746.44	-745.89	-746.44	-746.44	-746.44	-746.44	-746.44
	bound	-Inf	-746.44	-Inf	-Inf	-746.44	-746.44	-746.44	-746.44
	runtime	0.15	1.28	0.31	0.05	2.15	0.16	3.13	0.10
5000133	value	-783.95	-783.95	-783.95	-783.95	-783.95	-783.95	-783.95	-783.95
	bound	-Inf	-783.95	-Inf	-Inf	-783.95	-783.95	-783.95	-783.95
	runtime	0.15	5.49	0.20	0.06	1.50	0.29	3.50	0.10
5000137	value	-829.33	-829.33	-829.33	-829.33	-829.33	-829.33	-829.33	-829.33
	bound	-Inf	-829.33	-Inf	-Inf	-829.33	-829.33	-829.33	-829.33
	runtime	0.14	1.06	0.18	0.06	0.97	0.04	2.19	0.09
5000144	value	-699.97	-701.26	-699.97	-701.26	-701.26	-701.26	-701.26	-701.26
	bound	-Inf	-701.26	-Inf	-Inf	-701.27	-701.26	-701.31	-701.26
	runtime	0.17	685.15	0.32	0.06	4.39	0.96	4.46	0.14
5000147	value	-750.53	-750.53	-750.53	-750.31	-750.53	-750.53	-750.53	-750.53
	bound	-Inf	-750.53	-Inf	-Inf	-750.53	-750.53	-750.53	-750.53
	runtime	0.14	5.47	0.31	0.07	3.61	0.80	3.67	0.09
5000149	value	-957.32	-957.32	-957.32	-957.32	-957.32	-957.32	-957.32	-957.32
	bound	-Inf	-957.32	-Inf	-Inf	-957.32	-957.32	-957.32	-957.32
	runtime	0.14	5.38	0.21	0.05	1.44	0.33	2.54	0.08
5000150	value	-763.99	-763.99	-763.99	-763.99	-763.99	-763.99	-763.99	-763.99
	bound	-Inf	-763.99	-Inf	-Inf	-764.03	-764.00	-764.05	-763.99
	runtime	0.16	1.66	0.38	0.08	4.12	4.18	4.16	0.11
5000162	value	-895.91	-895.91	-895.91	-895.69	-895.91	-895.91	-895.91	-895.91
	bound	-Inf	-895.91	-Inf	-Inf	-895.91	-895.91	-895.91	-895.91
	runtime	0.17	1.76	0.30	0.07	4.43	0.58	4.50	0.11
5000163	value	-1095.30	-1095.30	-1095.30	-1095.30	-1095.30	-1095.30	-1095.30	-1095.30
	bound	-Inf	-1095.30	-Inf	-Inf	-1095.30	-1095.30	-1095.30	-1095.30
	runtime	0.17	1.42	0.23	0.06	0.74	0.04	1.43	0.10
5000164	value	-1138.97	-1138.97	-1138.97	-1138.97	-1138.97	-1138.97	-1138.97	-1138.97
	bound	-Inf	-1138.97	-Inf	-Inf	-1138.97	-1138.97	-1138.97	-1138.97
	runtime	0.17	1.11	0.23	0.07	0.67	0.15	1.04	0.10
5000165	value	-1043.23	-1043.23	-1043.23	-1043.23	-1043.23	-1043.23	-1043.23	-1043.23
	bound	-Inf	-1043.23	-Inf	-Inf	-1043.23	-1043.23	-1043.23	-1043.23
	runtime	0.16	1.16	0.45	0.07	1.37	0.15	2.99	0.10
5000166	value	-819.37	-819.37	-819.37	-819.34	-819.37	-819.37	-819.37	-819.37
	bound	-Inf	-819.37	-Inf	-Inf	-819.37	-819.37	-819.37	-819.37
	runtime	0.18	1.37	0.38	0.08	3.73	0.72	3.77	0.12

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
5000168	value	-885.03	-885.36	-885.03	-885.36	-885.36	-885.36	-885.36	-885.36
	bound	-Inf	-885.36	-Inf	-Inf	-885.41	-885.36	-885.56	-885.36
	runtime	0.17	3082.84	0.36	0.08	3.48	0.83	3.57	0.13
5000172	value	-820.94	-820.94	-820.94	-820.94	-820.94	-820.94	-820.94	-820.94
	bound	-Inf	-820.94	-Inf	-Inf	-820.94	-820.94	-820.94	-820.94
	runtime	0.18	1.79	0.29	0.08	4.23	0.62	4.53	0.11
5000173	value	-915.62	-915.62	-915.62	-915.62	-915.62	-915.62	-915.62	-915.62
	bound	-Inf	-915.62	-Inf	-Inf	-915.62	-915.62	-915.64	-915.62
	runtime	0.17	6.34	0.39	0.08	4.29	0.77	4.35	0.11
5000174	value	-911.00	-913.92	-910.96	-913.92	-913.92	-913.92	-913.92	-913.92
	bound	-Inf	-913.92	-Inf	-Inf	-914.02	-913.92	-914.18	-913.92
	runtime	0.17	92.83	0.44	0.07	4.32	2.32	4.39	0.13
5000175	value	-807.63	-811.92	-808.36	-811.92	-811.92	-811.92	-811.92	-811.92
	bound	-Inf	-811.92	-Inf	-Inf	-811.92	-811.92	-811.92	-811.92
	runtime	0.17	1.72	0.45	0.06	3.56	3.60	3.60	0.13
5000176	value	-714.58	-714.58	-714.58	-714.58	-714.58	-714.58	-714.58	-714.58
	bound	-Inf	-714.58	-Inf	-Inf	-714.58	-714.58	-714.58	-714.58
	runtime	0.13	1.02	0.16	0.04	0.58	0.05	0.67	0.08
5000180	value	-921.98	-921.98	-921.98	-921.98	-921.98	-921.98	-921.98	-921.98
	bound	-Inf	-921.98	-Inf	-Inf	-921.98	-921.98	-921.98	-921.98
	runtime	0.14	1.11	0.21	0.05	2.78	0.20	3.69	0.09
5000181	value	-832.33	-832.33	-832.33	-832.33	-832.33	-832.33	-832.33	-832.33
	bound	-Inf	-832.33	-Inf	-Inf	-832.33	-832.33	-832.33	-832.33
	runtime	0.13	5.31	0.20	0.05	2.39	0.63	3.40	0.09
5000182	value	-730.94	-731.06	-730.94	-731.06	-731.06	-731.06	-731.06	-731.06
	bound	-Inf	-731.06	-Inf	-Inf	-731.07	-731.06	-731.09	-731.06
	runtime	0.13	4.87	0.23	0.05	3.60	0.51	3.55	0.09
5000183	value	-865.79	-865.79	-865.79	-865.79	-865.79	-865.79	-865.79	-865.79
	bound	-Inf	-865.79	-Inf	-Inf	-865.79	-865.79	-865.79	-865.79
	runtime	0.14	5.28	0.19	0.05	0.48	2.03	0.55	0.09
5000184	value	-922.47	-922.47	-922.47	-922.47	-922.47	-922.47	-922.47	-922.47
	bound	-Inf	-922.47	-Inf	-Inf	-922.47	-922.47	-922.47	-922.47
	runtime	0.15	1.21	0.17	0.04	0.92	0.09	1.37	0.09
5000188	value	-750.68	-750.68	-750.68	-750.68	-750.68	-750.68	-750.68	-750.68
	bound	-Inf	-750.68	-Inf	-Inf	-750.68	-750.68	-750.68	-750.68
	runtime	0.13	4.91	0.18	0.04	0.44	0.11	0.52	0.08
5000190	value	-741.31	-741.31	-741.31	-741.31	-741.31	-741.31	-741.31	-741.31
	bound	-Inf	-741.31	-Inf	-Inf	-741.31	-741.31	-741.31	-741.31
	runtime	0.14	5.44	0.25	0.04	0.92	0.26	1.63	0.08
5000191	value	-563.69	-563.69	-563.69	-563.39	-563.69	-563.69	-563.69	-563.69
	bound	-Inf	-563.69	-Inf	-Inf	-563.70	-563.69	-563.76	-563.69
	runtime	0.15	87.67	0.30	0.06	3.92	2.29	4.00	0.11
5000192	value	-679.22	-679.25	-679.22	-679.25	-679.25	-679.25	-679.25	-679.25
	bound	-Inf	-679.25	-Inf	-Inf	-679.26	-679.25	-679.32	-679.25
	runtime	0.14	6.66	0.26	0.05	3.64	2.14	3.66	0.11
5000194	value	-677.37	-677.37	-677.37	-677.37	-677.37	-677.37	-677.37	-677.37
	bound	-Inf	-677.37	-Inf	-Inf	-677.37	-677.37	-677.37	-677.37
	runtime	0.13	4.20	0.20	0.05	1.63	0.15	2.81	0.08
5000195	value	-816.50	-816.50	-816.50	-816.50	-816.50	-816.50	-816.50	-816.50
	bound	-Inf	-816.50	-Inf	-Inf	-816.50	-816.50	-816.50	-816.50
	runtime	0.15	1.20	0.29	0.06	4.01	1.27	4.00	0.11
5000196	value	-786.58	-786.58	-786.38	-786.08	-786.58	-786.58	-786.58	-786.58
	bound	-Inf	-786.58	-Inf	-Inf	-786.62	-786.58	-786.74	-786.58
	runtime	0.15	1.68	0.47	0.05	3.86	0.94	3.94	0.10
5000197	value	-715.96	-715.96	-715.96	-715.68	-715.96	-715.96	-715.96	-715.96
	bound	-Inf	-715.96	-Inf	-Inf	-715.96	-715.96	-715.96	-715.96
	runtime	0.15	2.06	0.25	0.05	2.71	1.24	3.78	0.09
5000198	value	-695.20	-695.20	-695.20	-694.77	-695.20	-695.20	-695.20	-695.20
	bound	-Inf	-695.20	-Inf	-Inf	-695.20	-695.20	-695.21	-695.20
	runtime	0.15	4.35	0.88	0.05	2.98	2.85	3.08	0.09
5000199	value	-855.38	-857.59	-857.59	-857.59	-857.59	-857.59	-857.59	-857.59
	bound	-Inf	-857.59	-Inf	-Inf	-857.63	-857.59	-857.66	-857.59
	runtime	0.15	5.12	0.82	0.07	3.87	0.55	3.87	0.11
5000200	value	-755.17	-755.17	-755.17	-755.17	-755.17	-755.17	-755.17	-755.17
	bound	-Inf	-755.17	-Inf	-Inf	-755.17	-755.17	-755.17	-755.17
	runtime	0.15	1.16	0.23	0.05	3.29	0.18	3.84	0.09
5000201	value	-863.14	-863.14	-863.14	-863.14	-863.14	-863.14	-863.14	-863.14
	bound	-Inf	-863.14	-Inf	-Inf	-863.14	-863.14	-863.14	-863.14
	runtime	0.15	1.22	0.29	0.05	4.09	2.70	4.09	0.10
5000202	value	-712.65	-712.65	-712.65	-712.65	-712.65	-712.65	-712.65	-712.65
	bound	-Inf	-712.65	-Inf	-Inf	-712.65	-712.65	-712.65	-712.65
	runtime	0.15	1.26	0.26	0.06	3.00	0.28	3.06	0.09
5000203	value	-596.03	-596.03	-596.03	-596.03	-596.03	-596.03	-596.03	-596.03
	bound	-Inf	-596.03	-Inf	-Inf	-596.04	-596.03	-596.09	-596.03
	runtime	0.14	5.27	0.24	0.06	2.95	0.30	2.96	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
5000204	value	-689.98	-689.98	-689.98	-689.98	-689.98	-689.98	-689.98	-689.98
	bound	-Inf	-689.98	-Inf	-Inf	-689.98	-689.98	-689.98	-689.98
	runtime	0.14	1.16	0.19	0.06	2.37	0.23	3.32	0.09
5000205	value	-701.33	-701.65	-701.33	-701.65	-701.65	-701.65	-701.65	-701.65
	bound	-Inf	-701.65	-Inf	-Inf	-701.67	-701.65	-701.76	-701.65
	runtime	0.14	5.59	0.24	0.07	2.99	0.36	3.02	0.10
5000226	value	-667.07	-667.07	-667.07	-667.07	-667.07	-667.07	-667.07	-667.07
	bound	-Inf	-667.07	-Inf	-Inf	-667.07	-667.07	-667.07	-667.07
	runtime	0.14	5.21	0.23	0.08	1.14	0.22	1.62	0.09
5000234	value	-679.98	-679.98	-679.98	-679.98	-679.98	-679.98	-679.98	-679.98
	bound	-Inf	-679.98	-Inf	-Inf	-679.98	-679.98	-679.98	-679.98
	runtime	0.14	1.25	0.26	0.07	3.76	0.34	3.78	0.11
5000257	value	-676.39	-676.39	-676.39	-676.39	-676.39	-676.39	-676.39	-676.39
	bound	-Inf	-676.39	-Inf	-Inf	-676.39	-676.39	-676.39	-676.39
	runtime	0.15	1.23	0.31	0.07	3.84	0.29	3.87	0.10
5000264	value	-745.64	-745.64	-745.64	-745.04	-745.64	-745.64	-745.64	-745.64
	bound	-Inf	-745.64	-Inf	-Inf	-745.64	-745.64	-745.64	-745.64
	runtime	0.15	1.18	0.32	0.06	1.10	0.49	2.14	0.10
5000265	value	-730.51	-730.51	-730.51	-730.51	-730.51	-730.51	-730.51	-730.51
	bound	-Inf	-730.51	-Inf	-Inf	-730.51	-730.51	-730.51	-730.51
	runtime	0.15	1.11	0.24	0.06	3.28	0.82	3.64	0.10
6000000	value	-864.54	-864.54	-864.54	-864.43	-864.54	-864.54	-864.54	-864.54
	bound	-Inf	-864.54	-Inf	-Inf	-864.54	-864.54	-864.54	-864.54
	runtime	0.17	1.28	0.25	0.06	2.52	0.30	4.55	0.12
6000001	value	-912.96	-912.96	-912.96	-912.96	-912.96	-912.96	-912.96	-912.96
	bound	-Inf	-912.96	-Inf	-Inf	-912.96	-912.96	-912.96	-912.96
	runtime	0.17	1.32	0.27	0.09	3.13	0.35	4.39	0.11
6000002	value	-911.65	-911.65	-911.65	-911.65	-911.65	-911.65	-911.65	-911.65
	bound	-Inf	-911.65	-Inf	-Inf	-911.65	-911.65	-911.67	-911.65
	runtime	0.17	4.26	0.24	0.06	4.44	0.80	4.47	0.12
6000003	value	-819.74	-819.74	-819.74	-819.74	-819.74	-819.74	-819.74	-819.74
	bound	-Inf	-819.74	-Inf	-Inf	-819.74	-819.74	-819.74	-819.74
	runtime	0.17	1.33	0.29	0.06	1.91	0.17	3.51	0.11
6000004	value	-774.66	-774.97	-774.66	-774.97	-774.97	-774.97	-774.97	-774.97
	bound	-Inf	-774.97	-Inf	-Inf	-774.97	-774.97	-775.03	-774.97
	runtime	0.16	12.56	0.31	0.08	4.24	2.23	4.29	0.12
6000005	value	-898.25	-898.25	-898.25	-898.25	-898.25	-898.25	-898.25	-898.25
	bound	-Inf	-898.25	-Inf	-Inf	-898.25	-898.25	-898.26	-898.25
	runtime	0.18	1.60	0.33	0.07	1.87	0.26	4.51	0.12
6000006	value	-906.22	-906.51	-906.22	-906.51	-906.51	-906.51	-906.51	-906.51
	bound	-Inf	-906.51	-Inf	-Inf	-906.51	-906.51	-906.52	-906.51
	runtime	0.19	3.59	0.30	0.09	4.68	2.37	4.78	0.14
6000007	value	-951.51	-951.72	-951.51	-951.72	-951.72	-951.72	-951.72	-951.72
	bound	-Inf	-951.72	-Inf	-Inf	-951.72	-951.72	-951.74	-951.72
	runtime	0.19	1.59	0.37	0.06	3.79	0.32	3.78	0.13
6000008	value	-850.74	-850.74	-850.74	-850.74	-850.74	-850.74	-850.74	-850.74
	bound	-Inf	-850.74	-Inf	-Inf	-850.74	-850.74	-850.74	-850.74
	runtime	0.17	1.23	0.30	0.06	4.21	1.25	4.32	0.11
6000009	value	-936.16	-936.16	-936.16	-936.16	-936.16	-936.16	-936.16	-936.16
	bound	-Inf	-936.16	-Inf	-Inf	-936.16	-936.16	-936.16	-936.16
	runtime	0.16	1.28	0.48	0.06	4.31	0.34	4.29	0.11
6000010	value	-921.82	-921.82	-921.82	-921.82	-921.82	-921.82	-921.82	-921.82
	bound	-Inf	-921.82	-Inf	-Inf	-921.82	-921.82	-921.83	-921.82
	runtime	0.17	1.69	0.39	0.09	4.39	1.14	4.48	0.12
6000011	value	-810.14	-810.14	-810.14	-810.14	-810.14	-810.14	-810.14	-810.14
	bound	-Inf	-810.14	-Inf	-Inf	-810.14	-810.14	-810.15	-810.14
	runtime	0.17	1.43	0.27	0.07	3.47	0.59	3.41	0.11
6000012	value	-923.83	-923.83	-923.83	-923.83	-923.83	-923.83	-923.83	-923.83
	bound	-Inf	-923.83	-Inf	-Inf	-923.83	-923.83	-923.84	-923.83
	runtime	0.18	1.38	0.32	0.06	4.56	0.44	4.60	0.13
6000013	value	-969.94	-969.94	-969.94	-969.94	-969.94	-969.94	-969.94	-969.94
	bound	-Inf	-969.94	-Inf	-Inf	-969.94	-969.94	-969.95	-969.94
	runtime	0.19	3.62	0.32	0.07	4.80	0.59	4.83	0.13
6000014	value	-962.80	-962.80	-962.80	-962.80	-962.80	-962.80	-962.80	-962.80
	bound	-Inf	-962.80	-Inf	-Inf	-962.80	-962.80	-962.80	-962.80
	runtime	0.18	1.25	0.26	0.06	4.44	0.55	4.47	0.12
6000015	value	-866.60	-866.60	-866.60	-866.60	-866.60	-866.60	-866.60	-866.60
	bound	-Inf	-866.60	-Inf	-Inf	-866.60	-866.60	-866.60	-866.60
	runtime	0.17	1.34	0.25	0.07	2.87	0.66	4.33	0.11
6000016	value	-917.15	-917.15	-917.15	-917.15	-917.15	-917.15	-917.15	-917.15
	bound	-Inf	-917.15	-Inf	-Inf	-917.15	-917.15	-917.16	-917.15
	runtime	0.17	1.34	0.30	0.08	3.52	0.84	3.52	0.11
6000017	value	-923.13	-923.13	-923.13	-923.13	-923.13	-923.13	-923.13	-923.13
	bound	-Inf	-923.13	-Inf	-Inf	-923.13	-923.13	-923.13	-923.13
	runtime	0.17	1.24	0.23	0.06	3.43	0.19	3.46	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000018	value	-819.26	-819.26	-819.26	-819.26	-819.26	-819.26	-819.26	-819.26
	bound	-Inf	-819.26	-Inf	-Inf	-819.26	-819.26	-819.26	-819.26
	runtime	0.17	1.21	0.31	0.06	1.64	0.46	4.34	0.11
6000019	value	-918.61	-918.61	-918.61	-918.56	-918.61	-918.61	-918.61	-918.61
	bound	-Inf	-918.61	-Inf	-Inf	-918.61	-918.61	-918.62	-918.61
	runtime	0.19	2.48	0.28	0.07	4.67	3.57	4.73	0.13
6000020	value	-962.65	-962.65	-962.65	-961.99	-962.65	-962.65	-962.65	-962.65
	bound	-Inf	-962.65	-Inf	-Inf	-962.65	-962.65	-962.66	-962.65
	runtime	0.18	1.31	0.27	0.06	4.59	0.33	4.64	0.12
6000021	value	-897.28	-897.28	-897.28	-897.28	-897.28	-897.28	-897.28	-897.28
	bound	-Inf	-897.28	-Inf	-Inf	-897.28	-897.28	-897.29	-897.28
	runtime	0.18	9.78	0.29	0.06	4.55	0.66	4.57	0.12
6000022	value	-1063.22	-1063.22	-1063.22	-1063.22	-1063.22	-1063.22	-1063.22	-1063.22
	bound	-Inf	-1063.22	-Inf	-Inf	-1063.22	-1063.22	-1063.22	-1063.22
	runtime	0.15	1.16	0.30	0.06	1.52	0.56	1.96	0.10
6000023	value	-792.91	-792.91	-792.91	-792.91	-792.91	-792.91	-792.91	-792.91
	bound	-Inf	-792.91	-Inf	-Inf	-792.91	-792.91	-792.92	-792.91
	runtime	0.17	1.38	0.32	0.06	3.37	0.39	3.40	0.11
6000024	value	-869.08	-869.08	-869.08	-869.08	-869.08	-869.08	-869.08	-869.08
	bound	-Inf	-869.08	-Inf	-Inf	-869.08	-869.08	-869.08	-869.08
	runtime	0.16	4.37	0.28	0.06	3.40	0.47	3.48	0.11
6000025	value	-920.50	-920.61	-920.50	-920.61	-920.61	-920.61	-920.61	-920.61
	bound	-Inf	-920.61	-Inf	-Inf	-920.64	-920.61	-920.72	-920.61
	runtime	0.18	21.18	0.35	0.07	4.68	1.35	4.65	0.13
6000026	value	-786.52	-786.52	-786.19	-786.52	-786.52	-786.52	-786.52	-786.52
	bound	-Inf	-786.52	-Inf	-Inf	-786.52	-786.52	-786.53	-786.52
	runtime	0.17	36.44	0.41	0.09	3.42	0.49	3.50	0.12
6000027	value	-950.75	-950.75	-950.75	-950.75	-950.75	-950.75	-950.75	-950.75
	bound	-Inf	-950.75	-Inf	-Inf	-950.75	-950.75	-950.75	-950.75
	runtime	0.18	2.27	0.26	0.06	1.83	0.12	3.69	0.12
6000028	value	-953.32	-953.32	-953.32	-953.32	-953.32	-953.32	-953.32	-953.32
	bound	-Inf	-953.32	-Inf	-Inf	-953.32	-953.32	-953.32	-953.32
	runtime	0.18	1.36	0.27	0.06	4.30	0.48	4.51	0.11
6000029	value	-858.09	-858.09	-858.09	-858.09	-858.09	-858.09	-858.09	-858.09
	bound	-Inf	-858.09	-Inf	-Inf	-858.09	-858.09	-858.12	-858.09
	runtime	0.17	1.29	0.27	0.08	3.50	0.54	3.58	0.11
6000030	value	-917.40	-917.40	-917.40	-917.40	-917.40	-917.40	-917.40	-917.40
	bound	-Inf	-917.40	-Inf	-Inf	-917.40	-917.40	-917.40	-917.40
	runtime	0.18	1.32	0.30	0.06	2.60	0.22	3.50	0.11
6000031	value	-860.62	-860.62	-860.62	-860.62	-860.62	-860.62	-860.62	-860.62
	bound	-Inf	-860.62	-Inf	-Inf	-860.62	-860.62	-860.62	-860.62
	runtime	0.17	1.41	0.28	0.05	2.99	0.42	4.39	0.11
6000032	value	-981.88	-981.88	-981.88	-981.88	-981.88	-981.88	-981.88	-981.88
	bound	-Inf	-981.88	-Inf	-Inf	-981.88	-981.88	-981.88	-981.88
	runtime	0.19	1.53	0.55	0.06	4.97	0.41	4.96	0.13
6000033	value	-851.99	-851.99	-851.99	-851.99	-851.99	-851.99	-851.99	-851.99
	bound	-Inf	-851.99	-Inf	-Inf	-851.99	-851.99	-851.99	-851.99
	runtime	0.18	1.46	0.29	0.10	1.87	0.45	2.22	0.12
6000034	value	-698.03	-698.03	-698.03	-697.78	-698.03	-698.03	-698.03	-698.03
	bound	-Inf	-698.03	-Inf	-Inf	-698.03	-698.03	-698.03	-698.03
	runtime	0.18	2.07	0.33	0.06	4.55	1.11	4.60	0.14
6000035	value	-901.56	-901.56	-901.56	-901.56	-901.56	-901.56	-901.56	-901.56
	bound	-Inf	-901.56	-Inf	-Inf	-901.56	-901.56	-901.56	-901.56
	runtime	0.17	1.24	0.23	0.06	2.29	0.16	3.73	0.11
6000036	value	-777.46	-777.46	-777.46	-777.46	-777.46	-777.46	-777.46	-777.46
	bound	-Inf	-777.46	-Inf	-Inf	-777.46	-777.46	-777.46	-777.46
	runtime	0.17	9.84	0.49	0.07	3.52	0.78	3.56	0.12
6000037	value	-908.14	-908.14	-908.14	-908.14	-908.14	-908.14	-908.14	-908.14
	bound	-Inf	-908.14	-Inf	-Inf	-908.14	-908.14	-908.14	-908.14
	runtime	0.19	2.00	0.29	0.08	2.47	0.26	4.80	0.12
6000038	value	-785.39	-786.56	-785.39	-786.56	-786.56	-786.56	-786.56	-786.56
	bound	-Inf	-786.56	-Inf	-Inf	-786.56	-786.56	-786.56	-786.56
	runtime	0.17	4.07	0.27	0.08	4.42	3.37	4.42	0.12
6000039	value	-865.40	-866.86	-865.40	-866.86	-866.86	-866.86	-866.86	-866.86
	bound	-Inf	-866.86	-Inf	-Inf	-866.86	-866.86	-866.88	-866.86
	runtime	0.17	1.50	0.35	0.07	4.41	0.31	4.52	0.13
6000040	value	-762.91	-762.91	-762.91	-762.91	-762.91	-762.91	-762.91	-762.91
	bound	-Inf	-762.91	-Inf	-Inf	-762.91	-762.91	-762.91	-762.91
	runtime	0.16	67.62	0.25	0.06	4.20	0.25	4.19	0.11
6000041	value	-923.10	-923.10	-923.10	-923.10	-923.10	-923.10	-923.10	-923.10
	bound	-Inf	-923.10	-Inf	-Inf	-923.10	-923.10	-923.10	-923.10
	runtime	0.18	1.91	0.25	0.06	1.61	0.20	2.07	0.11
6000042	value	-848.62	-848.62	-848.62	-848.62	-848.62	-848.62	-848.62	-848.62
	bound	-Inf	-848.62	-Inf	-Inf	-848.62	-848.62	-848.62	-848.62
	runtime	0.17	1.43	0.24	0.07	1.99	0.12	4.11	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000043	value	-929.64	-929.64	-929.64	-929.64	-929.64	-929.64	-929.64	-929.64
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	1.51	0.23	0.07	4.30	0.89	4.29	0.11
6000044	value	-761.68	-762.38	-762.38	-762.38	-762.38	-762.38	-762.38	-762.38
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	9.86	0.37	0.06	4.27	0.37	4.39	0.11
6000045	value	-870.52	-870.52	-870.52	-870.36	-870.52	-870.52	-870.52	-870.52
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	1.77	0.32	0.09	2.79	1.07	4.48	0.12
6000046	value	-827.81	-827.81	-827.81	-827.81	-827.81	-827.81	-827.81	-827.81
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.16	1.14	0.29	0.07	2.62	0.32	3.33	0.10
6000047	value	-872.20	-872.40	-872.20	-872.40	-872.40	-872.40	-872.40	-872.40
	bound	-Inf	-872.40	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	2.19	0.29	0.07	3.56	0.58	3.60	0.12
6000048	value	-856.70	-856.87	-856.70	-856.87	-856.87	-856.87	-856.87	-856.87
	bound	-Inf	-856.87	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	2.52	0.34	0.07	4.51	4.52	4.57	0.12
6000049	value	-853.88	-853.92	-853.88	-853.92	-853.92	-853.92	-853.92	-853.92
	bound	-Inf	-853.92	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	1.57	0.31	0.06	4.55	2.15	4.62	0.12
6000050	value	-885.48	-885.48	-885.48	-885.44	-885.48	-885.48	-885.48	-885.48
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	1.33	0.26	0.06	1.71	0.71	2.78	0.12
6000051	value	-920.98	-920.98	-920.98	-920.98	-920.98	-920.98	-920.98	-920.98
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	1.35	0.23	0.07	0.86	0.16	2.29	0.11
6000052	value	-917.26	-917.26	-917.26	-917.26	-917.26	-917.26	-917.26	-917.26
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	4.12	0.44	0.08	4.55	1.11	4.60	0.12
6000053	value	-920.71	-920.71	-920.71	-920.71	-920.71	-920.71	-920.71	-920.71
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	1.15	0.60	0.07	4.22	0.64	4.28	0.11
6000054	value	-787.92	-787.92	-787.92	-787.92	-787.92	-787.92	-787.92	-787.92
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.16	1.26	0.25	0.06	2.67	0.24	3.39	0.11
6000055	value	-859.93	-859.93	-859.93	-859.93	-859.93	-859.93	-859.93	-859.93
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	1.37	0.25	0.08	2.58	0.22	3.83	0.12
6000056	value	-896.18	-896.72	-896.18	-896.72	-896.72	-896.72	-896.72	-896.72
	bound	-Inf	-896.72	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	1.28	0.32	0.06	4.40	0.48	4.44	0.13
6000057	value	-922.02	-922.02	-922.02	-922.02	-922.02	-922.02	-922.02	-922.02
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	279.69	0.48	0.09	4.67	3.46	4.71	0.13
6000058	value	-852.76	-852.76	-852.76	-852.76	-852.76	-852.76	-852.76	-852.76
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	16.18	0.26	0.07	4.18	1.91	4.23	0.13
6000059	value	-797.63	-797.63	-797.63	-797.63	-797.63	-797.63	-797.63	-797.63
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	8.35	0.29	0.06	2.41	0.38	3.78	0.11
6000060	value	-771.89	-771.89	-771.89	-771.81	-771.89	-771.89	-771.89	-771.89
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.16	1.93	0.27	0.06	4.03	1.73	4.12	0.10
6000061	value	-893.91	-893.91	-893.91	-893.91	-893.91	-893.91	-893.91	-893.91
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	16.85	0.35	0.07	4.39	1.63	4.38	0.12
6000062	value	-819.39	-819.39	-819.39	-819.39	-819.39	-819.39	-819.39	-819.39
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	1.47	0.30	0.06	3.46	0.21	3.52	0.11
6000063	value	-751.77	-752.14	-752.14	-751.87	-752.14	-752.14	-752.14	-752.14
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.16	15.81	0.31	0.06	4.24	4.23	4.23	0.12
6000064	value	-1008.17	-1008.17	-1008.17	-1008.17	-1008.17	-1008.17	-1008.17	-1008.17
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	1.31	0.27	0.06	3.16	0.24	4.65	0.12
6000065	value	-902.44	-902.44	-902.44	-902.44	-902.44	-902.44	-902.44	-902.44
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	2.69	0.31	0.08	4.59	0.88	4.60	0.12
6000066	value	-907.46	-907.46	-907.46	-907.46	-907.46	-907.46	-907.46	-907.46
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	1.32	0.23	0.06	1.02	0.19	2.34	0.11
6000067	value	-895.76	-895.82	-895.76	-895.82	-895.82	-895.82	-895.82	-895.82
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	3.09	0.30	0.07	3.74	0.53	3.84	0.13

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000068	value	-716.11	-716.11	-716.11	-716.11	-716.11	-716.11	-716.11	-716.11
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.14	5.15	0.20	0.05	0.81	0.09	2.42	0.09
6000069	value	-907.79	-907.79	-907.79	-907.79	-907.79	-907.79	-907.79	-907.79
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.16	1.23	0.22	0.06	2.22	2.20	3.00	0.09
6000070	value	-826.39	-826.39	-826.39	-826.39	-826.39	-826.39	-826.39	-826.39
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	31.73	0.43	0.06	4.23	1.06	4.61	0.12
6000071	value	-960.36	-960.36	-960.36	-960.36	-960.36	-960.36	-960.36	-960.36
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	1.49	0.32	0.08	4.45	0.50	4.48	0.11
6000072	value	-822.99	-830.63	-824.72	-830.63	-830.63	-830.63	-830.63	-830.63
	bound	-Inf	-830.63	-Inf	-Inf	-830.63	-830.63	-830.63	-830.63
	runtime	0.17	1.66	0.50	0.06	3.54	1.12	3.58	0.12
6000073	value	-818.16	-818.40	-818.40	-818.40	-818.40	-818.40	-818.40	-818.40
	bound	-Inf	-818.40	-Inf	-Inf	-818.44	-818.40	-818.64	-818.40
	runtime	0.18	1.71	0.34	0.07	4.45	0.90	4.50	0.13
6000074	value	-829.15	-829.15	-829.15	-829.15	-829.15	-829.15	-829.15	-829.15
	bound	-Inf	-829.15	-Inf	-Inf	-829.15	-829.15	-829.15	-829.15
	runtime	0.17	5.30	0.23	0.06	2.97	0.17	3.58	0.11
6000075	value	-1038.05	-1038.05	-1038.05	-1035.77	-1038.05	-1038.05	-1038.05	-1038.05
	bound	-Inf	-1038.05	-Inf	-Inf	-1038.06	-1038.05	-1038.10	-1038.05
	runtime	0.16	2.81	0.29	0.07	3.24	0.71	3.33	0.10
6000076	value	-775.04	-775.04	-775.04	-775.04	-775.04	-775.04	-775.04	-775.04
	bound	-Inf	-775.04	-Inf	-Inf	-775.04	-775.04	-775.04	-775.04
	runtime	0.17	3.73	0.27	0.06	2.67	0.34	4.25	0.11
6000077	value	-873.95	-873.95	-873.89	-873.89	-873.95	-873.95	-873.95	-873.95
	bound	-Inf	-873.95	-Inf	-Inf	-873.95	-873.95	-873.95	-873.95
	runtime	0.17	1.31	0.25	0.06	3.51	0.44	3.56	0.11
6000078	value	-890.97	-890.97	-890.97	-890.97	-890.97	-890.97	-890.97	-890.97
	bound	-Inf	-890.97	-Inf	-Inf	-890.97	-890.97	-890.97	-890.97
	runtime	0.19	8.24	0.43	0.07	3.02	0.36	4.70	0.12
6000079	value	-763.89	-764.08	-763.89	-763.89	-764.08	-764.08	-764.08	-764.08
	bound	-Inf	-764.08	-Inf	-Inf	-764.08	-764.08	-764.08	-764.08
	runtime	0.17	3.02	0.26	0.07	4.27	0.55	4.38	0.11
6000080	value	-888.15	-888.15	-888.15	-888.15	-888.15	-888.15	-888.15	-888.15
	bound	-Inf	-888.15	-Inf	-Inf	-888.15	-888.15	-888.15	-888.15
	runtime	0.17	2.44	0.26	0.06	4.47	2.00	4.47	0.12
6000081	value	-889.71	-889.71	-889.71	-889.71	-889.71	-889.71	-889.71	-889.71
	bound	-Inf	-889.71	-Inf	-Inf	-889.71	-889.71	-889.72	-889.71
	runtime	0.16	6.19	0.25	0.06	3.28	0.30	3.37	0.11
6000082	value	-1001.70	-1001.70	-1001.70	-1000.68	-1001.70	-1001.70	-1001.70	-1001.70
	bound	-Inf	-1001.70	-Inf	-Inf	-1001.70	-1001.70	-1001.70	-1001.70
	runtime	0.16	1.79	0.28	0.07	2.83	0.68	3.98	0.10
6000083	value	-830.91	-830.91	-830.91	-830.91	-830.91	-830.91	-830.91	-830.91
	bound	-Inf	-830.91	-Inf	-Inf	-830.91	-830.91	-830.93	-830.91
	runtime	0.16	31.98	0.27	0.09	4.19	0.50	4.25	0.11
6000084	value	-886.93	-886.93	-886.93	-886.93	-886.93	-886.93	-886.93	-886.93
	bound	-Inf	-886.93	-Inf	-Inf	-886.93	-886.93	-886.93	-886.93
	runtime	0.18	4.12	0.39	0.08	4.18	0.36	4.66	0.12
6000085	value	-875.23	-875.23	-875.23	-875.23	-875.21	-875.23	-875.21	-875.23
	bound	-Inf	-875.23	-Inf	-Inf	-875.28	-875.24	-875.36	-875.23
	runtime	0.17	30.52	0.31	0.07	4.38	4.37	4.43	0.12
6000086	value	-970.44	-970.44	-970.44	-970.44	-970.44	-970.44	-970.44	-970.44
	bound	-Inf	-970.44	-Inf	-Inf	-970.44	-970.44	-970.44	-970.44
	runtime	0.17	16.09	0.36	0.06	3.28	1.20	4.44	0.11
6000087	value	-822.17	-823.03	-822.17	-821.65	-823.03	-823.03	-823.03	-823.03
	bound	-Inf	-823.03	-Inf	-Inf	-823.04	-823.03	-823.11	-823.03
	runtime	0.17	3.99	1.12	0.06	4.31	2.38	4.42	0.12
6000088	value	-843.12	-844.07	-843.12	-844.07	-844.07	-844.07	-844.07	-844.07
	bound	-Inf	-844.07	-Inf	-Inf	-844.07	-844.07	-844.07	-844.07
	runtime	0.17	7.70	0.25	0.09	3.34	0.29	3.60	0.12
6000089	value	-961.59	-961.59	-961.59	-961.59	-961.59	-961.59	-961.59	-961.59
	bound	-Inf	-961.59	-Inf	-Inf	-961.59	-961.59	-961.59	-961.59
	runtime	0.17	1.85	0.32	0.06	3.28	0.42	4.50	0.11
6000090	value	-866.42	-866.42	-866.42	-866.42	-866.42	-866.42	-866.42	-866.42
	bound	-Inf	-866.42	-Inf	-Inf	-866.42	-866.43	-866.49	-866.42
	runtime	0.18	26.59	0.29	0.08	4.51	4.50	4.53	0.13
6000091	value	-912.24	-912.24	-912.24	-912.24	-912.24	-912.24	-912.24	-912.24
	bound	-Inf	-912.24	-Inf	-Inf	-912.24	-912.24	-912.24	-912.24
	runtime	0.17	1.35	0.29	0.06	4.46	0.46	4.55	0.11
6000092	value	-878.99	-878.99	-878.99	-878.99	-878.99	-878.99	-878.99	-878.99
	bound	-Inf	-878.99	-Inf	-Inf	-878.99	-878.99	-879.00	-878.99
	runtime	0.18	4.59	0.39	0.07	4.56	0.35	4.53	0.13

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000093	value	-880.66	-880.66	-880.66	-880.66	-880.66	-880.66	-880.66	-880.66
	bound	-Inf	-880.66	-Inf	-Inf	-880.66	-880.66	-880.66	-880.66
	runtime	0.17	16.68	0.34	0.06	2.87	0.21	3.55	0.12
6000094	value	-832.11	-832.11	-831.93	-832.11	-832.11	-832.11	-832.11	-832.11
	bound	-Inf	-832.11	-Inf	-Inf	-832.11	-832.11	-832.11	-832.11
	runtime	0.17	1.59	0.28	0.06	4.41	0.67	4.39	0.13
6000095	value	-885.06	-885.06	-885.06	-883.83	-885.06	-885.06	-885.06	-885.06
	bound	-Inf	-885.06	-Inf	-Inf	-885.06	-885.06	-885.06	-885.06
	runtime	0.17	1.56	0.36	0.06	3.13	0.24	3.49	0.12
6000096	value	-889.27	-889.27	-889.27	-889.27	-889.27	-889.27	-889.27	-889.27
	bound	-Inf	-889.27	-Inf	-Inf	-889.27	-889.27	-889.27	-889.27
	runtime	0.17	1.24	0.36	0.06	2.07	0.15	3.99	0.11
6000097	value	-856.71	-856.71	-856.71	-856.71	-856.71	-856.71	-856.71	-856.71
	bound	-Inf	-856.71	-Inf	-Inf	-856.71	-856.71	-856.72	-856.71
	runtime	0.17	1.33	0.27	0.07	4.35	0.26	4.32	0.12
6000098	value	-730.23	-730.23	-729.77	-730.23	-730.23	-730.23	-730.23	-730.23
	bound	-Inf	-730.23	-Inf	-Inf	-730.23	-730.23	-730.23	-730.23
	runtime	0.16	1.86	0.26	0.06	4.20	0.86	4.13	0.11
6000099	value	-928.91	-928.91	-928.91	-928.91	-928.91	-928.91	-928.91	-928.91
	bound	-Inf	-928.91	-Inf	-Inf	-928.91	-928.91	-928.91	-928.91
	runtime	0.17	1.44	0.28	0.06	4.32	0.43	4.32	0.12
6000100	value	-948.29	-948.29	-948.29	-948.29	-948.29	-948.29	-948.29	-948.29
	bound	-Inf	-948.29	-Inf	-Inf	-948.29	-948.29	-948.29	-948.29
	runtime	0.17	1.61	0.29	0.08	1.42	3.42	2.84	0.12
6000101	value	-814.84	-814.84	-814.84	-814.84	-814.84	-814.84	-814.84	-814.84
	bound	-Inf	-814.84	-Inf	-Inf	-814.85	-814.84	-814.87	-814.84
	runtime	0.17	1.39	0.45	0.06	4.36	1.87	4.40	0.11
6000102	value	-806.34	-806.34	-806.34	-806.34	-806.34	-806.34	-806.34	-806.34
	bound	-Inf	-806.34	-Inf	-Inf	-806.34	-806.34	-806.34	-806.34
	runtime	0.17	3.77	0.33	0.07	3.60	0.38	3.64	0.13
6000103	value	-801.89	-801.89	-801.89	-801.89	-801.89	-801.89	-801.89	-801.89
	bound	-Inf	-801.89	-Inf	-Inf	-801.89	-801.89	-801.89	-801.89
	runtime	0.17	1.20	0.25	0.07	2.14	0.39	4.32	0.11
6000104	value	-1111.50	-1111.50	-1111.50	-1111.42	-1111.50	-1111.50	-1111.50	-1111.50
	bound	-Inf	-1111.50	-Inf	-Inf	-1111.50	-1111.50	-1111.50	-1111.50
	runtime	0.15	1.20	0.21	0.05	2.35	0.33	3.18	0.09
6000105	value	-1068.29	-1068.29	-1068.29	-1068.29	-1068.29	-1068.29	-1068.29	-1068.29
	bound	-Inf	-1068.29	-Inf	-Inf	-1068.29	-1068.29	-1068.30	-1068.29
	runtime	0.16	1.28	0.29	0.06	4.03	0.35	4.08	0.11
6000106	value	-963.10	-963.10	-963.10	-963.10	-963.10	-963.10	-963.10	-963.10
	bound	-Inf	-963.10	-Inf	-Inf	-963.10	-963.10	-963.10	-963.10
	runtime	0.17	1.26	0.24	0.06	3.82	0.15	4.29	0.11
6000107	value	-769.23	-769.23	-769.23	-769.23	-769.23	-769.23	-769.23	-769.23
	bound	-Inf	-769.23	-Inf	-Inf	-769.23	-769.23	-769.23	-769.23
	runtime	0.16	2.08	0.25	0.06	1.84	0.18	3.14	0.11
6000108	value	-756.29	-756.29	-756.29	-756.29	-756.29	-756.29	-756.29	-756.29
	bound	-Inf	-756.29	-Inf	-Inf	-756.29	-756.29	-756.29	-756.29
	runtime	0.17	1.20	0.24	0.07	2.87	0.15	4.36	0.12
6000109	value	-955.50	-955.50	-955.50	-955.50	-955.50	-955.50	-955.50	-955.50
	bound	-Inf	-955.50	-Inf	-Inf	-955.50	-955.50	-955.50	-955.50
	runtime	0.17	2.20	0.43	0.08	3.39	0.37	3.59	0.12
6000110	value	-691.70	-691.70	-691.70	-691.70	-691.70	-691.70	-691.70	-691.70
	bound	-Inf	-691.70	-Inf	-Inf	-691.70	-691.70	-691.71	-691.70
	runtime	0.18	51.38	0.37	0.08	4.57	2.04	4.65	0.14
6000111	value	-854.07	-854.07	-854.07	-853.93	-854.07	-854.07	-854.07	-854.07
	bound	-Inf	-854.07	-Inf	-Inf	-854.07	-854.07	-854.07	-854.07
	runtime	0.17	4.54	0.25	0.06	4.40	0.41	4.45	0.12
6000112	value	-945.47	-945.47	-945.47	-945.47	-945.47	-945.47	-945.47	-945.47
	bound	-Inf	-945.47	-Inf	-Inf	-945.47	-945.47	-945.47	-945.47
	runtime	0.18	1.52	0.27	0.07	4.05	0.47	4.62	0.13
6000113	value	-894.72	-894.72	-894.72	-894.72	-894.72	-894.72	-894.72	-894.72
	bound	-Inf	-894.72	-Inf	-Inf	-894.72	-894.72	-894.72	-894.72
	runtime	0.17	1.30	0.26	0.06	3.46	0.14	3.55	0.12
6000114	value	-802.85	-802.85	-802.85	-802.85	-802.85	-802.85	-802.85	-802.85
	bound	-Inf	-802.85	-Inf	-Inf	-802.85	-802.85	-802.85	-802.85
	runtime	0.16	1.23	0.36	0.06	2.22	0.17	4.17	0.12
6000115	value	-864.59	-864.59	-864.59	-864.59	-864.59	-864.59	-864.59	-864.59
	bound	-Inf	-864.59	-Inf	-Inf	-864.59	-864.59	-864.59	-864.59
	runtime	0.18	1.32	0.22	0.05	2.16	0.32	2.64	0.12
6000116	value	-864.49	-864.49	-864.49	-864.49	-864.49	-864.49	-864.49	-864.49
	bound	-Inf	-864.49	-Inf	-Inf	-864.49	-864.49	-864.49	-864.49
	runtime	0.17	1.49	0.40	0.06	1.73	0.49	2.66	0.12
6000117	value	-841.28	-841.28	-841.28	-841.28	-841.28	-841.28	-841.28	-841.28
	bound	-Inf	-841.28	-Inf	-Inf	-841.28	-841.28	-841.28	-841.28
	runtime	0.17	6.90	0.31	0.07	4.27	0.43	4.33	0.12

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000118	value	-785.37	-785.37	-785.37	-785.37	-785.37	-785.37	-785.37	-785.37
	bound	-Inf	-785.37	-Inf	-Inf	-785.37	-785.37	-785.37	-785.37
	runtime	0.18	1.24	0.26	0.07	2.63	0.57	4.02	0.13
6000119	value	-858.32	-858.32	-858.32	-858.32	-858.32	-858.32	-858.32	-858.32
	bound	-Inf	-858.32	-Inf	-Inf	-858.32	-858.32	-858.32	-858.32
	runtime	0.17	1.27	0.23	0.07	2.81	0.16	3.49	0.11
6000120	value	-924.06	-924.06	-924.06	-924.06	-924.06	-924.06	-924.06	-924.06
	bound	-Inf	-924.06	-Inf	-Inf	-924.06	-924.06	-924.06	-924.06
	runtime	0.18	1.28	0.34	0.08	3.21	0.39	4.61	0.13
6000121	value	-892.97	-892.97	-892.97	-892.97	-892.97	-892.97	-892.97	-892.97
	bound	-Inf	-892.97	-Inf	-Inf	-892.97	-892.97	-892.97	-892.97
	runtime	0.17	1.41	0.24	0.09	2.80	0.80	3.54	0.11
6000122	value	-924.26	-924.26	-924.26	-924.26	-924.26	-924.26	-924.26	-924.26
	bound	-Inf	-924.26	-Inf	-Inf	-924.26	-924.26	-924.26	-924.26
	runtime	0.18	1.62	0.26	0.07	3.74	1.41	4.57	0.12
6000123	value	-850.46	-850.46	-850.46	-849.91	-850.46	-850.46	-850.46	-850.46
	bound	-Inf	-850.46	-Inf	-Inf	-850.46	-850.46	-850.50	-850.46
	runtime	0.18	1.72	0.28	0.06	3.62	0.50	3.64	0.12
6000124	value	-812.86	-812.99	-812.86	-812.99	-812.99	-812.99	-812.99	-812.99
	bound	-Inf	-812.99	-Inf	-Inf	-813.01	-812.99	-813.08	-812.99
	runtime	0.18	6.89	0.42	0.06	4.54	1.79	4.64	0.13
6000125	value	-867.83	-867.83	-867.83	-867.83	-867.83	-867.83	-867.83	-867.83
	bound	-Inf	-867.83	-Inf	-Inf	-867.83	-867.83	-867.83	-867.83
	runtime	0.17	1.32	0.26	0.07	1.59	0.23	2.20	0.12
6000126	value	-747.48	-750.46	-747.48	-750.46	-750.46	-750.46	-750.46	-750.46
	bound	-Inf	-750.46	-Inf	-Inf	-750.46	-750.46	-750.46	-750.46
	runtime	0.17	1.17	0.28	0.07	1.50	0.09	1.65	0.11
6000127	value	-776.51	-776.51	-776.51	-776.10	-776.51	-776.51	-776.51	-776.51
	bound	-Inf	-776.51	-Inf	-Inf	-776.51	-776.51	-776.51	-776.51
	runtime	0.17	1.41	0.26	0.06	1.39	0.24	3.07	0.11
6000128	value	-865.86	-865.86	-865.86	-865.73	-865.86	-865.86	-865.86	-865.86
	bound	-Inf	-865.86	-Inf	-Inf	-865.86	-865.86	-865.86	-865.86
	runtime	0.18	3.55	0.37	0.06	4.10	3.44	4.65	0.13
6000129	value	-861.15	-861.15	-861.15	-861.15	-861.15	-861.15	-861.15	-861.15
	bound	-Inf	-861.15	-Inf	-Inf	-861.15	-861.15	-861.15	-861.15
	runtime	0.17	1.27	0.24	0.06	4.34	0.20	4.38	0.11
6000130	value	-883.45	-884.19	-883.45	-884.19	-884.19	-884.19	-884.08	-884.19
	bound	-Inf	-884.19	-Inf	-Inf	-884.19	-884.19	-884.30	-884.19
	runtime	0.17	18.40	0.37	0.07	4.48	1.17	4.53	0.13
6000131	value	-884.16	-884.16	-884.16	-884.02	-884.16	-884.16	-884.16	-884.16
	bound	-Inf	-884.16	-Inf	-Inf	-884.16	-884.16	-884.16	-884.16
	runtime	0.18	1.39	0.34	0.06	2.59	0.32	3.62	0.12
6000132	value	-850.86	-850.86	-850.86	-850.86	-850.86	-850.86	-850.86	-850.86
	bound	-Inf	-850.86	-Inf	-Inf	-850.86	-850.86	-850.86	-850.86
	runtime	0.17	1.37	0.30	0.05	4.47	0.40	4.58	0.12
6000133	value	-780.42	-780.42	-780.42	-780.38	-780.42	-780.42	-780.42	-780.42
	bound	-Inf	-780.42	-Inf	-Inf	-780.42	-780.42	-780.42	-780.42
	runtime	0.17	1.55	0.31	0.06	3.84	0.65	4.48	0.12
6000134	value	-855.51	-855.51	-855.51	-855.51	-855.51	-855.51	-855.51	-855.51
	bound	-Inf	-855.51	-Inf	-Inf	-855.55	-855.51	-855.67	-855.51
	runtime	0.18	5.64	0.36	0.07	4.54	4.47	4.55	0.13
6000135	value	-771.61	-772.24	-771.61	-772.10	-772.24	-772.24	-772.24	-772.24
	bound	-Inf	-772.24	-Inf	-Inf	-772.24	-772.24	-772.29	-772.24
	runtime	0.17	1.40	0.29	0.06	3.42	0.35	3.47	0.13
6000136	value	-823.60	-825.63	-823.60	-825.41	-825.63	-825.63	-825.63	-825.63
	bound	-Inf	-825.63	-Inf	-Inf	-825.63	-825.63	-825.63	-825.63
	runtime	0.18	1.60	0.44	0.06	2.80	0.37	4.50	0.13
6000137	value	-821.11	-821.11	-818.82	-821.11	-821.11	-821.11	-821.11	-821.11
	bound	-Inf	-821.11	-Inf	-Inf	-821.12	-821.11	-821.14	-821.11
	runtime	0.17	1.27	0.33	0.06	4.37	0.67	4.43	0.12
6000138	value	-889.56	-891.99	-889.56	-891.99	-891.99	-891.99	-891.99	-891.99
	bound	-Inf	-891.99	-Inf	-Inf	-891.99	-891.99	-892.02	-891.99
	runtime	0.18	1.48	0.48	0.07	3.60	2.48	3.63	0.13
6000139	value	-943.57	-943.57	-943.57	-943.57	-943.57	-943.57	-943.57	-943.57
	bound	-Inf	-943.57	-Inf	-Inf	-943.57	-943.57	-943.57	-943.57
	runtime	0.19	1.31	0.24	0.06	3.20	0.30	4.31	0.12
6000140	value	-854.23	-854.23	-854.23	-854.23	-854.23	-854.23	-854.23	-854.23
	bound	-Inf	-854.23	-Inf	-Inf	-854.23	-854.23	-854.23	-854.23
	runtime	0.18	1.50	0.31	0.06	4.45	0.32	4.48	0.12
6000141	value	-862.75	-862.86	-862.75	-862.86	-862.86	-862.86	-862.86	-862.86
	bound	-Inf	-862.86	-Inf	-Inf	-862.87	-862.86	-862.91	-862.86
	runtime	0.17	1.89	0.35	0.06	4.42	4.38	4.41	0.13
6000142	value	-851.43	-852.04	-851.96	-852.04	-852.04	-852.04	-852.04	-852.04
	bound	-Inf	-852.04	-Inf	-Inf	-852.09	-852.04	-852.17	-852.04
	runtime	0.17	7.24	0.30	0.06	4.35	2.48	4.41	0.13

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000143	value	-865.33	-865.33	-865.33	-865.33	-865.33	-865.33	-865.33	-865.33
	bound	-Inf	-865.33	-Inf	-Inf	-865.33	-865.33	-865.33	-865.33
	runtime	0.17	2.16	0.34	0.06	3.54	0.22	4.53	0.12
6000144	value	-845.41	-845.41	-845.41	-845.41	-845.41	-845.41	-845.41	-845.41
	bound	-Inf	-845.41	-Inf	-Inf	-845.41	-845.41	-845.41	-845.41
	runtime	0.17	3.91	0.39	0.06	3.78	0.50	4.25	0.11
6000145	value	-855.57	-855.57	-855.57	-855.57	-855.57	-855.57	-855.57	-855.57
	bound	-Inf	-855.57	-Inf	-Inf	-855.57	-855.57	-855.57	-855.57
	runtime	0.17	1.36	0.25	0.09	4.44	0.37	4.52	0.11
6000146	value	-1078.28	-1078.28	-1078.28	-1078.28	-1078.28	-1078.28	-1078.28	-1078.28
	bound	-Inf	-1078.28	-Inf	-Inf	-1078.28	-1078.28	-1078.28	-1078.28
	runtime	0.17	1.14	0.25	0.07	3.15	0.29	4.26	0.11
6000147	value	-909.94	-909.94	-909.94	-909.94	-909.94	-909.94	-909.94	-909.94
	bound	-Inf	-909.94	-Inf	-Inf	-909.94	-909.94	-909.94	-909.94
	runtime	0.18	1.44	0.33	0.06	3.76	0.48	4.64	0.12
6000148	value	-901.13	-901.13	-901.13	-901.13	-901.13	-901.13	-901.13	-901.13
	bound	-Inf	-901.13	-Inf	-Inf	-901.13	-901.13	-901.13	-901.13
	runtime	0.16	1.14	0.24	0.06	2.49	0.11	3.29	0.10
6000149	value	-860.84	-860.84	-860.84	-860.84	-860.84	-860.84	-860.84	-860.84
	bound	-Inf	-860.84	-Inf	-Inf	-860.85	-860.84	-860.85	-860.84
	runtime	0.17	1.30	0.31	0.06	4.32	0.21	4.41	0.11
6000150	value	-843.77	-843.77	-843.77	-843.63	-843.77	-843.77	-843.77	-843.77
	bound	-Inf	-843.77	-Inf	-Inf	-843.78	-843.77	-843.83	-843.77
	runtime	0.18	28.57	0.30	0.09	4.56	0.87	4.55	0.13
6000151	value	-810.13	-811.30	-810.13	-811.30	-811.30	-811.30	-811.30	-811.30
	bound	-Inf	-811.30	-Inf	-Inf	-811.30	-811.30	-811.33	-811.30
	runtime	0.17	6.68	0.33	0.06	3.43	0.52	3.51	0.12
6000152	value	-886.74	-886.95	-886.74	-886.95	-886.95	-886.95	-886.95	-886.95
	bound	-Inf	-886.95	-Inf	-Inf	-886.96	-886.95	-886.96	-886.95
	runtime	0.17	1.86	0.39	0.06	4.38	0.68	4.38	0.13
6000153	value	-857.60	-857.60	-857.60	-857.60	-857.60	-857.60	-857.60	-857.60
	bound	-Inf	-857.60	-Inf	-Inf	-857.60	-857.60	-857.62	-857.60
	runtime	0.16	1.36	0.43	0.07	3.36	0.28	3.44	0.13
6000154	value	-799.99	-799.99	-799.99	-799.99	-799.99	-799.99	-799.99	-799.99
	bound	-Inf	-799.99	-Inf	-Inf	-799.99	-799.99	-799.99	-799.99
	runtime	0.16	1.12	0.22	0.09	4.06	0.21	4.08	0.11
6000155	value	-905.79	-907.89	-905.79	-907.89	-907.89	-907.89	-907.89	-907.89
	bound	-Inf	-907.89	-Inf	-Inf	-907.89	-907.89	-907.95	-907.89
	runtime	0.19	26.25	0.43	0.06	4.70	0.39	4.81	0.13
6000156	value	-850.37	-853.69	-852.95	-853.69	-853.69	-853.69	-853.69	-853.69
	bound	-Inf	-853.69	-Inf	-Inf	-853.69	-853.69	-853.71	-853.69
	runtime	0.18	7.65	0.39	0.06	4.67	0.59	4.65	0.14
6000157	value	-832.17	-832.17	-832.17	-832.17	-832.17	-832.17	-832.17	-832.17
	bound	-Inf	-832.17	-Inf	-Inf	-832.17	-832.17	-832.18	-832.17
	runtime	0.16	1.23	0.27	0.06	4.22	0.40	4.31	0.11
6000158	value	-825.36	-825.36	-825.36	-825.36	-825.36	-825.36	-825.36	-825.36
	bound	-Inf	-825.36	-Inf	-Inf	-825.38	-825.36	-825.41	-825.36
	runtime	0.18	19.47	1.63	0.06	4.49	3.96	4.45	0.12
6000159	value	-816.97	-816.97	-816.97	-816.97	-816.97	-816.97	-816.97	-816.97
	bound	-Inf	-816.97	-Inf	-Inf	-816.97	-816.97	-816.97	-816.97
	runtime	0.16	1.25	0.24	0.06	1.43	0.37	2.22	0.10
6000160	value	-813.28	-813.28	-813.28	-813.28	-813.28	-813.28	-813.28	-813.28
	bound	-Inf	-813.28	-Inf	-Inf	-813.28	-813.28	-813.28	-813.28
	runtime	0.17	1.38	0.26	0.06	3.33	0.45	3.56	0.11
6000161	value	-891.41	-891.41	-891.41	-891.41	-891.41	-891.41	-891.41	-891.41
	bound	-Inf	-891.41	-Inf	-Inf	-891.41	-891.41	-891.41	-891.41
	runtime	0.16	5.02	0.48	0.06	4.12	0.52	4.13	0.11
6000162	value	-1034.63	-1034.63	-1034.63	-1034.63	-1034.63	-1034.63	-1034.63	-1034.63
	bound	-Inf	-1034.63	-Inf	-Inf	-1034.67	-1034.63	-1034.74	-1034.63
	runtime	0.17	1.45	0.37	0.06	4.35	1.55	4.47	0.13
6000163	value	-666.53	-667.12	-666.53	-666.95	-667.12	-667.12	-667.12	-667.12
	bound	-Inf	-667.12	-Inf	-Inf	-667.12	-667.12	-667.13	-667.12
	runtime	0.16	18.60	0.29	0.09	2.65	1.57	4.38	0.13
6000164	value	-733.39	-733.39	-733.39	-731.35	-733.39	-733.39	-733.39	-733.39
	bound	-Inf	-733.39	-Inf	-Inf	-733.39	-733.39	-733.41	-733.39
	runtime	0.16	5.60	0.29	0.05	3.23	0.26	3.30	0.12
6000165	value	-926.03	-926.03	-926.03	-926.03	-926.03	-926.03	-926.03	-926.03
	bound	-Inf	-926.03	-Inf	-Inf	-926.03	-926.03	-926.04	-926.03
	runtime	0.17	1.48	0.29	0.06	4.39	0.67	4.38	0.11
6000166	value	-894.09	-894.09	-894.09	-892.11	-894.09	-894.09	-894.09	-894.09
	bound	-Inf	-894.09	-Inf	-Inf	-894.10	-894.09	-894.11	-894.09
	runtime	0.17	6.54	0.29	0.06	4.43	0.34	4.53	0.12
6000167	value	-825.65	-825.65	-825.65	-825.65	-825.65	-825.65	-825.65	-825.65
	bound	-Inf	-825.65	-Inf	-Inf	-825.80	-825.65	-826.03	-825.65
	runtime	0.16	1.72	0.31	0.06	4.13	2.05	4.11	0.13

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000168	value	-814.00	-814.00	-814.00	-814.00	-814.00	-814.00	-814.00	-814.00
	bound	-Inf	-814.00	-Inf	-Inf	-814.06	-814.01	-814.12	-814.00
	runtime	0.17	1.48	0.36	0.06	4.39	4.45	4.50	0.13
6000169	value	-855.30	-855.30	-854.33	-855.30	-855.30	-855.30	-855.30	-855.30
	bound	-Inf	-855.30	-Inf	-Inf	-855.40	-855.30	-855.71	-855.30
	runtime	0.18	2.83	0.45	0.06	4.46	1.36	4.47	0.16
6000170	value	-805.83	-805.83	-805.83	-805.83	-805.83	-805.83	-805.83	-805.83
	bound	-Inf	-805.83	-Inf	-Inf	-805.83	-805.83	-805.83	-805.83
	runtime	0.16	2.87	0.25	0.08	4.01	0.48	4.09	0.11
6000171	value	-864.20	-864.20	-864.20	-864.12	-864.20	-864.20	-864.20	-864.20
	bound	-Inf	-864.20	-Inf	-Inf	-864.20	-864.20	-864.21	-864.20
	runtime	0.16	1.58	0.23	0.07	4.11	0.28	4.11	0.10
6000172	value	-844.84	-844.84	-844.84	-844.84	-844.84	-844.84	-844.84	-844.84
	bound	-Inf	-844.84	-Inf	-Inf	-844.85	-844.85	-844.94	-844.84
	runtime	0.16	1.21	0.24	0.09	4.15	4.19	4.25	0.12
6000173	value	-826.74	-826.74	-826.74	-826.74	-826.74	-826.74	-826.74	-826.74
	bound	-Inf	-826.74	-Inf	-Inf	-826.74	-826.74	-826.74	-826.74
	runtime	0.17	1.34	0.24	0.09	3.47	0.24	3.48	0.11
6000174	value	-820.89	-820.89	-820.89	-820.89	-820.89	-820.89	-820.89	-820.89
	bound	-Inf	-820.89	-Inf	-Inf	-820.89	-820.89	-820.92	-820.89
	runtime	0.18	621.93	0.45	0.06	4.50	1.55	4.61	0.14
6000175	value	-821.95	-821.95	-821.95	-820.73	-821.95	-821.95	-821.95	-821.95
	bound	-Inf	-821.95	-Inf	-Inf	-821.96	-821.95	-821.99	-821.95
	runtime	0.17	1.65	0.33	0.08	4.40	3.12	4.38	0.14
6000176	value	-813.60	-814.00	-813.60	-814.00	-814.00	-814.00	-814.00	-814.00
	bound	-Inf	-814.00	-Inf	-Inf	-814.04	-814.00	-814.15	-814.00
	runtime	0.18	32.07	0.34	0.07	4.55	2.86	4.68	0.14
6000177	value	-810.47	-810.47	-810.47	-810.47	-810.47	-810.47	-810.47	-810.47
	bound	-Inf	-810.47	-Inf	-Inf	-810.47	-810.47	-810.47	-810.47
	runtime	0.16	1.18	0.28	0.05	2.15	0.22	3.22	0.11
6000178	value	-881.43	-881.43	-881.43	-881.43	-881.43	-881.43	-881.43	-881.43
	bound	-Inf	-881.43	-Inf	-Inf	-881.43	-881.43	-881.43	-881.43
	runtime	0.18	1.72	0.27	0.07	4.46	4.40	4.44	0.12
6000179	value	-750.02	-750.02	-750.02	-750.02	-750.02	-750.02	-750.02	-750.02
	bound	-Inf	-750.02	-Inf	-Inf	-750.02	-750.02	-750.04	-750.02
	runtime	0.17	2.16	0.36	0.06	4.20	4.23	4.28	0.12
6000180	value	-865.61	-866.17	-865.61	-866.17	-866.17	-866.17	-866.17	-866.17
	bound	-Inf	-866.17	-Inf	-Inf	-866.17	-866.17	-866.22	-866.17
	runtime	0.17	1.24	0.25	0.06	4.38	0.44	4.35	0.11
6000181	value	-861.33	-861.33	-860.79	-861.33	-861.33	-861.33	-861.33	-861.33
	bound	-Inf	-861.33	-Inf	-Inf	-861.34	-861.33	-861.36	-861.33
	runtime	0.17	1.47	0.37	0.06	4.40	1.82	4.50	0.12
6000182	value	-950.57	-950.57	-950.57	-950.57	-950.57	-950.57	-950.57	-950.57
	bound	-Inf	-950.57	-Inf	-Inf	-950.57	-950.57	-950.58	-950.57
	runtime	0.17	1.40	0.34	0.06	4.40	2.67	4.39	0.11
6000183	value	-929.45	-929.45	-929.44	-929.45	-929.45	-929.45	-929.45	-929.45
	bound	-Inf	-929.45	-Inf	-Inf	-929.47	-929.45	-929.51	-929.45
	runtime	0.17	1.18	0.32	0.06	3.38	3.38	3.42	0.11
6000184	value	-973.56	-973.56	-973.56	-973.56	-973.56	-973.56	-973.56	-973.56
	bound	-Inf	-973.56	-Inf	-Inf	-973.56	-973.56	-973.56	-973.56
	runtime	0.18	1.43	0.27	0.06	2.89	0.27	4.79	0.12
6000185	value	-976.09	-977.79	-976.09	-977.79	-977.79	-977.79	-977.79	-977.79
	bound	-Inf	-977.79	-Inf	-Inf	-977.79	-977.79	-977.84	-977.79
	runtime	0.18	2.67	0.35	0.06	4.69	0.46	4.69	0.13
6000186	value	-1033.87	-1034.89	-1033.87	-1034.89	-1034.89	-1034.89	-1034.89	-1034.89
	bound	-Inf	-1034.89	-Inf	-Inf	-1034.90	-1034.89	-1034.93	-1034.89
	runtime	0.18	2.93	0.31	0.06	4.57	0.81	4.67	0.13
6000187	value	-951.97	-952.39	-951.97	-952.39	-952.39	-952.39	-952.39	-952.39
	bound	-Inf	-952.39	-Inf	-Inf	-952.39	-952.39	-952.39	-952.39
	runtime	0.18	1.41	0.36	0.06	4.80	1.55	4.78	0.13
6000188	value	-771.44	-771.44	-771.44	-771.44	-771.44	-771.44	-771.44	-771.44
	bound	-Inf	-771.44	-Inf	-Inf	-771.44	-771.44	-771.44	-771.44
	runtime	0.17	1.32	0.27	0.08	4.30	0.71	4.41	0.12
6000189	value	-798.83	-799.40	-799.40	-799.40	-799.40	-799.40	-799.40	-799.40
	bound	-Inf	-799.40	-Inf	-Inf	-799.44	-799.40	-799.52	-799.40
	runtime	0.17	4.02	0.37	0.06	3.39	0.84	3.40	0.12
6000190	value	-869.30	-869.30	-869.30	-869.30	-869.30	-869.30	-869.30	-869.30
	bound	-Inf	-869.30	-Inf	-Inf	-869.30	-869.30	-869.30	-869.30
	runtime	0.17	1.20	0.30	0.06	3.03	0.47	4.27	0.10
6000191	value	-874.79	-875.39	-874.79	-875.24	-875.39	-875.39	-875.39	-875.39
	bound	-Inf	-875.39	-Inf	-Inf	-875.40	-875.39	-875.41	-875.39
	runtime	0.17	1.51	0.28	0.06	4.34	0.90	4.41	0.12
6000192	value	-924.70	-924.70	-924.70	-924.70	-924.70	-924.70	-924.70	-924.70
	bound	-Inf	-924.70	-Inf	-Inf	-924.70	-924.70	-924.70	-924.70
	runtime	0.17	1.31	0.23	0.06	1.49	0.17	2.39	0.10

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000193	value	-957.80	-957.80	-957.80	-957.80	-957.80	-957.80	-957.80	-957.80
	bound	-Inf	-957.80	-Inf	-Inf	-957.80	-957.80	-957.80	-957.80
	runtime	0.17	1.39	0.27	0.06	4.42	1.16	4.53	0.11
6000194	value	-901.00	-901.00	-901.00	-901.00	-901.00	-901.00	-901.00	-901.00
	bound	-Inf	-901.00	-Inf	-Inf	-901.00	-901.00	-901.00	-901.00
	runtime	0.17	1.27	0.25	0.06	1.32	1.85	3.73	0.11
6000195	value	-970.87	-970.87	-970.87	-970.87	-970.87	-970.87	-970.87	-970.87
	bound	-Inf	-970.87	-Inf	-Inf	-970.87	-970.87	-970.87	-970.87
	runtime	0.18	1.37	0.31	0.07	4.68	0.90	4.74	0.12
6000196	value	-824.77	-825.33	-824.77	-825.33	-825.33	-825.33	-825.33	-825.33
	bound	-Inf	-825.33	-Inf	-Inf	-825.33	-825.33	-825.33	-825.33
	runtime	0.17	89.17	0.27	0.06	4.29	0.80	4.34	0.12
6000197	value	-999.60	-999.60	-999.60	-999.60	-999.60	-999.60	-999.60	-999.60
	bound	-Inf	-999.60	-Inf	-Inf	-999.60	-999.60	-999.60	-999.60
	runtime	0.19	1.47	0.35	0.06	4.80	0.25	4.83	0.12
6000198	value	-925.87	-925.87	-923.85	-925.87	-925.87	-925.87	-925.87	-925.87
	bound	-Inf	-925.87	-Inf	-Inf	-925.87	-925.87	-925.87	-925.87
	runtime	0.18	1.49	0.34	0.06	4.17	0.20	4.64	0.11
6000199	value	-998.07	-998.07	-998.07	-998.07	-998.07	-998.07	-998.07	-998.07
	bound	-Inf	-998.07	-Inf	-Inf	-998.07	-998.07	-998.07	-998.07
	runtime	0.18	1.54	0.28	0.06	3.81	0.26	3.87	0.11
6000200	value	-863.59	-868.36	-863.59	-868.36	-868.36	-868.36	-868.36	-868.36
	bound	-Inf	-868.36	-Inf	-Inf	-868.36	-868.36	-868.36	-868.36
	runtime	0.17	1.33	0.36	0.06	3.73	0.56	4.37	0.12
6000201	value	-875.31	-875.31	-875.31	-875.31	-875.31	-875.31	-875.31	-875.31
	bound	-Inf	-875.31	-Inf	-Inf	-875.31	-875.31	-875.31	-875.31
	runtime	0.19	1.41	0.29	0.07	2.55	0.19	2.45	0.12
6000202	value	-793.90	-795.41	-793.90	-795.41	-795.41	-795.41	-795.41	-795.41
	bound	-Inf	-795.41	-Inf	-Inf	-795.41	-795.41	-795.41	-795.41
	runtime	0.17	1259.53	0.37	0.08	4.39	0.80	4.43	0.14
6000203	value	-925.66	-926.02	-925.66	-926.02	-926.02	-926.02	-926.02	-926.02
	bound	-Inf	-926.02	-Inf	-Inf	-926.02	-926.02	-926.02	-926.02
	runtime	0.18	1.33	0.42	0.06	3.09	0.61	4.64	0.12
6000204	value	-962.62	-962.62	-962.62	-962.62	-962.62	-962.62	-962.62	-962.62
	bound	-Inf	-962.62	-Inf	-Inf	-962.62	-962.62	-962.62	-962.62
	runtime	0.17	1.62	0.28	0.08	4.41	0.23	4.50	0.11
6000205	value	-804.37	-804.37	-804.37	-804.37	-804.37	-804.37	-804.37	-804.37
	bound	-Inf	-804.37	-Inf	-Inf	-804.37	-804.37	-804.37	-804.37
	runtime	0.18	190.38	0.31	0.06	4.52	1.32	4.58	0.13
6000206	value	-913.73	-913.96	-913.73	-913.96	-913.96	-913.96	-913.96	-913.96
	bound	-Inf	-913.96	-Inf	-Inf	-913.96	-913.96	-913.96	-913.96
	runtime	0.18	1.24	0.32	0.06	4.48	0.54	4.52	0.12
6000207	value	-876.67	-876.67	-876.67	-876.67	-876.67	-876.67	-876.67	-876.67
	bound	-Inf	-876.67	-Inf	-Inf	-876.67	-876.67	-876.67	-876.67
	runtime	0.16	1.34	0.24	0.06	2.48	0.32	4.23	0.10
6000208	value	-849.84	-850.61	-849.84	-850.61	-850.61	-850.61	-850.61	-850.61
	bound	-Inf	-850.61	-Inf	-Inf	-850.61	-850.61	-850.61	-850.61
	runtime	0.16	1.55	0.26	0.07	4.28	1.69	4.27	0.12
6000209	value	-860.65	-861.10	-860.65	-861.10	-861.10	-861.10	-861.10	-861.10
	bound	-Inf	-861.10	-Inf	-Inf	-861.10	-861.10	-861.10	-861.10
	runtime	0.17	3.99	0.25	0.06	4.28	1.22	4.40	0.12
6000210	value	-837.72	-837.72	-837.72	-837.72	-837.72	-837.72	-837.72	-837.72
	bound	-Inf	-837.72	-Inf	-Inf	-837.72	-837.72	-837.72	-837.72
	runtime	0.19	5.07	0.38	0.07	4.81	0.59	4.79	0.15
6000211	value	-902.01	-902.01	-902.01	-902.01	-902.01	-902.01	-902.01	-902.01
	bound	-Inf	-902.01	-Inf	-Inf	-902.01	-902.01	-902.01	-902.01
	runtime	0.17	4.45	0.26	0.08	4.29	0.93	4.39	0.12
6000212	value	-793.76	-794.22	-793.76	-794.22	-794.22	-794.22	-794.22	-794.22
	bound	-Inf	-794.22	-Inf	-Inf	-794.22	-794.22	-794.22	-794.22
	runtime	0.17	107.79	0.31	0.08	4.41	0.65	4.43	0.15
6000213	value	-849.88	-849.88	-849.88	-849.88	-849.88	-849.88	-849.88	-849.88
	bound	-Inf	-849.88	-Inf	-Inf	-849.88	-849.88	-849.88	-849.88
	runtime	0.17	18.40	0.33	0.07	3.60	0.95	3.64	0.13
6000214	value	-1041.39	-1041.39	-1041.39	-1041.39	-1041.39	-1041.39	-1041.39	-1041.39
	bound	-Inf	-1041.39	-Inf	-Inf	-1041.39	-1041.39	-1041.39	-1041.39
	runtime	0.17	1.27	0.22	0.07	0.52	0.05	1.19	0.11
6000215	value	-858.36	-858.55	-858.36	-858.55	-858.55	-858.55	-858.55	-858.55
	bound	-Inf	-858.55	-Inf	-Inf	-858.55	-858.55	-858.55	-858.55
	runtime	0.17	1.34	0.63	0.06	2.31	0.38	3.64	0.12
6000216	value	-881.60	-881.60	-881.60	-881.60	-881.60	-881.60	-881.60	-881.60
	bound	-Inf	-881.60	-Inf	-Inf	-881.60	-881.60	-881.60	-881.60
	runtime	0.17	1.23	0.26	0.06	1.99	0.20	4.07	0.11
6000217	value	-951.02	-951.02	-951.02	-951.02	-951.02	-951.02	-951.02	-951.02
	bound	-Inf	-951.02	-Inf	-Inf	-951.02	-951.02	-951.02	-951.02
	runtime	0.17	1.43	0.31	0.06	3.18	0.45	4.49	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000218	value	-929.82	-929.82	-929.82	-929.82	-929.82	-929.82	-929.82	-929.82
	bound	-Inf	-929.82	-Inf	-Inf	-929.82	-929.82	-929.82	-929.82
	runtime	0.18	2.35	0.28	0.07	4.55	0.24	4.62	0.12
6000219	value	-929.83	-929.83	-929.83	-929.83	-929.83	-929.83	-929.83	-929.83
	bound	-Inf	-929.83	-Inf	-Inf	-929.83	-929.83	-929.83	-929.83
	runtime	0.17	1.32	0.26	0.06	1.52	0.67	2.53	0.11
6000220	value	-1016.99	-1016.99	-1016.99	-1016.99	-1016.99	-1016.99	-1016.99	-1016.99
	bound	-Inf	-1016.99	-Inf	-Inf	-1016.99	-1016.99	-1016.99	-1016.99
	runtime	0.18	1.31	0.24	0.08	2.29	0.34	3.01	0.11
6000221	value	-916.74	-916.74	-916.74	-916.74	-916.74	-916.74	-916.74	-916.74
	bound	-Inf	-916.74	-Inf	-Inf	-916.75	-916.74	-916.81	-916.74
	runtime	0.19	2.82	0.39	0.08	4.68	0.81	4.78	0.13
6000222	value	-923.24	-923.24	-923.24	-923.24	-923.24	-923.24	-923.24	-923.24
	bound	-Inf	-923.24	-Inf	-Inf	-923.24	-923.24	-923.24	-923.24
	runtime	0.18	1.48	0.28	0.08	1.78	4.49	3.66	0.12
6000223	value	-932.07	-932.07	-932.07	-931.73	-932.07	-932.07	-932.07	-932.07
	bound	-Inf	-932.07	-Inf	-Inf	-932.08	-932.07	-932.08	-932.07
	runtime	0.17	1.46	0.41	0.08	4.47	0.58	4.50	0.12
6000224	value	-945.47	-945.56	-945.47	-945.56	-945.56	-945.56	-945.56	-945.56
	bound	-Inf	-945.56	-Inf	-Inf	-945.56	-945.56	-945.58	-945.56
	runtime	0.18	1.59	0.29	0.06	4.50	0.57	4.55	0.12
6000225	value	-893.01	-893.01	-893.01	-893.01	-893.01	-893.01	-893.01	-893.01
	bound	-Inf	-893.01	-Inf	-Inf	-893.01	-893.01	-893.02	-893.01
	runtime	0.18	2.50	0.55	0.06	3.64	0.58	3.70	0.12
6000226	value	-1022.26	-1022.26	-1022.26	-1022.26	-1022.26	-1022.26	-1022.26	-1022.26
	bound	-Inf	-1022.26	-Inf	-Inf	-1022.26	-1022.26	-1022.26	-1022.26
	runtime	0.17	1.24	0.25	0.07	2.98	0.25	4.41	0.11
6000227	value	-891.17	-891.17	-891.17	-891.17	-891.17	-891.17	-891.17	-891.17
	bound	-Inf	-891.17	-Inf	-Inf	-891.17	-891.17	-891.17	-891.17
	runtime	0.17	2.42	0.29	0.07	3.26	0.33	4.57	0.11
6000228	value	-890.60	-890.60	-890.29	-890.36	-890.60	-890.60	-890.60	-890.60
	bound	-Inf	-890.60	-Inf	-Inf	-890.62	-890.60	-890.67	-890.60
	runtime	0.16	58.59	0.31	0.08	4.21	0.96	4.27	0.13
6000229	value	-956.18	-956.18	-956.18	-956.18	-956.18	-956.18	-956.18	-956.18
	bound	-Inf	-956.18	-Inf	-Inf	-956.18	-956.18	-956.19	-956.18
	runtime	0.18	1.47	0.38	0.06	4.58	1.01	4.62	0.11
6000230	value	-880.57	-880.57	-880.57	-880.57	-880.57	-880.57	-880.57	-880.57
	bound	-Inf	-880.57	-Inf	-Inf	-880.57	-880.57	-880.57	-880.57
	runtime	0.17	1.64	0.31	0.06	3.47	0.38	4.44	0.11
6000231	value	-955.36	-955.36	-955.36	-955.36	-955.36	-955.36	-955.36	-955.36
	bound	-Inf	-955.36	-Inf	-Inf	-955.36	-955.36	-955.36	-955.36
	runtime	0.17	1.27	0.22	0.06	2.33	0.21	4.51	0.10
6000232	value	-975.22	-975.51	-975.22	-975.51	-975.51	-975.51	-975.51	-975.51
	bound	-Inf	-975.51	-Inf	-Inf	-975.51	-975.51	-975.51	-975.51
	runtime	0.15	1.57	0.30	0.05	3.95	0.49	3.99	0.10
6000233	value	-867.16	-867.16	-867.16	-867.00	-867.16	-867.16	-867.16	-867.16
	bound	-Inf	-867.16	-Inf	-Inf	-867.16	-867.16	-867.16	-867.16
	runtime	0.17	1.39	0.31	0.06	4.52	4.51	4.58	0.12
6000234	value	-868.15	-870.00	-870.00	-869.79	-870.00	-870.00	-870.00	-870.00
	bound	-Inf	-870.00	-Inf	-Inf	-870.00	-870.00	-870.07	-870.00
	runtime	0.17	2.68	5.67	0.09	3.46	3.51	3.53	0.19
6000235	value	-749.76	-749.76	-749.76	-749.76	-749.76	-749.76	-749.76	-749.76
	bound	-Inf	-749.76	-Inf	-Inf	-749.76	-749.76	-749.81	-749.76
	runtime	0.15	26.46	0.38	0.06	4.08	0.72	4.10	0.11
6000236	value	-985.14	-985.14	-985.14	-985.14	-985.14	-985.14	-985.14	-985.14
	bound	-Inf	-985.14	-Inf	-Inf	-985.14	-985.14	-985.14	-985.14
	runtime	0.17	1.17	0.25	0.08	4.28	0.32	4.37	0.11
6000237	value	-918.86	-918.86	-918.86	-918.86	-918.86	-918.86	-918.86	-918.86
	bound	-Inf	-918.86	-Inf	-Inf	-918.86	-918.86	-918.86	-918.86
	runtime	0.18	4.52	0.29	0.07	1.57	4.60	2.17	0.12
6000238	value	-946.93	-946.93	-946.93	-946.93	-946.93	-946.93	-946.93	-946.93
	bound	-Inf	-946.93	-Inf	-Inf	-946.94	-946.93	-946.95	-946.93
	runtime	0.17	2.30	0.27	0.07	4.38	4.38	4.46	0.11
6000239	value	-1075.96	-1075.96	-1075.96	-1075.96	-1075.96	-1075.96	-1075.96	-1075.96
	bound	-Inf	-1075.96	-Inf	-Inf	-1075.96	-1075.96	-1075.96	-1075.96
	runtime	0.17	1.37	0.29	0.06	4.30	0.23	4.28	0.10
6000240	value	-978.15	-978.15	-978.15	-978.15	-978.15	-978.15	-978.15	-978.15
	bound	-Inf	-978.15	-Inf	-Inf	-978.15	-978.15	-978.15	-978.15
	runtime	0.17	1.66	0.24	0.06	1.58	0.20	2.90	0.11
6000241	value	-941.24	-941.24	-941.24	-941.24	-941.24	-941.24	-941.24	-941.24
	bound	-Inf	-941.24	-Inf	-Inf	-941.24	-941.24	-941.24	-941.24
	runtime	0.18	1.52	0.26	0.07	2.27	0.10	3.64	0.11
6000242	value	-878.92	-878.92	-878.92	-878.92	-878.92	-878.92	-878.92	-878.92
	bound	-Inf	-878.92	-Inf	-Inf	-878.92	-878.92	-878.92	-878.92
	runtime	0.16	1.36	0.40	0.06	4.02	1.33	4.39	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000243	value	-972.51	-972.51	-972.51	-972.51	-972.51	-972.51	-972.51	-972.51
	bound	-Inf	-972.51	-Inf	-Inf	-972.51	-972.51	-972.51	-972.51
	runtime	0.18	1.29	0.31	0.08	0.59	0.18	2.05	0.11
6000244	value	-941.13	-941.13	-941.13	-941.13	-941.13	-941.13	-941.13	-941.13
	bound	-Inf	-941.13	-Inf	-Inf	-941.13	-941.13	-941.13	-941.13
	runtime	0.18	1.31	0.29	0.06	1.24	0.85	3.59	0.11
6000245	value	-896.70	-896.70	-896.70	-896.70	-896.70	-896.70	-896.70	-896.70
	bound	-Inf	-896.70	-Inf	-Inf	-896.70	-896.70	-896.70	-896.70
	runtime	0.17	1.18	0.33	0.06	4.26	1.87	4.32	0.11
6000246	value	-877.32	-877.32	-877.32	-877.32	-877.32	-877.32	-877.32	-877.32
	bound	-Inf	-877.32	-Inf	-Inf	-877.32	-877.32	-877.32	-877.32
	runtime	0.17	1.52	0.24	0.06	1.51	0.38	3.36	0.11
6000247	value	-911.72	-911.72	-911.72	-911.72	-911.72	-911.72	-911.72	-911.72
	bound	-Inf	-911.72	-Inf	-Inf	-911.72	-911.72	-911.72	-911.72
	runtime	0.18	1.22	0.31	0.08	2.94	0.22	3.70	0.11
6000248	value	-875.54	-875.54	-875.54	-875.30	-875.54	-875.54	-875.54	-875.54
	bound	-Inf	-875.54	-Inf	-Inf	-875.54	-875.54	-875.55	-875.54
	runtime	0.17	1.66	0.30	0.07	4.53	0.95	4.50	0.11
6000249	value	-828.69	-829.46	-828.69	-829.46	-829.46	-829.46	-829.46	-829.46
	bound	-Inf	-829.46	-Inf	-Inf	-829.46	-829.46	-829.46	-829.46
	runtime	0.18	1.43	0.29	0.06	4.45	0.87	4.57	0.12
6000250	value	-930.45	-930.45	-930.45	-930.25	-930.45	-930.45	-930.45	-930.45
	bound	-Inf	-930.45	-Inf	-Inf	-930.46	-930.45	-930.49	-930.45
	runtime	0.17	1.24	0.42	0.07	4.38	0.95	4.36	0.12
6000251	value	-908.64	-908.64	-908.64	-908.64	-908.64	-908.64	-908.64	-908.64
	bound	-Inf	-908.64	-Inf	-Inf	-908.64	-908.64	-908.64	-908.64
	runtime	0.17	1.30	0.32	0.06	2.86	0.73	4.62	0.11
6000252	value	-904.28	-904.28	-904.28	-904.28	-904.28	-904.28	-904.28	-904.28
	bound	-Inf	-904.28	-Inf	-Inf	-904.29	-904.28	-904.30	-904.28
	runtime	0.17	1.44	0.35	0.08	4.34	0.45	4.44	0.12
6000253	value	-939.41	-939.41	-939.41	-939.41	-939.41	-939.41	-939.41	-939.41
	bound	-Inf	-939.41	-Inf	-Inf	-939.41	-939.41	-939.41	-939.41
	runtime	0.17	1.33	0.24	0.06	3.47	0.52	4.50	0.11
6000254	value	-879.69	-879.69	-879.69	-879.69	-879.69	-879.69	-879.69	-879.69
	bound	-Inf	-879.69	-Inf	-Inf	-879.69	-879.69	-879.69	-879.69
	runtime	0.18	1.34	0.35	0.07	4.60	0.70	4.61	0.12
6000255	value	-948.32	-948.32	-948.32	-948.32	-948.32	-948.32	-948.32	-948.32
	bound	-Inf	-948.32	-Inf	-Inf	-948.32	-948.32	-948.32	-948.32
	runtime	0.17	1.40	0.23	0.08	1.31	0.46	1.63	0.10
6000256	value	-1011.92	-1011.92	-1011.92	-1011.92	-1011.92	-1011.92	-1011.92	-1011.92
	bound	-Inf	-1011.92	-Inf	-Inf	-1011.92	-1011.92	-1011.92	-1011.92
	runtime	0.18	1.43	0.27	0.06	4.50	0.34	4.60	0.12
6000257	value	-996.80	-996.80	-996.80	-996.80	-996.80	-996.80	-996.80	-996.80
	bound	-Inf	-996.80	-Inf	-Inf	-996.80	-996.80	-996.80	-996.80
	runtime	0.17	1.32	0.22	0.06	1.08	0.39	1.64	0.10
6000258	value	-929.75	-929.75	-929.75	-929.75	-929.75	-929.75	-929.75	-929.75
	bound	-Inf	-929.75	-Inf	-Inf	-929.75	-929.75	-929.75	-929.75
	runtime	0.17	1.31	0.21	0.06	1.87	0.10	2.59	0.10
6000259	value	-967.59	-967.59	-967.59	-967.59	-967.59	-967.59	-967.59	-967.59
	bound	-Inf	-967.59	-Inf	-Inf	-967.59	-967.59	-967.59	-967.59
	runtime	0.17	1.32	0.26	0.06	3.69	0.18	4.52	0.11
6000260	value	-922.72	-922.72	-922.72	-922.72	-922.72	-922.72	-922.72	-922.72
	bound	-Inf	-922.72	-Inf	-Inf	-922.72	-922.72	-922.72	-922.72
	runtime	0.17	1.35	0.24	0.06	1.82	0.19	2.45	0.11
6000261	value	-968.46	-971.20	-968.46	-971.20	-971.20	-971.20	-971.20	-971.20
	bound	-Inf	-971.20	-Inf	-Inf	-971.20	-971.20	-971.20	-971.20
	runtime	0.18	11.51	0.39	0.08	3.32	0.28	3.73	0.13
6000262	value	-897.57	-897.57	-897.57	-897.57	-897.57	-897.57	-897.57	-897.57
	bound	-Inf	-897.57	-Inf	-Inf	-897.57	-897.57	-897.57	-897.57
	runtime	0.16	1.30	0.28	0.09	3.65	2.11	4.19	0.10
6000263	value	-1024.08	-1024.08	-1024.08	-1024.08	-1024.08	-1024.08	-1024.08	-1024.08
	bound	-Inf	-1024.08	-Inf	-Inf	-1024.08	-1024.08	-1024.08	-1024.08
	runtime	0.18	1.44	0.22	0.06	0.70	0.11	1.50	0.12
6000264	value	-969.70	-969.70	-969.70	-969.70	-969.70	-969.70	-969.70	-969.70
	bound	-Inf	-969.70	-Inf	-Inf	-969.70	-969.70	-969.70	-969.70
	runtime	0.19	1.34	0.26	0.06	3.28	0.66	4.37	0.12
6000265	value	-1036.47	-1036.47	-1036.47	-1036.47	-1036.47	-1036.47	-1036.47	-1036.47
	bound	-Inf	-1036.47	-Inf	-Inf	-1036.47	-1036.47	-1036.47	-1036.47
	runtime	0.16	2.44	0.26	0.08	1.01	2.59	3.41	0.11
6000266	value	-1000.94	-1000.94	-1000.94	-1000.94	-1000.94	-1000.94	-1000.94	-1000.94
	bound	-Inf	-1000.94	-Inf	-Inf	-1000.94	-1000.94	-1000.94	-1000.94
	runtime	0.19	1.42	0.23	0.08	1.37	1.06	2.98	0.11
6000267	value	-908.40	-908.40	-908.40	-908.40	-908.40	-908.40	-908.40	-908.40
	bound	-Inf	-908.40	-Inf	-Inf	-908.40	-908.40	-908.40	-908.40
	runtime	0.17	4.55	0.34	0.06	3.17	1.09	4.37	0.12

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000268	value	-897.56	-897.56	-897.56	-896.81	-897.56	-897.56	-897.56	-897.56
	bound	-Inf	-897.56	-Inf	-Inf	-897.56	-897.56	-897.56	-897.56
	runtime	0.16	1.18	0.25	0.06	0.94	0.18	1.18	0.10
6000269	value	-958.12	-958.12	-958.12	-958.12	-958.12	-958.12	-958.12	-958.12
	bound	-Inf	-958.12	-Inf	-Inf	-958.12	-958.12	-958.12	-958.12
	runtime	0.18	1.43	0.28	0.06	3.62	0.17	3.67	0.12
6000270	value	-891.38	-891.38	-891.38	-891.38	-891.38	-891.38	-891.38	-891.38
	bound	-Inf	-891.38	-Inf	-Inf	-891.38	-891.38	-891.38	-891.38
	runtime	0.17	1.20	0.24	0.06	2.61	0.57	3.65	0.11
6000271	value	-927.62	-927.62	-927.62	-927.62	-927.62	-927.62	-927.62	-927.62
	bound	-Inf	-927.62	-Inf	-Inf	-927.62	-927.62	-927.62	-927.62
	runtime	0.17	1.40	0.38	0.06	4.46	1.70	4.51	0.11
6000272	value	-866.92	-866.92	-866.92	-866.92	-866.92	-866.92	-866.92	-866.92
	bound	-Inf	-866.92	-Inf	-Inf	-866.92	-866.92	-866.92	-866.92
	runtime	0.17	1.49	0.36	0.06	4.43	0.71	4.45	0.12
6000273	value	-1015.40	-1015.40	-1015.40	-1015.40	-1015.40	-1015.40	-1015.40	-1015.40
	bound	-Inf	-1015.40	-Inf	-Inf	-1015.40	-1015.40	-1015.40	-1015.40
	runtime	0.18	3.94	0.31	0.06	4.08	0.32	4.63	0.12
6000274	value	-873.48	-873.48	-873.48	-873.48	-873.48	-873.48	-873.48	-873.48
	bound	-Inf	-873.48	-Inf	-Inf	-873.48	-873.48	-873.48	-873.48
	runtime	0.17	1.34	0.26	0.06	4.29	0.28	4.34	0.11
6000275	value	-859.46	-859.46	-859.46	-859.46	-859.46	-859.46	-859.46	-859.46
	bound	-Inf	-859.46	-Inf	-Inf	-859.46	-859.46	-859.46	-859.46
	runtime	0.17	1.50	0.27	0.06	2.14	0.27	2.74	0.11
6000276	value	-905.50	-907.89	-905.50	-907.89	-907.89	-907.89	-907.89	-907.89
	bound	-Inf	-907.89	-Inf	-Inf	-907.89	-907.89	-907.89	-907.89
	runtime	0.16	1.40	0.30	0.06	1.96	0.34	3.78	0.11
6000277	value	-925.31	-926.15	-925.31	-926.03	-926.15	-926.15	-926.15	-926.15
	bound	-Inf	-926.15	-Inf	-Inf	-926.18	-926.15	-926.20	-926.15
	runtime	0.16	2.27	0.41	0.07	4.23	0.68	4.28	0.12
6000278	value	-889.27	-889.27	-889.04	-889.27	-889.27	-889.27	-889.27	-889.27
	bound	-Inf	-889.27	-Inf	-Inf	-889.27	-889.27	-889.27	-889.27
	runtime	0.16	1.14	0.25	0.06	2.53	0.24	4.20	0.10
6000279	value	-928.08	-928.08	-928.08	-928.08	-928.08	-928.08	-928.08	-928.08
	bound	-Inf	-928.08	-Inf	-Inf	-928.08	-928.08	-928.08	-928.08
	runtime	0.17	1.43	0.28	0.06	1.61	0.24	2.44	0.11
6000280	value	-1017.11	-1018.09	-1016.94	-1018.09	-1018.09	-1018.09	-1018.09	-1018.09
	bound	-Inf	-1018.09	-Inf	-Inf	-1018.09	-1018.09	-1018.12	-1018.09
	runtime	0.17	15.21	0.66	0.06	4.33	0.69	4.33	0.12
6000281	value	-945.15	-945.15	-945.15	-945.15	-945.15	-945.15	-945.15	-945.15
	bound	-Inf	-945.15	-Inf	-Inf	-945.15	-945.15	-945.15	-945.15
	runtime	0.17	1.39	0.25	0.07	1.65	0.34	4.50	0.12
6000282	value	-836.37	-836.37	-836.37	-835.89	-836.37	-836.37	-836.37	-836.37
	bound	-Inf	-836.37	-Inf	-Inf	-836.42	-836.37	-836.45	-836.37
	runtime	0.18	8.49	0.33	0.06	4.47	2.19	4.51	0.14
6000283	value	-808.62	-808.62	-808.62	-808.54	-808.62	-808.62	-808.62	-808.62
	bound	-Inf	-808.62	-Inf	-Inf	-808.62	-808.62	-808.62	-808.62
	runtime	0.17	1.83	0.28	0.06	2.43	0.28	3.51	0.12
6000284	value	-887.93	-887.93	-887.93	-887.93	-887.93	-887.93	-887.93	-887.93
	bound	-Inf	-887.93	-Inf	-Inf	-887.93	-887.93	-887.95	-887.93
	runtime	0.18	27.23	0.44	0.07	3.60	0.32	3.62	0.12
6000285	value	-958.95	-958.95	-958.95	-958.86	-958.95	-958.95	-958.95	-958.95
	bound	-Inf	-958.95	-Inf	-Inf	-958.96	-958.95	-958.97	-958.95
	runtime	0.17	1.43	0.27	0.06	4.19	0.83	4.27	0.11
6000286	value	-858.65	-859.39	-858.65	-859.39	-859.39	-859.39	-859.39	-859.39
	bound	-Inf	-859.39	-Inf	-Inf	-859.55	-859.39	-859.72	-859.39
	runtime	0.16	2.80	0.32	0.06	4.22	4.26	4.23	0.14
6000287	value	-914.03	-914.19	-914.03	-914.19	-914.19	-914.19	-914.19	-914.19
	bound	-Inf	-914.19	-Inf	-Inf	-914.21	-914.19	-914.29	-914.19
	runtime	0.17	1.36	0.33	0.06	3.52	0.35	3.60	0.12
6000288	value	-930.65	-930.65	-930.65	-930.65	-930.65	-930.65	-930.65	-930.65
	bound	-Inf	-930.65	-Inf	-Inf	-930.65	-930.65	-930.65	-930.65
	runtime	0.17	1.29	0.28	0.06	2.57	0.25	3.93	0.11
6000289	value	-978.93	-978.93	-978.93	-978.93	-978.93	-978.93	-978.93	-978.93
	bound	-Inf	-978.93	-Inf	-Inf	-978.93	-978.93	-978.93	-978.93
	runtime	0.18	1.34	0.26	0.06	2.83	0.24	4.60	0.12
6000290	value	-922.56	-922.56	-922.56	-922.56	-922.56	-922.56	-922.56	-922.56
	bound	-Inf	-922.56	-Inf	-Inf	-922.56	-922.56	-922.56	-922.56
	runtime	0.17	1.29	0.25	0.06	3.94	0.35	4.50	0.11
6000291	value	-941.67	-941.67	-941.67	-941.67	-941.67	-941.67	-941.67	-941.67
	bound	-Inf	-941.67	-Inf	-Inf	-941.67	-941.67	-941.68	-941.67
	runtime	0.17	1.91	0.30	0.07	4.26	0.77	4.36	0.11
6000292	value	-1057.67	-1057.67	-1057.67	-1057.67	-1057.67	-1057.67	-1057.67	-1057.67
	bound	-Inf	-1057.67	-Inf	-Inf	-1057.73	-1057.67	-1057.79	-1057.67
	runtime	0.19	2.02	0.35	0.07	4.85	1.07	4.85	0.13

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000293	value	-1006.22	-1006.22	-1006.22	-1006.22	-1006.22	-1006.22	-1006.22	-1006.22
	bound	-Inf	-1006.22	-Inf	-Inf	-1006.22	-1006.22	-1006.22	-1006.22
	runtime	0.16	1.18	0.29	0.06	4.13	2.48	4.20	0.10
6000294	value	-808.78	-809.78	-808.78	-809.78	-809.78	-809.78	-809.78	-809.78
	bound	-Inf	-809.78	-Inf	-Inf	-809.78	-809.78	-809.78	-809.78
	runtime	0.17	1.33	0.33	0.06	4.05	0.30	4.38	0.11
6000295	value	-872.34	-872.67	-872.34	-872.19	-872.67	-872.67	-872.67	-872.67
	bound	-Inf	-872.67	-Inf	-Inf	-872.67	-872.67	-872.67	-872.67
	runtime	0.17	2.81	0.32	0.08	4.26	2.21	4.34	0.11
6000296	value	-964.13	-964.83	-964.83	-964.83	-964.83	-964.83	-964.83	-964.83
	bound	-Inf	-964.83	-Inf	-Inf	-964.83	-964.83	-964.83	-964.83
	runtime	0.18	1.78	0.31	0.07	4.71	0.37	4.70	0.13
6000297	value	-847.39	-847.39	-847.39	-847.39	-847.39	-847.39	-847.39	-847.39
	bound	-Inf	-847.39	-Inf	-Inf	-847.39	-847.39	-847.39	-847.39
	runtime	0.17	3.66	0.38	0.06	3.08	0.21	3.53	0.12
6000298	value	-914.94	-915.71	-914.94	-915.71	-915.71	-915.71	-915.71	-915.71
	bound	-Inf	-915.71	-Inf	-Inf	-915.71	-915.71	-915.71	-915.71
	runtime	0.17	2.11	0.39	0.06	3.46	0.44	3.56	0.12
6000299	value	-933.44	-933.44	-933.44	-933.44	-933.44	-933.44	-933.44	-933.44
	bound	-Inf	-933.44	-Inf	-Inf	-933.44	-933.44	-933.44	-933.44
	runtime	0.17	4.28	0.26	0.07	2.47	0.28	3.56	0.12
6000300	value	-837.87	-840.20	-840.20	-840.09	-840.20	-840.20	-840.20	-840.20
	bound	-Inf	-840.20	-Inf	-Inf	-840.23	-840.20	-840.24	-840.20
	runtime	0.17	2.56	0.34	0.08	4.40	1.02	4.50	0.13
6000301	value	-893.34	-893.34	-893.34	-893.34	-893.34	-893.34	-893.34	-893.34
	bound	-Inf	-893.34	-Inf	-Inf	-893.34	-893.34	-893.34	-893.34
	runtime	0.17	1.90	0.27	0.06	1.88	0.40	3.04	0.12
6000302	value	-880.57	-880.57	-880.57	-880.57	-880.57	-880.57	-880.57	-880.57
	bound	-Inf	-880.57	-Inf	-Inf	-880.59	-880.57	-880.60	-880.57
	runtime	0.17	5.47	0.33	0.07	4.42	0.43	4.41	0.12
6000303	value	-948.73	-948.73	-948.73	-948.73	-948.73	-948.73	-948.73	-948.73
	bound	-Inf	-948.73	-Inf	-Inf	-948.73	-948.73	-948.73	-948.73
	runtime	0.18	1.42	0.30	0.06	3.60	3.62	3.68	0.12
6000304	value	-933.01	-933.01	-933.01	-933.01	-933.01	-933.01	-933.01	-933.01
	bound	-Inf	-933.01	-Inf	-Inf	-933.01	-933.01	-933.01	-933.01
	runtime	0.17	1.28	0.32	0.06	3.91	0.24	4.31	0.11
6000305	value	-1053.35	-1053.35	-1053.35	-1053.15	-1053.35	-1053.35	-1053.35	-1053.35
	bound	-Inf	-1053.35	-Inf	-Inf	-1053.35	-1053.35	-1053.35	-1053.35
	runtime	0.17	1.72	0.38	0.06	4.47	0.63	4.56	0.12
6000306	value	-858.85	-858.85	-858.85	-858.69	-858.85	-858.85	-858.85	-858.85
	bound	-Inf	-858.85	-Inf	-Inf	-858.85	-858.85	-858.85	-858.85
	runtime	0.16	1.52	0.27	0.07	1.76	0.36	2.99	0.12
6000307	value	-887.91	-887.91	-887.91	-887.91	-887.91	-887.91	-887.91	-887.91
	bound	-Inf	-887.91	-Inf	-Inf	-887.91	-887.91	-887.91	-887.91
	runtime	0.17	2.47	0.65	0.07	4.45	0.81	4.48	0.11
6000308	value	-831.91	-831.91	-831.91	-831.91	-831.91	-831.91	-831.91	-831.91
	bound	-Inf	-831.91	-Inf	-Inf	-831.91	-831.91	-831.91	-831.91
	runtime	0.17	1.94	0.24	0.07	2.26	0.11	3.51	0.11
6000309	value	-945.20	-945.20	-945.20	-945.20	-945.20	-945.20	-945.20	-945.20
	bound	-Inf	-945.20	-Inf	-Inf	-945.21	-945.20	-945.23	-945.20
	runtime	0.17	1.47	0.34	0.08	4.46	3.57	4.56	0.11
6000310	value	-826.28	-826.28	-826.28	-826.28	-826.28	-826.28	-826.28	-826.28
	bound	-Inf	-826.28	-Inf	-Inf	-826.28	-826.28	-826.28	-826.28
	runtime	0.15	1.19	0.21	0.05	3.04	0.25	4.03	0.10
6000311	value	-949.17	-949.17	-949.17	-948.54	-949.17	-949.17	-949.17	-949.17
	bound	-Inf	-949.17	-Inf	-Inf	-949.17	-949.17	-949.17	-949.17
	runtime	0.17	1.20	0.27	0.07	2.05	0.27	3.53	0.11
6000312	value	-920.48	-921.00	-920.48	-921.00	-921.00	-921.00	-921.00	-921.00
	bound	-Inf	-921.00	-Inf	-Inf	-921.01	-921.00	-921.05	-921.00
	runtime	0.16	1.34	0.24	0.08	4.23	2.11	4.23	0.11
6000313	value	-815.57	-815.83	-815.83	-815.83	-815.83	-815.83	-815.83	-815.83
	bound	-Inf	-815.83	-Inf	-Inf	-815.83	-815.83	-815.83	-815.83
	runtime	0.16	2.01	0.25	0.07	4.02	4.07	4.12	0.10
6000314	value	-809.91	-811.50	-811.50	-811.50	-811.50	-811.50	-811.50	-811.50
	bound	-Inf	-811.50	-Inf	-Inf	-811.50	-811.50	-811.50	-811.50
	runtime	0.16	1.18	0.31	0.06	1.81	0.79	2.66	0.10
6000315	value	-888.53	-888.53	-888.53	-888.53	-888.53	-888.53	-888.53	-888.53
	bound	-Inf	-888.53	-Inf	-Inf	-888.53	-888.53	-888.53	-888.53
	runtime	0.17	1.52	0.23	0.06	2.00	0.28	3.20	0.11
6000316	value	-906.21	-906.21	-906.21	-906.21	-906.21	-906.21	-906.21	-906.21
	bound	-Inf	-906.21	-Inf	-Inf	-906.21	-906.21	-906.21	-906.21
	runtime	0.18	1.44	0.27	0.06	3.88	0.33	4.45	0.12
6000317	value	-836.38	-836.38	-836.38	-836.38	-836.38	-836.38	-836.38	-836.38
	bound	-Inf	-836.38	-Inf	-Inf	-836.38	-836.38	-836.38	-836.38
	runtime	0.17	3.40	0.45	0.06	2.71	0.48	2.11	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000318	value	-712.55	-712.55	-712.55	-712.55	-712.55	-712.55	-712.55	-712.55
	bound	-Inf	-712.55	-Inf	-Inf	-712.55	-712.55	-712.55	-712.55
	runtime	0.14	5.14	0.25	0.05	2.19	0.16	3.00	0.09
6000319	value	-924.70	-924.70	-924.70	-924.67	-924.70	-924.70	-924.70	-924.70
	bound	-Inf	-924.70	-Inf	-Inf	-924.70	-924.70	-924.70	-924.70
	runtime	0.17	4.23	0.28	0.07	4.35	0.60	4.44	0.11
6000320	value	-942.54	-945.98	-945.98	-945.98	-945.98	-945.98	-945.98	-945.98
	bound	-Inf	-945.98	-Inf	-Inf	-945.98	-945.98	-945.98	-945.98
	runtime	0.18	1.40	0.26	0.06	3.24	0.33	4.71	0.12
6000321	value	-848.30	-848.30	-848.30	-848.30	-848.30	-848.30	-848.30	-848.30
	bound	-Inf	-848.30	-Inf	-Inf	-848.30	-848.30	-848.30	-848.30
	runtime	0.18	3.16	0.30	0.07	3.77	0.63	3.87	0.13
6000322	value	-933.26	-933.26	-933.26	-933.26	-933.26	-933.26	-933.26	-933.26
	bound	-Inf	-933.26	-Inf	-Inf	-933.26	-933.26	-933.26	-933.26
	runtime	0.16	2.11	0.24	0.09	2.49	0.43	4.17	0.10
6000323	value	-925.22	-925.22	-925.22	-925.22	-925.22	-925.22	-925.22	-925.22
	bound	-Inf	-925.22	-Inf	-Inf	-925.22	-925.22	-925.22	-925.22
	runtime	0.17	1.32	0.25	0.07	1.06	0.27	3.97	0.11
6000324	value	-798.98	-800.05	-798.98	-800.05	-800.05	-800.05	-800.05	-800.05
	bound	-Inf	-800.05	-Inf	-Inf	-800.05	-800.05	-800.05	-800.05
	runtime	0.16	22.64	0.26	0.06	4.30	0.46	4.31	0.11
6000325	value	-877.53	-878.06	-878.06	-878.06	-878.06	-878.06	-878.06	-878.06
	bound	-Inf	-878.06	-Inf	-Inf	-878.06	-878.06	-878.06	-878.06
	runtime	0.16	1.50	0.37	0.07	4.20	0.64	4.29	0.11
6000326	value	-860.89	-860.89	-860.89	-860.89	-860.89	-860.89	-860.89	-860.89
	bound	-Inf	-860.89	-Inf	-Inf	-860.89	-860.89	-860.89	-860.89
	runtime	0.16	1.43	0.29	0.06	3.38	0.24	3.42	0.11
6000327	value	-889.31	-889.31	-889.31	-889.31	-889.31	-889.31	-889.31	-889.31
	bound	-Inf	-889.31	-Inf	-Inf	-889.31	-889.31	-889.31	-889.31
	runtime	0.17	1.45	0.36	0.08	2.00	0.29	3.67	0.11
6000328	value	-775.80	-775.80	-775.80	-775.80	-775.80	-775.80	-775.80	-775.80
	bound	-Inf	-775.80	-Inf	-Inf	-775.80	-775.80	-775.80	-775.80
	runtime	0.16	1.54	0.43	0.06	4.21	0.54	4.24	0.11
6000329	value	-936.97	-936.97	-936.97	-936.97	-936.97	-936.97	-936.97	-936.97
	bound	-Inf	-936.97	-Inf	-Inf	-936.97	-936.97	-936.97	-936.97
	runtime	0.17	1.85	0.24	0.06	2.44	0.31	4.29	0.11
6000330	value	-881.14	-881.14	-881.14	-881.14	-881.14	-881.14	-881.14	-881.14
	bound	-Inf	-881.14	-Inf	-Inf	-881.14	-881.14	-881.14	-881.14
	runtime	0.16	1.34	0.32	0.06	4.27	0.33	4.26	0.11
6000331	value	-922.36	-922.36	-922.36	-922.04	-922.36	-922.36	-922.36	-922.36
	bound	-Inf	-922.36	-Inf	-Inf	-922.36	-922.36	-922.36	-922.36
	runtime	0.17	1.48	0.44	0.09	4.43	0.57	4.53	0.11
6000332	value	-890.03	-890.03	-890.03	-890.03	-890.03	-890.03	-890.03	-890.03
	bound	-Inf	-890.03	-Inf	-Inf	-890.03	-890.03	-890.03	-890.03
	runtime	0.17	1.46	0.37	0.06	4.51	0.52	4.50	0.11
6000333	value	-874.63	-874.63	-874.63	-874.63	-874.63	-874.63	-874.63	-874.63
	bound	-Inf	-874.63	-Inf	-Inf	-874.63	-874.63	-874.63	-874.63
	runtime	0.16	1.25	0.50	0.06	2.75	0.22	3.52	0.11
6000334	value	-877.18	-877.18	-877.18	-877.18	-877.18	-877.18	-877.18	-877.18
	bound	-Inf	-877.18	-Inf	-Inf	-877.18	-877.18	-877.18	-877.18
	runtime	0.17	1.24	0.27	0.06	1.99	0.27	2.43	0.11
6000335	value	-879.01	-880.16	-879.01	-880.16	-880.16	-880.16	-880.16	-880.16
	bound	-Inf	-880.16	-Inf	-Inf	-880.16	-880.16	-880.16	-880.16
	runtime	0.16	1.46	0.26	0.06	4.26	0.32	4.31	0.11
6000336	value	-851.24	-851.24	-851.24	-851.24	-851.24	-851.24	-851.24	-851.24
	bound	-Inf	-851.24	-Inf	-Inf	-851.24	-851.24	-851.24	-851.24
	runtime	0.18	1.36	0.26	0.06	3.11	0.89	4.60	0.11
6000337	value	-996.14	-996.14	-996.14	-996.14	-996.14	-996.14	-996.14	-996.14
	bound	-Inf	-996.14	-Inf	-Inf	-996.14	-996.14	-996.14	-996.14
	runtime	0.17	1.35	0.28	0.06	4.51	0.34	4.48	0.11
6000338	value	-958.07	-958.07	-958.07	-958.07	-958.07	-958.07	-958.07	-958.07
	bound	-Inf	-958.07	-Inf	-Inf	-958.07	-958.07	-958.07	-958.07
	runtime	0.18	1.41	0.30	0.07	3.72	0.24	4.70	0.11
6000339	value	-832.27	-832.44	-832.27	-832.44	-832.44	-832.44	-832.44	-832.44
	bound	-Inf	-832.44	-Inf	-Inf	-832.44	-832.44	-832.44	-832.44
	runtime	0.18	1.36	0.32	0.06	3.56	0.52	3.61	0.11
6000340	value	-946.52	-946.52	-946.52	-946.52	-946.52	-946.52	-946.52	-946.52
	bound	-Inf	-946.52	-Inf	-Inf	-946.52	-946.52	-946.52	-946.52
	runtime	0.17	1.23	0.29	0.06	4.40	0.41	4.44	0.10
6000341	value	-879.03	-879.23	-879.03	-879.23	-879.23	-879.23	-879.23	-879.23
	bound	-Inf	-879.23	-Inf	-Inf	-879.23	-879.23	-879.23	-879.23
	runtime	0.16	1.25	0.25	0.06	1.51	0.28	2.44	0.10
6000342	value	-879.57	-879.57	-879.57	-879.57	-879.57	-879.57	-879.57	-879.57
	bound	-Inf	-879.57	-Inf	-Inf	-879.57	-879.57	-879.57	-879.57
	runtime	0.17	1.57	0.34	0.10	1.39	0.22	2.69	0.11

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
6000343	value	-1064.23	-1064.40	-1064.40	-1064.40	-1064.40	-1064.40	-1064.40	-1064.40
	bound	-Inf	-1064.40	-Inf	-Inf	-1064.40	-1064.40	-1064.40	-1064.40
	runtime	0.19	3.15	0.30	0.10	1.75	0.84	2.38	0.12
6000344	value	-927.52	-927.52	-927.52	-927.52	-927.52	-927.52	-927.52	-927.52
	bound	-Inf	-927.52	-Inf	-Inf	-927.52	-927.52	-927.52	-927.52
	runtime	0.18	1.34	0.26	0.07	1.54	0.38	4.57	0.12
6000345	value	-859.27	-859.27	-859.27	-859.27	-859.27	-859.27	-859.27	-859.27
	bound	-Inf	-859.27	-Inf	-Inf	-859.27	-859.27	-859.27	-859.27
	runtime	0.18	1544.30	0.27	0.07	4.66	4.64	4.73	0.12
6000346	value	-939.48	-939.71	-939.48	-939.24	-939.71	-939.71	-939.71	-939.71
	bound	-Inf	-939.71	-Inf	-Inf	-939.76	-939.71	-939.71	-939.71
	runtime	0.17	1.79	0.36	0.06	4.35	0.61	4.42	0.12
6000347	value	-822.54	-823.05	-822.54	-822.95	-823.05	-823.05	-823.05	-823.05
	bound	-Inf	-823.05	-Inf	-Inf	-823.08	-823.05	-823.19	-823.05
	runtime	0.16	8.34	0.24	0.06	4.38	1.98	4.40	0.12
6000348	value	-977.47	-977.47	-977.47	-977.47	-977.47	-977.47	-977.47	-977.47
	bound	-Inf	-977.47	-Inf	-Inf	-977.47	-977.47	-977.47	-977.47
	runtime	0.17	1.23	0.20	0.06	1.31	0.28	3.46	0.10
6000349	value	-893.19	-893.19	-893.19	-893.19	-893.19	-893.19	-893.19	-893.19
	bound	-Inf	-893.19	-Inf	-Inf	-893.19	-893.19	-893.20	-893.19
	runtime	0.16	1.18	0.29	0.06	4.09	1.60	4.13	0.10
6000350	value	-768.92	-768.92	-768.92	-768.70	-768.92	-768.92	-768.92	-768.92
	bound	-Inf	-768.92	-Inf	-Inf	-768.94	-768.92	-768.98	-768.92
	runtime	0.15	1.17	0.30	0.05	3.95	1.51	4.03	0.10
6000351	value	-805.14	-805.81	-805.14	-805.81	-805.81	-805.81	-805.81	-805.81
	bound	-Inf	-805.81	-Inf	-Inf	-805.81	-805.81	-805.85	-805.81
	runtime	0.16	1.42	0.31	0.09	3.13	1.07	3.45	0.12
6000352	value	-885.65	-885.65	-885.65	-885.65	-885.65	-885.65	-885.65	-885.65
	bound	-Inf	-885.65	-Inf	-Inf	-885.65	-885.65	-885.68	-885.65
	runtime	0.17	2.20	0.30	0.06	3.59	0.81	3.65	0.12
6000353	value	-889.29	-889.29	-889.29	-889.21	-889.29	-889.29	-889.29	-889.29
	bound	-Inf	-889.29	-Inf	-Inf	-889.30	-889.29	-889.31	-889.29
	runtime	0.18	22.54	0.34	0.06	3.62	0.75	3.66	0.12
6000354	value	-944.47	-944.47	-944.47	-944.47	-944.47	-944.47	-944.47	-944.47
	bound	-Inf	-944.47	-Inf	-Inf	-944.48	-944.47	-944.48	-944.47
	runtime	0.17	1.36	0.30	0.07	4.42	0.34	4.49	0.11
6000355	value	-973.02	-974.84	-974.84	-973.02	-974.84	-974.84	-974.84	-974.84
	bound	-Inf	-974.84	-Inf	-Inf	-974.84	-974.84	-974.84	-974.84
	runtime	0.17	1.72	0.26	0.08	1.78	0.18	3.56	0.11
8000811	value	-1054.19	-1054.19	-1054.19	-1054.19	-1054.19	-1054.19	-1054.19	-1054.19
	bound	-Inf	-1054.19	-Inf	-Inf	-1054.19	-1054.19	-1054.19	-1054.19
	runtime	0.14	1.08	0.22	0.05	1.27	0.16	1.84	0.09
8001155	value	-778.75	-778.75	-778.75	-778.75	-778.75	-778.75	-778.75	-778.75
	bound	-Inf	-778.75	-Inf	-Inf	-778.75	-778.75	-778.75	-778.75
	runtime	0.17	641.65	0.28	0.10	4.41	0.32	4.53	0.12
8001974	value	-815.64	-815.64	-815.64	-815.35	-815.64	-815.64	-815.64	-815.64
	bound	-Inf	-815.64	-Inf	-Inf	-815.64	-815.64	-815.65	-815.64
	runtime	0.17	7.05	0.30	0.09	4.47	0.43	4.48	0.12
8002274	value	-1106.97	-1106.97	-1106.68	-1106.97	-1106.97	-1106.97	-1106.97	-1106.97
	bound	-Inf	-1106.97	-Inf	-Inf	-1106.97	-1106.97	-1106.97	-1106.97
	runtime	0.15	1.22	0.19	0.06	2.98	0.26	3.87	0.09
8002764	value	-1017.78	-1017.78	-1017.78	-1017.78	-1017.78	-1017.78	-1017.78	-1017.78
	bound	-Inf	-1017.78	-Inf	-Inf	-1017.78	-1017.78	-1017.78	-1017.78
	runtime	0.14	1.10	0.23	0.07	2.47	0.20	3.64	0.08
8003131	value	-716.60	-716.60	-716.60	-716.52	-716.60	-716.60	-716.60	-716.60
	bound	-Inf	-716.60	-Inf	-Inf	-716.60	-716.60	-716.61	-716.60
	runtime	0.15	1.23	0.35	0.07	4.05	1.32	4.06	0.11
8003836	value	-1098.96	-1098.96	-1098.96	-1098.96	-1098.96	-1098.96	-1098.96	-1098.96
	bound	-Inf	-1098.96	-Inf	-Inf	-1098.96	-1098.96	-1098.96	-1098.96
	runtime	0.17	5.16	0.27	0.06	4.29	0.47	4.37	0.11
8003952	value	-761.31	-761.35	-761.31	-761.35	-761.35	-761.35	-761.35	-761.35
	bound	-Inf	-761.35	-Inf	-Inf	-761.35	-761.35	-761.36	-761.35
	runtime	0.14	1.14	0.26	0.05	3.02	0.58	3.03	0.09
8004573	value	-728.65	-728.65	-728.65	-728.65	-728.65	-728.65	-728.65	-728.65
	bound	-Inf	-728.65	-Inf	-Inf	-728.65	-728.65	-728.65	-728.65
	runtime	0.14	1.00	0.23	0.07	2.61	0.17	2.90	0.09
8005616	value	-833.66	-833.77	-833.66	-833.66	-833.77	-833.77	-833.77	-833.77
	bound	-Inf	-833.77	-Inf	-Inf	-833.77	-833.77	-833.77	-833.77
	runtime	0.14	1.17	0.26	0.05	2.80	0.72	3.04	0.10
8006160	value	-997.20	-997.20	-997.20	-997.20	-997.20	-997.20	-997.20	-997.20
	bound	-Inf	-997.20	-Inf	-Inf	-997.20	-997.20	-997.20	-997.20
	runtime	0.15	1.22	0.23	0.07	2.71	0.51	3.25	0.10
8006302	value	-839.09	-839.51	-839.09	-839.51	-839.51	-839.51	-839.51	-839.51
	bound	-Inf	-839.51	-Inf	-Inf	-839.51	-839.51	-839.52	-839.51
	runtime	0.17	33.98	0.28	0.06	1.88	0.22	3.49	0.12

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
8008099	value	-727.90	-727.90	-727.90	-727.42	-727.90	-727.90	-727.90	-727.90
	bound	-Inf	-727.90	-Inf	-Inf	-727.90	-727.90	-727.90	-727.90
	runtime	0.14	6.21	0.24	0.07	3.80	3.78	3.84	0.11
8008545	value	-1036.77	-1036.77	-1036.77	-1036.72	-1036.77	-1036.77	-1036.77	-1036.77
	bound	-Inf	-1036.77	-Inf	-Inf	-1036.77	-1036.77	-1036.77	-1036.77
	runtime	0.16	13.08	0.31	0.08	3.31	0.31	3.36	0.12
8008998	value	-946.03	-946.03	-946.03	-946.03	-946.03	-946.03	-946.03	-946.03
	bound	-Inf	-946.03	-Inf	-Inf	-946.03	-946.03	-946.03	-946.03
	runtime	0.15	5.22	0.26	0.06	1.34	0.24	3.49	0.10
9000001	value	-889.24	-889.24	-889.24	-889.24	-889.24	-889.24	-889.24	-889.24
	bound	-Inf	-889.24	-Inf	-Inf	-889.24	-889.24	-889.24	-889.24
	runtime	0.17	1.41	0.27	0.08	2.16	3.92	3.64	0.11
9000002	value	-971.04	-971.04	-971.04	-970.59	-971.04	-971.04	-971.04	-971.04
	bound	-Inf	-971.04	-Inf	-Inf	-971.07	-971.04	-971.12	-971.04
	runtime	0.16	1.20	0.29	0.06	4.14	2.20	4.20	0.11
9000003	value	-681.78	-681.79	-681.52	-681.39	-681.79	-681.79	-681.79	-681.79
	bound	-Inf	-681.79	-Inf	-Inf	-681.79	-681.79	-681.82	-681.79
	runtime	0.15	1221.78	0.28	0.07	3.90	3.32	3.94	0.12
9000029	value	-890.78	-890.78	-890.78	-890.55	-890.78	-890.78	-890.78	-890.78
	bound	-Inf	-890.78	-Inf	-Inf	-890.78	-890.78	-890.80	-890.78
	runtime	0.16	8.06	0.32	0.07	4.15	0.73	4.19	0.12
9000127	value	-788.23	-788.83	-788.83	-788.83	-788.83	-788.83	-788.83	-788.83
	bound	-Inf	-788.83	-Inf	-Inf	-788.85	-788.83	-788.96	-788.83
	runtime	0.16	4.60	0.27	0.06	3.29	0.50	3.33	0.12
9000136	value	-973.09	-973.09	-973.09	-971.76	-973.09	-973.09	-973.09	-973.09
	bound	-Inf	-973.09	-Inf	-Inf	-973.10	-973.09	-973.15	-973.09
	runtime	0.18	2.79	0.29	0.07	3.66	1.98	3.72	0.13
9000210	value	-797.65	-797.65	-797.65	-797.65	-797.65	-797.65	-797.65	-797.65
	bound	-Inf	-797.65	-Inf	-Inf	-797.65	-797.65	-797.65	-797.65
	runtime	0.16	1.28	0.36	0.06	4.07	0.81	4.29	0.12
9000288	value	-849.15	-849.15	-849.15	-849.15	-849.15	-849.15	-849.15	-849.15
	bound	-Inf	-849.15	-Inf	-Inf	-849.15	-849.15	-849.15	-849.15
	runtime	0.17	1.25	0.23	0.08	3.22	0.10	4.33	0.11
9000395	value	-822.73	-822.73	-822.73	-822.39	-822.73	-822.73	-822.73	-822.73
	bound	-Inf	-822.73	-Inf	-Inf	-822.73	-822.73	-822.73	-822.73
	runtime	0.16	1.48	0.25	0.07	2.46	0.28	4.20	0.11
9000747	value	-826.15	-826.15	-826.15	-826.15	-826.15	-826.15	-826.15	-826.15
	bound	-Inf	-826.15	-Inf	-Inf	-826.15	-826.15	-826.15	-826.15
	runtime	0.17	1.58	0.28	0.08	4.44	0.86	4.48	0.11
9000868	value	-853.22	-853.22	-853.22	-853.22	-853.22	-853.22	-853.22	-853.22
	bound	-Inf	-853.22	-Inf	-Inf	-853.22	-853.22	-853.22	-853.22
	runtime	0.17	1.33	0.29	0.09	4.50	0.18	4.52	0.11
9000875	value	-897.09	-897.09	-896.68	-897.09	-897.09	-897.09	-897.09	-897.09
	bound	-Inf	-897.09	-Inf	-Inf	-897.09	-897.09	-897.11	-897.09
	runtime	0.18	1.63	0.24	0.07	4.48	1.04	4.52	0.12
9000928	value	-924.22	-924.22	-924.22	-924.22	-924.22	-924.22	-924.22	-924.22
	bound	-Inf	-924.22	-Inf	-Inf	-924.22	-924.22	-924.22	-924.22
	runtime	0.16	2.22	0.24	0.07	1.84	1.14	1.87	0.12
9000933	value	-907.49	-907.49	-907.49	-907.49	-907.49	-907.49	-907.49	-907.49
	bound	-Inf	-907.49	-Inf	-Inf	-907.49	-907.49	-907.49	-907.49
	runtime	0.17	1.29	0.26	0.06	4.38	0.67	4.44	0.11
9000989	value	-908.40	-908.40	-908.40	-908.40	-908.40	-908.40	-908.40	-908.40
	bound	-Inf	-908.40	-Inf	-Inf	-908.40	-908.40	-908.41	-908.40
	runtime	0.17	17.44	0.27	0.14	4.60	1.53	4.65	0.13
9001001	value	-915.65	-915.65	-915.65	-915.65	-915.65	-915.65	-915.65	-915.65
	bound	-Inf	-915.65	-Inf	-Inf	-915.65	-915.65	-915.65	-915.65
	runtime	0.18	1.90	0.29	0.06	4.70	1.16	4.73	0.13
9001034	value	-856.09	-856.09	-856.09	-856.09	-856.09	-856.09	-856.09	-856.09
	bound	-Inf	-856.09	-Inf	-Inf	-856.09	-856.09	-856.11	-856.09
	runtime	0.16	1.22	0.25	0.06	4.10	0.93	4.12	0.11
9001071	value	-768.19	-768.19	-768.19	-768.19	-768.19	-768.19	-768.19	-768.19
	bound	-Inf	-768.19	-Inf	-Inf	-768.19	-768.19	-768.19	-768.19
	runtime	0.15	1.30	0.24	0.06	3.21	1.60	3.22	0.11
9001184	value	-997.33	-997.33	-997.33	-997.33	-997.33	-997.33	-997.33	-997.33
	bound	-Inf	-997.33	-Inf	-Inf	-997.33	-997.33	-997.33	-997.33
	runtime	0.17	1.45	0.23	0.07	0.88	0.11	1.67	0.11
9001300	value	-922.70	-923.49	-923.47	-923.49	-923.49	-923.49	-923.49	-923.49
	bound	-Inf	-923.49	-Inf	-Inf	-923.50	-923.49	-923.52	-923.49
	runtime	0.16	4.59	0.25	0.10	4.24	3.46	4.36	0.12
9001317	value	-715.68	-717.51	-717.51	-715.63	-717.51	-717.51	-717.51	-717.51
	bound	-Inf	-717.51	-Inf	-Inf	-717.51	-717.51	-717.53	-717.51
	runtime	0.17	8.52	0.37	0.06	4.41	2.07	4.38	0.13
9001619	value	-861.39	-861.88	-861.39	-861.88	-861.88	-861.88	-861.88	-861.88
	bound	-Inf	-861.88	-Inf	-Inf	-861.88	-861.88	-861.90	-861.88
	runtime	0.18	33.37	0.30	0.07	3.70	0.37	3.80	0.14

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
9001713	value	-834.00	-834.00	-834.00	-834.00	-834.00	-834.00	-834.00	-834.00
	bound	-Inf	-834.00	-Inf	-Inf	-834.00	-834.00	-834.00	-834.00
	runtime	0.17	3.26	0.25	0.07	2.17	0.23	3.05	0.13
9001991	value	-843.18	-843.18	-843.18	-842.85	-843.18	-843.18	-843.18	-843.18
	bound	-Inf	-843.18	-Inf	-Inf	-843.18	-843.18	-843.18	-843.18
	runtime	0.17	868.19	0.38	0.06	4.41	0.44	4.41	0.12
9002004	value	-972.40	-972.40	-972.40	-972.40	-972.40	-972.40	-972.40	-972.40
	bound	-Inf	-972.40	-Inf	-Inf	-972.40	-972.40	-972.40	-972.40
	runtime	0.14	1.05	0.19	0.05	3.66	0.48	3.72	0.08
9002021	value	-857.82	-857.82	-857.82	-857.82	-857.82	-857.82	-857.82	-857.82
	bound	-Inf	-857.82	-Inf	-Inf	-857.82	-857.82	-857.82	-857.82
	runtime	0.17	1.35	0.24	0.06	4.28	0.19	4.36	0.10
9002090	value	-933.27	-933.27	-933.27	-933.27	-933.27	-933.27	-933.27	-933.27
	bound	-Inf	-933.27	-Inf	-Inf	-933.27	-933.27	-933.27	-933.27
	runtime	0.17	3.46	0.32	0.11	3.59	0.24	3.61	0.12
9002114	value	-824.19	-824.19	-824.19	-824.19	-824.19	-824.19	-824.19	-824.19
	bound	-Inf	-824.19	-Inf	-Inf	-824.19	-824.19	-824.19	-824.19
	runtime	0.16	1.23	0.23	0.07	1.38	3.65	1.73	0.10
9002474	value	-801.67	-801.67	-801.67	-801.67	-801.67	-801.67	-801.67	-801.67
	bound	-Inf	-801.67	-Inf	-Inf	-801.67	-801.67	-801.67	-801.67
	runtime	0.16	1.64	0.25	0.06	2.02	0.32	3.51	0.11
9002577	value	-1231.71	-1231.71	-1231.71	-1231.71	-1231.71	-1231.71	-1231.71	-1231.71
	bound	-Inf	-1231.71	-Inf	-Inf	-1231.71	-1231.71	-1231.71	-1231.71
	runtime	0.16	1.08	0.24	0.07	4.24	0.98	4.25	0.10
9002827	value	-736.24	-736.24	-736.24	-736.24	-736.24	-736.24	-736.24	-736.24
	bound	-Inf	-736.24	-Inf	-Inf	-736.24	-736.24	-736.24	-736.24
	runtime	0.14	1.24	0.21	0.05	3.85	3.88	3.93	0.09
9002861	value	-866.36	-868.93	-866.36	-868.93	-868.93	-868.93	-868.93	-868.93
	bound	-Inf	-868.93	-Inf	-Inf	-868.93	-868.93	-868.93	-868.93
	runtime	0.18	3.57	0.30	0.06	4.63	0.39	4.63	0.13
9002972	value	-772.40	-772.47	-772.40	-772.47	-772.47	-772.47	-772.47	-772.47
	bound	-Inf	-772.47	-Inf	-Inf	-772.51	-772.47	-772.59	-772.47
	runtime	0.16	1.37	0.38	0.06	4.13	3.16	4.16	0.12
9003116	value	-707.26	-707.26	-707.26	-707.26	-707.26	-707.26	-707.26	-707.26
	bound	-Inf	-707.26	-Inf	-Inf	-707.26	-707.26	-707.26	-707.26
	runtime	0.16	7.15	0.28	0.07	4.24	0.59	4.22	0.11
9003135	value	-947.41	-947.41	-947.41	-947.41	-947.41	-947.41	-947.41	-947.41
	bound	-Inf	-947.41	-Inf	-Inf	-947.42	-947.41	-947.43	-947.41
	runtime	0.18	1.46	0.36	0.07	4.59	1.21	4.69	0.12
9003234	value	-864.69	-864.69	-864.69	-864.69	-864.69	-864.69	-864.69	-864.69
	bound	-Inf	-864.69	-Inf	-Inf	-864.69	-864.69	-864.69	-864.69
	runtime	0.17	1.33	0.26	0.06	2.47	0.21	4.34	0.11
9003250	value	-963.78	-963.78	-963.78	-963.74	-963.78	-963.78	-963.78	-963.78
	bound	-Inf	-963.78	-Inf	-Inf	-963.78	-963.78	-963.78	-963.78
	runtime	0.15	1.46	0.25	0.05	3.97	0.42	4.07	0.10
9003301	value	-795.64	-795.64	-795.64	-795.64	-795.64	-795.64	-795.64	-795.64
	bound	-Inf	-795.64	-Inf	-Inf	-795.64	-795.64	-795.64	-795.64
	runtime	0.16	1.28	0.20	0.06	1.31	0.05	1.56	0.10
9003333	value	-834.72	-834.72	-834.72	-834.72	-834.72	-834.72	-834.72	-834.72
	bound	-Inf	-834.72	-Inf	-Inf	-834.72	-834.72	-834.72	-834.72
	runtime	0.17	1.31	0.25	0.06	4.49	0.56	4.48	0.11
9003339	value	-892.18	-892.18	-892.18	-892.18	-892.18	-892.18	-892.18	-892.18
	bound	-Inf	-892.18	-Inf	-Inf	-892.18	-892.18	-892.18	-892.18
	runtime	0.17	1.44	0.28	0.07	4.45	0.71	4.58	0.11
9003378	value	-832.65	-832.65	-832.65	-832.65	-832.65	-832.65	-832.65	-832.65
	bound	-Inf	-832.65	-Inf	-Inf	-832.65	-832.65	-832.65	-832.65
	runtime	0.16	1.16	0.26	0.09	4.09	0.55	4.24	0.11
9003423	value	-865.49	-865.49	-865.49	-865.41	-865.49	-865.49	-865.49	-865.49
	bound	-Inf	-865.49	-Inf	-Inf	-865.49	-865.49	-865.49	-865.49
	runtime	0.16	1.20	0.25	0.06	1.64	0.32	2.18	0.10
9003585	value	-639.00	-639.00	-639.00	-639.00	-639.00	-639.00	-639.00	-639.00
	bound	-Inf	-639.00	-Inf	-Inf	-639.00	-639.00	-639.00	-639.00
	runtime	0.14	1.12	0.22	0.07	1.48	0.12	1.83	0.10
9003635	value	-819.14	-819.14	-819.14	-819.14	-819.14	-819.14	-819.14	-819.14
	bound	-Inf	-819.14	-Inf	-Inf	-819.14	-819.14	-819.14	-819.14
	runtime	0.16	12.61	0.28	0.06	4.27	0.66	4.31	0.12
9003836	value	-820.95	-820.95	-820.95	-820.95	-820.95	-820.95	-820.95	-820.95
	bound	-Inf	-820.95	-Inf	-Inf	-820.95	-820.95	-820.95	-820.95
	runtime	0.17	1.29	0.23	0.06	1.47	0.07	2.07	0.11
9004060	value	-924.19	-928.50	-927.56	-928.50	-928.50	-928.50	-928.50	-928.50
	bound	-Inf	-928.50	-Inf	-Inf	-928.50	-928.50	-928.52	-928.50
	runtime	0.17	1.18	0.27	0.06	4.47	0.39	4.42	0.13
9004066	value	-1159.86	-1159.86	-1159.86	-1159.86	-1159.86	-1159.86	-1159.86	-1159.86
	bound	-Inf	-1159.86	-Inf	-Inf	-1159.86	-1159.86	-1159.86	-1159.86
	runtime	0.16	1.29	0.21	0.06	2.08	0.39	3.05	0.10

scene-decomposition		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP
9004070	value	-1010.98	-1010.98	-1010.98	-1010.98	-1010.98	-1010.98	-1010.98	-1010.98
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.16	1.25	0.25	0.06	2.13	0.09	3.35	0.10
9004199	value	-820.75	-820.75	-820.75	-819.98	-820.75	-820.75	-820.75	-820.75
	bound	-Inf	-Inf	-Inf	-Inf	-820.75	-820.75	-820.75	-820.75
	runtime	0.16	1.22	0.24	0.07	2.02	0.22	3.40	0.10
9004242	value	-844.23	-844.23	-844.23	-844.23	-844.23	-844.23	-844.23	-844.23
	bound	-Inf	-Inf	-Inf	-Inf	-844.23	-844.23	-844.23	-844.23
	runtime	0.17	1.81	0.23	0.06	2.66	0.17	3.25	0.10
9004294	value	-940.53	-940.53	-940.53	-940.53	-940.53	-940.53	-940.53	-940.53
	bound	-Inf	-Inf	-Inf	-Inf	-940.53	-940.53	-940.54	-940.53
	runtime	0.16	1.46	0.31	0.08	4.10	0.35	4.15	0.11
9004353	value	-901.62	-901.62	-901.62	-901.46	-901.62	-901.62	-901.62	-901.62
	bound	-Inf	-Inf	-Inf	-Inf	-901.62	-901.63	-901.64	-901.62
	runtime	0.17	1.37	0.30	0.06	4.55	4.57	4.64	0.12
9004368	value	-743.92	-743.92	-743.92	-743.92	-743.92	-743.92	-743.92	-743.92
	bound	-Inf	-Inf	-Inf	-Inf	-743.92	-743.92	-743.93	-743.92
	runtime	0.15	1.35	0.45	0.06	4.02	0.42	4.05	0.10
9004383	value	-967.73	-968.28	-967.73	-967.70	-968.28	-968.28	-968.28	-968.28
	bound	-Inf	-968.28	-Inf	-Inf	-968.28	-968.28	-968.29	-968.28
	runtime	0.17	1.45	5.67	0.06	4.37	2.15	4.42	0.11
9004427	value	-970.71	-972.46	-970.71	-972.46	-972.46	-972.46	-972.46	-972.46
	bound	-Inf	-972.46	-Inf	-Inf	-972.49	-972.46	-972.53	-972.46
	runtime	0.17	3.51	0.33	0.07	4.27	0.51	4.33	0.12
9004520	value	-871.22	-871.22	-871.22	-871.22	-871.22	-871.22	-871.22	-871.22
	bound	-Inf	-871.22	-Inf	-Inf	-871.22	-871.22	-871.22	-871.22
	runtime	0.16	33.38	0.28	0.07	2.90	0.19	3.36	0.10
9004581	value	-1040.46	-1040.46	-1040.46	-1040.46	-1040.46	-1040.46	-1040.46	-1040.46
	bound	-Inf	-1040.46	-Inf	-Inf	-1040.46	-1040.46	-1040.46	-1040.46
	runtime	0.15	1.12	0.27	0.07	3.82	1.37	3.85	0.09
9004766	value	-672.97	-672.97	-672.97	-672.97	-672.97	-672.97	-672.97	-672.97
	bound	-Inf	-672.97	-Inf	-Inf	-672.97	-672.97	-672.98	-672.97
	runtime	0.15	6.59	0.29	0.06	3.90	0.65	3.94	0.10
9004879	value	-727.76	-727.76	-727.76	-727.76	-727.76	-727.76	-727.76	-727.76
	bound	-Inf	-727.76	-Inf	-Inf	-727.76	-727.76	-727.76	-727.76
	runtime	0.16	1.87	0.23	0.07	2.65	0.35	4.29	0.11
9004965	value	-756.79	-756.79	-756.79	-756.79	-756.79	-756.79	-756.79	-756.79
	bound	-Inf	-756.79	-Inf	-Inf	-756.79	-756.79	-756.79	-756.79
	runtime	0.13	5.15	0.22	0.05	3.61	0.34	3.68	0.09
9004971	value	-649.04	-649.04	-649.04	-648.83	-649.04	-649.04	-649.04	-649.04
	bound	-Inf	-649.04	-Inf	-Inf	-649.04	-649.04	-649.04	-649.04
	runtime	0.16	1.95	0.28	0.07	3.07	0.26	4.16	0.11
9005011	value	-863.43	-863.43	-863.43	-863.43	-863.43	-863.43	-863.43	-863.43
	bound	-Inf	-863.43	-Inf	-Inf	-863.43	-863.43	-863.45	-863.43
	runtime	0.17	13.82	0.39	0.08	4.55	0.38	4.60	0.13
9005105	value	-873.24	-873.24	-873.24	-873.24	-873.24	-873.24	-873.24	-873.24
	bound	-Inf	-873.24	-Inf	-Inf	-873.24	-873.24	-873.24	-873.24
	runtime	0.17	2.56	0.30	0.09	3.07	1.41	3.54	0.11
9005245	value	-1115.38	-1115.38	-1115.38	-1115.38	-1115.38	-1115.38	-1115.38	-1115.38
	bound	-Inf	-1115.38	-Inf	-Inf	-1115.38	-1115.38	-1115.38	-1115.38
	runtime	0.16	1.18	0.25	0.06	2.90	0.33	4.26	0.10
9005273	value	-655.73	-655.73	-655.73	-655.73	-655.73	-655.73	-655.73	-655.73
	bound	-Inf	-655.73	-Inf	-Inf	-655.73	-655.73	-655.73	-655.73
	runtime	0.14	5.91	0.25	0.05	2.99	0.15	3.01	0.09
9005294	value	-1080.63	-1080.63	-1080.63	-1080.63	-1080.63	-1080.63	-1080.63	-1080.63
	bound	-Inf	-1080.63	-Inf	-Inf	-1080.63	-1080.64	-1080.67	-1080.63
	runtime	0.17	1.70	0.47	0.07	4.45	4.50	4.58	0.12
mean energy		-866.73	-866.93	-866.76	-866.85	-866.93	-866.93	-866.93	-866.93
mean bound		-Inf	-Inf	-Inf	-Inf	-866.93	-866.93	-866.94	-866.93
mean runtime		0.17	28.31	0.32	0.07	3.29	0.91	3.77	0.11
best value		79.16	100.00	80.56	82.10	99.86	100.00	99.58	100.00
best bound		0.00	99.86	0.00	0.00	48.95	94.13	30.77	100.00
verified opt		0.00	99.86	0.00	0.00	48.95	94.13	30.77	100.00

Table 40: scene-decomposition

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
0000047	value	-848.29	-848.29	-848.29	-848.29	-848.29
	bound	-Inf	-848.29	-Inf	-848.29	-848.29
	runtime	0.26	0.10	1.18	0.18	0.20
0000051	value	-963.04	-963.04	-963.04	-963.04	-963.04
	bound	-Inf	-963.04	-Inf	-963.04	-963.04
	runtime	0.31	0.08	1.01	0.17	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
0000059	value	-940.11	-940.11	-940.11	-940.11	-940.11
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.28	0.11	1.98	0.19	0.21
0000072	value	-874.12	-874.12	-874.12	-874.12	-874.12
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.21	0.09	1.40	0.18	0.21
0000087	value	-811.78	-813.34	-811.78	-813.34	-813.34
	bound	-Inf	-813.34	-Inf	-813.34	-813.34
	runtime	0.38	0.12	2.91	0.18	0.21
0000176	value	-991.38	-991.38	-991.38	-991.38	-991.38
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.09	1.07	0.19	0.21
0000382	value	-785.74	-786.31	-786.31	-786.31	-786.31
	bound	-Inf	-786.31	-Inf	-786.31	-786.31
	runtime	0.26	0.09	0.91	0.15	0.18
0000631	value	-885.59	-885.59	-885.59	-885.59	-885.59
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.08	0.85	0.15	0.18
0000643	value	-758.21	-758.21	-758.21	-758.21	-758.21
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.10	0.90	0.17	0.19
0000697	value	-766.04	-766.04	-766.04	-766.04	-766.04
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.09	1.77	0.16	0.19
0000759	value	-780.15	-780.15	-780.15	-780.15	-780.15
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.10	1.02	0.15	0.17
0000794	value	-787.37	-787.50	-787.50	-787.50	-787.50
	bound	-Inf	-787.50	-Inf	-787.50	-787.50
	runtime	0.22	0.09	1.16	0.13	0.15
0000952	value	-752.58	-752.58	-752.58	-752.58	-752.58
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.39	0.11	1.56	0.18	0.21
0001677	value	-1037.97	-1037.97	-1037.97	-1037.97	-1037.97
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.08	0.65	0.16	0.19
0002136	value	-863.20	-863.52	-863.52	-863.52	-863.52
	bound	-Inf	-863.52	-Inf	-863.52	-863.52
	runtime	0.24	0.10	2.02	0.18	0.20
0002395	value	-1043.26	-1043.26	-1043.26	-1043.26	-1043.26
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.09	0.79	0.16	0.19
0002755	value	-682.83	-682.83	-681.05	-682.83	-682.83
	bound	-Inf	-Inf	-Inf	-682.83	-682.83
	runtime	0.57	0.12	1.25	0.18	0.20
0003178	value	-582.61	-582.61	-582.61	-582.61	-582.61
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.32	0.10	0.83	0.16	0.18
0003423	value	-795.51	-795.51	-795.51	-795.51	-795.51
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.26	0.08	0.89	0.13	0.16
0003463	value	-573.18	-573.86	-573.18	-573.86	-573.86
	bound	-Inf	-573.86	-Inf	-573.86	-573.86
	runtime	0.18	0.09	1.89	0.15	0.17
0003728	value	-758.99	-758.99	-758.99	-758.99	-758.99
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.40	0.12	1.53	0.17	0.21
0003793	value	-862.13	-862.13	-862.13	-862.13	-862.13
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.08	0.68	0.16	0.19
0003957	value	-595.63	-595.63	-595.63	-595.63	-595.63
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.08	1.35	0.14	0.16
0004028	value	-849.36	-849.36	-849.36	-849.36	-849.36
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.08	1.45	0.16	0.19
0004069	value	-720.11	-720.11	-720.11	-720.11	-720.11
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.28	0.12	1.57	0.17	0.20
0004294	value	-622.15	-623.81	-623.81	-623.81	-623.81
	bound	-Inf	-623.81	-Inf	-623.81	-623.81
	runtime	0.24	0.10	0.78	0.15	0.18
0004498	value	-820.08	-821.13	-821.13	-821.13	-821.13
	bound	-Inf	-821.13	-Inf	-821.13	-821.13
	runtime	0.28	0.11	0.98	0.17	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
0004774	value	-830.55	-832.33	-830.55	-832.33	-832.33
	bound	-Inf	-832.33	-Inf	-832.33	-832.33
	runtime	0.33	0.08	1.52	0.14	0.16
0005074	value	-839.35	-840.01	-840.01	-840.01	-840.01
	bound	-Inf	-840.01	-Inf	-840.01	-840.01
	runtime	0.28	0.09	0.89	0.17	0.20
0005079	value	-694.17	-694.17	-694.17	-694.17	-694.17
	bound	-Inf	-694.17	-Inf	-694.17	-694.17
	runtime	0.23	0.08	0.80	0.15	0.17
0005633	value	-826.38	-826.38	-826.38	-826.38	-826.38
	bound	-Inf	-826.38	-Inf	-826.38	-826.38
	runtime	0.25	0.10	1.53	0.16	0.19
0006575	value	-718.73	-718.73	-718.73	-718.73	-718.73
	bound	-Inf	-718.73	-Inf	-718.73	-718.73
	runtime	0.26	0.11	1.38	0.18	0.20
0007323	value	-903.25	-903.25	-903.25	-903.25	-903.25
	bound	-Inf	-903.25	-Inf	-903.25	-903.25
	runtime	0.24	0.08	1.05	0.16	0.18
0007545	value	-694.04	-694.04	-694.04	-694.04	-694.04
	bound	-Inf	-694.04	-Inf	-694.04	-694.04
	runtime	0.18	0.08	0.62	0.14	0.16
0007932	value	-818.77	-818.77	-818.77	-818.77	-818.77
	bound	-Inf	-818.77	-Inf	-818.77	-818.77
	runtime	0.26	0.10	1.62	0.17	0.20
0009212	value	-691.39	-691.39	-691.39	-691.39	-691.39
	bound	-Inf	-691.39	-Inf	-691.39	-691.39
	runtime	0.30	0.10	1.28	0.14	0.16
0010830	value	-1019.89	-1019.89	-1019.89	-1019.89	-1019.89
	bound	-Inf	-1019.89	-Inf	-1019.89	-1019.89
	runtime	0.40	0.10	1.11	0.18	0.20
0010950	value	-989.47	-989.47	-989.47	-989.47	-989.47
	bound	-Inf	-989.47	-Inf	-989.47	-989.47
	runtime	0.32	0.11	1.70	0.18	0.21
0011003	value	-742.54	-742.54	-742.54	-742.54	-742.54
	bound	-Inf	-742.54	-Inf	-742.54	-742.54
	runtime	0.16	0.07	0.70	0.14	0.16
0011033	value	-899.85	-899.85	-899.85	-899.85	-899.85
	bound	-Inf	-899.85	-Inf	-899.85	-899.85
	runtime	0.39	0.11	1.52	0.19	0.21
0011073	value	-939.95	-939.95	-939.95	-939.95	-939.95
	bound	-Inf	-939.95	-Inf	-939.95	-939.95
	runtime	0.20	0.09	1.27	0.17	0.20
0011088	value	-900.43	-900.43	-900.43	-900.43	-900.43
	bound	-Inf	-900.43	-Inf	-900.43	-900.43
	runtime	0.31	0.10	1.38	0.17	0.19
0011116	value	-871.04	-871.82	-871.32	-871.82	-871.82
	bound	-Inf	-871.82	-Inf	-871.82	-871.82
	runtime	0.30	0.10	0.70	0.17	0.20
0011154	value	-781.48	-781.48	-781.48	-781.48	-781.48
	bound	-Inf	-781.48	-Inf	-781.48	-781.48
	runtime	0.24	0.09	0.94	0.16	0.19
0100026	value	-694.00	-694.22	-694.00	-694.22	-694.22
	bound	-Inf	-694.22	-Inf	-694.22	-694.22
	runtime	0.27	0.08	0.86	0.15	0.17
0100030	value	-850.75	-850.75	-850.75	-850.75	-850.75
	bound	-Inf	-850.75	-Inf	-850.75	-850.75
	runtime	0.21	0.08	1.12	0.17	0.20
0100061	value	-733.86	-734.38	-734.38	-734.38	-734.38
	bound	-Inf	-734.38	-Inf	-734.38	-734.38
	runtime	0.21	0.08	0.83	0.13	0.16
0100091	value	-925.22	-928.18	-928.18	-928.18	-928.18
	bound	-Inf	-928.18	-Inf	-928.18	-928.18
	runtime	0.39	0.11	1.44	0.18	0.20
0100113	value	-718.54	-718.54	-718.54	-718.54	-718.54
	bound	-Inf	-718.54	-Inf	-718.54	-718.54
	runtime	0.29	0.08	0.97	0.14	0.16
0100132	value	-1088.13	-1089.51	-1089.51	-1089.51	-1089.51
	bound	-Inf	-1089.51	-Inf	-1089.51	-1089.51
	runtime	0.22	0.09	1.88	0.16	0.19
0100164	value	-917.47	-917.47	-917.47	-917.47	-917.47
	bound	-Inf	-917.47	-Inf	-917.47	-917.47
	runtime	0.28	0.09	1.02	0.17	0.20
0100241	value	-852.14	-852.14	-852.14	-852.14	-852.14
	bound	-Inf	-852.14	-Inf	-852.14	-852.14
	runtime	0.21	0.10	0.87	0.17	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
0100477	value	-719.91	-719.91	-719.91	-719.91	-719.91
	bound	-Inf	-719.91	-Inf	-719.91	-719.91
	runtime	0.23	0.09	2.14	0.16	0.18
0100579	value	-955.86	-955.86	-955.86	-955.86	-955.86
	bound	-Inf	-955.86	-Inf	-955.86	-955.86
	runtime	0.23	0.07	0.62	0.15	0.17
0100628	value	-769.19	-769.19	-769.19	-769.19	-769.19
	bound	-Inf	-769.19	-Inf	-769.19	-769.19
	runtime	0.24	0.09	1.59	0.16	0.18
0100740	value	-850.40	-850.59	-850.59	-850.59	-850.59
	bound	-Inf	-850.59	-Inf	-850.59	-850.59
	runtime	0.25	0.09	1.20	0.17	0.20
0100787	value	-889.18	-889.18	-889.18	-889.18	-889.18
	bound	-Inf	-889.18	-Inf	-889.18	-889.18
	runtime	0.26	0.08	0.68	0.17	0.19
0100822	value	-872.82	-872.82	-872.82	-872.82	-872.82
	bound	-Inf	-872.82	-Inf	-872.82	-872.82
	runtime	0.25	0.10	1.82	0.17	0.19
0100851	value	-797.63	-797.63	-797.63	-797.63	-797.63
	bound	-Inf	-797.63	-Inf	-797.63	-797.63
	runtime	0.23	0.08	1.01	0.17	0.19
0100855	value	-1011.25	-1011.25	-1011.25	-1011.25	-1011.25
	bound	-Inf	-1011.25	-Inf	-1011.25	-1011.25
	runtime	0.23	0.10	1.46	0.18	0.21
0100892	value	-703.38	-703.38	-703.38	-703.38	-703.38
	bound	-Inf	-703.38	-Inf	-703.38	-703.38
	runtime	0.27	0.11	0.74	0.18	0.20
0100935	value	-786.60	-786.60	-786.60	-786.60	-786.60
	bound	-Inf	-786.60	-Inf	-786.60	-786.60
	runtime	0.29	0.10	0.92	0.16	0.19
0101060	value	-707.59	-707.59	-707.59	-707.59	-707.59
	bound	-Inf	-707.59	-Inf	-707.59	-707.59
	runtime	0.20	0.08	0.66	0.14	0.16
0101121	value	-755.23	-755.23	-755.23	-755.23	-755.23
	bound	-Inf	-755.23	-Inf	-755.23	-755.23
	runtime	0.35	0.10	3.13	0.16	0.19
0101434	value	-758.23	-758.23	-758.23	-758.23	-758.23
	bound	-Inf	-758.23	-Inf	-758.23	-758.23
	runtime	0.27	0.09	1.36	0.16	0.18
0101463	value	-658.76	-658.77	-658.76	-658.77	-658.77
	bound	-Inf	-658.77	-Inf	-658.77	-658.77
	runtime	0.22	0.08	0.78	0.14	0.17
0101488	value	-923.24	-923.24	-923.24	-923.24	-923.24
	bound	-Inf	-923.24	-Inf	-923.24	-923.24
	runtime	0.18	0.08	0.61	0.15	0.17
0101492	value	-940.18	-940.18	-940.18	-940.18	-940.18
	bound	-Inf	-940.18	-Inf	-940.18	-940.18
	runtime	0.20	0.08	0.72	0.14	0.17
0101801	value	-827.65	-827.65	-827.65	-827.65	-827.65
	bound	-Inf	-827.65	-Inf	-827.65	-827.65
	runtime	0.32	0.09	2.22	0.17	0.20
0102039	value	-755.10	-755.10	-755.10	-755.10	-755.10
	bound	-Inf	-755.10	-Inf	-755.10	-755.10
	runtime	0.21	0.08	2.34	0.15	0.18
0102170	value	-809.68	-809.68	-809.68	-809.68	-809.68
	bound	-Inf	-809.68	-Inf	-809.68	-809.68
	runtime	0.21	0.10	0.74	0.17	0.19
0102234	value	-891.15	-891.15	-891.15	-891.15	-891.15
	bound	-Inf	-891.15	-Inf	-891.15	-891.15
	runtime	0.24	0.09	1.35	0.17	0.19
0102403	value	-793.05	-793.05	-793.05	-793.05	-793.05
	bound	-Inf	-793.05	-Inf	-793.05	-793.05
	runtime	0.24	0.09	0.72	0.18	0.20
0102435	value	-1260.14	-1260.14	-1260.14	-1260.14	-1260.14
	bound	-Inf	-1260.14	-Inf	-1260.14	-1260.14
	runtime	0.20	0.08	0.84	0.17	0.19
0102436	value	-885.86	-885.86	-885.86	-885.86	-885.86
	bound	-Inf	-885.86	-Inf	-885.86	-885.86
	runtime	0.21	0.08	0.71	0.18	0.21
0102534	value	-793.86	-793.86	-793.86	-793.86	-793.86
	bound	-Inf	-793.86	-Inf	-793.86	-793.86
	runtime	0.21	0.07	0.67	0.15	0.17
0102544	value	-819.76	-819.76	-819.76	-819.76	-819.76
	bound	-Inf	-819.76	-Inf	-819.76	-819.76
	runtime	0.28	0.10	1.27	0.18	0.21

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
0102566	value	-889.85	-889.85	-889.85	-889.85	-889.85
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.08	0.74	0.17	0.19
0103256	value	-837.10	-837.10	-837.10	-837.10	-837.10
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.09	1.36	0.18	0.21
0103344	value	-700.96	-700.96	-700.96	-700.96	-700.96
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.20	0.09	1.20	0.15	0.18
0103420	value	-1058.04	-1058.04	-1058.04	-1058.04	-1058.04
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.08	0.97	0.17	0.20
0103468	value	-1005.07	-1005.07	-1005.07	-1005.07	-1005.07
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.15	0.07	0.29	0.16	0.19
0103740	value	-803.77	-803.77	-803.77	-803.77	-803.77
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.38	0.09	0.93	0.16	0.19
0104019	value	-937.50	-937.50	-937.50	-937.50	-937.50
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.31	0.12	1.31	0.18	0.22
0104194	value	-858.98	-858.98	-858.98	-858.98	-858.98
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.21	0.07	0.52	0.16	0.18
0104439	value	-967.48	-967.48	-967.48	-967.48	-967.48
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	0.09	0.73	0.13	0.15
0104463	value	-912.89	-912.89	-912.89	-912.89	-912.89
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	0.08	0.90	0.17	0.19
0104552	value	-1028.51	-1028.51	-1028.51	-1028.51	-1028.51
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.26	0.10	0.80	0.18	0.21
0104808	value	-970.07	-970.07	-970.07	-970.07	-970.07
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.27	0.09	2.13	0.17	0.20
0104958	value	-1097.99	-1097.99	-1097.99	-1097.99	-1097.99
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.17	0.06	0.84	0.13	0.16
0105003	value	-870.37	-870.37	-870.37	-870.37	-870.37
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.09	0.75	0.18	0.21
0105064	value	-874.74	-874.74	-874.74	-874.74	-874.74
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.10	0.92	0.17	0.20
0105146	value	-756.82	-756.82	-756.82	-756.82	-756.82
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.08	0.87	0.16	0.19
0105159	value	-951.69	-951.69	-951.69	-951.69	-951.69
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.09	0.92	0.18	0.20
0105305	value	-924.51	-925.32	-925.32	-925.32	-925.32
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.09	1.56	0.18	0.21
1000061	value	-925.14	-925.14	-925.14	-925.14	-925.14
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.29	0.09	1.28	0.17	0.19
1000063	value	-892.40	-892.40	-892.40	-892.40	-892.40
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.26	0.12	0.95	0.18	0.20
1000097	value	-749.65	-749.65	-749.65	-749.65	-749.65
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.10	1.48	0.18	0.21
1000105	value	-864.57	-864.57	-864.57	-864.57	-864.57
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.56	0.09	1.66	0.18	0.20
1000288	value	-922.55	-922.55	-922.55	-922.55	-922.55
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.09	0.52	0.17	0.20
1000351	value	-1113.20	-1113.20	-1113.20	-1113.20	-1113.20
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	0.07	0.72	0.16	0.19
1000413	value	-920.09	-920.09	-920.09	-920.09	-920.09
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.12	1.58	0.19	0.22

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
1000505	value	-819.76	-820.44	-820.44	-820.44	-820.44
	bound	-Inf	-820.44	-Inf	-820.44	-820.44
	runtime	0.35	0.10	0.95	0.18	0.20
1000580	value	-807.22	-806.08	-805.77	-807.15	-807.15
	bound	-Inf	-807.27	-Inf	-807.27	-807.27
	runtime	0.43	0.11	7.18	0.19	0.21
1000615	value	-935.67	-935.67	-935.67	-935.67	-935.67
	bound	-Inf	-935.67	-Inf	-935.67	-935.67
	runtime	0.18	0.07	1.41	0.16	0.19
1000731	value	-848.80	-848.80	-848.80	-848.80	-848.80
	bound	-Inf	-848.80	-Inf	-848.80	-848.80
	runtime	0.25	0.09	1.99	0.17	0.20
1000875	value	-959.34	-961.24	-959.34	-961.24	-961.24
	bound	-Inf	-961.24	-Inf	-961.24	-961.24
	runtime	0.36	0.10	0.82	0.18	0.21
1000882	value	-955.75	-955.75	-955.75	-955.75	-955.75
	bound	-Inf	-955.75	-Inf	-955.75	-955.75
	runtime	0.26	0.10	1.57	0.17	0.20
1000929	value	-903.40	-903.40	-903.40	-903.40	-903.40
	bound	-Inf	-903.40	-Inf	-903.40	-903.40
	runtime	0.22	0.09	1.93	0.17	0.20
1000947	value	-992.23	-992.23	-992.23	-992.23	-992.23
	bound	-Inf	-992.23	-Inf	-992.23	-992.23
	runtime	0.26	0.09	1.27	0.18	0.21
1000993	value	-890.24	-890.24	-890.24	-890.24	-890.24
	bound	-Inf	-890.24	-Inf	-890.24	-890.24
	runtime	0.28	0.09	0.76	0.17	0.19
1001184	value	-987.96	-987.96	-987.96	-987.96	-987.96
	bound	-Inf	-987.96	-Inf	-987.96	-987.96
	runtime	0.16	0.08	0.72	0.17	0.20
1001195	value	-732.85	-732.85	-732.85	-732.85	-732.85
	bound	-Inf	-732.85	-Inf	-732.85	-732.85
	runtime	0.32	0.09	1.39	0.14	0.16
1001252	value	-688.02	-688.02	-688.02	-688.02	-688.02
	bound	-Inf	-688.02	-Inf	-688.02	-688.02
	runtime	0.20	0.07	0.69	0.15	0.17
1001685	value	-708.46	-708.46	-708.46	-708.46	-708.46
	bound	-Inf	-708.46	-Inf	-708.46	-708.46
	runtime	0.25	0.10	1.27	0.17	0.20
1001688	value	-710.39	-711.48	-711.48	-711.48	-711.48
	bound	-Inf	-711.48	-Inf	-711.48	-711.48
	runtime	0.26	0.08	1.34	0.16	0.18
1001770	value	-681.18	-681.18	-681.18	-681.18	-681.18
	bound	-Inf	-681.18	-Inf	-681.18	-681.18
	runtime	0.16	0.07	1.07	0.14	0.17
1001794	value	-1091.20	-1091.20	-1091.20	-1091.20	-1091.20
	bound	-Inf	-1091.20	-Inf	-1091.20	-1091.20
	runtime	0.19	0.09	0.76	0.17	0.20
1001875	value	-787.56	-787.56	-787.56	-787.56	-787.56
	bound	-Inf	-787.56	-Inf	-787.56	-787.56
	runtime	0.21	0.09	1.09	0.15	0.17
1001944	value	-746.76	-746.76	-746.76	-746.76	-746.76
	bound	-Inf	-746.76	-Inf	-746.76	-746.76
	runtime	0.21	0.08	0.53	0.17	0.19
1100001	value	-852.50	-852.50	-852.50	-852.50	-852.50
	bound	-Inf	-852.50	-Inf	-852.50	-852.50
	runtime	0.28	0.09	0.69	0.16	0.19
1100002	value	-703.77	-703.77	-703.77	-703.77	-703.77
	bound	-Inf	-703.77	-Inf	-703.77	-703.77
	runtime	0.39	0.11	1.66	0.17	0.20
1100003	value	-719.45	-719.45	-719.45	-719.45	-719.45
	bound	-Inf	-719.45	-Inf	-719.45	-719.45
	runtime	0.29	0.07	1.61	0.14	0.15
1100004	value	-771.91	-771.91	-771.91	-771.91	-771.91
	bound	-Inf	-771.91	-Inf	-771.91	-771.91
	runtime	0.20	0.09	0.60	0.15	0.18
1100005	value	-694.20	-694.20	-694.20	-694.20	-694.20
	bound	-Inf	-694.20	-Inf	-694.20	-694.20
	runtime	0.23	0.08	1.20	0.15	0.17
1100006	value	-614.79	-615.12	-614.79	-615.12	-615.12
	bound	-Inf	-615.12	-Inf	-615.12	-615.12
	runtime	0.28	0.09	1.01	0.14	0.16
1100007	value	-1010.03	-1010.03	-1010.03	-1010.03	-1010.03
	bound	-Inf	-1010.03	-Inf	-1010.03	-1010.03
	runtime	0.20	0.08	1.13	0.17	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
1100008	value	-1011.71	-1011.71	-1011.71	-1011.71	-1011.71
	bound	-Inf	-1011.71	-Inf	-1011.71	-1011.71
	runtime	0.20	0.08	1.10	0.15	0.18
1100009	value	-834.60	-834.60	-834.60	-834.60	-834.60
	bound	-Inf	-834.60	-Inf	-834.60	-834.60
	runtime	0.37	0.11	1.04	0.17	0.20
1100011	value	-693.35	-693.35	-693.35	-693.35	-693.35
	bound	-Inf	-693.35	-Inf	-693.35	-693.35
	runtime	0.24	0.08	0.65	0.15	0.17
1100013	value	-824.63	-824.63	-824.63	-824.63	-824.63
	bound	-Inf	-824.63	-Inf	-824.63	-824.63
	runtime	0.22	0.08	1.80	0.17	0.20
1100014	value	-1111.72	-1111.72	-1111.72	-1111.72	-1111.72
	bound	-Inf	-1111.72	-Inf	-1111.72	-1111.72
	runtime	0.19	0.07	0.41	0.14	0.17
1100015	value	-1269.30	-1269.30	-1269.30	-1269.30	-1269.30
	bound	-Inf	-1269.30	-Inf	-1269.30	-1269.30
	runtime	0.18	0.07	1.49	0.16	0.18
1100016	value	-772.57	-779.24	-779.24	-779.24	-779.24
	bound	-Inf	-779.24	-Inf	-779.24	-779.24
	runtime	0.37	0.09	1.78	0.17	0.19
1100017	value	-880.10	-881.54	-880.10	-881.54	-881.54
	bound	-Inf	-881.54	-Inf	-881.54	-881.54
	runtime	0.24	0.10	1.11	0.17	0.19
1100023	value	-906.00	-906.00	-906.00	-906.00	-906.00
	bound	-Inf	-906.00	-Inf	-906.00	-906.00
	runtime	0.22	0.09	0.87	0.18	0.20
1100025	value	-845.88	-845.88	-845.88	-845.88	-845.88
	bound	-Inf	-845.88	-Inf	-845.88	-845.88
	runtime	0.22	0.09	0.84	0.15	0.18
1100027	value	-792.82	-792.82	-792.82	-792.82	-792.82
	bound	-Inf	-792.82	-Inf	-792.82	-792.82
	runtime	0.19	0.09	0.74	0.17	0.20
1100029	value	-822.11	-822.11	-822.11	-822.11	-822.11
	bound	-Inf	-822.11	-Inf	-822.11	-822.11
	runtime	0.20	0.08	0.97	0.16	0.19
1100030	value	-831.21	-831.21	-831.21	-831.21	-831.21
	bound	-Inf	-831.21	-Inf	-831.21	-831.21
	runtime	0.27	0.09	0.90	0.17	0.20
1100031	value	-732.78	-732.78	-732.78	-732.78	-732.78
	bound	-Inf	-732.78	-Inf	-732.78	-732.78
	runtime	0.20	0.08	0.44	0.14	0.17
2000001	value	-757.05	-757.05	-757.05	-757.05	-757.05
	bound	-Inf	-757.05	-Inf	-757.05	-757.05
	runtime	0.35	0.14	1.73	0.18	0.21
2000002	value	-813.18	-813.18	-813.18	-813.18	-813.18
	bound	-Inf	-813.18	-Inf	-813.18	-813.18
	runtime	0.27	0.11	1.34	0.17	0.20
2000003	value	-900.58	-900.58	-900.58	-900.58	-900.58
	bound	-Inf	-900.58	-Inf	-900.58	-900.58
	runtime	0.23	0.10	0.84	0.18	0.21
2000004	value	-725.54	-725.75	-725.54	-725.75	-725.75
	bound	-Inf	-725.75	-Inf	-725.75	-725.75
	runtime	0.23	0.09	0.63	0.15	0.17
2000008	value	-755.82	-755.82	-755.82	-755.82	-755.82
	bound	-Inf	-755.82	-Inf	-755.82	-755.82
	runtime	0.21	0.10	1.29	0.15	0.17
2000012	value	-757.93	-757.93	-757.93	-757.93	-757.93
	bound	-Inf	-757.93	-Inf	-757.93	-757.93
	runtime	0.26	0.10	1.22	0.17	0.19
2000019	value	-779.58	-779.58	-779.58	-779.58	-779.58
	bound	-Inf	-779.58	-Inf	-779.58	-779.58
	runtime	0.19	0.07	0.72	0.15	0.17
2000022	value	-860.33	-860.33	-860.33	-860.33	-860.33
	bound	-Inf	-860.33	-Inf	-860.33	-860.33
	runtime	0.18	0.08	0.51	0.16	0.18
2000023	value	-1015.96	-1015.96	-1015.96	-1015.96	-1015.96
	bound	-Inf	-1015.96	-Inf	-1015.96	-1015.96
	runtime	0.19	0.08	1.77	0.17	0.19
2000025	value	-828.49	-828.49	-828.49	-828.49	-828.49
	bound	-Inf	-828.49	-Inf	-828.49	-828.49
	runtime	0.23	0.10	2.07	0.18	0.20
2000028	value	-811.28	-811.28	-811.28	-811.28	-811.28
	bound	-Inf	-811.28	-Inf	-811.28	-811.28
	runtime	0.26	0.08	1.33	0.15	0.18

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
2000030	value	-843.04	-843.04	-843.04	-843.04	-843.04
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.09	1.52	0.17	0.19
2000031	value	-819.11	-819.11	-819.11	-819.11	-819.11
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.08	0.76	0.16	0.19
2000032	value	-773.57	-773.57	-773.57	-773.57	-773.57
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.10	2.27	0.18	0.21
2000033	value	-961.78	-961.78	-961.78	-961.78	-961.78
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	0.06	0.50	0.14	0.16
2000034	value	-867.92	-867.92	-867.92	-867.92	-867.92
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.39	0.11	2.27	0.18	0.21
2000035	value	-844.62	-844.62	-844.62	-844.62	-844.62
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.20	0.08	1.20	0.17	0.19
2000036	value	-875.37	-875.37	-875.37	-875.37	-875.37
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.09	1.44	0.17	0.20
2000037	value	-811.72	-811.72	-811.72	-811.72	-811.72
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.08	1.15	0.16	0.18
2000039	value	-769.97	-769.97	-769.97	-769.97	-769.97
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.70	0.09	1.06	0.16	0.18
2000041	value	-734.97	-734.97	-734.97	-734.97	-734.97
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.35	0.08	2.10	0.14	0.16
2000042	value	-832.89	-832.89	-832.89	-832.89	-832.89
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.31	0.10	1.35	0.18	0.20
2000043	value	-784.93	-784.93	-784.93	-784.93	-784.93
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.09	0.67	0.16	0.19
2000044	value	-807.85	-807.85	-807.85	-807.85	-807.85
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.83	0.09	1.23	0.16	0.18
3000072	value	-697.09	-698.50	-697.09	-698.50	-698.50
	bound	-Inf	-698.50	-Inf	-698.50	-698.50
	runtime	0.31	0.14	2.79	0.17	0.19
3000076	value	-797.61	-797.61	-797.61	-797.61	-797.61
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.21	0.08	0.72	0.16	0.19
3000099	value	-876.11	-877.44	-876.11	-877.44	-877.44
	bound	-Inf	-877.44	-Inf	-877.44	-877.44
	runtime	0.22	0.09	0.93	0.17	0.19
3000119	value	-1231.09	-1231.09	-1231.09	-1231.09	-1231.09
	bound	-Inf	-1231.09	-Inf	-1231.09	-1231.09
	runtime	0.22	0.08	0.69	0.16	0.19
3000148	value	-812.21	-812.21	-812.21	-812.21	-812.21
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.09	2.21	0.16	0.19
3000299	value	-820.56	-820.56	-820.56	-820.56	-820.56
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.42	0.08	1.34	0.17	0.19
3000323	value	-1128.93	-1128.93	-1128.93	-1128.93	-1128.93
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.08	1.16	0.16	0.19
3000454	value	-687.39	-687.39	-687.39	-687.39	-687.39
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.09	1.96	0.16	0.18
3000469	value	-1002.22	-1003.59	-1002.22	-1003.59	-1003.59
	bound	-Inf	-1003.59	-Inf	-1003.59	-1003.59
	runtime	0.30	0.09	1.00	0.17	0.19
3000676	value	-1136.98	-1136.98	-1136.98	-1136.98	-1136.98
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.15	0.06	0.40	0.13	0.16
3000716	value	-611.27	-611.27	-611.27	-611.27	-611.27
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.07	0.62	0.15	0.17
3000759	value	-476.99	-476.99	-476.99	-476.99	-476.99
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.09	1.06	0.14	0.17

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
3000945	value	-717.01	-717.01	-717.01	-717.01	-717.01
	bound	-Inf	-717.01	-Inf	-717.01	-717.01
	runtime	0.22	0.07	0.86	0.14	0.16
3001004	value	-823.91	-823.91	-823.91	-823.91	-823.91
	bound	-Inf	-823.91	-Inf	-823.91	-823.91
	runtime	0.27	0.09	1.27	0.18	0.20
3001018	value	-629.62	-629.62	-629.62	-629.62	-629.62
	bound	-Inf	-629.62	-Inf	-629.62	-629.62
	runtime	0.39	0.09	0.69	0.14	0.16
3001061	value	-754.82	-754.82	-754.69	-754.82	-754.82
	bound	-Inf	-754.82	-Inf	-754.82	-754.82
	runtime	0.25	0.11	1.33	0.15	0.18
3001131	value	-764.33	-764.39	-764.39	-764.39	-764.39
	bound	-Inf	-764.39	-Inf	-764.39	-764.39
	runtime	0.26	0.08	0.98	0.15	0.17
3001230	value	-837.33	-837.36	-837.36	-837.36	-837.36
	bound	-Inf	-837.36	-Inf	-837.36	-837.36
	runtime	0.24	0.08	0.83	0.17	0.19
3001319	value	-950.35	-950.35	-950.35	-950.35	-950.35
	bound	-Inf	-950.35	-Inf	-950.35	-950.35
	runtime	0.23	0.08	1.77	0.17	0.20
3001336	value	-639.35	-639.35	-639.35	-639.35	-639.35
	bound	-Inf	-639.35	-Inf	-639.35	-639.35
	runtime	0.29	0.09	0.69	0.15	0.17
3001421	value	-944.28	-944.28	-944.28	-944.28	-944.28
	bound	-Inf	-944.28	-Inf	-944.28	-944.28
	runtime	0.37	0.12	1.17	0.17	0.20
3001460	value	-1035.81	-1037.29	-1036.51	-1037.29	-1037.29
	bound	-Inf	-1037.29	-Inf	-1037.29	-1037.29
	runtime	0.33	0.13	2.45	0.19	0.21
3001555	value	-570.50	-570.50	-570.50	-570.50	-570.50
	bound	-Inf	-570.50	-Inf	-570.50	-570.50
	runtime	0.22	0.08	0.41	0.14	0.16
3001569	value	-938.69	-938.69	-938.69	-938.69	-938.69
	bound	-Inf	-938.69	-Inf	-938.69	-938.69
	runtime	0.24	0.08	1.01	0.17	0.19
3001667	value	-776.10	-776.10	-776.10	-776.10	-776.10
	bound	-Inf	-776.10	-Inf	-776.10	-776.10
	runtime	0.35	0.15	0.88	0.17	0.20
3001751	value	-656.34	-656.34	-656.34	-656.34	-656.34
	bound	-Inf	-656.34	-Inf	-656.34	-656.34
	runtime	0.26	0.09	1.07	0.15	0.18
3001767	value	-888.59	-888.59	-888.59	-888.59	-888.59
	bound	-Inf	-888.59	-Inf	-888.59	-888.59
	runtime	0.20	0.09	1.39	0.17	0.20
3001826	value	-694.78	-694.78	-694.78	-694.78	-694.78
	bound	-Inf	-694.78	-Inf	-694.78	-694.78
	runtime	0.24	0.11	1.48	0.18	0.20
3001891	value	-1169.91	-1169.91	-1169.91	-1169.91	-1169.91
	bound	-Inf	-1169.91	-Inf	-1169.91	-1169.91
	runtime	0.17	0.07	1.00	0.17	0.19
3001976	value	-644.91	-644.20	-645.03	-644.08	-645.03
	bound	-Inf	-645.03	-Inf	-645.03	-645.03
	runtime	0.22	0.08	0.83	0.14	0.17
3002020	value	-935.80	-935.80	-935.80	-935.80	-935.80
	bound	-Inf	-935.80	-Inf	-935.80	-935.80
	runtime	0.22	0.08	1.76	0.16	0.19
3002059	value	-816.79	-816.79	-816.79	-816.79	-816.79
	bound	-Inf	-816.79	-Inf	-816.79	-816.79
	runtime	0.29	0.09	0.74	0.17	0.19
3002082	value	-641.62	-641.62	-641.62	-641.62	-641.62
	bound	-Inf	-641.62	-Inf	-641.62	-641.62
	runtime	0.19	0.08	1.00	0.15	0.17
3002154	value	-1031.79	-1031.99	-1031.99	-1031.99	-1031.99
	bound	-Inf	-1031.99	-Inf	-1031.99	-1031.99
	runtime	0.29	0.09	2.12	0.17	0.20
3002206	value	-931.86	-931.86	-931.86	-931.86	-931.86
	bound	-Inf	-931.86	-Inf	-931.86	-931.86
	runtime	2.29	0.09	0.70	0.18	0.20
3002221	value	-626.08	-626.08	-626.08	-626.08	-626.08
	bound	-Inf	-626.08	-Inf	-626.08	-626.08
	runtime	0.27	0.08	1.07	0.14	0.17
3002340	value	-722.96	-723.09	-723.09	-723.09	-723.09
	bound	-Inf	-723.09	-Inf	-723.09	-723.09
	runtime	0.26	0.11	0.74	0.18	0.20

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
3002366	value	-806.39	-806.67	-806.67	-806.67	-806.67
	bound	-Inf	-806.67	-Inf	-806.67	-806.67
	runtime	0.24	0.11	6.38	0.16	0.18
3002411	value	-1054.59	-1054.59	-1054.59	-1054.59	-1054.59
	bound	-Inf	-1054.59	-Inf	-1054.59	-1054.59
	runtime	0.20	0.08	1.36	0.15	0.17
3002594	value	-902.13	-902.13	-902.13	-902.13	-902.13
	bound	-Inf	-902.13	-Inf	-902.13	-902.13
	runtime	0.31	0.10	1.42	0.18	0.20
3002905	value	-596.72	-596.81	-596.72	-596.81	-596.81
	bound	-Inf	-596.81	-Inf	-596.81	-596.81
	runtime	0.23	0.09	0.68	0.14	0.17
3002909	value	-806.23	-806.23	-806.23	-806.23	-806.23
	bound	-Inf	-806.23	-Inf	-806.23	-806.23
	runtime	0.20	0.09	1.11	0.17	0.19
3003122	value	-959.80	-959.80	-959.80	-959.80	-959.80
	bound	-Inf	-959.80	-Inf	-959.80	-959.80
	runtime	0.32	0.10	1.21	0.18	0.20
3003322	value	-740.54	-740.54	-740.54	-740.54	-740.54
	bound	-Inf	-740.54	-Inf	-740.54	-740.54
	runtime	0.26	0.09	0.66	0.15	0.18
3003328	value	-809.39	-809.39	-809.39	-809.39	-809.39
	bound	-Inf	-809.39	-Inf	-809.39	-809.39
	runtime	0.72	0.07	0.61	0.15	0.17
3003356	value	-867.90	-867.90	-867.90	-867.90	-867.90
	bound	-Inf	-867.90	-Inf	-867.90	-867.90
	runtime	0.21	0.09	0.95	0.17	0.19
3003448	value	-1170.07	-1170.07	-1170.07	-1170.07	-1170.07
	bound	-Inf	-1170.07	-Inf	-1170.07	-1170.07
	runtime	0.24	0.09	0.50	0.17	0.20
3003731	value	-803.31	-803.31	-803.31	-803.31	-803.31
	bound	-Inf	-803.31	-Inf	-803.31	-803.31
	runtime	0.20	0.09	1.30	0.17	0.19
3003791	value	-1332.08	-1332.08	-1332.08	-1332.08	-1332.08
	bound	-Inf	-1332.08	-Inf	-1332.08	-1332.08
	runtime	0.22	0.07	0.87	0.16	0.18
3003817	value	-738.08	-738.08	-738.08	-738.08	-738.08
	bound	-Inf	-738.08	-Inf	-738.08	-738.08
	runtime	0.20	0.08	1.93	0.15	0.17
4000066	value	-1331.48	-1331.48	-1331.48	-1331.48	-1331.48
	bound	-Inf	-1331.48	-Inf	-1331.48	-1331.48
	runtime	0.33	0.08	1.31	0.18	0.20
4000086	value	-1041.16	-1041.16	-1041.16	-1041.16	-1041.16
	bound	-Inf	-1041.16	-Inf	-1041.16	-1041.16
	runtime	0.20	0.08	0.93	0.17	0.20
4100066	value	-917.25	-917.25	-917.25	-917.25	-917.25
	bound	-Inf	-917.25	-Inf	-917.25	-917.25
	runtime	0.18	0.07	1.36	0.16	0.18
4100246	value	-909.75	-909.75	-909.75	-909.75	-909.75
	bound	-Inf	-909.75	-Inf	-909.75	-909.75
	runtime	0.27	0.11	2.24	0.18	0.21
4100280	value	-917.09	-917.09	-917.09	-917.09	-917.09
	bound	-Inf	-917.09	-Inf	-917.09	-917.09
	runtime	0.21	0.09	0.85	0.18	0.20
5000016	value	-935.46	-935.46	-935.46	-935.46	-935.46
	bound	-Inf	-935.46	-Inf	-935.46	-935.46
	runtime	0.18	0.07	0.70	0.15	0.17
5000119	value	-844.45	-844.45	-844.45	-844.45	-844.45
	bound	-Inf	-844.45	-Inf	-844.45	-844.45
	runtime	0.17	0.07	0.89	0.15	0.18
5000120	value	-723.38	-723.38	-723.38	-723.38	-723.38
	bound	-Inf	-723.38	-Inf	-723.38	-723.38
	runtime	0.18	0.08	0.81	0.15	0.17
5000121	value	-854.91	-855.97	-854.93	-855.97	-855.97
	bound	-Inf	-855.97	-Inf	-855.97	-855.97
	runtime	0.36	0.09	1.10	0.16	0.18
5000122	value	-837.76	-837.81	-837.76	-837.81	-837.81
	bound	-Inf	-837.81	-Inf	-837.81	-837.81
	runtime	0.23	0.09	3.07	0.16	0.18
5000123	value	-839.72	-839.72	-839.72	-839.72	-839.72
	bound	-Inf	-839.72	-Inf	-839.72	-839.72
	runtime	0.22	0.09	1.93	0.16	0.18
5000124	value	-860.47	-860.64	-860.64	-860.64	-860.64
	bound	-Inf	-860.64	-Inf	-860.64	-860.64
	runtime	0.21	0.08	0.89	0.16	0.18

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
5000125	value	-922.68	-922.68	-922.68	-922.68	-922.68
	bound	-Inf	-922.68	-Inf	-922.68	-922.68
	runtime	0.20	0.08	0.93	0.16	0.18
5000126	value	-877.19	-877.19	-877.19	-877.19	-877.19
	bound	-Inf	-877.19	-Inf	-877.19	-877.19
	runtime	0.22	0.07	0.58	0.15	0.17
5000127	value	-770.08	-770.08	-770.08	-770.08	-770.08
	bound	-Inf	-770.08	-Inf	-770.08	-770.08
	runtime	0.19	0.07	1.02	0.14	0.16
5000128	value	-876.57	-876.57	-876.57	-876.57	-876.57
	bound	-Inf	-876.57	-Inf	-876.57	-876.57
	runtime	0.21	0.07	0.82	0.16	0.19
5000129	value	-766.76	-767.00	-766.76	-767.00	-767.00
	bound	-Inf	-767.00	-Inf	-767.00	-767.00
	runtime	0.20	0.07	0.78	0.14	0.16
5000130	value	-744.69	-744.69	-744.69	-744.69	-744.69
	bound	-Inf	-744.69	-Inf	-744.69	-744.69
	runtime	0.18	0.07	0.28	0.15	0.17
5000131	value	-823.56	-823.97	-823.56	-823.97	-823.97
	bound	-Inf	-823.97	-Inf	-823.97	-823.97
	runtime	0.20	0.08	1.22	0.15	0.17
5000132	value	-745.89	-746.44	-746.44	-746.44	-746.44
	bound	-Inf	-746.44	-Inf	-746.44	-746.44
	runtime	0.28	0.08	0.81	0.15	0.18
5000133	value	-783.95	-783.95	-783.95	-783.95	-783.95
	bound	-Inf	-783.95	-Inf	-783.95	-783.95
	runtime	0.18	0.07	0.74	0.15	0.17
5000137	value	-829.33	-829.33	-829.33	-829.33	-829.33
	bound	-Inf	-829.33	-Inf	-829.33	-829.33
	runtime	0.15	0.06	0.57	0.14	0.16
5000144	value	-699.97	-701.26	-699.60	-701.26	-701.26
	bound	-Inf	-701.26	-Inf	-701.26	-701.26
	runtime	0.29	0.11	1.37	0.17	0.20
5000147	value	-750.53	-750.53	-750.53	-750.53	-750.53
	bound	-Inf	-750.53	-Inf	-750.53	-750.53
	runtime	0.28	0.08	0.88	0.14	0.16
5000149	value	-957.32	-957.32	-957.32	-957.32	-957.32
	bound	-Inf	-957.32	-Inf	-957.32	-957.32
	runtime	0.19	0.07	0.26	0.14	0.16
5000150	value	-763.99	-763.99	-763.99	-763.99	-763.99
	bound	-Inf	-763.99	-Inf	-763.99	-763.99
	runtime	0.35	0.08	1.01	0.16	0.18
5000162	value	-895.91	-895.91	-895.91	-895.91	-895.91
	bound	-Inf	-895.91	-Inf	-895.91	-895.91
	runtime	0.27	0.10	1.28	0.18	0.20
5000163	value	-1095.30	-1095.30	-1095.30	-1095.30	-1095.30
	bound	-Inf	-1095.30	-Inf	-1095.30	-1095.30
	runtime	0.20	0.08	0.83	0.18	0.20
5000164	value	-1138.97	-1138.97	-1138.97	-1138.97	-1138.97
	bound	-Inf	-1138.97	-Inf	-1138.97	-1138.97
	runtime	0.20	0.08	0.74	0.17	0.19
5000165	value	-1043.23	-1043.23	-1043.23	-1043.23	-1043.23
	bound	-Inf	-1043.23	-Inf	-1043.23	-1043.23
	runtime	0.42	0.07	0.95	0.16	0.18
5000166	value	-819.37	-819.37	-819.32	-819.37	-819.37
	bound	-Inf	-819.37	-Inf	-819.37	-819.37
	runtime	0.35	0.10	2.55	0.18	0.20
5000168	value	-885.03	-885.36	-885.36	-885.36	-885.36
	bound	-Inf	-885.36	-Inf	-885.36	-885.36
	runtime	0.33	0.11	1.34	0.18	0.20
5000172	value	-820.94	-820.94	-820.94	-820.94	-820.94
	bound	-Inf	-820.94	-Inf	-820.94	-820.94
	runtime	0.25	0.09	1.30	0.18	0.21
5000173	value	-915.62	-915.62	-915.62	-915.62	-915.62
	bound	-Inf	-915.62	-Inf	-915.62	-915.62
	runtime	0.37	0.09	1.48	0.17	0.20
5000174	value	-910.96	-913.92	-913.92	-913.92	-913.92
	bound	-Inf	-913.92	-Inf	-913.92	-913.92
	runtime	0.41	0.11	1.93	0.17	0.19
5000175	value	-808.36	-811.92	-810.33	-811.92	-811.92
	bound	-Inf	-811.92	-Inf	-811.92	-811.92
	runtime	0.42	0.11	1.59	0.17	0.20
5000176	value	-714.58	-714.58	-714.58	-714.58	-714.58
	bound	-Inf	-714.58	-Inf	-714.58	-714.58
	runtime	0.14	0.06	0.87	0.13	0.15

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
5000180	value	-921.98	-921.98	-921.98	-921.98	-921.98
	bound	-Inf	-921.98	-Inf	-921.98	-921.98
	runtime	0.19	0.07	1.31	0.14	0.17
5000181	value	-832.33	-832.33	-832.33	-832.33	-832.33
	bound	-Inf	-832.33	-Inf	-832.33	-832.33
	runtime	0.17	0.07	0.71	0.14	0.16
5000182	value	-730.94	-731.06	-731.06	-731.06	-731.06
	bound	-Inf	-731.06	-Inf	-731.06	-731.06
	runtime	0.21	0.06	1.21	0.13	0.15
5000183	value	-865.79	-865.79	-865.79	-865.79	-865.79
	bound	-Inf	-865.79	-Inf	-865.79	-865.79
	runtime	0.17	0.07	0.54	0.14	0.16
5000184	value	-922.47	-922.47	-922.47	-922.47	-922.47
	bound	-Inf	-922.47	-Inf	-922.47	-922.47
	runtime	0.14	0.07	0.69	0.15	0.17
5000188	value	-750.68	-750.68	-750.68	-750.68	-750.68
	bound	-Inf	-750.68	-Inf	-750.68	-750.68
	runtime	0.15	0.06	0.48	0.13	0.16
5000190	value	-741.31	-741.31	-741.31	-741.31	-741.31
	bound	-Inf	-741.31	-Inf	-741.31	-741.31
	runtime	0.23	0.06	0.72	0.14	0.16
5000191	value	-563.69	-563.69	-563.69	-563.69	-563.69
	bound	-Inf	-563.69	-Inf	-563.69	-563.69
	runtime	0.27	0.10	1.99	0.15	0.17
5000192	value	-679.22	-679.25	-679.25	-679.25	-679.25
	bound	-Inf	-679.25	-Inf	-679.25	-679.25
	runtime	0.23	0.09	0.89	0.14	0.16
5000194	value	-677.37	-677.37	-677.37	-677.37	-677.37
	bound	-Inf	-677.37	-Inf	-677.37	-677.37
	runtime	0.18	0.07	0.54	0.13	0.15
5000195	value	-816.50	-816.50	-816.50	-816.50	-816.50
	bound	-Inf	-816.50	-Inf	-816.50	-816.50
	runtime	0.26	0.09	1.22	0.16	0.18
5000196	value	-786.38	-786.58	-786.38	-786.58	-786.58
	bound	-Inf	-786.58	-Inf	-786.58	-786.58
	runtime	0.44	0.09	0.84	0.15	0.18
5000197	value	-715.96	-715.96	-715.96	-715.96	-715.96
	bound	-Inf	-715.96	-Inf	-715.96	-715.96
	runtime	0.23	0.08	1.23	0.15	0.17
5000198	value	-695.20	-695.20	-695.20	-695.20	-695.20
	bound	-Inf	-695.20	-Inf	-695.20	-695.20
	runtime	0.86	0.08	0.57	0.15	0.17
5000199	value	-857.59	-857.59	-857.59	-857.59	-857.59
	bound	-Inf	-857.59	-Inf	-857.59	-857.59
	runtime	0.80	0.09	4.16	0.15	0.17
5000200	value	-755.17	-755.17	-755.17	-755.17	-755.17
	bound	-Inf	-755.17	-Inf	-755.17	-755.17
	runtime	0.20	0.08	0.90	0.15	0.17
5000201	value	-863.14	-863.14	-863.14	-863.14	-863.14
	bound	-Inf	-863.14	-Inf	-863.14	-863.14
	runtime	0.26	0.08	0.81	0.16	0.18
5000202	value	-712.65	-712.65	-712.65	-712.65	-712.65
	bound	-Inf	-712.65	-Inf	-712.65	-712.65
	runtime	0.24	0.07	0.55	0.15	0.17
5000203	value	-596.03	-596.03	-596.03	-596.03	-596.03
	bound	-Inf	-596.03	-Inf	-596.03	-596.03
	runtime	0.22	0.09	0.54	0.14	0.16
5000204	value	-689.98	-689.98	-689.98	-689.98	-689.98
	bound	-Inf	-689.98	-Inf	-689.98	-689.98
	runtime	0.16	0.07	0.65	0.14	0.16
5000205	value	-701.33	-701.65	-701.33	-701.65	-701.65
	bound	-Inf	-701.65	-Inf	-701.65	-701.65
	runtime	0.22	0.09	0.73	0.14	0.17
5000226	value	-667.07	-667.07	-667.07	-667.07	-667.07
	bound	-Inf	-667.07	-Inf	-667.07	-667.07
	runtime	0.20	0.07	1.00	0.14	0.16
5000234	value	-679.98	-679.98	-679.98	-679.98	-679.98
	bound	-Inf	-679.98	-Inf	-679.98	-679.98
	runtime	0.23	0.09	3.20	0.14	0.16
5000257	value	-676.39	-676.39	-676.39	-676.39	-676.39
	bound	-Inf	-676.39	-Inf	-676.39	-676.39
	runtime	0.28	0.08	1.21	0.15	0.17
5000264	value	-745.64	-745.64	-745.64	-745.64	-745.64
	bound	-Inf	-745.64	-Inf	-745.64	-745.64
	runtime	0.29	0.08	0.88	0.15	0.18

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
5000265	value	-730.51	-730.51	-730.51	-730.51	-730.51
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.21	0.08	0.86	0.16	0.18
6000000	value	-864.54	-864.54	-864.54	-864.54	-864.54
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.11	0.94	0.18	0.21
6000001	value	-912.96	-912.96	-912.96	-912.96	-912.96
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.09	1.05	0.17	0.20
6000002	value	-911.65	-911.65	-911.65	-911.65	-911.65
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.21	0.10	0.76	0.17	0.20
6000003	value	-819.74	-819.74	-819.74	-819.74	-819.74
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.26	0.09	0.80	0.17	0.19
6000004	value	-774.66	-774.97	-774.97	-774.97	-774.97
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.28	0.09	1.34	0.17	0.19
6000005	value	-898.25	-898.25	-898.25	-898.25	-898.25
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.30	0.10	1.09	0.18	0.21
6000006	value	-906.22	-906.51	-906.51	-906.51	-906.51
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.27	0.11	2.30	0.19	0.22
6000007	value	-951.51	-951.72	-951.72	-951.72	-951.72
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.34	0.10	2.28	0.19	0.21
6000008	value	-850.74	-850.74	-850.74	-850.74	-850.74
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.28	0.09	1.10	0.17	0.20
6000009	value	-936.16	-936.16	-936.16	-936.16	-936.16
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.45	0.09	1.84	0.17	0.19
6000010	value	-921.82	-921.82	-921.82	-921.82	-921.82
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.36	0.10	1.66	0.18	0.20
6000011	value	-810.14	-810.14	-810.14	-810.14	-810.14
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.09	1.30	0.17	0.20
6000012	value	-923.83	-923.83	-923.83	-923.83	-923.83
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.30	0.11	1.15	0.18	0.21
6000013	value	-969.94	-969.94	-969.94	-969.94	-969.94
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.28	0.12	1.54	0.19	0.22
6000014	value	-962.80	-962.80	-962.80	-962.80	-962.80
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.10	1.37	0.18	0.20
6000015	value	-866.60	-866.60	-866.60	-866.60	-866.60
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.09	2.18	0.17	0.20
6000016	value	-917.15	-917.15	-917.15	-917.15	-917.15
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.27	0.09	0.71	0.17	0.20
6000017	value	-923.13	-923.13	-923.13	-923.13	-923.13
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.20	0.09	0.57	0.17	0.19
6000018	value	-819.26	-819.26	-819.26	-819.26	-819.26
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.27	0.09	1.97	0.17	0.19
6000019	value	-918.61	-918.61	-918.61	-918.61	-918.61
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.10	1.28	0.19	0.21
6000020	value	-962.65	-962.65	-962.65	-962.65	-962.65
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.11	1.39	0.18	0.21
6000021	value	-897.28	-897.28	-897.28	-897.28	-897.28
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.26	0.11	1.48	0.18	0.21
6000022	value	-1063.22	-1063.22	-1063.22	-1063.22	-1063.22
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.27	0.08	2.09	0.15	0.18
6000023	value	-792.91	-792.91	-792.91	-792.91	-792.91
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.30	0.09	1.63	0.17	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000024	value	-869.08	-869.08	-869.08	-869.08	-869.08
	bound	-Inf	-869.08	-Inf	-869.08	-869.08
	runtime	0.25	0.09	0.80	0.17	0.19
6000025	value	-920.50	-920.61	-920.61	-920.61	-920.61
	bound	-Inf	-920.61	-Inf	-920.61	-920.61
	runtime	0.32	0.12	2.45	0.19	0.21
6000026	value	-786.19	-786.52	-786.52	-786.52	-786.52
	bound	-Inf	-786.52	-Inf	-786.52	-786.52
	runtime	0.38	0.10	0.86	0.17	0.19
6000027	value	-950.75	-950.75	-950.75	-950.75	-950.75
	bound	-Inf	-950.75	-Inf	-950.75	-950.75
	runtime	0.23	0.09	0.70	0.18	0.21
6000028	value	-953.32	-953.32	-953.32	-953.32	-953.32
	bound	-Inf	-953.32	-Inf	-953.32	-953.32
	runtime	0.24	0.10	0.88	0.18	0.21
6000029	value	-858.09	-858.09	-858.09	-858.09	-858.09
	bound	-Inf	-858.09	-Inf	-858.09	-858.09
	runtime	0.24	0.09	1.09	0.17	0.20
6000030	value	-917.40	-917.40	-917.40	-917.40	-917.40
	bound	-Inf	-917.40	-Inf	-917.40	-917.40
	runtime	0.27	0.09	0.73	0.18	0.20
6000031	value	-860.62	-860.62	-860.62	-860.62	-860.62
	bound	-Inf	-860.62	-Inf	-860.62	-860.62
	runtime	0.25	0.09	1.65	0.17	0.19
6000032	value	-981.88	-981.88	-981.88	-981.88	-981.88
	bound	-Inf	-981.88	-Inf	-981.88	-981.88
	runtime	0.51	0.11	1.48	0.20	0.22
6000033	value	-851.99	-851.99	-851.99	-851.99	-851.99
	bound	-Inf	-851.99	-Inf	-851.99	-851.99
	runtime	0.26	0.10	2.49	0.19	0.21
6000034	value	-698.03	-698.03	-698.03	-698.03	-698.03
	bound	-Inf	-698.03	-Inf	-698.03	-698.03
	runtime	0.30	0.11	1.37	0.18	0.20
6000035	value	-901.56	-901.56	-901.56	-901.56	-901.56
	bound	-Inf	-901.56	-Inf	-901.56	-901.56
	runtime	0.20	0.08	0.84	0.17	0.20
6000036	value	-777.46	-777.46	-777.46	-777.46	-777.46
	bound	-Inf	-777.46	-Inf	-777.46	-777.46
	runtime	0.47	0.10	1.06	0.17	0.20
6000037	value	-908.14	-908.14	-908.14	-908.14	-908.14
	bound	-Inf	-908.14	-Inf	-908.14	-908.14
	runtime	0.25	0.11	1.32	0.19	0.22
6000038	value	-785.39	-786.56	-785.79	-786.56	-786.56
	bound	-Inf	-786.56	-Inf	-786.56	-786.56
	runtime	0.25	0.10	1.23	0.17	0.20
6000039	value	-865.40	-866.86	-866.86	-866.86	-866.86
	bound	-Inf	-866.86	-Inf	-866.86	-866.86
	runtime	0.31	0.11	2.04	0.17	0.20
6000040	value	-762.91	-762.91	-762.91	-762.91	-762.91
	bound	-Inf	-762.91	-Inf	-762.91	-762.91
	runtime	0.22	0.09	0.95	0.16	0.19
6000041	value	-923.10	-923.10	-923.10	-923.10	-923.10
	bound	-Inf	-923.10	-Inf	-923.10	-923.10
	runtime	0.22	0.09	0.74	0.18	0.20
6000042	value	-848.62	-848.62	-848.62	-848.62	-848.62
	bound	-Inf	-848.62	-Inf	-848.62	-848.62
	runtime	0.21	0.08	1.76	0.17	0.20
6000043	value	-929.64	-929.64	-929.64	-929.64	-929.64
	bound	-Inf	-929.64	-Inf	-929.64	-929.64
	runtime	0.20	0.09	1.17	0.17	0.20
6000044	value	-762.38	-762.38	-762.38	-762.38	-762.38
	bound	-Inf	-762.38	-Inf	-762.38	-762.38
	runtime	0.34	0.09	1.09	0.17	0.19
6000045	value	-870.52	-870.52	-870.52	-870.52	-870.52
	bound	-Inf	-870.52	-Inf	-870.52	-870.52
	runtime	0.29	0.10	1.13	0.18	0.21
6000046	value	-827.81	-827.81	-827.81	-827.81	-827.81
	bound	-Inf	-827.81	-Inf	-827.81	-827.81
	runtime	0.27	0.08	0.76	0.16	0.19
6000047	value	-872.20	-872.40	-872.20	-872.40	-872.40
	bound	-Inf	-872.40	-Inf	-872.40	-872.40
	runtime	0.26	0.09	0.77	0.18	0.21
6000048	value	-856.70	-856.87	-856.70	-856.87	-856.87
	bound	-Inf	-856.87	-Inf	-856.87	-856.87
	runtime	0.31	0.10	0.95	0.18	0.21

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000049	value	-853.88	-853.92	-853.88	-853.92	-853.92
	bound	-Inf	-853.92	-Inf	-853.92	-853.92
	runtime	0.28	0.10	1.74	0.18	0.21
6000050	value	-885.48	-885.48	-885.48	-885.48	-885.48
	bound	-Inf	-885.48	-Inf	-885.48	-885.48
	runtime	0.23	0.09	0.97	0.19	0.21
6000051	value	-920.98	-920.98	-920.98	-920.98	-920.98
	bound	-Inf	-920.98	-Inf	-920.98	-920.98
	runtime	0.19	0.09	0.97	0.17	0.20
6000052	value	-917.26	-917.26	-917.26	-917.26	-917.26
	bound	-Inf	-917.26	-Inf	-917.26	-917.26
	runtime	0.41	0.09	1.43	0.18	0.21
6000053	value	-920.71	-920.71	-920.71	-920.71	-920.71
	bound	-Inf	-920.71	-Inf	-920.71	-920.71
	runtime	0.58	0.09	0.94	0.17	0.20
6000054	value	-787.92	-787.92	-787.92	-787.92	-787.92
	bound	-Inf	-787.92	-Inf	-787.92	-787.92
	runtime	0.22	0.09	1.05	0.16	0.19
6000055	value	-859.93	-859.93	-859.93	-859.93	-859.93
	bound	-Inf	-859.93	-Inf	-859.93	-859.93
	runtime	0.22	0.09	1.47	0.18	0.21
6000056	value	-896.18	-896.72	-896.18	-896.72	-896.72
	bound	-Inf	-896.72	-Inf	-896.72	-896.72
	runtime	0.29	0.10	1.69	0.17	0.20
6000057	value	-922.02	-922.02	-922.02	-922.02	-922.02
	bound	-Inf	-922.02	-Inf	-922.02	-922.02
	runtime	0.44	0.11	1.72	0.19	0.22
6000058	value	-852.76	-852.76	-852.76	-852.76	-852.76
	bound	-Inf	-852.76	-Inf	-852.76	-852.76
	runtime	0.23	0.10	0.95	0.17	0.19
6000059	value	-797.63	-797.63	-797.63	-797.63	-797.63
	bound	-Inf	-797.63	-Inf	-797.63	-797.63
	runtime	0.26	0.10	1.53	0.17	0.20
6000060	value	-771.89	-771.89	-771.89	-771.89	-771.89
	bound	-Inf	-771.89	-Inf	-771.89	-771.89
	runtime	0.24	0.08	1.17	0.16	0.19
6000061	value	-893.91	-893.91	-893.91	-893.91	-893.91
	bound	-Inf	-893.91	-Inf	-893.91	-893.91
	runtime	0.32	0.10	1.01	0.17	0.20
6000062	value	-819.39	-819.39	-819.39	-819.39	-819.39
	bound	-Inf	-819.39	-Inf	-819.39	-819.39
	runtime	0.27	0.09	1.96	0.17	0.20
6000063	value	-752.14	-752.14	-752.14	-752.14	-752.14
	bound	-Inf	-752.14	-Inf	-752.14	-752.14
	runtime	0.29	0.10	1.34	0.17	0.19
6000064	value	-1008.17	-1008.17	-1008.17	-1008.17	-1008.17
	bound	-Inf	-1008.17	-Inf	-1008.17	-1008.17
	runtime	0.24	0.10	1.09	0.18	0.21
6000065	value	-902.44	-902.44	-902.44	-902.44	-902.44
	bound	-Inf	-902.44	-Inf	-902.44	-902.44
	runtime	0.28	0.10	2.23	0.18	0.21
6000066	value	-907.46	-907.46	-907.46	-907.46	-907.46
	bound	-Inf	-907.46	-Inf	-907.46	-907.46
	runtime	0.20	0.09	0.96	0.18	0.20
6000067	value	-895.76	-895.82	-895.76	-895.82	-895.82
	bound	-Inf	-895.82	-Inf	-895.82	-895.82
	runtime	0.28	0.12	1.08	0.19	0.22
6000068	value	-716.11	-716.11	-716.11	-716.11	-716.11
	bound	-Inf	-716.11	-Inf	-716.11	-716.11
	runtime	0.17	0.07	0.59	0.14	0.17
6000069	value	-907.79	-907.79	-907.79	-907.79	-907.79
	bound	-Inf	-907.79	-Inf	-907.79	-907.79
	runtime	0.19	0.08	1.22	0.16	0.19
6000070	value	-826.39	-826.39	-826.39	-826.39	-826.39
	bound	-Inf	-826.39	-Inf	-826.39	-826.39
	runtime	0.40	0.10	1.78	0.19	0.22
6000071	value	-960.36	-960.36	-960.36	-960.36	-960.36
	bound	-Inf	-960.36	-Inf	-960.36	-960.36
	runtime	0.29	0.09	0.95	0.18	0.21
6000072	value	-824.72	-830.63	-824.72	-830.63	-830.63
	bound	-Inf	-830.63	-Inf	-830.63	-830.63
	runtime	0.48	0.10	1.10	0.17	0.20
6000073	value	-818.40	-818.40	-818.40	-818.40	-818.40
	bound	-Inf	-818.40	-Inf	-818.40	-818.40
	runtime	0.30	0.12	1.80	0.18	0.21

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000074	value	-829.15	-829.15	-829.15	-829.15	-829.15
	bound	-Inf	-829.15	-Inf	-829.15	-829.15
	runtime	0.20	0.09	1.25	0.18	0.21
6000075	value	-1038.05	-1038.05	-1038.05	-1038.05	-1038.05
	bound	-Inf	-1038.05	-Inf	-1038.05	-1038.05
	runtime	0.26	0.10	0.56	0.16	0.19
6000076	value	-775.04	-775.04	-775.04	-775.04	-775.04
	bound	-Inf	-775.04	-Inf	-775.04	-775.04
	runtime	0.24	0.10	1.29	0.17	0.20
6000077	value	-873.89	-873.95	-873.95	-873.95	-873.95
	bound	-Inf	-873.95	-Inf	-873.95	-873.95
	runtime	0.22	0.10	2.04	0.17	0.20
6000078	value	-890.97	-890.97	-890.97	-890.97	-890.97
	bound	-Inf	-890.97	-Inf	-890.97	-890.97
	runtime	0.40	0.11	2.35	0.19	0.22
6000079	value	-763.89	-764.08	-763.89	-764.08	-764.08
	bound	-Inf	-764.08	-Inf	-764.08	-764.08
	runtime	0.23	0.10	1.49	0.17	0.20
6000080	value	-888.15	-888.15	-888.15	-888.15	-888.15
	bound	-Inf	-888.15	-Inf	-888.15	-888.15
	runtime	0.23	0.09	0.80	0.18	0.20
6000081	value	-889.71	-889.71	-889.71	-889.71	-889.71
	bound	-Inf	-889.71	-Inf	-889.71	-889.71
	runtime	0.21	0.10	0.92	0.17	0.19
6000082	value	-1001.70	-1001.70	-1001.70	-1001.70	-1001.70
	bound	-Inf	-1001.70	-Inf	-1001.70	-1001.70
	runtime	0.25	0.09	1.20	0.16	0.19
6000083	value	-830.91	-830.91	-830.91	-830.91	-830.91
	bound	-Inf	-830.91	-Inf	-830.91	-830.91
	runtime	0.24	0.10	1.60	0.17	0.19
6000084	value	-886.93	-886.93	-886.93	-886.93	-886.93
	bound	-Inf	-886.93	-Inf	-886.93	-886.93
	runtime	0.36	0.11	1.39	0.19	0.21
6000085	value	-875.23	-875.23	-875.23	-875.23	-875.23
	bound	-Inf	-875.23	-Inf	-875.23	-875.23
	runtime	0.28	0.11	2.64	0.17	0.20
6000086	value	-970.44	-970.44	-970.44	-970.44	-970.44
	bound	-Inf	-970.44	-Inf	-970.44	-970.44
	runtime	0.33	0.10	1.28	0.18	0.20
6000087	value	-822.17	-823.03	-822.17	-823.03	-823.03
	bound	-Inf	-823.03	-Inf	-823.03	-823.03
	runtime	1.11	0.11	1.10	0.17	0.20
6000088	value	-843.12	-844.07	-844.07	-844.07	-844.07
	bound	-Inf	-844.07	-Inf	-844.07	-844.07
	runtime	0.22	0.11	0.83	0.18	0.21
6000089	value	-961.59	-961.59	-961.59	-961.59	-961.59
	bound	-Inf	-961.59	-Inf	-961.59	-961.59
	runtime	0.29	0.09	1.64	0.18	0.21
6000090	value	-866.42	-866.42	-866.42	-866.42	-866.42
	bound	-Inf	-866.42	-Inf	-866.42	-866.42
	runtime	0.26	0.11	1.22	0.18	0.21
6000091	value	-912.24	-912.24	-912.24	-912.24	-912.24
	bound	-Inf	-912.24	-Inf	-912.24	-912.24
	runtime	0.26	0.10	0.84	0.18	0.20
6000092	value	-878.99	-878.99	-878.99	-878.99	-878.99
	bound	-Inf	-878.99	-Inf	-878.99	-878.99
	runtime	0.36	0.10	1.22	0.18	0.21
6000093	value	-880.66	-880.66	-880.66	-880.66	-880.66
	bound	-Inf	-880.66	-Inf	-880.66	-880.66
	runtime	0.31	0.10	1.29	0.17	0.20
6000094	value	-831.93	-832.11	-831.93	-832.11	-832.11
	bound	-Inf	-832.11	-Inf	-832.11	-832.11
	runtime	0.24	0.10	0.96	0.17	0.20
6000095	value	-885.06	-885.06	-885.06	-885.06	-885.06
	bound	-Inf	-885.06	-Inf	-885.06	-885.06
	runtime	0.33	0.09	0.72	0.17	0.20
6000096	value	-889.27	-889.27	-889.27	-889.27	-889.27
	bound	-Inf	-889.27	-Inf	-889.27	-889.27
	runtime	0.33	0.09	1.29	0.17	0.20
6000097	value	-856.71	-856.71	-856.71	-856.71	-856.71
	bound	-Inf	-856.71	-Inf	-856.71	-856.71
	runtime	0.24	0.10	0.95	0.17	0.19
6000098	value	-729.77	-730.23	-729.77	-730.23	-730.23
	bound	-Inf	-730.23	-Inf	-730.23	-730.23
	runtime	0.23	0.09	0.81	0.16	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000099	value	-928.91	-928.91	-928.91	-928.91	-928.91
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.26	0.10	1.49	0.17	0.20
6000100	value	-948.29	-948.29	-948.29	-948.29	-948.29
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.26	0.09	1.18	0.17	0.19
6000101	value	-814.84	-814.84	-814.84	-814.84	-814.84
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.42	0.10	1.91	0.17	0.19
6000102	value	-806.34	-806.34	-806.34	-806.34	-806.34
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.30	0.11	2.57	0.18	0.20
6000103	value	-801.89	-801.89	-801.89	-801.89	-801.89
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.09	0.95	0.17	0.19
6000104	value	-1111.50	-1111.50	-1111.50	-1111.50	-1111.50
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.18	0.07	0.64	0.15	0.17
6000105	value	-1068.29	-1068.29	-1068.29	-1068.29	-1068.29
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.08	1.40	0.16	0.19
6000106	value	-963.10	-963.10	-963.10	-963.10	-963.10
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.20	0.08	1.37	0.17	0.20
6000107	value	-769.23	-769.23	-769.23	-769.23	-769.23
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.08	1.24	0.17	0.19
6000108	value	-756.29	-756.29	-756.29	-756.29	-756.29
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.09	2.60	0.17	0.20
6000109	value	-955.50	-955.50	-955.50	-955.50	-955.50
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.39	0.10	0.89	0.18	0.20
6000110	value	-691.70	-691.70	-691.70	-691.70	-691.70
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.34	0.11	2.54	0.18	0.21
6000111	value	-854.07	-854.07	-854.07	-854.07	-854.07
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.09	2.20	0.18	0.21
6000112	value	-945.47	-945.47	-945.47	-945.47	-945.47
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.10	1.29	0.18	0.21
6000113	value	-894.72	-894.72	-894.72	-894.72	-894.72
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.09	1.00	0.17	0.20
6000114	value	-802.85	-802.85	-802.85	-802.85	-802.85
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.33	0.09	1.14	0.16	0.19
6000115	value	-864.59	-864.59	-864.59	-864.59	-864.59
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.09	1.05	0.18	0.20
6000116	value	-864.49	-864.49	-864.49	-864.49	-864.49
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.37	0.10	1.64	0.18	0.20
6000117	value	-841.28	-841.28	-841.28	-841.28	-841.28
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.28	0.10	1.28	0.17	0.20
6000118	value	-785.37	-785.37	-785.37	-785.37	-785.37
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.11	1.06	0.19	0.21
6000119	value	-858.32	-858.32	-858.32	-858.32	-858.32
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.09	0.65	0.17	0.20
6000120	value	-924.06	-924.06	-924.06	-924.06	-924.06
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.31	0.09	1.02	0.18	0.21
6000121	value	-892.97	-892.97	-892.97	-892.97	-892.97
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.21	0.09	0.84	0.17	0.20
6000122	value	-924.26	-924.26	-924.26	-924.26	-924.26
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.09	0.98	0.18	0.21
6000123	value	-850.46	-850.46	-850.46	-850.46	-850.46
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.09	0.61	0.18	0.20

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000124	value	-812.86	-812.99	-812.99	-812.99	-812.99
	bound	-Inf	-812.99	-Inf	-812.99	-812.99
	runtime	0.38	0.09	1.66	0.18	0.21
6000125	value	-867.83	-867.83	-867.83	-867.83	-867.83
	bound	-Inf	-867.83	-Inf	-867.83	-867.83
	runtime	0.23	0.09	0.84	0.17	0.20
6000126	value	-747.48	-750.46	-750.46	-750.46	-750.46
	bound	-Inf	-750.46	-Inf	-750.46	-750.46
	runtime	0.26	0.09	0.85	0.17	0.20
6000127	value	-776.51	-776.51	-776.51	-776.51	-776.51
	bound	-Inf	-776.51	-Inf	-776.51	-776.51
	runtime	0.23	0.08	0.62	0.17	0.19
6000128	value	-865.86	-865.86	-865.86	-865.86	-865.86
	bound	-Inf	-865.86	-Inf	-865.86	-865.86
	runtime	0.34	0.11	1.99	0.18	0.20
6000129	value	-861.15	-861.15	-861.15	-861.15	-861.15
	bound	-Inf	-861.15	-Inf	-861.15	-861.15
	runtime	0.21	0.09	1.27	0.17	0.20
6000130	value	-883.45	-884.19	-883.45	-884.19	-884.19
	bound	-Inf	-884.19	-Inf	-884.19	-884.19
	runtime	0.34	0.10	1.88	0.18	0.20
6000131	value	-884.16	-884.16	-884.16	-884.16	-884.16
	bound	-Inf	-884.16	-Inf	-884.16	-884.16
	runtime	0.31	0.10	1.31	0.18	0.21
6000132	value	-850.86	-850.86	-850.86	-850.86	-850.86
	bound	-Inf	-850.86	-Inf	-850.86	-850.86
	runtime	0.27	0.09	1.47	0.18	0.20
6000133	value	-780.42	-780.42	-780.42	-780.42	-780.42
	bound	-Inf	-780.42	-Inf	-780.42	-780.42
	runtime	0.28	0.09	1.73	0.18	0.21
6000134	value	-855.51	-855.51	-855.51	-855.51	-855.51
	bound	-Inf	-855.51	-Inf	-855.51	-855.51
	runtime	0.32	0.12	1.45	0.18	0.21
6000135	value	-771.61	-772.24	-771.61	-772.24	-772.24
	bound	-Inf	-772.24	-Inf	-772.24	-772.24
	runtime	0.26	0.10	0.67	0.17	0.20
6000136	value	-823.60	-825.63	-823.60	-825.63	-825.63
	bound	-Inf	-825.63	-Inf	-825.63	-825.63
	runtime	0.41	0.11	2.41	0.19	0.21
6000137	value	-818.82	-821.11	-821.11	-821.11	-821.11
	bound	-Inf	-821.11	-Inf	-821.11	-821.11
	runtime	0.30	0.10	1.45	0.17	0.20
6000138	value	-889.56	-891.99	-891.99	-891.99	-891.99
	bound	-Inf	-891.99	-Inf	-891.99	-891.99
	runtime	0.45	0.11	1.28	0.18	0.21
6000139	value	-943.57	-943.57	-943.57	-943.57	-943.57
	bound	-Inf	-943.57	-Inf	-943.57	-943.57
	runtime	0.21	0.10	1.20	0.19	0.22
6000140	value	-854.23	-854.23	-854.23	-854.23	-854.23
	bound	-Inf	-854.23	-Inf	-854.23	-854.23
	runtime	0.28	0.10	1.20	0.18	0.21
6000141	value	-862.75	-862.86	-862.86	-862.86	-862.86
	bound	-Inf	-862.86	-Inf	-862.86	-862.86
	runtime	0.32	0.10	3.47	0.17	0.20
6000142	value	-851.96	-852.04	-851.96	-852.04	-852.04
	bound	-Inf	-852.04	-Inf	-852.04	-852.04
	runtime	0.27	0.11	0.91	0.17	0.20
6000143	value	-865.33	-865.33	-865.33	-865.33	-865.33
	bound	-Inf	-865.33	-Inf	-865.33	-865.33
	runtime	0.31	0.10	2.04	0.17	0.20
6000144	value	-845.41	-845.41	-845.41	-845.41	-845.41
	bound	-Inf	-845.41	-Inf	-845.41	-845.41
	runtime	0.36	0.09	1.90	0.17	0.19
6000145	value	-855.57	-855.57	-855.57	-855.57	-855.57
	bound	-Inf	-855.57	-Inf	-855.57	-855.57
	runtime	0.22	0.09	1.01	0.17	0.20
6000146	value	-1078.28	-1078.28	-1078.28	-1078.28	-1078.28
	bound	-Inf	-1078.28	-Inf	-1078.28	-1078.28
	runtime	0.22	0.09	1.30	0.17	0.20
6000147	value	-909.94	-909.94	-909.94	-909.94	-909.94
	bound	-Inf	-909.94	-Inf	-909.94	-909.94
	runtime	0.30	0.10	1.80	0.18	0.21
6000148	value	-901.13	-901.13	-901.13	-901.13	-901.13
	bound	-Inf	-901.13	-Inf	-901.13	-901.13
	runtime	0.21	0.08	0.58	0.16	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000149	value	-860.84	-860.84	-860.84	-860.84	-860.84
	bound	-Inf	-860.84	-Inf	-860.84	-860.84
	runtime	0.28	0.09	0.96	0.17	0.20
6000150	value	-843.77	-843.77	-843.63	-843.77	-843.77
	bound	-Inf	-843.77	-Inf	-843.77	-843.77
	runtime	0.27	0.11	1.67	0.18	0.21
6000151	value	-810.13	-811.30	-810.13	-811.30	-811.30
	bound	-Inf	-811.30	-Inf	-811.30	-811.30
	runtime	0.30	0.10	0.83	0.17	0.20
6000152	value	-886.74	-886.95	-886.74	-886.95	-886.95
	bound	-Inf	-886.95	-Inf	-886.95	-886.95
	runtime	0.35	0.10	1.21	0.17	0.19
6000153	value	-857.60	-857.60	-857.60	-857.60	-857.60
	bound	-Inf	-857.60	-Inf	-857.60	-857.60
	runtime	0.40	0.10	0.95	0.17	0.19
6000154	value	-799.99	-799.99	-799.99	-799.99	-799.99
	bound	-Inf	-799.99	-Inf	-799.99	-799.99
	runtime	0.19	0.09	1.16	0.17	0.19
6000155	value	-905.79	-907.89	-907.89	-907.89	-907.89
	bound	-Inf	-907.89	-Inf	-907.89	-907.89
	runtime	0.40	0.11	1.45	0.19	0.22
6000156	value	-852.95	-853.69	-853.69	-853.69	-853.69
	bound	-Inf	-853.69	-Inf	-853.69	-853.69
	runtime	0.36	0.11	1.66	0.19	0.21
6000157	value	-832.17	-832.17	-832.17	-832.17	-832.17
	bound	-Inf	-832.17	-Inf	-832.17	-832.17
	runtime	0.24	0.08	1.27	0.17	0.19
6000158	value	-825.36	-825.36	-825.36	-825.36	-825.36
	bound	-Inf	-825.36	-Inf	-825.36	-825.36
	runtime	1.59	0.10	2.10	0.18	0.21
6000159	value	-816.97	-816.97	-816.97	-816.97	-816.97
	bound	-Inf	-816.97	-Inf	-816.97	-816.97
	runtime	0.21	0.08	0.71	0.16	0.19
6000160	value	-813.28	-813.28	-813.28	-813.28	-813.28
	bound	-Inf	-813.28	-Inf	-813.28	-813.28
	runtime	0.24	0.08	0.56	0.17	0.20
6000161	value	-891.41	-891.41	-891.41	-891.41	-891.41
	bound	-Inf	-891.41	-Inf	-891.41	-891.41
	runtime	0.45	0.10	0.98	0.16	0.19
6000162	value	-1034.63	-1034.63	-1034.63	-1034.63	-1034.63
	bound	-Inf	-1034.63	-Inf	-1034.63	-1034.63
	runtime	0.34	0.11	2.60	0.18	0.20
6000163	value	-666.53	-667.12	-667.12	-667.12	-667.12
	bound	-Inf	-667.12	-Inf	-667.12	-667.12
	runtime	0.27	0.11	1.38	0.17	0.19
6000164	value	-733.39	-733.39	-733.39	-733.39	-733.39
	bound	-Inf	-733.39	-Inf	-733.39	-733.39
	runtime	0.26	0.09	1.17	0.16	0.18
6000165	value	-926.03	-926.03	-926.03	-926.03	-926.03
	bound	-Inf	-926.03	-Inf	-926.03	-926.03
	runtime	0.27	0.09	1.52	0.18	0.20
6000166	value	-894.09	-894.09	-894.09	-894.09	-894.09
	bound	-Inf	-894.09	-Inf	-894.09	-894.09
	runtime	0.26	0.10	1.34	0.18	0.21
6000167	value	-825.65	-825.65	-825.65	-825.65	-825.65
	bound	-Inf	-825.65	-Inf	-825.65	-825.65
	runtime	0.28	0.11	1.88	0.16	0.19
6000168	value	-814.00	-814.00	-814.00	-814.00	-814.00
	bound	-Inf	-814.00	-Inf	-814.00	-814.00
	runtime	0.33	0.11	1.14	0.18	0.20
6000169	value	-854.33	-855.30	-854.33	-855.30	-855.30
	bound	-Inf	-855.30	-Inf	-855.30	-855.30
	runtime	0.42	0.13	6.90	0.18	0.21
6000170	value	-805.83	-805.83	-805.83	-805.83	-805.83
	bound	-Inf	-805.83	-Inf	-805.83	-805.83
	runtime	0.22	0.09	1.29	0.16	0.19
6000171	value	-864.20	-864.20	-864.20	-864.20	-864.20
	bound	-Inf	-864.20	-Inf	-864.20	-864.20
	runtime	0.20	0.09	2.04	0.16	0.19
6000172	value	-844.84	-844.84	-844.84	-844.84	-844.84
	bound	-Inf	-844.84	-Inf	-844.84	-844.84
	runtime	0.21	0.11	1.16	0.17	0.19
6000173	value	-826.74	-826.74	-826.74	-826.74	-826.74
	bound	-Inf	-826.74	-Inf	-826.74	-826.74
	runtime	0.21	0.09	0.93	0.17	0.20

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000174	value	-820.89	-820.89	-820.89	-820.89	-820.89
	bound	-Inf	-820.89	-Inf	-820.89	-820.89
	runtime	0.42	0.12	1.42	0.18	0.21
6000175	value	-821.95	-821.95	-821.95	-821.95	-821.95
	bound	-Inf	-821.95	-Inf	-821.95	-821.95
	runtime	0.30	0.12	1.56	0.17	0.20
6000176	value	-813.60	-814.00	-813.71	-814.00	-814.00
	bound	-Inf	-814.00	-Inf	-814.00	-814.00
	runtime	0.31	0.12	3.51	0.18	0.21
6000177	value	-810.47	-810.47	-810.47	-810.47	-810.47
	bound	-Inf	-810.47	-Inf	-810.47	-810.47
	runtime	0.25	0.09	0.93	0.16	0.18
6000178	value	-881.43	-881.43	-881.43	-881.43	-881.43
	bound	-Inf	-881.43	-Inf	-881.43	-881.43
	runtime	0.24	0.10	0.97	0.18	0.21
6000179	value	-750.02	-750.02	-750.02	-750.02	-750.02
	bound	-Inf	-750.02	-Inf	-750.02	-750.02
	runtime	0.33	0.10	1.42	0.17	0.19
6000180	value	-865.61	-866.17	-866.17	-866.17	-866.17
	bound	-Inf	-866.17	-Inf	-866.17	-866.17
	runtime	0.22	0.09	1.31	0.17	0.19
6000181	value	-860.79	-861.33	-861.33	-861.33	-861.33
	bound	-Inf	-861.33	-Inf	-861.33	-861.33
	runtime	0.34	0.11	1.18	0.18	0.21
6000182	value	-950.57	-950.57	-950.57	-950.57	-950.57
	bound	-Inf	-950.57	-Inf	-950.57	-950.57
	runtime	0.31	0.10	1.72	0.18	0.20
6000183	value	-929.44	-929.45	-929.45	-929.45	-929.45
	bound	-Inf	-929.45	-Inf	-929.45	-929.45
	runtime	0.29	0.09	1.37	0.17	0.20
6000184	value	-973.56	-973.56	-973.56	-973.56	-973.56
	bound	-Inf	-973.56	-Inf	-973.56	-973.56
	runtime	0.24	0.10	1.10	0.19	0.22
6000185	value	-976.09	-977.79	-976.09	-977.79	-977.79
	bound	-Inf	-977.79	-Inf	-977.79	-977.79
	runtime	0.31	0.12	1.11	0.19	0.21
6000186	value	-1033.87	-1034.89	-1034.89	-1034.89	-1034.89
	bound	-Inf	-1034.89	-Inf	-1034.89	-1034.89
	runtime	0.28	0.12	1.29	0.19	0.21
6000187	value	-951.97	-952.39	-952.39	-952.39	-952.39
	bound	-Inf	-952.39	-Inf	-952.39	-952.39
	runtime	0.33	0.11	1.52	0.19	0.22
6000188	value	-771.44	-771.44	-771.44	-771.44	-771.44
	bound	-Inf	-771.44	-Inf	-771.44	-771.44
	runtime	0.24	0.11	1.46	0.17	0.20
6000189	value	-799.40	-799.40	-799.40	-799.40	-799.40
	bound	-Inf	-799.40	-Inf	-799.40	-799.40
	runtime	0.35	0.11	1.03	0.17	0.19
6000190	value	-869.30	-869.30	-869.30	-869.30	-869.30
	bound	-Inf	-869.30	-Inf	-869.30	-869.30
	runtime	0.27	0.08	1.25	0.17	0.19
6000191	value	-874.79	-875.39	-875.39	-875.39	-875.39
	bound	-Inf	-875.39	-Inf	-875.39	-875.39
	runtime	0.25	0.10	1.90	0.17	0.20
6000192	value	-924.70	-924.70	-924.70	-924.70	-924.70
	bound	-Inf	-924.70	-Inf	-924.70	-924.70
	runtime	0.20	0.09	0.68	0.17	0.20
6000193	value	-957.80	-957.80	-957.80	-957.80	-957.80
	bound	-Inf	-957.80	-Inf	-957.80	-957.80
	runtime	0.24	0.09	1.44	0.18	0.20
6000194	value	-901.00	-901.00	-901.00	-901.00	-901.00
	bound	-Inf	-901.00	-Inf	-901.00	-901.00
	runtime	0.22	0.09	1.13	0.17	0.20
6000195	value	-970.87	-970.87	-970.87	-970.87	-970.87
	bound	-Inf	-970.87	-Inf	-970.87	-970.87
	runtime	0.27	0.09	1.09	0.19	0.21
6000196	value	-824.77	-825.33	-824.77	-825.33	-825.33
	bound	-Inf	-825.33	-Inf	-825.33	-825.33
	runtime	0.24	0.10	1.65	0.17	0.20
6000197	value	-999.60	-999.60	-999.60	-999.60	-999.60
	bound	-Inf	-999.60	-Inf	-999.60	-999.60
	runtime	0.32	0.10	1.66	0.19	0.22
6000198	value	-923.85	-925.87	-925.87	-925.87	-925.87
	bound	-Inf	-925.87	-Inf	-925.87	-925.87
	runtime	0.31	0.09	0.91	0.18	0.21

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000199	value	-998.07	-998.07	-998.07	-998.07	-998.07
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.09	0.77	0.19	0.21
6000200	value	-863.59	-868.36	-863.59	-868.36	-868.36
	bound	-Inf	-868.36	-Inf	-868.36	-868.36
	runtime	0.33	0.10	1.10	0.17	0.19
6000201	value	-875.31	-875.31	-875.31	-875.31	-875.31
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.26	0.10	1.74	0.19	0.22
6000202	value	-793.90	-795.41	-795.41	-795.41	-795.41
	bound	-Inf	-795.41	-Inf	-795.41	-795.41
	runtime	0.34	0.12	1.55	0.17	0.20
6000203	value	-925.66	-926.02	-925.66	-926.02	-926.02
	bound	-Inf	-926.02	-Inf	-926.02	-926.02
	runtime	0.39	0.10	1.12	0.18	0.20
6000204	value	-962.62	-962.62	-962.62	-962.62	-962.62
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.09	1.51	0.18	0.21
6000205	value	-804.37	-804.37	-804.37	-804.37	-804.37
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.29	0.11	1.17	0.18	0.21
6000206	value	-913.73	-913.96	-913.96	-913.96	-913.96
	bound	-Inf	-913.96	-Inf	-913.96	-913.96
	runtime	0.29	0.10	1.42	0.18	0.20
6000207	value	-876.67	-876.67	-876.67	-876.67	-876.67
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.21	0.09	1.25	0.17	0.19
6000208	value	-849.84	-850.61	-850.61	-850.61	-850.61
	bound	-Inf	-850.61	-Inf	-850.61	-850.61
	runtime	0.23	0.09	1.35	0.17	0.19
6000209	value	-860.65	-861.10	-861.10	-861.10	-861.10
	bound	-Inf	-861.10	-Inf	-861.10	-861.10
	runtime	0.22	0.11	1.50	0.17	0.20
6000210	value	-837.72	-837.72	-837.72	-837.72	-837.72
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.35	0.12	1.21	0.19	0.22
6000211	value	-902.01	-902.01	-902.01	-902.01	-902.01
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.11	1.34	0.17	0.20
6000212	value	-793.76	-794.22	-794.22	-794.22	-794.22
	bound	-Inf	-794.22	-Inf	-794.22	-794.22
	runtime	0.28	0.12	1.06	0.17	0.20
6000213	value	-849.88	-849.88	-849.88	-849.88	-849.88
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.30	0.11	1.07	0.18	0.20
6000214	value	-1041.39	-1041.39	-1041.39	-1041.39	-1041.39
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.09	0.46	0.17	0.20
6000215	value	-858.36	-858.55	-858.36	-858.55	-858.55
	bound	-Inf	-858.55	-Inf	-858.55	-858.55
	runtime	0.59	0.09	0.62	0.18	0.20
6000216	value	-881.60	-881.60	-881.60	-881.60	-881.60
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.23	0.09	1.92	0.17	0.20
6000217	value	-951.02	-951.02	-951.02	-951.02	-951.02
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.29	0.10	1.35	0.18	0.20
6000218	value	-929.82	-929.82	-929.82	-929.82	-929.82
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.10	1.67	0.18	0.22
6000219	value	-929.83	-929.83	-929.83	-929.83	-929.83
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.24	0.09	1.28	0.17	0.20
6000220	value	-1016.99	-1016.99	-1016.99	-1016.99	-1016.99
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.20	0.09	1.37	0.18	0.21
6000221	value	-916.74	-916.74	-916.74	-916.74	-916.74
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.36	0.11	1.22	0.19	0.22
6000222	value	-923.24	-923.24	-923.24	-923.24	-923.24
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.25	0.10	0.89	0.18	0.21
6000223	value	-932.07	-932.07	-932.07	-932.07	-932.07
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.37	0.10	2.00	0.17	0.20

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000224	value	-945.47	-945.56	-945.56	-945.56	-945.56
	bound	-Inf	-945.56	-Inf	-945.56	-945.56
	runtime	0.26	0.09	1.51	0.18	0.21
6000225	value	-893.01	-893.01	-893.01	-893.01	-893.01
	bound	-Inf	-893.01	-Inf	-893.01	-893.01
	runtime	0.52	0.10	2.65	0.18	0.21
6000226	value	-1022.26	-1022.26	-1022.26	-1022.26	-1022.26
	bound	-Inf	-1022.26	-Inf	-1022.26	-1022.26
	runtime	0.23	0.09	0.91	0.17	0.20
6000227	value	-891.17	-891.17	-891.17	-891.17	-891.17
	bound	-Inf	-891.17	-Inf	-891.17	-891.17
	runtime	0.26	0.10	1.54	0.18	0.20
6000228	value	-890.29	-890.60	-890.36	-890.60	-890.60
	bound	-Inf	-890.60	-Inf	-890.60	-890.60
	runtime	0.28	0.10	2.85	0.17	0.19
6000229	value	-956.18	-956.18	-956.18	-956.18	-956.18
	bound	-Inf	-956.18	-Inf	-956.18	-956.18
	runtime	0.35	0.09	1.64	0.18	0.21
6000230	value	-880.57	-880.57	-880.57	-880.57	-880.57
	bound	-Inf	-880.57	-Inf	-880.57	-880.57
	runtime	0.28	0.10	1.55	0.18	0.20
6000231	value	-955.36	-955.36	-955.36	-955.36	-955.36
	bound	-Inf	-955.36	-Inf	-955.36	-955.36
	runtime	0.19	0.09	1.06	0.17	0.20
6000232	value	-975.22	-975.51	-975.22	-975.51	-975.51
	bound	-Inf	-975.51	-Inf	-975.51	-975.51
	runtime	0.27	0.09	1.18	0.16	0.18
6000233	value	-867.16	-867.16	-867.16	-867.16	-867.16
	bound	-Inf	-867.16	-Inf	-867.16	-867.16
	runtime	0.28	0.11	1.17	0.18	0.21
6000234	value	-870.00	-869.36	-870.00	-869.41	-870.00
	bound	-Inf	-870.00	-Inf	-870.00	-870.00
	runtime	5.70	0.11	1.03	0.17	0.20
6000235	value	-749.76	-749.76	-749.76	-749.76	-749.76
	bound	-Inf	-749.76	-Inf	-749.76	-749.76
	runtime	0.35	0.10	1.36	0.16	0.18
6000236	value	-985.14	-985.14	-985.14	-985.14	-985.14
	bound	-Inf	-985.14	-Inf	-985.14	-985.14
	runtime	0.22	0.09	0.95	0.17	0.20
6000237	value	-918.86	-918.86	-918.86	-918.86	-918.86
	bound	-Inf	-918.86	-Inf	-918.86	-918.86
	runtime	0.25	0.11	1.38	0.18	0.22
6000238	value	-946.93	-946.93	-946.93	-946.93	-946.93
	bound	-Inf	-946.93	-Inf	-946.93	-946.93
	runtime	0.24	0.10	1.57	0.17	0.19
6000239	value	-1075.96	-1075.96	-1075.96	-1075.96	-1075.96
	bound	-Inf	-1075.96	-Inf	-1075.96	-1075.96
	runtime	0.26	0.08	1.43	0.17	0.20
6000240	value	-978.15	-978.15	-978.15	-978.15	-978.15
	bound	-Inf	-978.15	-Inf	-978.15	-978.15
	runtime	0.21	0.09	0.60	0.17	0.20
6000241	value	-941.24	-941.24	-941.24	-941.24	-941.24
	bound	-Inf	-941.24	-Inf	-941.24	-941.24
	runtime	0.23	0.09	0.71	0.18	0.21
6000242	value	-878.92	-878.92	-878.92	-878.92	-878.92
	bound	-Inf	-878.92	-Inf	-878.92	-878.92
	runtime	0.37	0.09	1.14	0.17	0.19
6000243	value	-972.51	-972.51	-972.51	-972.51	-972.51
	bound	-Inf	-972.51	-Inf	-972.51	-972.51
	runtime	0.28	0.09	0.65	0.18	0.22
6000244	value	-941.13	-941.13	-941.13	-941.13	-941.13
	bound	-Inf	-941.13	-Inf	-941.13	-941.13
	runtime	0.26	0.10	1.02	0.18	0.21
6000245	value	-896.70	-896.70	-896.70	-896.70	-896.70
	bound	-Inf	-896.70	-Inf	-896.70	-896.70
	runtime	0.30	0.10	1.22	0.17	0.19
6000246	value	-877.32	-877.32	-877.32	-877.32	-877.32
	bound	-Inf	-877.32	-Inf	-877.32	-877.32
	runtime	0.21	0.09	2.55	0.18	0.20
6000247	value	-911.72	-911.72	-911.72	-911.72	-911.72
	bound	-Inf	-911.72	-Inf	-911.72	-911.72
	runtime	0.28	0.10	0.70	0.18	0.21
6000248	value	-875.54	-875.54	-875.54	-875.54	-875.54
	bound	-Inf	-875.54	-Inf	-875.54	-875.54
	runtime	0.27	0.09	0.89	0.18	0.20

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000249	value	-828.69	-829.46	-828.69	-829.46	-829.46
	bound	-Inf	-829.46	-Inf	-829.46	-829.46
	runtime	0.26	0.09	1.23	0.18	0.20
6000250	value	-930.45	-930.45	-930.45	-930.45	-930.45
	bound	-Inf	-930.45	-Inf	-930.45	-930.45
	runtime	0.39	0.10	1.38	0.17	0.20
6000251	value	-908.64	-908.64	-908.64	-908.64	-908.64
	bound	-Inf	-908.64	-Inf	-908.64	-908.64
	runtime	0.28	0.09	1.31	0.18	0.21
6000252	value	-904.28	-904.28	-904.28	-904.28	-904.28
	bound	-Inf	-904.28	-Inf	-904.28	-904.28
	runtime	0.33	0.09	1.35	0.17	0.20
6000253	value	-939.41	-939.41	-939.41	-939.41	-939.41
	bound	-Inf	-939.41	-Inf	-939.41	-939.41
	runtime	0.21	0.09	0.84	0.18	0.20
6000254	value	-879.69	-879.69	-879.69	-879.69	-879.69
	bound	-Inf	-879.69	-Inf	-879.69	-879.69
	runtime	0.32	0.11	1.05	0.19	0.21
6000255	value	-948.32	-948.32	-948.32	-948.32	-948.32
	bound	-Inf	-948.32	-Inf	-948.32	-948.32
	runtime	0.20	0.09	1.07	0.17	0.20
6000256	value	-1011.92	-1011.92	-1011.92	-1011.92	-1011.92
	bound	-Inf	-1011.92	-Inf	-1011.92	-1011.92
	runtime	0.23	0.11	1.30	0.18	0.21
6000257	value	-996.80	-996.80	-996.80	-996.80	-996.80
	bound	-Inf	-996.80	-Inf	-996.80	-996.80
	runtime	0.19	0.08	1.29	0.17	0.20
6000258	value	-929.75	-929.75	-929.75	-929.75	-929.75
	bound	-Inf	-929.75	-Inf	-929.75	-929.75
	runtime	0.18	0.09	1.24	0.18	0.20
6000259	value	-967.59	-967.59	-967.59	-967.59	-967.59
	bound	-Inf	-967.59	-Inf	-967.59	-967.59
	runtime	0.22	0.09	2.03	0.18	0.20
6000260	value	-922.72	-922.72	-922.72	-922.72	-922.72
	bound	-Inf	-922.72	-Inf	-922.72	-922.72
	runtime	0.21	0.09	1.52	0.18	0.21
6000261	value	-968.46	-971.20	-968.46	-971.20	-971.20
	bound	-Inf	-971.20	-Inf	-971.20	-971.20
	runtime	0.36	0.11	0.96	0.19	0.22
6000262	value	-897.57	-897.57	-897.57	-897.57	-897.57
	bound	-Inf	-897.57	-Inf	-897.57	-897.57
	runtime	0.25	0.08	0.74	0.16	0.19
6000263	value	-1024.08	-1024.08	-1024.08	-1024.08	-1024.08
	bound	-Inf	-1024.08	-Inf	-1024.08	-1024.08
	runtime	0.19	0.09	0.61	0.19	0.22
6000264	value	-969.70	-969.70	-969.70	-969.70	-969.70
	bound	-Inf	-969.70	-Inf	-969.70	-969.70
	runtime	0.23	0.10	1.31	0.19	0.22
6000265	value	-1036.47	-1036.47	-1036.47	-1036.47	-1036.47
	bound	-Inf	-1036.47	-Inf	-1036.47	-1036.47
	runtime	0.23	0.09	0.74	0.16	0.19
6000266	value	-1000.94	-1000.94	-1000.94	-1000.94	-1000.94
	bound	-Inf	-1000.94	-Inf	-1000.94	-1000.94
	runtime	0.20	0.11	1.52	0.19	0.22
6000267	value	-908.40	-908.40	-908.40	-908.40	-908.40
	bound	-Inf	-908.40	-Inf	-908.40	-908.40
	runtime	0.31	0.10	1.44	0.17	0.20
6000268	value	-897.56	-897.56	-897.56	-897.56	-897.56
	bound	-Inf	-897.56	-Inf	-897.56	-897.56
	runtime	0.22	0.09	0.73	0.17	0.19
6000269	value	-958.12	-958.12	-958.12	-958.12	-958.12
	bound	-Inf	-958.12	-Inf	-958.12	-958.12
	runtime	0.24	0.10	1.74	0.18	0.21
6000270	value	-891.38	-891.38	-891.38	-891.38	-891.38
	bound	-Inf	-891.38	-Inf	-891.38	-891.38
	runtime	0.21	0.09	0.97	0.18	0.20
6000271	value	-927.62	-927.62	-927.62	-927.62	-927.62
	bound	-Inf	-927.62	-Inf	-927.62	-927.62
	runtime	0.35	0.09	1.14	0.18	0.20
6000272	value	-866.92	-866.92	-866.92	-866.92	-866.92
	bound	-Inf	-866.92	-Inf	-866.92	-866.92
	runtime	0.33	0.10	1.74	0.18	0.20
6000273	value	-1015.40	-1015.40	-1015.40	-1015.40	-1015.40
	bound	-Inf	-1015.40	-Inf	-1015.40	-1015.40
	runtime	0.27	0.10	0.99	0.18	0.21

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000274	value	-873.48	-873.48	-873.48	-873.48	-873.48
	bound	-Inf	-873.48	-Inf	-873.48	-873.48
	runtime	0.23	0.09	0.71	0.17	0.20
6000275	value	-859.46	-859.46	-859.46	-859.46	-859.46
	bound	-Inf	-859.46	-Inf	-859.46	-859.46
	runtime	0.24	0.09	1.43	0.17	0.20
6000276	value	-905.50	-907.89	-907.89	-907.89	-907.89
	bound	-Inf	-907.89	-Inf	-907.89	-907.89
	runtime	0.27	0.08	2.27	0.17	0.20
6000277	value	-925.31	-926.15	-925.45	-926.15	-926.15
	bound	-Inf	-926.15	-Inf	-926.15	-926.15
	runtime	0.38	0.10	1.21	0.17	0.19
6000278	value	-889.04	-889.27	-889.27	-889.27	-889.27
	bound	-Inf	-889.27	-Inf	-889.27	-889.27
	runtime	0.22	0.08	1.56	0.17	0.19
6000279	value	-928.08	-928.08	-928.08	-928.08	-928.08
	bound	-Inf	-928.08	-Inf	-928.08	-928.08
	runtime	0.25	0.09	2.26	0.18	0.21
6000280	value	-1016.94	-1018.09	-1016.94	-1018.09	-1018.09
	bound	-Inf	-1018.09	-Inf	-1018.09	-1018.09
	runtime	0.63	0.10	1.85	0.17	0.20
6000281	value	-945.15	-945.15	-945.15	-945.15	-945.15
	bound	-Inf	-945.15	-Inf	-945.15	-945.15
	runtime	0.22	0.09	0.79	0.18	0.21
6000282	value	-836.37	-836.37	-836.37	-836.37	-836.37
	bound	-Inf	-836.37	-Inf	-836.37	-836.37
	runtime	0.30	0.12	2.42	0.18	0.21
6000283	value	-808.62	-808.62	-808.62	-808.62	-808.62
	bound	-Inf	-808.62	-Inf	-808.62	-808.62
	runtime	0.25	0.10	1.21	0.18	0.20
6000284	value	-887.93	-887.93	-887.93	-887.93	-887.93
	bound	-Inf	-887.93	-Inf	-887.93	-887.93
	runtime	0.41	0.11	1.03	0.18	0.21
6000285	value	-958.95	-958.95	-958.95	-958.95	-958.95
	bound	-Inf	-958.95	-Inf	-958.95	-958.95
	runtime	0.24	0.09	1.30	0.17	0.19
6000286	value	-858.65	-859.39	-859.15	-859.39	-859.39
	bound	-Inf	-859.39	-Inf	-859.39	-859.39
	runtime	0.29	0.11	2.33	0.17	0.19
6000287	value	-914.03	-914.19	-914.03	-914.19	-914.19
	bound	-Inf	-914.19	-Inf	-914.19	-914.19
	runtime	0.30	0.10	0.78	0.18	0.21
6000288	value	-930.65	-930.65	-930.65	-930.65	-930.65
	bound	-Inf	-930.65	-Inf	-930.65	-930.65
	runtime	0.25	0.09	1.54	0.17	0.20
6000289	value	-978.93	-978.93	-978.93	-978.93	-978.93
	bound	-Inf	-978.93	-Inf	-978.93	-978.93
	runtime	0.23	0.10	1.42	0.18	0.21
6000290	value	-922.56	-922.56	-922.56	-922.56	-922.56
	bound	-Inf	-922.56	-Inf	-922.56	-922.56
	runtime	0.22	0.09	1.02	0.18	0.20
6000291	value	-941.67	-941.67	-941.67	-941.67	-941.67
	bound	-Inf	-941.67	-Inf	-941.67	-941.67
	runtime	0.26	0.09	1.99	0.17	0.20
6000292	value	-1057.67	-1057.67	-1057.67	-1057.67	-1057.67
	bound	-Inf	-1057.67	-Inf	-1057.67	-1057.67
	runtime	0.32	0.12	1.49	0.19	0.22
6000293	value	-1006.22	-1006.22	-1006.22	-1006.22	-1006.22
	bound	-Inf	-1006.22	-Inf	-1006.22	-1006.22
	runtime	0.26	0.10	1.75	0.16	0.19
6000294	value	-808.78	-809.78	-809.78	-809.78	-809.78
	bound	-Inf	-809.78	-Inf	-809.78	-809.78
	runtime	0.30	0.10	1.38	0.17	0.20
6000295	value	-872.34	-872.67	-872.67	-872.67	-872.67
	bound	-Inf	-872.67	-Inf	-872.67	-872.67
	runtime	0.29	0.09	1.47	0.17	0.20
6000296	value	-964.83	-964.83	-964.83	-964.83	-964.83
	bound	-Inf	-964.83	-Inf	-964.83	-964.83
	runtime	0.27	0.12	1.36	0.19	0.22
6000297	value	-847.39	-847.39	-847.39	-847.39	-847.39
	bound	-Inf	-847.39	-Inf	-847.39	-847.39
	runtime	0.35	0.09	0.61	0.17	0.20
6000298	value	-914.94	-915.71	-914.94	-915.71	-915.71
	bound	-Inf	-915.71	-Inf	-915.71	-915.71
	runtime	0.35	0.10	1.03	0.18	0.20

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000299	value	-933.44	-933.44	-933.44	-933.44	-933.44
	bound	-Inf	-933.44	-Inf	-933.44	-933.44
	runtime	0.23	0.09	0.70	0.18	0.20
6000300	value	-840.20	-840.20	-840.20	-840.20	-840.20
	bound	-Inf	-840.20	-Inf	-840.20	-840.20
	runtime	0.31	0.11	1.44	0.18	0.21
6000301	value	-893.34	-893.34	-893.34	-893.34	-893.34
	bound	-Inf	-893.34	-Inf	-893.34	-893.34
	runtime	0.24	0.10	1.23	0.18	0.20
6000302	value	-880.57	-880.57	-880.57	-880.57	-880.57
	bound	-Inf	-880.57	-Inf	-880.57	-880.57
	runtime	0.30	0.10	1.43	0.17	0.20
6000303	value	-948.73	-948.73	-948.73	-948.73	-948.73
	bound	-Inf	-948.73	-Inf	-948.73	-948.73
	runtime	0.27	0.10	0.43	0.18	0.20
6000304	value	-933.01	-933.01	-933.01	-933.01	-933.01
	bound	-Inf	-933.01	-Inf	-933.01	-933.01
	runtime	0.29	0.09	0.84	0.17	0.20
6000305	value	-1053.35	-1053.35	-1053.35	-1053.35	-1053.35
	bound	-Inf	-1053.35	-Inf	-1053.35	-1053.35
	runtime	0.35	0.10	2.23	0.18	0.20
6000306	value	-858.85	-858.85	-858.85	-858.85	-858.85
	bound	-Inf	-858.85	-Inf	-858.85	-858.85
	runtime	0.24	0.09	1.69	0.17	0.20
6000307	value	-887.91	-887.91	-887.91	-887.91	-887.91
	bound	-Inf	-887.91	-Inf	-887.91	-887.91
	runtime	0.62	0.09	2.57	0.17	0.20
6000308	value	-831.91	-831.91	-831.91	-831.91	-831.91
	bound	-Inf	-831.91	-Inf	-831.91	-831.91
	runtime	0.21	0.09	2.49	0.17	0.20
6000309	value	-945.20	-945.20	-945.20	-945.20	-945.20
	bound	-Inf	-945.20	-Inf	-945.20	-945.20
	runtime	0.31	0.09	1.68	0.18	0.20
6000310	value	-826.28	-826.28	-826.28	-826.28	-826.28
	bound	-Inf	-826.28	-Inf	-826.28	-826.28
	runtime	0.18	0.08	1.57	0.16	0.18
6000311	value	-949.17	-949.17	-949.17	-949.17	-949.17
	bound	-Inf	-949.17	-Inf	-949.17	-949.17
	runtime	0.24	0.09	0.65	0.17	0.20
6000312	value	-920.48	-921.00	-920.48	-921.00	-921.00
	bound	-Inf	-921.00	-Inf	-921.00	-921.00
	runtime	0.21	0.09	0.73	0.17	0.19
6000313	value	-815.83	-815.83	-815.83	-815.83	-815.83
	bound	-Inf	-815.83	-Inf	-815.83	-815.83
	runtime	0.23	0.08	1.34	0.16	0.18
6000314	value	-811.50	-811.50	-811.50	-811.50	-811.50
	bound	-Inf	-811.50	-Inf	-811.50	-811.50
	runtime	0.27	0.09	0.97	0.16	0.18
6000315	value	-888.53	-888.53	-888.53	-888.53	-888.53
	bound	-Inf	-888.53	-Inf	-888.53	-888.53
	runtime	0.20	0.09	1.40	0.18	0.20
6000316	value	-906.21	-906.21	-906.21	-906.21	-906.21
	bound	-Inf	-906.21	-Inf	-906.21	-906.21
	runtime	0.24	0.10	1.06	0.18	0.21
6000317	value	-836.38	-836.38	-836.38	-836.38	-836.38
	bound	-Inf	-836.38	-Inf	-836.38	-836.38
	runtime	0.43	0.10	1.04	0.18	0.20
6000318	value	-712.55	-712.55	-712.55	-712.55	-712.55
	bound	-Inf	-712.55	-Inf	-712.55	-712.55
	runtime	0.22	0.08	0.45	0.14	0.16
6000319	value	-924.70	-924.70	-924.70	-924.70	-924.70
	bound	-Inf	-924.70	-Inf	-924.70	-924.70
	runtime	0.25	0.09	1.56	0.18	0.20
6000320	value	-945.98	-945.98	-945.98	-945.98	-945.98
	bound	-Inf	-945.98	-Inf	-945.98	-945.98
	runtime	0.23	0.10	2.60	0.19	0.22
6000321	value	-848.30	-848.30	-848.30	-848.30	-848.30
	bound	-Inf	-848.30	-Inf	-848.30	-848.30
	runtime	0.27	0.11	0.69	0.19	0.22
6000322	value	-933.26	-933.26	-933.26	-933.26	-933.26
	bound	-Inf	-933.26	-Inf	-933.26	-933.26
	runtime	0.22	0.10	2.51	0.17	0.19
6000323	value	-925.22	-925.22	-925.22	-925.22	-925.22
	bound	-Inf	-925.22	-Inf	-925.22	-925.22
	runtime	0.21	0.09	1.41	0.18	0.21

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000324	value	-798.98	-800.05	-800.05	-800.05	-800.05
	bound	-Inf	-800.05	-Inf	-800.05	-800.05
	runtime	0.23	0.10	0.99	0.17	0.20
6000325	value	-878.06	-878.06	-878.06	-878.06	-878.06
	bound	-Inf	-878.06	-Inf	-878.06	-878.06
	runtime	0.34	0.09	0.93	0.17	0.19
6000326	value	-860.89	-860.89	-860.89	-860.89	-860.89
	bound	-Inf	-860.89	-Inf	-860.89	-860.89
	runtime	0.26	0.09	0.92	0.17	0.20
6000327	value	-889.31	-889.31	-889.31	-889.31	-889.31
	bound	-Inf	-889.31	-Inf	-889.31	-889.31
	runtime	0.34	0.10	1.13	0.18	0.21
6000328	value	-775.80	-775.80	-775.80	-775.80	-775.80
	bound	-Inf	-775.80	-Inf	-775.80	-775.80
	runtime	0.40	0.10	3.48	0.17	0.19
6000329	value	-936.97	-936.97	-936.97	-936.97	-936.97
	bound	-Inf	-936.97	-Inf	-936.97	-936.97
	runtime	0.21	0.09	1.29	0.18	0.20
6000330	value	-881.14	-881.14	-881.14	-881.14	-881.14
	bound	-Inf	-881.14	-Inf	-881.14	-881.14
	runtime	0.29	0.09	1.14	0.17	0.19
6000331	value	-922.36	-922.36	-922.36	-922.36	-922.36
	bound	-Inf	-922.36	-Inf	-922.36	-922.36
	runtime	0.41	0.11	1.26	0.18	0.21
6000332	value	-890.03	-890.03	-890.03	-890.03	-890.03
	bound	-Inf	-890.03	-Inf	-890.03	-890.03
	runtime	0.34	0.09	1.41	0.18	0.20
6000333	value	-874.63	-874.63	-874.63	-874.63	-874.63
	bound	-Inf	-874.63	-Inf	-874.63	-874.63
	runtime	0.48	0.09	1.63	0.17	0.20
6000334	value	-877.18	-877.18	-877.18	-877.18	-877.18
	bound	-Inf	-877.18	-Inf	-877.18	-877.18
	runtime	0.24	0.09	0.98	0.17	0.20
6000335	value	-879.01	-880.16	-880.16	-880.16	-880.16
	bound	-Inf	-880.16	-Inf	-880.16	-880.16
	runtime	0.23	0.09	1.09	0.17	0.19
6000336	value	-851.24	-851.24	-851.24	-851.24	-851.24
	bound	-Inf	-851.24	-Inf	-851.24	-851.24
	runtime	0.23	0.09	1.57	0.18	0.21
6000337	value	-996.14	-996.14	-996.14	-996.14	-996.14
	bound	-Inf	-996.14	-Inf	-996.14	-996.14
	runtime	0.25	0.09	2.58	0.18	0.21
6000338	value	-958.07	-958.07	-958.07	-958.07	-958.07
	bound	-Inf	-958.07	-Inf	-958.07	-958.07
	runtime	0.27	0.08	3.19	0.18	0.21
6000339	value	-832.27	-832.44	-832.27	-832.44	-832.44
	bound	-Inf	-832.44	-Inf	-832.44	-832.44
	runtime	0.28	0.10	0.60	0.18	0.21
6000340	value	-946.52	-946.52	-946.52	-946.52	-946.52
	bound	-Inf	-946.52	-Inf	-946.52	-946.52
	runtime	0.26	0.08	0.86	0.17	0.19
6000341	value	-879.03	-879.23	-879.03	-879.23	-879.23
	bound	-Inf	-879.23	-Inf	-879.23	-879.23
	runtime	0.22	0.08	0.93	0.17	0.19
6000342	value	-879.57	-879.57	-879.57	-879.57	-879.57
	bound	-Inf	-879.57	-Inf	-879.57	-879.57
	runtime	0.31	0.09	0.72	0.17	0.20
6000343	value	-1064.40	-1064.40	-1064.40	-1064.40	-1064.40
	bound	-Inf	-1064.40	-Inf	-1064.40	-1064.40
	runtime	0.27	0.10	1.72	0.20	0.23
6000344	value	-927.52	-927.52	-927.52	-927.52	-927.52
	bound	-Inf	-927.52	-Inf	-927.52	-927.52
	runtime	0.23	0.10	2.11	0.18	0.21
6000345	value	-859.27	-859.27	-859.27	-859.27	-859.27
	bound	-Inf	-859.27	-Inf	-859.27	-859.27
	runtime	0.24	0.10	2.92	0.18	0.22
6000346	value	-939.48	-939.71	-939.71	-939.71	-939.71
	bound	-Inf	-939.71	-Inf	-939.71	-939.71
	runtime	0.33	0.10	2.80	0.18	0.20
6000347	value	-822.54	-823.05	-823.05	-823.05	-823.05
	bound	-Inf	-823.05	-Inf	-823.05	-823.05
	runtime	0.21	0.10	1.59	0.17	0.20
6000348	value	-977.47	-977.47	-977.47	-977.47	-977.47
	bound	-Inf	-977.47	-Inf	-977.47	-977.47
	runtime	0.17	0.08	1.13	0.17	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
6000349	value	-893.19	-893.19	-893.19	-893.19	-893.19
	bound	-Inf	-893.19	-Inf	-893.19	-893.19
	runtime	0.27	0.08	1.01	0.16	0.19
6000350	value	-768.92	-768.92	-768.92	-768.92	-768.92
	bound	-Inf	-768.92	-Inf	-768.92	-768.92
	runtime	0.27	0.09	1.54	0.15	0.17
6000351	value	-805.14	-805.81	-805.81	-805.81	-805.81
	bound	-Inf	-805.81	-Inf	-805.81	-805.81
	runtime	0.29	0.11	0.75	0.17	0.19
6000352	value	-885.65	-885.65	-885.65	-885.65	-885.65
	bound	-Inf	-885.65	-Inf	-885.65	-885.65
	runtime	0.27	0.12	0.71	0.18	0.20
6000353	value	-889.29	-889.29	-889.29	-889.29	-889.29
	bound	-Inf	-889.29	-Inf	-889.29	-889.29
	runtime	0.31	0.10	0.51	0.18	0.21
6000354	value	-944.47	-944.47	-944.47	-944.47	-944.47
	bound	-Inf	-944.47	-Inf	-944.47	-944.47
	runtime	0.27	0.09	1.12	0.18	0.20
6000355	value	-974.84	-974.84	-974.84	-974.84	-974.84
	bound	-Inf	-974.84	-Inf	-974.84	-974.84
	runtime	0.23	0.09	1.14	0.18	0.20
8000811	value	-1054.19	-1054.19	-1054.19	-1054.19	-1054.19
	bound	-Inf	-1054.19	-Inf	-1054.19	-1054.19
	runtime	0.20	0.07	0.64	0.14	0.17
8001155	value	-778.75	-778.75	-778.75	-778.75	-778.75
	bound	-Inf	-778.75	-Inf	-778.75	-778.75
	runtime	0.25	0.10	0.83	0.18	0.20
8001974	value	-815.64	-815.64	-815.64	-815.64	-815.64
	bound	-Inf	-815.64	-Inf	-815.64	-815.64
	runtime	0.27	0.11	1.90	0.18	0.20
8002274	value	-1106.68	-1106.97	-1106.68	-1106.97	-1106.97
	bound	-Inf	-1106.97	-Inf	-1106.97	-1106.97
	runtime	0.17	0.07	0.89	0.15	0.17
8002764	value	-1017.78	-1017.78	-1017.78	-1017.78	-1017.78
	bound	-Inf	-1017.78	-Inf	-1017.78	-1017.78
	runtime	0.20	0.07	0.68	0.14	0.17
8003131	value	-716.60	-716.60	-716.60	-716.60	-716.60
	bound	-Inf	-716.60	-Inf	-716.60	-716.60
	runtime	0.32	0.09	1.80	0.15	0.17
8003836	value	-1098.96	-1098.96	-1098.96	-1098.96	-1098.96
	bound	-Inf	-1098.96	-Inf	-1098.96	-1098.96
	runtime	0.25	0.09	1.64	0.17	0.20
8003952	value	-761.31	-761.35	-761.35	-761.35	-761.35
	bound	-Inf	-761.35	-Inf	-761.35	-761.35
	runtime	0.23	0.07	1.06	0.14	0.17
8004573	value	-728.65	-728.65	-728.65	-728.65	-728.65
	bound	-Inf	-728.65	-Inf	-728.65	-728.65
	runtime	0.20	0.07	1.12	0.14	0.16
8005616	value	-833.66	-833.77	-833.66	-833.77	-833.77
	bound	-Inf	-833.77	-Inf	-833.77	-833.77
	runtime	0.24	0.08	0.52	0.15	0.17
8006160	value	-997.20	-997.20	-997.20	-997.20	-997.20
	bound	-Inf	-997.20	-Inf	-997.20	-997.20
	runtime	0.21	0.08	0.62	0.16	0.18
8006302	value	-839.09	-839.51	-839.09	-839.51	-839.51
	bound	-Inf	-839.51	-Inf	-839.51	-839.51
	runtime	0.25	0.10	0.82	0.17	0.20
8008099	value	-727.90	-727.90	-727.90	-727.90	-727.90
	bound	-Inf	-727.90	-Inf	-727.90	-727.90
	runtime	0.21	0.08	0.84	0.14	0.17
8008545	value	-1036.77	-1036.77	-1036.77	-1036.77	-1036.77
	bound	-Inf	-1036.77	-Inf	-1036.77	-1036.77
	runtime	0.28	0.10	1.29	0.17	0.19
8008998	value	-946.03	-946.03	-946.03	-946.03	-946.03
	bound	-Inf	-946.03	-Inf	-946.03	-946.03
	runtime	0.23	0.09	2.19	0.16	0.18
9000001	value	-889.24	-889.24	-889.24	-889.24	-889.24
	bound	-Inf	-889.24	-Inf	-889.24	-889.24
	runtime	0.24	0.10	1.64	0.17	0.20
9000002	value	-971.04	-971.04	-970.34	-971.04	-971.04
	bound	-Inf	-971.04	-Inf	-971.04	-971.04
	runtime	0.25	0.09	6.50	0.17	0.19
9000003	value	-681.52	-681.79	-681.79	-681.79	-681.79
	bound	-Inf	-681.79	-Inf	-681.79	-681.79
	runtime	0.25	0.10	1.89	0.15	0.17

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
9000029	value	-890.78	-890.78	-890.78	-890.78	-890.78
	bound	-Inf	-890.78	-Inf	-890.78	-890.78
	runtime	0.29	0.10	1.60	0.17	0.19
9000127	value	-788.83	-788.83	-788.83	-788.83	-788.83
	bound	-Inf	-788.83	-Inf	-788.83	-788.83
	runtime	0.24	0.10	1.59	0.16	0.18
9000136	value	-973.09	-973.09	-973.09	-973.09	-973.09
	bound	-Inf	-973.09	-Inf	-973.09	-973.09
	runtime	0.26	0.11	1.16	0.18	0.21
9000210	value	-797.65	-797.65	-797.65	-797.65	-797.65
	bound	-Inf	-797.65	-Inf	-797.65	-797.65
	runtime	0.33	0.10	0.98	0.16	0.19
9000288	value	-849.15	-849.15	-849.15	-849.15	-849.15
	bound	-Inf	-849.15	-Inf	-849.15	-849.15
	runtime	0.19	0.09	0.87	0.17	0.20
9000395	value	-822.73	-822.73	-822.73	-822.73	-822.73
	bound	-Inf	-822.73	-Inf	-822.73	-822.73
	runtime	0.23	0.09	1.21	0.17	0.19
9000747	value	-826.15	-826.15	-826.15	-826.15	-826.15
	bound	-Inf	-826.15	-Inf	-826.15	-826.15
	runtime	0.25	0.09	2.21	0.18	0.20
9000868	value	-853.22	-853.22	-853.22	-853.22	-853.22
	bound	-Inf	-853.22	-Inf	-853.22	-853.22
	runtime	0.26	0.09	1.59	0.18	0.20
9000875	value	-896.68	-897.09	-896.68	-897.09	-897.09
	bound	-Inf	-897.09	-Inf	-897.09	-897.09
	runtime	0.21	0.10	1.34	0.18	0.21
9000928	value	-924.22	-924.22	-924.22	-924.22	-924.22
	bound	-Inf	-924.22	-Inf	-924.22	-924.22
	runtime	0.21	0.09	1.15	0.17	0.19
9000933	value	-907.49	-907.49	-907.49	-907.49	-907.49
	bound	-Inf	-907.49	-Inf	-907.49	-907.49
	runtime	0.23	0.09	0.96	0.17	0.20
9000989	value	-908.40	-908.40	-908.40	-908.40	-908.40
	bound	-Inf	-908.40	-Inf	-908.40	-908.40
	runtime	0.24	0.11	1.50	0.18	0.21
9001001	value	-915.65	-915.65	-915.65	-915.65	-915.65
	bound	-Inf	-915.65	-Inf	-915.65	-915.65
	runtime	0.26	0.11	1.56	0.18	0.21
9001034	value	-856.09	-856.09	-856.09	-856.09	-856.09
	bound	-Inf	-856.09	-Inf	-856.09	-856.09
	runtime	0.23	0.09	1.24	0.16	0.18
9001071	value	-768.19	-768.19	-768.19	-768.19	-768.19
	bound	-Inf	-768.19	-Inf	-768.19	-768.19
	runtime	0.21	0.09	0.74	0.16	0.18
9001184	value	-997.33	-997.33	-997.33	-997.33	-997.33
	bound	-Inf	-997.33	-Inf	-997.33	-997.33
	runtime	0.21	0.09	0.96	0.18	0.20
9001300	value	-923.47	-923.49	-923.49	-923.49	-923.49
	bound	-Inf	-923.49	-Inf	-923.49	-923.49
	runtime	0.22	0.10	1.57	0.17	0.19
9001317	value	-717.51	-717.51	-717.51	-717.51	-717.51
	bound	-Inf	-717.51	-Inf	-717.51	-717.51
	runtime	0.33	0.11	1.31	0.17	0.19
9001619	value	-861.39	-861.88	-861.39	-861.88	-861.88
	bound	-Inf	-861.88	-Inf	-861.88	-861.88
	runtime	0.26	0.12	0.85	0.18	0.21
9001713	value	-834.00	-834.00	-834.00	-834.00	-834.00
	bound	-Inf	-834.00	-Inf	-834.00	-834.00
	runtime	0.22	0.13	1.15	0.18	0.20
9001991	value	-843.18	-843.18	-843.18	-843.18	-843.18
	bound	-Inf	-843.18	-Inf	-843.18	-843.18
	runtime	0.35	0.10	1.45	0.17	0.20
9002004	value	-972.40	-972.40	-972.40	-972.40	-972.40
	bound	-Inf	-972.40	-Inf	-972.40	-972.40
	runtime	0.17	0.07	0.93	0.14	0.16
9002021	value	-857.82	-857.82	-857.82	-857.82	-857.82
	bound	-Inf	-857.82	-Inf	-857.82	-857.82
	runtime	0.21	0.08	1.11	0.17	0.19
9002090	value	-933.27	-933.27	-933.27	-933.27	-933.27
	bound	-Inf	-933.27	-Inf	-933.27	-933.27
	runtime	0.29	0.10	0.81	0.18	0.20
9002114	value	-824.19	-824.19	-824.19	-824.19	-824.19
	bound	-Inf	-824.19	-Inf	-824.19	-824.19
	runtime	0.20	0.09	1.22	0.16	0.19

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
9002474	value	-801.67	-801.67	-801.67	-801.67	-801.67
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.22	0.09	0.63	0.17	0.20
9002577	value	-1231.71	-1231.71	-1231.71	-1231.71	-1231.71
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.21	0.08	1.26	0.16	0.18
9002827	value	-736.24	-736.24	-736.24	-736.24	-736.24
	bound	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.07	0.75	0.15	0.18
9002861	value	-866.36	-868.93	-868.93	-868.93	-868.93
	bound	-Inf	-868.93	-Inf	-868.93	-868.93
	runtime	0.27	0.10	2.13	0.18	0.21
9002972	value	-772.40	-772.47	-772.40	-772.47	-772.47
	bound	-Inf	-772.47	-Inf	-772.47	-772.47
	runtime	0.35	0.09	1.94	0.16	0.18
9003116	value	-707.26	-707.26	-707.26	-707.26	-707.26
	bound	-Inf	-707.26	-Inf	-707.26	-707.26
	runtime	0.25	0.10	1.08	0.17	0.20
9003135	value	-947.41	-947.41	-947.41	-947.41	-947.41
	bound	-Inf	-947.41	-Inf	-947.41	-947.41
	runtime	0.33	0.09	1.21	0.18	0.21
9003234	value	-864.69	-864.69	-864.69	-864.69	-864.69
	bound	-Inf	-864.69	-Inf	-864.69	-864.69
	runtime	0.22	0.09	1.55	0.17	0.19
9003250	value	-963.78	-963.78	-963.78	-963.78	-963.78
	bound	-Inf	-963.78	-Inf	-963.78	-963.78
	runtime	0.23	0.08	1.06	0.16	0.19
9003301	value	-795.64	-795.64	-795.64	-795.64	-795.64
	bound	-Inf	-795.64	-Inf	-795.64	-795.64
	runtime	0.16	0.08	0.72	0.17	0.19
9003333	value	-834.72	-834.72	-834.72	-834.72	-834.72
	bound	-Inf	-834.72	-Inf	-834.72	-834.72
	runtime	0.23	0.10	1.11	0.18	0.21
9003339	value	-892.18	-892.18	-892.18	-892.18	-892.18
	bound	-Inf	-892.18	-Inf	-892.18	-892.18
	runtime	0.25	0.09	1.17	0.18	0.20
9003378	value	-832.65	-832.65	-832.65	-832.65	-832.65
	bound	-Inf	-832.65	-Inf	-832.65	-832.65
	runtime	0.22	0.09	2.20	0.17	0.20
9003423	value	-865.49	-865.49	-865.49	-865.49	-865.49
	bound	-Inf	-865.49	-Inf	-865.49	-865.49
	runtime	0.22	0.09	0.90	0.16	0.18
9003585	value	-639.00	-639.00	-639.00	-639.00	-639.00
	bound	-Inf	-639.00	-Inf	-639.00	-639.00
	runtime	0.19	0.08	1.05	0.14	0.16
9003635	value	-819.14	-819.14	-819.14	-819.14	-819.14
	bound	-Inf	-819.14	-Inf	-819.14	-819.14
	runtime	0.25	0.10	0.87	0.17	0.20
9003836	value	-820.95	-820.95	-820.95	-820.95	-820.95
	bound	-Inf	-820.95	-Inf	-820.95	-820.95
	runtime	0.20	0.08	1.78	0.17	0.20
9004060	value	-927.56	-928.50	-927.56	-928.50	-928.50
	bound	-Inf	-928.50	-Inf	-928.50	-928.50
	runtime	0.24	0.10	1.36	0.18	0.20
9004066	value	-1159.86	-1159.86	-1159.86	-1159.86	-1159.86
	bound	-Inf	-1159.86	-Inf	-1159.86	-1159.86
	runtime	0.19	0.07	0.84	0.17	0.19
9004070	value	-1010.98	-1010.98	-1010.98	-1010.98	-1010.98
	bound	-Inf	-1010.98	-Inf	-1010.98	-1010.98
	runtime	0.22	0.08	0.43	0.17	0.19
9004199	value	-820.75	-820.75	-820.75	-820.75	-820.75
	bound	-Inf	-820.75	-Inf	-820.75	-820.75
	runtime	0.21	0.08	0.51	0.16	0.19
9004242	value	-844.23	-844.23	-844.23	-844.23	-844.23
	bound	-Inf	-844.23	-Inf	-844.23	-844.23
	runtime	0.20	0.08	0.67	0.17	0.20
9004294	value	-940.53	-940.53	-940.53	-940.53	-940.53
	bound	-Inf	-940.53	-Inf	-940.53	-940.53
	runtime	0.28	0.09	1.36	0.16	0.19
9004353	value	-901.62	-901.62	-901.62	-901.62	-901.62
	bound	-Inf	-901.62	-Inf	-901.62	-901.62
	runtime	0.27	0.10	1.08	0.18	0.21
9004368	value	-743.92	-743.92	-743.92	-743.92	-743.92
	bound	-Inf	-743.92	-Inf	-743.92	-743.92
	runtime	0.43	0.08	0.96	0.16	0.18

scene-decomposition		ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
9004383	value	-967.73	-968.28	-967.73	-968.28	-968.28
	bound	-Inf	-968.28	-Inf	-968.28	-968.28
	runtime	5.61	0.09	6.71	0.17	0.20
9004427	value	-970.71	-972.46	-972.46	-972.46	-972.46
	bound	-Inf	-972.46	-Inf	-972.46	-972.46
	runtime	0.30	0.10	1.91	0.17	0.20
9004520	value	-871.22	-871.22	-871.22	-871.22	-871.22
	bound	-Inf	-871.22	-Inf	-871.22	-871.22
	runtime	0.25	0.09	0.72	0.16	0.18
9004581	value	-1040.46	-1040.46	-1040.46	-1040.46	-1040.46
	bound	-Inf	-1040.46	-Inf	-1040.46	-1040.46
	runtime	0.25	0.08	0.95	0.15	0.18
9004766	value	-672.97	-672.97	-672.97	-672.97	-672.97
	bound	-Inf	-672.97	-Inf	-672.97	-672.97
	runtime	0.27	0.09	1.23	0.15	0.17
9004879	value	-727.76	-727.76	-727.76	-727.76	-727.76
	bound	-Inf	-727.76	-Inf	-727.76	-727.76
	runtime	0.21	0.11	1.15	0.17	0.19
9004965	value	-756.79	-756.79	-756.79	-756.79	-756.79
	bound	-Inf	-756.79	-Inf	-756.79	-756.79
	runtime	0.20	0.08	0.79	0.14	0.16
9004971	value	-649.04	-649.04	-649.04	-649.04	-649.04
	bound	-Inf	-649.04	-Inf	-649.04	-649.04
	runtime	0.26	0.10	1.48	0.16	0.19
9005011	value	-863.43	-863.43	-863.43	-863.43	-863.43
	bound	-Inf	-863.43	-Inf	-863.43	-863.43
	runtime	0.36	0.11	2.24	0.18	0.20
9005105	value	-873.24	-873.24	-873.24	-873.24	-873.24
	bound	-Inf	-873.24	-Inf	-873.24	-873.24
	runtime	0.27	0.09	0.78	0.17	0.20
9005245	value	-1115.38	-1115.38	-1115.38	-1115.38	-1115.38
	bound	-Inf	-1115.38	-Inf	-1115.38	-1115.38
	runtime	0.23	0.08	1.29	0.16	0.19
9005273	value	-655.73	-655.73	-655.73	-655.73	-655.73
	bound	-Inf	-655.73	-Inf	-655.73	-655.73
	runtime	0.23	0.08	0.81	0.14	0.16
9005294	value	-1080.63	-1080.63	-1080.63	-1080.63	-1080.63
	bound	-Inf	-1080.63	-Inf	-1080.63	-1080.63
	runtime	0.44	0.11	2.61	0.18	0.20
mean energy		-866.76	-866.92	-866.85	-866.93	-866.93
mean bound		-Inf	-866.93	-Inf	-866.93	-866.93
mean runtime		0.29	0.09	1.29	0.17	0.19
best value		80.56	99.58	89.51	99.58	99.86
best bound		0.00	99.58	0.00	99.58	99.58
verified opt		0.00	99.58	0.00	99.58	99.58

4.13. Geometric Scene Labeling 3 (geo-surf-3)

Table 41: geo-surf-3

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm1	value	156.87	156.87	156.87	156.87	156.87	156.87	156.87	156.87
	bound	156.87	-Inf	-Inf	156.87	156.87	156.87	156.87	-Inf
	runtime	0.74	0.39	0.11	66.09	9.08	65.49	0.10	0.38
gm10	value	146.15	147.77	146.15	146.15	146.15	146.15	146.15	147.77
	bound	146.15	-Inf	-Inf	146.15	146.15	146.14	146.15	-Inf
	runtime	3.46	1.01	0.17	117.93	15.40	126.77	0.19	1.02
gm100	value	35.07	35.07	35.07	35.07	35.07	35.07	35.07	35.07
	bound	35.07	-Inf	-Inf	35.07	35.07	35.07	35.07	-Inf
	runtime	0.17	0.09	0.03	3.06	1.54	4.24	0.03	0.08
gm101	value	23.97	23.97	23.97	23.97	23.97	23.97	23.97	23.97
	bound	23.97	-Inf	-Inf	23.97	23.97	23.97	23.97	-Inf
	runtime	0.10	0.05	0.02	5.74	1.33	5.92	0.01	0.04
gm102	value	102.11	102.11	102.11	102.11	102.11	102.11	102.11	102.11
	bound	102.11	-Inf	-Inf	102.11	102.11	102.11	102.11	-Inf
	runtime	1.41	0.34	0.10	40.67	39.68	62.10	0.09	0.35
gm103	value	62.34	62.34	62.34	62.34	62.34	62.34	62.34	62.34
	bound	62.34	-Inf	-Inf	62.34	62.34	62.34	62.34	-Inf
	runtime	0.30	0.11	0.04	16.57	17.43	19.66	0.03	0.11
gm104	value	107.62	107.62	107.62	107.62	107.62	107.62	107.62	107.62
	bound	107.62	-Inf	-Inf	107.62	107.62	107.62	107.62	-Inf
	runtime	1.59	0.26	0.11	11.79	1.72	17.56	0.09	0.26
gm105	value	67.71	67.71	67.71	67.71	67.71	67.71	67.71	67.71
	bound	67.71	-Inf	-Inf	67.71	67.71	67.71	67.71	-Inf
	runtime	0.19	0.12	0.03	15.60	1.29	16.28	0.03	0.12

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm106	value	19.71	19.71	19.71	19.71	19.71	19.71	19.71	19.71
	bound	19.71	-Inf	-Inf	19.71	19.71	19.71	19.71	-Inf
	runtime	0.03	0.03	0.02	0.96	0.17	2.36	0.01	0.03
gm107	value	176.33	176.33	176.33	176.33	176.33	176.33	176.33	176.33
	bound	176.33	-Inf	-Inf	176.33	176.33	176.33	176.33	-Inf
	runtime	1.91	0.67	0.14	30.44	24.77	74.09	0.15	0.68
gm108	value	105.21	105.21	105.21	105.21	105.21	105.21	105.21	105.21
	bound	105.21	-Inf	-Inf	105.21	105.21	105.21	105.21	-Inf
	runtime	0.19	0.10	0.05	8.86	1.30	11.25	0.03	0.09
gm109	value	120.11	120.11	120.11	120.11	120.11	120.11	120.11	120.11
	bound	120.11	-Inf	-Inf	120.11	120.11	120.11	120.11	-Inf
	runtime	0.91	0.46	0.10	88.31	91.52	92.46	0.09	0.48
gm11	value	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30
	bound	48.30	-Inf	-Inf	48.30	48.30	48.30	48.30	-Inf
	runtime	0.02	0.04	0.02	1.45	0.72	2.41	0.01	0.03
gm110	value	176.16	176.16	176.16	176.16	176.16	176.16	176.16	176.16
	bound	176.16	-Inf	-Inf	176.16	176.16	176.16	176.16	-Inf
	runtime	1.20	0.43	0.14	55.73	8.44	92.93	0.14	0.44
gm111	value	181.90	181.92	181.90	181.90	181.90	181.90	181.90	181.92
	bound	181.90	-Inf	-Inf	181.89	181.90	181.87	181.90	-Inf
	runtime	0.22	0.23	0.05	46.86	20.88	46.44	0.05	0.23
gm112	value	192.99	192.99	192.99	192.99	192.99	192.99	192.99	192.99
	bound	192.99	-Inf	-Inf	192.99	192.99	192.99	192.99	-Inf
	runtime	2.41	0.65	0.14	63.23	50.34	151.67	0.17	0.70
gm113	value	133.14	133.14	133.14	133.14	133.14	133.14	133.14	133.14
	bound	133.14	-Inf	-Inf	133.14	133.14	133.14	133.14	-Inf
	runtime	1.62	0.54	0.14	58.16	14.07	101.63	0.12	0.57
gm114	value	122.16	122.16	122.16	122.16	122.16	122.16	122.16	122.16
	bound	122.16	-Inf	-Inf	122.16	122.16	122.16	122.16	-Inf
	runtime	2.71	0.98	0.15	167.46	16.63	163.39	0.18	0.99
gm115	value	280.30	280.30	280.30	280.30	280.30	280.30	280.30	280.30
	bound	280.30	-Inf	-Inf	280.30	280.30	280.29	280.30	-Inf
	runtime	3.38	0.93	0.16	113.10	16.86	113.33	0.16	1.00
gm116	value	211.02	211.02	211.02	211.02	211.02	211.02	211.02	211.02
	bound	211.02	-Inf	-Inf	211.02	211.02	211.00	211.02	-Inf
	runtime	2.50	0.71	0.16	130.43	76.17	131.96	0.19	0.73
gm117	value	77.09	77.09	77.09	77.09	77.09	77.09	77.09	77.09
	bound	77.09	-Inf	-Inf	77.09	77.09	77.09	77.09	-Inf
	runtime	0.34	0.22	0.06	8.74	16.89	18.09	0.05	0.22
gm118	value	220.70	220.70	220.70	220.70	220.70	220.70	220.70	220.70
	bound	220.70	-Inf	-Inf	220.70	220.70	220.70	220.70	-Inf
	runtime	1.83	0.38	0.12	75.08	7.59	81.96	0.14	0.38
gm119	value	125.79	125.79	125.79	125.79	125.79	125.79	125.79	125.79
	bound	125.79	-Inf	-Inf	125.79	125.79	125.77	125.79	-Inf
	runtime	1.01	0.35	0.10	61.47	8.82	60.03	0.09	0.36
gm12	value	83.58	83.58	83.58	83.58	83.58	83.58	83.58	83.58
	bound	83.58	-Inf	-Inf	83.58	83.58	83.58	83.58	-Inf
	runtime	0.23	0.09	0.03	11.72	9.42	11.49	0.03	0.09
gm120	value	115.60	115.60	115.60	115.60	115.60	115.60	115.60	115.60
	bound	115.60	-Inf	-Inf	115.60	115.60	115.60	115.60	-Inf
	runtime	0.31	0.30	0.05	25.29	17.39	29.30	0.05	0.31
gm121	value	195.13	195.13	195.13	195.13	195.13	195.13	195.13	195.13
	bound	195.13	-Inf	-Inf	195.13	195.13	195.13	195.13	-Inf
	runtime	3.00	0.60	0.17	22.72	20.06	37.77	0.17	0.63
gm122	value	94.79	94.79	94.79	94.79	94.79	94.79	94.79	94.79
	bound	94.79	-Inf	-Inf	94.79	94.79	94.78	94.79	-Inf
	runtime	0.19	0.17	0.05	29.40	7.66	29.08	0.04	0.16
gm123	value	176.46	176.46	176.46	176.46	176.46	176.46	176.46	176.46
	bound	176.46	-Inf	-Inf	176.45	176.46	176.44	176.46	-Inf
	runtime	1.50	0.42	0.11	116.30	47.15	117.62	0.13	0.43
gm124	value	202.59	202.59	202.59	202.59	202.59	202.59	202.59	202.59
	bound	202.59	-Inf	-Inf	202.59	202.59	202.59	202.59	-Inf
	runtime	1.33	0.37	0.11	18.81	6.96	39.16	0.11	0.38
gm125	value	186.08	186.08	186.08	186.08	186.08	186.08	186.08	186.08
	bound	186.08	-Inf	-Inf	186.08	186.08	186.08	186.08	-Inf
	runtime	3.05	0.54	0.16	117.29	10.26	117.41	0.15	0.56
gm126	value	230.42	230.42	230.42	230.42	230.42	230.42	230.42	230.42
	bound	230.42	-Inf	-Inf	230.42	230.42	230.42	230.42	-Inf
	runtime	2.61	0.70	0.17	167.05	53.12	173.29	0.17	0.71
gm127	value	186.55	186.55	186.55	186.55	186.55	186.55	186.55	186.55
	bound	186.55	-Inf	-Inf	186.55	186.55	186.55	186.55	-Inf
	runtime	0.21	0.23	0.04	15.49	11.91	20.92	0.04	0.22
gm128	value	203.04	203.04	203.04	203.04	203.04	203.04	203.04	203.04
	bound	203.04	-Inf	-Inf	203.04	203.04	203.04	203.04	-Inf
	runtime	2.67	0.79	0.17	186.19	28.01	194.81	0.20	0.81

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm129	value	171.21	171.21	171.21	171.21	171.21	171.21	171.21	171.21
	bound	171.21	-Inf	-Inf	171.21	171.21	171.21	171.21	-Inf
	runtime	0.34	0.21	0.06	12.20	3.70	18.66	0.05	0.21
gm13	value	240.14	240.14	240.14	240.14	240.14	240.14	240.14	240.14
	bound	240.14	-Inf	-Inf	240.14	240.14	240.14	240.14	-Inf
	runtime	1.04	0.42	0.09	46.98	34.08	60.21	0.09	0.43
gm130	value	180.05	180.05	180.05	180.05	180.05	180.05	180.05	180.05
	bound	180.05	-Inf	-Inf	180.05	180.05	180.05	180.05	-Inf
	runtime	0.69	0.27	0.09	66.31	8.05	69.71	0.09	0.27
gm131	value	245.27	245.27	245.27	245.27	245.27	245.27	245.27	245.27
	bound	245.27	-Inf	-Inf	245.27	245.27	245.27	245.27	-Inf
	runtime	1.84	0.56	0.15	25.43	19.30	37.14	0.15	0.57
gm132	value	161.61	161.61	161.61	161.61	161.61	161.61	161.61	161.61
	bound	161.61	-Inf	-Inf	161.61	161.61	161.61	161.61	-Inf
	runtime	2.45	0.55	0.17	53.68	8.83	79.09	0.16	0.58
gm133	value	182.11	182.42	182.11	182.11	182.11	182.11	182.11	182.42
	bound	182.11	-Inf	-Inf	182.09	182.11	182.06	182.11	-Inf
	runtime	0.32	0.20	0.06	35.24	33.87	35.11	0.06	0.20
gm134	value	95.33	95.33	95.33	95.33	95.33	95.33	95.33	95.33
	bound	95.33	-Inf	-Inf	95.33	95.33	95.33	95.33	-Inf
	runtime	0.75	0.41	0.08	14.70	16.46	24.73	0.07	0.40
gm135	value	117.98	117.98	117.98	117.98	117.98	117.98	117.98	117.98
	bound	117.98	-Inf	-Inf	117.98	117.98	117.98	117.98	-Inf
	runtime	0.83	0.30	0.09	72.61	33.83	72.64	0.08	0.30
gm136	value	102.94	102.94	102.94	102.94	102.94	102.94	102.94	102.94
	bound	102.94	-Inf	-Inf	102.94	102.94	102.94	102.94	-Inf
	runtime	0.59	0.21	0.07	31.34	2.35	32.44	0.06	0.20
gm137	value	121.44	121.44	121.44	121.44	121.44	121.44	121.44	121.44
	bound	121.44	-Inf	-Inf	121.44	121.44	121.44	121.44	-Inf
	runtime	3.41	0.65	0.17	143.56	24.05	156.77	0.19	0.65
gm138	value	232.66	233.18	232.66	232.66	232.66	232.66	232.66	233.18
	bound	232.66	-Inf	-Inf	232.65	232.66	232.65	232.66	-Inf
	runtime	0.66	0.31	0.09	54.83	16.61	55.04	0.09	0.32
gm139	value	132.17	132.17	132.17	132.17	132.17	132.17	132.17	132.17
	bound	132.17	-Inf	-Inf	132.17	132.17	132.17	132.17	-Inf
	runtime	0.84	0.33	0.10	76.86	57.03	76.92	0.08	0.34
gm14	value	13.08	13.08	13.08	13.08	13.08	13.08	13.08	13.08
	bound	13.08	-Inf	-Inf	13.08	13.08	13.08	13.08	-Inf
	runtime	0.01	0.01	0.01	0.16	0.01	0.24	0.00	0.01
gm140	value	135.24	135.24	135.24	135.24	135.24	135.24	135.24	135.24
	bound	135.24	-Inf	-Inf	135.24	135.24	135.24	135.24	-Inf
	runtime	3.03	2.41	0.21	295.91	290.39	331.95	0.19	2.40
gm141	value	189.91	189.91	189.91	189.91	189.91	189.91	189.91	189.91
	bound	189.91	-Inf	-Inf	189.91	189.91	189.91	189.91	-Inf
	runtime	3.20	0.71	0.17	118.87	15.50	196.07	0.20	0.71
gm142	value	147.66	147.66	147.66	147.66	147.66	147.66	147.66	147.66
	bound	147.66	-Inf	-Inf	147.66	147.66	147.66	147.66	-Inf
	runtime	2.23	0.61	0.13	118.00	17.27	162.54	0.15	0.63
gm143	value	160.29	160.29	160.29	160.29	160.29	160.29	160.29	160.29
	bound	160.29	-Inf	-Inf	160.29	160.29	160.29	160.29	-Inf
	runtime	1.88	0.46	0.13	40.84	21.97	64.34	0.12	0.48
gm144	value	163.25	163.25	163.25	163.25	163.25	163.25	163.25	163.25
	bound	163.25	-Inf	-Inf	163.25	163.25	163.25	163.25	-Inf
	runtime	1.85	0.47	0.12	69.46	14.45	69.24	0.11	0.50
gm145	value	137.30	137.30	137.30	137.30	137.30	137.30	137.30	137.30
	bound	137.30	-Inf	-Inf	137.30	137.30	137.30	137.30	-Inf
	runtime	3.65	0.82	0.25	142.62	20.12	102.20	0.24	0.80
gm146	value	208.89	208.89	208.89	208.89	208.89	208.89	208.89	208.89
	bound	208.89	-Inf	-Inf	208.89	208.89	208.89	208.89	-Inf
	runtime	0.81	0.29	0.08	66.41	7.69	65.28	0.08	0.28
gm147	value	162.07	162.07	162.07	162.07	162.07	162.07	162.07	162.07
	bound	162.07	-Inf	-Inf	162.07	162.07	162.07	162.07	-Inf
	runtime	1.49	0.54	0.13	101.90	12.33	100.13	0.15	0.55
gm148	value	249.53	249.53	249.53	249.53	249.53	249.53	249.53	249.53
	bound	249.53	-Inf	-Inf	249.53	249.53	249.52	249.53	-Inf
	runtime	1.27	0.55	0.14	89.17	19.06	87.59	0.11	0.57
gm149	value	92.74	92.74	92.74	92.74	92.74	92.74	92.74	92.74
	bound	92.74	-Inf	-Inf	92.74	92.74	92.74	92.74	-Inf
	runtime	0.82	0.20	0.07	12.62	3.55	18.59	0.07	0.19
gm15	value	214.27	214.35	214.27	214.27	214.27	214.27	214.27	214.35
	bound	214.27	-Inf	-Inf	214.27	214.27	214.26	214.27	-Inf
	runtime	0.45	0.27	0.07	33.19	16.82	33.08	0.07	0.28
gm150	value	170.77	170.77	170.77	170.77	170.77	170.77	170.77	170.77
	bound	170.77	-Inf	-Inf	170.76	170.77	170.75	170.77	-Inf
	runtime	1.22	0.75	0.12	69.97	27.40	70.07	0.11	0.81

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm151	value	95.10	95.10	95.10	95.10	95.10	95.10	95.10	95.10
	bound	95.10	-Inf	-Inf	95.10	95.10	95.10	95.10	-Inf
	runtime	1.39	0.35	0.11	74.11	36.47	75.60	0.10	0.36
gm152	value	88.94	88.94	88.94	88.94	88.94	88.94	88.94	88.94
	bound	88.94	-Inf	-Inf	88.94	88.94	88.94	88.94	-Inf
	runtime	0.32	0.15	0.04	19.71	2.99	19.66	0.04	0.15
gm153	value	95.52	95.52	95.52	95.52	95.52	95.52	95.52	95.52
	bound	95.52	-Inf	-Inf	95.52	95.52	95.52	95.52	-Inf
	runtime	0.12	0.10	0.03	6.73	3.29	12.88	0.03	0.09
gm154	value	131.94	131.94	131.94	131.94	131.94	131.94	131.94	131.94
	bound	131.94	-Inf	-Inf	131.94	131.94	131.94	131.94	-Inf
	runtime	0.93	0.21	0.07	5.71	2.08	7.08	0.06	0.20
gm155	value	104.64	104.64	104.64	104.64	104.64	104.64	104.64	104.64
	bound	104.64	-Inf	-Inf	104.64	104.64	104.64	104.64	-Inf
	runtime	1.54	0.65	0.10	112.05	94.77	115.57	0.11	0.64
gm156	value	119.78	119.78	119.78	119.78	119.78	119.78	119.78	119.78
	bound	119.78	-Inf	-Inf	119.78	119.78	119.78	119.78	-Inf
	runtime	0.42	0.16	0.06	14.16	2.07	17.98	0.05	0.15
gm157	value	195.72	195.72	195.72	195.72	195.72	195.72	195.72	195.72
	bound	195.72	-Inf	-Inf	195.72	195.72	195.72	195.72	-Inf
	runtime	1.75	0.40	0.14	74.96	7.17	72.75	0.13	0.41
gm158	value	186.66	186.66	186.66	186.66	186.66	186.66	186.66	186.66
	bound	186.66	-Inf	-Inf	186.66	186.66	186.66	186.66	-Inf
	runtime	1.75	0.54	0.12	109.32	94.33	108.71	0.14	0.57
gm159	value	172.89	172.89	172.89	172.89	172.89	172.89	172.89	172.89
	bound	172.89	-Inf	-Inf	172.89	172.89	172.89	172.89	-Inf
	runtime	0.34	0.20	0.07	22.01	4.56	22.13	0.05	0.20
gm16	value	123.69	123.69	123.69	123.69	123.69	123.69	123.69	123.69
	bound	123.69	-Inf	-Inf	123.69	123.69	123.69	123.69	-Inf
	runtime	0.41	0.25	0.06	9.88	10.26	16.96	0.05	0.25
gm160	value	146.78	146.78	146.78	146.78	146.78	146.78	146.78	146.78
	bound	146.78	-Inf	-Inf	146.78	146.78	146.78	146.78	-Inf
	runtime	1.22	0.37	0.12	22.58	35.64	33.69	0.11	0.37
gm161	value	264.68	264.68	264.68	264.68	264.68	264.68	264.68	264.68
	bound	264.68	-Inf	-Inf	264.68	264.68	264.68	264.68	-Inf
	runtime	1.50	0.45	0.14	88.88	23.97	84.07	0.14	0.46
gm162	value	137.28	137.28	137.28	137.28	137.28	137.28	137.28	137.28
	bound	137.28	-Inf	-Inf	137.28	137.28	137.28	137.28	-Inf
	runtime	0.91	0.31	0.08	22.87	14.38	34.39	0.09	0.32
gm163	value	252.76	252.76	252.76	252.76	252.76	252.76	252.76	252.76
	bound	252.76	-Inf	-Inf	252.76	252.76	252.76	252.76	-Inf
	runtime	0.73	0.28	0.08	50.84	4.29	53.79	0.08	0.29
gm164	value	250.21	250.21	250.21	250.21	250.21	250.21	250.21	250.21
	bound	250.21	-Inf	-Inf	250.21	250.21	250.21	250.21	-Inf
	runtime	1.56	0.50	0.15	83.01	12.87	86.18	0.15	0.47
gm165	value	88.33	88.33	88.33	88.33	88.33	88.33	88.33	88.33
	bound	88.33	-Inf	-Inf	88.33	88.33	88.33	88.33	-Inf
	runtime	1.74	0.37	0.11	20.91	5.41	54.18	0.10	0.36
gm166	value	184.37	184.37	184.37	184.37	184.37	184.37	184.37	184.37
	bound	184.37	-Inf	-Inf	184.37	184.37	184.37	184.37	-Inf
	runtime	4.02	0.61	0.18	136.34	42.98	140.41	0.18	0.61
gm167	value	171.52	171.52	171.52	171.52	171.52	171.52	171.52	171.52
	bound	171.52	-Inf	-Inf	171.52	171.52	171.52	171.52	-Inf
	runtime	0.80	0.40	0.11	30.23	6.53	66.57	0.10	0.39
gm168	value	223.05	223.05	223.05	223.05	223.05	223.05	223.05	223.05
	bound	223.05	-Inf	-Inf	223.05	223.05	223.05	223.05	-Inf
	runtime	0.93	0.30	0.11	7.40	9.47	12.35	0.10	0.28
gm169	value	177.03	177.03	177.03	177.03	177.03	177.03	177.03	177.03
	bound	177.03	-Inf	-Inf	177.03	177.03	177.03	177.03	-Inf
	runtime	2.87	1.24	0.21	251.83	47.07	252.89	0.24	1.24
gm17	value	41.97	41.97	41.97	41.97	41.97	41.97	41.97	41.97
	bound	41.97	-Inf	-Inf	41.97	41.97	41.97	41.97	-Inf
	runtime	0.33	0.09	0.03	15.19	3.66	14.42	0.03	0.09
gm170	value	190.47	190.47	190.47	190.47	190.47	190.47	190.47	190.47
	bound	190.47	-Inf	-Inf	190.47	190.47	190.47	190.47	-Inf
	runtime	2.24	0.67	0.18	87.01	29.94	82.19	0.17	0.67
gm171	value	167.91	167.91	167.91	167.91	167.91	167.91	167.91	167.91
	bound	167.91	-Inf	-Inf	167.91	167.91	167.91	167.91	-Inf
	runtime	0.47	0.21	0.07	42.51	7.46	42.31	0.06	0.20
gm172	value	80.08	80.08	80.08	80.08	80.08	80.08	80.08	80.08
	bound	80.08	-Inf	-Inf	80.08	80.08	80.08	80.08	-Inf
	runtime	0.44	0.19	0.06	12.88	30.09	16.33	0.05	0.18
gm173	value	100.56	100.56	100.56	100.56	100.56	100.56	100.56	100.56
	bound	100.56	-Inf	-Inf	100.56	100.56	100.56	100.56	-Inf
	runtime	0.14	0.14	0.04	22.98	2.99	22.61	0.03	0.13

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm174	value	256.08	256.08	256.08	256.08	256.08	256.08	256.08	256.08
	bound	256.08	-Inf	-Inf	256.08	256.08	256.08	256.08	-Inf
	runtime	0.62	0.35	0.09	27.81	32.22	35.65	0.08	0.34
gm175	value	208.04	208.05	208.04	208.04	208.04	208.04	208.04	208.05
	bound	208.04	-Inf	-Inf	208.04	208.04	208.04	208.04	-Inf
	runtime	1.53	0.47	0.12	107.69	105.30	106.66	0.11	0.48
gm176	value	138.87	138.87	138.87	138.87	138.87	138.87	138.87	138.87
	bound	138.87	-Inf	-Inf	138.87	138.87	138.87	138.87	-Inf
	runtime	0.39	0.23	0.10	28.27	3.34	46.95	0.06	0.22
gm177	value	288.46	288.46	288.46	288.46	288.46	288.46	288.46	288.46
	bound	288.46	-Inf	-Inf	288.46	288.46	288.46	288.46	-Inf
	runtime	3.28	1.17	0.18	311.50	46.55	322.42	0.21	1.14
gm178	value	175.12	175.12	175.12	175.12	175.12	175.12	175.12	175.12
	bound	175.12	-Inf	-Inf	175.12	175.12	175.11	175.12	-Inf
	runtime	3.04	0.72	0.15	125.79	24.21	127.50	0.16	0.73
gm179	value	191.95	191.95	191.95	191.95	191.95	191.95	191.95	191.95
	bound	191.95	-Inf	-Inf	191.95	191.95	191.95	191.95	-Inf
	runtime	1.48	0.46	0.14	106.93	101.23	107.64	0.14	0.47
gm18	value	23.71	23.71	23.71	23.71	23.71	23.71	23.71	23.71
	bound	23.71	-Inf	-Inf	23.71	23.71	23.71	23.71	-Inf
	runtime	1.45	0.42	0.10	0.07	0.07	0.07	0.10	0.40
gm180	value	246.21	246.21	246.21	246.21	246.21	246.21	246.21	246.21
	bound	246.21	-Inf	-Inf	246.21	246.21	246.21	246.21	-Inf
	runtime	0.34	0.23	0.06	38.72	6.98	37.83	0.06	0.22
gm181	value	126.92	126.92	126.92	126.92	126.92	126.92	126.92	126.92
	bound	126.92	-Inf	-Inf	126.92	126.92	126.92	126.92	-Inf
	runtime	0.48	0.23	0.06	56.25	42.44	58.50	0.06	0.22
gm182	value	151.98	151.98	151.98	151.98	151.98	151.98	151.98	152.00
	bound	151.98	-Inf	-Inf	151.98	151.98	151.98	151.98	-Inf
	runtime	3.06	1.11	0.26	135.79	34.46	134.29	0.18	1.13
gm183	value	156.87	156.87	156.87	156.87	156.87	156.87	156.87	156.87
	bound	156.87	-Inf	-Inf	156.87	156.87	156.87	156.87	-Inf
	runtime	0.81	0.44	0.10	74.47	40.19	86.13	0.09	0.42
gm184	value	67.79	67.79	67.79	67.79	67.79	67.79	67.79	67.79
	bound	67.79	-Inf	-Inf	67.79	67.79	67.79	67.79	-Inf
	runtime	0.06	0.09	0.02	2.87	12.76	3.40	0.02	0.08
gm185	value	116.82	116.82	116.82	116.82	116.82	116.82	116.82	116.82
	bound	116.82	-Inf	-Inf	116.82	116.82	116.82	116.82	-Inf
	runtime	0.77	0.18	0.07	8.65	5.02	13.40	0.06	0.17
gm186	value	311.30	311.37	311.30	311.30	311.30	311.30	311.30	311.37
	bound	311.30	-Inf	-Inf	311.29	311.30	311.28	311.30	-Inf
	runtime	1.83	0.73	0.16	105.93	32.09	104.36	0.16	0.73
gm187	value	159.38	159.38	159.38	159.38	159.38	159.38	159.38	159.38
	bound	159.38	-Inf	-Inf	159.38	159.38	159.38	159.38	-Inf
	runtime	2.10	0.57	0.12	38.25	11.75	114.92	0.13	0.55
gm188	value	70.54	70.54	70.54	70.54	70.54	70.54	70.54	70.54
	bound	70.54	-Inf	-Inf	70.54	70.54	70.54	70.54	-Inf
	runtime	0.08	0.07	0.02	3.99	0.67	5.20	0.02	0.06
gm189	value	99.98	99.98	99.98	99.98	99.98	99.98	99.98	99.98
	bound	99.98	-Inf	-Inf	99.98	99.98	99.98	99.98	-Inf
	runtime	1.40	0.36	0.10	50.41	18.14	62.73	0.10	0.36
gm19	value	320.69	320.69	320.69	320.69	320.69	320.69	320.69	320.69
	bound	320.69	-Inf	-Inf	320.69	320.69	320.69	320.69	-Inf
	runtime	2.59	0.65	0.17	115.74	19.22	115.49	0.17	0.63
gm190	value	146.57	146.57	146.57	146.57	146.57	146.57	146.57	146.57
	bound	146.57	-Inf	-Inf	146.57	146.57	146.57	146.57	-Inf
	runtime	3.50	0.60	0.17	67.67	189.28	124.88	0.18	0.58
gm191	value	22.85	22.85	22.85	22.85	22.85	22.85	22.85	22.85
	bound	22.85	-Inf	-Inf	22.85	22.85	22.85	22.85	-Inf
	runtime	0.02	0.02	0.01	1.67	0.17	3.37	0.01	0.02
gm192	value	48.23	48.23	48.23	48.23	48.23	48.23	48.23	48.23
	bound	48.23	-Inf	-Inf	48.23	48.23	48.23	48.23	-Inf
	runtime	0.04	0.05	0.02	4.96	1.24	7.39	0.01	0.04
gm193	value	104.40	104.40	104.40	104.40	104.40	104.40	104.40	104.40
	bound	104.40	-Inf	-Inf	104.40	104.40	104.40	104.40	-Inf
	runtime	1.69	0.48	0.13	26.92	52.04	46.00	0.12	0.46
gm194	value	38.87	38.87	38.87	38.87	38.87	38.87	38.87	38.87
	bound	38.87	-Inf	-Inf	38.87	38.87	38.87	38.87	-Inf
	runtime	0.12	0.06	0.02	5.98	0.35	8.15	0.02	0.06
gm195	value	142.01	142.29	142.01	142.01	142.01	142.01	142.01	142.29
	bound	142.01	-Inf	-Inf	142.01	142.01	142.01	142.01	-Inf
	runtime	0.24	0.22	0.06	8.32	8.82	24.42	0.06	0.20
gm196	value	45.25	45.25	45.25	45.25	45.25	45.25	45.25	45.25
	bound	45.25	-Inf	-Inf	45.25	45.25	45.25	45.25	-Inf
	runtime	0.02	0.03	0.01	1.22	0.39	4.18	0.01	0.03

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm197	value	93.38	93.38	93.38	93.38	93.38	93.38	93.38	93.38
	bound	93.38	-Inf	-Inf	93.38	93.38	93.38	93.38	-Inf
	runtime	0.42	0.13	0.05	5.67	1.61	9.86	0.04	0.12
gm198	value	114.09	114.09	114.09	114.09	114.09	114.09	114.09	114.09
	bound	114.09	-Inf	-Inf	114.09	114.09	114.09	114.09	-Inf
	runtime	0.36	0.10	0.05	4.51	0.76	6.87	0.03	0.09
gm199	value	95.66	95.66	95.66	95.66	95.66	95.66	95.66	95.66
	bound	95.66	-Inf	-Inf	95.66	95.66	95.66	95.66	-Inf
	runtime	0.95	0.30	0.09	26.33	4.79	66.98	0.09	0.29
gm2	value	88.43	88.43	88.43	88.43	88.43	88.43	88.43	88.43
	bound	88.43	-Inf	-Inf	88.43	88.43	88.43	88.43	-Inf
	runtime	2.04	0.70	0.12	114.78	30.39	116.93	0.13	0.70
gm20	value	110.18	110.18	110.18	110.18	110.18	110.18	110.18	110.18
	bound	110.18	-Inf	-Inf	110.18	110.18	110.18	110.18	-Inf
	runtime	0.34	0.12	0.05	12.63	7.18	29.48	0.04	0.11
gm200	value	264.25	264.25	264.25	264.25	264.25	264.25	264.25	264.25
	bound	264.25	-Inf	-Inf	264.25	264.25	264.25	264.25	-Inf
	runtime	0.53	0.21	0.07	33.81	12.03	33.46	0.07	0.20
gm201	value	138.86	138.86	138.86	138.86	138.86	138.86	138.86	138.86
	bound	138.86	-Inf	-Inf	138.86	138.86	138.86	138.86	-Inf
	runtime	0.49	0.19	0.05	34.01	3.91	34.23	0.04	0.18
gm202	value	142.23	142.26	142.23	142.23	142.23	142.23	142.23	142.26
	bound	142.23	-Inf	-Inf	142.23	142.23	142.23	142.23	-Inf
	runtime	1.03	0.47	0.11	10.04	16.67	16.21	0.08	0.48
gm203	value	52.28	52.28	52.28	52.28	52.28	52.28	52.28	52.28
	bound	52.28	-Inf	-Inf	52.28	52.28	52.28	52.28	-Inf
	runtime	0.06	0.07	0.03	2.60	0.24	4.26	0.02	0.06
gm204	value	167.02	167.02	167.02	167.02	167.02	167.02	167.02	167.02
	bound	167.02	-Inf	-Inf	167.02	167.02	167.02	167.02	-Inf
	runtime	0.39	0.15	0.06	15.30	22.54	22.40	0.05	0.14
gm205	value	184.96	184.96	184.96	184.96	184.96	184.96	184.96	184.96
	bound	184.96	-Inf	-Inf	184.96	184.96	184.96	184.96	-Inf
	runtime	0.77	0.27	0.10	32.79	2.41	32.34	0.06	0.26
gm206	value	118.64	118.68	118.64	118.64	118.64	118.64	118.64	118.68
	bound	118.64	-Inf	-Inf	118.64	118.64	118.64	118.64	-Inf
	runtime	1.94	0.46	0.10	60.84	38.76	61.73	0.10	0.45
gm207	value	109.68	109.68	109.68	109.68	109.68	109.68	109.68	109.68
	bound	109.68	-Inf	-Inf	109.68	109.68	109.68	109.68	-Inf
	runtime	2.03	0.49	0.10	49.92	8.07	69.80	0.10	0.49
gm208	value	82.41	82.41	82.41	82.41	82.41	82.41	82.41	82.41
	bound	82.41	-Inf	-Inf	82.41	82.41	82.41	82.41	-Inf
	runtime	1.12	0.24	0.09	48.23	4.96	58.32	0.07	0.23
gm209	value	161.15	161.15	161.15	161.15	161.15	161.15	161.15	161.15
	bound	161.15	-Inf	-Inf	161.15	161.15	161.15	161.15	-Inf
	runtime	0.90	0.35	0.07	25.53	11.32	39.38	0.07	0.34
gm21	value	109.81	109.81	109.81	109.81	109.81	109.81	109.81	109.81
	bound	109.81	-Inf	-Inf	109.81	109.81	109.81	109.81	-Inf
	runtime	0.44	0.16	0.05	5.34	1.72	9.51	0.05	0.15
gm210	value	192.00	192.00	192.00	192.00	192.00	192.00	192.00	192.00
	bound	192.00	-Inf	-Inf	192.00	192.00	192.00	192.00	-Inf
	runtime	0.78	0.23	0.09	13.33	7.47	19.50	0.08	0.22
gm211	value	177.20	177.20	177.20	177.20	177.20	177.20	177.20	177.20
	bound	177.20	-Inf	-Inf	177.20	177.20	177.20	177.20	-Inf
	runtime	0.93	0.26	0.08	16.64	7.20	19.49	0.07	0.25
gm212	value	138.83	138.83	138.83	138.83	138.83	138.83	138.83	138.93
	bound	138.83	-Inf	-Inf	138.83	138.83	138.83	138.83	-Inf
	runtime	0.92	0.27	0.07	40.65	6.65	40.98	0.07	0.25
gm213	value	104.63	104.63	104.63	104.63	104.63	104.63	104.63	104.63
	bound	104.63	-Inf	-Inf	104.63	104.63	104.63	104.63	-Inf
	runtime	0.09	0.08	0.03	2.99	0.64	4.41	0.03	0.07
gm214	value	161.09	161.09	161.09	161.09	161.09	161.09	161.09	161.09
	bound	161.09	-Inf	-Inf	161.09	161.09	161.09	161.09	-Inf
	runtime	2.15	0.54	0.14	116.05	36.87	119.18	0.14	0.52
gm215	value	107.45	107.45	107.45	107.45	107.45	107.45	107.45	107.45
	bound	107.45	-Inf	-Inf	107.45	107.45	107.45	107.45	-Inf
	runtime	1.42	0.36	0.10	51.02	7.27	50.56	0.10	0.35
gm216	value	186.73	186.73	186.73	186.73	186.73	186.73	186.73	186.73
	bound	186.73	-Inf	-Inf	186.73	186.73	186.73	186.73	-Inf
	runtime	0.94	0.33	0.08	24.92	12.01	24.29	0.08	0.33
gm217	value	118.74	118.74	118.74	118.74	118.74	118.74	118.74	118.74
	bound	118.74	-Inf	-Inf	118.74	118.74	118.74	118.74	-Inf
	runtime	0.49	0.23	0.06	34.49	13.36	34.97	0.05	0.22
gm218	value	140.53	140.94	140.53	140.53	140.53	140.53	140.53	140.94
	bound	140.53	-Inf	-Inf	140.53	140.53	140.53	140.53	-Inf
	runtime	0.42	0.20	0.06	21.70	1.85	21.61	0.05	0.19

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm219	value	132.60	132.60	132.60	132.60	132.60	132.60	132.60	132.60
	bound	132.60	-Inf	-Inf	132.60	132.60	132.60	132.60	-Inf
	runtime	1.17	0.45	0.13	88.18	15.81	83.52	0.11	0.44
gm22	value	98.13	98.13	98.13	98.13	98.13	98.13	98.13	98.13
	bound	98.13	-Inf	-Inf	98.13	98.13	98.13	98.13	-Inf
	runtime	1.02	0.34	0.08	75.12	25.16	79.34	0.07	0.33
gm220	value	15.77	15.77	15.77	15.77	15.77	15.77	15.77	15.77
	bound	15.77	-Inf	-Inf	15.77	15.77	15.77	15.77	-Inf
	runtime	0.02	0.02	0.01	0.25	0.04	0.43	0.01	0.01
gm221	value	102.95	102.95	102.95	102.95	102.95	102.95	102.95	102.95
	bound	102.95	-Inf	-Inf	102.95	102.95	102.93	102.95	-Inf
	runtime	0.07	0.14	0.03	22.03	10.29	22.28	0.03	0.13
gm222	value	124.02	124.02	124.02	124.02	124.02	124.02	124.02	124.02
	bound	124.02	-Inf	-Inf	124.01	124.02	124.02	124.02	-Inf
	runtime	1.66	1.81	0.14	117.50	75.56	121.84	0.11	1.77
gm223	value	114.27	114.27	114.27	114.27	114.27	114.27	114.27	114.27
	bound	114.27	-Inf	-Inf	114.27	114.27	114.27	114.27	-Inf
	runtime	0.81	0.31	0.08	37.00	2.54	37.28	0.06	0.30
gm224	value	105.21	105.21	105.21	105.21	105.21	105.21	105.21	105.21
	bound	105.21	-Inf	-Inf	105.21	105.21	105.21	105.21	-Inf
	runtime	0.06	0.13	0.05	5.48	0.52	9.61	0.02	0.11
gm225	value	54.92	54.92	54.92	54.92	54.92	54.92	54.92	54.92
	bound	54.92	-Inf	-Inf	54.92	54.92	54.92	54.92	-Inf
	runtime	0.08	0.06	0.03	1.53	0.20	1.67	0.02	0.05
gm226	value	214.34	214.51	214.34	214.34	214.34	214.34	214.34	214.51
	bound	214.34	-Inf	-Inf	214.34	214.34	214.34	214.34	-Inf
	runtime	1.04	0.27	0.07	16.89	6.21	26.52	0.07	0.26
gm227	value	140.71	140.71	140.71	140.71	140.71	140.71	140.71	140.71
	bound	140.71	-Inf	-Inf	140.71	140.71	140.70	140.71	-Inf
	runtime	0.34	0.13	0.04	14.81	14.97	14.81	0.03	0.12
gm228	value	72.36	72.36	72.36	72.36	72.36	72.36	72.36	72.36
	bound	72.36	-Inf	-Inf	72.36	72.36	72.36	72.36	-Inf
	runtime	0.15	0.07	0.03	2.56	0.33	4.32	0.02	0.06
gm229	value	57.88	57.88	57.88	57.88	57.88	57.88	57.88	57.88
	bound	57.88	-Inf	-Inf	57.88	57.88	57.88	57.88	-Inf
	runtime	0.41	0.12	0.05	5.10	1.15	9.63	0.04	0.11
gm23	value	127.67	127.67	127.67	127.67	127.67	127.67	127.67	127.67
	bound	127.67	-Inf	-Inf	127.67	127.67	127.67	127.67	-Inf
	runtime	2.32	0.85	0.16	156.82	19.59	159.55	0.16	0.81
gm230	value	46.79	46.79	46.79	46.79	46.79	46.79	46.79	46.79
	bound	46.79	-Inf	-Inf	46.79	46.79	46.79	46.79	-Inf
	runtime	1.42	0.29	0.10	7.65	0.99	13.01	0.08	0.26
gm231	value	126.42	126.42	126.42	126.42	126.42	126.42	126.42	126.42
	bound	126.42	-Inf	-Inf	126.42	126.42	126.42	126.42	-Inf
	runtime	2.47	0.63	0.19	29.64	7.78	75.17	0.17	0.58
gm232	value	47.45	47.45	47.45	47.45	47.45	47.45	47.45	47.45
	bound	47.45	-Inf	-Inf	47.45	47.45	47.45	47.45	-Inf
	runtime	0.61	0.22	0.06	9.75	4.62	21.70	0.05	0.20
gm233	value	107.50	107.50	107.50	107.50	107.50	107.50	107.50	107.50
	bound	107.50	-Inf	-Inf	107.50	107.50	107.50	107.50	-Inf
	runtime	0.85	0.31	0.08	33.99	20.53	33.46	0.07	0.31
gm234	value	113.70	113.70	113.70	113.70	113.70	113.70	113.70	113.70
	bound	113.70	-Inf	-Inf	113.70	113.70	113.70	113.70	-Inf
	runtime	1.28	0.40	0.11	98.61	22.10	99.38	0.10	0.38
gm235	value	34.76	34.76	34.76	34.76	34.76	34.76	34.76	34.76
	bound	34.76	-Inf	-Inf	34.76	34.76	34.76	34.76	-Inf
	runtime	0.37	0.10	0.04	0.02	0.02	0.02	0.03	0.09
gm236	value	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78
	bound	93.78	-Inf	-Inf	93.78	93.78	93.78	93.78	-Inf
	runtime	1.33	0.38	0.09	57.17	6.29	62.82	0.10	0.36
gm237	value	205.60	205.60	205.60	205.60	205.60	205.60	205.60	205.60
	bound	205.60	-Inf	-Inf	205.60	205.60	205.60	205.60	-Inf
	runtime	1.58	0.59	0.17	63.32	19.06	87.48	0.17	0.55
gm238	value	208.07	208.07	208.08	208.07	208.07	208.07	208.07	208.07
	bound	208.07	-Inf	-Inf	208.07	208.07	208.07	208.07	-Inf
	runtime	1.62	0.43	0.18	82.08	70.36	44.63	0.11	0.42
gm239	value	55.86	55.86	55.86	55.86	55.86	55.86	55.86	55.86
	bound	55.86	-Inf	-Inf	55.86	55.86	55.86	55.86	-Inf
	runtime	0.80	0.25	0.09	6.11	1.03	12.69	0.07	0.23
gm24	value	27.20	27.20	27.20	27.20	27.20	27.20	27.20	27.20
	bound	27.20	-Inf	-Inf	27.20	27.20	27.20	27.20	-Inf
	runtime	0.03	0.03	0.02	0.81	0.10	1.52	0.01	0.02
gm240	value	132.95	132.95	133.49	132.95	132.95	132.95	132.95	132.95
	bound	132.95	-Inf	-Inf	132.95	132.95	132.95	132.95	-Inf
	runtime	0.35	0.20	0.06	22.23	3.17	35.73	0.05	0.19

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm241	value	249.51	249.51	249.51	249.51	249.51	249.51	249.51	249.51
	bound	249.51	-Inf	-Inf	249.51	249.51	249.51	249.51	-Inf
	runtime	0.75	0.29	0.09	34.81	48.34	49.65	0.08	0.28
gm242	value	140.62	140.62	140.62	140.62	140.62	140.62	140.62	140.62
	bound	140.62	-Inf	-Inf	140.62	140.62	140.62	140.62	-Inf
	runtime	0.27	0.19	0.05	33.23	3.42	33.44	0.04	0.18
gm243	value	143.28	143.28	143.28	143.28	143.28	143.28	143.28	143.28
	bound	143.28	-Inf	-Inf	143.28	143.28	143.28	143.28	-Inf
	runtime	0.73	0.30	0.09	60.07	8.28	60.05	0.08	0.29
gm244	value	150.16	150.16	150.16	150.16	150.16	150.16	150.16	150.16
	bound	150.16	-Inf	-Inf	150.16	150.16	150.16	150.16	-Inf
	runtime	0.94	0.31	0.10	71.06	6.63	71.04	0.09	0.30
gm245	value	172.08	172.08	172.08	172.08	172.08	172.08	172.08	172.08
	bound	172.08	-Inf	-Inf	172.08	172.08	172.08	172.08	-Inf
	runtime	0.86	0.30	0.09	57.03	8.91	57.60	0.09	0.29
gm246	value	211.41	211.41	211.41	211.41	211.41	211.41	211.41	211.41
	bound	211.41	-Inf	-Inf	211.41	211.41	211.41	211.41	-Inf
	runtime	1.49	0.35	0.12	99.05	12.61	71.72	0.12	0.33
gm247	value	79.01	79.01	79.01	79.01	79.01	79.01	79.01	79.01
	bound	79.01	-Inf	-Inf	79.01	79.01	79.01	79.01	-Inf
	runtime	0.91	0.28	0.08	37.43	47.91	48.39	0.07	0.27
gm248	value	119.66	119.66	119.66	119.66	119.66	119.66	119.66	119.66
	bound	119.66	-Inf	-Inf	119.66	119.66	119.66	119.66	-Inf
	runtime	3.10	0.73	0.17	91.79	24.95	94.10	0.18	0.70
gm249	value	162.65	162.65	162.65	162.65	162.65	162.65	162.65	162.65
	bound	162.65	-Inf	-Inf	162.65	162.65	162.65	162.65	-Inf
	runtime	0.23	0.22	0.06	29.10	35.69	35.87	0.05	0.20
gm25	value	82.61	82.61	82.61	82.61	82.61	82.61	82.61	82.61
	bound	82.61	-Inf	-Inf	82.61	82.61	82.61	82.61	-Inf
	runtime	1.50	0.38	0.12	26.17	75.28	47.07	0.11	0.37
gm250	value	222.95	222.95	222.95	222.95	222.95	222.95	222.95	222.95
	bound	222.95	-Inf	-Inf	222.92	222.95	222.91	222.95	-Inf
	runtime	1.13	0.53	0.09	91.98	91.23	96.00	0.08	0.52
gm251	value	135.86	135.86	135.86	135.86	135.86	135.86	135.86	135.86
	bound	135.86	-Inf	-Inf	135.86	135.86	135.86	135.86	-Inf
	runtime	0.23	0.17	0.04	27.98	3.66	28.26	0.03	0.16
gm252	value	179.49	179.49	179.56	179.49	179.49	179.49	179.49	179.49
	bound	179.49	-Inf	-Inf	179.49	179.49	179.49	179.49	-Inf
	runtime	0.47	0.19	0.08	9.61	1.35	14.70	0.05	0.18
gm253	value	135.82	135.82	135.82	135.82	135.82	135.82	135.82	135.82
	bound	135.82	-Inf	-Inf	135.82	135.82	135.82	135.82	-Inf
	runtime	0.88	0.20	0.07	11.98	2.72	13.49	0.06	0.19
gm254	value	192.83	192.83	192.83	192.83	192.83	192.83	192.83	192.83
	bound	192.83	-Inf	-Inf	192.83	192.83	192.83	192.83	-Inf
	runtime	1.45	0.47	0.12	20.61	6.87	39.08	0.11	0.43
gm255	value	171.47	171.47	171.47	171.47	171.47	171.47	171.47	171.47
	bound	171.47	-Inf	-Inf	171.47	171.47	171.47	171.47	-Inf
	runtime	1.45	0.45	0.11	94.26	22.83	75.66	0.10	0.42
gm256	value	228.61	228.61	228.61	228.61	228.61	228.61	228.61	228.61
	bound	228.61	-Inf	-Inf	228.61	228.61	228.61	228.61	-Inf
	runtime	1.92	0.58	0.16	107.40	48.72	106.51	0.15	0.54
gm257	value	169.17	169.17	169.17	169.17	169.17	169.17	169.17	169.17
	bound	169.17	-Inf	-Inf	169.17	169.17	169.17	169.17	-Inf
	runtime	1.95	0.65	0.14	186.03	39.68	194.46	0.16	0.62
gm258	value	139.09	139.09	139.09	139.09	139.09	139.09	139.09	139.09
	bound	139.09	-Inf	-Inf	139.09	139.09	139.09	139.09	-Inf
	runtime	1.31	0.39	0.10	22.87	5.46	43.09	0.11	0.37
gm259	value	194.33	194.48	194.33	194.33	194.33	194.33	194.33	194.48
	bound	194.33	-Inf	-Inf	194.33	194.33	194.33	194.33	-Inf
	runtime	0.16	0.19	0.06	23.67	8.18	37.93	0.06	0.17
gm26	value	56.77	56.77	56.77	56.77	56.77	56.77	56.77	56.77
	bound	56.77	-Inf	-Inf	56.77	56.77	56.77	56.77	-Inf
	runtime	0.14	0.08	0.03	5.03	6.85	11.94	0.02	0.08
gm260	value	127.88	127.88	127.88	127.88	127.88	127.88	127.88	127.88
	bound	127.88	-Inf	-Inf	127.88	127.88	127.88	127.88	-Inf
	runtime	0.10	0.10	0.03	5.91	0.50	11.71	0.03	0.09
gm261	value	241.00	241.00	241.00	241.00	241.00	241.00	241.00	241.00
	bound	241.00	-Inf	-Inf	241.00	241.00	241.00	241.00	-Inf
	runtime	0.25	0.23	0.06	37.12	3.64	37.26	0.06	0.22
gm262	value	147.93	147.93	147.93	147.93	147.93	147.93	147.93	147.93
	bound	147.93	-Inf	-Inf	147.93	147.93	147.93	147.93	-Inf
	runtime	0.56	0.16	0.05	9.06	1.30	10.95	0.04	0.14
gm263	value	236.30	236.31	236.54	236.30	236.30	236.30	236.30	236.31
	bound	236.30	-Inf	-Inf	236.30	236.30	236.28	236.30	-Inf
	runtime	0.89	0.31	0.12	46.65	44.52	45.06	0.08	0.30

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm264	value	209.17	209.59	209.17	209.17	209.17	209.17	209.17	209.59
	bound	209.17	-Inf	-Inf	209.17	209.17	209.17	209.17	-Inf
	runtime	1.34	1.05	0.14	83.69	14.71	81.26	0.12	1.05
gm265	value	243.32	243.32	243.32	243.32	243.32	243.32	243.32	243.32
	bound	243.32	-Inf	-Inf	243.32	243.32	243.32	243.32	-Inf
	runtime	1.10	0.45	0.12	74.60	7.63	74.15	0.11	0.43
gm266	value	234.93	234.93	234.93	234.93	234.93	234.93	234.93	234.93
	bound	234.93	-Inf	-Inf	234.93	234.93	234.93	234.93	-Inf
	runtime	1.39	0.43	0.11	11.89	6.09	14.92	0.10	0.41
gm267	value	329.10	329.10	329.10	329.10	329.10	329.10	329.10	329.10
	bound	329.10	-Inf	-Inf	329.10	329.10	329.09	329.10	-Inf
	runtime	1.64	0.72	0.17	157.61	149.69	158.51	0.16	0.68
gm268	value	97.57	97.57	97.57	97.57	97.57	97.57	97.57	97.57
	bound	97.57	-Inf	-Inf	97.57	97.57	97.57	97.57	-Inf
	runtime	1.35	0.47	0.11	27.64	15.72	50.78	0.11	0.45
gm269	value	172.23	172.23	172.23	172.23	172.23	172.23	172.23	172.23
	bound	172.23	-Inf	-Inf	172.23	172.23	172.23	172.23	-Inf
	runtime	3.68	1.11	0.23	202.86	42.58	201.10	0.21	1.06
gm27	value	179.42	179.42	179.42	179.42	179.42	179.42	179.42	179.42
	bound	179.42	-Inf	-Inf	179.42	179.42	179.42	179.42	-Inf
	runtime	0.40	1.79	0.06	28.39	22.62	28.23	0.05	1.86
gm270	value	96.89	96.89	96.89	96.89	96.89	96.89	96.89	96.89
	bound	96.89	-Inf	-Inf	96.89	96.89	96.89	96.89	-Inf
	runtime	0.43	0.17	0.07	15.29	3.54	29.72	0.06	0.16
gm271	value	183.76	183.76	183.76	183.76	183.76	183.76	183.76	183.76
	bound	183.76	-Inf	-Inf	183.76	183.76	183.76	183.76	-Inf
	runtime	1.29	0.55	0.13	53.00	98.80	72.87	0.11	0.53
gm272	value	120.19	120.85	120.19	120.19	120.19	120.19	120.19	120.85
	bound	120.19	-Inf	-Inf	120.19	120.19	120.19	120.19	-Inf
	runtime	2.02	0.50	0.11	63.29	24.99	86.45	0.11	0.48
gm273	value	119.78	120.18	119.78	119.78	119.78	119.78	119.78	120.18
	bound	119.78	-Inf	-Inf	119.78	119.78	119.78	119.78	-Inf
	runtime	2.20	0.52	0.12	94.56	10.25	95.03	0.14	0.50
gm274	value	69.45	69.45	69.45	69.45	69.45	69.45	69.45	69.45
	bound	69.45	-Inf	-Inf	69.45	69.45	69.45	69.45	-Inf
	runtime	0.38	0.14	0.05	5.52	0.61	11.14	0.04	0.12
gm275	value	166.56	166.56	166.56	166.56	166.56	166.56	166.56	166.56
	bound	166.56	-Inf	-Inf	166.56	166.56	166.56	166.56	-Inf
	runtime	2.03	0.44	0.14	55.43	6.87	94.25	0.12	0.41
gm276	value	71.68	71.68	71.68	71.68	71.68	71.68	71.68	71.68
	bound	71.68	-Inf	-Inf	71.68	71.68	71.68	71.68	-Inf
	runtime	0.39	0.09	0.04	6.29	0.72	10.02	0.03	0.08
gm277	value	87.94	88.11	87.94	87.94	87.94	87.94	87.94	88.11
	bound	87.94	-Inf	-Inf	87.94	87.94	87.94	87.94	-Inf
	runtime	0.50	0.24	0.10	35.96	12.15	45.11	0.06	0.22
gm278	value	198.39	198.39	198.39	198.39	198.39	198.39	198.39	198.39
	bound	198.39	-Inf	-Inf	198.39	198.39	198.39	198.39	-Inf
	runtime	0.79	0.25	0.09	47.37	6.41	56.14	0.08	0.24
gm279	value	165.05	165.05	165.05	165.05	165.05	165.05	165.05	165.05
	bound	165.05	-Inf	-Inf	165.04	165.05	165.04	165.05	-Inf
	runtime	0.26	0.17	0.05	27.77	5.11	28.38	0.04	0.17
gm28	value	190.92	190.92	190.92	190.92	190.92	190.92	190.92	190.92
	bound	190.92	-Inf	-Inf	190.92	190.92	190.92	190.92	-Inf
	runtime	1.49	0.44	0.12	14.89	19.14	22.88	0.11	0.43
gm280	value	121.45	121.45	121.45	121.45	121.45	121.45	121.45	121.45
	bound	121.45	-Inf	-Inf	121.45	121.45	121.45	121.45	-Inf
	runtime	0.15	0.19	0.04	22.80	15.46	35.59	0.04	0.18
gm281	value	163.09	163.09	163.09	163.09	163.09	163.09	163.09	163.09
	bound	163.09	-Inf	-Inf	163.09	163.09	163.09	163.09	-Inf
	runtime	1.92	0.62	0.16	126.71	24.14	141.60	0.15	0.60
gm282	value	175.53	175.53	175.53	175.53	175.53	175.53	175.53	175.53
	bound	175.53	-Inf	-Inf	175.53	175.53	175.53	175.53	-Inf
	runtime	0.72	0.33	0.08	53.47	6.16	52.86	0.07	0.31
gm283	value	110.68	110.68	110.68	110.68	110.68	110.68	110.68	110.68
	bound	110.68	-Inf	-Inf	110.68	110.68	110.68	110.68	-Inf
	runtime	0.51	0.23	0.07	18.12	21.17	33.13	0.07	0.22
gm284	value	115.98	115.98	115.98	115.98	115.98	115.98	115.98	115.98
	bound	115.98	-Inf	-Inf	115.98	115.98	115.98	115.98	-Inf
	runtime	0.58	0.19	0.06	15.87	2.02	18.21	0.05	0.18
gm285	value	97.46	97.46	97.46	97.46	97.46	97.46	97.46	97.46
	bound	97.46	-Inf	-Inf	97.46	97.46	97.46	97.46	-Inf
	runtime	0.22	0.10	0.04	4.88	1.77	7.13	0.03	0.09
gm286	value	128.36	128.36	128.36	128.36	128.36	128.36	128.36	128.36
	bound	128.36	-Inf	-Inf	128.36	128.36	128.36	128.36	-Inf
	runtime	1.32	0.45	0.09	20.25	7.42	35.55	0.08	0.45

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm287	value	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93
	bound	77.93	-Inf	-Inf	77.93	77.93	77.93	77.93	-Inf
	runtime	0.20	0.15	0.05	8.98	6.06	14.96	0.04	0.13
gm288	value	113.99	113.99	113.99	113.99	113.99	113.99	113.99	113.99
	bound	113.99	-Inf	-Inf	113.99	113.99	113.99	113.99	-Inf
	runtime	0.94	0.28	0.09	31.88	4.43	46.94	0.08	0.27
gm289	value	207.93	210.20	207.93	207.93	207.93	207.93	207.93	210.20
	bound	207.93	-Inf	-Inf	207.93	207.93	207.93	207.93	-Inf
	runtime	1.23	0.35	0.13	61.18	19.16	62.01	0.10	0.34
gm29	value	56.21	56.21	56.21	56.21	56.21	56.21	56.21	56.21
	bound	56.21	-Inf	-Inf	56.21	56.21	56.21	56.21	-Inf
	runtime	0.27	0.11	0.05	9.05	5.20	15.53	0.04	0.10
gm290	value	113.09	113.09	113.09	113.09	113.09	113.09	113.09	113.09
	bound	113.09	-Inf	-Inf	113.09	113.09	113.09	113.09	-Inf
	runtime	2.19	0.91	0.17	31.18	13.92	49.65	0.15	0.90
gm291	value	133.97	133.97	133.97	133.97	133.97	133.97	133.97	133.97
	bound	133.97	-Inf	-Inf	133.97	133.97	133.97	133.97	-Inf
	runtime	0.57	0.31	0.08	40.66	11.11	47.97	0.07	0.30
gm292	value	149.37	149.37	149.37	149.37	149.37	149.37	149.37	149.37
	bound	149.37	-Inf	-Inf	149.37	149.37	149.37	149.37	-Inf
	runtime	1.59	0.45	0.15	25.34	22.47	33.53	0.13	0.42
gm293	value	105.40	105.40	105.40	105.40	105.40	105.40	105.40	105.40
	bound	105.40	-Inf	-Inf	105.40	105.40	105.40	105.40	-Inf
	runtime	0.66	0.31	0.08	51.31	50.12	51.14	0.08	0.30
gm294	value	26.25	26.25	26.25	26.25	26.25	26.25	26.25	26.25
	bound	26.25	-Inf	-Inf	26.25	26.25	26.25	26.25	-Inf
	runtime	0.26	0.09	0.03	3.66	0.57	5.50	0.02	0.08
gm295	value	84.02	84.02	84.02	84.02	84.02	84.02	84.02	84.02
	bound	84.02	-Inf	-Inf	84.02	84.02	84.02	84.02	-Inf
	runtime	1.49	0.63	0.11	90.68	46.22	90.82	0.11	0.62
gm296	value	157.83	158.02	157.83	157.83	157.83	157.83	157.83	158.02
	bound	157.83	-Inf	-Inf	157.83	157.83	157.83	157.83	-Inf
	runtime	1.24	0.38	0.10	70.36	5.96	69.62	0.10	0.37
gm297	value	150.73	150.73	150.73	150.73	150.73	150.73	150.73	150.73
	bound	150.73	-Inf	-Inf	150.73	150.73	150.73	150.73	-Inf
	runtime	0.44	0.31	0.06	53.43	36.33	53.21	0.05	0.30
gm298	value	93.26	93.26	93.26	93.26	93.26	93.26	93.26	93.26
	bound	93.26	-Inf	-Inf	93.26	93.26	93.26	93.26	-Inf
	runtime	0.32	0.17	0.04	9.35	2.10	13.09	0.03	0.16
gm299	value	70.70	70.70	70.70	70.70	70.70	70.70	70.70	70.70
	bound	70.70	-Inf	-Inf	70.70	70.70	70.70	70.70	-Inf
	runtime	0.58	0.16	0.05	12.78	1.99	21.01	0.05	0.15
gm3	value	34.46	34.46	34.46	34.46	34.46	34.46	34.46	34.46
	bound	34.46	-Inf	-Inf	34.46	34.46	34.46	34.46	-Inf
	runtime	0.97	0.22	0.07	10.47	3.03	18.61	0.07	0.21
gm30	value	104.49	104.49	104.49	104.49	104.49	104.49	104.49	104.49
	bound	104.49	-Inf	-Inf	104.49	104.49	104.49	104.49	-Inf
	runtime	0.53	0.25	0.08	38.31	4.93	40.26	0.07	0.24
gm300	value	58.20	58.20	58.20	58.20	58.20	58.20	58.20	58.20
	bound	58.20	-Inf	-Inf	58.20	58.20	58.20	58.20	-Inf
	runtime	0.08	0.09	0.03	2.07	0.80	2.51	0.02	0.08
gm31	value	84.06	84.06	84.06	84.06	84.06	84.06	84.06	84.06
	bound	84.06	-Inf	-Inf	84.06	84.06	84.06	84.06	-Inf
	runtime	0.12	0.11	0.03	7.72	3.66	14.40	0.03	0.10
gm32	value	27.06	27.06	27.06	27.06	27.06	27.06	27.06	27.06
	bound	27.06	-Inf	-Inf	27.06	27.06	27.06	27.06	-Inf
	runtime	0.06	0.03	0.02	1.24	0.15	1.97	0.01	0.03
gm33	value	121.42	121.42	121.42	121.42	121.42	121.42	121.42	121.42
	bound	121.42	-Inf	-Inf	121.42	121.42	121.42	121.42	-Inf
	runtime	1.54	0.78	0.13	78.49	18.81	79.52	0.11	0.75
gm34	value	232.91	233.46	232.91	232.91	232.91	232.91	232.91	233.46
	bound	232.91	-Inf	-Inf	232.91	232.91	232.91	232.91	-Inf
	runtime	1.13	0.36	0.10	56.22	54.88	55.76	0.09	0.35
gm35	value	319.58	319.58	319.58	319.58	319.58	319.58	319.58	319.58
	bound	319.58	-Inf	-Inf	319.58	319.58	319.58	319.58	-Inf
	runtime	2.20	0.44	0.15	54.58	25.55	52.70	0.11	0.43
gm36	value	209.63	209.63	209.63	209.63	209.63	209.63	209.63	209.63
	bound	209.63	-Inf	-Inf	209.63	209.63	209.63	209.63	-Inf
	runtime	0.83	0.32	0.09	49.04	4.05	47.23	0.08	0.31
gm37	value	62.06	62.06	62.06	62.06	62.06	62.06	62.06	62.06
	bound	62.06	-Inf	-Inf	62.06	62.06	62.06	62.06	-Inf
	runtime	0.29	0.08	0.03	1.00	0.39	2.02	0.02	0.07
gm38	value	170.29	170.29	170.29	170.29	170.29	170.29	170.29	170.29
	bound	170.29	-Inf	-Inf	170.29	170.29	170.29	170.29	-Inf
	runtime	0.41	0.17	0.06	27.47	1.91	27.48	0.05	0.16

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm39	value	51.04	51.04	51.04	51.04	51.04	51.04	51.04	51.04
	bound	51.04	-Inf	-Inf	51.04	51.04	51.04	51.04	-Inf
	runtime	0.24	0.10	0.03	15.06	5.51	15.19	0.03	0.09
gm4	value	55.67	55.67	55.67	55.67	55.67	55.67	55.67	55.67
	bound	55.67	-Inf	-Inf	55.67	55.67	55.67	55.67	-Inf
	runtime	1.44	0.47	0.11	60.11	14.86	60.45	0.10	0.45
gm40	value	28.36	28.36	28.36	28.36	28.36	28.36	28.36	28.36
	bound	28.36	-Inf	-Inf	28.36	28.36	28.36	28.36	-Inf
	runtime	0.37	0.12	0.04	2.93	0.37	5.29	0.03	0.11
gm41	value	52.70	52.70	52.70	52.70	52.70	52.70	52.70	52.70
	bound	52.70	-Inf	-Inf	52.70	52.70	52.70	52.70	-Inf
	runtime	0.33	0.12	0.04	2.75	0.79	3.59	0.04	0.11
gm42	value	84.25	84.25	84.25	84.25	84.25	84.25	84.25	84.25
	bound	84.25	-Inf	-Inf	84.25	84.25	84.25	84.25	-Inf
	runtime	1.99	0.45	0.11	77.26	13.01	98.90	0.11	0.43
gm43	value	83.83	83.83	83.83	83.83	83.83	83.83	83.83	83.83
	bound	83.83	-Inf	-Inf	83.83	83.83	83.83	83.83	-Inf
	runtime	0.42	0.18	0.06	13.44	2.06	17.67	0.05	0.17
gm44	value	102.92	102.92	102.92	102.92	102.92	102.92	102.92	102.92
	bound	102.92	-Inf	-Inf	102.92	102.92	102.92	102.92	-Inf
	runtime	0.86	0.31	0.09	37.20	20.56	46.42	0.08	0.30
gm45	value	138.87	138.87	138.87	138.87	138.87	138.87	138.87	138.87
	bound	138.87	-Inf	-Inf	138.87	138.87	138.87	138.87	-Inf
	runtime	2.07	0.49	0.15	30.34	20.01	71.62	0.13	0.46
gm46	value	102.44	102.44	102.44	102.44	102.44	102.44	102.44	102.44
	bound	102.44	-Inf	-Inf	102.44	102.44	102.44	102.44	-Inf
	runtime	1.49	0.47	0.14	13.80	6.56	18.48	0.11	0.45
gm47	value	53.11	53.11	53.11	53.11	53.11	53.11	53.11	53.11
	bound	53.11	-Inf	-Inf	53.11	53.11	53.11	53.11	-Inf
	runtime	0.24	0.13	0.04	5.38	1.05	9.36	0.04	0.12
gm48	value	84.41	84.41	84.41	84.41	84.41	84.41	84.41	84.41
	bound	84.41	-Inf	-Inf	84.41	84.41	84.41	84.41	-Inf
	runtime	0.47	0.12	0.05	2.98	4.99	5.35	0.04	0.11
gm49	value	138.09	138.09	138.09	138.09	138.09	138.09	138.09	138.09
	bound	138.09	-Inf	-Inf	138.09	138.09	138.09	138.09	-Inf
	runtime	1.47	0.42	0.12	14.41	5.62	19.07	0.11	0.40
gm5	value	56.39	56.39	56.39	56.39	56.39	56.39	56.39	56.39
	bound	56.39	-Inf	-Inf	56.39	56.39	56.39	56.39	-Inf
	runtime	0.64	0.21	0.05	5.89	0.65	22.76	0.05	0.20
gm50	value	108.25	108.25	108.25	108.25	108.25	108.25	108.25	108.25
	bound	108.25	-Inf	-Inf	108.25	108.25	108.25	108.25	-Inf
	runtime	1.49	0.40	0.10	47.17	4.68	46.39	0.09	0.39
gm51	value	56.11	56.11	56.11	56.11	56.11	56.11	56.11	56.11
	bound	56.11	-Inf	-Inf	56.11	56.11	56.11	56.11	-Inf
	runtime	0.09	0.08	0.03	8.84	0.63	9.99	0.02	0.07
gm52	value	52.51	52.51	52.51	52.51	52.51	52.51	52.51	52.51
	bound	52.51	-Inf	-Inf	52.51	52.51	52.51	52.51	-Inf
	runtime	0.37	0.20	0.05	15.61	12.56	22.03	0.05	0.19
gm53	value	99.49	99.49	99.49	99.49	99.49	99.49	99.49	99.49
	bound	99.49	-Inf	-Inf	99.49	99.49	99.49	99.49	-Inf
	runtime	0.50	0.16	0.05	37.83	9.45	38.48	0.05	0.15
gm54	value	68.98	68.98	68.98	68.98	68.98	68.98	68.98	68.98
	bound	68.98	-Inf	-Inf	68.98	68.98	68.98	68.98	-Inf
	runtime	0.41	0.15	0.04	5.54	1.85	8.94	0.03	0.14
gm55	value	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50
	bound	112.50	-Inf	-Inf	112.50	112.50	112.50	112.50	-Inf
	runtime	0.36	0.19	0.06	15.80	29.96	24.38	0.05	0.18
gm56	value	52.84	52.84	52.84	52.84	52.84	52.84	52.84	52.84
	bound	52.84	-Inf	-Inf	52.84	52.84	52.84	52.84	-Inf
	runtime	0.36	0.13	0.04	16.02	6.10	16.40	0.03	0.12
gm57	value	40.81	40.81	40.81	40.81	40.81	40.81	40.81	40.81
	bound	40.81	-Inf	-Inf	40.81	40.81	40.81	40.81	-Inf
	runtime	0.18	0.07	0.03	5.07	4.12	8.89	0.02	0.06
gm58	value	135.47	135.47	135.47	135.47	135.47	135.47	135.47	135.47
	bound	135.47	-Inf	-Inf	135.47	135.47	135.47	135.47	-Inf
	runtime	0.79	0.21	0.08	11.83	23.10	25.40	0.06	0.20
gm59	value	103.42	103.42	103.42	103.42	103.42	103.42	103.42	103.42
	bound	103.42	-Inf	-Inf	103.42	103.42	103.42	103.42	-Inf
	runtime	0.88	0.35	0.09	48.33	7.66	50.83	0.08	0.34
gm6	value	43.11	43.11	43.11	43.11	43.11	43.11	43.11	43.11
	bound	43.11	-Inf	-Inf	43.11	43.11	43.11	43.11	-Inf
	runtime	1.58	0.53	0.10	13.36	4.75	34.02	0.10	0.51
gm60	value	90.18	90.18	90.18	90.18	90.18	90.18	90.18	90.18
	bound	90.18	-Inf	-Inf	90.18	90.18	90.18	90.18	-Inf
	runtime	1.68	0.52	0.13	17.49	7.69	26.28	0.12	0.51

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm61	value	52.34	52.34	52.34	52.34	52.34	52.34	52.34	52.34
	bound	52.34	-Inf	-Inf	52.34	52.34	52.34	52.34	-Inf
	runtime	0.19	0.10	0.04	5.59	14.38	4.86	0.03	0.09
gm62	value	234.53	234.53	234.53	234.53	234.53	234.53	234.53	234.53
	bound	234.53	-Inf	-Inf	234.53	234.53	234.53	234.53	-Inf
	runtime	0.75	0.47	0.10	101.10	60.65	100.82	0.10	0.45
gm63	value	318.07	318.07	318.07	318.07	318.07	318.07	318.07	318.07
	bound	318.07	-Inf	-Inf	318.07	318.07	318.07	318.07	-Inf
	runtime	1.40	0.44	0.12	47.90	19.30	79.70	0.12	0.43
gm64	value	65.39	65.39	65.39	65.39	65.39	65.39	65.39	65.39
	bound	65.39	-Inf	-Inf	65.39	65.39	65.39	65.39	-Inf
	runtime	0.20	0.13	0.04	19.87	4.21	19.95	0.03	0.13
gm65	value	111.16	111.16	111.16	111.16	111.16	111.16	111.16	111.16
	bound	111.16	-Inf	-Inf	111.16	111.16	111.16	111.16	-Inf
	runtime	0.92	0.22	0.08	4.46	2.79	7.73	0.07	0.21
gm66	value	74.92	74.92	74.92	74.92	74.92	74.92	74.92	74.92
	bound	74.92	-Inf	-Inf	74.92	74.92	74.92	74.92	-Inf
	runtime	0.18	0.07	0.03	3.87	1.01	6.17	0.02	0.06
gm67	value	36.55	36.55	36.55	36.55	36.55	36.55	36.55	36.55
	bound	36.55	-Inf	-Inf	36.55	36.55	36.55	36.55	-Inf
	runtime	0.02	0.05	0.02	0.79	0.03	0.97	0.01	0.04
gm68	value	73.36	73.36	73.36	73.36	73.36	73.36	73.36	73.36
	bound	73.36	-Inf	-Inf	73.36	73.36	73.36	73.36	-Inf
	runtime	0.24	0.11	0.03	3.10	0.66	5.49	0.03	0.10
gm69	value	72.33	72.33	72.33	72.33	72.33	72.33	72.33	72.33
	bound	72.33	-Inf	-Inf	72.33	72.33	72.33	72.33	-Inf
	runtime	0.12	0.08	0.03	3.29	0.63	4.63	0.03	0.08
gm7	value	112.14	112.14	112.14	112.14	112.14	112.14	112.14	112.14
	bound	112.14	-Inf	-Inf	112.14	112.14	112.14	112.14	-Inf
	runtime	1.56	0.39	0.10	105.28	17.77	104.94	0.09	0.39
gm70	value	34.84	34.84	34.84	34.84	34.84	34.84	34.84	34.84
	bound	34.84	-Inf	-Inf	34.84	34.84	34.84	34.84	-Inf
	runtime	0.05	0.04	0.01	4.13	0.48	6.10	0.02	0.04
gm71	value	132.52	132.52	132.52	132.52	132.52	132.52	132.52	132.52
	bound	132.52	-Inf	-Inf	132.52	132.52	132.52	132.52	-Inf
	runtime	0.24	0.14	0.05	14.52	6.47	17.36	0.04	0.12
gm72	value	126.08	126.08	126.08	126.08	126.08	126.08	126.08	126.08
	bound	126.08	-Inf	-Inf	126.08	126.08	126.08	126.08	-Inf
	runtime	0.18	0.15	0.04	24.67	2.53	24.15	0.04	0.14
gm73	value	62.59	62.59	62.59	62.59	62.59	62.59	62.59	62.59
	bound	62.59	-Inf	-Inf	62.59	62.59	62.59	62.59	-Inf
	runtime	0.06	0.07	0.03	11.07	0.35	12.13	0.02	0.06
gm74	value	332.39	332.92	332.39	332.39	332.39	332.39	332.39	332.92
	bound	332.39	-Inf	-Inf	332.35	332.39	332.32	332.39	-Inf
	runtime	0.97	0.25	0.09	59.64	40.34	61.42	0.09	0.25
gm75	value	189.63	189.63	189.63	189.63	189.63	189.63	189.63	189.63
	bound	189.63	-Inf	-Inf	189.63	189.62	189.63	189.63	-Inf
	runtime	0.99	0.33	0.10	10.71	64.26	15.38	0.08	0.31
gm76	value	101.66	101.66	101.66	101.66	101.66	101.66	101.66	101.66
	bound	101.66	-Inf	-Inf	101.66	101.66	101.66	101.66	-Inf
	runtime	0.75	0.22	0.06	30.49	6.58	35.52	0.06	0.21
gm77	value	167.62	167.62	167.62	167.62	167.62	167.62	167.62	167.62
	bound	167.62	-Inf	-Inf	167.62	167.62	167.62	167.62	-Inf
	runtime	0.11	0.13	0.06	5.06	1.56	13.84	0.04	0.11
gm78	value	27.52	27.52	27.52	27.52	27.52	27.52	27.52	27.52
	bound	27.52	-Inf	-Inf	27.52	27.52	27.52	27.52	-Inf
	runtime	0.26	0.09	0.04	9.18	1.97	12.98	0.03	0.08
gm79	value	99.61	99.61	99.61	99.61	99.61	99.61	99.61	99.61
	bound	99.61	-Inf	-Inf	99.61	99.61	99.61	99.61	-Inf
	runtime	3.16	0.79	0.15	133.50	131.83	133.09	0.15	0.77
gm8	value	117.05	117.05	117.05	117.05	117.05	117.05	117.05	117.05
	bound	117.05	-Inf	-Inf	117.05	117.05	117.05	117.05	-Inf
	runtime	0.89	0.25	0.09	18.23	48.55	30.82	0.07	0.23
gm80	value	95.83	95.83	95.83	95.83	95.83	95.83	95.83	95.83
	bound	95.83	-Inf	-Inf	95.83	95.83	95.83	95.83	-Inf
	runtime	0.54	0.20	0.06	28.30	18.93	28.80	0.05	0.19
gm81	value	109.52	109.52	109.52	109.52	109.52	109.52	109.52	109.52
	bound	109.52	-Inf	-Inf	109.52	109.52	109.52	109.52	-Inf
	runtime	0.85	0.36	0.06	49.37	12.64	49.68	0.05	0.36
gm82	value	191.01	191.01	191.01	191.01	191.01	191.01	191.01	191.01
	bound	191.01	-Inf	-Inf	191.01	191.01	191.01	191.01	-Inf
	runtime	1.05	0.44	0.11	99.07	19.48	99.10	0.10	0.43
gm83	value	62.48	62.48	62.48	62.48	62.48	62.48	62.48	62.48
	bound	62.48	-Inf	-Inf	62.48	62.48	62.48	62.48	-Inf
	runtime	0.37	0.11	0.04	2.34	0.62	4.18	0.04	0.10

geo-surf-3		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm84	value	147.25	147.25	147.25	147.25	147.25	147.25	147.25	147.25
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.70	0.25	0.07	11.76	11.42	34.92	0.07	0.24
gm85	value	25.04	25.04	25.04	25.04	25.04	25.04	25.04	25.04
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.12	0.04	0.02	1.02	0.26	1.41	0.02	0.04
gm86	value	95.31	95.31	95.31	95.31	95.31	95.31	95.31	95.31
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.60	0.26	0.07	39.99	8.62	39.63	0.06	0.26
gm87	value	167.96	167.96	167.96	167.96	167.96	167.96	167.96	167.96
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	1.43	0.39	0.13	28.14	7.46	45.90	0.11	0.37
gm88	value	46.73	46.73	46.73	46.73	46.73	46.73	46.73	46.73
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.19	0.09	0.03	5.87	0.89	11.43	0.03	0.09
gm89	value	59.50	59.50	59.50	59.50	59.50	59.50	59.50	59.50
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.40	0.17	0.05	4.65	3.11	5.52	0.05	0.16
gm9	value	119.13	119.13	119.13	119.13	119.13	119.13	119.13	119.13
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	1.47	0.34	0.09	85.18	7.82	85.99	0.09	0.33
gm90	value	18.86	18.86	18.86	18.86	18.86	18.86	18.86	18.86
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.15	0.08	0.03	0.02	0.02	0.02	0.03	0.07
gm91	value	103.96	103.96	103.96	103.96	103.96	103.96	103.96	103.96
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	2.38	0.32	0.13	10.79	7.99	13.19	0.11	0.30
gm92	value	73.67	73.67	73.67	73.67	73.67	73.67	73.67	73.67
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.13	0.11	0.04	2.13	0.30	3.55	0.04	0.10
gm93	value	131.11	131.11	131.11	131.11	131.11	131.11	131.11	131.11
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	2.73	0.74	0.15	130.96	82.70	138.83	0.16	0.70
gm94	value	142.79	142.79	142.79	142.79	142.79	142.79	142.79	142.79
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	1.41	0.26	0.10	7.17	2.53	12.34	0.09	0.24
gm95	value	117.58	117.58	117.58	117.58	117.58	117.58	117.58	117.58
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	1.05	0.56	0.09	52.30	20.22	54.80	0.08	0.56
gm96	value	155.35	155.35	155.35	155.35	155.35	155.35	155.35	155.35
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	3.87	0.79	0.18	92.17	15.46	103.11	0.19	0.74
gm97	value	235.76	235.76	235.76	235.76	235.76	235.76	235.76	235.76
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	1.06	0.32	0.09	21.66	9.33	64.42	0.09	0.30
gm98	value	57.40	57.40	57.40	57.40	57.40	57.40	57.40	57.40
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.32	0.14	0.04	5.38	1.36	9.22	0.04	0.13
gm99	value	76.17	76.17	76.17	76.17	76.17	76.17	76.17	76.17
	bound	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
	runtime	0.64	0.20	0.07	7.00	1.81	11.19	0.06	0.19
mean energy		132.14	132.17	132.14	132.14	132.14	132.14	132.14	132.17
mean bound		132.14	-Inf	-Inf	132.14	132.14	132.14	132.14	-Inf
mean runtime		1.03	0.35	0.09	44.70	18.63	51.28	0.08	0.34
best value		100.00	91.33	98.00	100.00	100.00	100.00	100.00	90.67
best bound		100.00	0.00	0.00	13.67	92.33	57.00	100.00	0.00
verified opt		100.00	0.00	0.00	13.67	92.33	57.00	100.00	0.00

Table 42: geo-surf-3

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm1	value	156.87	156.87
	bound	-Inf	-Inf
	runtime	0.65	10.44
gm10	value	146.15	147.77
	bound	-Inf	-Inf
	runtime	1.45	23.30
gm100	value	35.07	35.07
	bound	-Inf	-Inf
	runtime	0.06	0.18
gm101	value	23.97	23.97
	bound	-Inf	-Inf
	runtime	0.04	0.20

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm102	value	102.11	102.11
	bound	102.11	-Inf
	runtime	0.41	7.31
gm103	value	62.34	62.34
	bound	62.34	-Inf
	runtime	0.11	0.99
gm104	value	107.62	107.62
	bound	107.62	-Inf
	runtime	0.76	2.72
gm105	value	67.71	67.71
	bound	67.71	-Inf
	runtime	0.13	0.75
gm106	value	19.71	19.71
	bound	19.71	-Inf
	runtime	0.02	0.03
gm107	value	176.33	176.33
	bound	176.33	-Inf
	runtime	1.17	9.59
gm108	value	105.21	105.21
	bound	105.21	-Inf
	runtime	0.13	0.46
gm109	value	120.11	120.11
	bound	120.11	-Inf
	runtime	0.37	11.83
gm11	value	48.30	48.30
	bound	48.30	-Inf
	runtime	0.01	0.16
gm110	value	176.16	176.16
	bound	176.16	-Inf
	runtime	0.92	4.55
gm111	value	181.90	181.90
	bound	181.90	-Inf
	runtime	0.16	2.20
gm112	value	192.99	192.99
	bound	192.99	-Inf
	runtime	1.88	19.59
gm113	value	133.14	133.14
	bound	133.14	-Inf
	runtime	1.02	6.94
gm114	value	122.16	122.16
	bound	122.16	-Inf
	runtime	1.03	23.47
gm115	value	280.30	280.30
	bound	280.30	-Inf
	runtime	1.66	10.65
gm116	value	211.02	211.02
	bound	211.02	-Inf
	runtime	1.04	11.87
gm117	value	77.09	77.09
	bound	77.09	-Inf
	runtime	0.21	2.41
gm118	value	220.70	220.70
	bound	220.70	-Inf
	runtime	1.84	2.85
gm119	value	125.79	125.79
	bound	125.79	-Inf
	runtime	0.41	4.79
gm12	value	83.58	83.58
	bound	83.58	-Inf
	runtime	0.08	0.34
gm120	value	115.60	115.60
	bound	115.60	-Inf
	runtime	0.19	1.47
gm121	value	195.13	195.13
	bound	195.13	-Inf
	runtime	2.19	4.26
gm122	value	94.79	94.79
	bound	94.79	-Inf
	runtime	0.15	1.47
gm123	value	176.46	176.46
	bound	176.46	-Inf
	runtime	1.10	6.21
gm124	value	202.59	202.59
	bound	202.59	-Inf
	runtime	0.96	7.27

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm125	value	186.08	186.08
	bound	186.08	-Inf
	runtime	1.34	10.01
gm126	value	230.42	230.42
	bound	230.42	-Inf
	runtime	1.59	20.12
gm127	value	186.55	186.55
	bound	186.55	-Inf
	runtime	0.19	3.48
gm128	value	203.04	203.04
	bound	203.04	-Inf
	runtime	2.43	16.17
gm129	value	171.21	171.21
	bound	171.21	-Inf
	runtime	0.21	1.37
gm13	value	240.14	240.14
	bound	240.14	-Inf
	runtime	0.80	4.51
gm130	value	180.05	180.05
	bound	180.05	-Inf
	runtime	0.36	3.17
gm131	value	245.27	245.27
	bound	245.27	-Inf
	runtime	1.17	14.99
gm132	value	161.61	161.61
	bound	161.61	-Inf
	runtime	1.15	7.19
gm133	value	182.11	182.42
	bound	182.11	-Inf
	runtime	0.27	2.53
gm134	value	95.33	95.33
	bound	95.33	-Inf
	runtime	0.34	11.54
gm135	value	117.98	117.98
	bound	117.98	-Inf
	runtime	0.49	8.03
gm136	value	102.94	102.94
	bound	102.94	-Inf
	runtime	0.25	1.23
gm137	value	121.44	121.44
	bound	121.44	-Inf
	runtime	2.03	11.31
gm138	value	232.66	233.18
	bound	232.66	-Inf
	runtime	0.59	4.44
gm139	value	132.17	132.17
	bound	132.17	-Inf
	runtime	0.51	5.29
gm14	value	13.08	13.08
	bound	13.08	-Inf
	runtime	0.00	0.01
gm140	value	135.24	135.24
	bound	135.24	-Inf
	runtime	0.68	79.47
gm141	value	189.91	189.91
	bound	189.91	-Inf
	runtime	1.45	23.83
gm142	value	147.66	147.66
	bound	147.66	-Inf
	runtime	1.11	9.92
gm143	value	160.29	160.29
	bound	160.29	-Inf
	runtime	1.08	4.69
gm144	value	163.25	163.25
	bound	163.25	-Inf
	runtime	0.81	4.00
gm145	value	137.30	137.30
	bound	137.30	-Inf
	runtime	2.44	31.60
gm146	value	208.89	208.89
	bound	208.89	-Inf
	runtime	0.47	8.88
gm147	value	162.07	162.07
	bound	162.07	-Inf
	runtime	0.88	9.66

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm148	value	249.53	249.53
	bound	249.53	-Inf
	runtime	0.64	12.33
gm149	value	92.74	92.74
	bound	92.74	-Inf
	runtime	0.45	2.26
gm15	value	214.27	214.27
	bound	214.27	-Inf
	runtime	0.55	1.54
gm150	value	170.77	170.77
	bound	170.77	-Inf
	runtime	0.86	8.63
gm151	value	95.10	95.10
	bound	95.10	-Inf
	runtime	0.56	11.72
gm152	value	88.94	88.94
	bound	88.94	-Inf
	runtime	0.18	1.69
gm153	value	95.52	95.52
	bound	95.52	-Inf
	runtime	0.07	0.45
gm154	value	131.94	131.94
	bound	131.94	-Inf
	runtime	0.34	1.50
gm155	value	104.64	104.64
	bound	104.64	-Inf
	runtime	0.54	16.81
gm156	value	119.78	119.78
	bound	119.78	-Inf
	runtime	0.23	1.14
gm157	value	195.72	195.72
	bound	195.72	-Inf
	runtime	1.56	3.19
gm158	value	186.66	186.66
	bound	186.66	-Inf
	runtime	0.94	10.05
gm159	value	172.89	172.89
	bound	172.89	-Inf
	runtime	0.24	1.55
gm16	value	123.69	123.69
	bound	123.69	-Inf
	runtime	0.29	1.11
gm160	value	146.78	146.78
	bound	146.78	-Inf
	runtime	0.85	5.52
gm161	value	264.68	264.68
	bound	264.68	-Inf
	runtime	0.88	7.65
gm162	value	137.28	137.28
	bound	137.28	-Inf
	runtime	0.62	4.44
gm163	value	252.76	252.76
	bound	252.76	-Inf
	runtime	0.68	4.82
gm164	value	250.21	250.21
	bound	250.21	-Inf
	runtime	1.10	7.54
gm165	value	88.33	88.33
	bound	88.33	-Inf
	runtime	0.48	5.07
gm166	value	184.37	184.37
	bound	184.37	-Inf
	runtime	1.73	9.23
gm167	value	171.52	171.77
	bound	171.52	-Inf
	runtime	0.29	4.95
gm168	value	223.05	223.05
	bound	223.05	-Inf
	runtime	0.94	2.50
gm169	value	177.03	177.03
	bound	177.03	-Inf
	runtime	2.77	28.90
gm17	value	41.97	41.97
	bound	41.97	-Inf
	runtime	0.08	0.18

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm170	value	190.47	190.47
	bound	190.47	-Inf
	runtime	1.35	9.91
gm171	value	167.91	167.91
	bound	167.91	-Inf
	runtime	0.22	1.97
gm172	value	80.08	80.08
	bound	80.08	-Inf
	runtime	0.19	1.67
gm173	value	100.56	100.56
	bound	100.56	-Inf
	runtime	0.16	0.68
gm174	value	256.08	256.08
	bound	256.08	-Inf
	runtime	0.44	3.30
gm175	value	208.04	208.05
	bound	208.04	-Inf
	runtime	0.83	7.98
gm176	value	138.87	138.87
	bound	138.87	-Inf
	runtime	0.22	3.67
gm177	value	288.46	288.46
	bound	288.46	-Inf
	runtime	2.05	33.46
gm178	value	175.12	175.12
	bound	175.12	-Inf
	runtime	1.59	19.29
gm179	value	191.95	191.95
	bound	191.95	-Inf
	runtime	1.21	10.20
gm18	value	23.71	23.71
	bound	23.71	-Inf
	runtime	0.56	8.31
gm180	value	246.21	246.21
	bound	246.21	-Inf
	runtime	0.31	2.02
gm181	value	126.92	126.92
	bound	126.92	-Inf
	runtime	0.22	2.69
gm182	value	151.98	152.00
	bound	151.98	-Inf
	runtime	1.42	6.91
gm183	value	156.87	156.87
	bound	156.87	-Inf
	runtime	0.51	13.29
gm184	value	67.79	67.79
	bound	67.79	-Inf
	runtime	0.05	1.55
gm185	value	116.82	116.82
	bound	116.82	-Inf
	runtime	0.31	1.65
gm186	value	311.30	311.32
	bound	311.30	-Inf
	runtime	1.25	17.29
gm187	value	159.38	159.38
	bound	159.38	-Inf
	runtime	0.95	4.29
gm188	value	70.54	70.54
	bound	70.54	-Inf
	runtime	0.05	0.85
gm189	value	99.98	99.98
	bound	99.98	-Inf
	runtime	0.69	3.85
gm19	value	320.69	320.69
	bound	320.69	-Inf
	runtime	1.92	7.64
gm190	value	146.57	146.57
	bound	146.57	-Inf
	runtime	2.43	15.21
gm191	value	22.85	22.85
	bound	22.85	-Inf
	runtime	0.01	0.08
gm192	value	48.23	48.23
	bound	48.23	-Inf
	runtime	0.02	0.29

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm193	value	104.40	104.40
	bound	104.40	-Inf
	runtime	1.08	9.37
gm194	value	38.87	38.87
	bound	38.87	-Inf
	runtime	0.04	0.38
gm195	value	142.01	142.29
	bound	142.01	-Inf
	runtime	0.30	2.13
gm196	value	45.25	45.25
	bound	45.25	-Inf
	runtime	0.02	0.10
gm197	value	93.38	93.38
	bound	93.38	-Inf
	runtime	0.25	1.43
gm198	value	114.09	114.09
	bound	114.09	-Inf
	runtime	0.18	1.12
gm199	value	95.66	95.66
	bound	95.66	-Inf
	runtime	0.43	5.03
gm2	value	88.43	88.43
	bound	88.43	-Inf
	runtime	0.98	11.59
gm20	value	110.18	110.18
	bound	110.18	-Inf
	runtime	0.22	1.58
gm200	value	264.25	264.25
	bound	264.25	-Inf
	runtime	0.41	3.01
gm201	value	138.86	138.86
	bound	138.86	-Inf
	runtime	0.28	1.53
gm202	value	142.23	142.23
	bound	142.23	-Inf
	runtime	0.61	7.08
gm203	value	52.28	52.28
	bound	52.28	-Inf
	runtime	0.04	0.27
gm204	value	167.02	167.02
	bound	167.02	-Inf
	runtime	0.26	0.85
gm205	value	184.96	184.96
	bound	184.96	-Inf
	runtime	0.35	2.09
gm206	value	118.64	118.64
	bound	118.64	-Inf
	runtime	0.65	2.72
gm207	value	109.68	109.68
	bound	109.68	-Inf
	runtime	0.95	3.37
gm208	value	82.41	82.41
	bound	82.41	-Inf
	runtime	0.56	2.61
gm209	value	161.15	161.15
	bound	161.15	-Inf
	runtime	0.51	2.03
gm21	value	109.81	109.81
	bound	109.81	-Inf
	runtime	0.20	1.64
gm210	value	192.00	192.00
	bound	192.00	-Inf
	runtime	0.72	1.81
gm211	value	177.20	177.20
	bound	177.20	-Inf
	runtime	0.57	5.79
gm212	value	138.83	138.83
	bound	138.83	-Inf
	runtime	0.71	2.67
gm213	value	104.63	104.63
	bound	104.63	-Inf
	runtime	0.11	0.21
gm214	value	161.09	161.09
	bound	161.09	-Inf
	runtime	1.20	8.95

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm215	value	107.45	107.45
	bound	107.45	-Inf
	runtime	0.81	2.73
gm216	value	186.73	186.73
	bound	186.73	-Inf
	runtime	0.52	5.50
gm217	value	118.74	118.74
	bound	118.74	-Inf
	runtime	0.22	2.12
gm218	value	140.53	140.53
	bound	140.53	-Inf
	runtime	0.34	1.14
gm219	value	132.60	132.60
	bound	132.60	-Inf
	runtime	0.59	5.45
gm22	value	98.13	98.13
	bound	98.13	-Inf
	runtime	0.32	10.16
gm220	value	15.77	15.77
	bound	15.77	-Inf
	runtime	0.01	0.02
gm221	value	102.95	102.95
	bound	102.95	-Inf
	runtime	0.08	3.14
gm222	value	124.02	124.02
	bound	124.02	-Inf
	runtime	0.35	36.05
gm223	value	114.27	114.27
	bound	114.27	-Inf
	runtime	0.33	1.32
gm224	value	105.21	105.21
	bound	105.21	-Inf
	runtime	0.06	0.23
gm225	value	54.92	54.92
	bound	54.92	-Inf
	runtime	0.02	0.24
gm226	value	214.34	214.34
	bound	214.34	-Inf
	runtime	0.49	1.62
gm227	value	140.71	140.71
	bound	140.71	-Inf
	runtime	0.20	0.57
gm228	value	72.36	72.36
	bound	72.36	-Inf
	runtime	0.08	0.28
gm229	value	57.88	57.88
	bound	57.88	-Inf
	runtime	0.08	0.97
gm23	value	127.67	127.67
	bound	127.67	-Inf
	runtime	0.93	20.85
gm230	value	46.79	46.79
	bound	46.79	-Inf
	runtime	0.49	5.24
gm231	value	126.42	126.42
	bound	126.42	-Inf
	runtime	1.26	10.22
gm232	value	47.45	47.45
	bound	47.45	-Inf
	runtime	0.18	2.28
gm233	value	107.50	107.50
	bound	107.50	-Inf
	runtime	0.55	1.35
gm234	value	113.70	113.70
	bound	113.70	-Inf
	runtime	0.51	12.91
gm235	value	34.76	34.76
	bound	34.76	-Inf
	runtime	0.14	0.63
gm236	value	93.78	93.78
	bound	93.78	-Inf
	runtime	0.76	6.27
gm237	value	205.60	205.60
	bound	205.60	-Inf
	runtime	1.37	5.06

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm238	value	208.07	208.08
	bound	208.07	-Inf
	runtime	1.39	4.33
gm239	value	55.86	55.86
	bound	55.86	-Inf
	runtime	0.37	5.66
gm24	value	27.20	27.20
	bound	27.20	-Inf
	runtime	0.01	0.03
gm240	value	132.95	132.95
	bound	132.95	-Inf
	runtime	0.26	2.62
gm241	value	249.51	249.51
	bound	249.51	-Inf
	runtime	0.69	6.81
gm242	value	140.62	140.62
	bound	140.62	-Inf
	runtime	0.14	2.85
gm243	value	143.28	143.28
	bound	143.28	-Inf
	runtime	0.55	3.69
gm244	value	150.16	150.16
	bound	150.16	-Inf
	runtime	0.67	4.86
gm245	value	172.08	172.08
	bound	172.08	-Inf
	runtime	0.39	5.00
gm246	value	211.41	211.41
	bound	211.41	-Inf
	runtime	1.30	5.43
gm247	value	79.01	79.01
	bound	79.01	-Inf
	runtime	0.21	0.72
gm248	value	119.66	119.66
	bound	119.66	-Inf
	runtime	1.46	8.24
gm249	value	162.65	162.65
	bound	162.65	-Inf
	runtime	0.21	2.25
gm25	value	82.61	82.61
	bound	82.61	-Inf
	runtime	0.79	6.29
gm250	value	222.95	222.95
	bound	222.95	-Inf
	runtime	0.58	10.53
gm251	value	135.86	135.86
	bound	135.86	-Inf
	runtime	0.12	1.44
gm252	value	179.49	179.49
	bound	179.49	-Inf
	runtime	0.43	0.96
gm253	value	135.82	135.82
	bound	135.82	-Inf
	runtime	0.28	2.56
gm254	value	192.83	192.83
	bound	192.83	-Inf
	runtime	0.81	15.87
gm255	value	171.47	171.47
	bound	171.47	-Inf
	runtime	0.56	13.79
gm256	value	228.61	228.61
	bound	228.61	-Inf
	runtime	1.42	18.87
gm257	value	169.17	169.17
	bound	169.17	-Inf
	runtime	1.45	19.11
gm258	value	139.09	139.09
	bound	139.09	-Inf
	runtime	0.83	4.86
gm259	value	194.33	194.48
	bound	194.33	-Inf
	runtime	0.20	1.55
gm26	value	56.77	56.77
	bound	56.77	-Inf
	runtime	0.09	0.51

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm260	value	127.88	127.88
	bound	127.88	-Inf
	runtime	0.14	0.42
gm261	value	241.00	241.00
	bound	241.00	-Inf
	runtime	0.33	1.94
gm262	value	147.93	147.93
	bound	147.93	-Inf
	runtime	0.30	0.84
gm263	value	236.30	236.31
	bound	236.30	-Inf
	runtime	0.48	2.65
gm264	value	209.17	209.17
	bound	209.17	-Inf
	runtime	0.95	13.43
gm265	value	243.32	243.32
	bound	243.32	-Inf
	runtime	0.90	7.80
gm266	value	234.93	234.93
	bound	234.93	-Inf
	runtime	0.84	2.47
gm267	value	329.10	329.10
	bound	329.10	-Inf
	runtime	1.72	13.71
gm268	value	97.57	97.57
	bound	97.57	-Inf
	runtime	0.83	8.77
gm269	value	172.23	172.23
	bound	172.23	-Inf
	runtime	1.44	19.22
gm27	value	179.42	179.42
	bound	179.42	-Inf
	runtime	0.27	1.19
gm270	value	96.89	96.89
	bound	96.89	-Inf
	runtime	0.20	2.05
gm271	value	183.76	183.76
	bound	183.76	-Inf
	runtime	0.79	14.22
gm272	value	120.19	120.19
	bound	120.19	-Inf
	runtime	0.64	6.78
gm273	value	119.78	120.18
	bound	119.78	-Inf
	runtime	0.59	8.12
gm274	value	69.45	69.45
	bound	69.45	-Inf
	runtime	0.18	0.24
gm275	value	166.56	166.56
	bound	166.56	-Inf
	runtime	0.87	14.88
gm276	value	71.68	71.68
	bound	71.68	-Inf
	runtime	0.10	0.73
gm277	value	87.94	87.94
	bound	87.94	-Inf
	runtime	0.27	4.81
gm278	value	198.39	198.39
	bound	198.39	-Inf
	runtime	0.54	2.96
gm279	value	165.05	165.05
	bound	165.05	-Inf
	runtime	0.15	1.52
gm28	value	190.92	190.92
	bound	190.92	-Inf
	runtime	0.82	3.10
gm280	value	121.45	121.45
	bound	121.45	-Inf
	runtime	0.10	1.95
gm281	value	163.09	163.09
	bound	163.09	-Inf
	runtime	1.15	13.06
gm282	value	175.53	175.53
	bound	175.53	-Inf
	runtime	0.49	3.47

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm283	value	110.68	110.68
	bound	110.68	-Inf
	runtime	0.42	2.25
gm284	value	115.98	115.98
	bound	115.98	-Inf
	runtime	0.29	2.20
gm285	value	97.46	97.46
	bound	97.46	-Inf
	runtime	0.11	1.50
gm286	value	128.36	128.36
	bound	128.36	-Inf
	runtime	0.58	7.29
gm287	value	77.93	77.93
	bound	77.93	-Inf
	runtime	0.15	0.84
gm288	value	113.99	113.99
	bound	113.99	-Inf
	runtime	0.56	3.46
gm289	value	207.93	210.20
	bound	207.93	-Inf
	runtime	0.78	10.78
gm29	value	56.21	56.21
	bound	56.21	-Inf
	runtime	0.11	1.98
gm290	value	113.09	113.09
	bound	113.09	-Inf
	runtime	1.03	14.38
gm291	value	133.97	133.97
	bound	133.97	-Inf
	runtime	0.41	5.96
gm292	value	149.37	149.37
	bound	149.37	-Inf
	runtime	0.69	4.07
gm293	value	105.40	105.40
	bound	105.40	-Inf
	runtime	0.34	4.14
gm294	value	26.25	26.25
	bound	26.25	-Inf
	runtime	0.04	0.39
gm295	value	84.02	84.02
	bound	84.02	-Inf
	runtime	1.11	12.39
gm296	value	157.83	158.02
	bound	157.83	-Inf
	runtime	0.91	5.23
gm297	value	150.73	150.73
	bound	150.73	-Inf
	runtime	0.24	4.35
gm298	value	93.26	93.26
	bound	93.26	-Inf
	runtime	0.16	0.87
gm299	value	70.70	70.70
	bound	70.70	-Inf
	runtime	0.14	2.94
gm3	value	34.46	34.46
	bound	34.46	-Inf
	runtime	0.30	4.52
gm30	value	104.49	104.49
	bound	104.49	-Inf
	runtime	0.47	2.90
gm300	value	58.20	58.20
	bound	58.20	-Inf
	runtime	0.07	0.46
gm31	value	84.06	84.06
	bound	84.06	-Inf
	runtime	0.09	0.53
gm32	value	27.06	27.06
	bound	27.06	-Inf
	runtime	0.02	0.11
gm33	value	121.42	121.42
	bound	121.42	-Inf
	runtime	0.91	11.92
gm34	value	232.91	233.46
	bound	232.91	-Inf
	runtime	0.82	3.22

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm35	value	319.58	319.58
	bound	319.58	-Inf
	runtime	1.22	4.66
gm36	value	209.63	209.63
	bound	209.63	-Inf
	runtime	0.69	2.85
gm37	value	62.06	62.06
	bound	62.06	-Inf
	runtime	0.06	0.30
gm38	value	170.29	170.29
	bound	170.29	-Inf
	runtime	0.39	1.65
gm39	value	51.04	51.04
	bound	51.04	-Inf
	runtime	0.06	0.66
gm4	value	55.67	55.67
	bound	55.67	-Inf
	runtime	0.48	6.65
gm40	value	28.36	28.36
	bound	28.36	-Inf
	runtime	0.11	0.16
gm41	value	52.70	52.70
	bound	52.70	-Inf
	runtime	0.12	0.81
gm42	value	84.25	84.25
	bound	84.25	-Inf
	runtime	0.75	6.92
gm43	value	83.83	83.83
	bound	83.83	-Inf
	runtime	0.26	0.79
gm44	value	102.92	102.92
	bound	102.92	-Inf
	runtime	0.59	5.23
gm45	value	138.87	138.87
	bound	138.87	-Inf
	runtime	0.74	13.57
gm46	value	102.44	102.44
	bound	102.44	-Inf
	runtime	0.53	7.75
gm47	value	53.11	53.11
	bound	53.11	-Inf
	runtime	0.15	1.09
gm48	value	84.41	84.41
	bound	84.41	-Inf
	runtime	0.14	0.76
gm49	value	138.09	138.09
	bound	138.09	-Inf
	runtime	0.68	5.36
gm5	value	56.39	56.39
	bound	56.39	-Inf
	runtime	0.29	3.35
gm50	value	108.25	108.25
	bound	108.25	-Inf
	runtime	0.55	2.82
gm51	value	56.11	56.11
	bound	56.11	-Inf
	runtime	0.06	0.44
gm52	value	52.51	52.51
	bound	52.51	-Inf
	runtime	0.20	2.21
gm53	value	99.49	99.49
	bound	99.49	-Inf
	runtime	0.17	3.73
gm54	value	68.98	68.98
	bound	68.98	-Inf
	runtime	0.15	0.33
gm55	value	112.50	112.50
	bound	112.50	-Inf
	runtime	0.26	1.57
gm56	value	52.84	52.84
	bound	52.84	-Inf
	runtime	0.13	0.53
gm57	value	40.81	40.81
	bound	40.81	-Inf
	runtime	0.04	0.16

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm58	value	135.47	135.47
	bound	135.47	-Inf
	runtime	0.38	2.57
gm59	value	103.42	103.42
	bound	103.42	-Inf
	runtime	0.50	4.99
gm6	value	43.11	43.11
	bound	43.11	-Inf
	runtime	0.33	14.05
gm60	value	90.18	90.27
	bound	90.18	-Inf
	runtime	1.02	3.23
gm61	value	52.34	52.34
	bound	52.34	-Inf
	runtime	0.13	0.29
gm62	value	234.53	234.53
	bound	234.53	-Inf
	runtime	0.82	8.42
gm63	value	318.07	318.07
	bound	318.07	-Inf
	runtime	1.32	10.31
gm64	value	65.39	65.39
	bound	65.39	-Inf
	runtime	0.12	0.23
gm65	value	111.16	111.16
	bound	111.16	-Inf
	runtime	0.50	0.59
gm66	value	74.92	74.92
	bound	74.92	-Inf
	runtime	0.13	0.33
gm67	value	36.55	36.55
	bound	36.55	-Inf
	runtime	0.02	0.21
gm68	value	73.36	73.36
	bound	73.36	-Inf
	runtime	0.08	0.52
gm69	value	72.33	72.33
	bound	72.33	-Inf
	runtime	0.11	0.45
gm7	value	112.14	112.14
	bound	112.14	-Inf
	runtime	0.39	8.55
gm70	value	34.84	34.84
	bound	34.84	-Inf
	runtime	0.04	0.21
gm71	value	132.52	132.52
	bound	132.52	-Inf
	runtime	0.26	1.64
gm72	value	126.08	126.08
	bound	126.08	-Inf
	runtime	0.18	0.65
gm73	value	62.59	62.59
	bound	62.59	-Inf
	runtime	0.04	0.13
gm74	value	332.39	332.92
	bound	332.39	-Inf
	runtime	0.70	7.86
gm75	value	189.63	189.63
	bound	189.63	-Inf
	runtime	0.73	3.61
gm76	value	101.66	101.66
	bound	101.66	-Inf
	runtime	0.38	2.04
gm77	value	167.62	167.62
	bound	167.62	-Inf
	runtime	0.19	0.55
gm78	value	27.52	27.52
	bound	27.52	-Inf
	runtime	0.09	0.86
gm79	value	99.61	99.61
	bound	99.61	-Inf
	runtime	1.55	15.79
gm8	value	117.05	117.05
	bound	117.05	-Inf
	runtime	0.49	3.04

geo-surf-3		ogm-LP-LP	ogm-TRBP
gm80	value	95.83	95.83
	bound	95.83	-Inf
	runtime	0.07	0.97
gm81	value	109.52	109.52
	bound	109.52	-Inf
	runtime	0.37	3.38
gm82	value	191.01	191.01
	bound	191.01	-Inf
	runtime	0.77	6.10
gm83	value	62.48	62.48
	bound	62.48	-Inf
	runtime	0.09	0.50
gm84	value	147.25	147.25
	bound	147.25	-Inf
	runtime	0.33	3.25
gm85	value	25.04	25.04
	bound	25.04	-Inf
	runtime	0.05	0.14
gm86	value	95.31	95.31
	bound	95.31	-Inf
	runtime	0.39	2.65
gm87	value	167.96	167.96
	bound	167.96	-Inf
	runtime	0.93	8.49
gm88	value	46.73	46.73
	bound	46.73	-Inf
	runtime	0.06	0.11
gm89	value	59.50	59.50
	bound	59.50	-Inf
	runtime	0.09	0.75
gm9	value	119.13	119.13
	bound	119.13	-Inf
	runtime	0.62	8.28
gm90	value	18.86	18.86
	bound	18.86	-Inf
	runtime	0.06	0.19
gm91	value	103.96	103.96
	bound	103.96	-Inf
	runtime	0.85	2.46
gm92	value	73.67	73.67
	bound	73.67	-Inf
	runtime	0.06	0.59
gm93	value	131.11	131.11
	bound	131.11	-Inf
	runtime	1.49	19.52
gm94	value	142.79	142.79
	bound	142.79	-Inf
	runtime	0.65	1.81
gm95	value	117.58	117.58
	bound	117.58	-Inf
	runtime	0.50	3.76
gm96	value	155.35	155.35
	bound	155.35	-Inf
	runtime	2.75	11.66
gm97	value	235.76	235.76
	bound	235.76	-Inf
	runtime	0.84	3.52
gm98	value	57.40	57.40
	bound	57.40	-Inf
	runtime	0.19	2.57
gm99	value	76.17	76.17
	bound	76.17	-Inf
	runtime	0.32	2.75
mean energy		132.14	132.16
mean bound		132.14	-Inf
mean runtime		0.58	5.60
best value		100.00	94.33
best bound		100.00	0.00
verified opt		100.00	0.00

4.14. Geometric Scene Labeling 7 (geo-surf-7)

Table 43: geo-surf-7

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm1	value	499.52	535.42	499.52	499.52	499.52	499.52	499.52	535.42
	bound	499.52	-Inf	-Inf	499.33	499.52	498.62	499.52	-Inf
	runtime	2.02	2.96	0.26	143.78	95.02	145.53	0.74	2.75
gm10	value	802.43	852.89	802.34	782.93	782.93	791.51	782.93	853.06
	bound	-Inf	-Inf	-Inf	781.29	782.93	770.91	782.93	-Inf
	runtime	3600.00	10.98	0.53	301.86	251.33	300.25	4.71	10.68
gm100	value	220.96	227.29	220.96	220.96	220.96	220.96	220.96	227.29
	bound	220.96	-Inf	-Inf	220.66	220.96	218.91	220.96	-Inf
	runtime	2.63	1.21	0.06	42.64	33.25	42.03	0.24	1.16
gm101	value	150.85	165.39	150.85	150.85	150.85	150.85	150.85	165.39
	bound	150.85	-Inf	-Inf	150.84	150.85	150.63	150.85	-Inf
	runtime	1.50	0.43	0.03	14.31	3.32	12.74	0.09	0.41
gm102	value	582.56	628.35	582.56	582.56	582.56	582.67	582.56	628.35
	bound	582.56	-Inf	-Inf	579.00	582.17	573.78	582.56	-Inf
	runtime	466.84	3.94	0.26	158.30	153.64	154.86	1.35	3.80
gm103	value	305.34	305.34	306.55	305.34	305.34	305.34	305.34	305.34
	bound	305.34	-Inf	-Inf	305.32	305.34	305.08	305.34	-Inf
	runtime	3.96	0.85	0.11	43.75	9.21	42.96	0.26	0.79
gm104	value	499.64	501.61	499.64	499.64	499.64	499.64	499.64	501.61
	bound	499.64	-Inf	-Inf	499.49	499.64	499.09	499.64	-Inf
	runtime	2.77	3.64	0.22	101.78	21.64	101.38	0.58	3.45
gm105	value	231.49	231.49	231.75	231.49	231.49	231.49	231.49	231.49
	bound	231.49	-Inf	-Inf	231.31	231.48	230.36	231.49	-Inf
	runtime	2.63	2.70	0.08	33.00	31.51	32.16	0.15	2.69
gm106	value	96.87	96.87	96.87	96.87	96.87	96.87	96.87	96.87
	bound	96.87	-Inf	-Inf	96.87	96.87	96.85	96.87	-Inf
	runtime	1.52	0.17	0.03	9.12	1.72	8.98	0.05	0.15
gm107	value	551.16	576.32	551.16	551.16	551.16	552.18	551.16	576.32
	bound	551.16	-Inf	-Inf	550.51	551.16	543.67	551.16	-Inf
	runtime	7.15	5.43	0.37	248.48	197.06	243.16	1.28	5.13
gm108	value	362.39	381.90	362.39	362.39	362.39	363.11	362.39	381.90
	bound	362.39	-Inf	-Inf	362.21	362.39	360.45	362.39	-Inf
	runtime	2.84	0.83	0.09	31.05	12.77	30.22	0.25	0.79
gm109	value	471.84	484.54	471.84	471.84	471.84	472.68	471.84	484.54
	bound	471.84	-Inf	-Inf	470.19	471.83	467.20	471.84	-Inf
	runtime	21.93	2.86	0.26	185.14	172.67	179.31	0.74	2.63
gm11	value	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12
	bound	48.12	-Inf	-Inf	48.12	48.12	48.12	48.12	-Inf
	runtime	0.05	0.17	0.03	6.24	0.48	11.76	0.04	0.15
gm110	value	549.39	588.74	549.39	549.39	549.39	550.01	549.39	588.74
	bound	549.39	-Inf	-Inf	548.36	549.33	544.64	549.39	-Inf
	runtime	24.97	5.38	0.36	196.35	204.03	197.27	1.18	5.12
gm111	value	340.44	369.08	340.44	340.44	340.44	340.90	340.44	369.08
	bound	340.44	-Inf	-Inf	339.46	340.44	337.29	340.44	-Inf
	runtime	2.60	1.22	0.19	91.45	44.45	89.78	0.38	1.10
gm112	value	845.73	874.78	812.78	812.78	812.78	812.78	812.78	874.78
	bound	-Inf	-Inf	-Inf	812.17	812.77	805.93	812.78	-Inf
	runtime	3600.00	6.51	0.45	394.12	388.87	385.14	2.03	6.20
gm113	value	743.70	771.44	740.69	740.97	740.69	744.13	740.69	771.44
	bound	-Inf	-Inf	-Inf	738.74	740.51	735.09	740.69	-Inf
	runtime	3600.00	4.98	0.33	209.71	201.79	205.56	1.15	4.75
gm114	value	698.75	716.69	698.75	698.75	698.75	703.46	698.75	716.84
	bound	-Inf	-Inf	-Inf	697.78	698.71	691.91	698.75	-Inf
	runtime	3600.00	16.38	0.48	347.99	334.91	347.46	1.87	15.86
gm115	value	1001.44	1029.35	1009.36	996.96	995.60	1023.64	995.60	1029.35
	bound	-Inf	-Inf	-Inf	990.79	994.05	978.42	995.60	-Inf
	runtime	3600.00	5.43	0.39	242.05	227.95	236.77	2.83	5.20
gm116	value	934.11	1011.02	934.11	934.11	934.11	936.67	934.11	1011.02
	bound	-Inf	-Inf	-Inf	932.96	934.11	924.95	934.11	-Inf
	runtime	3600.00	9.74	0.34	289.06	205.02	286.34	3.11	9.37
gm117	value	484.32	484.32	484.32	484.32	484.32	488.15	484.32	484.32
	bound	484.32	-Inf	-Inf	483.35	484.28	478.96	484.32	-Inf
	runtime	4.64	1.48	0.20	82.21	78.90	79.76	0.66	1.37
gm118	value	812.82	837.13	812.82	812.82	812.82	828.02	812.82	837.13
	bound	-Inf	-Inf	-Inf	811.96	812.82	807.10	812.82	-Inf
	runtime	3600.00	5.51	0.33	169.43	154.56	163.07	1.86	5.27
gm119	value	611.58	646.29	612.48	611.63	611.58	617.64	611.58	646.29
	bound	611.58	-Inf	-Inf	608.23	611.41	598.56	611.58	-Inf
	runtime	443.38	2.85	0.20	133.28	129.52	132.28	1.18	2.66
gm12	value	251.41	251.41	251.41	251.41	251.41	251.41	251.41	251.41
	bound	251.41	-Inf	-Inf	251.41	251.41	251.39	251.41	-Inf
	runtime	2.86	0.96	0.08	25.61	2.70	25.34	0.16	0.92
gm120	value	323.68	323.68	323.68	323.68	323.68	323.69	323.68	323.68
	bound	323.68	-Inf	-Inf	323.53	323.67	322.61	323.68	-Inf
	runtime	3.12	1.42	0.11	53.76	51.99	52.62	0.30	1.34

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm121	value	490.64	497.59	490.64	490.64	490.64	490.64	490.64	497.59
	bound	490.64	-Inf	-Inf	489.56	490.62	487.41	490.64	-Inf
	runtime	1888.95	5.16	0.36	182.52	171.00	178.44	1.01	4.90
gm122	value	391.94	392.82	391.94	391.94	391.94	391.94	391.94	392.82
	bound	391.94	-Inf	-Inf	391.92	391.94	391.94	391.94	-Inf
	runtime	2.64	1.44	0.12	57.64	13.86	56.17	0.27	1.34
gm123	value	662.16	699.83	661.02	661.02	661.02	661.42	661.02	699.83
	bound	-Inf	-Inf	-Inf	660.63	660.95	656.72	661.02	-Inf
	runtime	3600.00	2.98	0.28	223.78	210.17	218.98	0.88	2.76
gm124	value	697.65	714.02	697.65	697.65	697.65	697.65	697.65	714.02
	bound	-Inf	-Inf	-Inf	697.48	697.65	695.39	697.65	-Inf
	runtime	3600.00	2.64	0.42	217.42	75.02	216.28	1.00	2.46
gm125	value	1077.55	1217.02	1077.55	1077.55	1077.55	1078.01	1077.55	1217.02
	bound	-Inf	-Inf	-Inf	1077.23	1077.46	1075.59	1077.55	-Inf
	runtime	3600.00	9.29	0.39	247.60	234.31	240.88	1.47	8.92
gm126	value	783.66	785.11	782.76	779.20	778.78	804.19	778.78	785.11
	bound	-Inf	-Inf	-Inf	775.95	777.94	762.27	778.78	-Inf
	runtime	3600.00	7.51	0.60	343.33	327.51	338.55	2.51	7.20
gm127	value	275.87	311.15	275.87	275.87	275.87	275.87	275.87	311.15
	bound	275.87	-Inf	-Inf	275.85	275.87	275.32	275.87	-Inf
	runtime	2.27	0.79	0.10	40.52	6.37	39.96	0.18	0.72
gm128	value	714.47	745.50	714.47	714.47	714.47	714.47	714.47	745.50
	bound	714.47	-Inf	-Inf	713.99	714.47	712.56	714.47	-Inf
	runtime	40.98	5.46	0.42	370.94	138.71	374.82	1.43	5.13
gm129	value	506.70	516.42	506.70	506.70	506.70	506.70	506.70	516.42
	bound	506.70	-Inf	-Inf	506.55	506.70	506.30	506.70	-Inf
	runtime	2.91	1.40	0.15	75.25	21.26	75.00	0.40	1.27
gm13	value	568.82	583.65	568.82	568.82	568.82	569.49	568.82	583.65
	bound	568.82	-Inf	-Inf	568.78	568.82	566.69	568.82	-Inf
	runtime	165.63	2.58	0.31	145.41	80.11	144.32	0.76	2.39
gm130	value	779.28	847.03	779.28	779.28	779.28	779.28	779.28	847.03
	bound	779.28	-Inf	-Inf	779.04	779.28	777.10	779.28	-Inf
	runtime	3.34	12.02	0.46	135.21	62.84	132.35	0.71	11.86
gm131	value	923.40	954.35	901.55	901.55	901.55	915.89	901.55	954.35
	bound	-Inf	-Inf	-Inf	899.60	901.18	887.64	901.55	-Inf
	runtime	3600.00	6.47	0.68	214.94	210.87	213.64	2.87	6.24
gm132	value	462.02	462.02	462.02	462.02	462.02	462.02	462.02	462.02
	bound	462.02	-Inf	-Inf	461.52	462.02	459.88	462.02	-Inf
	runtime	18.92	5.91	0.34	166.48	53.22	168.87	1.04	5.62
gm133	value	347.66	347.66	347.66	347.66	347.66	347.66	347.66	347.66
	bound	347.66	-Inf	-Inf	347.65	347.66	347.63	347.66	-Inf
	runtime	2.97	0.87	0.14	67.44	8.03	66.38	0.26	0.76
gm134	value	473.70	509.42	473.70	473.70	473.70	473.70	473.70	509.42
	bound	473.70	-Inf	-Inf	473.45	473.70	470.94	473.70	-Inf
	runtime	6.46	3.24	0.18	135.69	82.28	136.45	0.72	3.03
gm135	value	640.36	714.80	640.36	640.36	640.36	640.36	640.36	714.80
	bound	640.36	-Inf	-Inf	640.34	640.36	639.77	640.36	-Inf
	runtime	5.95	2.96	0.35	142.62	54.05	142.19	0.72	2.76
gm136	value	518.44	567.91	518.44	518.44	518.44	520.72	518.44	567.91
	bound	518.44	-Inf	-Inf	515.87	518.44	508.89	518.44	-Inf
	runtime	26.91	4.73	0.17	73.02	51.13	71.58	0.87	4.61
gm137	value	633.49	673.17	633.49	633.49	633.49	633.73	633.49	673.17
	bound	-Inf	-Inf	-Inf	631.56	633.41	627.31	633.49	-Inf
	runtime	3600.00	8.07	0.66	323.53	309.62	318.84	1.82	7.70
gm138	value	502.54	525.76	502.54	502.54	502.54	502.65	502.54	525.76
	bound	502.54	-Inf	-Inf	501.94	502.42	500.43	502.54	-Inf
	runtime	2.05	1.98	0.22	104.98	100.18	101.08	0.52	1.83
gm139	value	525.73	542.42	525.73	525.73	525.73	525.73	525.73	542.42
	bound	525.73	-Inf	-Inf	524.93	525.73	523.04	525.73	-Inf
	runtime	6.97	3.24	0.20	156.01	73.47	158.22	0.79	3.03
gm14	value	17.36	17.36	17.36	17.36	17.36	17.36	17.36	17.36
	bound	17.36	-Inf	-Inf	17.36	17.36	17.36	17.36	-Inf
	runtime	0.01	0.03	0.01	0.30	0.02	0.85	0.01	0.02
gm140	value	636.57	672.67	636.57	636.57	636.57	636.57	636.57	672.67
	bound	-Inf	-Inf	-Inf	634.70	636.53	631.82	636.57	-Inf
	runtime	3600.00	16.26	0.58	609.56	594.33	638.93	2.11	14.91
gm141	value	452.16	452.16	452.16	452.16	452.16	452.47	452.16	452.16
	bound	452.16	-Inf	-Inf	450.92	452.16	447.68	452.16	-Inf
	runtime	1283.94	6.72	0.41	363.74	199.84	373.94	1.26	6.30
gm142	value	688.18	690.80	678.81	678.06	678.06	678.82	678.06	690.80
	bound	-Inf	-Inf	-Inf	676.79	677.95	671.27	678.06	-Inf
	runtime	3600.00	4.30	0.40	304.85	293.33	303.13	1.42	4.07
gm143	value	538.57	563.01	538.57	538.57	538.57	538.57	538.57	563.01
	bound	-Inf	-Inf	-Inf	537.96	538.57	535.53	538.57	-Inf
	runtime	3600.00	3.29	0.34	147.78	141.22	143.99	0.95	3.10

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm144	value	797.70	814.60	796.28	796.28	796.28	796.51	796.28	814.60
	bound	-Inf	-Inf	-Inf	795.92	796.28	793.36	796.28	-Inf
	runtime	3600.00	2.99	0.37	140.81	99.89	138.13	0.97	2.77
gm145	value	540.67	569.06	540.67	540.67	540.67	540.67	540.67	569.06
	bound	540.67	-Inf	-Inf	540.64	540.67	540.65	540.67	-Inf
	runtime	5.51	9.86	0.43	524.12	85.29	542.67	1.65	9.42
gm146	value	630.11	632.26	630.11	630.11	630.11	632.12	630.11	632.26
	bound	630.11	-Inf	-Inf	627.78	629.66	624.30	630.11	-Inf
	runtime	357.08	2.81	0.19	130.89	128.93	131.03	0.86	2.62
gm147	value	569.61	591.37	569.61	569.61	569.61	569.62	569.61	591.37
	bound	569.61	-Inf	-Inf	568.42	569.56	560.61	569.61	-Inf
	runtime	128.33	5.42	0.26	227.31	221.30	227.03	1.59	5.10
gm148	value	619.28	694.76	625.25	609.11	606.90	630.93	606.90	694.76
	bound	-Inf	-Inf	-Inf	603.23	606.69	593.67	606.90	-Inf
	runtime	3600.00	8.39	0.40	186.55	183.28	185.75	3.14	8.19
gm149	value	267.78	267.78	267.78	267.78	267.78	267.78	267.78	267.78
	bound	267.78	-Inf	-Inf	267.78	267.78	267.78	267.78	-Inf
	runtime	1.84	1.49	0.16	49.79	23.02	87.00	0.34	1.37
gm15	value	290.02	310.99	290.02	290.02	290.02	290.02	290.02	310.99
	bound	290.02	-Inf	-Inf	289.08	290.02	288.16	290.02	-Inf
	runtime	4.99	1.01	0.16	64.74	36.77	62.36	0.32	0.89
gm150	value	803.60	813.09	798.74	798.74	798.74	801.45	798.74	813.09
	bound	-Inf	-Inf	-Inf	798.29	798.74	794.91	798.74	-Inf
	runtime	3600.00	3.60	0.39	156.76	98.13	157.53	1.33	3.39
gm151	value	525.55	559.30	525.55	525.55	525.55	527.85	525.55	559.30
	bound	-Inf	-Inf	-Inf	523.23	525.42	519.14	525.55	-Inf
	runtime	3600.00	3.38	0.22	160.31	157.24	159.19	1.05	3.18
gm152	value	347.71	356.49	347.71	347.71	347.71	347.71	347.71	356.49
	bound	347.71	-Inf	-Inf	347.42	347.71	344.21	347.71	-Inf
	runtime	3.35	1.21	0.08	44.42	17.85	43.86	0.35	1.15
gm153	value	310.81	322.19	313.13	310.81	310.81	311.48	310.81	322.19
	bound	310.81	-Inf	-Inf	310.20	310.81	307.43	310.81	-Inf
	runtime	1.75	0.81	0.10	27.16	13.79	26.60	0.24	0.76
gm154	value	461.82	473.53	461.82	461.82	461.82	461.82	461.82	473.53
	bound	461.82	-Inf	-Inf	461.75	461.82	460.12	461.82	-Inf
	runtime	2.83	1.89	0.22	72.25	27.78	71.14	0.57	1.76
gm155	value	514.42	528.43	514.42	514.42	514.42	514.44	514.42	528.43
	bound	514.42	-Inf	-Inf	513.96	514.25	512.30	514.42	-Inf
	runtime	12.15	3.93	0.21	242.56	235.64	240.63	0.98	3.69
gm156	value	534.74	611.15	540.61	534.96	534.74	535.78	534.74	611.15
	bound	534.74	-Inf	-Inf	533.06	534.73	524.07	534.74	-Inf
	runtime	4.83	1.84	0.14	55.83	54.95	55.63	0.46	1.74
gm157	value	716.81	729.26	712.91	715.13	712.91	727.68	712.91	729.26
	bound	-Inf	-Inf	-Inf	711.46	712.73	707.06	712.91	-Inf
	runtime	3600.00	3.86	0.36	151.81	147.35	150.72	1.59	3.65
gm158	value	588.05	584.77	584.08	584.08	584.08	590.73	584.08	584.77
	bound	-Inf	-Inf	-Inf	582.53	583.90	579.07	584.08	-Inf
	runtime	3600.00	4.99	0.38	214.79	205.19	212.81	1.06	4.85
gm159	value	323.64	325.11	323.64	323.64	323.64	323.64	323.64	325.11
	bound	323.64	-Inf	-Inf	323.17	323.64	322.40	323.64	-Inf
	runtime	3.82	0.99	0.17	44.18	17.76	43.81	0.31	0.89
gm16	value	421.35	421.35	421.35	421.35	421.35	421.35	421.35	421.35
	bound	421.35	-Inf	-Inf	421.24	421.35	420.81	421.35	-Inf
	runtime	5.77	1.77	0.14	56.03	14.70	55.03	0.42	1.68
gm160	value	771.03	799.01	746.48	746.48	746.48	755.85	746.48	799.01
	bound	-Inf	-Inf	-Inf	744.84	746.25	735.63	746.48	-Inf
	runtime	3600.00	4.14	0.24	167.82	162.93	167.49	1.33	3.97
gm161	value	868.15	901.81	819.80	819.80	819.80	832.19	819.80	901.81
	bound	-Inf	-Inf	-Inf	818.25	819.57	812.96	819.80	-Inf
	runtime	3600.00	4.24	0.23	175.53	169.79	175.63	1.56	3.99
gm162	value	469.74	471.44	469.74	469.74	469.74	470.93	469.74	471.44
	bound	469.74	-Inf	-Inf	468.74	469.64	466.50	469.74	-Inf
	runtime	49.97	2.13	0.21	141.13	135.85	136.70	0.60	1.97
gm163	value	462.92	464.01	462.92	462.92	462.92	462.99	462.92	464.01
	bound	462.92	-Inf	-Inf	462.22	462.88	459.03	462.92	-Inf
	runtime	867.86	1.95	0.29	108.48	106.62	107.19	0.60	1.84
gm164	value	669.36	669.36	669.36	669.36	669.36	669.36	669.36	669.36
	bound	669.36	-Inf	-Inf	669.36	669.36	669.35	669.36	-Inf
	runtime	5.32	4.97	0.54	225.13	55.16	221.69	1.01	4.73
gm165	value	662.84	672.70	662.84	662.90	662.84	662.90	662.84	672.70
	bound	662.84	-Inf	-Inf	661.59	662.69	653.76	662.84	-Inf
	runtime	1147.96	4.44	0.27	154.32	152.41	154.20	1.51	4.26
gm166	value	872.92	913.07	863.19	863.84	863.19	885.69	863.19	913.07
	bound	-Inf	-Inf	-Inf	858.87	862.46	848.67	863.19	-Inf
	runtime	3600.00	6.48	0.41	284.60	266.19	274.81	3.85	6.20

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm167	value	668.04	692.26	668.04	668.04	668.04	668.04	668.04	692.26
	bound	-Inf	-Inf	-Inf	668.04	668.04	667.09	668.04	-Inf
	runtime	3600.00	3.07	0.26	160.64	131.55	160.48	1.00	2.92
gm168	value	587.87	590.85	584.91	584.91	584.91	593.03	584.91	590.85
	bound	-Inf	-Inf	-Inf	583.11	584.76	579.56	584.91	-Inf
	runtime	3600.00	3.24	0.39	128.67	123.71	126.37	1.49	3.02
gm169	value	905.82	940.08	898.38	901.29	898.38	918.87	898.38	940.08
	bound	-Inf	-Inf	-Inf	892.09	895.18	878.72	898.38	-Inf
	runtime	3600.00	10.79	0.65	479.31	468.07	505.20	4.16	10.32
gm17	value	201.61	201.61	201.61	201.61	201.61	201.61	201.61	201.61
	bound	-Inf	-Inf	-Inf	201.61	201.61	201.60	201.61	-Inf
	runtime	2.94	0.71	0.08	31.96	3.17	31.69	0.15	0.66
gm170	value	852.21	856.69	852.21	852.21	852.21	852.21	852.21	856.69
	bound	852.21	-Inf	-Inf	852.17	852.21	851.88	852.21	-Inf
	runtime	2055.00	4.52	0.37	289.57	85.88	288.41	1.22	4.23
gm171	value	474.12	505.02	474.12	474.12	474.12	474.25	474.12	505.02
	bound	474.12	-Inf	-Inf	473.80	474.12	471.67	474.12	-Inf
	runtime	6.27	2.01	0.23	80.38	48.47	81.38	0.73	1.87
gm172	value	284.46	312.16	284.46	284.46	284.46	284.46	284.46	312.16
	bound	284.46	-Inf	-Inf	284.46	284.46	284.46	284.46	-Inf
	runtime	3.79	1.23	0.12	63.00	6.67	62.84	0.29	1.12
gm173	value	273.94	306.96	273.94	273.94	273.94	273.94	273.94	306.96
	bound	273.94	-Inf	-Inf	273.94	273.94	273.93	273.94	-Inf
	runtime	1.59	0.71	0.09	30.45	6.56	44.41	0.18	0.66
gm174	value	696.48	759.80	713.62	696.48	696.48	696.82	696.48	759.80
	bound	696.48	-Inf	-Inf	694.62	696.31	690.72	696.48	-Inf
	runtime	6.02	4.73	0.30	130.48	124.21	129.25	0.92	4.56
gm175	value	656.57	653.55	653.55	653.82	653.55	656.16	653.55	653.55
	bound	-Inf	-Inf	-Inf	652.01	653.55	647.96	653.55	-Inf
	runtime	3600.00	3.32	0.28	206.18	187.61	204.98	0.94	3.14
gm176	value	539.58	575.70	540.78	539.58	539.58	542.94	539.58	575.70
	bound	539.58	-Inf	-Inf	538.56	539.43	533.39	539.58	-Inf
	runtime	22.46	2.09	0.24	99.84	98.77	99.93	0.70	1.94
gm177	value	567.41	595.45	567.41	568.07	567.41	570.09	567.41	595.45
	bound	567.41	-Inf	-Inf	565.71	567.41	562.55	567.41	-Inf
	runtime	5.08	8.74	0.45	581.51	347.40	603.54	1.77	8.27
gm178	value	467.83	467.83	467.83	467.83	467.83	469.49	467.83	467.83
	bound	-Inf	-Inf	-Inf	466.76	467.82	465.04	467.83	-Inf
	runtime	3600.00	6.74	0.37	260.26	259.85	268.99	1.21	6.49
gm179	value	932.20	981.67	899.79	893.82	894.39	898.63	893.82	981.67
	bound	-Inf	-Inf	-Inf	886.86	892.39	869.60	893.82	-Inf
	runtime	3600.00	4.32	0.47	199.45	191.18	198.31	1.89	4.12
gm18	value	417.34	418.79	417.34	417.34	417.34	417.34	417.34	418.79
	bound	417.34	-Inf	-Inf	415.98	417.32	411.08	417.34	-Inf
	runtime	2364.44	3.91	0.22	172.76	173.01	175.76	1.72	3.73
gm180	value	366.89	366.89	371.77	366.89	366.89	366.89	366.89	366.89
	bound	366.89	-Inf	-Inf	366.59	366.89	365.59	366.89	-Inf
	runtime	3.49	1.63	0.14	77.21	14.07	75.90	0.40	1.52
gm181	value	347.76	375.85	347.76	347.76	347.76	347.76	347.76	375.85
	bound	347.76	-Inf	-Inf	347.49	347.76	347.30	347.76	-Inf
	runtime	4.74	2.59	0.15	114.13	45.54	113.31	0.36	2.46
gm182	value	787.50	835.51	787.50	787.50	787.50	787.50	787.50	835.51
	bound	-Inf	-Inf	-Inf	787.07	787.50	784.91	787.50	-Inf
	runtime	3600.00	13.25	0.45	291.71	284.15	290.17	1.78	12.96
gm183	value	486.31	552.80	486.31	486.31	486.31	491.18	486.31	552.80
	bound	486.31	-Inf	-Inf	484.69	486.31	479.60	486.31	-Inf
	runtime	1.98	3.49	0.16	199.68	174.02	205.69	1.43	3.25
gm184	value	127.08	127.08	127.08	127.08	127.08	127.08	127.08	127.08
	bound	127.08	-Inf	-Inf	127.08	127.08	126.98	127.08	-Inf
	runtime	3.11	0.42	0.06	29.09	4.11	28.61	0.12	0.37
gm185	value	408.31	408.31	408.31	408.31	408.31	408.31	408.31	408.31
	bound	408.31	-Inf	-Inf	408.21	408.31	408.10	408.31	-Inf
	runtime	3.50	1.52	0.16	82.34	19.83	81.52	0.40	1.40
gm186	value	903.53	940.31	902.99	902.63	902.63	911.80	902.63	940.31
	bound	-Inf	-Inf	-Inf	901.91	902.59	893.47	902.63	-Inf
	runtime	3600.00	4.11	0.33	217.00	210.94	215.13	2.15	3.81
gm187	value	784.96	838.86	764.33	764.33	764.33	769.22	764.33	838.86
	bound	-Inf	-Inf	-Inf	763.62	764.33	759.58	764.33	-Inf
	runtime	3600.00	6.99	0.25	220.99	118.00	219.40	1.37	6.75
gm188	value	141.90	146.40	141.90	141.90	141.90	141.90	141.90	146.40
	bound	141.90	-Inf	-Inf	141.89	141.90	141.82	141.90	-Inf
	runtime	4.67	0.34	0.06	28.07	3.47	28.68	0.10	0.30
gm189	value	779.16	809.48	779.16	781.59	779.16	814.29	779.16	809.48
	bound	-Inf	-Inf	-Inf	776.00	778.41	767.86	779.16	-Inf
	runtime	3600.00	3.85	0.27	134.36	131.72	135.94	1.71	3.66

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm19	value	879.05	923.79	876.65	876.65	876.65	880.55	876.65	923.79
	bound	-Inf	-Inf	-Inf	876.51	876.59	874.00	876.65	-Inf
	runtime	3600.00	5.72	0.41	233.54	228.18	238.04	1.43	5.48
gm190	value	572.30	572.30	572.30	572.30	572.30	572.76	572.30	572.30
	bound	572.30	-Inf	-Inf	571.72	572.30	570.01	572.30	-Inf
	runtime	8.32	5.16	0.42	375.49	164.20	372.17	1.18	4.72
gm191	value	94.62	94.62	94.62	94.62	94.62	94.62	94.62	94.62
	bound	94.62	-Inf	-Inf	94.58	94.62	94.50	94.62	-Inf
	runtime	0.43	0.18	0.03	6.67	3.05	6.61	0.03	0.17
gm192	value	114.51	114.51	114.51	114.51	114.51	114.51	114.51	114.51
	bound	114.51	-Inf	-Inf	114.49	114.51	114.37	114.51	-Inf
	runtime	4.67	0.26	0.04	16.29	1.93	16.15	0.08	0.24
gm193	value	572.88	610.60	572.88	573.86	572.88	575.68	572.88	610.60
	bound	572.88	-Inf	-Inf	570.19	572.88	565.18	572.88	-Inf
	runtime	1101.72	7.78	0.35	260.43	250.29	265.98	1.38	7.54
gm194	value	270.78	285.46	279.68	270.78	270.78	270.78	270.78	285.46
	bound	270.78	-Inf	-Inf	270.69	270.78	269.67	270.78	-Inf
	runtime	1.88	0.50	0.07	26.75	9.71	26.65	0.22	0.46
gm195	value	404.68	404.68	404.68	404.68	404.68	404.68	404.68	404.68
	bound	404.68	-Inf	-Inf	404.68	404.68	404.50	404.68	-Inf
	runtime	3.01	1.81	0.15	69.73	10.06	71.65	0.35	1.68
gm196	value	66.20	66.20	66.20	66.20	66.20	66.20	66.20	66.20
	bound	66.20	-Inf	-Inf	66.20	66.20	66.20	66.20	-Inf
	runtime	0.12	0.14	0.03	3.89	0.51	8.40	0.04	0.12
gm197	value	270.02	281.29	270.02	270.02	270.02	270.62	270.02	281.29
	bound	270.02	-Inf	-Inf	269.85	270.02	269.09	270.02	-Inf
	runtime	3.79	1.23	0.13	54.60	13.58	53.94	0.28	1.15
gm198	value	213.04	233.45	213.04	213.04	213.04	213.04	213.04	233.45
	bound	213.04	-Inf	-Inf	213.04	213.04	213.03	213.04	-Inf
	runtime	3.55	0.79	0.09	31.27	3.94	31.26	0.17	0.73
gm199	value	316.28	319.37	316.28	316.28	316.28	316.28	316.28	319.37
	bound	316.28	-Inf	-Inf	316.23	316.28	315.57	316.28	-Inf
	runtime	4.35	2.71	0.21	152.36	82.92	151.58	0.56	2.51
gm2	value	715.38	775.45	715.38	715.38	715.38	716.70	715.38	775.45
	bound	-Inf	-Inf	-Inf	711.30	714.97	704.67	715.38	-Inf
	runtime	3600.00	6.72	0.38	244.96	252.62	247.54	1.90	6.45
gm20	value	347.10	359.61	347.10	347.10	347.10	347.10	347.10	359.61
	bound	347.10	-Inf	-Inf	347.01	347.10	346.81	347.10	-Inf
	runtime	3.77	1.46	0.12	61.20	11.45	58.83	0.26	1.39
gm200	value	326.44	326.44	326.44	326.44	326.44	326.44	326.44	326.44
	bound	326.44	-Inf	-Inf	326.44	326.44	326.44	326.44	-Inf
	runtime	5.17	1.14	0.16	67.97	3.79	67.39	0.29	1.04
gm201	value	311.75	322.09	311.75	311.75	311.75	311.86	311.75	322.09
	bound	311.75	-Inf	-Inf	309.78	311.73	306.08	311.75	-Inf
	runtime	6.45	1.18	0.19	70.02	68.74	69.06	0.50	1.11
gm202	value	715.80	780.68	715.80	715.80	715.80	718.27	715.80	780.68
	bound	715.80	-Inf	-Inf	714.58	715.80	706.85	715.80	-Inf
	runtime	88.31	6.54	0.26	135.81	93.65	135.43	1.05	6.40
gm203	value	106.21	106.21	106.21	106.21	106.21	106.21	106.21	106.21
	bound	106.21	-Inf	-Inf	106.21	106.21	106.21	106.21	-Inf
	runtime	2.59	0.38	0.06	10.92	1.77	17.32	0.10	0.35
gm204	value	110.85	110.85	110.85	110.85	110.85	110.85	110.85	110.85
	bound	110.85	-Inf	-Inf	110.84	110.85	110.78	110.85	-Inf
	runtime	3.85	0.70	0.13	44.42	3.80	44.53	0.23	0.62
gm205	value	410.24	430.43	410.24	410.24	410.24	410.24	410.24	430.43
	bound	410.24	-Inf	-Inf	409.63	410.24	408.67	410.24	-Inf
	runtime	1.75	1.88	0.17	75.60	31.44	75.53	0.52	1.76
gm206	value	499.91	538.23	499.91	499.91	499.91	500.25	499.91	538.23
	bound	499.91	-Inf	-Inf	499.40	499.88	497.73	499.91	-Inf
	runtime	45.06	4.21	0.25	132.81	129.51	131.68	0.86	4.05
gm207	value	328.59	329.44	328.59	328.59	328.59	329.40	328.59	329.44
	bound	328.59	-Inf	-Inf	328.27	328.59	327.27	328.59	-Inf
	runtime	271.65	2.61	0.24	137.94	72.63	140.47	0.62	2.43
gm208	value	267.48	267.48	267.48	267.48	267.48	267.48	267.48	267.48
	bound	267.48	-Inf	-Inf	267.41	267.44	267.29	267.48	-Inf
	runtime	2.14	1.77	0.18	118.72	116.84	118.86	0.45	1.62
gm209	value	509.78	534.94	509.78	510.04	509.78	515.06	509.78	534.94
	bound	-Inf	-Inf	-Inf	508.38	509.78	506.60	509.78	-Inf
	runtime	3600.00	2.41	0.17	81.34	60.74	80.90	0.76	2.31
gm21	value	425.91	450.41	425.91	426.55	425.91	428.01	425.91	450.41
	bound	425.91	-Inf	-Inf	424.37	425.91	420.52	425.91	-Inf
	runtime	9.62	1.77	0.12	53.47	52.60	52.44	0.49	1.67
gm210	value	307.86	307.86	307.86	307.86	307.86	307.86	307.86	307.86
	bound	307.86	-Inf	-Inf	307.84	307.86	307.59	307.86	-Inf
	runtime	2.29	1.65	0.21	97.59	20.06	95.68	0.41	1.52

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm211	value	577.60	595.23	577.60	577.60	577.60	581.28	577.60	595.23
	bound	577.60	-Inf	-Inf	576.48	577.57	567.04	577.60	-Inf
	runtime	3474.76	2.08	0.30	151.21	147.95	149.92	0.84	1.94
gm212	value	476.30	474.52	474.52	474.52	474.52	474.52	474.52	474.52
	bound	-Inf	-Inf	-Inf	474.50	474.52	473.57	474.52	-Inf
	runtime	3600.00	2.06	0.17	86.79	63.14	87.85	0.57	1.94
gm213	value	186.32	193.24	186.32	186.32	186.32	186.32	186.32	193.24
	bound	186.32	-Inf	-Inf	186.21	186.32	185.46	186.32	-Inf
	runtime	1.91	0.76	0.08	25.98	9.96	25.76	0.15	0.70
gm214	value	615.06	670.52	615.06	615.24	615.06	616.03	615.06	670.52
	bound	-Inf	-Inf	-Inf	613.98	615.05	606.05	615.06	-Inf
	runtime	3600.00	5.60	0.37	239.10	235.47	239.88	1.83	5.43
gm215	value	249.39	256.20	249.39	249.39	249.39	249.39	249.39	256.20
	bound	-Inf	-Inf	-Inf	249.18	249.39	248.56	249.39	-Inf
	runtime	3600.00	2.17	0.22	104.05	25.58	102.52	0.51	2.01
gm216	value	489.87	491.89	489.87	489.87	489.87	489.87	489.87	491.89
	bound	489.87	-Inf	-Inf	489.52	489.87	488.42	489.87	-Inf
	runtime	39.26	3.08	0.19	107.04	62.64	108.67	0.54	2.94
gm217	value	229.21	266.65	229.21	229.21	229.21	229.21	229.21	266.65
	bound	229.21	-Inf	-Inf	229.21	229.21	229.21	229.21	-Inf
	runtime	5.06	1.24	0.13	31.86	6.46	39.99	0.29	1.15
gm218	value	253.21	253.21	253.21	253.21	253.21	253.21	253.21	253.21
	bound	253.21	-Inf	-Inf	253.20	253.21	253.07	253.21	-Inf
	runtime	4.62	1.21	0.14	53.07	8.21	51.11	0.33	1.11
gm219	value	789.74	846.95	789.74	789.74	789.74	789.74	789.74	847.63
	bound	789.74	-Inf	-Inf	789.10	789.74	785.68	789.74	-Inf
	runtime	108.40	4.23	0.39	180.58	172.33	175.91	1.40	4.01
gm22	value	286.17	288.58	286.17	286.17	286.17	286.17	286.17	288.58
	bound	286.17	-Inf	-Inf	286.17	286.17	286.17	286.17	-Inf
	runtime	1.77	2.43	0.15	161.79	23.70	161.44	0.49	2.26
gm220	value	57.65	57.65	57.65	57.65	57.65	57.65	57.65	57.65
	bound	57.65	-Inf	-Inf	57.65	57.65	57.65	57.65	-Inf
	runtime	4.91	0.08	0.02	1.72	0.10	4.29	0.02	0.07
gm221	value	163.07	163.07	163.07	163.07	163.07	163.07	163.07	163.07
	bound	163.07	-Inf	-Inf	163.00	163.07	162.65	163.07	-Inf
	runtime	2.98	0.67	0.10	43.84	8.49	43.24	0.15	0.60
gm222	value	480.02	555.30	480.02	480.02	480.02	480.02	480.02	555.30
	bound	480.02	-Inf	-Inf	479.65	480.02	478.92	480.02	-Inf
	runtime	16.93	9.13	0.35	261.53	145.15	269.35	1.10	8.58
gm223	value	713.13	727.72	688.36	688.40	688.36	697.77	688.36	727.72
	bound	-Inf	-Inf	-Inf	687.01	688.31	679.22	688.36	-Inf
	runtime	3600.00	2.03	0.19	80.85	79.53	78.41	0.85	1.93
gm224	value	106.46	106.46	106.46	106.46	106.46	106.46	106.46	106.46
	bound	106.46	-Inf	-Inf	106.31	106.46	106.00	106.46	-Inf
	runtime	0.94	0.42	0.06	19.58	2.47	18.89	0.11	0.37
gm225	value	44.97	44.97	44.97	44.97	44.97	44.97	44.97	44.97
	bound	44.97	-Inf	-Inf	44.97	44.97	44.97	44.97	-Inf
	runtime	0.64	0.36	0.06	8.43	0.67	12.73	0.08	0.32
gm226	value	446.56	446.57	446.56	446.56	446.56	446.56	446.56	446.57
	bound	446.56	-Inf	-Inf	446.37	446.50	445.39	446.56	-Inf
	runtime	210.21	2.18	0.18	60.18	60.15	59.32	0.46	2.10
gm227	value	247.41	249.78	247.41	247.41	247.41	247.41	247.41	249.78
	bound	247.41	-Inf	-Inf	247.40	247.41	247.04	247.41	-Inf
	runtime	3.77	0.63	0.09	29.83	4.70	29.29	0.18	0.58
gm228	value	153.53	153.53	153.53	153.53	153.53	153.53	153.53	153.53
	bound	153.53	-Inf	-Inf	153.52	153.53	153.38	153.53	-Inf
	runtime	2.44	0.45	0.07	25.06	3.82	24.68	0.13	0.41
gm229	value	308.97	308.97	308.97	308.97	308.97	308.97	308.97	308.97
	bound	308.97	-Inf	-Inf	308.96	308.97	308.91	308.97	-Inf
	runtime	3.61	1.01	0.15	50.57	6.74	49.34	0.30	0.95
gm23	value	1045.49	1072.61	1029.42	1029.43	1029.42	1033.64	1029.42	1073.27
	bound	-Inf	-Inf	-Inf	1027.69	1029.25	1021.76	1029.42	-Inf
	runtime	3600.00	96.42	1.04	322.67	314.71	320.90	2.48	96.64
gm230	value	499.12	509.28	499.12	499.12	499.12	501.50	499.12	509.28
	bound	-Inf	-Inf	-Inf	498.12	499.01	493.58	499.12	-Inf
	runtime	3600.00	4.56	0.23	167.49	166.60	167.22	0.96	4.41
gm231	value	812.84	836.80	821.60	785.67	785.67	794.45	785.67	836.80
	bound	-Inf	-Inf	-Inf	783.43	785.62	778.68	785.67	-Inf
	runtime	3600.00	7.15	0.48	294.97	288.50	290.81	5.22	6.80
gm232	value	370.95	387.13	371.50	370.95	370.95	370.95	370.95	387.13
	bound	370.95	-Inf	-Inf	370.67	370.95	368.17	370.95	-Inf
	runtime	20.51	2.47	0.21	95.93	39.14	94.17	0.66	2.37
gm233	value	588.26	595.14	588.26	588.26	588.26	590.07	588.26	595.14
	bound	-Inf	-Inf	-Inf	587.54	588.26	583.85	588.26	-Inf
	runtime	3600.00	3.40	0.20	77.85	75.06	76.23	0.85	3.29

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm234	value	590.90	592.01	607.16	590.90	590.90	590.90	590.90	592.01
	bound	590.90	-Inf	-Inf	589.86	590.89	586.81	590.90	-Inf
	runtime	346.48	5.63	0.21	200.80	201.87	204.63	1.37	5.40
gm235	value	353.20	383.32	358.26	353.20	353.20	359.95	353.20	383.32
	bound	353.20	-Inf	-Inf	350.72	353.20	345.89	353.20	-Inf
	runtime	4.73	1.28	0.07	38.91	38.65	38.38	0.63	1.22
gm236	value	580.03	645.07	580.03	580.55	580.03	580.65	580.03	645.07
	bound	580.03	-Inf	-Inf	579.08	579.83	575.22	580.03	-Inf
	runtime	20.06	3.83	0.22	155.38	152.38	154.03	0.85	3.67
gm237	value	960.27	977.42	960.17	961.71	960.17	981.50	960.17	977.42
	bound	-Inf	-Inf	-Inf	957.48	959.64	950.82	960.17	-Inf
	runtime	3600.00	7.86	0.55	224.39	216.81	224.36	3.72	7.58
gm238	value	524.81	512.26	512.26	512.26	512.26	512.46	512.26	512.26
	bound	-Inf	-Inf	-Inf	512.13	512.26	511.26	512.26	-Inf
	runtime	3600.00	2.50	0.28	150.38	105.29	150.74	0.60	2.34
gm239	value	498.26	510.71	498.26	498.26	498.26	498.26	498.26	510.71
	bound	498.26	-Inf	-Inf	497.84	498.26	496.75	498.26	-Inf
	runtime	1.64	2.85	0.18	136.53	43.35	136.89	0.89	2.71
gm24	value	101.31	101.31	101.31	101.31	101.31	101.31	101.31	101.31
	bound	101.31	-Inf	-Inf	101.31	101.31	101.31	101.31	-Inf
	runtime	0.50	0.20	0.02	2.97	0.85	5.66	0.05	0.18
gm240	value	414.77	449.21	414.77	414.77	414.77	414.77	414.77	449.21
	bound	414.77	-Inf	-Inf	414.22	414.74	409.73	414.77	-Inf
	runtime	6.95	2.03	0.14	78.26	77.64	77.51	0.53	1.91
gm241	value	544.95	600.31	544.95	544.95	544.95	544.95	544.95	600.31
	bound	544.95	-Inf	-Inf	544.81	544.95	542.35	544.95	-Inf
	runtime	154.79	1.97	0.21	94.41	40.32	95.27	0.73	1.84
gm242	value	401.70	405.12	401.70	401.70	401.70	401.70	401.70	405.12
	bound	401.70	-Inf	-Inf	401.47	401.70	400.14	401.70	-Inf
	runtime	12.41	1.30	0.12	69.20	28.51	67.41	0.39	1.21
gm243	value	620.98	735.59	620.98	620.98	620.98	623.10	620.98	735.59
	bound	620.98	-Inf	-Inf	620.50	620.98	618.61	620.98	-Inf
	runtime	215.82	3.40	0.22	128.47	60.55	127.75	0.71	3.23
gm244	value	617.83	617.83	617.83	617.83	617.83	617.83	617.83	617.83
	bound	617.83	-Inf	-Inf	617.29	617.83	616.38	617.83	-Inf
	runtime	46.98	2.80	0.24	145.01	115.73	142.56	0.65	2.65
gm245	value	439.68	476.84	439.68	439.68	439.68	439.68	439.68	476.84
	bound	439.68	-Inf	-Inf	439.53	439.68	437.17	439.68	-Inf
	runtime	13.42	2.66	0.22	126.84	62.32	128.47	0.81	2.49
gm246	value	815.01	810.75	793.58	793.58	793.58	808.15	793.58	810.75
	bound	-Inf	-Inf	-Inf	792.38	793.38	784.62	793.58	-Inf
	runtime	3600.00	3.87	0.38	199.94	194.41	197.45	2.15	3.68
gm247	value	426.68	428.14	426.68	426.68	426.68	428.98	426.68	428.14
	bound	426.68	-Inf	-Inf	426.27	426.67	422.21	426.68	-Inf
	runtime	571.55	2.17	0.22	107.95	105.98	107.32	0.77	2.03
gm248	value	877.48	916.02	867.31	867.31	867.31	868.19	867.31	916.02
	bound	-Inf	-Inf	-Inf	866.84	867.31	862.19	867.31	-Inf
	runtime	3600.00	12.94	0.47	324.67	184.46	333.78	2.13	12.58
gm249	value	425.31	434.72	430.50	425.31	425.31	425.51	425.31	434.72
	bound	425.31	-Inf	-Inf	424.88	425.31	419.07	425.31	-Inf
	runtime	2.50	1.26	0.20	72.17	27.46	70.68	0.47	1.13
gm25	value	716.82	752.53	727.22	711.53	711.53	718.86	711.53	752.53
	bound	-Inf	-Inf	-Inf	708.59	711.16	699.77	711.53	-Inf
	runtime	3600.00	5.19	0.37	169.90	165.92	167.33	2.66	5.00
gm250	value	508.35	539.08	506.66	507.59	506.66	508.94	506.66	539.08
	bound	-Inf	-Inf	-Inf	500.22	505.41	488.01	506.66	-Inf
	runtime	3600.00	3.27	0.30	188.78	187.23	187.83	1.21	3.10
gm251	value	287.85	297.43	287.85	287.85	287.85	288.57	287.85	297.43
	bound	287.85	-Inf	-Inf	287.55	287.85	286.67	287.85	-Inf
	runtime	2.76	0.79	0.09	55.25	43.54	55.51	0.20	0.71
gm252	value	279.39	291.99	279.39	279.39	279.39	279.39	279.39	291.99
	bound	279.39	-Inf	-Inf	279.39	279.39	279.19	279.39	-Inf
	runtime	4.16	1.13	0.20	45.14	10.30	42.95	0.28	1.05
gm253	value	565.58	583.77	541.56	546.49	541.56	549.90	541.56	583.77
	bound	-Inf	-Inf	-Inf	539.99	541.35	520.53	541.56	-Inf
	runtime	3600.00	2.53	0.25	92.33	92.43	91.61	0.78	2.39
gm254	value	523.98	525.99	523.98	523.98	523.98	523.98	523.98	525.99
	bound	523.98	-Inf	-Inf	522.03	523.71	509.93	523.98	-Inf
	runtime	5.22	7.51	0.28	192.44	190.41	192.50	1.04	7.15
gm255	value	663.60	692.26	659.50	660.39	659.50	678.16	659.50	692.26
	bound	-Inf	-Inf	-Inf	656.77	659.11	646.51	659.50	-Inf
	runtime	3600.00	4.45	0.38	196.47	195.23	196.67	1.56	4.25
gm256	value	1084.84	1151.27	1078.43	1079.71	1078.43	1103.33	1078.43	1151.27
	bound	-Inf	-Inf	-Inf	1076.19	1078.03	1058.81	1078.43	-Inf
	runtime	3600.00	6.75	0.55	301.17	298.46	300.52	3.43	6.42

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm257	value	834.46	885.18	834.46	834.46	834.46	835.14	834.46	885.18
	bound	-Inf	-Inf	-Inf	832.08	834.33	829.68	834.46	-Inf
	runtime	3600.00	8.70	0.38	368.75	356.05	368.24	1.31	8.38
gm258	value	899.89	921.89	884.44	887.86	884.44	916.84	884.44	921.89
	bound	-Inf	-Inf	-Inf	880.05	883.79	869.61	884.44	-Inf
	runtime	3600.00	16.99	0.31	135.85	136.55	138.16	2.76	16.62
gm259	value	323.69	323.69	323.69	323.69	323.69	323.95	323.69	323.69
	bound	-Inf	-Inf	-Inf	323.27	323.69	322.38	323.69	-Inf
	runtime	5.13	1.24	0.14	75.67	44.81	74.53	0.34	1.12
gm26	value	297.77	321.48	308.18	297.77	297.77	300.74	297.77	321.48
	bound	-Inf	-Inf	-Inf	296.26	297.49	291.31	297.77	-Inf
	runtime	2.11	0.77	0.07	38.19	37.50	37.36	0.24	0.73
gm260	value	116.97	118.64	116.97	116.97	116.97	116.97	116.97	118.64
	bound	-Inf	-Inf	-Inf	116.97	116.97	116.95	116.97	-Inf
	runtime	3.08	0.48	0.08	26.93	1.71	26.68	0.13	0.41
gm261	value	395.37	424.61	395.37	395.37	395.37	395.37	395.37	424.61
	bound	-Inf	-Inf	-Inf	395.36	395.37	395.10	395.37	-Inf
	runtime	2.93	0.92	0.14	72.85	15.12	72.36	0.35	0.84
gm262	value	365.23	382.05	365.23	365.23	365.23	365.23	365.23	382.05
	bound	-Inf	-Inf	-Inf	365.16	365.23	364.85	365.23	-Inf
	runtime	4.14	0.88	0.12	42.54	8.40	43.13	0.29	0.81
gm263	value	551.19	591.40	551.19	546.11	546.11	547.60	546.11	591.40
	bound	-Inf	-Inf	-Inf	545.00	546.09	542.82	546.11	-Inf
	runtime	3600.00	2.34	0.33	93.32	91.55	92.71	1.01	2.22
gm264	value	819.90	905.29	819.90	819.90	819.90	819.90	819.90	905.29
	bound	-Inf	-Inf	-Inf	819.63	819.90	816.66	819.90	-Inf
	runtime	14.59	3.66	0.26	166.62	112.34	165.83	1.10	3.45
gm265	value	670.20	691.34	670.20	670.20	670.20	670.57	670.20	691.34
	bound	-Inf	-Inf	-Inf	668.75	670.19	666.51	670.20	-Inf
	runtime	837.13	5.92	0.49	154.22	148.96	153.21	0.92	5.71
gm266	value	606.31	606.31	606.31	606.31	606.31	606.35	606.31	606.31
	bound	-Inf	-Inf	-Inf	605.52	606.29	601.70	606.31	-Inf
	runtime	1290.89	3.38	0.27	114.54	110.96	112.16	0.81	3.22
gm267	value	1123.20	1131.91	1121.66	1121.66	1121.66	1124.61	1121.66	1131.91
	bound	-Inf	-Inf	-Inf	1120.08	1121.66	1114.34	1121.66	-Inf
	runtime	3600.00	7.97	0.45	316.91	247.76	309.09	2.20	7.66
gm268	value	742.27	766.70	742.27	742.73	742.27	752.86	742.27	766.70
	bound	-Inf	-Inf	-Inf	741.66	742.22	738.87	742.27	-Inf
	runtime	180.56	4.60	0.27	212.09	205.10	211.76	1.27	4.34
gm269	value	919.19	928.42	902.67	902.44	902.44	903.39	902.44	928.42
	bound	-Inf	-Inf	-Inf	901.34	902.43	895.91	902.44	-Inf
	runtime	3600.00	9.51	0.59	398.24	387.28	413.65	2.57	9.21
gm27	value	301.81	312.98	301.81	301.81	301.81	301.81	301.81	312.98
	bound	-Inf	-Inf	-Inf	301.80	301.81	301.68	301.81	-Inf
	runtime	3.68	1.05	0.14	55.16	8.29	54.14	0.28	0.96
gm270	value	387.83	388.26	387.83	387.83	387.83	387.83	387.83	388.26
	bound	-Inf	-Inf	-Inf	387.54	387.82	386.77	387.83	-Inf
	runtime	4.63	1.42	0.17	77.66	75.69	76.43	0.35	1.28
gm271	value	823.75	879.26	823.75	823.75	823.75	834.00	823.75	879.26
	bound	-Inf	-Inf	-Inf	823.00	823.75	818.40	823.75	-Inf
	runtime	3600.00	5.62	0.46	208.00	179.24	206.47	1.39	5.35
gm272	value	387.24	389.75	387.24	387.24	387.24	387.31	387.24	389.75
	bound	-Inf	-Inf	-Inf	386.39	387.24	383.23	387.24	-Inf
	runtime	1128.28	3.37	0.27	179.42	65.51	176.81	0.81	3.18
gm273	value	402.00	402.00	402.00	402.00	402.00	402.00	402.00	402.00
	bound	-Inf	-Inf	-Inf	401.13	401.83	400.57	402.00	-Inf
	runtime	19.30	5.48	0.31	207.56	203.14	207.25	1.00	5.23
gm274	value	368.36	379.62	368.36	368.36	368.36	368.77	368.36	379.62
	bound	-Inf	-Inf	-Inf	368.07	368.36	366.37	368.36	-Inf
	runtime	176.72	1.52	0.11	45.10	27.47	44.63	0.43	1.45
gm275	value	877.69	871.94	868.03	868.76	864.53	888.83	864.53	871.94
	bound	-Inf	-Inf	-Inf	860.51	862.94	846.51	864.53	-Inf
	runtime	3600.00	5.81	0.48	197.15	189.72	192.58	2.77	5.59
gm276	value	338.90	347.04	338.90	338.90	338.90	339.91	338.90	347.04
	bound	-Inf	-Inf	-Inf	338.08	338.90	334.86	338.90	-Inf
	runtime	3.64	1.17	0.10	43.44	30.51	42.60	0.34	1.11
gm277	value	644.34	679.14	655.96	644.34	644.34	644.34	644.34	679.14
	bound	-Inf	-Inf	-Inf	644.17	644.34	643.25	644.34	-Inf
	runtime	6.27	29.93	0.19	114.60	53.27	114.36	0.81	29.64
gm278	value	473.72	501.38	473.72	473.72	473.72	473.72	473.72	501.38
	bound	-Inf	-Inf	-Inf	473.26	473.72	472.48	473.72	-Inf
	runtime	33.13	2.17	0.18	107.28	24.79	105.17	0.47	2.00
gm279	value	294.78	304.54	294.78	294.78	294.78	296.10	294.78	304.54
	bound	-Inf	-Inf	-Inf	294.68	294.78	293.45	294.78	-Inf
	runtime	2.68	1.14	0.17	57.88	28.13	56.36	0.30	1.08

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm28	value	654.28	663.74	650.80	650.80	650.80	652.75	650.80	663.74
	bound	-Inf	-Inf	-Inf	649.74	650.80	647.34	650.80	-Inf
	runtime	3600.00	4.38	0.29	148.85	119.15	145.20	0.90	4.16
gm280	value	274.24	274.85	274.24	274.24	274.24	274.24	274.24	274.85
	bound	274.24	-Inf	-Inf	273.32	274.24	272.06	274.24	-Inf
	runtime	1.73	0.78	0.09	70.76	47.99	68.33	0.25	0.66
gm281	value	810.16	853.49	796.36	795.86	794.48	807.87	794.48	853.49
	bound	-Inf	-Inf	-Inf	792.21	793.89	783.26	794.48	-Inf
	runtime	3600.00	6.27	0.40	298.95	311.90	296.29	1.89	5.97
gm282	value	590.44	597.66	590.44	590.44	590.44	590.44	590.44	597.66
	bound	590.44	-Inf	-Inf	589.34	590.32	587.66	590.44	-Inf
	runtime	23.00	2.36	0.20	111.16	114.29	106.84	0.58	2.22
gm283	value	452.36	480.30	452.36	452.90	452.36	456.17	452.36	480.30
	bound	452.36	-Inf	-Inf	450.79	451.99	443.06	452.36	-Inf
	runtime	89.07	2.40	0.15	93.23	99.31	92.76	0.65	2.28
gm284	value	473.33	494.05	473.33	473.33	473.33	474.53	473.33	494.05
	bound	473.33	-Inf	-Inf	472.91	473.31	468.89	473.33	-Inf
	runtime	70.36	1.42	0.22	92.06	96.50	90.28	0.55	1.32
gm285	value	355.64	364.19	367.31	355.64	355.64	355.64	355.64	364.19
	bound	355.64	-Inf	-Inf	355.30	355.64	351.56	355.64	-Inf
	runtime	2.33	0.85	0.13	64.77	32.86	64.45	0.25	0.79
gm286	value	646.78	687.15	646.78	646.78	646.78	646.78	646.78	687.15
	bound	646.78	-Inf	-Inf	645.45	646.78	642.89	646.78	-Inf
	runtime	67.99	2.94	0.23	138.65	79.83	137.14	0.76	2.79
gm287	value	251.86	265.27	251.86	251.86	251.86	251.86	251.86	265.27
	bound	251.86	-Inf	-Inf	251.86	251.86	251.74	251.86	-Inf
	runtime	2.11	0.91	0.12	53.53	6.52	51.92	0.21	0.81
gm288	value	558.81	558.92	558.81	558.81	558.81	558.81	558.81	558.92
	bound	-Inf	-Inf	-Inf	558.59	558.81	556.58	558.81	-Inf
	runtime	3600.00	2.92	0.23	121.23	127.69	119.76	0.65	2.78
gm289	value	457.31	458.80	457.31	457.31	457.31	457.31	457.31	458.80
	bound	457.31	-Inf	-Inf	457.13	457.31	456.49	457.31	-Inf
	runtime	3.04	4.12	0.23	139.77	93.77	138.01	0.69	4.00
gm29	value	245.06	245.31	245.06	245.06	245.06	245.06	245.06	245.31
	bound	245.06	-Inf	-Inf	244.93	245.06	244.58	245.06	-Inf
	runtime	3.66	1.06	0.08	47.43	26.70	47.99	0.28	0.99
gm290	value	700.39	701.00	700.39	700.40	700.39	701.08	700.39	701.00
	bound	-Inf	-Inf	-Inf	698.89	700.29	696.11	700.39	-Inf
	runtime	3600.00	5.04	0.32	247.14	260.42	244.28	1.26	4.80
gm291	value	715.73	748.94	711.49	711.49	711.49	720.47	711.49	748.94
	bound	-Inf	-Inf	-Inf	710.07	711.34	702.72	711.49	-Inf
	runtime	3600.00	2.49	0.25	105.09	110.55	105.76	1.31	2.34
gm292	value	608.26	620.38	608.77	608.26	608.26	608.26	608.26	620.38
	bound	608.26	-Inf	-Inf	607.75	608.24	606.23	608.26	-Inf
	runtime	793.18	4.19	0.38	196.14	207.15	193.24	1.05	3.95
gm293	value	546.55	590.46	546.55	546.55	546.55	546.96	546.55	590.46
	bound	546.55	-Inf	-Inf	545.38	546.51	540.93	546.55	-Inf
	runtime	21.02	5.01	0.30	116.61	119.93	115.02	1.24	4.84
gm294	value	223.64	223.64	223.64	223.64	223.64	223.64	223.64	223.64
	bound	223.64	-Inf	-Inf	222.76	223.62	220.86	223.64	-Inf
	runtime	3.40	1.11	0.10	26.97	27.59	26.91	0.24	1.07
gm295	value	561.22	576.53	561.22	561.22	561.22	563.94	561.22	576.53
	bound	561.22	-Inf	-Inf	560.88	561.22	558.38	561.22	-Inf
	runtime	2356.04	4.72	0.43	206.07	152.27	205.71	1.77	4.48
gm296	value	397.91	425.52	397.91	397.91	397.91	397.91	397.91	425.52
	bound	397.91	-Inf	-Inf	397.85	397.91	397.35	397.91	-Inf
	runtime	2.77	2.78	0.21	150.89	38.97	147.79	0.74	2.64
gm297	value	536.62	579.29	536.62	537.40	536.62	539.49	536.62	579.29
	bound	536.62	-Inf	-Inf	534.52	536.32	525.51	536.62	-Inf
	runtime	11.03	1.73	0.15	107.18	110.98	106.20	0.62	1.61
gm298	value	386.18	386.66	386.18	386.18	386.18	389.40	386.18	386.66
	bound	386.18	-Inf	-Inf	385.86	386.17	381.85	386.18	-Inf
	runtime	44.80	2.79	0.10	28.90	29.84	28.33	0.31	2.73
gm299	value	257.80	275.23	257.80	257.80	257.80	257.80	257.80	275.23
	bound	257.80	-Inf	-Inf	257.62	257.80	255.65	257.80	-Inf
	runtime	5.37	1.25	0.09	72.59	26.39	71.49	0.35	1.17
gm3	value	405.84	432.95	405.84	405.84	405.84	405.84	405.84	432.95
	bound	405.84	-Inf	-Inf	405.36	405.76	404.45	405.84	-Inf
	runtime	1.60	3.27	0.15	113.63	118.68	113.46	0.70	3.16
gm30	value	609.37	614.45	609.37	609.37	609.37	609.37	609.37	614.45
	bound	609.37	-Inf	-Inf	608.71	609.37	606.01	609.37	-Inf
	runtime	217.23	3.01	0.24	92.65	53.58	90.61	0.80	2.88
gm300	value	237.70	240.20	237.70	237.70	237.70	239.51	237.70	240.20
	bound	237.70	-Inf	-Inf	237.19	237.70	236.06	237.70	-Inf
	runtime	2.12	0.88	0.05	28.58	28.71	27.97	0.20	0.84

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm31	value	323.72	335.29	323.72	323.72	323.72	323.72	323.72	335.29
	bound	323.72	-Inf	-Inf	323.55	323.72	322.71	323.72	-Inf
	runtime	1.89	0.79	0.09	35.95	9.22	35.42	0.26	0.73
gm32	value	150.50	181.44	150.50	150.50	150.50	150.50	150.50	181.44
	bound	150.50	-Inf	-Inf	150.50	150.50	150.50	150.50	-Inf
	runtime	5.14	0.67	0.04	2.84	1.15	12.91	0.08	0.65
gm33	value	518.44	565.81	518.44	518.44	518.44	518.44	518.44	565.81
	bound	518.44	-Inf	-Inf	518.44	518.44	518.44	518.44	-Inf
	runtime	3.06	6.97	0.23	185.23	45.15	185.98	0.98	6.74
gm34	value	653.01	680.47	653.01	653.01	653.01	653.26	653.01	680.47
	bound	653.01	-Inf	-Inf	652.28	653.01	649.38	653.01	-Inf
	runtime	90.01	3.61	0.24	116.53	45.02	115.03	1.04	3.47
gm35	value	598.62	621.41	598.62	598.62	598.62	598.73	598.62	621.41
	bound	598.62	-Inf	-Inf	598.03	598.61	596.52	598.62	-Inf
	runtime	286.39	2.58	0.26	110.79	115.98	109.68	0.80	2.41
gm36	value	471.88	507.61	480.48	471.88	471.88	472.00	471.88	507.61
	bound	471.88	-Inf	-Inf	471.57	471.88	465.34	471.88	-Inf
	runtime	5.48	3.10	0.15	99.89	59.55	100.09	0.82	2.96
gm37	value	268.28	268.28	268.28	268.28	268.28	268.28	268.28	268.28
	bound	268.28	-Inf	-Inf	268.12	268.28	267.58	268.28	-Inf
	runtime	2.72	0.81	0.06	19.51	5.73	19.12	0.17	0.77
gm38	value	396.05	396.05	397.65	396.05	396.05	396.05	396.05	396.05
	bound	396.05	-Inf	-Inf	395.73	395.99	394.93	396.05	-Inf
	runtime	4.41	1.32	0.19	57.23	58.78	56.03	0.30	1.23
gm39	value	236.25	248.61	236.25	237.23	236.25	238.52	236.25	248.61
	bound	236.25	-Inf	-Inf	233.63	235.54	230.23	236.25	-Inf
	runtime	3.45	1.37	0.07	35.42	36.07	35.41	0.29	1.32
gm4	value	436.16	436.16	436.16	436.16	436.16	436.16	436.16	436.16
	bound	436.16	-Inf	-Inf	436.11	436.16	434.51	436.16	-Inf
	runtime	997.33	3.94	0.29	150.62	42.30	149.24	1.20	3.77
gm40	value	142.37	142.37	142.37	142.37	142.37	142.37	142.37	142.37
	bound	142.37	-Inf	-Inf	142.37	142.37	142.37	142.37	-Inf
	runtime	3.80	1.31	0.10	8.02	1.00	41.94	0.24	1.22
gm41	value	196.76	207.37	196.76	196.76	196.76	196.76	196.76	207.37
	bound	196.76	-Inf	-Inf	196.59	196.76	195.85	196.76	-Inf
	runtime	3.53	1.15	0.10	43.11	15.77	43.05	0.28	1.08
gm42	value	756.57	755.30	753.98	752.34	752.34	755.49	752.34	755.30
	bound	-Inf	-Inf	-Inf	750.34	752.19	746.38	752.34	-Inf
	runtime	3600.00	6.48	0.42	212.74	221.88	211.49	1.54	6.18
gm43	value	444.76	473.06	444.76	444.76	444.76	444.76	444.76	473.06
	bound	444.76	-Inf	-Inf	444.68	444.76	442.18	444.76	-Inf
	runtime	7.52	2.13	0.15	55.02	35.69	54.71	0.49	2.03
gm44	value	541.54	541.78	541.54	541.54	541.54	541.54	541.54	541.78
	bound	541.54	-Inf	-Inf	541.40	541.52	540.60	541.54	-Inf
	runtime	27.75	3.83	0.25	112.92	118.78	111.72	0.60	3.66
gm45	value	688.11	739.16	686.73	687.41	686.73	694.86	686.73	739.16
	bound	-Inf	-Inf	-Inf	684.52	686.66	676.38	686.73	-Inf
	runtime	3600.00	5.93	0.35	221.89	234.95	220.93	1.97	5.71
gm46	value	569.41	571.55	569.41	569.41	569.41	575.56	569.41	571.55
	bound	569.41	-Inf	-Inf	568.16	569.41	561.70	569.41	-Inf
	runtime	10.51	5.46	0.23	191.81	181.26	189.00	2.01	5.19
gm47	value	212.55	212.55	212.55	212.55	212.55	212.55	212.55	212.55
	bound	212.55	-Inf	-Inf	212.23	212.55	211.81	212.55	-Inf
	runtime	3.21	1.39	0.08	49.77	14.57	49.52	0.21	1.33
gm48	value	343.74	343.75	343.75	343.74	343.74	343.74	343.74	343.75
	bound	343.74	-Inf	-Inf	343.03	343.58	339.97	343.74	-Inf
	runtime	3.80	1.15	0.17	52.46	54.45	51.86	0.39	1.09
gm49	value	880.70	892.10	873.08	873.08	873.08	880.18	873.08	892.10
	bound	-Inf	-Inf	-Inf	872.49	873.08	868.40	873.08	-Inf
	runtime	3600.00	4.11	0.38	170.84	93.86	171.75	1.54	3.90
gm5	value	369.10	386.45	369.10	370.14	369.10	373.87	369.10	387.07
	bound	369.10	-Inf	-Inf	365.80	368.88	359.50	369.10	-Inf
	runtime	283.69	3.16	0.22	82.25	85.10	81.12	1.06	3.00
gm50	value	519.46	532.54	519.46	519.46	519.46	519.46	519.46	532.54
	bound	519.46	-Inf	-Inf	519.19	519.46	517.98	519.46	-Inf
	runtime	128.89	3.51	0.25	111.57	39.74	110.28	0.68	3.32
gm51	value	210.93	251.40	210.93	210.93	210.93	210.93	210.93	251.40
	bound	210.93	-Inf	-Inf	210.93	210.93	210.90	210.93	-Inf
	runtime	5.55	0.64	0.06	6.74	3.07	28.60	0.17	0.58
gm52	value	378.96	417.95	378.96	378.96	378.96	378.96	378.96	417.95
	bound	378.96	-Inf	-Inf	378.68	378.96	375.48	378.96	-Inf
	runtime	5.06	2.13	0.08	72.18	27.65	71.33	0.53	2.04
gm53	value	362.94	370.25	362.94	362.94	362.94	362.94	362.94	370.25
	bound	362.94	-Inf	-Inf	362.58	362.94	361.90	362.94	-Inf
	runtime	5.65	1.05	0.17	77.63	20.05	76.97	0.34	0.98

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm54	value	307.24	323.10	307.24	307.24	307.24	307.24	307.24	323.10
	bound	307.24	-Inf	-Inf	307.19	307.24	306.70	307.24	-Inf
	runtime	237.23	1.25	0.13	37.57	13.32	37.33	0.28	1.18
gm55	value	473.23	509.28	479.41	473.66	473.23	485.57	473.23	509.28
	bound	473.23	-Inf	-Inf	470.37	473.11	461.89	473.23	-Inf
	runtime	24.97	2.43	0.14	69.35	72.78	68.27	0.73	2.33
gm56	value	331.70	414.64	331.70	331.70	331.70	331.70	331.70	414.64
	bound	331.70	-Inf	-Inf	331.61	331.70	331.43	331.70	-Inf
	runtime	3.50	1.50	0.10	35.99	9.35	35.61	0.26	1.45
gm57	value	196.87	196.87	196.87	196.87	196.87	196.87	196.87	196.87
	bound	196.87	-Inf	-Inf	196.86	196.87	196.65	196.87	-Inf
	runtime	1.83	0.67	0.06	19.22	3.00	19.25	0.12	0.63
gm58	value	376.26	431.41	376.26	376.26	376.26	376.26	376.26	431.41
	bound	376.26	-Inf	-Inf	376.23	376.26	376.21	376.26	-Inf
	runtime	1.72	2.97	0.18	89.20	16.81	88.45	0.41	2.84
gm59	value	773.30	799.37	760.17	757.74	757.74	759.18	757.74	799.37
	bound	-Inf	-Inf	-Inf	756.82	757.74	752.35	757.74	-Inf
	runtime	3600.00	4.22	0.23	119.60	121.94	114.90	1.29	4.06
gm6	value	411.50	452.56	412.06	411.50	411.50	411.50	411.50	452.74
	bound	411.50	-Inf	-Inf	410.13	411.31	403.86	411.50	-Inf
	runtime	101.80	6.71	0.24	186.37	193.19	185.43	1.79	6.48
gm60	value	757.66	757.66	759.36	757.66	757.66	757.66	757.66	757.66
	bound	757.66	-Inf	-Inf	757.66	757.66	757.11	757.66	-Inf
	runtime	60.70	4.48	0.35	155.24	39.53	153.46	0.85	4.27
gm61	value	164.00	171.46	164.00	164.00	164.00	164.00	164.00	171.46
	bound	164.00	-Inf	-Inf	163.99	164.00	163.98	164.00	-Inf
	runtime	2.52	0.92	0.09	31.79	11.15	31.54	0.16	0.87
gm62	value	539.45	539.45	539.45	539.45	539.45	539.51	539.45	539.45
	bound	539.45	-Inf	-Inf	538.15	539.44	532.87	539.45	-Inf
	runtime	38.53	4.98	0.44	206.64	217.71	201.90	1.14	4.75
gm63	value	456.73	456.73	456.73	456.86	456.73	456.86	456.73	456.73
	bound	456.73	-Inf	-Inf	454.78	456.64	452.20	456.73	-Inf
	runtime	211.77	4.79	0.29	164.93	174.75	163.04	0.78	4.62
gm64	value	282.80	282.80	282.80	282.80	282.80	282.80	282.80	282.80
	bound	282.80	-Inf	-Inf	281.90	282.80	279.51	282.80	-Inf
	runtime	2.51	0.98	0.08	40.96	28.09	41.52	0.32	0.91
gm65	value	693.20	708.26	671.18	667.04	667.04	669.90	667.04	708.26
	bound	-Inf	-Inf	-Inf	666.49	667.04	662.32	667.04	-Inf
	runtime	3600.00	2.11	0.19	75.59	63.15	74.98	0.80	1.98
gm66	value	97.91	97.91	97.91	97.91	97.91	97.91	97.91	97.91
	bound	97.91	-Inf	-Inf	97.91	97.91	97.91	97.91	-Inf
	runtime	1.98	0.41	0.04	1.02	0.13	8.37	0.13	0.37
gm67	value	33.74	38.79	33.74	33.74	33.74	33.74	33.74	38.79
	bound	33.74	-Inf	-Inf	33.74	33.74	33.74	33.74	-Inf
	runtime	0.04	0.20	0.02	0.51	0.03	1.64	0.05	0.16
gm68	value	228.19	228.19	228.28	228.19	228.19	228.19	228.19	228.19
	bound	228.19	-Inf	-Inf	227.57	228.19	226.49	228.19	-Inf
	runtime	2.44	1.36	0.08	36.37	36.98	35.30	0.22	1.31
gm69	value	191.50	191.50	191.50	191.50	191.50	191.50	191.50	191.50
	bound	191.50	-Inf	-Inf	191.50	191.50	191.50	191.50	-Inf
	runtime	1.78	0.49	0.07	27.39	9.31	26.70	0.12	0.45
gm7	value	479.28	497.23	479.28	479.28	479.28	479.28	479.28	497.23
	bound	479.28	-Inf	-Inf	479.03	479.28	477.68	479.28	-Inf
	runtime	2.96	2.74	0.24	205.63	160.28	204.08	0.64	2.59
gm70	value	121.78	121.78	121.78	121.78	121.78	121.78	121.78	121.78
	bound	121.78	-Inf	-Inf	121.78	121.78	121.77	121.78	-Inf
	runtime	0.94	0.41	0.03	12.75	1.68	12.06	0.07	0.38
gm71	value	137.04	137.04	137.04	137.04	137.04	137.04	137.04	137.04
	bound	137.04	-Inf	-Inf	136.91	137.04	136.89	137.04	-Inf
	runtime	3.06	1.62	0.12	57.98	10.39	56.80	0.22	1.52
gm72	value	211.86	211.86	211.86	211.86	211.86	211.86	211.86	211.86
	bound	211.86	-Inf	-Inf	211.10	211.86	210.70	211.86	-Inf
	runtime	1.69	0.89	0.15	48.84	40.19	48.46	0.21	0.80
gm73	value	192.45	199.17	192.45	192.45	192.45	192.45	192.45	199.17
	bound	192.45	-Inf	-Inf	192.04	192.45	190.02	192.45	-Inf
	runtime	0.86	0.38	0.06	24.03	24.93	23.72	0.14	0.33
gm74	value	581.51	632.79	581.51	581.51	581.51	581.51	581.51	632.79
	bound	581.51	-Inf	-Inf	581.51	581.51	581.51	581.51	-Inf
	runtime	2.02	2.20	0.21	81.99	25.73	117.61	0.50	2.05
gm75	value	395.53	508.52	395.53	395.53	395.53	395.53	395.53	508.52
	bound	395.53	-Inf	-Inf	395.53	395.53	395.53	395.53	-Inf
	runtime	2.30	2.95	0.24	115.50	27.32	125.95	0.48	2.76
gm76	value	267.64	269.52	267.64	267.64	267.64	267.64	267.64	269.52
	bound	267.64	-Inf	-Inf	266.39	267.64	264.62	267.64	-Inf
	runtime	1.92	2.41	0.14	78.04	70.55	76.84	0.38	2.29

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
gm77	value	144.29	144.29	144.29	144.29	144.29	144.29	144.29	144.29
	bound	144.29	-Inf	-Inf	144.29	144.29	144.29	144.29	-Inf
	runtime	0.96	0.48	0.10	29.22	1.73	34.18	0.16	0.40
gm78	value	197.98	269.62	197.98	197.98	197.98	197.98	197.98	269.62
	bound	197.98	-Inf	-Inf	197.98	197.98	197.98	197.98	-Inf
	runtime	3.11	0.86	0.08	19.45	1.78	38.96	0.19	0.81
gm79	value	671.22	690.53	666.52	666.87	666.52	669.43	666.52	690.53
	bound	-Inf	-Inf	-Inf	665.12	666.37	660.95	666.52	-Inf
	runtime	3600.00	8.32	0.45	289.98	305.19	290.03	1.92	7.93
gm8	value	552.31	605.65	558.02	552.31	552.31	552.31	552.31	605.65
	bound	552.31	-Inf	-Inf	552.28	552.31	552.11	552.31	-Inf
	runtime	2988.83	2.82	0.21	110.33	33.47	109.45	0.65	2.67
gm80	value	273.94	285.23	273.94	273.94	273.94	273.94	273.94	285.23
	bound	273.94	-Inf	-Inf	273.37	273.94	272.65	273.94	-Inf
	runtime	6.61	1.39	0.13	63.82	66.87	63.18	0.35	1.29
gm81	value	442.65	491.33	442.65	442.65	442.65	445.07	442.65	491.33
	bound	442.65	-Inf	-Inf	442.31	442.64	441.31	442.65	-Inf
	runtime	3.78	1.32	0.14	99.59	102.49	97.93	0.44	1.23
gm82	value	656.37	668.69	656.37	656.37	656.37	663.06	656.37	668.69
	bound	656.37	-Inf	-Inf	653.79	656.23	646.91	656.37	-Inf
	runtime	9.25	5.19	0.26	191.88	202.83	189.49	0.92	5.05
gm83	value	332.45	332.45	332.45	332.45	332.45	332.85	332.45	332.45
	bound	332.45	-Inf	-Inf	332.27	332.45	332.12	332.45	-Inf
	runtime	3.53	0.85	0.14	41.29	12.90	41.04	0.27	0.78
gm84	value	494.99	530.58	494.99	494.99	494.99	495.66	494.99	530.58
	bound	494.99	-Inf	-Inf	494.13	494.99	491.23	494.99	-Inf
	runtime	66.78	1.95	0.18	86.21	78.40	85.24	0.55	1.84
gm85	value	168.23	169.61	168.23	168.23	168.23	168.23	168.23	169.61
	bound	168.23	-Inf	-Inf	168.23	168.23	168.22	168.23	-Inf
	runtime	1.36	0.30	0.03	14.51	7.25	14.38	0.08	0.27
gm86	value	395.52	395.77	395.52	395.52	395.52	395.55	395.52	395.77
	bound	395.52	-Inf	-Inf	395.41	395.52	394.73	395.52	-Inf
	runtime	1.60	1.86	0.17	84.73	88.86	85.54	0.40	1.76
gm87	value	652.37	674.26	655.42	652.61	652.37	656.67	652.37	674.26
	bound	-Inf	-Inf	-Inf	650.39	652.37	643.53	652.37	-Inf
	runtime	3600.00	3.42	0.32	227.77	179.74	224.84	1.17	3.22
gm88	value	173.35	173.95	173.35	173.35	173.35	173.35	173.35	173.95
	bound	173.35	-Inf	-Inf	173.35	173.35	173.35	173.35	-Inf
	runtime	2.13	0.69	0.09	27.59	4.94	35.86	0.14	0.64
gm89	value	250.20	250.20	250.20	250.20	250.20	250.20	250.20	250.20
	bound	250.20	-Inf	-Inf	250.20	250.20	250.18	250.20	-Inf
	runtime	3.49	1.62	0.15	56.44	5.88	55.01	0.26	1.51
gm9	value	606.47	617.11	606.47	606.47	606.47	611.68	606.47	617.11
	bound	606.47	-Inf	-Inf	605.20	606.41	601.11	606.47	-Inf
	runtime	603.28	3.69	0.17	183.67	188.66	181.99	1.01	3.52
gm90	value	194.03	202.53	194.03	194.03	194.03	194.03	194.03	202.53
	bound	194.03	-Inf	-Inf	194.02	194.03	193.99	194.03	-Inf
	runtime	3.89	0.68	0.07	43.24	5.83	42.78	0.19	0.63
gm91	value	234.71	234.71	234.71	234.71	234.71	234.71	234.71	234.71
	bound	234.71	-Inf	-Inf	234.42	234.69	233.91	234.71	-Inf
	runtime	3.77	3.06	0.26	145.96	152.32	142.15	0.63	2.88
gm92	value	250.81	250.81	250.81	250.81	250.81	250.81	250.81	250.81
	bound	250.81	-Inf	-Inf	250.81	250.81	250.80	250.81	-Inf
	runtime	6.06	0.74	0.10	45.53	7.02	44.74	0.18	0.66
gm93	value	454.30	469.50	454.30	454.30	454.30	454.30	454.30	469.50
	bound	454.30	-Inf	-Inf	453.89	454.30	452.97	454.30	-Inf
	runtime	5.31	5.42	0.31	278.06	119.77	280.15	1.12	5.08
gm94	value	800.87	861.54	800.87	800.87	800.87	802.39	800.87	861.54
	bound	-Inf	-Inf	-Inf	800.48	800.87	797.51	800.87	-Inf
	runtime	3600.00	2.64	0.24	111.68	78.30	111.41	0.88	2.48
gm95	value	582.87	615.67	568.09	567.51	567.51	567.51	567.51	615.67
	bound	-Inf	-Inf	-Inf	565.99	567.51	561.91	567.51	-Inf
	runtime	3600.00	6.06	15.18	116.85	101.19	116.95	1.87	5.93
gm96	value	869.89	875.47	856.39	856.39	856.39	862.64	856.39	875.47
	bound	-Inf	-Inf	-Inf	854.98	856.39	850.19	856.39	-Inf
	runtime	3600.00	12.30	0.45	305.82	246.57	302.57	1.85	11.96
gm97	value	488.74	495.13	488.74	488.74	488.74	489.06	488.74	495.13
	bound	488.74	-Inf	-Inf	488.16	488.74	486.93	488.74	-Inf
	runtime	2.69	1.90	0.22	121.22	103.86	120.45	0.57	1.74
gm98	value	415.82	422.86	415.82	415.82	415.82	415.82	415.82	422.86
	bound	415.82	-Inf	-Inf	415.80	415.82	414.20	415.82	-Inf
	runtime	4.73	1.91	0.12	53.68	13.38	53.53	0.40	1.85
gm99	value	484.67	506.38	484.67	484.67	484.67	484.67	484.67	506.38
	bound	484.67	-Inf	-Inf	484.67	484.67	483.99	484.67	-Inf
	runtime	3.65	2.71	0.18	68.99	13.01	68.45	0.45	2.60
mean energy		478.96	498.44	477.83	477.08	476.95	479.26	476.95	498.37
mean bound		-Inf	-Inf	-Inf	476.11	476.86	473.16	476.95	-Inf

geo-surf-7		BRAOBB	ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP
mean runtime		1031.34	3.67	0.28	128.90	97.91	129.24	0.87	3.51
best value		82.67	22.00	85.67	87.00	99.67	53.33	100.00	22.00
best bound		74.33	0.00	0.00	3.33	60.00	4.00	100.00	0.00
verified opt		74.33	0.00	0.00	3.33	60.00	4.00	100.00	0.00

Table 44: geo-surf-7

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm1	value	499.52	517.68
	bound	499.52	-Inf
	runtime	0.86	58.31
gm10	value	782.93	805.11
	bound	782.93	-Inf
	runtime	41.27	147.89
gm100	value	220.96	227.29
	bound	220.96	-Inf
	runtime	0.31	16.84
gm101	value	150.85	157.15
	bound	150.85	-Inf
	runtime	0.07	3.18
gm102	value	582.56	621.07
	bound	582.56	-Inf
	runtime	2.92	55.14
gm103	value	305.34	305.34
	bound	305.34	-Inf
	runtime	0.19	19.22
gm104	value	499.64	499.64
	bound	499.64	-Inf
	runtime	0.45	45.63
gm105	value	231.49	231.49
	bound	231.49	-Inf
	runtime	0.14	12.20
gm106	value	96.87	96.87
	bound	96.87	-Inf
	runtime	0.04	1.46
gm107	value	551.16	562.48
	bound	551.16	-Inf
	runtime	0.96	91.42
gm108	value	362.39	374.37
	bound	362.39	-Inf
	runtime	0.63	12.76
gm109	value	471.84	473.70
	bound	471.84	-Inf
	runtime	0.54	44.93
gm11	value	48.12	48.12
	bound	48.12	-Inf
	runtime	0.03	2.42
gm110	value	549.39	549.39
	bound	549.39	-Inf
	runtime	1.07	73.12
gm111	value	340.44	343.77
	bound	340.44	-Inf
	runtime	0.40	22.73
gm112	value	812.78	814.72
	bound	812.78	-Inf
	runtime	2.09	89.34
gm113	value	740.69	740.74
	bound	740.69	-Inf
	runtime	0.98	69.91
gm114	value	698.75	698.75
	bound	698.75	-Inf
	runtime	1.57	117.03
gm115	value	995.60	1001.32
	bound	995.60	-Inf
	runtime	20.25	80.84
gm116	value	934.11	941.85
	bound	934.11	-Inf
	runtime	9.82	116.67
gm117	value	484.32	488.23
	bound	484.32	-Inf
	runtime	1.54	29.63
gm118	value	812.82	833.94
	bound	812.82	-Inf
	runtime	1.77	65.39

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm119	value	611.58	632.65
	bound	611.58	-Inf
	runtime	2.53	52.09
gm12	value	251.41	251.41
	bound	251.41	-Inf
	runtime	0.13	12.87
gm120	value	323.68	323.68
	bound	323.68	-Inf
	runtime	0.31	20.47
gm121	value	490.64	490.64
	bound	490.64	-Inf
	runtime	0.72	74.19
gm122	value	391.94	392.82
	bound	391.94	-Inf
	runtime	0.37	17.12
gm123	value	661.02	692.71
	bound	661.02	-Inf
	runtime	0.64	55.63
gm124	value	697.65	778.31
	bound	697.65	-Inf
	runtime	1.13	55.00
gm125	value	1077.55	1080.49
	bound	1077.55	-Inf
	runtime	5.60	80.20
gm126	value	778.78	782.76
	bound	778.78	-Inf
	runtime	4.56	95.47
gm127	value	275.87	275.87
	bound	275.87	-Inf
	runtime	0.21	10.44
gm128	value	714.47	714.47
	bound	714.47	-Inf
	runtime	1.10	106.53
gm129	value	506.70	506.70
	bound	506.70	-Inf
	runtime	0.72	23.75
gm13	value	568.82	573.85
	bound	568.82	-Inf
	runtime	1.24	40.93
gm130	value	779.28	810.79
	bound	779.28	-Inf
	runtime	2.47	38.24
gm131	value	901.55	927.61
	bound	901.55	-Inf
	runtime	49.77	91.93
gm132	value	462.02	462.02
	bound	462.02	-Inf
	runtime	0.84	66.59
gm133	value	347.66	347.66
	bound	347.66	-Inf
	runtime	0.18	20.74
gm134	value	473.70	517.18
	bound	473.70	-Inf
	runtime	1.05	49.34
gm135	value	640.36	640.36
	bound	640.36	-Inf
	runtime	1.51	43.48
gm136	value	518.44	546.46
	bound	518.44	-Inf
	runtime	5.28	34.74
gm137	value	633.49	645.54
	bound	633.49	-Inf
	runtime	1.58	108.62
gm138	value	502.54	506.85
	bound	502.54	-Inf
	runtime	0.44	32.18
gm139	value	525.73	527.90
	bound	525.73	-Inf
	runtime	0.66	46.84
gm14	value	17.36	17.36
	bound	17.36	-Inf
	runtime	0.01	0.08
gm140	value	636.57	670.87
	bound	636.57	-Inf
	runtime	2.03	254.25

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm141	value	452.16	452.16
	bound	452.16	-Inf
	runtime	0.88	105.58
gm142	value	678.06	688.18
	bound	678.06	-Inf
	runtime	1.31	72.87
gm143	value	538.57	563.01
	bound	538.57	-Inf
	runtime	0.83	61.80
gm144	value	796.28	814.80
	bound	796.28	-Inf
	runtime	0.99	52.09
gm145	value	540.67	540.67
	bound	540.67	-Inf
	runtime	1.37	159.32
gm146	value	630.11	630.91
	bound	630.11	-Inf
	runtime	4.36	38.55
gm147	value	569.61	591.55
	bound	569.61	-Inf
	runtime	1.06	91.42
gm148	value	606.90	621.18
	bound	606.90	-Inf
	runtime	41.23	61.27
gm149	value	267.78	267.78
	bound	267.78	-Inf
	runtime	0.24	29.33
gm15	value	290.02	292.18
	bound	290.02	-Inf
	runtime	0.24	22.33
gm150	value	798.74	819.53
	bound	798.74	-Inf
	runtime	10.19	60.93
gm151	value	525.55	525.55
	bound	525.55	-Inf
	runtime	1.03	54.81
gm152	value	347.71	356.49
	bound	347.71	-Inf
	runtime	0.48	20.69
gm153	value	310.81	310.81
	bound	310.81	-Inf
	runtime	1.04	11.01
gm154	value	461.82	461.82
	bound	461.82	-Inf
	runtime	1.00	30.22
gm155	value	514.42	514.42
	bound	514.42	-Inf
	runtime	0.91	78.46
gm156	value	534.74	559.58
	bound	534.74	-Inf
	runtime	1.07	20.73
gm157	value	712.91	720.24
	bound	712.91	-Inf
	runtime	1.25	63.01
gm158	value	584.08	591.21
	bound	584.08	-Inf
	runtime	0.94	63.81
gm159	value	323.64	325.11
	bound	323.64	-Inf
	runtime	0.43	15.19
gm16	value	421.35	421.35
	bound	421.35	-Inf
	runtime	0.61	25.10
gm160	value	746.48	780.30
	bound	746.48	-Inf
	runtime	4.47	59.72
gm161	value	819.80	876.64
	bound	819.80	-Inf
	runtime	2.24	65.71
gm162	value	469.74	470.27
	bound	469.74	-Inf
	runtime	0.46	41.22
gm163	value	462.92	462.99
	bound	462.92	-Inf
	runtime	0.68	35.33

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm164	value	669.36	669.36
	bound	669.36	-Inf
	runtime	1.11	85.94
gm165	value	662.84	662.84
	bound	662.84	-Inf
	runtime	10.86	66.99
gm166	value	863.40	909.16
	bound	862.80	-Inf
	runtime	2.98	92.76
gm167	value	668.04	668.04
	bound	668.04	-Inf
	runtime	0.96	54.13
gm168	value	584.91	587.87
	bound	584.91	-Inf
	runtime	5.29	45.99
gm169	value	898.38	937.70
	bound	898.38	-Inf
	runtime	5.19	147.74
gm17	value	201.61	201.61
	bound	201.61	-Inf
	runtime	0.12	14.03
gm170	value	852.21	856.69
	bound	852.21	-Inf
	runtime	1.25	82.71
gm171	value	474.12	491.63
	bound	474.12	-Inf
	runtime	1.83	26.66
gm172	value	284.46	284.46
	bound	284.46	-Inf
	runtime	0.20	23.84
gm173	value	273.94	309.49
	bound	273.94	-Inf
	runtime	0.23	13.36
gm174	value	696.48	737.98
	bound	696.48	-Inf
	runtime	1.84	35.59
gm175	value	653.55	653.99
	bound	653.55	-Inf
	runtime	0.78	52.28
gm176	value	539.58	549.71
	bound	539.58	-Inf
	runtime	8.88	35.10
gm177	value	567.41	567.41
	bound	567.41	-Inf
	runtime	1.26	142.31
gm178	value	467.83	467.83
	bound	467.83	-Inf
	runtime	0.86	99.42
gm179	value	893.82	974.45
	bound	893.82	-Inf
	runtime	3.38	57.93
gm18	value	417.34	417.34
	bound	417.34	-Inf
	runtime	5.06	87.39
gm180	value	366.89	366.89
	bound	366.89	-Inf
	runtime	0.34	24.03
gm181	value	347.76	347.76
	bound	347.76	-Inf
	runtime	0.52	28.80
gm182	value	787.50	815.83
	bound	787.50	-Inf
	runtime	1.36	117.70
gm183	value	486.31	494.09
	bound	486.31	-Inf
	runtime	2.21	60.45
gm184	value	127.08	127.08
	bound	127.08	-Inf
	runtime	0.14	10.76
gm185	value	408.31	408.31
	bound	408.31	-Inf
	runtime	0.35	31.36
gm186	value	902.63	919.95
	bound	902.63	-Inf
	runtime	6.09	80.31

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm187	value	764.33	809.16
	bound	764.33	-Inf
	runtime	1.31	63.67
gm188	value	141.90	146.40
	bound	141.90	-Inf
	runtime	0.07	7.63
gm189	value	779.16	791.36
	bound	779.16	-Inf
	runtime	6.66	58.81
gm19	value	876.65	879.05
	bound	876.65	-Inf
	runtime	1.08	81.52
gm190	value	572.30	572.30
	bound	572.30	-Inf
	runtime	0.92	97.02
gm191	value	94.62	94.62
	bound	94.62	-Inf
	runtime	0.03	1.45
gm192	value	114.51	114.51
	bound	114.51	-Inf
	runtime	0.08	6.87
gm193	value	572.88	575.06
	bound	572.88	-Inf
	runtime	1.29	80.94
gm194	value	270.78	279.68
	bound	270.78	-Inf
	runtime	0.25	8.92
gm195	value	404.68	404.68
	bound	404.68	-Inf
	runtime	0.32	28.29
gm196	value	66.20	66.20
	bound	66.20	-Inf
	runtime	0.04	2.32
gm197	value	270.02	281.29
	bound	270.02	-Inf
	runtime	0.22	17.76
gm198	value	213.04	233.45
	bound	213.04	-Inf
	runtime	0.15	10.32
gm199	value	316.28	319.37
	bound	316.28	-Inf
	runtime	0.37	49.81
gm2	value	715.38	772.41
	bound	715.38	-Inf
	runtime	2.79	86.98
gm20	value	347.10	359.61
	bound	347.10	-Inf
	runtime	0.28	19.25
gm200	value	326.44	326.44
	bound	326.44	-Inf
	runtime	0.20	25.56
gm201	value	311.75	311.75
	bound	311.75	-Inf
	runtime	0.72	22.18
gm202	value	715.80	736.92
	bound	715.80	-Inf
	runtime	1.68	49.52
gm203	value	106.21	106.21
	bound	106.21	-Inf
	runtime	0.06	5.28
gm204	value	110.85	110.85
	bound	110.85	-Inf
	runtime	0.15	8.49
gm205	value	410.24	430.43
	bound	410.24	-Inf
	runtime	0.60	24.41
gm206	value	499.91	534.78
	bound	499.91	-Inf
	runtime	0.69	55.73
gm207	value	328.59	328.59
	bound	328.59	-Inf
	runtime	0.43	49.18
gm208	value	267.48	267.48
	bound	267.48	-Inf
	runtime	0.30	38.48

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm209	value	509.78	509.78
	bound	509.78	-Inf
	runtime	0.68	31.90
gm21	value	425.91	444.82
	bound	425.91	-Inf
	runtime	1.74	19.72
gm210	value	307.86	307.86
	bound	307.86	-Inf
	runtime	0.31	33.37
gm211	value	577.60	585.58
	bound	577.60	-Inf
	runtime	3.55	36.88
gm212	value	474.52	474.52
	bound	474.52	-Inf
	runtime	0.42	36.88
gm213	value	186.32	199.77
	bound	186.32	-Inf
	runtime	0.14	3.74
gm214	value	615.06	651.88
	bound	615.06	-Inf
	runtime	2.14	74.72
gm215	value	249.39	250.96
	bound	249.39	-Inf
	runtime	0.36	38.60
gm216	value	489.87	489.87
	bound	489.87	-Inf
	runtime	0.50	34.96
gm217	value	229.21	266.65
	bound	229.21	-Inf
	runtime	0.20	26.08
gm218	value	253.21	253.21
	bound	253.21	-Inf
	runtime	0.22	23.72
gm219	value	789.74	830.13
	bound	789.74	-Inf
	runtime	3.39	63.15
gm22	value	286.17	286.17
	bound	286.17	-Inf
	runtime	0.33	51.17
gm220	value	57.65	57.65
	bound	57.65	-Inf
	runtime	0.02	0.34
gm221	value	163.07	163.07
	bound	163.07	-Inf
	runtime	0.14	11.94
gm222	value	480.02	482.25
	bound	480.02	-Inf
	runtime	2.83	131.48
gm223	value	688.36	717.21
	bound	688.36	-Inf
	runtime	2.52	26.21
gm224	value	106.46	106.46
	bound	106.46	-Inf
	runtime	0.07	2.23
gm225	value	44.97	44.97
	bound	44.97	-Inf
	runtime	0.05	1.99
gm226	value	446.56	446.57
	bound	446.56	-Inf
	runtime	0.44	28.61
gm227	value	247.41	249.78
	bound	247.41	-Inf
	runtime	0.13	6.85
gm228	value	153.53	153.53
	bound	153.53	-Inf
	runtime	0.09	6.29
gm229	value	308.97	308.97
	bound	308.97	-Inf
	runtime	0.30	18.63
gm23	value	1029.42	1029.42
	bound	1029.42	-Inf
	runtime	6.90	101.66
gm230	value	499.12	509.28
	bound	499.12	-Inf
	runtime	1.01	57.24

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm231	value	785.67	805.52
	bound	785.67	-Inf
	runtime	27.71	124.66
gm232	value	370.95	370.95
	bound	370.95	-Inf
	runtime	0.55	36.13
gm233	value	588.26	595.14
	bound	588.26	-Inf
	runtime	1.98	37.39
gm234	value	590.90	593.78
	bound	590.90	-Inf
	runtime	3.34	64.58
gm235	value	353.20	383.86
	bound	353.20	-Inf
	runtime	2.01	14.21
gm236	value	580.03	580.03
	bound	580.03	-Inf
	runtime	0.70	59.54
gm237	value	960.17	975.05
	bound	960.17	-Inf
	runtime	13.10	87.28
gm238	value	512.26	512.26
	bound	512.26	-Inf
	runtime	0.43	42.91
gm239	value	498.26	498.26
	bound	498.26	-Inf
	runtime	0.99	51.12
gm24	value	101.31	101.31
	bound	101.31	-Inf
	runtime	0.04	1.52
gm240	value	414.77	449.21
	bound	414.77	-Inf
	runtime	4.06	30.22
gm241	value	544.95	593.75
	bound	544.95	-Inf
	runtime	1.46	31.91
gm242	value	401.70	405.12
	bound	401.70	-Inf
	runtime	0.82	22.23
gm243	value	620.98	714.87
	bound	620.98	-Inf
	runtime	2.75	43.86
gm244	value	617.83	623.85
	bound	617.83	-Inf
	runtime	0.64	39.64
gm245	value	439.68	439.68
	bound	439.68	-Inf
	runtime	0.84	50.12
gm246	value	793.58	793.76
	bound	793.58	-Inf
	runtime	10.94	48.22
gm247	value	426.68	426.68
	bound	426.68	-Inf
	runtime	0.68	43.48
gm248	value	867.31	908.66
	bound	867.31	-Inf
	runtime	5.22	121.73
gm249	value	425.31	425.31
	bound	425.31	-Inf
	runtime	1.18	22.62
gm25	value	711.53	737.69
	bound	711.53	-Inf
	runtime	7.84	64.21
gm250	value	506.66	523.93
	bound	506.66	-Inf
	runtime	10.46	48.03
gm251	value	287.85	297.43
	bound	287.85	-Inf
	runtime	0.24	14.18
gm252	value	279.39	288.09
	bound	279.39	-Inf
	runtime	0.30	10.89
gm253	value	541.56	579.70
	bound	541.56	-Inf
	runtime	5.79	34.18

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm254	value	523.98	523.98
	bound	523.98	-Inf
	runtime	1.08	74.37
gm255	value	659.50	659.50
	bound	659.50	-Inf
	runtime	9.96	64.67
gm256	value	1078.43	1087.56
	bound	1078.43	-Inf
	runtime	28.49	90.13
gm257	value	834.46	840.06
	bound	834.46	-Inf
	runtime	1.12	83.45
gm258	value	884.44	908.36
	bound	884.44	-Inf
	runtime	12.26	56.81
gm259	value	323.69	323.69
	bound	323.69	-Inf
	runtime	0.63	23.55
gm26	value	297.77	303.35
	bound	297.77	-Inf
	runtime	0.39	12.81
gm260	value	116.97	116.97
	bound	116.97	-Inf
	runtime	0.08	11.33
gm261	value	395.37	405.84
	bound	395.37	-Inf
	runtime	0.36	21.96
gm262	value	365.23	371.05
	bound	365.23	-Inf
	runtime	0.49	11.66
gm263	value	546.11	579.55
	bound	546.11	-Inf
	runtime	5.31	32.30
gm264	value	819.90	859.91
	bound	819.90	-Inf
	runtime	0.94	63.02
gm265	value	670.20	683.76
	bound	670.20	-Inf
	runtime	1.74	54.64
gm266	value	606.31	606.31
	bound	606.31	-Inf
	runtime	0.58	45.64
gm267	value	1121.66	1121.66
	bound	1121.66	-Inf
	runtime	5.37	90.58
gm268	value	742.27	750.92
	bound	742.27	-Inf
	runtime	1.19	68.65
gm269	value	902.44	918.18
	bound	902.44	-Inf
	runtime	3.19	130.21
gm27	value	301.81	312.98
	bound	301.81	-Inf
	runtime	0.24	19.62
gm270	value	387.83	388.02
	bound	387.83	-Inf
	runtime	0.26	29.33
gm271	value	823.75	842.87
	bound	823.75	-Inf
	runtime	3.01	64.05
gm272	value	387.24	389.75
	bound	387.24	-Inf
	runtime	0.58	65.25
gm273	value	402.00	402.00
	bound	402.00	-Inf
	runtime	0.74	83.98
gm274	value	368.36	368.36
	bound	368.36	-Inf
	runtime	3.84	21.75
gm275	value	864.53	871.94
	bound	864.53	-Inf
	runtime	9.99	68.09
gm276	value	338.90	347.04
	bound	338.90	-Inf
	runtime	1.04	16.40

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm277	value	644.34	651.15
	bound	644.34	-Inf
	runtime	2.33	32.28
gm278	value	473.72	473.72
	bound	473.72	-Inf
	runtime	0.34	30.95
gm279	value	294.78	294.78
	bound	294.78	-Inf
	runtime	0.22	19.79
gm28	value	650.80	654.20
	bound	650.80	-Inf
	runtime	0.74	51.26
gm280	value	274.24	274.85
	bound	274.24	-Inf
	runtime	1.14	16.90
gm281	value	794.48	804.32
	bound	794.48	-Inf
	runtime	1.76	95.66
gm282	value	590.44	590.44
	bound	590.44	-Inf
	runtime	0.51	35.69
gm283	value	452.36	464.06
	bound	452.36	-Inf
	runtime	0.46	34.27
gm284	value	473.33	473.33
	bound	473.33	-Inf
	runtime	2.75	28.89
gm285	value	355.64	355.64
	bound	355.64	-Inf
	runtime	0.58	15.05
gm286	value	646.78	651.05
	bound	646.78	-Inf
	runtime	1.18	45.98
gm287	value	251.86	261.73
	bound	251.86	-Inf
	runtime	0.16	17.72
gm288	value	558.81	558.81
	bound	558.81	-Inf
	runtime	1.15	42.63
gm289	value	457.31	457.31
	bound	457.31	-Inf
	runtime	0.57	52.07
gm29	value	245.06	245.31
	bound	245.06	-Inf
	runtime	0.22	23.45
gm290	value	700.39	700.39
	bound	700.39	-Inf
	runtime	1.20	90.27
gm291	value	711.49	741.95
	bound	711.49	-Inf
	runtime	5.75	44.08
gm292	value	608.26	608.26
	bound	608.26	-Inf
	runtime	0.82	74.78
gm293	value	546.55	548.67
	bound	546.55	-Inf
	runtime	1.75	47.33
gm294	value	223.64	223.73
	bound	223.64	-Inf
	runtime	0.28	14.24
gm295	value	561.22	568.97
	bound	561.22	-Inf
	runtime	4.97	81.46
gm296	value	397.91	397.91
	bound	397.91	-Inf
	runtime	0.57	51.83
gm297	value	536.62	573.34
	bound	536.62	-Inf
	runtime	4.01	26.96
gm298	value	386.18	386.66
	bound	386.18	-Inf
	runtime	0.65	10.47
gm299	value	257.80	257.80
	bound	257.80	-Inf
	runtime	0.30	29.31

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm3	value	405.84	432.93
	bound	405.84	-Inf
	runtime	1.03	50.67
gm30	value	609.37	609.37
	bound	609.37	-Inf
	runtime	2.53	39.13
gm300	value	237.70	239.98
	bound	237.70	-Inf
	runtime	0.39	10.51
gm31	value	323.72	325.13
	bound	323.72	-Inf
	runtime	0.24	13.38
gm32	value	150.50	177.22
	bound	150.50	-Inf
	runtime	0.07	5.83
gm33	value	518.44	518.44
	bound	518.44	-Inf
	runtime	0.96	86.37
gm34	value	653.01	653.01
	bound	653.01	-Inf
	runtime	1.69	44.45
gm35	value	598.62	598.62
	bound	598.62	-Inf
	runtime	0.63	45.96
gm36	value	471.88	472.32
	bound	471.88	-Inf
	runtime	0.91	37.41
gm37	value	268.28	268.28
	bound	268.28	-Inf
	runtime	0.27	6.82
gm38	value	396.05	396.05
	bound	396.05	-Inf
	runtime	0.49	15.67
gm39	value	236.25	239.56
	bound	236.25	-Inf
	runtime	0.73	16.13
gm4	value	436.16	436.16
	bound	436.16	-Inf
	runtime	2.35	75.32
gm40	value	142.37	142.37
	bound	142.37	-Inf
	runtime	0.17	22.78
gm41	value	196.76	198.95
	bound	196.76	-Inf
	runtime	0.25	20.62
gm42	value	752.34	753.98
	bound	752.34	-Inf
	runtime	2.56	74.61
gm43	value	444.76	454.31
	bound	444.76	-Inf
	runtime	0.80	25.24
gm44	value	541.54	541.54
	bound	541.54	-Inf
	runtime	0.46	44.59
gm45	value	686.73	699.62
	bound	686.73	-Inf
	runtime	2.72	82.64
gm46	value	569.41	571.55
	bound	569.41	-Inf
	runtime	2.53	78.36
gm47	value	212.55	212.55
	bound	212.55	-Inf
	runtime	0.15	18.82
gm48	value	343.74	343.75
	bound	343.74	-Inf
	runtime	0.75	20.60
gm49	value	873.08	881.14
	bound	873.08	-Inf
	runtime	8.24	64.88
gm5	value	369.10	372.65
	bound	369.10	-Inf
	runtime	2.37	39.90
gm50	value	519.46	532.54
	bound	519.46	-Inf
	runtime	0.91	54.41

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm51	value	210.93	228.60
	bound	210.93	-Inf
	runtime	0.13	11.67
gm52	value	378.96	420.53
	bound	378.96	-Inf
	runtime	0.74	30.20
gm53	value	362.94	370.25
	bound	362.94	-Inf
	runtime	0.31	23.36
gm54	value	307.24	307.24
	bound	307.24	-Inf
	runtime	0.26	18.98
gm55	value	473.23	476.12
	bound	473.23	-Inf
	runtime	4.60	29.40
gm56	value	331.70	385.81
	bound	331.70	-Inf
	runtime	0.38	14.12
gm57	value	196.87	196.87
	bound	196.87	-Inf
	runtime	0.10	5.18
gm58	value	376.26	396.81
	bound	376.26	-Inf
	runtime	0.31	35.48
gm59	value	757.74	780.91
	bound	757.74	-Inf
	runtime	8.57	51.28
gm6	value	411.50	443.00
	bound	411.50	-Inf
	runtime	4.48	95.99
gm60	value	757.66	757.66
	bound	757.66	-Inf
	runtime	0.87	64.74
gm61	value	164.00	169.31
	bound	164.00	-Inf
	runtime	0.11	8.70
gm62	value	539.45	546.99
	bound	539.45	-Inf
	runtime	2.08	51.58
gm63	value	456.73	459.71
	bound	456.73	-Inf
	runtime	0.58	56.53
gm64	value	282.80	290.93
	bound	282.80	-Inf
	runtime	0.24	16.33
gm65	value	667.04	694.32
	bound	667.04	-Inf
	runtime	4.22	32.41
gm66	value	97.91	97.91
	bound	97.91	-Inf
	runtime	0.08	7.61
gm67	value	33.74	38.79
	bound	33.74	-Inf
	runtime	0.03	1.71
gm68	value	228.19	228.19
	bound	228.19	-Inf
	runtime	0.18	15.04
gm69	value	191.50	191.50
	bound	191.50	-Inf
	runtime	0.09	9.23
gm7	value	479.28	481.76
	bound	479.28	-Inf
	runtime	0.45	51.91
gm70	value	121.78	121.78
	bound	121.78	-Inf
	runtime	0.05	1.92
gm71	value	137.04	137.04
	bound	137.04	-Inf
	runtime	0.16	21.40
gm72	value	211.86	211.86
	bound	211.86	-Inf
	runtime	0.32	14.60
gm73	value	192.45	195.99
	bound	192.45	-Inf
	runtime	0.14	6.46

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm74	value	581.51	621.13
	bound	581.51	-Inf
	runtime	0.44	33.75
gm75	value	395.53	395.53
	bound	395.53	-Inf
	runtime	0.35	40.48
gm76	value	267.64	268.51
	bound	267.64	-Inf
	runtime	0.28	32.87
gm77	value	144.29	144.29
	bound	144.29	-Inf
	runtime	0.10	8.42
gm78	value	197.98	197.98
	bound	197.98	-Inf
	runtime	0.13	17.96
gm79	value	666.52	690.35
	bound	666.52	-Inf
	runtime	1.94	106.97
gm8	value	552.31	576.80
	bound	552.31	-Inf
	runtime	0.91	43.64
gm80	value	273.94	278.68
	bound	273.94	-Inf
	runtime	0.36	27.28
gm81	value	442.65	442.65
	bound	442.65	-Inf
	runtime	0.55	26.49
gm82	value	656.37	674.29
	bound	656.37	-Inf
	runtime	0.79	50.19
gm83	value	332.45	332.45
	bound	332.45	-Inf
	runtime	0.24	17.59
gm84	value	494.99	508.90
	bound	494.99	-Inf
	runtime	0.39	31.74
gm85	value	168.23	168.23
	bound	168.23	-Inf
	runtime	0.05	2.47
gm86	value	395.52	395.77
	bound	395.52	-Inf
	runtime	0.29	32.29
gm87	value	652.37	666.88
	bound	652.37	-Inf
	runtime	1.11	60.74
gm88	value	173.35	173.35
	bound	173.35	-Inf
	runtime	0.10	12.09
gm89	value	250.20	250.20
	bound	250.20	-Inf
	runtime	0.18	15.47
gm9	value	606.47	615.93
	bound	606.47	-Inf
	runtime	0.95	52.57
gm90	value	194.03	202.53
	bound	194.03	-Inf
	runtime	0.13	16.52
gm91	value	234.71	234.71
	bound	234.71	-Inf
	runtime	0.44	53.67
gm92	value	250.81	250.81
	bound	250.81	-Inf
	runtime	0.15	13.95
gm93	value	454.30	454.30
	bound	454.30	-Inf
	runtime	0.78	98.98
gm94	value	800.87	804.90
	bound	800.87	-Inf
	runtime	2.55	43.67
gm95	value	567.51	573.24
	bound	567.51	-Inf
	runtime	4.38	44.21
gm96	value	856.39	869.89
	bound	856.39	-Inf
	runtime	1.93	110.86

geo-surf-7		ogm-LP-LP	ogm-TRBP
gm97	value	488.74	488.74
	bound	488.74	-Inf
	runtime	0.60	35.77
gm98	value	415.82	415.82
	bound	415.82	-Inf
	runtime	0.58	21.37
gm99	value	484.67	491.48
	bound	484.67	-Inf
	runtime	0.40	30.04
mean energy		476.95	485.88
mean bound		476.94	-Inf
mean runtime		2.27	44.83
best value		99.67	40.00
best bound		99.67	0.00
verified opt		99.67	0.00

4.15. Hierarchical Image Segmentation (correlation-clustering)

Table 45: correlation-clustering

correlation-clustering		MCR	MCA	MCA-fdo
0000047	value	-814.64	-833.59	-833.59
	bound	-841.25	-833.59	-833.59
	runtime	0.99	34.00	19.59
0000051	value	-520.90	-520.90	-520.90
	bound	-520.90	-520.90	-520.90
	runtime	0.07	0.04	0.04
0000059	value	-1076.55	-1085.19	-1085.19
	bound	-1087.32	-1085.19	-1085.19
	runtime	1.33	13.67	8.52
0000072	value	-1016.22	-1016.29	-1016.29
	bound	-1016.32	-1016.29	-1016.29
	runtime	0.40	0.60	0.51
0000087	value	-591.96	-598.42	-598.42
	bound	-600.44	-598.42	-598.42
	runtime	0.62	4.28	3.85
0000176	value	-1060.19	-1061.62	-1061.62
	bound	-1061.97	-1061.62	-1061.62
	runtime	0.85	1.16	1.15
0000382	value	-435.32	-464.74	-464.74
	bound	-465.09	-464.74	-464.74
	runtime	0.22	0.10	0.17
0000631	value	-178.61	-178.71	-178.71
	bound	-179.16	-178.71	-178.71
	runtime	0.05	0.29	0.23
0000643	value	-623.75	-631.12	-631.12
	bound	-632.02	-631.12	-631.12
	runtime	0.37	0.53	0.44
0000697	value	-599.51	-600.68	-600.68
	bound	-602.18	-600.68	-600.68
	runtime	0.51	1.02	1.06
0000759	value	-499.68	-500.43	-500.43
	bound	-500.72	-500.43	-500.43
	runtime	0.27	0.28	0.22
0000794	value	-317.82	-321.74	-321.74
	bound	-325.73	-321.74	-321.74
	runtime	0.14	1.64	1.44
0000952	value	-761.55	-762.66	-762.66
	bound	-764.25	-762.66	-762.66
	runtime	0.47	4.18	3.46
0001677	value	-591.43	-593.05	-593.05
	bound	-593.14	-593.05	-593.05
	runtime	0.42	0.40	0.45
0002136	value	-751.63	-752.29	-752.29
	bound	-753.43	-752.29	-752.29
	runtime	0.81	3.69	2.15
0002395	value	-474.71	-474.71	-474.71
	bound	-475.31	-474.71	-474.71
	runtime	0.12	1.97	1.80
0002755	value	-721.56	-724.99	-724.99
	bound	-725.90	-724.99	-724.99
	runtime	0.25	0.67	1.29
0003178	value	-951.03	-952.34	-952.34
	bound	-952.37	-952.34	-952.34
	runtime	0.88	0.77	1.51

correlation-clustering		MCR	MCA	MCA-fdo
0003423	value	-569.13	-570.74	-570.74
	bound	-570.92	-570.74	-570.74
	runtime	0.14	0.44	0.41
0003463	value	-582.69	-582.80	-582.80
	bound	-583.09	-582.80	-582.80
	runtime	0.41	0.47	0.37
0003728	value	-629.13	-634.37	-634.37
	bound	-634.82	-634.37	-634.37
	runtime	0.52	1.52	1.08
0003793	value	-724.97	-725.87	-725.87
	bound	-726.72	-725.87	-725.87
	runtime	0.10	0.24	0.27
0003957	value	-870.51	-882.14	-882.14
	bound	-883.01	-882.14	-882.14
	runtime	0.23	0.26	0.23
0004028	value	-688.74	-710.58	-710.58
	bound	-710.72	-710.58	-710.58
	runtime	0.34	0.37	0.28
0004069	value	-673.61	-674.60	-674.60
	bound	-674.99	-674.60	-674.60
	runtime	0.34	0.82	0.46
0004294	value	-374.79	-375.10	-375.10
	bound	-375.25	-375.10	-375.10
	runtime	0.23	0.30	0.27
0004498	value	-523.03	-523.70	-523.70
	bound	-525.19	-523.70	-523.70
	runtime	0.24	0.18	0.25
0004774	value	-827.57	-829.46	-829.46
	bound	-830.40	-829.46	-829.46
	runtime	0.07	0.26	0.39
0005074	value	-362.88	-388.85	-388.85
	bound	-389.64	-388.85	-388.85
	runtime	0.29	1.05	0.97
0005079	value	-942.05	-942.05	-942.05
	bound	-942.43	-942.05	-942.05
	runtime	0.34	0.75	0.75
0005633	value	-524.96	-525.71	-525.71
	bound	-526.11	-525.71	-525.71
	runtime	0.19	0.30	0.35
0006575	value	-926.12	-932.65	-932.65
	bound	-935.04	-932.65	-932.65
	runtime	1.04	3.84	3.72
0007323	value	-640.69	-643.50	-643.50
	bound	-643.76	-643.50	-643.50
	runtime	0.24	0.36	0.39
0007545	value	-537.99	-541.51	-541.51
	bound	-542.56	-541.51	-541.51
	runtime	0.19	0.28	0.31
0007932	value	-413.12	-429.63	-429.63
	bound	-429.94	-429.63	-429.63
	runtime	0.16	0.11	0.13
0009212	value	-359.46	-373.77	-373.77
	bound	-375.65	-373.77	-373.77
	runtime	0.56	1.27	1.32
0010830	value	-498.22	-499.14	-499.14
	bound	-499.31	-499.14	-499.14
	runtime	0.05	0.07	0.11
0010950	value	-667.88	-670.87	-670.87
	bound	-671.61	-670.87	-670.87
	runtime	0.45	1.65	1.15
0011003	value	-495.38	-495.38	-495.38
	bound	-495.38	-495.38	-495.38
	runtime	0.09	0.09	0.12
0011033	value	-438.43	-439.17	-439.17
	bound	-440.08	-439.17	-439.17
	runtime	0.53	0.59	0.61
0011073	value	-968.75	-969.55	-969.55
	bound	-970.28	-969.55	-969.55
	runtime	0.47	0.84	1.10
0011088	value	-738.79	-739.16	-739.16
	bound	-740.10	-739.16	-739.16
	runtime	0.14	0.53	0.51
0011116	value	-731.04	-732.86	-732.86
	bound	-734.43	-732.86	-732.86
	runtime	0.44	1.98	1.74

correlation-clustering		MCR	MCA	MCA-fdo
0011154	value	-311.32	-311.32	-311.32
	bound	-311.32	-311.32	-311.32
	runtime	0.17	0.15	0.17
0100026	value	-696.13	-696.67	-696.67
	bound	-697.17	-696.67	-696.67
	runtime	0.23	0.18	0.21
0100030	value	-587.09	-587.09	-587.09
	bound	-587.56	-587.09	-587.09
	runtime	0.12	0.19	0.18
0100061	value	-266.18	-267.58	-267.58
	bound	-268.17	-267.58	-267.58
	runtime	0.23	1.10	1.53
0100091	value	-551.73	-551.73	-551.73
	bound	-551.73	-551.73	-551.73
	runtime	0.29	0.28	0.26
0100113	value	-728.21	-728.21	-728.21
	bound	-728.21	-728.21	-728.21
	runtime	0.16	0.30	0.19
0100132	value	-546.80	-548.21	-548.21
	bound	-550.60	-548.21	-548.21
	runtime	0.29	1.30	1.45
0100164	value	-258.96	-261.58	-261.58
	bound	-262.22	-261.58	-261.58
	runtime	0.12	0.24	0.23
0100241	value	-622.83	-651.09	-651.09
	bound	-651.80	-651.09	-651.09
	runtime	0.06	0.42	0.64
0100477	value	-562.46	-566.80	-566.80
	bound	-569.45	-566.80	-566.80
	runtime	0.48	1.08	1.18
0100579	value	-394.23	-404.76	-404.76
	bound	-405.28	-404.76	-404.76
	runtime	0.14	0.19	0.20
0100628	value	-868.89	-870.21	-870.21
	bound	-871.15	-870.21	-870.21
	runtime	0.51	1.38	1.28
0100740	value	-631.62	-632.98	-632.98
	bound	-634.23	-632.98	-632.98
	runtime	0.09	0.11	0.10
0100787	value	-811.92	-813.76	-813.76
	bound	-815.83	-813.76	-813.76
	runtime	1.11	3.75	4.09
0100822	value	-601.10	-621.37	-621.37
	bound	-623.22	-621.37	-621.37
	runtime	0.61	1.99	1.83
0100851	value	-561.27	-564.52	-564.52
	bound	-569.35	-564.52	-564.52
	runtime	0.45	3.63	2.53
0100855	value	-319.78	-328.67	-328.67
	bound	-329.49	-328.67	-328.67
	runtime	0.23	0.39	0.29
0100892	value	-727.51	-727.96	-727.96
	bound	-727.99	-727.96	-727.96
	runtime	0.17	0.17	0.21
0100935	value	-422.26	-442.12	-442.12
	bound	-443.96	-442.12	-442.12
	runtime	0.11	0.69	1.64
0101060	value	-482.30	-483.35	-483.35
	bound	-484.29	-483.35	-483.35
	runtime	0.42	2.18	1.53
0101121	value	-307.79	-327.82	-327.82
	bound	-327.99	-327.82	-327.82
	runtime	0.10	0.07	0.12
0101434	value	-415.48	-418.68	-418.68
	bound	-420.02	-418.68	-418.68
	runtime	0.38	0.53	0.42
0101463	value	-707.85	-707.85	-707.85
	bound	-707.85	-707.85	-707.85
	runtime	0.12	0.09	0.08
0101488	value	-331.20	-331.61	-331.61
	bound	-331.83	-331.61	-331.61
	runtime	0.10	0.25	0.23
0101492	value	-548.31	-565.50	-565.50
	bound	-566.26	-565.50	-565.50
	runtime	0.21	1.48	0.87

correlation-clustering		MCR	MCA	MCA-fdo
0101801	value	-717.31	-718.31	-718.31
	bound	-719.29	-718.31	-718.31
	runtime	0.37	0.74	0.80
0102039	value	-773.58	-773.58	-773.58
	bound	-773.58	-773.58	-773.58
	runtime	0.04	0.04	0.04
0102170	value	-530.12	-530.12	-530.12
	bound	-530.12	-530.12	-530.12
	runtime	0.30	0.22	0.21
0102234	value	-751.02	-758.50	-758.50
	bound	-760.01	-758.50	-758.50
	runtime	0.19	0.26	0.44
0102403	value	-799.03	-803.76	-803.76
	bound	-804.45	-803.76	-803.76
	runtime	0.60	0.84	0.68
0102435	value	-1077.43	-1079.66	-1079.66
	bound	-1081.00	-1079.66	-1079.66
	runtime	0.10	1.02	0.95
0102436	value	-691.96	-706.46	-706.46
	bound	-706.69	-706.46	-706.46
	runtime	0.21	0.28	0.36
0102534	value	-394.95	-394.95	-394.95
	bound	-394.95	-394.95	-394.95
	runtime	0.04	0.06	0.05
0102544	value	-426.48	-428.23	-428.23
	bound	-429.27	-428.23	-428.23
	runtime	0.20	0.54	0.43
0102566	value	-435.55	-436.02	-436.02
	bound	-436.49	-436.02	-436.02
	runtime	0.10	0.14	0.34
0103256	value	-615.17	-615.17	-615.17
	bound	-615.17	-615.17	-615.17
	runtime	0.10	0.09	0.09
0103344	value	-593.97	-596.38	-596.38
	bound	-597.31	-596.38	-596.38
	runtime	0.29	0.56	0.51
0103420	value	-316.47	-316.47	-316.47
	bound	-316.47	-316.47	-316.47
	runtime	0.35	0.31	0.24
0103468	value	-413.50	-414.36	-414.36
	bound	-416.20	-414.36	-414.36
	runtime	0.12	0.52	0.36
0103740	value	-549.19	-550.87	-550.87
	bound	-551.21	-550.87	-550.87
	runtime	0.15	0.37	0.36
0104019	value	-789.89	-792.30	-792.30
	bound	-794.61	-792.30	-792.30
	runtime	1.15	3.94	2.72
0104194	value	-654.53	-654.53	-654.53
	bound	-654.53	-654.53	-654.53
	runtime	0.26	0.31	0.31
0104439	value	-326.79	-327.86	-327.86
	bound	-330.52	-327.86	-327.86
	runtime	0.29	6.90	5.81
0104463	value	-716.21	-722.03	-722.03
	bound	-723.83	-722.03	-722.03
	runtime	0.47	1.95	1.37
0104552	value	-495.66	-496.33	-496.33
	bound	-496.96	-496.33	-496.33
	runtime	0.20	0.23	0.39
0104808	value	-648.56	-648.56	-648.56
	bound	-648.56	-648.56	-648.56
	runtime	0.12	0.11	0.13
0104958	value	-321.11	-321.11	-321.11
	bound	-321.11	-321.11	-321.11
	runtime	0.01	0.02	0.02
0105003	value	-859.41	-860.86	-860.86
	bound	-861.58	-860.86	-860.86
	runtime	0.28	1.02	0.87
0105064	value	-479.00	-505.88	-505.88
	bound	-507.91	-505.88	-505.88
	runtime	0.17	0.53	0.90
0105146	value	-435.53	-435.87	-435.87
	bound	-436.76	-435.87	-435.87
	runtime	0.20	0.73	0.64

correlation-clustering		MCR	MCA	MCA-fdo
0105159	value	-440.09	-440.09	-440.09
	bound	-440.09	-440.09	-440.09
	runtime	0.20	0.11	0.10
0105305	value	-862.48	-863.89	-863.89
	bound	-865.47	-863.89	-863.89
	runtime	0.51	2.53	2.49
1000061	value	-697.06	-701.61	-701.61
	bound	-701.81	-701.61	-701.61
	runtime	0.48	0.78	1.29
1000063	value	-730.40	-730.74	-730.74
	bound	-730.86	-730.74	-730.74
	runtime	0.33	0.28	0.30
1000097	value	-1042.17	-1042.17	-1042.17
	bound	-1042.17	-1042.17	-1042.17
	runtime	0.38	0.23	0.25
1000105	value	-327.79	-329.41	-329.41
	bound	-332.34	-329.41	-329.41
	runtime	0.30	0.69	0.66
1000288	value	-518.16	-519.21	-519.21
	bound	-519.40	-519.21	-519.21
	runtime	0.13	0.18	0.16
1000351	value	-621.40	-621.40	-621.40
	bound	-621.60	-621.40	-621.40
	runtime	0.04	0.20	0.20
1000413	value	-689.89	-709.28	-709.28
	bound	-713.12	-709.28	-709.28
	runtime	0.55	1.00	0.90
1000505	value	-499.82	-523.58	-523.58
	bound	-524.97	-523.58	-523.58
	runtime	0.37	0.81	1.20
1000580	value	-548.47	-583.22	-583.22
	bound	-583.50	-583.22	-583.22
	runtime	0.31	0.55	0.60
1000615	value	-740.26	-740.26	-740.26
	bound	-740.26	-740.26	-740.26
	runtime	0.20	0.13	0.23
1000731	value	-805.57	-812.61	-812.61
	bound	-813.68	-812.61	-812.61
	runtime	0.34	0.47	0.49
1000875	value	-550.72	-564.52	-564.52
	bound	-564.81	-564.52	-564.52
	runtime	0.53	0.55	0.59
1000882	value	-508.63	-512.72	-512.72
	bound	-513.36	-512.72	-512.72
	runtime	0.32	0.95	0.89
1000929	value	-559.40	-560.45	-560.45
	bound	-560.55	-560.45	-560.45
	runtime	0.26	0.44	0.34
1000947	value	-767.43	-768.26	-768.26
	bound	-769.89	-768.26	-768.26
	runtime	0.29	0.60	0.61
1000993	value	-1102.52	-1107.17	-1107.17
	bound	-1107.82	-1107.17	-1107.17
	runtime	0.15	0.41	0.57
1001184	value	-392.28	-396.45	-396.45
	bound	-396.78	-396.45	-396.45
	runtime	0.54	0.58	0.58
1001195	value	-381.24	-388.02	-388.02
	bound	-388.86	-388.02	-388.02
	runtime	0.28	0.34	0.58
1001252	value	-531.27	-537.68	-537.68
	bound	-538.18	-537.68	-537.68
	runtime	0.07	0.16	0.33
1001685	value	-799.52	-800.07	-800.07
	bound	-800.20	-800.07	-800.07
	runtime	0.46	0.63	0.50
1001688	value	-492.93	-492.93	-492.93
	bound	-493.08	-492.93	-492.93
	runtime	0.21	0.31	0.39
1001770	value	-736.15	-748.84	-748.84
	bound	-763.50	-748.84	-748.84
	runtime	0.40	14.00	8.08
1001794	value	-355.89	-358.38	-358.38
	bound	-359.84	-358.38	-358.38
	runtime	0.24	0.94	1.14

correlation-clustering		MCR	MCA	MCA-fdo
1001875	value	-454.11	-455.59	-455.59
	bound	-456.76	-455.59	-455.59
	runtime	0.31	1.03	1.13
1001944	value	-1175.01	-1181.16	-1181.16
	bound	-1183.32	-1181.16	-1181.16
	runtime	0.88	8.61	10.51
1100001	value	-809.97	-811.64	-811.64
	bound	-812.12	-811.64	-811.64
	runtime	0.33	0.50	0.66
1100002	value	-768.10	-769.16	-769.16
	bound	-770.90	-769.16	-769.16
	runtime	0.22	0.23	0.27
1100003	value	-399.92	-399.92	-399.92
	bound	-399.92	-399.92	-399.92
	runtime	0.05	0.06	0.07
1100004	value	-744.26	-746.83	-746.83
	bound	-747.55	-746.83	-746.83
	runtime	0.19	1.74	1.78
1100005	value	-590.02	-603.36	-603.36
	bound	-603.74	-603.36	-603.36
	runtime	0.13	0.17	0.17
1100006	value	-522.60	-522.60	-522.60
	bound	-523.85	-522.60	-522.60
	runtime	0.12	0.09	0.10
1100007	value	-1106.31	-1106.31	-1106.31
	bound	-1106.31	-1106.31	-1106.31
	runtime	0.34	0.20	0.27
1100008	value	-389.13	-389.13	-389.13
	bound	-389.13	-389.13	-389.13
	runtime	0.08	0.06	0.07
1100009	value	-440.75	-446.74	-446.74
	bound	-448.04	-446.74	-446.74
	runtime	0.05	0.19	0.21
1100011	value	-502.73	-506.76	-506.76
	bound	-507.88	-506.76	-506.76
	runtime	0.14	0.56	0.64
1100013	value	-917.52	-925.74	-925.74
	bound	-928.19	-925.74	-925.74
	runtime	0.31	0.50	0.56
1100014	value	-706.65	-706.65	-706.65
	bound	-706.65	-706.65	-706.65
	runtime	0.06	0.08	0.15
1100015	value	-355.50	-355.62	-355.62
	bound	-355.68	-355.62	-355.62
	runtime	0.06	0.09	0.22
1100016	value	-583.74	-583.74	-583.74
	bound	-583.74	-583.74	-583.74
	runtime	0.36	0.19	0.18
1100017	value	-589.77	-590.31	-590.31
	bound	-590.32	-590.31	-590.31
	runtime	0.22	0.19	0.18
1100023	value	-510.03	-512.75	-512.75
	bound	-513.69	-512.75	-512.75
	runtime	0.23	0.35	0.34
1100025	value	-546.61	-554.01	-554.01
	bound	-554.60	-554.01	-554.01
	runtime	0.49	0.77	0.66
1100027	value	-585.28	-587.63	-587.63
	bound	-588.00	-587.63	-587.63
	runtime	0.20	0.22	0.17
1100029	value	-395.25	-398.67	-398.67
	bound	-400.05	-398.67	-398.67
	runtime	0.23	1.03	1.09
1100030	value	-358.76	-359.72	-359.72
	bound	-360.62	-359.72	-359.72
	runtime	0.22	1.00	0.87
1100031	value	-558.74	-578.89	-578.89
	bound	-581.48	-578.89	-578.89
	runtime	0.73	2.57	2.24
2000001	value	-602.95	-604.68	-604.68
	bound	-605.91	-604.68	-604.68
	runtime	0.74	2.37	2.67
2000002	value	-471.58	-478.84	-478.84
	bound	-479.87	-478.84	-478.84
	runtime	0.26	0.45	0.57

correlation-clustering		MCR	MCA	MCA-fdo
2000003	value	-581.42	-583.35	-583.35
	bound	-584.92	-583.35	-583.35
	runtime	0.69	2.04	1.77
2000004	value	-600.95	-600.95	-600.95
	bound	-601.04	-600.95	-600.95
	runtime	0.27	0.39	0.26
2000008	value	-413.93	-417.37	-417.37
	bound	-419.11	-417.37	-417.37
	runtime	0.41	0.89	0.95
2000012	value	-540.26	-542.95	-542.95
	bound	-544.38	-542.95	-542.95
	runtime	0.36	0.95	0.88
2000019	value	-594.43	-595.88	-595.88
	bound	-596.80	-595.88	-595.88
	runtime	0.25	0.29	0.23
2000022	value	-479.71	-479.71	-479.71
	bound	-479.71	-479.71	-479.71
	runtime	0.09	0.10	0.12
2000023	value	-442.67	-446.82	-446.82
	bound	-446.84	-446.82	-446.82
	runtime	0.10	0.07	0.18
2000025	value	-572.46	-575.43	-575.43
	bound	-575.93	-575.43	-575.43
	runtime	0.57	0.46	0.69
2000028	value	-723.53	-736.84	-736.84
	bound	-738.79	-736.84	-736.84
	runtime	0.24	0.47	0.82
2000030	value	-828.80	-830.02	-830.02
	bound	-830.07	-830.02	-830.02
	runtime	0.59	0.47	0.45
2000031	value	-436.22	-449.58	-449.58
	bound	-450.29	-449.58	-449.58
	runtime	0.09	0.09	0.09
2000032	value	-830.84	-831.59	-831.59
	bound	-831.70	-831.59	-831.59
	runtime	0.36	0.66	0.43
2000033	value	-681.63	-681.71	-681.71
	bound	-682.51	-681.71	-681.71
	runtime	0.18	2.80	2.62
2000034	value	-611.14	-616.42	-616.42
	bound	-617.88	-616.42	-616.42
	runtime	0.69	1.90	1.40
2000035	value	-468.97	-471.49	-471.49
	bound	-471.83	-471.49	-471.49
	runtime	0.26	0.40	0.28
2000036	value	-606.13	-606.24	-606.24
	bound	-606.52	-606.24	-606.24
	runtime	0.29	0.46	0.62
2000037	value	-511.31	-520.69	-520.69
	bound	-523.84	-520.69	-520.69
	runtime	0.37	0.49	0.99
2000039	value	-443.27	-443.27	-443.27
	bound	-444.03	-443.27	-443.27
	runtime	0.26	0.15	0.18
2000041	value	-472.21	-474.44	-474.44
	bound	-474.45	-474.44	-474.44
	runtime	0.23	0.11	0.13
2000042	value	-485.30	-487.16	-487.16
	bound	-487.43	-487.16	-487.16
	runtime	0.09	0.19	0.26
2000043	value	-743.99	-744.71	-744.71
	bound	-745.73	-744.71	-744.71
	runtime	0.59	1.47	0.97
2000044	value	-201.61	-201.61	-201.61
	bound	-202.16	-201.61	-201.61
	runtime	0.12	0.04	0.05
3000072	value	-557.97	-559.14	-559.14
	bound	-559.25	-559.14	-559.14
	runtime	0.63	2.55	2.20
3000076	value	-747.79	-748.34	-748.34
	bound	-748.50	-748.34	-748.34
	runtime	0.23	1.11	0.89
3000099	value	-1140.26	-1142.36	-1142.36
	bound	-1144.16	-1142.36	-1142.36
	runtime	3.95	6.10	2.89

correlation-clustering		MCR	MCA	MCA-fdo
3000119	value	-922.20	-923.74	-923.74
	bound	-924.84	-923.74	-923.74
	runtime	0.47	1.47	1.24
3000148	value	-540.37	-540.37	-540.37
	bound	-540.43	-540.37	-540.37
	runtime	0.30	0.52	0.61
3000299	value	-1026.80	-1026.80	-1026.80
	bound	-1027.23	-1026.80	-1026.80
	runtime	0.26	0.29	0.34
3000323	value	-760.96	-761.28	-761.28
	bound	-761.32	-761.28	-761.28
	runtime	0.14	0.19	0.14
3000454	value	-922.45	-947.27	-947.27
	bound	-950.13	-947.27	-947.27
	runtime	2.03	4.52	4.50
3000469	value	-363.81	-364.14	-364.14
	bound	-364.32	-364.14	-364.14
	runtime	0.11	0.13	0.08
3000676	value	-844.60	-844.60	-844.60
	bound	-844.60	-844.60	-844.60
	runtime	0.03	0.05	0.08
3000716	value	-1226.32	-1226.32	-1226.32
	bound	-1226.32	-1226.32	-1226.32
	runtime	0.75	0.59	0.61
3000759	value	-963.57	-964.29	-964.29
	bound	-964.32	-964.29	-964.29
	runtime	0.24	0.38	0.57
3000945	value	-258.11	-260.66	-260.66
	bound	-261.51	-260.66	-260.66
	runtime	0.08	0.11	0.11
3001004	value	-958.85	-961.30	-961.30
	bound	-961.78	-961.30	-961.30
	runtime	0.96	2.21	1.80
3001018	value	-718.93	-719.82	-719.82
	bound	-720.25	-719.82	-719.82
	runtime	0.46	0.86	1.42
3001061	value	-746.12	-749.58	-749.58
	bound	-751.37	-749.58	-749.58
	runtime	0.40	2.59	2.12
3001131	value	-555.88	-560.81	-560.81
	bound	-561.67	-560.81	-560.81
	runtime	0.29	0.48	0.44
3001230	value	-717.69	-720.79	-720.79
	bound	-721.72	-720.79	-720.79
	runtime	0.29	0.46	0.67
3001319	value	-820.86	-821.25	-821.25
	bound	-821.92	-821.25	-821.25
	runtime	0.21	0.55	0.49
3001336	value	-399.97	-404.56	-404.56
	bound	-404.85	-404.56	-404.56
	runtime	0.14	0.13	0.28
3001421	value	-638.22	-638.57	-638.57
	bound	-639.07	-638.57	-638.57
	runtime	0.34	0.72	0.78
3001460	value	-914.09	-917.00	-917.00
	bound	-918.84	-917.00	-917.00
	runtime	0.54	0.46	0.51
3001555	value	-447.61	-454.99	-454.99
	bound	-456.06	-454.99	-454.99
	runtime	0.18	0.37	0.30
3001569	value	-487.53	-487.53	-487.53
	bound	-487.65	-487.53	-487.53
	runtime	0.06	0.05	0.08
3001667	value	-456.05	-456.57	-456.57
	bound	-456.64	-456.57	-456.57
	runtime	1.37	1.02	1.30
3001751	value	-415.99	-434.01	-434.01
	bound	-435.12	-434.01	-434.01
	runtime	0.13	0.24	0.17
3001767	value	-1024.97	-1026.92	-1026.92
	bound	-1027.94	-1026.92	-1026.92
	runtime	0.57	2.50	3.03
3001826	value	-871.30	-872.01	-872.01
	bound	-872.53	-872.01	-872.01
	runtime	0.90	2.40	2.33

correlation-clustering		MCR	MCA	MCA-fdo
3001891	value	-1089.62	-1089.86	-1089.86
	bound	-1090.47	-1089.86	-1089.86
	runtime	0.65	2.52	2.76
3001976	value	-419.45	-419.45	-419.45
	bound	-419.54	-419.45	-419.45
	runtime	0.40	0.27	0.32
3002020	value	-474.49	-474.49	-474.49
	bound	-474.82	-474.49	-474.49
	runtime	0.04	0.15	0.14
3002059	value	-801.57	-804.24	-804.24
	bound	-806.17	-804.24	-804.24
	runtime	2.45	3.07	2.84
3002082	value	-817.10	-817.82	-817.82
	bound	-823.44	-817.82	-817.82
	runtime	1.07	2.97	2.72
3002154	value	-895.49	-896.31	-896.31
	bound	-896.62	-896.31	-896.31
	runtime	0.27	0.24	0.31
3002206	value	-656.57	-656.84	-656.84
	bound	-657.12	-656.84	-656.84
	runtime	0.31	0.81	0.81
3002221	value	-448.94	-448.94	-448.94
	bound	-448.94	-448.94	-448.94
	runtime	0.44	0.31	0.45
3002340	value	-788.48	-793.45	-793.45
	bound	-794.07	-793.45	-793.45
	runtime	0.94	1.82	2.01
3002366	value	-352.92	-371.45	-371.45
	bound	-371.53	-371.45	-371.45
	runtime	0.10	0.09	0.12
3002411	value	-293.43	-293.43	-293.43
	bound	-293.43	-293.43	-293.43
	runtime	0.29	0.24	0.33
3002594	value	-515.18	-530.68	-530.68
	bound	-531.22	-530.68	-530.68
	runtime	0.12	0.17	0.20
3002905	value	-399.45	-400.03	-400.03
	bound	-401.27	-400.03	-400.03
	runtime	0.41	0.65	0.66
3002909	value	-525.28	-542.51	-542.51
	bound	-543.26	-542.51	-542.51
	runtime	0.28	0.31	0.38
3003122	value	-515.09	-515.95	-515.95
	bound	-516.96	-515.95	-515.95
	runtime	0.39	1.11	0.83
3003322	value	-829.72	-830.27	-830.27
	bound	-830.74	-830.27	-830.27
	runtime	0.16	0.18	0.16
3003328	value	-550.97	-562.14	-562.14
	bound	-564.65	-562.14	-562.14
	runtime	0.25	0.45	0.36
3003356	value	-633.97	-634.40	-634.40
	bound	-635.28	-634.40	-634.40
	runtime	0.72	4.56	4.48
3003448	value	-599.24	-602.34	-602.34
	bound	-602.61	-602.34	-602.34
	runtime	0.13	0.30	0.28
3003731	value	-894.00	-899.25	-899.25
	bound	-899.33	-899.25	-899.25
	runtime	1.83	2.86	2.37
3003791	value	-417.22	-417.22	-417.22
	bound	-417.22	-417.22	-417.22
	runtime	0.08	0.08	0.11
3003817	value	-512.04	-515.94	-515.94
	bound	-516.54	-515.94	-515.94
	runtime	0.33	0.46	1.16
4000066	value	-440.39	-449.66	-449.66
	bound	-450.70	-449.66	-449.66
	runtime	0.10	0.30	0.25
4000086	value	-550.54	-550.96	-550.96
	bound	-552.67	-550.96	-550.96
	runtime	0.27	0.58	0.63
4100066	value	-556.79	-557.66	-557.66
	bound	-558.20	-557.66	-557.66
	runtime	0.32	0.38	0.27

correlation-clustering		MCR	MCA	MCA-fdo
4100246	value	-634.05	-635.17	-635.17
	bound	-635.33	-635.17	-635.17
	runtime	0.45	0.48	0.45
4100280	value	-877.45	-877.45	-877.45
	bound	-877.45	-877.45	-877.45
	runtime	0.58	0.53	0.58
5000016	value	-773.37	-783.18	-783.18
	bound	-784.74	-783.18	-783.18
	runtime	0.24	0.29	0.39
5000119	value	-633.94	-634.49	-634.49
	bound	-634.63	-634.49	-634.49
	runtime	0.18	0.17	0.19
5000120	value	-444.88	-454.80	-454.80
	bound	-455.88	-454.80	-454.80
	runtime	0.14	0.39	0.42
5000121	value	-475.75	-495.05	-495.05
	bound	-495.68	-495.05	-495.05
	runtime	0.26	0.67	0.89
5000122	value	-421.47	-425.47	-425.47
	bound	-427.49	-425.47	-425.47
	runtime	0.25	1.47	1.34
5000123	value	-429.84	-429.95	-429.95
	bound	-429.95	-429.95	-429.95
	runtime	0.19	0.38	0.34
5000124	value	-582.98	-587.95	-587.95
	bound	-588.97	-587.95	-587.95
	runtime	0.46	2.81	2.23
5000125	value	-624.69	-639.51	-639.51
	bound	-640.83	-639.51	-639.51
	runtime	0.30	0.68	0.70
5000126	value	-1843.63	-1843.63	-1843.63
	bound	-1843.86	-1843.63	-1843.63
	runtime	0.33	0.75	1.03
5000127	value	-358.58	-364.53	-364.53
	bound	-364.93	-364.53	-364.53
	runtime	0.16	0.68	0.64
5000128	value	-1220.92	-1221.02	-1221.02
	bound	-1221.76	-1221.02	-1221.02
	runtime	0.53	0.99	1.20
5000129	value	-673.62	-673.62	-673.62
	bound	-673.62	-673.62	-673.62
	runtime	0.07	0.07	0.09
5000130	value	-1351.90	-1351.90	-1351.90
	bound	-1351.90	-1351.90	-1351.90
	runtime	1.03	1.00	0.86
5000131	value	-599.60	-602.56	-602.56
	bound	-604.00	-602.56	-602.56
	runtime	0.21	0.82	0.77
5000132	value	-579.99	-586.21	-586.21
	bound	-586.59	-586.21	-586.21
	runtime	0.25	0.43	0.33
5000133	value	-391.06	-391.28	-391.28
	bound	-391.41	-391.28	-391.28
	runtime	0.09	0.12	0.21
5000137	value	-834.68	-834.68	-834.68
	bound	-834.68	-834.68	-834.68
	runtime	0.06	0.09	0.10
5000144	value	-725.12	-725.12	-725.12
	bound	-725.12	-725.12	-725.12
	runtime	0.14	0.09	0.09
5000147	value	-499.37	-520.82	-520.82
	bound	-526.22	-520.82	-520.82
	runtime	0.15	1.35	0.86
5000149	value	-813.19	-813.81	-813.81
	bound	-814.56	-813.81	-813.81
	runtime	0.17	1.04	0.77
5000150	value	-496.42	-496.80	-496.80
	bound	-496.80	-496.80	-496.80
	runtime	0.16	0.21	0.29
5000162	value	-574.24	-575.46	-575.46
	bound	-575.67	-575.46	-575.46
	runtime	0.36	0.52	0.44
5000163	value	-876.12	-876.40	-876.40
	bound	-877.11	-876.40	-876.40
	runtime	0.13	0.38	0.34

correlation-clustering		MCR	MCA	MCA-fdo
5000164	value	-793.81	-829.15	-829.15
	bound	-831.58	-829.15	-829.15
	runtime	0.37	1.72	1.63
5000165	value	-731.05	-731.05	-731.05
	bound	-731.05	-731.05	-731.05
	runtime	0.13	0.20	0.12
5000166	value	-1030.36	-1031.79	-1031.79
	bound	-1031.91	-1031.79	-1031.79
	runtime	0.76	1.25	1.65
5000168	value	-765.90	-770.89	-770.89
	bound	-771.63	-770.89	-770.89
	runtime	0.47	1.67	1.76
5000172	value	-889.74	-915.17	-915.17
	bound	-915.44	-915.17	-915.17
	runtime	0.57	1.11	0.78
5000173	value	-942.31	-942.40	-942.40
	bound	-942.70	-942.40	-942.40
	runtime	0.04	0.18	0.17
5000174	value	-651.23	-651.23	-651.23
	bound	-651.23	-651.23	-651.23
	runtime	0.26	0.18	0.18
5000175	value	-943.96	-944.86	-944.86
	bound	-945.37	-944.86	-944.86
	runtime	0.63	0.79	0.88
5000176	value	-1016.34	-1022.83	-1022.83
	bound	-1027.32	-1022.83	-1022.83
	runtime	2.71	38.70	22.34
5000180	value	-719.00	-719.00	-719.00
	bound	-719.00	-719.00	-719.00
	runtime	0.96	0.82	0.99
5000181	value	-350.75	-350.75	-350.75
	bound	-350.86	-350.75	-350.75
	runtime	0.27	0.33	0.38
5000182	value	-1053.66	-1053.66	-1053.66
	bound	-1053.66	-1053.66	-1053.66
	runtime	0.27	0.19	0.23
5000183	value	-731.41	-731.41	-731.41
	bound	-731.41	-731.41	-731.41
	runtime	0.56	0.25	0.30
5000184	value	-908.78	-908.78	-908.78
	bound	-910.12	-908.78	-908.78
	runtime	0.45	0.63	0.58
5000188	value	-646.21	-646.70	-646.70
	bound	-646.97	-646.70	-646.70
	runtime	0.55	1.63	1.18
5000190	value	-677.09	-694.76	-694.76
	bound	-702.98	-694.76	-694.76
	runtime	0.06	0.19	0.19
5000191	value	-699.02	-699.02	-699.02
	bound	-699.02	-699.02	-699.02
	runtime	0.11	0.08	0.10
5000192	value	-512.90	-513.49	-513.49
	bound	-513.77	-513.49	-513.49
	runtime	0.20	0.39	0.27
5000194	value	-201.84	-201.84	-201.84
	bound	-201.84	-201.84	-201.84
	runtime	0.04	0.03	0.05
5000195	value	-321.84	-321.84	-321.84
	bound	-321.84	-321.84	-321.84
	runtime	0.15	0.07	0.08
5000196	value	-471.86	-471.86	-471.86
	bound	-471.86	-471.86	-471.86
	runtime	0.06	0.08	0.08
5000197	value	-482.17	-485.98	-485.98
	bound	-487.97	-485.98	-485.98
	runtime	0.35	0.74	1.14
5000198	value	-336.76	-336.76	-336.76
	bound	-336.76	-336.76	-336.76
	runtime	0.10	0.09	0.07
5000199	value	-597.87	-598.26	-598.26
	bound	-598.97	-598.26	-598.26
	runtime	0.12	0.63	0.89
5000200	value	-234.39	-238.42	-238.42
	bound	-240.64	-238.42	-238.42
	runtime	0.09	0.34	0.77

correlation-clustering		MCR	MCA	MCA-fdo
5000201	value	-597.10	-609.80	-609.80
	bound	-610.65	-609.80	-609.80
	runtime	0.70	1.92	2.90
5000202	value	-628.46	-629.27	-629.27
	bound	-630.08	-629.27	-629.27
	runtime	0.10	0.14	0.19
5000203	value	-410.82	-411.27	-411.27
	bound	-411.32	-411.27	-411.27
	runtime	0.36	0.42	0.34
5000204	value	-1012.08	-1025.32	-1025.32
	bound	-1027.78	-1025.32	-1025.32
	runtime	0.46	3.48	1.97
5000205	value	-541.49	-545.13	-545.13
	bound	-545.49	-545.13	-545.13
	runtime	0.15	0.14	0.17
5000226	value	-511.91	-511.99	-511.99
	bound	-512.15	-511.99	-511.99
	runtime	0.08	0.23	0.18
5000234	value	-857.52	-858.86	-858.86
	bound	-860.80	-858.86	-858.86
	runtime	0.80	2.12	1.81
5000257	value	-664.52	-665.10	-665.10
	bound	-667.27	-665.10	-665.10
	runtime	0.49	0.50	0.60
5000264	value	-518.91	-520.68	-520.68
	bound	-524.05	-520.68	-520.68
	runtime	0.51	0.38	0.31
5000265	value	-448.78	-452.13	-452.13
	bound	-452.52	-452.13	-452.13
	runtime	0.13	0.18	0.21
6000000	value	-575.92	-590.23	-590.23
	bound	-592.84	-590.23	-590.23
	runtime	0.50	0.92	0.70
6000001	value	-775.40	-789.77	-789.77
	bound	-790.57	-789.77	-789.77
	runtime	0.44	0.52	0.71
6000002	value	-701.77	-708.71	-708.71
	bound	-710.03	-708.71	-708.71
	runtime	0.30	1.12	1.26
6000003	value	-753.43	-753.43	-753.43
	bound	-753.43	-753.43	-753.43
	runtime	0.23	0.21	0.20
6000004	value	-779.19	-779.73	-779.73
	bound	-779.84	-779.73	-779.73
	runtime	0.60	0.84	1.15
6000005	value	-666.69	-668.33	-668.33
	bound	-670.10	-668.33	-668.33
	runtime	0.39	1.29	1.25
6000006	value	-789.63	-791.05	-791.05
	bound	-791.66	-791.05	-791.05
	runtime	0.62	1.42	1.22
6000007	value	-638.31	-641.39	-641.39
	bound	-643.19	-641.39	-641.39
	runtime	1.23	1.47	2.63
6000008	value	-586.78	-586.78	-586.78
	bound	-586.78	-586.78	-586.78
	runtime	0.11	0.19	0.23
6000009	value	-680.40	-682.12	-682.12
	bound	-682.46	-682.12	-682.12
	runtime	0.95	0.88	1.04
6000010	value	-902.66	-903.38	-903.38
	bound	-903.77	-903.38	-903.38
	runtime	0.60	1.36	1.18
6000011	value	-611.65	-616.57	-616.57
	bound	-617.81	-616.57	-616.57
	runtime	0.19	0.62	0.57
6000012	value	-599.26	-600.13	-600.13
	bound	-601.79	-600.13	-600.13
	runtime	0.58	2.67	2.15
6000013	value	-733.25	-733.64	-733.64
	bound	-736.69	-733.64	-733.64
	runtime	0.47	4.21	3.90
6000014	value	-938.55	-940.94	-940.94
	bound	-943.31	-940.94	-940.94
	runtime	0.76	1.74	1.49

correlation-clustering		MCR	MCA	MCA-fdo
6000015	value	-715.37	-716.32	-716.32
	bound	-716.81	-716.32	-716.32
	runtime	0.27	0.38	0.38
6000016	value	-612.35	-612.70	-612.70
	bound	-613.58	-612.70	-612.70
	runtime	0.42	0.56	0.88
6000017	value	-597.24	-599.46	-599.46
	bound	-600.58	-599.46	-599.46
	runtime	0.70	1.86	1.68
6000018	value	-794.37	-796.75	-796.75
	bound	-798.25	-796.75	-796.75
	runtime	0.36	2.79	3.19
6000019	value	-743.09	-743.99	-743.99
	bound	-744.13	-743.99	-743.99
	runtime	0.70	0.97	0.54
6000020	value	-649.59	-653.26	-653.26
	bound	-653.69	-653.26	-653.26
	runtime	0.54	0.75	0.84
6000021	value	-757.60	-758.47	-758.47
	bound	-761.54	-758.47	-758.47
	runtime	0.42	0.82	0.99
6000022	value	-361.83	-364.28	-364.28
	bound	-365.26	-364.28	-364.28
	runtime	0.11	0.18	0.17
6000023	value	-530.49	-530.94	-530.94
	bound	-533.42	-530.94	-530.94
	runtime	0.26	1.12	1.00
6000024	value	-536.01	-536.14	-536.14
	bound	-537.64	-536.14	-536.14
	runtime	0.38	2.45	1.81
6000025	value	-530.53	-533.57	-533.57
	bound	-534.52	-533.57	-533.57
	runtime	0.42	1.12	0.88
6000026	value	-520.62	-521.61	-521.61
	bound	-523.41	-521.61	-521.61
	runtime	0.26	0.83	0.87
6000027	value	-573.19	-576.54	-576.54
	bound	-577.72	-576.54	-576.54
	runtime	0.24	0.70	0.45
6000028	value	-873.77	-874.15	-874.15
	bound	-874.70	-874.15	-874.15
	runtime	0.63	2.66	2.59
6000029	value	-1106.25	-1106.25	-1106.25
	bound	-1107.25	-1106.25	-1106.25
	runtime	1.18	0.55	0.64
6000030	value	-793.93	-794.99	-794.99
	bound	-795.02	-794.99	-794.99
	runtime	0.35	0.36	0.29
6000031	value	-589.00	-589.23	-589.23
	bound	-589.32	-589.23	-589.23
	runtime	0.11	0.60	0.36
6000032	value	-813.67	-826.81	-826.81
	bound	-827.19	-826.81	-826.81
	runtime	0.56	0.76	1.19
6000033	value	-596.64	-596.64	-596.64
	bound	-596.64	-596.64	-596.64
	runtime	0.70	0.51	0.76
6000034	value	-874.25	-886.70	-886.70
	bound	-887.27	-886.70	-886.70
	runtime	1.09	1.79	2.11
6000035	value	-550.95	-551.69	-551.69
	bound	-552.02	-551.69	-551.69
	runtime	0.44	0.51	0.44
6000036	value	-619.67	-620.93	-620.93
	bound	-621.70	-620.93	-620.93
	runtime	0.18	0.45	0.39
6000037	value	-440.97	-441.63	-441.63
	bound	-442.59	-441.63	-441.63
	runtime	0.29	0.66	0.99
6000038	value	-805.84	-807.76	-807.76
	bound	-810.37	-807.76	-807.76
	runtime	0.35	0.67	0.61
6000039	value	-573.89	-573.89	-573.89
	bound	-573.89	-573.89	-573.89
	runtime	0.14	0.12	0.10

correlation-clustering		MCR	MCA	MCA-fdo
6000040	value	-694.16	-695.56	-695.56
	bound	-695.62	-695.56	-695.56
	runtime	0.64	0.35	0.88
6000041	value	-519.27	-525.29	-525.29
	bound	-526.33	-525.29	-525.29
	runtime	0.44	0.52	0.67
6000042	value	-576.08	-576.94	-576.94
	bound	-577.16	-576.94	-576.94
	runtime	0.20	0.40	0.40
6000043	value	-502.29	-503.03	-503.03
	bound	-503.81	-503.03	-503.03
	runtime	0.24	0.86	1.20
6000044	value	-507.70	-507.70	-507.70
	bound	-509.36	-507.70	-507.70
	runtime	0.17	0.16	0.13
6000045	value	-576.13	-584.43	-584.43
	bound	-586.41	-584.43	-584.43
	runtime	0.30	0.85	0.88
6000046	value	-510.98	-510.98	-510.98
	bound	-510.98	-510.98	-510.98
	runtime	0.11	0.07	0.11
6000047	value	-563.58	-564.16	-564.16
	bound	-565.81	-564.16	-564.16
	runtime	0.41	1.46	1.71
6000048	value	-690.03	-690.03	-690.03
	bound	-690.03	-690.03	-690.03
	runtime	0.26	0.22	0.18
6000049	value	-497.21	-511.07	-511.07
	bound	-511.51	-511.07	-511.07
	runtime	0.52	0.69	0.57
6000050	value	-742.03	-752.27	-752.27
	bound	-753.94	-752.27	-752.27
	runtime	0.65	2.18	2.43
6000051	value	-470.80	-471.62	-471.62
	bound	-472.56	-471.62	-471.62
	runtime	0.19	1.11	1.26
6000052	value	-438.14	-447.62	-447.62
	bound	-448.37	-447.62	-447.62
	runtime	0.59	0.78	0.86
6000053	value	-636.50	-636.83	-636.83
	bound	-637.25	-636.83	-636.83
	runtime	0.31	0.46	0.49
6000054	value	-671.39	-674.72	-674.72
	bound	-675.16	-674.72	-674.72
	runtime	1.17	1.52	1.90
6000055	value	-991.13	-992.44	-992.44
	bound	-993.19	-992.44	-992.44
	runtime	0.78	1.92	1.76
6000056	value	-667.80	-669.62	-669.62
	bound	-669.94	-669.62	-669.62
	runtime	0.21	0.72	0.57
6000057	value	-468.26	-481.90	-481.90
	bound	-483.19	-481.90	-481.90
	runtime	0.21	0.38	0.35
6000058	value	-351.43	-351.72	-351.72
	bound	-352.55	-351.72	-351.72
	runtime	0.16	0.50	0.55
6000059	value	-630.22	-631.11	-631.11
	bound	-631.83	-631.11	-631.11
	runtime	0.36	0.68	0.75
6000060	value	-545.33	-547.57	-547.57
	bound	-548.39	-547.57	-547.57
	runtime	0.15	0.13	0.22
6000061	value	-854.75	-862.95	-862.95
	bound	-864.58	-862.95	-862.95
	runtime	0.57	2.52	2.14
6000062	value	-543.09	-546.36	-546.36
	bound	-547.00	-546.36	-546.36
	runtime	0.31	0.47	0.70
6000063	value	-600.10	-603.33	-603.33
	bound	-604.48	-603.33	-603.33
	runtime	0.45	0.70	0.75
6000064	value	-736.13	-739.15	-739.15
	bound	-740.55	-739.15	-739.15
	runtime	0.35	0.76	0.72

correlation-clustering		MCR	MCA	MCA-fdo
6000065	value	-553.92	-559.67	-559.67
	bound	-559.69	-559.67	-559.67
	runtime	0.15	0.23	0.33
6000066	value	-479.90	-480.39	-480.39
	bound	-480.63	-480.39	-480.39
	runtime	0.24	0.47	0.38
6000067	value	-650.68	-652.52	-652.52
	bound	-653.02	-652.52	-652.52
	runtime	0.44	0.86	0.68
6000068	value	-627.24	-627.24	-627.24
	bound	-628.61	-627.24	-627.24
	runtime	1.02	4.11	4.09
6000069	value	-403.31	-407.65	-407.65
	bound	-407.88	-407.65	-407.65
	runtime	0.16	0.22	0.17
6000070	value	-803.91	-807.44	-807.44
	bound	-808.03	-807.44	-807.44
	runtime	0.41	0.81	0.77
6000071	value	-497.91	-500.20	-500.20
	bound	-500.54	-500.20	-500.20
	runtime	0.23	0.41	0.42
6000072	value	-651.35	-655.78	-655.78
	bound	-656.31	-655.78	-655.78
	runtime	0.48	0.88	1.30
6000073	value	-591.83	-592.41	-592.41
	bound	-592.90	-592.41	-592.41
	runtime	0.50	2.16	2.22
6000074	value	-462.29	-462.29	-462.29
	bound	-462.44	-462.29	-462.29
	runtime	0.40	0.32	0.31
6000075	value	-488.23	-488.31	-488.31
	bound	-488.33	-488.31	-488.31
	runtime	0.25	0.61	0.61
6000076	value	-430.11	-430.11	-430.11
	bound	-430.11	-430.11	-430.11
	runtime	0.08	0.10	0.09
6000077	value	-686.20	-696.68	-696.68
	bound	-697.49	-696.68	-696.68
	runtime	0.24	0.70	0.91
6000078	value	-579.33	-579.73	-579.73
	bound	-579.89	-579.73	-579.73
	runtime	0.26	0.27	0.63
6000079	value	-501.65	-503.73	-503.73
	bound	-503.86	-503.73	-503.73
	runtime	0.49	0.38	0.59
6000080	value	-593.83	-599.22	-599.22
	bound	-599.98	-599.22	-599.22
	runtime	0.29	0.36	0.35
6000081	value	-387.07	-387.60	-387.60
	bound	-387.60	-387.60	-387.60
	runtime	0.29	0.35	0.30
6000082	value	-323.15	-323.38	-323.38
	bound	-323.39	-323.38	-323.38
	runtime	0.14	0.11	0.18
6000083	value	-492.57	-493.21	-493.21
	bound	-493.30	-493.21	-493.21
	runtime	0.12	0.21	0.13
6000084	value	-654.45	-655.98	-655.98
	bound	-656.64	-655.98	-655.98
	runtime	0.10	0.37	0.28
6000085	value	-439.40	-442.20	-442.20
	bound	-442.70	-442.20	-442.20
	runtime	0.28	0.60	0.62
6000086	value	-944.60	-944.60	-944.60
	bound	-945.89	-944.60	-944.60
	runtime	0.57	3.54	5.57
6000087	value	-510.14	-511.16	-511.16
	bound	-512.00	-511.16	-511.16
	runtime	0.30	1.39	1.61
6000088	value	-779.70	-782.13	-782.13
	bound	-783.98	-782.13	-782.13
	runtime	1.39	16.55	11.31
6000089	value	-558.85	-562.40	-562.40
	bound	-563.12	-562.40	-562.40
	runtime	0.54	0.80	0.82

correlation-clustering		MCR	MCA	MCA-fdo
6000090	value	-629.82	-631.38	-631.38
	bound	-631.75	-631.38	-631.38
	runtime	0.91	2.24	2.04
6000091	value	-684.54	-685.91	-685.91
	bound	-687.90	-685.91	-685.91
	runtime	0.32	1.69	1.50
6000092	value	-510.43	-521.07	-521.07
	bound	-522.19	-521.07	-521.07
	runtime	0.23	0.79	0.46
6000093	value	-469.73	-470.68	-470.68
	bound	-471.26	-470.68	-470.68
	runtime	0.17	0.70	0.67
6000094	value	-709.02	-709.80	-709.80
	bound	-710.53	-709.80	-709.80
	runtime	0.34	0.36	0.64
6000095	value	-872.03	-877.13	-877.13
	bound	-877.89	-877.13	-877.13
	runtime	0.81	3.89	2.66
6000096	value	-745.21	-746.58	-746.58
	bound	-746.65	-746.58	-746.58
	runtime	0.54	0.38	0.59
6000097	value	-708.90	-710.74	-710.74
	bound	-711.56	-710.74	-710.74
	runtime	0.66	0.96	1.13
6000098	value	-564.07	-566.27	-566.27
	bound	-567.44	-566.27	-566.27
	runtime	0.21	0.75	0.96
6000099	value	-221.44	-223.24	-223.24
	bound	-224.13	-223.24	-223.24
	runtime	0.12	0.11	0.26
6000100	value	-368.44	-369.95	-369.95
	bound	-370.83	-369.95	-369.95
	runtime	0.22	0.39	0.39
6000101	value	-725.35	-725.35	-725.35
	bound	-725.57	-725.35	-725.35
	runtime	0.20	0.22	0.19
6000102	value	-785.37	-785.37	-785.37
	bound	-785.37	-785.37	-785.37
	runtime	0.37	0.24	0.34
6000103	value	-590.02	-594.51	-594.51
	bound	-597.98	-594.51	-594.51
	runtime	0.21	0.94	1.03
6000104	value	-594.65	-594.65	-594.65
	bound	-594.75	-594.65	-594.65
	runtime	0.07	0.10	0.10
6000105	value	-391.99	-392.21	-392.21
	bound	-392.69	-392.21	-392.21
	runtime	0.13	0.27	0.27
6000106	value	-662.25	-668.04	-668.04
	bound	-670.30	-668.04	-668.04
	runtime	0.20	0.61	0.60
6000107	value	-1050.66	-1052.32	-1052.32
	bound	-1052.81	-1052.32	-1052.32
	runtime	0.46	0.83	0.99
6000108	value	-992.20	-994.44	-994.44
	bound	-995.40	-994.44	-994.44
	runtime	0.32	1.63	1.54
6000109	value	-674.02	-681.17	-681.17
	bound	-683.37	-681.17	-681.17
	runtime	0.84	7.23	4.74
6000110	value	-551.68	-556.51	-556.51
	bound	-558.16	-556.51	-556.51
	runtime	0.25	0.35	0.28
6000111	value	-843.90	-846.61	-846.61
	bound	-847.28	-846.61	-846.61
	runtime	0.40	0.81	0.91
6000112	value	-614.37	-629.04	-629.04
	bound	-629.91	-629.04	-629.04
	runtime	0.34	4.56	4.35
6000113	value	-666.40	-667.25	-667.25
	bound	-667.73	-667.25	-667.25
	runtime	0.26	0.59	0.70
6000114	value	-572.57	-580.51	-580.51
	bound	-583.58	-580.51	-580.51
	runtime	0.51	3.23	6.16

correlation-clustering		MCR	MCA	MCA-fdo
6000115	value	-772.21	-772.80	-772.80
	bound	-772.99	-772.80	-772.80
	runtime	0.33	0.51	0.68
6000116	value	-751.21	-752.06	-752.06
	bound	-752.16	-752.06	-752.06
	runtime	0.70	0.74	1.06
6000117	value	-374.89	-374.89	-374.89
	bound	-374.99	-374.89	-374.89
	runtime	0.10	0.22	0.27
6000118	value	-707.84	-714.04	-714.04
	bound	-716.65	-714.04	-714.04
	runtime	1.06	3.71	3.83
6000119	value	-706.01	-727.60	-727.60
	bound	-728.89	-727.60	-727.60
	runtime	0.92	1.68	2.74
6000120	value	-554.71	-555.46	-555.46
	bound	-555.48	-555.46	-555.46
	runtime	0.38	0.84	0.67
6000121	value	-382.95	-383.02	-383.02
	bound	-383.06	-383.02	-383.02
	runtime	0.17	0.08	0.11
6000122	value	-613.45	-614.03	-614.03
	bound	-614.60	-614.03	-614.03
	runtime	0.33	0.87	0.80
6000123	value	-593.81	-596.33	-596.33
	bound	-596.61	-596.33	-596.33
	runtime	0.20	0.26	0.29
6000124	value	-785.58	-788.52	-788.52
	bound	-788.75	-788.52	-788.52
	runtime	0.51	0.60	0.75
6000125	value	-816.65	-822.59	-822.59
	bound	-827.46	-822.59	-822.59
	runtime	0.41	1.21	1.17
6000126	value	-1041.60	-1047.52	-1047.52
	bound	-1048.00	-1047.52	-1047.52
	runtime	0.51	1.76	1.83
6000127	value	-660.98	-661.82	-661.82
	bound	-662.15	-661.82	-661.82
	runtime	0.48	0.53	0.64
6000128	value	-883.56	-886.11	-886.11
	bound	-887.00	-886.11	-886.11
	runtime	1.32	1.87	2.42
6000129	value	-486.66	-487.42	-487.42
	bound	-487.46	-487.42	-487.42
	runtime	0.27	0.18	0.20
6000130	value	-674.38	-679.13	-679.13
	bound	-680.53	-679.13	-679.13
	runtime	0.57	1.65	1.46
6000131	value	-626.79	-652.15	-652.15
	bound	-653.35	-652.15	-652.15
	runtime	0.64	0.78	0.80
6000132	value	-759.28	-762.29	-762.29
	bound	-766.20	-762.29	-762.29
	runtime	0.46	0.48	0.54
6000133	value	-590.81	-591.55	-591.55
	bound	-592.98	-591.55	-591.55
	runtime	0.18	1.25	1.12
6000134	value	-671.61	-691.13	-691.13
	bound	-693.82	-691.13	-691.13
	runtime	0.61	1.11	1.43
6000135	value	-899.58	-909.84	-909.84
	bound	-909.88	-909.84	-909.84
	runtime	0.49	0.51	0.45
6000136	value	-598.90	-599.71	-599.71
	bound	-600.55	-599.71	-599.71
	runtime	0.71	1.19	1.27
6000137	value	-466.84	-467.35	-467.35
	bound	-469.98	-467.35	-467.35
	runtime	0.33	0.60	0.72
6000138	value	-660.05	-671.23	-671.23
	bound	-672.29	-671.23	-671.23
	runtime	0.71	1.00	1.18
6000139	value	-747.13	-747.97	-747.97
	bound	-749.92	-747.97	-747.97
	runtime	0.33	0.40	0.48

correlation-clustering		MCR	MCA	MCA-fdo
6000140	value	-922.69	-922.69	-922.69
	bound	-922.80	-922.69	-922.69
	runtime	0.87	0.71	0.47
6000141	value	-706.73	-707.29	-707.29
	bound	-708.55	-707.29	-707.29
	runtime	0.53	15.11	12.68
6000142	value	-654.78	-656.55	-656.55
	bound	-657.48	-656.55	-656.55
	runtime	0.60	1.25	1.40
6000143	value	-693.44	-694.32	-694.32
	bound	-695.53	-694.32	-694.32
	runtime	0.38	2.85	2.71
6000144	value	-607.78	-609.14	-609.14
	bound	-609.30	-609.14	-609.14
	runtime	0.44	0.62	0.76
6000145	value	-504.10	-504.40	-504.40
	bound	-504.41	-504.40	-504.40
	runtime	0.19	0.27	0.25
6000146	value	-319.74	-355.28	-355.28
	bound	-356.93	-355.28	-355.28
	runtime	0.24	0.45	0.43
6000147	value	-703.92	-706.17	-706.17
	bound	-707.37	-706.17	-706.17
	runtime	0.61	2.81	1.84
6000148	value	-928.50	-928.50	-928.50
	bound	-928.71	-928.50	-928.50
	runtime	0.48	0.62	0.75
6000149	value	-716.41	-716.99	-716.99
	bound	-717.34	-716.99	-716.99
	runtime	0.28	0.48	0.60
6000150	value	-739.38	-741.33	-741.33
	bound	-741.95	-741.33	-741.33
	runtime	1.07	2.99	2.30
6000151	value	-580.96	-585.19	-585.19
	bound	-585.85	-585.19	-585.19
	runtime	0.46	1.29	1.17
6000152	value	-468.26	-473.27	-473.27
	bound	-473.79	-473.27	-473.27
	runtime	0.59	1.86	1.50
6000153	value	-467.12	-467.50	-467.50
	bound	-467.92	-467.50	-467.50
	runtime	0.25	0.59	0.57
6000154	value	-543.00	-544.82	-544.82
	bound	-545.30	-544.82	-544.82
	runtime	0.17	0.74	0.71
6000155	value	-602.37	-634.56	-634.56
	bound	-638.15	-634.56	-634.56
	runtime	0.57	1.79	1.91
6000156	value	-1031.01	-1032.75	-1032.75
	bound	-1033.59	-1032.75	-1032.75
	runtime	1.16	2.57	2.50
6000157	value	-778.12	-785.69	-785.69
	bound	-785.79	-785.69	-785.69
	runtime	0.57	0.49	0.92
6000158	value	-491.35	-492.50	-492.50
	bound	-493.19	-492.50	-492.50
	runtime	0.18	0.95	0.85
6000159	value	-630.16	-633.84	-633.84
	bound	-636.50	-633.84	-633.84
	runtime	0.19	14.39	13.15
6000160	value	-487.61	-510.64	-510.64
	bound	-512.92	-510.64	-510.64
	runtime	0.20	0.26	0.52
6000161	value	-292.35	-293.91	-293.91
	bound	-294.58	-293.91	-293.91
	runtime	0.08	0.54	0.51
6000162	value	-594.79	-594.89	-594.89
	bound	-596.54	-594.89	-594.89
	runtime	0.20	1.08	1.00
6000163	value	-897.54	-900.91	-900.91
	bound	-901.37	-900.91	-900.91
	runtime	0.58	2.66	1.57
6000164	value	-550.01	-550.01	-550.01
	bound	-550.70	-550.01	-550.01
	runtime	0.21	0.54	0.51

correlation-clustering		MCR	MCA	MCA-fdo
6000165	value	-555.10	-555.52	-555.52
	bound	-555.89	-555.52	-555.52
	runtime	0.26	0.31	0.32
6000166	value	-686.18	-686.56	-686.56
	bound	-686.57	-686.56	-686.56
	runtime	0.34	0.43	0.45
6000167	value	-235.57	-237.81	-237.81
	bound	-238.67	-237.81	-237.81
	runtime	0.18	0.34	0.44
6000168	value	-547.94	-548.07	-548.07
	bound	-548.20	-548.07	-548.07
	runtime	0.30	0.31	0.37
6000169	value	-732.98	-742.32	-742.32
	bound	-743.39	-742.32	-742.32
	runtime	0.42	2.76	2.89
6000170	value	-427.11	-427.11	-427.11
	bound	-427.13	-427.11	-427.11
	runtime	0.68	0.51	0.60
6000171	value	-580.07	-583.91	-583.91
	bound	-584.34	-583.91	-583.91
	runtime	0.41	0.80	0.76
6000172	value	-415.47	-416.10	-416.10
	bound	-416.17	-416.10	-416.10
	runtime	0.33	0.42	0.46
6000173	value	-773.76	-773.76	-773.76
	bound	-773.76	-773.76	-773.76
	runtime	0.35	0.36	0.27
6000174	value	-963.88	-983.44	-983.44
	bound	-985.18	-983.44	-983.44
	runtime	0.51	1.22	1.02
6000175	value	-900.91	-904.61	-904.61
	bound	-906.37	-904.61	-904.61
	runtime	1.33	4.99	2.71
6000176	value	-593.27	-593.28	-593.28
	bound	-593.28	-593.28	-593.28
	runtime	0.60	0.44	0.56
6000177	value	-440.84	-442.22	-442.22
	bound	-443.54	-442.22	-442.22
	runtime	0.30	1.61	1.08
6000178	value	-607.93	-632.23	-632.23
	bound	-633.48	-632.23	-632.23
	runtime	0.31	0.55	1.10
6000179	value	-540.82	-541.14	-541.14
	bound	-541.29	-541.14	-541.14
	runtime	0.29	0.67	0.66
6000180	value	-502.48	-506.95	-506.95
	bound	-507.35	-506.95	-506.95
	runtime	0.35	0.59	0.92
6000181	value	-465.67	-466.31	-466.31
	bound	-466.49	-466.31	-466.31
	runtime	0.21	0.36	0.67
6000182	value	-528.86	-534.06	-534.06
	bound	-534.72	-534.06	-534.06
	runtime	0.34	0.52	0.84
6000183	value	-634.12	-637.04	-637.04
	bound	-637.90	-637.04	-637.04
	runtime	0.22	0.37	0.38
6000184	value	-788.94	-791.26	-791.26
	bound	-791.99	-791.26	-791.26
	runtime	0.51	0.81	0.95
6000185	value	-585.35	-587.05	-587.05
	bound	-587.28	-587.05	-587.05
	runtime	0.36	0.70	0.43
6000186	value	-536.22	-538.48	-538.48
	bound	-539.26	-538.48	-538.48
	runtime	0.56	2.21	1.25
6000187	value	-532.69	-533.84	-533.84
	bound	-534.16	-533.84	-533.84
	runtime	0.34	0.31	0.50
6000188	value	-622.19	-624.74	-624.74
	bound	-624.90	-624.74	-624.74
	runtime	0.72	1.12	1.17
6000189	value	-541.91	-552.34	-552.34
	bound	-552.74	-552.34	-552.34
	runtime	0.32	1.17	0.91

correlation-clustering		MCR	MCA	MCA-fdo
6000190	value	-479.92	-481.77	-481.77
	bound	-481.82	-481.77	-481.77
	runtime	0.20	0.15	0.19
6000191	value	-404.56	-415.54	-415.54
	bound	-417.76	-415.54	-415.54
	runtime	0.15	0.22	0.41
6000192	value	-349.89	-350.16	-350.16
	bound	-350.22	-350.16	-350.16
	runtime	0.10	0.14	0.16
6000193	value	-454.05	-455.59	-455.59
	bound	-456.05	-455.59	-455.59
	runtime	0.32	0.37	0.40
6000194	value	-485.00	-485.00	-485.00
	bound	-485.53	-485.00	-485.00
	runtime	0.31	0.42	0.58
6000195	value	-607.04	-607.04	-607.04
	bound	-607.04	-607.04	-607.04
	runtime	0.41	0.25	0.32
6000196	value	-474.79	-487.73	-487.73
	bound	-488.62	-487.73	-487.73
	runtime	0.27	0.65	0.85
6000197	value	-584.90	-585.40	-585.40
	bound	-585.99	-585.40	-585.40
	runtime	0.21	0.62	0.62
6000198	value	-443.19	-443.19	-443.19
	bound	-443.19	-443.19	-443.19
	runtime	0.11	0.10	0.16
6000199	value	-452.62	-452.62	-452.62
	bound	-452.62	-452.62	-452.62
	runtime	0.13	0.08	0.10
6000200	value	-464.76	-465.76	-465.76
	bound	-466.72	-465.76	-465.76
	runtime	0.30	0.69	0.87
6000201	value	-591.25	-599.92	-599.92
	bound	-601.27	-599.92	-599.92
	runtime	0.19	0.26	0.32
6000202	value	-843.50	-843.50	-843.50
	bound	-843.50	-843.50	-843.50
	runtime	0.75	0.88	0.60
6000203	value	-654.78	-655.51	-655.51
	bound	-655.69	-655.51	-655.51
	runtime	0.64	0.60	0.78
6000204	value	-519.14	-522.53	-522.53
	bound	-522.91	-522.53	-522.53
	runtime	0.26	0.23	0.26
6000205	value	-786.49	-786.78	-786.78
	bound	-787.23	-786.78	-786.78
	runtime	0.64	1.42	1.51
6000206	value	-705.41	-706.88	-706.88
	bound	-708.55	-706.88	-706.88
	runtime	0.40	1.50	0.83
6000207	value	-420.87	-440.05	-440.05
	bound	-440.36	-440.05	-440.05
	runtime	0.26	0.43	0.44
6000208	value	-487.52	-487.76	-487.76
	bound	-487.77	-487.76	-487.76
	runtime	0.33	0.32	0.18
6000209	value	-575.02	-576.55	-576.55
	bound	-576.84	-576.55	-576.55
	runtime	0.46	0.83	0.75
6000210	value	-616.76	-633.37	-633.37
	bound	-633.66	-633.37	-633.37
	runtime	0.59	1.85	1.46
6000211	value	-554.49	-562.88	-562.88
	bound	-563.10	-562.88	-562.88
	runtime	0.16	0.19	0.27
6000212	value	-671.01	-681.36	-681.36
	bound	-681.80	-681.36	-681.36
	runtime	0.55	1.11	0.96
6000213	value	-675.92	-677.81	-677.81
	bound	-679.70	-677.81	-677.81
	runtime	0.45	2.36	2.41
6000214	value	-522.76	-523.21	-523.21
	bound	-523.25	-523.21	-523.21
	runtime	0.39	0.38	0.65

correlation-clustering		MCR	MCA	MCA-fdo
6000215	value	-616.22	-616.60	-616.60
	bound	-619.09	-616.60	-616.60
	runtime	0.16	0.53	0.50
6000216	value	-637.39	-639.08	-639.08
	bound	-641.63	-639.08	-639.08
	runtime	0.26	0.36	0.36
6000217	value	-848.71	-854.65	-854.65
	bound	-856.56	-854.65	-854.65
	runtime	0.53	1.41	2.44
6000218	value	-608.21	-609.09	-609.09
	bound	-609.79	-609.09	-609.09
	runtime	0.29	0.59	0.92
6000219	value	-569.70	-570.08	-570.08
	bound	-571.31	-570.08	-570.08
	runtime	0.36	0.78	0.70
6000220	value	-811.27	-814.14	-814.14
	bound	-814.91	-814.14	-814.14
	runtime	0.43	1.21	1.93
6000221	value	-706.70	-709.81	-709.81
	bound	-711.08	-709.81	-709.81
	runtime	0.43	1.91	1.73
6000222	value	-770.25	-770.74	-770.74
	bound	-770.75	-770.74	-770.74
	runtime	0.90	1.46	0.92
6000223	value	-658.90	-666.68	-666.68
	bound	-668.03	-666.68	-666.68
	runtime	0.24	1.54	2.02
6000224	value	-646.87	-649.94	-649.94
	bound	-651.80	-649.94	-649.94
	runtime	0.54	2.24	2.43
6000225	value	-892.23	-893.67	-893.67
	bound	-894.06	-893.67	-893.67
	runtime	0.55	0.80	0.45
6000226	value	-671.54	-672.83	-672.83
	bound	-672.95	-672.83	-672.83
	runtime	0.69	1.07	0.56
6000227	value	-665.30	-667.39	-667.39
	bound	-668.86	-667.39	-667.39
	runtime	0.57	2.98	2.63
6000228	value	-889.52	-890.18	-890.18
	bound	-891.57	-890.18	-890.18
	runtime	0.52	0.55	0.48
6000229	value	-563.56	-564.51	-564.51
	bound	-565.07	-564.51	-564.51
	runtime	0.34	0.73	0.34
6000230	value	-582.03	-583.84	-583.84
	bound	-584.64	-583.84	-583.84
	runtime	0.33	0.26	0.29
6000231	value	-852.15	-854.43	-854.43
	bound	-855.98	-854.43	-854.43
	runtime	0.47	0.86	0.98
6000232	value	-271.47	-273.29	-273.29
	bound	-273.92	-273.29	-273.29
	runtime	0.12	0.32	0.41
6000233	value	-623.20	-642.89	-642.89
	bound	-643.59	-642.89	-642.89
	runtime	0.33	0.45	0.43
6000234	value	-589.73	-607.64	-607.64
	bound	-608.05	-607.64	-607.64
	runtime	0.37	0.60	0.44
6000235	value	-412.43	-412.50	-412.50
	bound	-413.00	-412.50	-412.50
	runtime	0.20	0.18	0.37
6000236	value	-647.87	-647.87	-647.87
	bound	-648.20	-647.87	-647.87
	runtime	0.50	0.74	0.63
6000237	value	-655.34	-662.17	-662.17
	bound	-663.23	-662.17	-662.17
	runtime	0.68	1.50	1.19
6000238	value	-409.15	-410.35	-410.35
	bound	-411.47	-410.35	-410.35
	runtime	0.14	0.45	0.59
6000239	value	-424.08	-424.70	-424.70
	bound	-424.81	-424.70	-424.70
	runtime	0.15	0.24	0.28

correlation-clustering		MCR	MCA	MCA-fdo
6000240	value	-716.63	-716.63	-716.63
	bound	-716.63	-716.63	-716.63
	runtime	0.33	0.32	0.35
6000241	value	-450.96	-451.49	-451.49
	bound	-452.14	-451.49	-451.49
	runtime	0.22	0.50	0.53
6000242	value	-518.93	-526.27	-526.27
	bound	-527.21	-526.27	-526.27
	runtime	0.15	0.69	1.85
6000243	value	-703.20	-704.58	-704.58
	bound	-705.40	-704.58	-704.58
	runtime	0.24	0.46	0.49
6000244	value	-771.23	-775.77	-775.77
	bound	-777.00	-775.77	-775.77
	runtime	0.53	1.52	1.19
6000245	value	-475.51	-475.68	-475.68
	bound	-476.44	-475.68	-475.68
	runtime	0.24	1.50	1.40
6000246	value	-517.40	-517.59	-517.59
	bound	-518.03	-517.59	-517.59
	runtime	0.16	0.18	0.18
6000247	value	-539.38	-541.03	-541.03
	bound	-541.52	-541.03	-541.03
	runtime	0.32	0.88	0.57
6000248	value	-590.24	-601.67	-601.67
	bound	-603.12	-601.67	-601.67
	runtime	0.31	0.48	0.49
6000249	value	-642.69	-643.45	-643.45
	bound	-643.71	-643.45	-643.45
	runtime	0.39	0.68	0.69
6000250	value	-531.77	-534.30	-534.30
	bound	-534.91	-534.30	-534.30
	runtime	0.21	0.87	0.71
6000251	value	-487.07	-487.49	-487.49
	bound	-487.74	-487.49	-487.49
	runtime	0.28	0.43	0.45
6000252	value	-554.97	-555.61	-555.61
	bound	-555.63	-555.61	-555.61
	runtime	0.16	0.18	0.25
6000253	value	-540.88	-554.57	-554.57
	bound	-556.54	-554.57	-554.57
	runtime	0.32	0.42	0.50
6000254	value	-617.05	-619.87	-619.87
	bound	-620.62	-619.87	-619.87
	runtime	0.23	0.43	0.31
6000255	value	-643.81	-650.71	-650.71
	bound	-651.02	-650.71	-650.71
	runtime	0.30	0.34	0.41
6000256	value	-491.87	-508.00	-508.00
	bound	-508.41	-508.00	-508.00
	runtime	0.18	0.44	0.31
6000257	value	-404.83	-410.72	-410.72
	bound	-410.88	-410.72	-410.72
	runtime	0.11	0.14	0.11
6000258	value	-824.11	-824.43	-824.43
	bound	-824.94	-824.43	-824.43
	runtime	0.87	1.77	1.34
6000259	value	-723.75	-725.76	-725.76
	bound	-726.86	-725.76	-725.76
	runtime	0.27	0.76	0.99
6000260	value	-586.48	-586.79	-586.79
	bound	-586.80	-586.79	-586.79
	runtime	0.20	0.18	0.28
6000261	value	-498.03	-498.46	-498.46
	bound	-498.53	-498.46	-498.46
	runtime	0.22	0.29	0.43
6000262	value	-768.24	-769.67	-769.67
	bound	-773.41	-769.67	-769.67
	runtime	0.69	13.92	12.60
6000263	value	-1039.76	-1039.91	-1039.91
	bound	-1040.10	-1039.91	-1039.91
	runtime	0.69	0.81	0.96
6000264	value	-909.15	-909.47	-909.47
	bound	-909.89	-909.47	-909.47
	runtime	0.57	0.80	0.84

correlation-clustering		MCR	MCA	MCA-fdo
6000265	value	-365.96	-374.33	-374.33
	bound	-374.57	-374.33	-374.33
	runtime	0.10	0.12	0.12
6000266	value	-606.22	-610.25	-610.25
	bound	-612.33	-610.25	-610.25
	runtime	0.38	0.50	0.92
6000267	value	-535.99	-538.44	-538.44
	bound	-539.33	-538.44	-538.44
	runtime	0.24	0.71	0.67
6000268	value	-523.14	-542.99	-542.99
	bound	-544.61	-542.99	-542.99
	runtime	0.21	0.59	0.84
6000269	value	-587.95	-602.79	-602.79
	bound	-604.59	-602.79	-602.79
	runtime	0.47	2.85	2.12
6000270	value	-1094.34	-1095.71	-1095.71
	bound	-1096.95	-1095.71	-1095.71
	runtime	0.69	1.82	1.42
6000271	value	-826.11	-827.54	-827.54
	bound	-828.84	-827.54	-827.54
	runtime	0.48	1.06	0.83
6000272	value	-518.36	-518.49	-518.49
	bound	-520.40	-518.49	-518.49
	runtime	0.41	0.74	0.66
6000273	value	-495.57	-506.19	-506.19
	bound	-506.27	-506.19	-506.19
	runtime	0.15	0.22	0.18
6000274	value	-624.78	-626.32	-626.32
	bound	-626.93	-626.32	-626.32
	runtime	0.36	0.43	0.48
6000275	value	-563.34	-563.80	-563.80
	bound	-564.15	-563.80	-563.80
	runtime	0.34	0.78	0.59
6000276	value	-561.03	-561.03	-561.03
	bound	-561.10	-561.03	-561.03
	runtime	0.21	0.44	0.50
6000277	value	-465.99	-465.99	-465.99
	bound	-465.99	-465.99	-465.99
	runtime	0.16	0.16	0.17
6000278	value	-977.64	-977.71	-977.71
	bound	-978.10	-977.71	-977.71
	runtime	0.28	0.45	0.50
6000279	value	-557.95	-575.81	-575.81
	bound	-577.43	-575.81	-575.81
	runtime	0.14	0.72	0.66
6000280	value	-602.87	-603.59	-603.59
	bound	-603.71	-603.59	-603.59
	runtime	0.11	0.18	0.15
6000281	value	-859.79	-861.04	-861.04
	bound	-861.68	-861.04	-861.04
	runtime	0.25	0.58	0.54
6000282	value	-515.20	-519.59	-519.59
	bound	-519.84	-519.59	-519.59
	runtime	0.33	0.86	0.78
6000283	value	-611.21	-611.78	-611.78
	bound	-611.86	-611.78	-611.78
	runtime	0.83	0.95	0.81
6000284	value	-710.52	-711.28	-711.28
	bound	-712.64	-711.28	-711.28
	runtime	0.72	1.90	1.63
6000285	value	-507.32	-507.32	-507.32
	bound	-507.70	-507.32	-507.32
	runtime	0.11	0.40	0.36
6000286	value	-602.28	-607.87	-607.87
	bound	-608.61	-607.87	-607.87
	runtime	0.69	1.97	1.50
6000287	value	-757.22	-760.19	-760.19
	bound	-760.70	-760.19	-760.19
	runtime	1.62	4.93	3.52
6000288	value	-565.34	-565.34	-565.34
	bound	-565.34	-565.34	-565.34
	runtime	0.20	0.47	0.41
6000289	value	-552.77	-554.32	-554.32
	bound	-554.76	-554.32	-554.32
	runtime	0.35	1.98	1.44

correlation-clustering		MCR	MCA	MCA-fdo
6000290	value	-603.54	-603.54	-603.54
	bound	-603.62	-603.54	-603.54
	runtime	0.42	1.12	1.21
6000291	value	-577.57	-578.45	-578.45
	bound	-579.21	-578.45	-578.45
	runtime	0.58	1.36	1.25
6000292	value	-1140.24	-1143.01	-1143.01
	bound	-1143.87	-1143.01	-1143.01
	runtime	0.78	2.04	1.81
6000293	value	-365.13	-365.44	-365.44
	bound	-366.36	-365.44	-365.44
	runtime	0.10	0.27	0.26
6000294	value	-476.67	-481.54	-481.54
	bound	-482.17	-481.54	-481.54
	runtime	0.34	0.67	0.43
6000295	value	-648.16	-648.67	-648.67
	bound	-649.44	-648.67	-648.67
	runtime	0.45	1.66	1.49
6000296	value	-741.91	-742.81	-742.81
	bound	-743.85	-742.81	-742.81
	runtime	0.69	1.14	1.23
6000297	value	-664.15	-665.13	-665.13
	bound	-665.38	-665.13	-665.13
	runtime	0.77	1.26	0.82
6000298	value	-536.53	-538.14	-538.14
	bound	-538.50	-538.14	-538.14
	runtime	0.38	0.62	0.56
6000299	value	-787.38	-791.65	-791.65
	bound	-793.14	-791.65	-791.65
	runtime	0.52	1.61	1.50
6000300	value	-516.02	-518.73	-518.73
	bound	-519.82	-518.73	-518.73
	runtime	0.54	3.44	2.52
6000301	value	-612.77	-613.49	-613.49
	bound	-614.16	-613.49	-613.49
	runtime	0.72	0.88	1.19
6000302	value	-547.22	-560.45	-560.45
	bound	-560.81	-560.45	-560.45
	runtime	0.42	0.37	0.29
6000303	value	-631.99	-651.10	-651.10
	bound	-651.27	-651.10	-651.10
	runtime	0.47	0.54	1.03
6000304	value	-528.51	-528.86	-528.86
	bound	-528.90	-528.86	-528.86
	runtime	0.55	0.77	0.61
6000305	value	-593.90	-595.68	-595.68
	bound	-597.83	-595.68	-595.68
	runtime	1.10	1.38	2.69
6000306	value	-650.93	-651.90	-651.90
	bound	-652.32	-651.90	-651.90
	runtime	0.26	0.70	0.62
6000307	value	-692.78	-692.78	-692.78
	bound	-692.78	-692.78	-692.78
	runtime	0.57	0.45	0.49
6000308	value	-739.96	-740.57	-740.57
	bound	-741.80	-740.57	-740.57
	runtime	0.55	2.39	2.06
6000309	value	-591.00	-593.16	-593.16
	bound	-594.56	-593.16	-593.16
	runtime	0.26	0.68	0.71
6000310	value	-641.21	-641.77	-641.77
	bound	-642.07	-641.77	-641.77
	runtime	0.30	0.67	0.75
6000311	value	-661.15	-667.11	-667.11
	bound	-668.67	-667.11	-667.11
	runtime	0.34	0.76	0.59
6000312	value	-580.00	-582.30	-582.30
	bound	-582.57	-582.30	-582.30
	runtime	0.27	0.42	0.41
6000313	value	-448.95	-454.95	-454.95
	bound	-455.54	-454.95	-454.95
	runtime	0.30	0.23	0.33
6000314	value	-539.07	-550.60	-550.60
	bound	-550.67	-550.60	-550.60
	runtime	0.10	0.11	0.15

correlation-clustering		MCR	MCA	MCA-fdo
6000315	value	-594.23	-594.80	-594.80
	bound	-595.54	-594.80	-594.80
	runtime	0.34	0.48	0.43
6000316	value	-484.05	-484.05	-484.05
	bound	-484.05	-484.05	-484.05
	runtime	0.17	0.14	0.17
6000317	value	-821.86	-824.20	-824.20
	bound	-825.40	-824.20	-824.20
	runtime	0.44	0.48	0.43
6000318	value	-656.02	-658.52	-658.52
	bound	-661.41	-658.52	-658.52
	runtime	0.76	1.59	1.16
6000319	value	-353.09	-354.92	-354.92
	bound	-354.95	-354.92	-354.92
	runtime	0.26	0.23	0.33
6000320	value	-410.60	-416.34	-416.34
	bound	-417.38	-416.34	-416.34
	runtime	0.27	0.81	0.75
6000321	value	-586.02	-587.50	-587.50
	bound	-588.00	-587.50	-587.50
	runtime	0.36	0.60	0.44
6000322	value	-499.35	-499.71	-499.71
	bound	-500.47	-499.71	-499.71
	runtime	0.20	0.79	0.70
6000323	value	-633.16	-633.16	-633.16
	bound	-633.23	-633.16	-633.16
	runtime	0.35	0.28	0.35
6000324	value	-413.48	-415.08	-415.08
	bound	-415.52	-415.08	-415.08
	runtime	0.24	0.43	0.29
6000325	value	-376.06	-377.44	-377.44
	bound	-378.33	-377.44	-377.44
	runtime	0.12	0.32	0.28
6000326	value	-471.13	-487.08	-487.08
	bound	-488.05	-487.08	-487.08
	runtime	0.18	0.27	0.37
6000327	value	-589.18	-589.18	-589.18
	bound	-589.51	-589.18	-589.18
	runtime	0.48	1.13	1.40
6000328	value	-586.12	-586.12	-586.12
	bound	-586.12	-586.12	-586.12
	runtime	0.19	0.18	0.19
6000329	value	-615.59	-627.67	-627.67
	bound	-628.42	-627.67	-627.67
	runtime	0.34	0.63	0.78
6000330	value	-544.81	-545.65	-545.65
	bound	-546.16	-545.65	-545.65
	runtime	0.44	0.87	1.00
6000331	value	-827.10	-827.10	-827.10
	bound	-827.10	-827.10	-827.10
	runtime	0.63	0.85	0.80
6000332	value	-623.34	-623.34	-623.34
	bound	-624.01	-623.34	-623.34
	runtime	0.71	0.61	0.47
6000333	value	-622.88	-624.09	-624.09
	bound	-628.15	-624.09	-624.09
	runtime	1.13	18.96	13.72
6000334	value	-772.39	-786.21	-786.21
	bound	-786.98	-786.21	-786.21
	runtime	0.39	0.87	0.99
6000335	value	-500.95	-501.74	-501.74
	bound	-501.98	-501.74	-501.74
	runtime	0.28	0.47	0.59
6000336	value	-546.33	-552.31	-552.31
	bound	-554.34	-552.31	-552.31
	runtime	0.36	9.24	7.58
6000337	value	-413.55	-431.05	-431.05
	bound	-431.99	-431.05	-431.05
	runtime	0.20	0.49	0.39
6000338	value	-684.60	-687.22	-687.22
	bound	-687.39	-687.22	-687.22
	runtime	0.36	0.26	0.30
6000339	value	-604.94	-604.94	-604.94
	bound	-604.94	-604.94	-604.94
	runtime	0.20	0.18	0.21

correlation-clustering		MCR	MCA	MCA-fdo
6000340	value	-633.53	-635.78	-635.78
	bound	-636.56	-635.78	-635.78
	runtime	0.33	0.27	0.53
6000341	value	-691.14	-696.50	-696.50
	bound	-697.64	-696.50	-696.50
	runtime	0.21	0.53	0.41
6000342	value	-872.68	-873.53	-873.53
	bound	-873.73	-873.53	-873.53
	runtime	0.49	0.46	0.54
6000343	value	-717.75	-719.87	-719.87
	bound	-722.14	-719.87	-719.87
	runtime	0.29	1.04	0.77
6000344	value	-603.12	-604.99	-604.99
	bound	-605.68	-604.99	-604.99
	runtime	0.57	0.76	0.92
6000345	value	-612.51	-616.82	-616.82
	bound	-617.66	-616.82	-616.82
	runtime	0.51	0.81	0.89
6000346	value	-445.52	-448.79	-448.79
	bound	-449.28	-448.79	-448.79
	runtime	0.14	0.28	0.36
6000347	value	-706.04	-709.64	-709.64
	bound	-710.58	-709.64	-709.64
	runtime	0.24	0.53	0.75
6000348	value	-513.12	-513.12	-513.12
	bound	-513.12	-513.12	-513.12
	runtime	0.16	0.08	0.12
6000349	value	-594.55	-594.71	-594.71
	bound	-595.06	-594.71	-594.71
	runtime	0.27	1.05	0.99
6000350	value	-529.21	-529.71	-529.71
	bound	-529.74	-529.71	-529.71
	runtime	0.20	0.19	0.18
6000351	value	-728.43	-729.60	-729.60
	bound	-729.80	-729.60	-729.60
	runtime	0.47	1.26	1.18
6000352	value	-383.99	-385.43	-385.43
	bound	-385.69	-385.43	-385.43
	runtime	0.25	0.43	0.43
6000353	value	-619.17	-619.62	-619.62
	bound	-619.71	-619.62	-619.62
	runtime	0.35	0.34	0.36
6000354	value	-402.68	-402.91	-402.91
	bound	-403.27	-402.91	-402.91
	runtime	0.10	0.15	0.29
6000355	value	-544.93	-546.79	-546.79
	bound	-548.44	-546.79	-546.79
	runtime	0.24	0.40	0.59
8000811	value	-562.98	-562.98	-562.98
	bound	-562.98	-562.98	-562.98
	runtime	0.16	0.14	0.33
8001155	value	-366.76	-367.82	-367.82
	bound	-368.29	-367.82	-367.82
	runtime	0.17	0.35	0.43
8001974	value	-1243.94	-1243.94	-1243.94
	bound	-1243.94	-1243.94	-1243.94
	runtime	0.65	1.66	1.17
8002274	value	-848.73	-848.73	-848.73
	bound	-848.73	-848.73	-848.73
	runtime	0.18	0.15	0.18
8002764	value	-357.09	-357.33	-357.33
	bound	-359.25	-357.33	-357.33
	runtime	0.04	0.12	0.22
8003131	value	-650.66	-650.66	-650.66
	bound	-650.66	-650.66	-650.66
	runtime	0.70	0.55	0.67
8003836	value	-308.75	-317.98	-317.98
	bound	-318.60	-317.98	-317.98
	runtime	0.03	0.11	0.13
8003952	value	-951.44	-959.64	-959.64
	bound	-959.93	-959.64	-959.64
	runtime	0.12	0.27	0.54
8004573	value	-348.40	-348.40	-348.40
	bound	-348.58	-348.40	-348.40
	runtime	0.11	0.26	0.22

correlation-clustering		MCR	MCA	MCA-fdo
8005616	value	-228.75	-229.32	-229.32
	bound	-230.49	-229.32	-229.32
	runtime	0.12	0.12	0.14
8006160	value	-401.07	-401.07	-401.07
	bound	-401.07	-401.07	-401.07
	runtime	0.06	0.06	0.06
8006302	value	-557.46	-557.46	-557.46
	bound	-557.87	-557.46	-557.46
	runtime	0.05	0.06	0.06
8008099	value	-981.38	-984.30	-984.30
	bound	-984.51	-984.30	-984.30
	runtime	0.16	0.22	0.35
8008545	value	-699.82	-700.15	-700.15
	bound	-700.44	-700.15	-700.15
	runtime	0.29	0.74	0.89
8008998	value	-459.31	-461.55	-461.55
	bound	-462.00	-461.55	-461.55
	runtime	0.11	0.27	0.37
9000001	value	-789.27	-792.68	-792.68
	bound	-793.72	-792.68	-792.68
	runtime	0.47	0.42	0.42
9000002	value	-597.19	-597.19	-597.19
	bound	-598.40	-597.19	-597.19
	runtime	0.21	0.12	0.17
9000003	value	-766.60	-766.60	-766.60
	bound	-766.60	-766.60	-766.60
	runtime	0.87	2.01	1.41
9000029	value	-580.98	-581.56	-581.56
	bound	-582.62	-581.56	-581.56
	runtime	0.32	0.50	0.55
9000127	value	-836.84	-837.29	-837.29
	bound	-838.13	-837.29	-837.29
	runtime	0.79	1.66	1.53
9000136	value	-765.04	-776.21	-776.21
	bound	-778.39	-776.21	-776.21
	runtime	0.47	1.99	2.37
9000210	value	-565.37	-568.26	-568.26
	bound	-569.56	-568.26	-568.26
	runtime	0.24	1.04	0.99
9000288	value	-485.52	-485.65	-485.65
	bound	-486.37	-485.65	-485.65
	runtime	0.10	0.25	0.32
9000395	value	-413.77	-414.96	-414.96
	bound	-415.94	-414.96	-414.96
	runtime	0.18	0.34	0.28
9000747	value	-495.73	-495.73	-495.73
	bound	-496.41	-495.73	-495.73
	runtime	0.14	0.42	0.47
9000868	value	-709.94	-711.39	-711.39
	bound	-712.16	-711.39	-711.39
	runtime	0.26	0.62	0.54
9000875	value	-602.13	-613.28	-613.28
	bound	-614.55	-613.28	-613.28
	runtime	0.95	1.59	2.54
9000928	value	-687.04	-704.44	-704.44
	bound	-707.71	-704.44	-704.44
	runtime	0.47	1.75	2.08
9000933	value	-515.47	-515.70	-515.70
	bound	-517.06	-515.70	-515.70
	runtime	0.24	0.66	0.56
9000989	value	-655.29	-660.46	-660.46
	bound	-662.45	-660.46	-660.46
	runtime	0.16	0.16	0.15
9001001	value	-713.70	-717.57	-717.57
	bound	-720.40	-717.57	-717.57
	runtime	0.52	0.56	0.64
9001034	value	-670.78	-671.52	-671.52
	bound	-671.95	-671.52	-671.52
	runtime	0.46	0.78	0.87
9001071	value	-860.19	-861.29	-861.29
	bound	-861.52	-861.29	-861.29
	runtime	0.67	0.70	0.49
9001184	value	-496.42	-505.01	-505.01
	bound	-505.62	-505.01	-505.01
	runtime	0.30	0.36	0.39

correlation-clustering		MCR	MCA	MCA-fdo
9001300	value	-837.40	-837.41	-837.41
	bound	-838.44	-837.41	-837.41
	runtime	0.51	0.62	0.74
9001317	value	-517.24	-519.21	-519.21
	bound	-519.60	-519.21	-519.21
	runtime	0.27	0.93	0.84
9001619	value	-509.55	-510.62	-510.62
	bound	-513.14	-510.62	-510.62
	runtime	0.39	2.48	2.14
9001713	value	-563.64	-566.01	-566.01
	bound	-566.30	-566.01	-566.01
	runtime	0.59	1.36	1.19
9001991	value	-368.43	-377.14	-377.14
	bound	-377.66	-377.14	-377.14
	runtime	0.12	0.30	0.37
9002004	value	-561.70	-561.70	-561.70
	bound	-561.70	-561.70	-561.70
	runtime	0.07	0.06	0.10
9002021	value	-884.40	-884.88	-884.88
	bound	-885.14	-884.88	-884.88
	runtime	0.30	1.00	0.79
9002090	value	-403.27	-403.53	-403.53
	bound	-403.55	-403.53	-403.53
	runtime	0.24	0.18	0.14
9002114	value	-429.52	-430.41	-430.41
	bound	-430.71	-430.41	-430.41
	runtime	0.19	0.21	0.34
9002474	value	-726.44	-726.44	-726.44
	bound	-726.44	-726.44	-726.44
	runtime	0.21	0.29	0.19
9002577	value	-874.29	-874.29	-874.29
	bound	-874.45	-874.29	-874.29
	runtime	0.17	0.44	0.48
9002827	value	-546.81	-561.63	-561.63
	bound	-565.86	-561.63	-561.63
	runtime	0.67	0.69	0.66
9002861	value	-644.98	-661.79	-661.79
	bound	-662.06	-661.79	-661.79
	runtime	0.76	0.96	1.28
9002972	value	-824.15	-824.71	-824.71
	bound	-825.68	-824.71	-824.71
	runtime	0.26	0.52	0.64
9003116	value	-330.70	-338.25	-338.25
	bound	-339.83	-338.25	-338.25
	runtime	0.42	0.89	0.78
9003135	value	-731.92	-733.39	-733.39
	bound	-734.02	-733.39	-733.39
	runtime	0.48	1.17	1.36
9003234	value	-661.44	-683.07	-683.07
	bound	-684.47	-683.07	-683.07
	runtime	0.63	1.83	4.16
9003250	value	-478.34	-478.34	-478.34
	bound	-478.41	-478.34	-478.34
	runtime	0.06	0.09	0.08
9003301	value	-1170.45	-1178.36	-1178.36
	bound	-1180.35	-1178.36	-1178.36
	runtime	0.63	5.58	3.92
9003333	value	-451.93	-464.55	-464.55
	bound	-464.62	-464.55	-464.55
	runtime	0.13	0.10	0.11
9003339	value	-809.21	-810.44	-810.44
	bound	-811.40	-810.44	-810.44
	runtime	0.23	0.32	0.43
9003378	value	-590.73	-591.56	-591.56
	bound	-591.79	-591.56	-591.56
	runtime	0.07	0.07	0.07
9003423	value	-716.50	-716.50	-716.50
	bound	-716.50	-716.50	-716.50
	runtime	0.13	0.14	0.19
9003585	value	-415.97	-418.38	-418.38
	bound	-419.06	-418.38	-418.38
	runtime	0.30	0.45	0.38
9003635	value	-495.38	-501.31	-501.31
	bound	-501.55	-501.31	-501.31
	runtime	0.26	0.25	0.19

correlation-clustering		MCR	MCA	MCA-fdo
9003836	value	-1260.18	-1261.74	-1261.74
	bound	-1264.59	-1261.74	-1261.74
	runtime	0.51	1.08	0.90
9004060	value	-600.54	-602.99	-602.99
	bound	-604.19	-602.99	-602.99
	runtime	0.38	3.72	2.62
9004066	value	-725.78	-727.77	-727.77
	bound	-727.83	-727.77	-727.77
	runtime	0.12	0.11	0.17
9004070	value	-628.91	-629.04	-629.04
	bound	-629.39	-629.04	-629.04
	runtime	0.35	0.75	0.56
9004199	value	-701.07	-703.00	-703.00
	bound	-703.74	-703.00	-703.00
	runtime	0.79	3.19	2.47
9004242	value	-1033.85	-1034.17	-1034.17
	bound	-1034.63	-1034.17	-1034.17
	runtime	0.14	0.64	0.59
9004294	value	-407.78	-407.78	-407.78
	bound	-407.78	-407.78	-407.78
	runtime	0.11	0.20	0.17
9004353	value	-658.80	-658.85	-658.85
	bound	-659.32	-658.85	-658.85
	runtime	0.75	0.70	0.88
9004368	value	-350.94	-351.69	-351.69
	bound	-352.13	-351.69	-351.69
	runtime	0.21	0.93	1.16
9004383	value	-624.06	-624.33	-624.33
	bound	-625.10	-624.33	-624.33
	runtime	0.25	0.62	0.57
9004427	value	-453.37	-488.45	-488.45
	bound	-490.52	-488.45	-488.45
	runtime	0.33	0.44	0.45
9004520	value	-439.65	-441.12	-441.12
	bound	-441.44	-441.12	-441.12
	runtime	0.14	0.31	0.31
9004581	value	-393.66	-399.15	-399.15
	bound	-399.75	-399.15	-399.15
	runtime	0.03	0.05	0.05
9004766	value	-350.19	-353.88	-353.88
	bound	-354.29	-353.88	-353.88
	runtime	0.12	0.09	0.08
9004879	value	-1145.20	-1159.74	-1159.74
	bound	-1165.18	-1159.74	-1159.74
	runtime	1.12	7.37	6.45
9004965	value	-1253.73	-1255.38	-1255.38
	bound	-1255.86	-1255.38	-1255.38
	runtime	0.82	1.93	1.55
9004971	value	-753.65	-755.08	-755.08
	bound	-755.99	-755.08	-755.08
	runtime	0.32	0.62	0.62
9005011	value	-545.91	-546.15	-546.15
	bound	-546.78	-546.15	-546.15
	runtime	0.51	1.67	1.61
9005105	value	-609.85	-610.41	-610.41
	bound	-610.75	-610.41	-610.41
	runtime	0.34	0.27	0.31
9005245	value	-587.14	-587.27	-587.27
	bound	-588.08	-587.27	-587.27
	runtime	0.32	0.42	0.59
9005273	value	-405.17	-405.88	-405.88
	bound	-406.09	-405.88	-405.88
	runtime	0.17	0.39	0.44
9005294	value	-488.55	-492.95	-492.95
	bound	-493.94	-492.95	-492.95
	runtime	0.37	0.58	0.55
mean energy		-624.35	-628.16	-628.16
mean bound		-629.03	-628.16	-628.16
mean runtime		0.38	1.14	1.04
best value		16.36	100.00	100.00
best bound		10.21	100.00	100.00
verified opt		10.21	100.00	100.00

4.16. Image Segmentation (images-seg)

Table 46: image-seg

image-seg		MCA	MCA-fdo
101085.bmp	value bound runtime	5207.50 5207.50 0.56	5207.50 5207.50 0.46
101087.bmp	value bound runtime	2789.90 2789.90 0.34	2789.90 2789.90 0.24
102061.bmp	value bound runtime	2943.77 2943.77 1.23	2943.77 2943.77 1.10
103070.bmp	value bound runtime	4199.38 4199.38 1.03	4199.38 4199.38 1.20
105025.bmp	value bound runtime	6055.33 6055.33 3.45	6055.33 6055.33 3.37
106024.bmp	value bound runtime	1599.25 1599.25 0.39	1599.25 1599.25 0.28
108005.bmp	value bound runtime	6578.03 6578.03 2.08	6578.03 6578.03 2.78
108070.bmp	value bound runtime	8422.24 8422.24 3.41	8422.24 8422.24 4.85
108082.bmp	value bound runtime	4800.15 4800.15 3.16	4800.15 4800.15 1.98
109053.bmp	value bound runtime	4421.13 4421.13 1.97	4421.13 4421.13 2.23
119082.bmp	value bound runtime	4530.71 4530.71 0.15	4530.71 4530.71 0.25
12084.bmp	value bound runtime	7284.45 7284.45 0.85	7284.45 7284.45 0.98
123074.bmp	value bound runtime	3842.74 3842.74 5.32	3842.74 3842.74 2.87
126007.bmp	value bound runtime	2684.83 2684.83 0.24	2684.83 2684.83 0.15
130026.bmp	value bound runtime	5350.83 5350.83 5.85	5350.83 5350.83 4.84
134035.bmp	value bound runtime	6578.98 6578.98 4.92	6578.98 6578.98 2.23
14037.bmp	value bound runtime	1383.14 1383.14 0.11	1383.14 1383.14 0.06
143090.bmp	value bound runtime	1714.38 1714.38 0.21	1714.38 1714.38 0.13
145086.bmp	value bound runtime	3322.21 3322.21 0.17	3322.21 3322.21 0.11
147091.bmp	value bound runtime	3973.71 3973.71 0.73	3973.71 3973.71 0.71
148026.bmp	value bound runtime	8205.98 8205.98 0.75	8205.98 8205.98 0.78
148089.bmp	value bound runtime	6439.58 6439.58 2.19	6439.58 6439.58 1.51
156065.bmp	value bound runtime	5234.15 5234.15 4.37	5234.15 5234.15 2.30
157055.bmp	value bound runtime	4685.17 4685.17 0.38	4685.17 4685.17 0.37
159008.bmp	value bound runtime	4540.87 4540.87 1.26	4540.87 4540.87 0.92

image-seg		MCA	MCA-fdo
160068.bmp	value bound runtime	3089.32 3089.32 0.40	3089.32 3089.32 0.32
16077.bmp	value bound runtime	4227.88 4227.88 0.52	4227.88 4227.88 0.44
163085.bmp	value bound runtime	4381.13 4381.13 1.98	4381.13 4381.13 1.36
167062.bmp	value bound runtime	1273.72 1273.72 0.05	1273.72 1273.72 0.10
167083.bmp	value bound runtime	8331.63 8331.63 2.12	8331.63 8331.63 2.52
170057.bmp	value bound runtime	3266.17 3266.17 4.74	3266.17 3266.17 3.83
175032.bmp	value bound runtime	11542.63 11542.63 71.82	11542.63 11542.63 55.07
175043.bmp	value bound runtime	7816.92 7816.92 2.11	7816.92 7816.92 2.23
182053.bmp	value bound runtime	3579.24 3579.24 3.20	3579.24 3579.24 2.03
189080.bmp	value bound runtime	1077.47 1077.47 0.05	1077.47 1077.47 0.11
19021.bmp	value bound runtime	4515.08 4515.08 0.90	4515.08 4515.08 1.08
196073.bmp	value bound runtime	545.47 545.47 0.07	545.47 545.47 0.05
197017.bmp	value bound runtime	2798.77 2798.77 0.12	2798.77 2798.77 0.08
208001.bmp	value bound runtime	6272.68 6272.68 22.48	6272.68 6272.68 12.58
210088.bmp	value bound runtime	1895.44 1895.44 0.07	1895.44 1895.44 0.10
21077.bmp	value bound runtime	2946.71 2946.71 0.82	2946.71 2946.71 0.40
216081.bmp	value bound runtime	4158.73 4158.73 0.32	4158.73 4158.73 0.21
219090.bmp	value bound runtime	2501.27 2501.27 0.10	2501.27 2501.27 0.07
220075.bmp	value bound runtime	3115.95 3115.95 0.07	3115.95 3115.95 0.11
223061.bmp	value bound runtime	6576.83 6576.83 12.29	6576.83 6576.83 8.20
227092.bmp	value bound runtime	1998.46 1998.46 0.56	1998.46 1998.46 0.64
229036.bmp	value bound runtime	6125.73 6125.73 0.74	6125.73 6125.73 1.09
236037.bmp	value bound runtime	9060.84 9060.84 4.14	9060.84 9060.84 7.68
24077.bmp	value bound runtime	4761.98 4761.98 0.73	4761.98 4761.98 0.62
241004.bmp	value bound runtime	1057.14 1057.14 0.06	1057.14 1057.14 0.04

image-seg		MCA	MCA-fdo
241048.bmp	value bound runtime	4730.95 4730.95 1.35	4730.95 4730.95 0.91
253027.bmp	value bound runtime	6606.62 6606.62 1.50	6606.62 6606.62 2.53
253055.bmp	value bound runtime	1502.16 1502.16 0.07	1502.16 1502.16 0.07
260058.bmp	value bound runtime	1084.26 1084.26 0.02	1084.26 1084.26 0.02
271035.bmp	value bound runtime	3621.00 3621.00 0.75	3621.00 3621.00 0.69
285079.bmp	value bound runtime	5610.12 5610.12 2.07	5610.12 5610.12 1.36
291000.bmp	value bound runtime	10208.87 10208.87 4.74	10208.87 10208.87 6.11
295087.bmp	value bound runtime	4290.54 4290.54 1.51	4290.54 4290.54 0.76
296007.bmp	value bound runtime	2293.13 2293.13 0.15	2293.13 2293.13 0.14
296059.bmp	value bound runtime	2044.71 2044.71 0.32	2044.71 2044.71 0.27
299086.bmp	value bound runtime	1557.24 1557.24 0.06	1557.24 1557.24 0.06
300091.bmp	value bound runtime	1495.10 1495.10 0.21	1495.10 1495.10 0.15
302008.bmp	value bound runtime	2543.23 2543.23 0.13	2543.23 2543.23 0.10
304034.bmp	value bound runtime	7835.47 7835.47 5.74	7835.47 7835.47 4.96
304074.bmp	value bound runtime	3891.88 3891.88 0.39	3891.88 3891.88 0.48
306005.bmp	value bound runtime	4290.25 4290.25 1.58	4290.25 4290.25 1.09
3096.bmp	value bound runtime	396.90 396.90 0.01	396.90 396.90 0.01
33039.bmp	value bound runtime	8069.67 8069.67 6.50	8069.67 8069.67 5.72
351093.bmp	value bound runtime	6105.28 6105.28 3.42	6105.28 6105.28 2.53
361010.bmp	value bound runtime	3361.02 3361.02 0.23	3361.02 3361.02 0.19
37073.bmp	value bound runtime	1975.00 1975.00 0.08	1975.00 1975.00 0.06
376043.bmp	value bound runtime	5863.83 5863.83 2.02	5863.83 5863.83 1.52
38082.bmp	value bound runtime	8060.34 8060.34 5.73	8060.34 8060.34 5.50
38092.bmp	value bound runtime	4071.86 4071.86 0.26	4071.86 4071.86 0.35
385039.bmp	value bound runtime	3745.53 3745.53 0.20	3745.53 3745.53 0.26

image-seg		MCA	MCA-fdo
41033.bmp	value bound runtime	1994.24 1994.24 0.11	1994.24 1994.24 0.13
41069.bmp	value bound runtime	5110.96 5110.96 18.43	5110.96 5110.96 10.85
42012.bmp	value bound runtime	3248.70 3248.70 3.17	3248.70 3248.70 1.79
42049.bmp	value bound runtime	1069.22 1069.22 0.04	1069.22 1069.22 0.11
43074.bmp	value bound runtime	2332.83 2332.83 0.42	2332.83 2332.83 0.30
45096.bmp	value bound runtime	977.78 977.78 0.04	977.78 977.78 0.06
54082.bmp	value bound runtime	3796.36 3796.36 0.89	3796.36 3796.36 1.26
55073.bmp	value bound runtime	7835.96 7835.96 3.56	7835.96 7835.96 3.92
58060.bmp	value bound runtime	9881.86 9881.86 4.43	9881.86 9881.86 3.51
62096.bmp	value bound runtime	3419.40 3419.40 0.38	3419.40 3419.40 0.40
65033.bmp	value bound runtime	7364.57 7364.57 1.69	7364.57 7364.57 1.56
66053.bmp	value bound runtime	4427.25 4427.25 0.69	4427.25 4427.25 0.91
69015.bmp	value bound runtime	4024.45 4024.45 1.44	4024.45 4024.45 0.82
69020.bmp	value bound runtime	5179.29 5179.29 1.76	5179.29 5179.29 1.55
69040.bmp	value bound runtime	7974.58 7974.58 10.39	7974.58 7974.58 7.90
76053.bmp	value bound runtime	4514.99 4514.99 3.11	4514.99 4514.99 1.35
78004.bmp	value bound runtime	3254.61 3254.61 0.28	3254.61 3254.61 0.22
8023.bmp	value bound runtime	4023.38 4023.38 6.04	4023.38 4023.38 4.75
85048.bmp	value bound runtime	5851.38 5851.38 0.74	5851.38 5851.38 0.67
86000.bmp	value bound runtime	4633.86 4633.86 0.45	4633.86 4633.86 0.63
86016.bmp	value bound runtime	6618.85 6618.85 0.47	6618.85 6618.85 0.38
86068.bmp	value bound runtime	5198.87 5198.87 2.16	5198.87 5198.87 2.05
87046.bmp	value bound runtime	4315.53 4315.53 1.16	4315.53 4315.53 0.89
89072.bmp	value bound runtime	3933.75 3933.75 0.35	3933.75 3933.75 0.21
97033.bmp	value bound runtime	4320.69 4320.69 0.88	4320.69 4320.69 0.33
mean energy		4442.64	4442.64
mean bound		4442.64	4442.64

image-seg		MCA	MCA-fdo
mean runtime		2.78	2.20
best value		100.00	100.00
best bound		100.00	100.00
verified opt		100.00	100.00

4.17. 3D Neuron Segmentation (seg-3d)

Table 47: seg-3d

seg-3d		MCA	MCA-6h	MCA-fdo
mc3d1-model	value	48140.05	48140.05	48140.05
	bound	48140.05	48140.05	48140.05
	runtime	11.86	10.85	10.91
mc3d2-model	value	781874.19	778931.96	780800.36
	bound	778891.02	778931.96	778866.07
	runtime	4023.81	10102.85	3715.07
mean energy		414470.20	413536.00	414470.20
mean bound		413515.53	413536.00	413503.06
mean runtime		2017.83	5056.85	1862.99
best value		50.00	100.00	50.00
best bound		50.00	100.00	50.00
verified opt		50.00	100.00	50.00

4.18. Non-Rigid Point Matching (matching)

Table 48: matching

matching		BPS	BRAOBB	ogm-LBP-LF2	FUSION	ogm-ASTAR	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A
matching0	value	50.66	19.36	28.61	113000000000.00	19.36	111.33	91.23	91.25
	bound	-Inf	19.36	-Inf	-Inf	19.36	11.15	11.37	9.17
	runtime	0.14	2.33	0.30	0.02	5.94	3.57	3.69	3.47
matching1	value	23.58	23.58	31.24	171000000000.00	23.58	10000000021.89	10000000021.89	10000000130.60
	bound	-Inf	23.58	-Inf	-Inf	23.58	17.48	19.63	11.82
	runtime	0.20	3.70	0.60	0.03	2.21	6.61	6.75	6.39
matching2	value	59.82	26.08	59.42	190000000000.00	26.08	20000000043.93	10000000055.06	20000000094.35
	bound	-Inf	26.08	-Inf	-Inf	26.08	19.87	22.09	8.06
	runtime	0.23	5.42	0.79	0.03	5.17	8.03	8.24	7.89
matching3	value	26.98	15.86	25.60	112000000000.00	15.86	10000000042.82	10000000055.67	81.55
	bound	-Inf	15.86	-Inf	-Inf	15.86	9.25	10.55	8.03
	runtime	0.13	2.55	0.27	0.02	21.81	3.54	3.66	3.48
mean energy		33.97	21.22	36.22	146500000000.00	21.22	10000000054.99	7500000055.96	7500000099.44
mean bound		-Inf	21.22	-Inf	-Inf	21.22	14.44	15.91	9.27
mean runtime		0.17	3.50	0.49	0.02	8.78	5.44	5.58	5.31
best value		25.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00
best bound		0.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00
verified opt		0.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00

Table 49: matching

matching		ogm-ILP	ogm-ILP-6h	ogm-LBP	ogm-LP-LP	ogm-TRBP	TRWS	TRWS-LF2
matching0	value	26.62	19.36	35.89	150000000041.25	36.87	61.05	34.15
	bound	16.23	19.36	-Inf	11.56	-Inf	11.03	11.03
	runtime	3588.03	5211.65	0.01	15.66	0.01	0.13	0.47
matching1	value	23.58	23.58	110000000077.16	70000000031.36	110000000079.65	102.20	37.05
	bound	23.58	23.58	-Inf	20.14	-Inf	18.52	18.52
	runtime	241.73	244.11	0.01	44.41	0.01	0.19	1.17
matching2	value	26.08	26.08	110000000096.00	20000000026.59	110000000096.00	51.59	36.42
	bound	26.08	26.08	-Inf	22.99	-Inf	21.19	21.19
	runtime	531.84	533.42	0.01	55.68	0.01	0.23	0.99
matching3	value	15.86	15.86	31.69	170000000047.82	36.94	42.32	21.90
	bound	15.86	15.86	-Inf	10.72	-Inf	10.14	10.14
	runtime	786.65	788.20	0.01	16.94	0.01	0.12	0.40
mean energy		23.04	21.22	52.19	102500000036.76	69.73	41.86	32.38
mean bound		20.44	21.22	-Inf	16.35	-Inf	15.22	15.22
mean runtime		1287.07	1694.34	0.01	33.17	0.01	0.17	0.76
best value		75.00	100.00	0.00	0.00	0.00	0.00	0.00
best bound		75.00	100.00	0.00	0.00	0.00	0.00	0.00
verified opt		75.00	100.00	0.00	0.00	0.00	0.00	0.00

4.19. Cell Tracking (cell-tracking)

Table 50: cell-tracking

cell-tracking		ogm-LBP-LF2	FUSION	ogm-BUNDLE-A	ogm-BUNDLE-H	ogm-SUBGRAD-A	ogm-ILP	ogm-LBP	ogm-LP-LP
ogm_model	value	7515575.61	34335812.82	107565308.03	107553778.57	4115740332.16	7514421.21	407520058.41	7516359.61
	bound	-Inf	-Inf	7501881.32	7501875.98	6899501.32	7514421.21	-Inf	7513851.52
	runtime	308.83	11.12	1055.07	1068.11	1106.16	32.77	30.47	3.26
mean energy		7515575.61	34335812.82	107565308.03	107553778.57	4115740332.16	7514421.21	9660739.15	7516359.61
mean bound		-Inf	-Inf	7501881.32	7501875.98	6899501.32	7514421.21	-Inf	7513851.52
mean runtime		308.83	11.12	1055.07	1068.11	1106.16	32.77	30.47	3.26
best value		0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
best bound		0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
verified opt		0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00

Table 51: cell-tracking

cell-tracking		ogm-TRBP
ogm_model	value	2307507383.37
	bound	-Inf
	runtime	31.80
mean energy		9644913.07
mean bound		-Inf
mean runtime		31.80
best value		0.00
best bound		0.00
verified opt		0.00

5. Evaluation per Instance (Plots)

5.1. Stereo Matching (mrf-stereo)

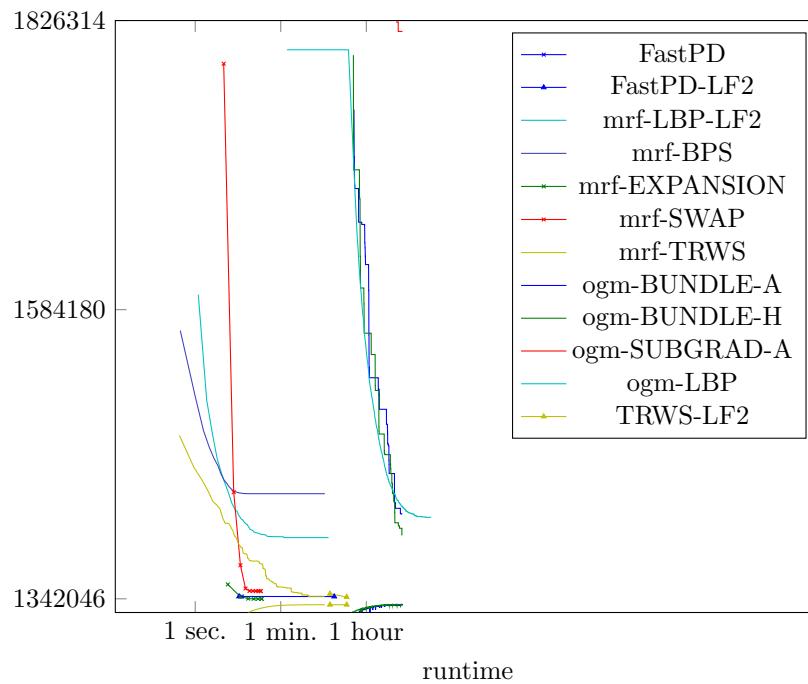


Figure 14: Runtime results for the instance *ted-gm* of the *mrf-stereo* models. Plots show best value of integer solution and (if provided) best lower bound.

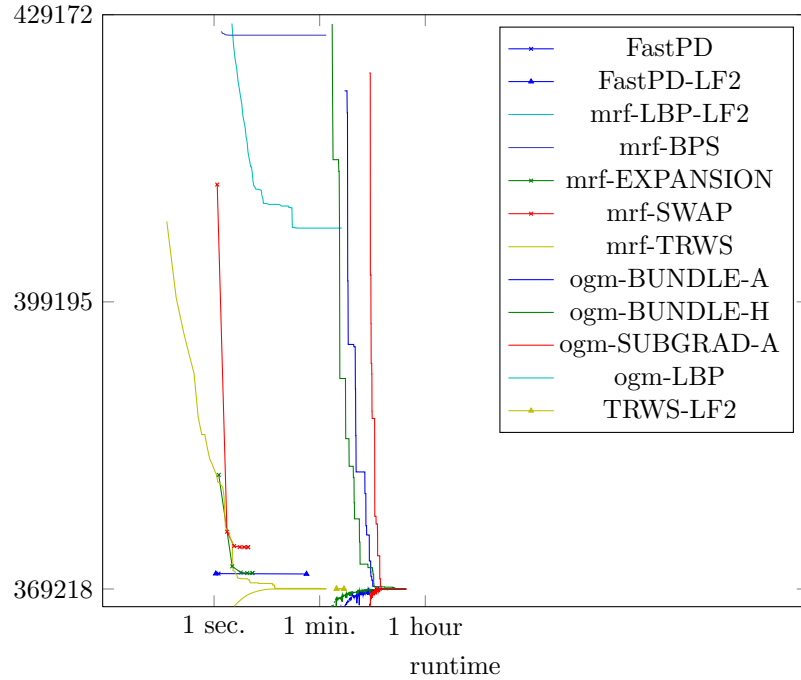


Figure 15: Runtime results for the instance *tsu-gm* of the *mrf-stereo* models. Plots show best value of integer solution and (if provided) best lower bound.

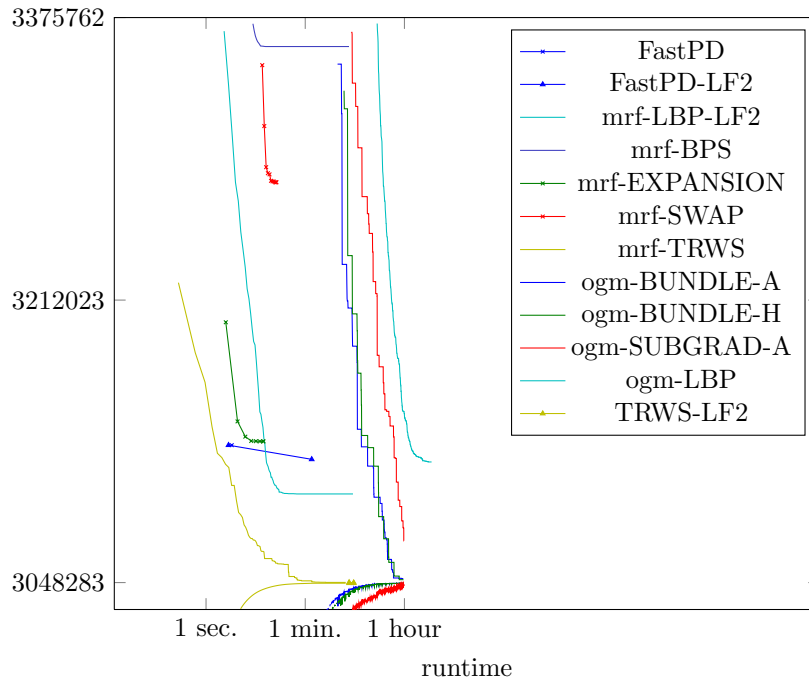


Figure 16: Runtime results for the instance *ven-gm* of the *mrf-stereo* models. Plots show best value of integer solution and (if provided) best lower bound.

5.2. In-Painting (mrf-inpainting)

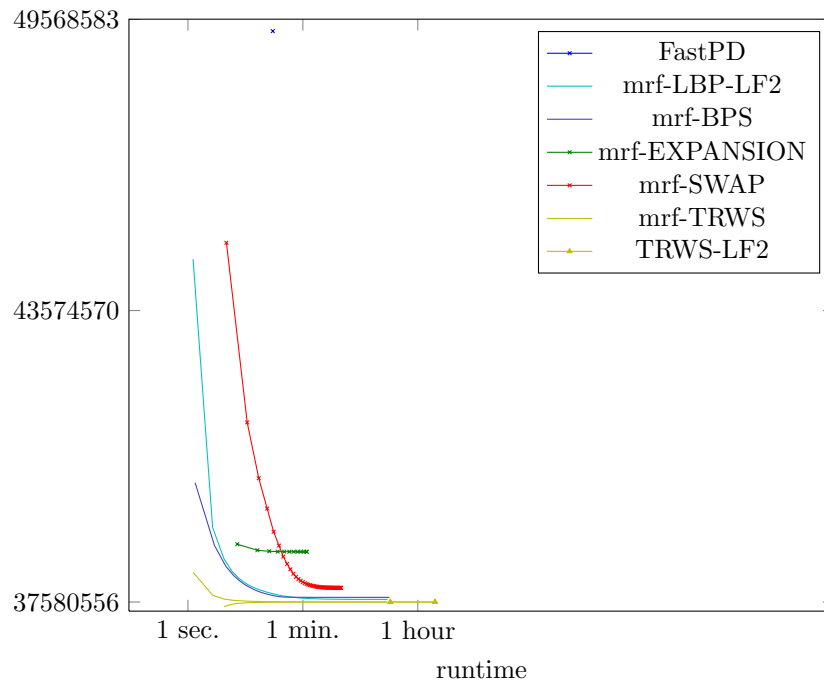


Figure 17: Runtime results for the instance *house-gm* of the *mrf-inpainting* models. Plots show best value of integer solution and (if provided) best lower bound.

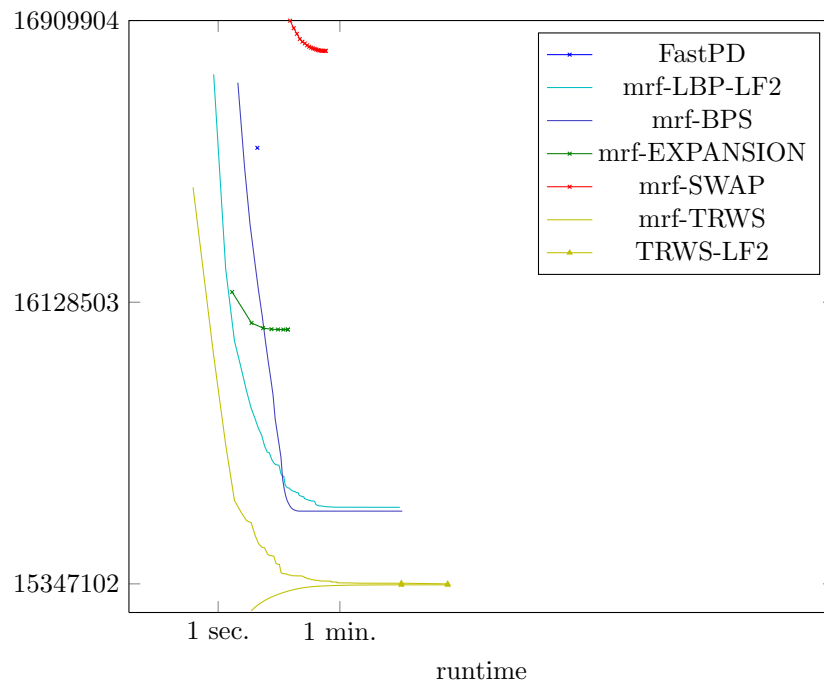


Figure 18: Runtime results for the instance *penguin-gm* of the *mrf-inpainting* models. Plots show best value of integer solution and (if provided) best lower bound.

5.3. Photo-montage (mrf-photomontage)

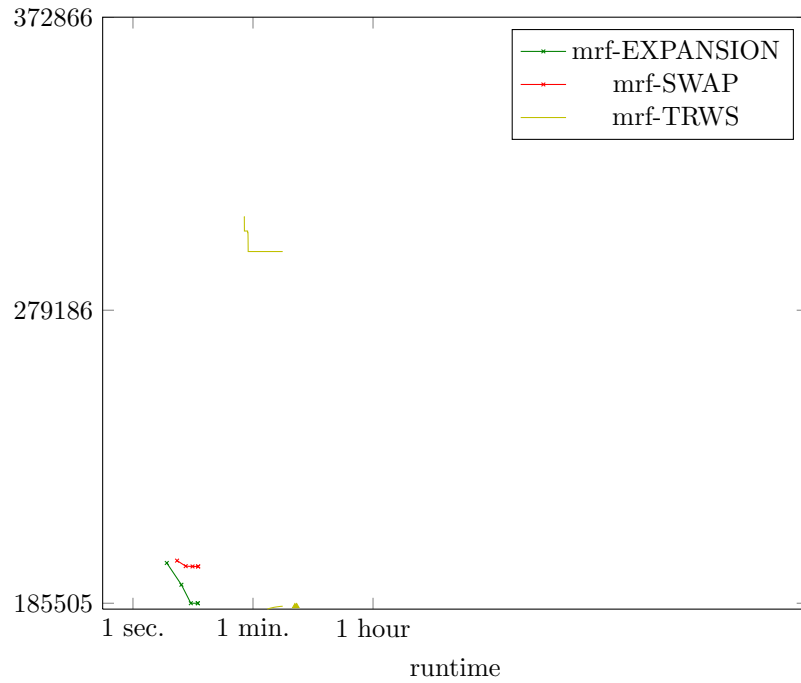


Figure 19: Runtime results for the instance *family-gm* of the *mrf-photomontage* models. Plots show best value of integer solution and (if provided) best lower bound.

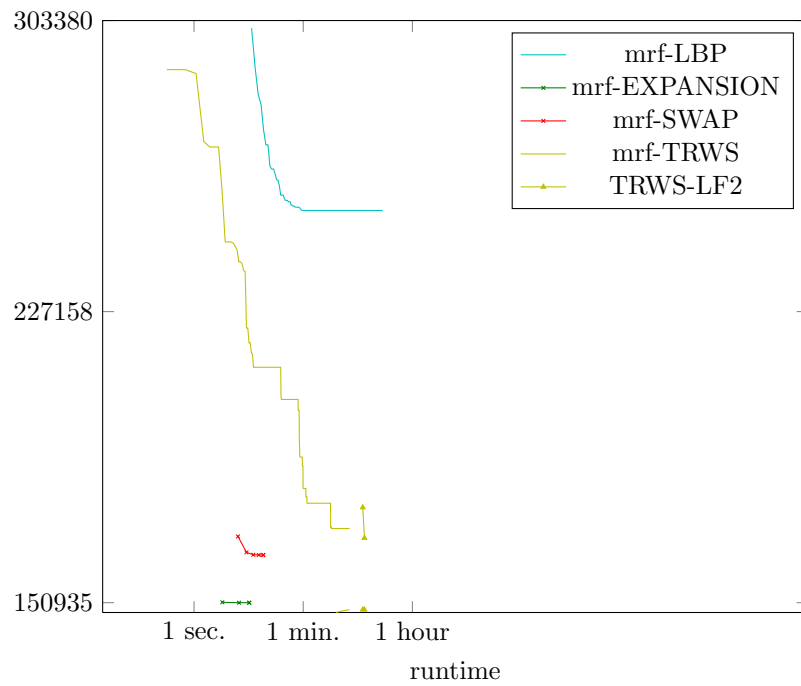


Figure 20: Runtime results for the instance *pano-gm* of the *mrf-photomontage* models. Plots show best value of integer solution and (if provided) best lower bound.

5.4. Color Segmentation (color-seg)

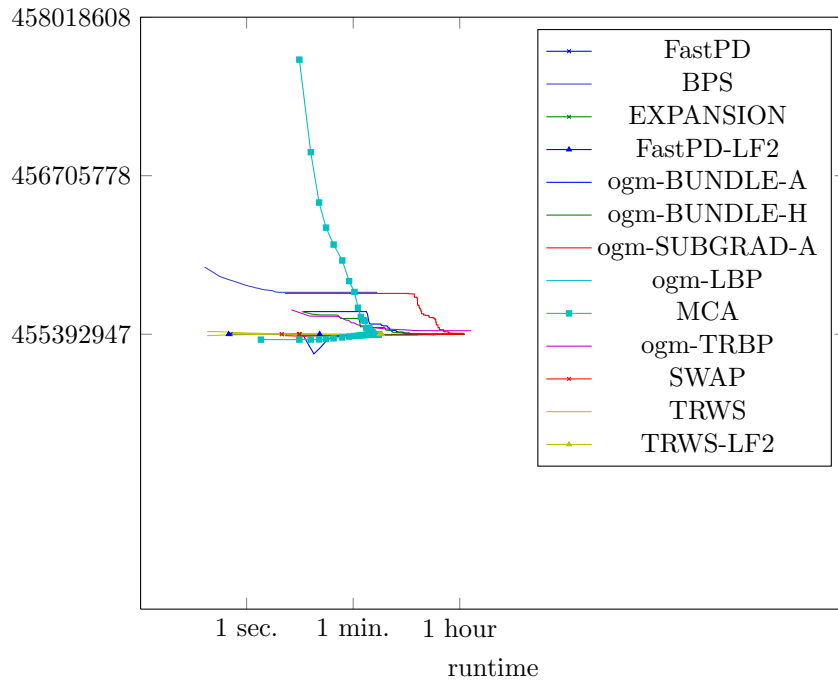


Figure 21: Runtime results for the instance *colseg-cow3* of the *color-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

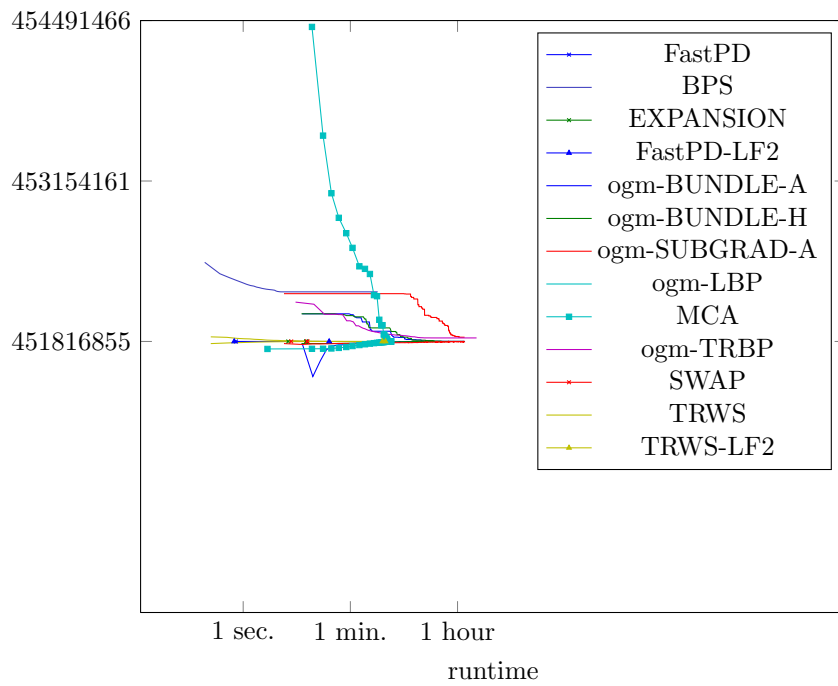


Figure 22: Runtime results for the instance *colseg-cow4* of the *color-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

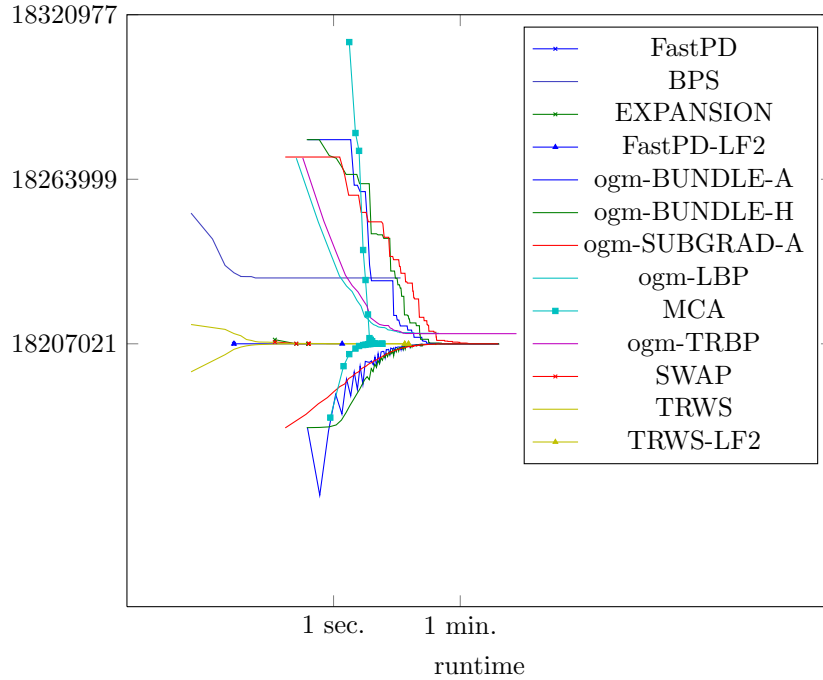


Figure 23: Runtime results for the instance *colseg-garden4* of the *color-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

5.5. Color Segmentation 4 (color-seg-n4)

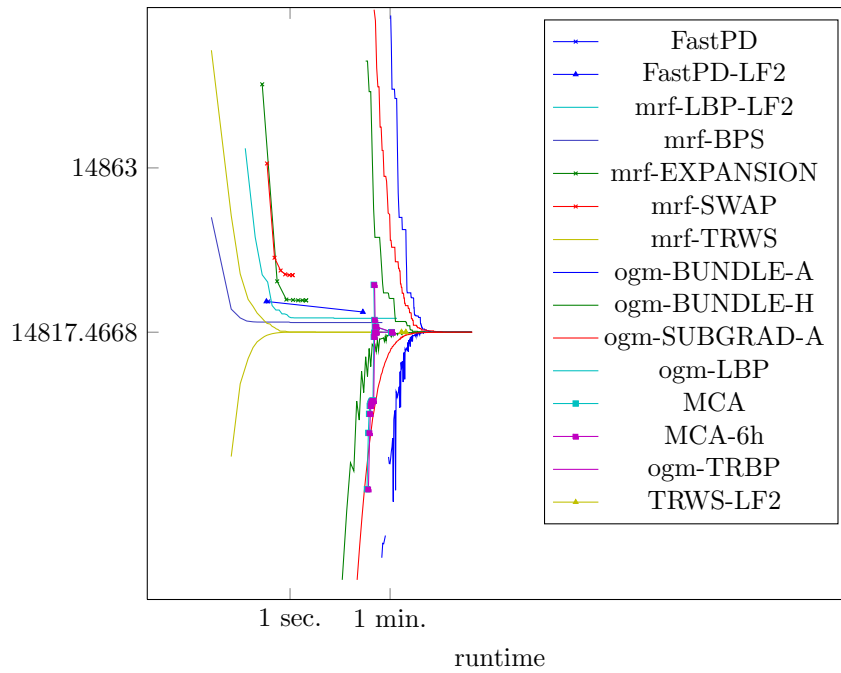


Figure 24: Runtime results for the instance *clownfish-small* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

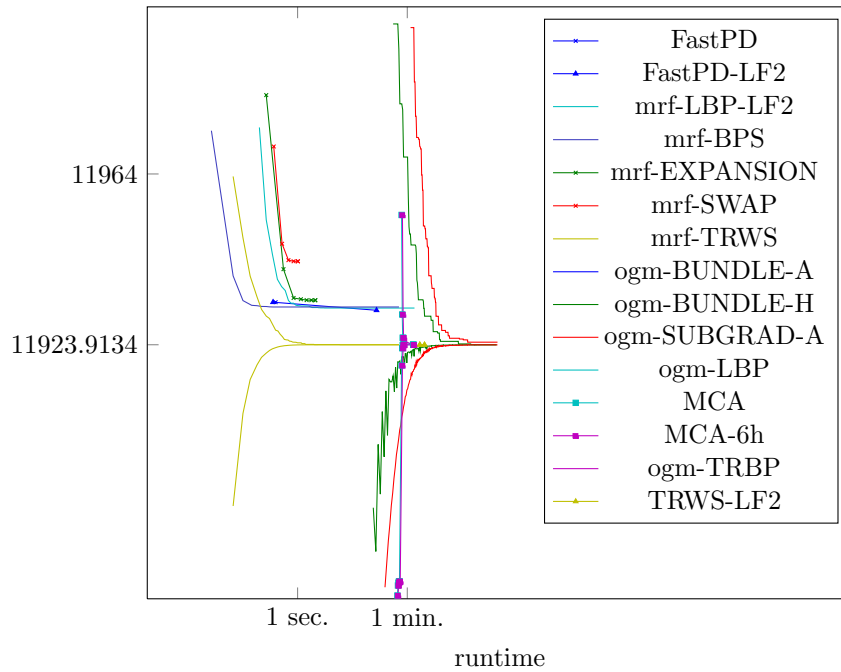


Figure 25: Runtime results for the instance *crops-small* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

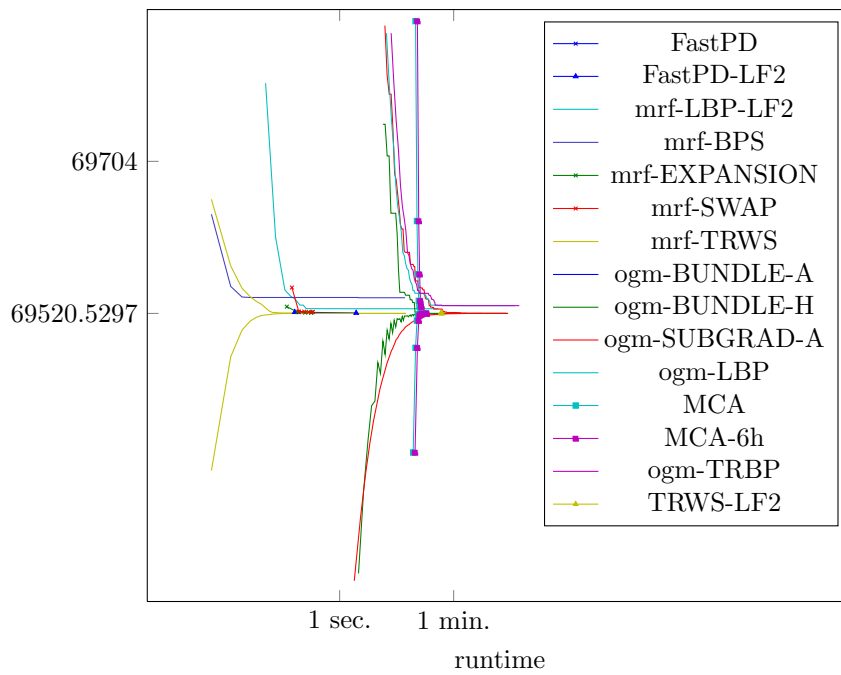


Figure 26: Runtime results for the instance *fourcolors* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

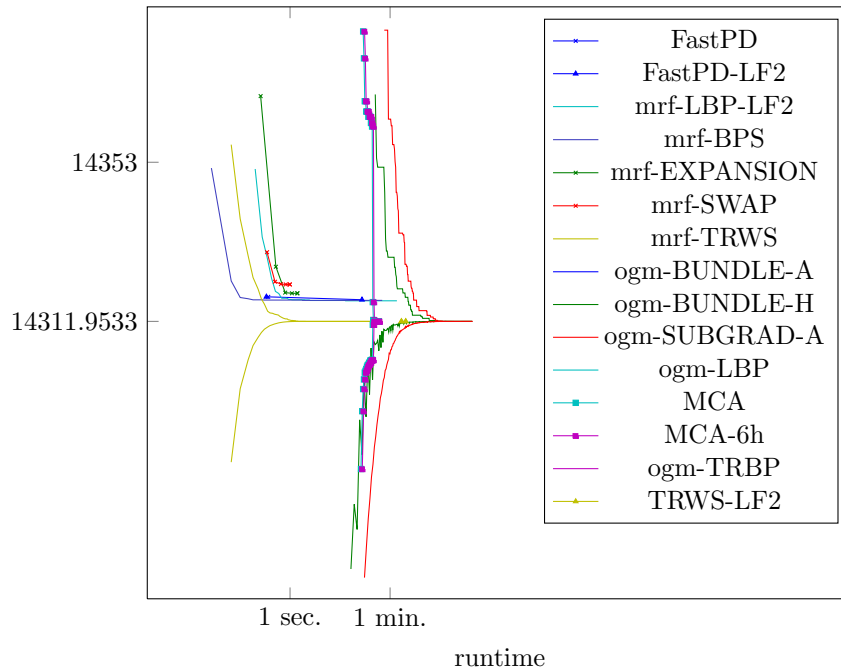


Figure 27: Runtime results for the instance *lake-small* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

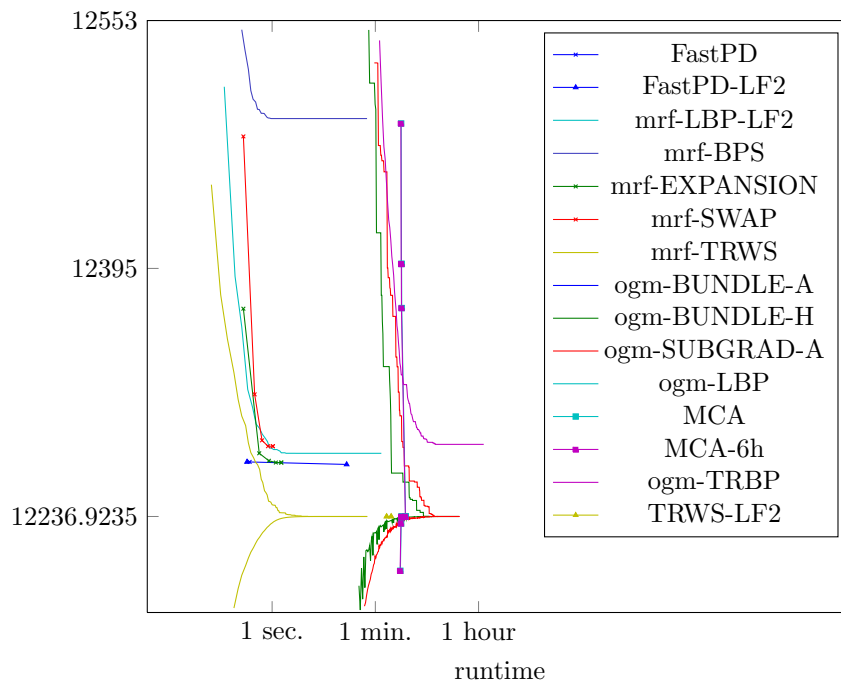


Figure 28: Runtime results for the instance *palm-small* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

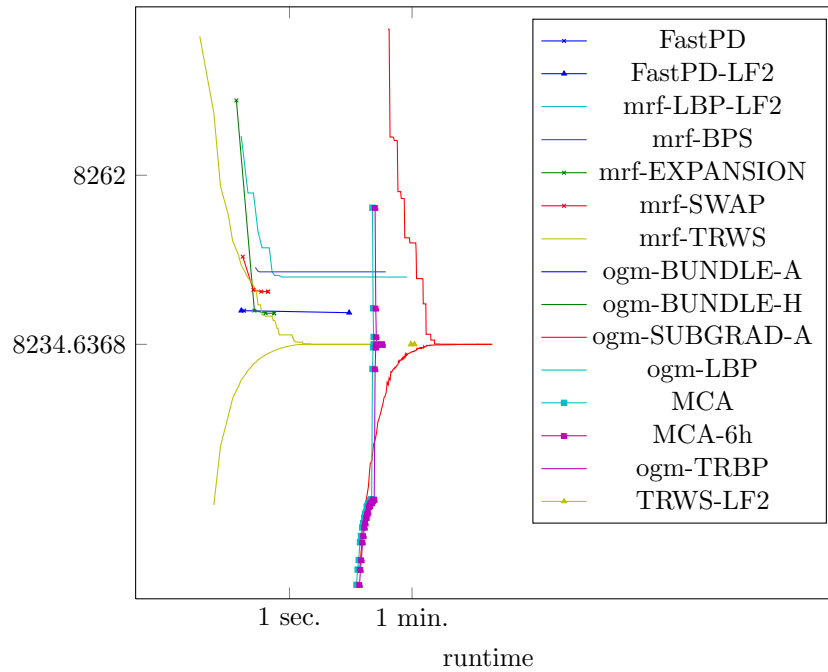


Figure 29: Runtime results for the instance *penguin-small* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

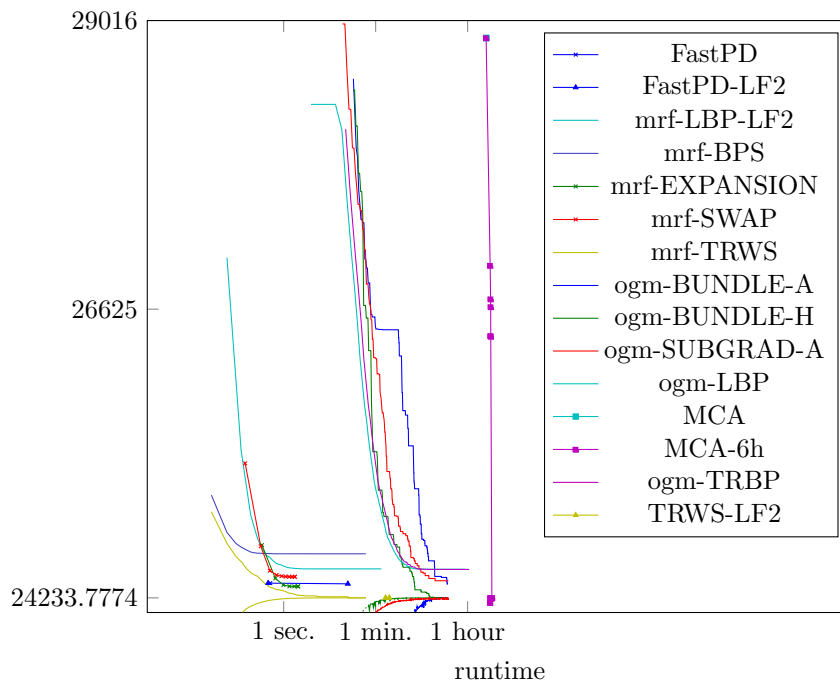


Figure 30: Runtime results for the instance *pfau-small* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

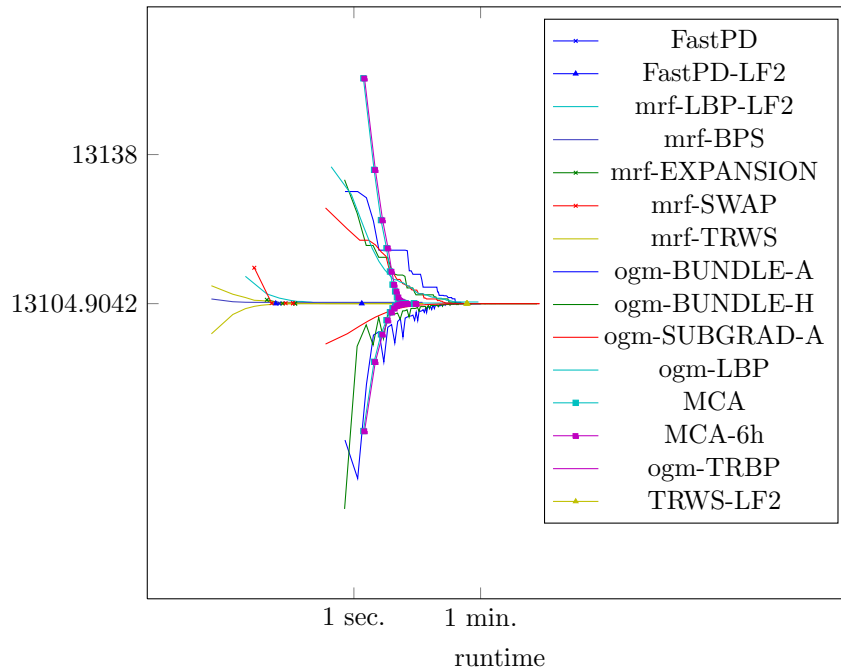


Figure 31: Runtime results for the instance *snail* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

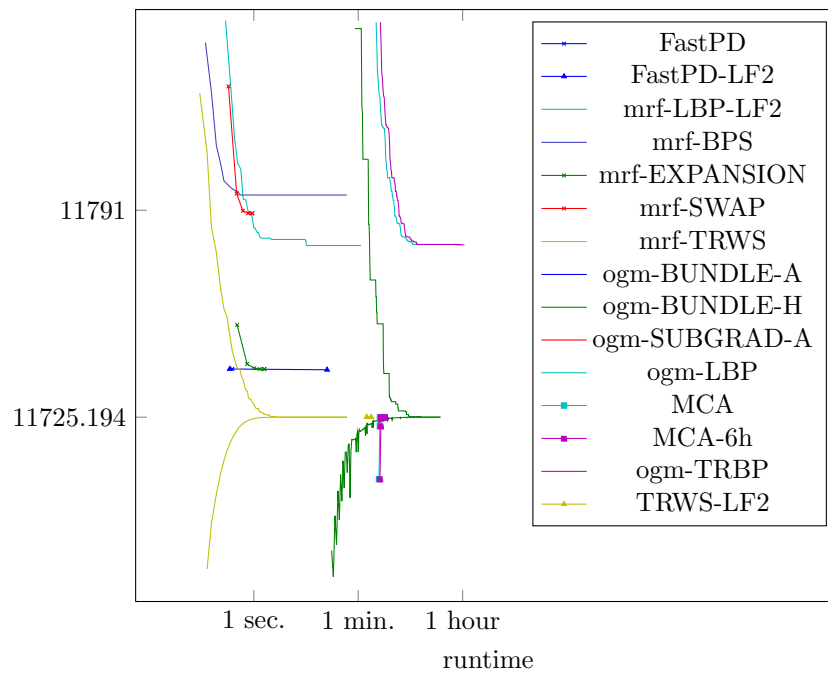


Figure 32: Runtime results for the instance *strawberry-glass-2-small* of the *color-seg-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

5.6. Color Segmentation 8 (col-seg-n8)

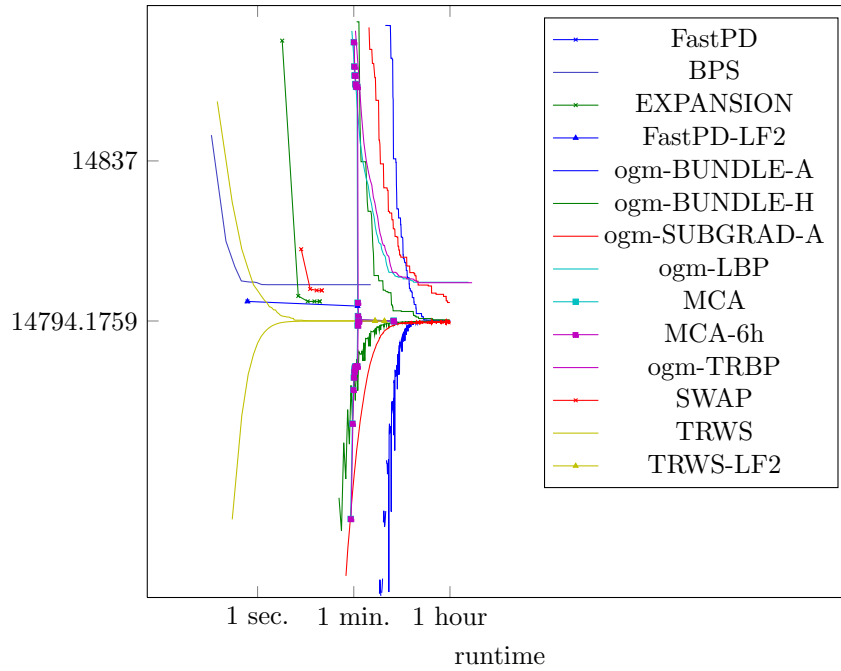


Figure 33: Runtime results for the instance *clownfish-small* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

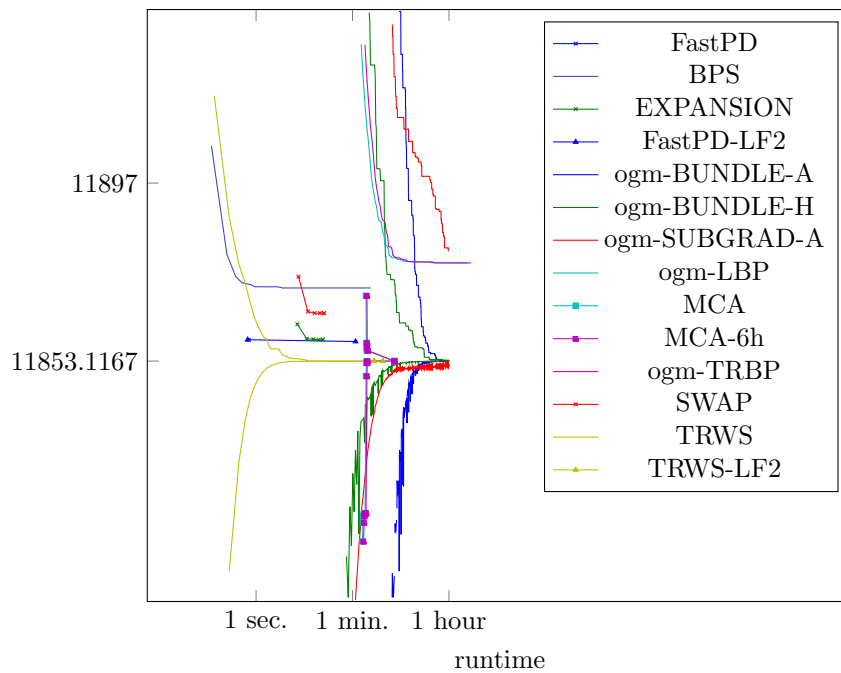


Figure 34: Runtime results for the instance *crops-small* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

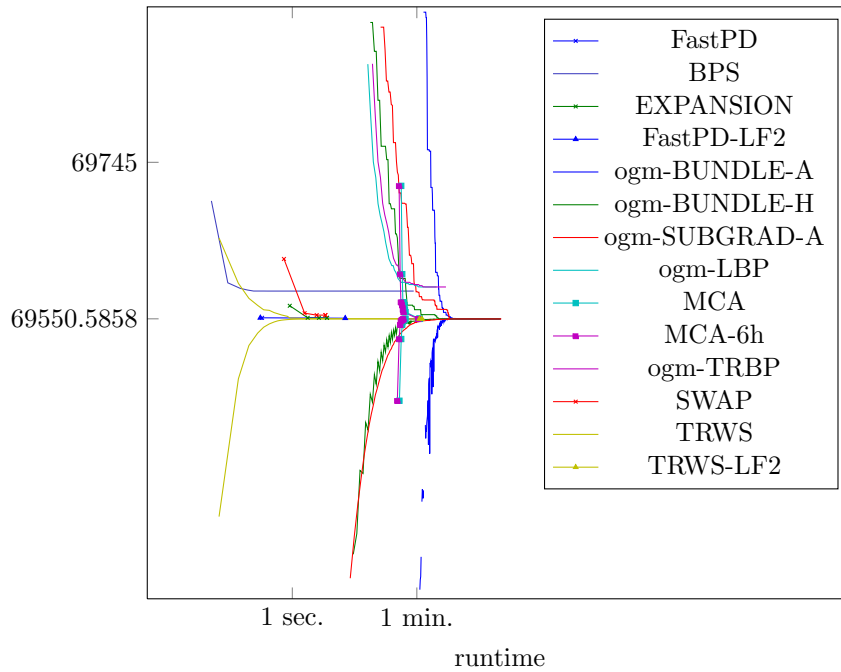


Figure 35: Runtime results for the instance *fourcolors* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

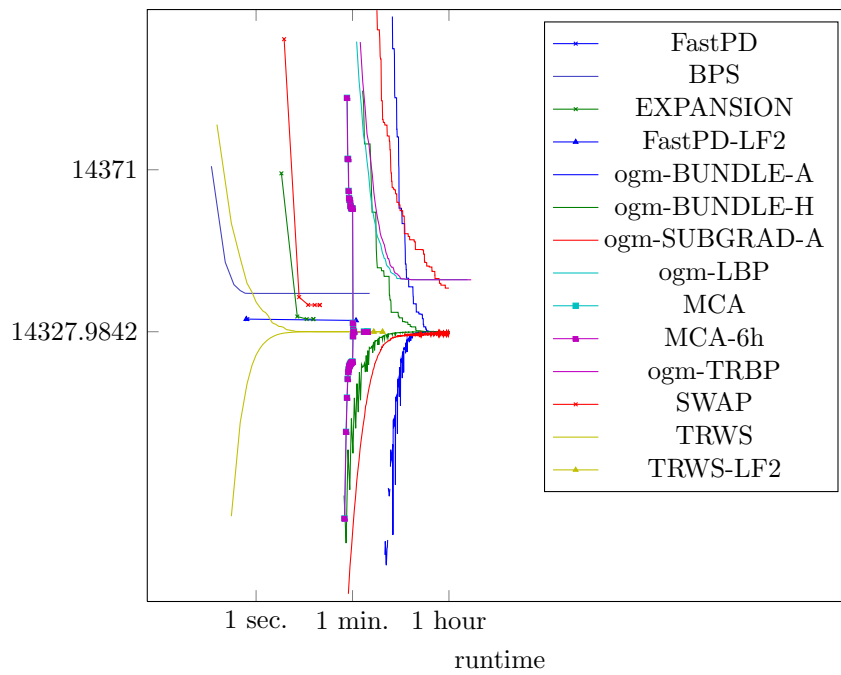


Figure 36: Runtime results for the instance *lake-small* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

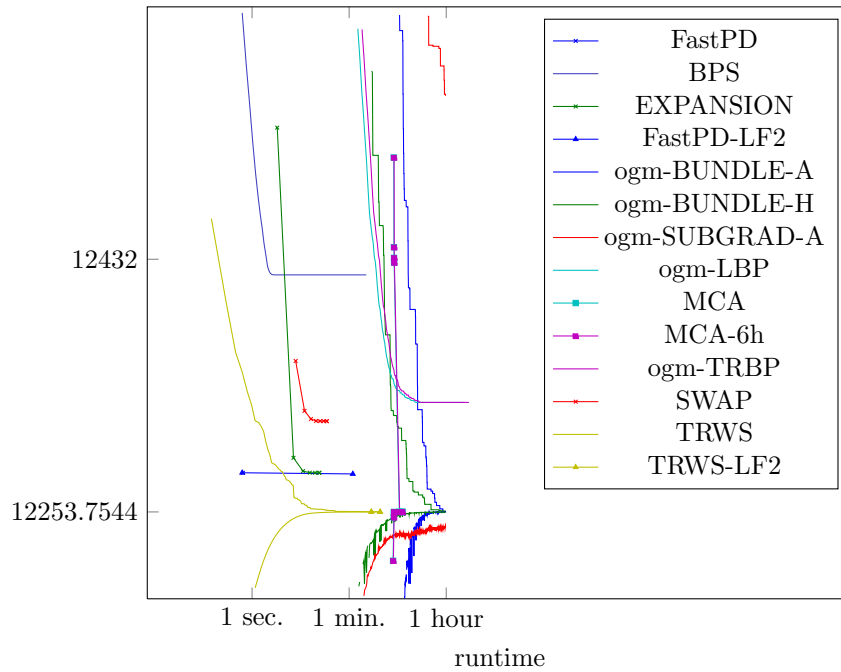


Figure 37: Runtime results for the instance *palm-small* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

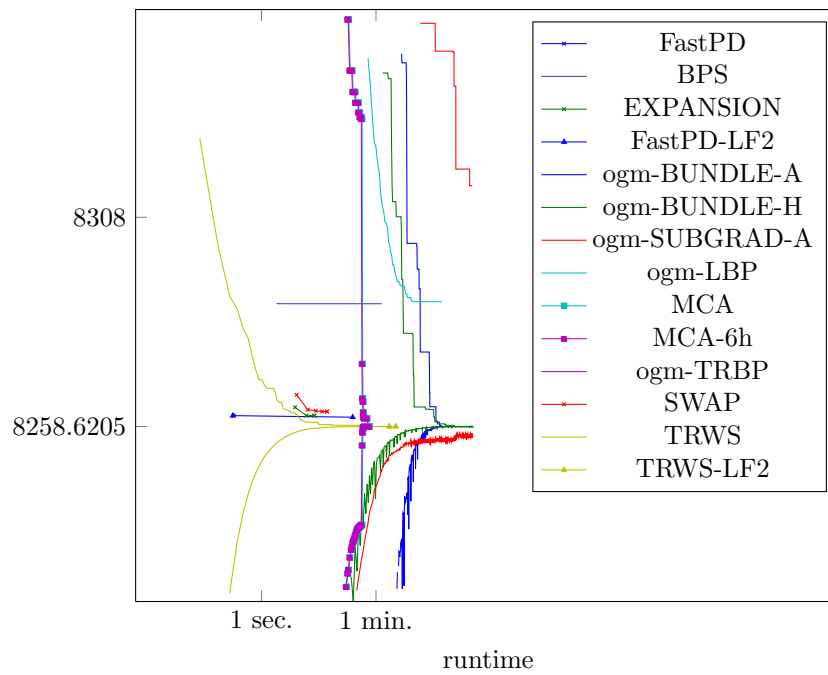


Figure 38: Runtime results for the instance *penguin-small* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

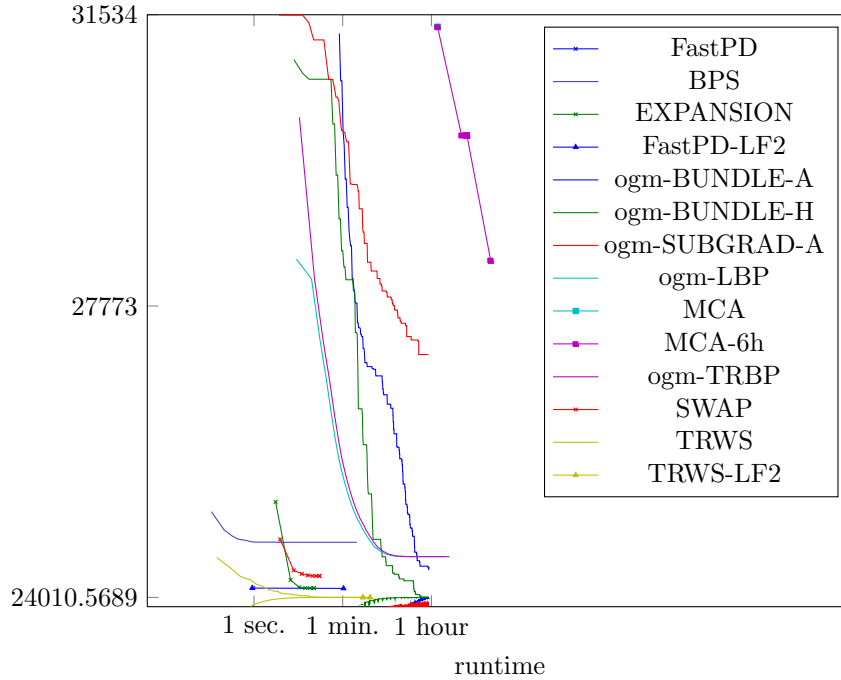


Figure 39: Runtime results for the instance *pfau-small* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

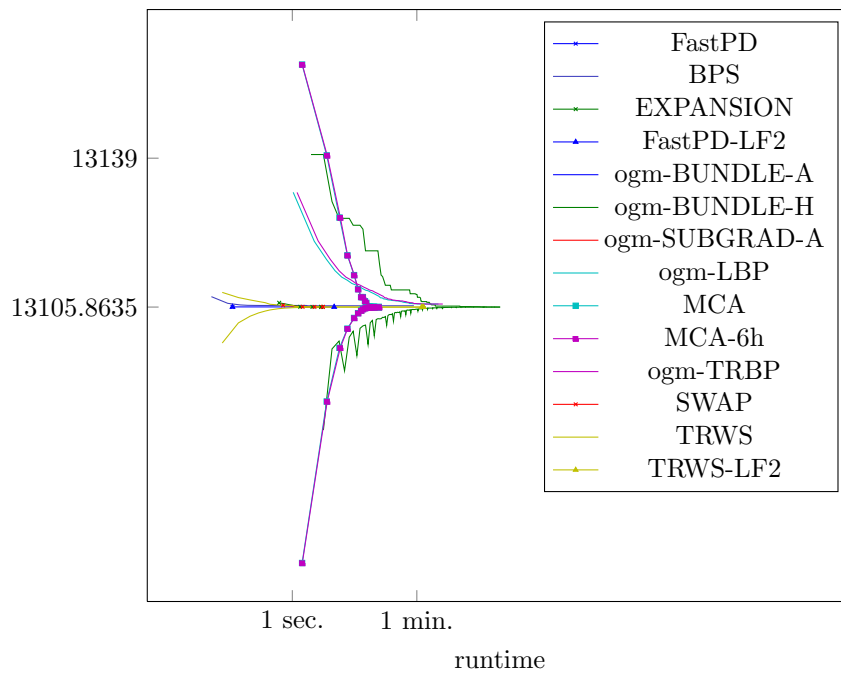


Figure 40: Runtime results for the instance *snail* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

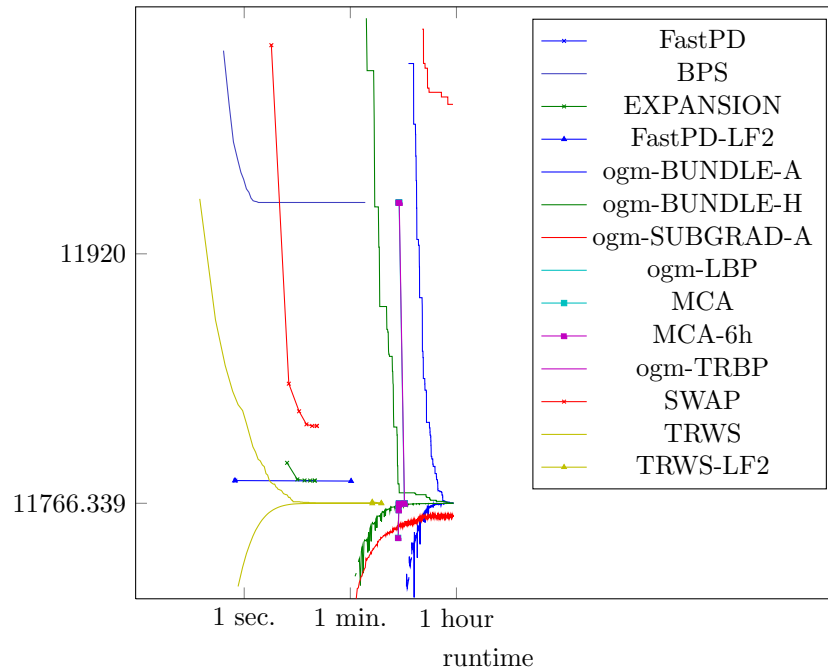


Figure 41: Runtime results for the instance *strawberry-glass-2-small* of the *color-seg-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

5.7. In-Painting 4 (inpainting-n4)

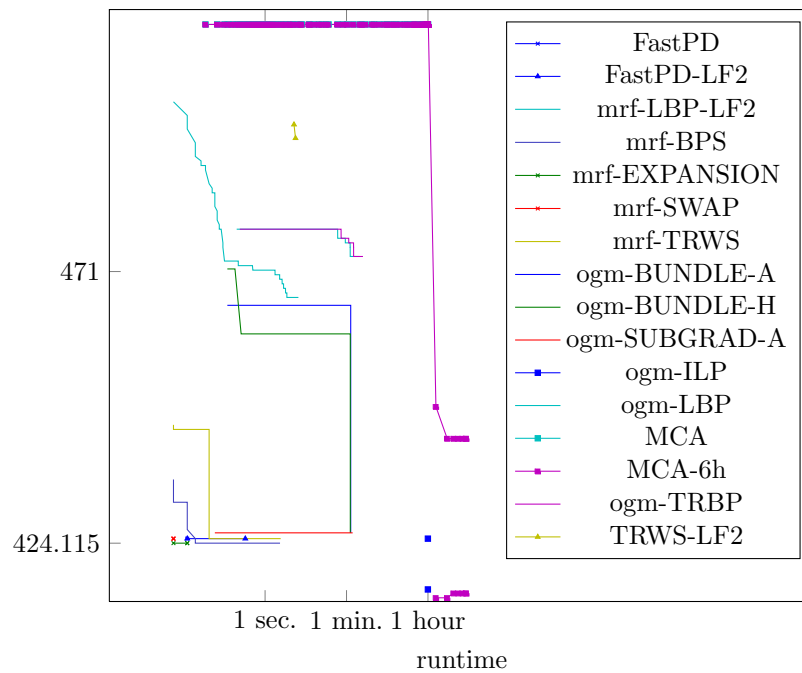


Figure 42: Runtime results for the instance *triplepoint4-plain-ring-inverse* of the *inpainting-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

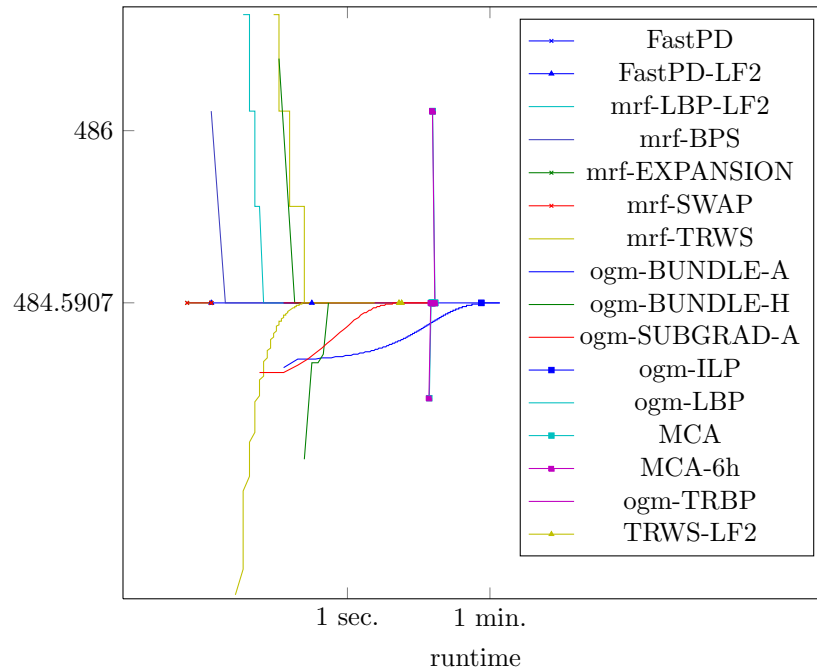


Figure 43: Runtime results for the instance *triplepoint4-plain-ring* of the *inpainting-n4* models. Plots show best value of integer solution and (if provided) best lower bound.

5.8. In-Painting 8 (inpainting-n8)

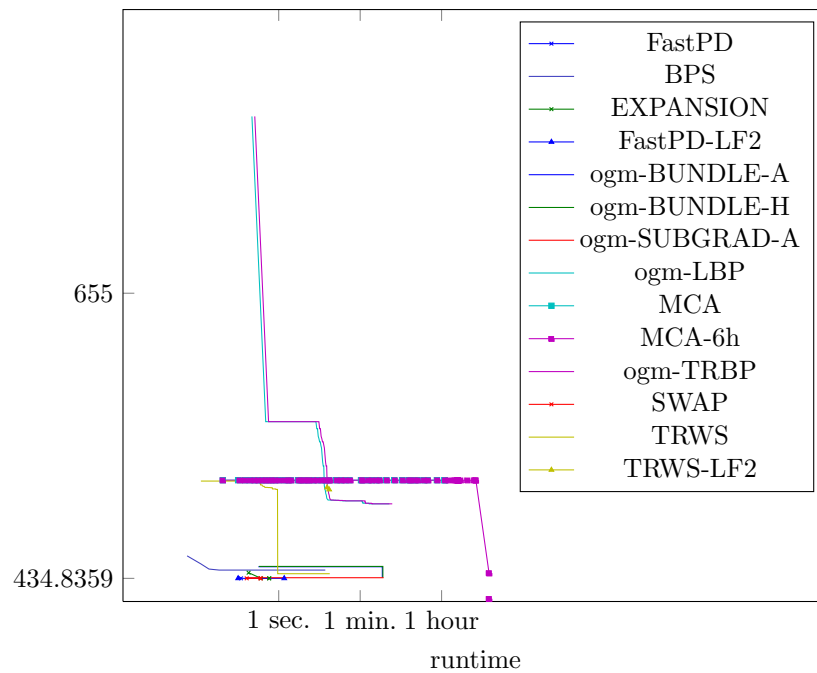


Figure 44: Runtime results for the instance *triplepoint4-plain-ring-inverse* of the *inpainting-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

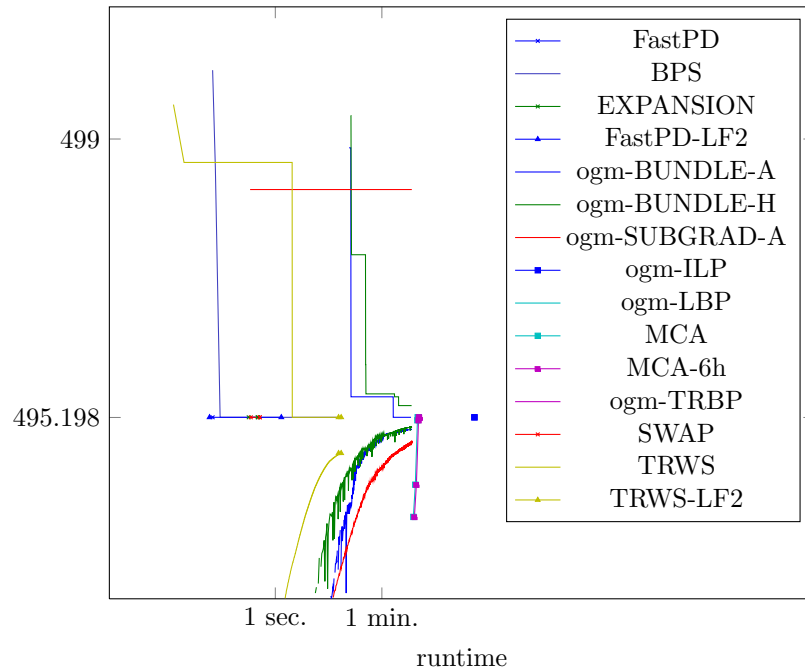


Figure 45: Runtime results for the instance *triplepoint4-plain-ring* of the *inpainting-n8* models. Plots show best value of integer solution and (if provided) best lower bound.

5.9. Object Segmentation (object-seg)

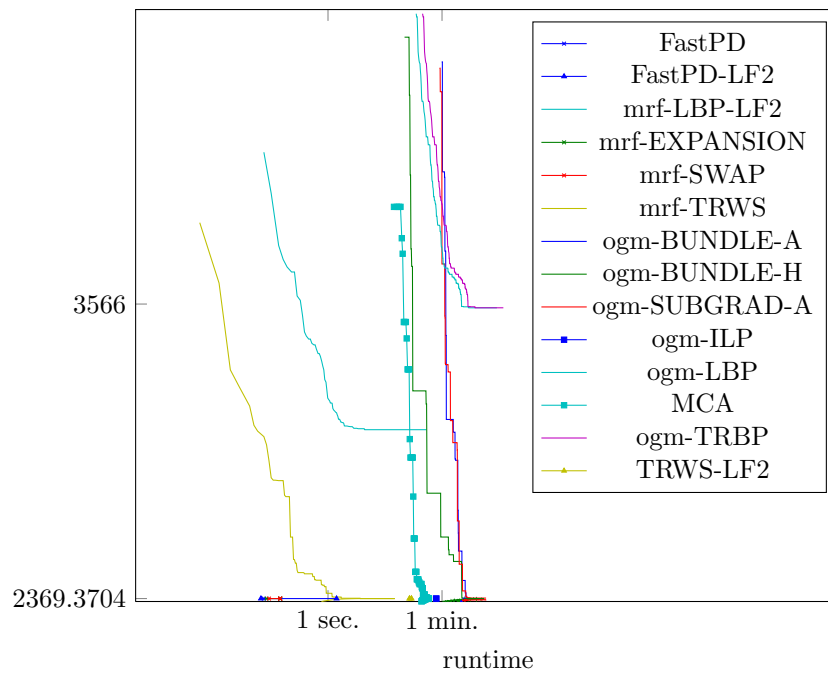


Figure 46: Runtime results for the instance *objseg-349* of the *object-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

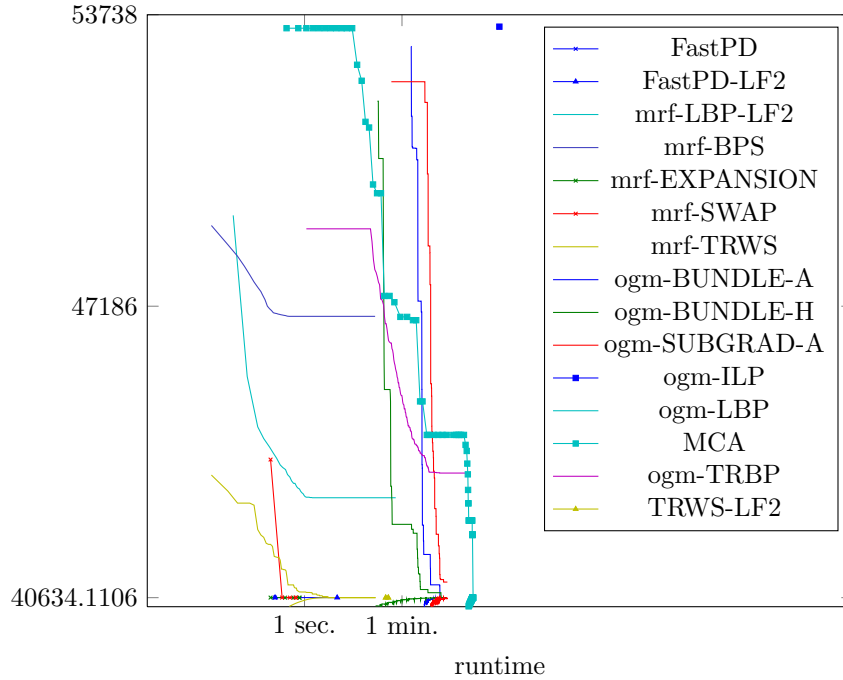


Figure 47: Runtime results for the instance *objseg-353* of the *object-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

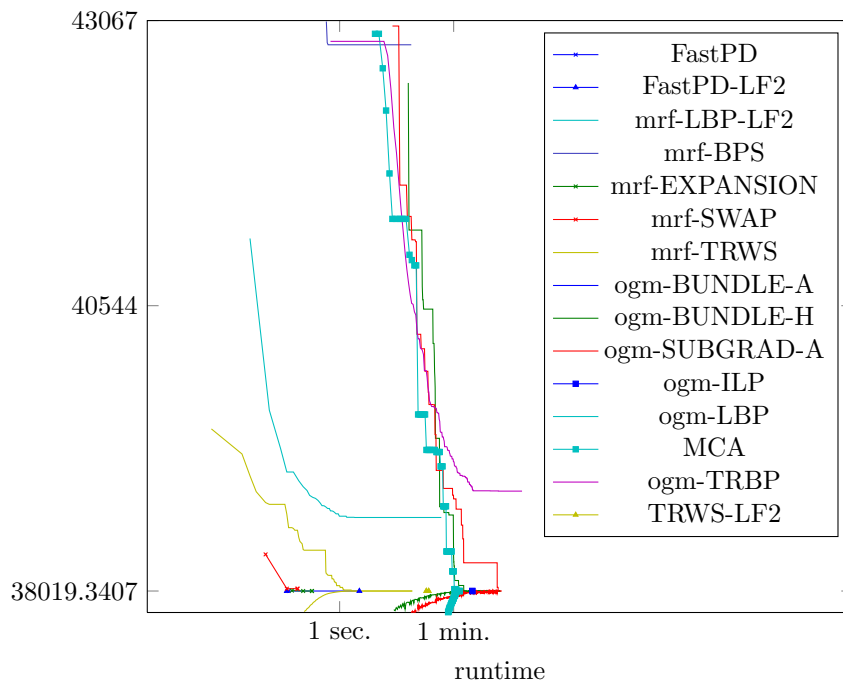


Figure 48: Runtime results for the instance *objseg-358* of the *object-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

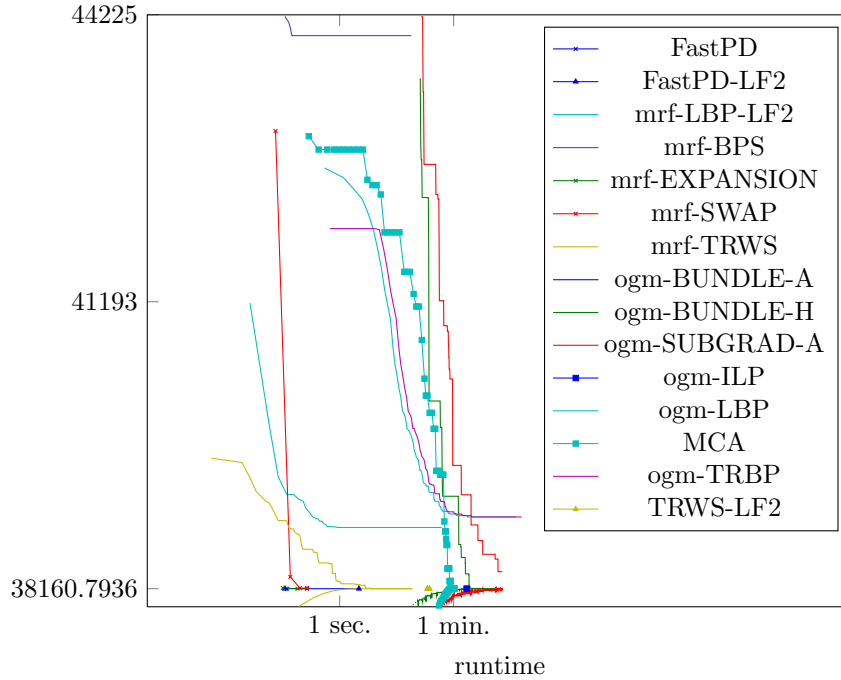


Figure 49: Runtime results for the instance *objseg-416* of the *object-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

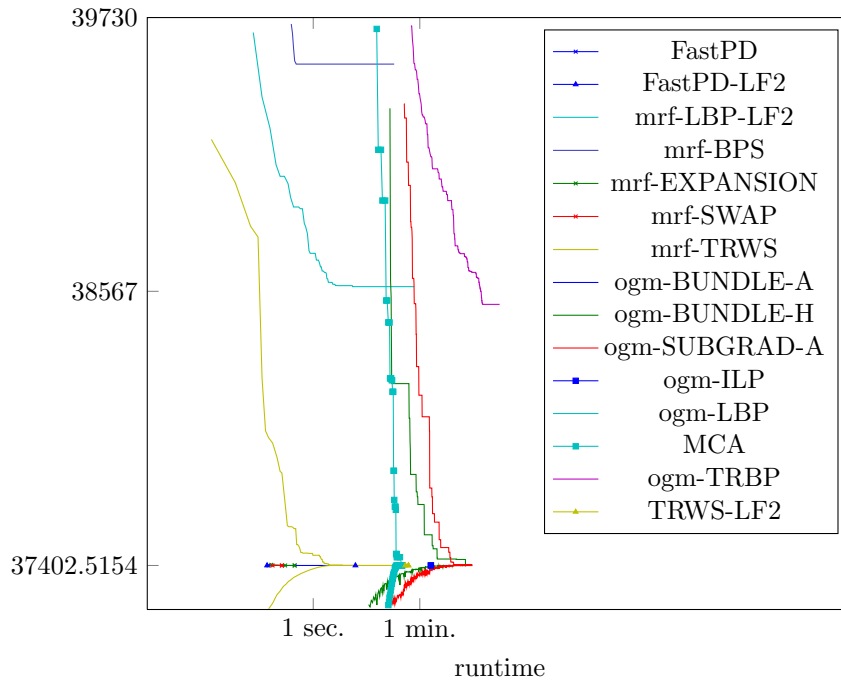


Figure 50: Runtime results for the instance *objseg-552* of the *object-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

5.10. MRI Brain Segmentation (brain)

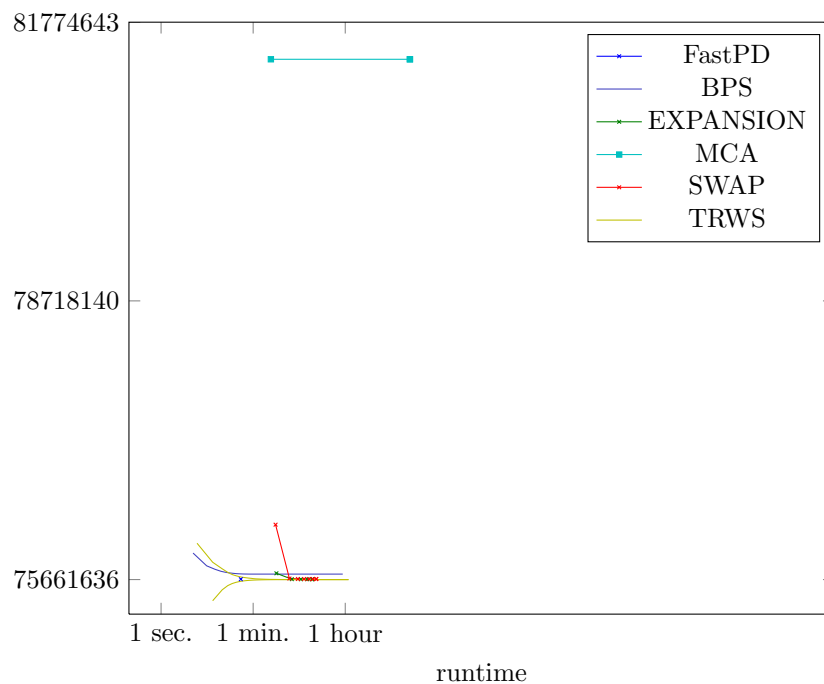


Figure 51: Runtime results for the instance *t1_icbm_normal_1mm_pn3_rf20* of the *brain* models. Plots show best value of integer solution and (if provided) best lower bound.

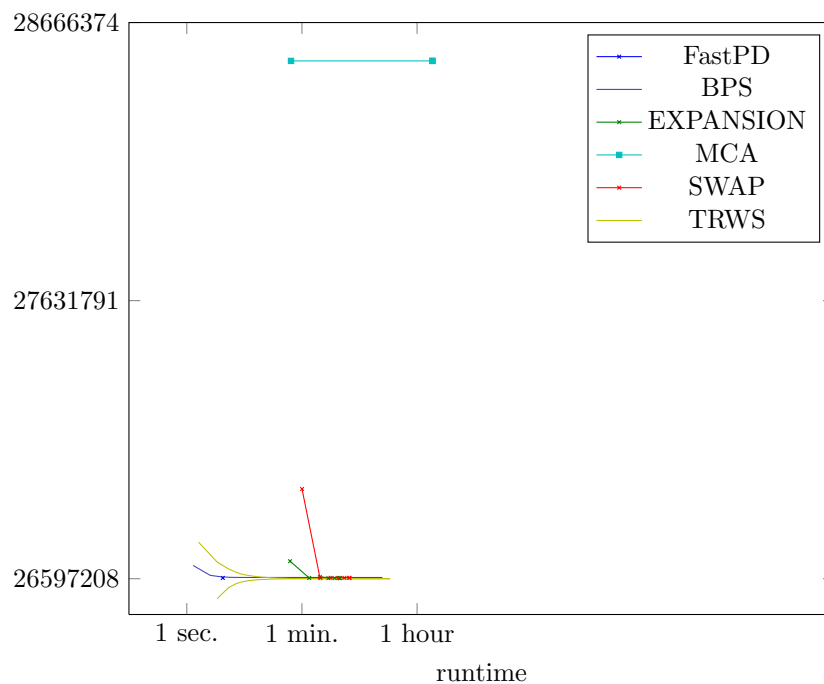


Figure 52: Runtime results for the instance *t1_icbm_normal_3mm_pn3_rf20* of the *brain* models. Plots show best value of integer solution and (if provided) best lower bound.

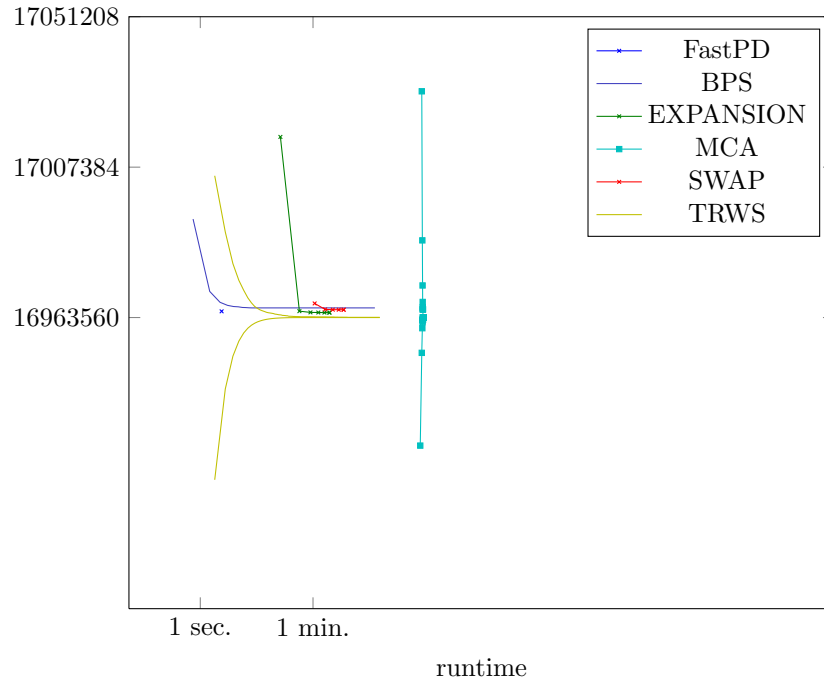


Figure 53: Runtime results for the instance *t1_icbm_normal_5mm_pn3_rf20* of the *brain* models. Plots show best value of integer solution and (if provided) best lower bound.

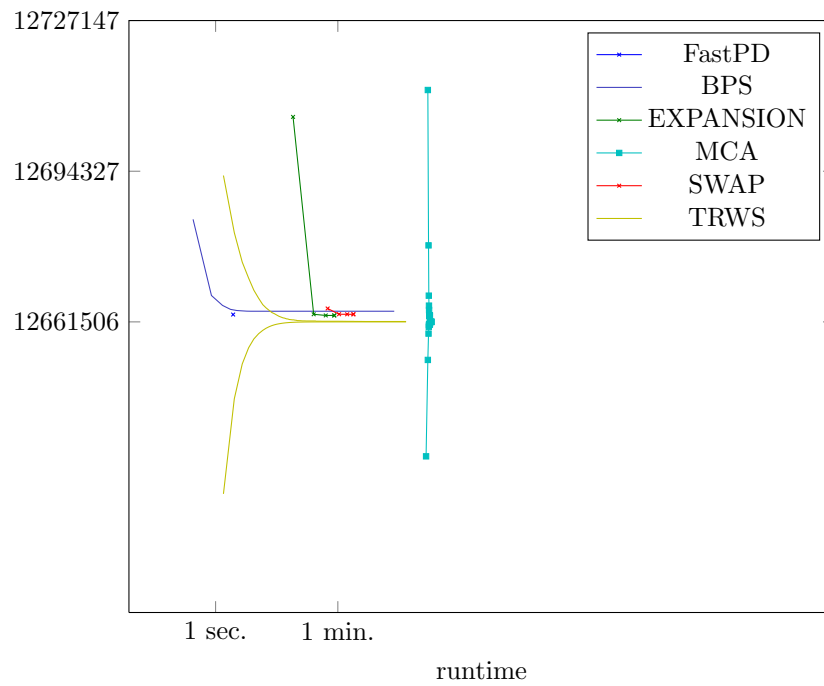


Figure 54: Runtime results for the instance *t1_icbm_normal_7mm_pn3_rf20* of the *brain* models. Plots show best value of integer solution and (if provided) best lower bound.

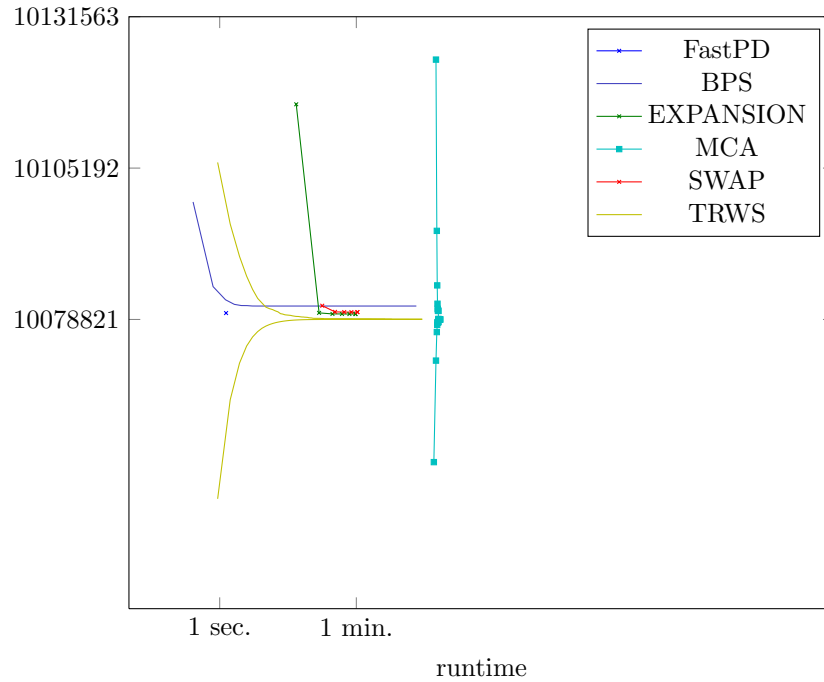


Figure 55: Runtime results for the instance *t1_icbm_normal_9mm_pn3_rf20* of the *brain* models. Plots show best value of integer solution and (if provided) best lower bound.

5.11. Chinese Character Inpainting (dtf-chinesechar)

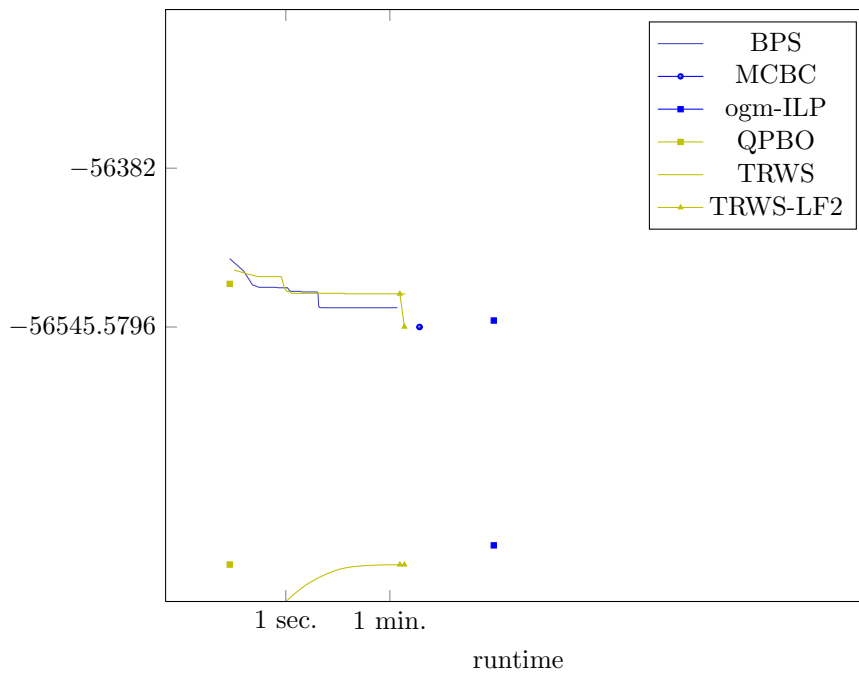


Figure 56: Runtime results for the instance *TST_test_0001_88_115* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

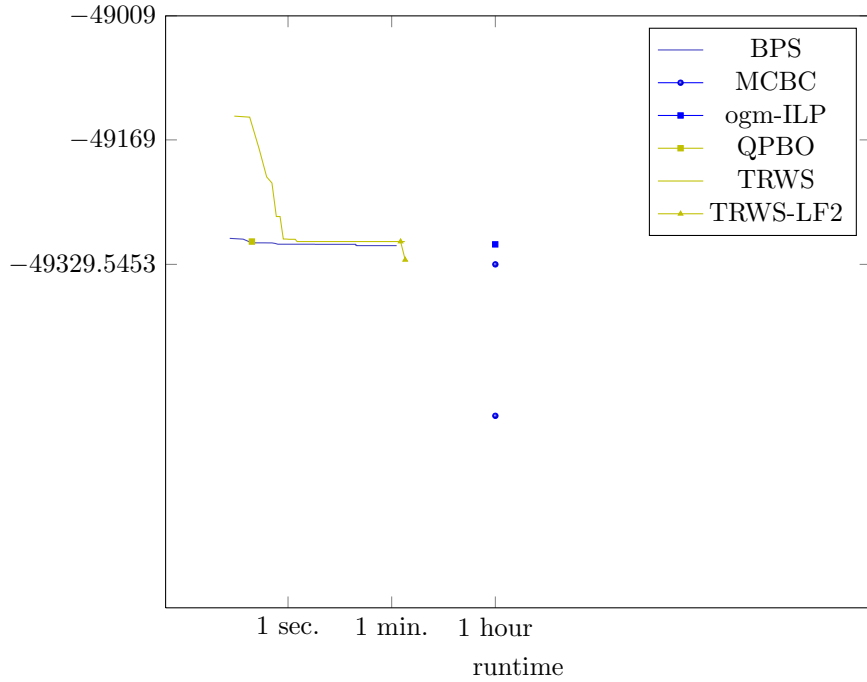


Figure 57: Runtime results for the instance *TST_test_0002_88_105* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

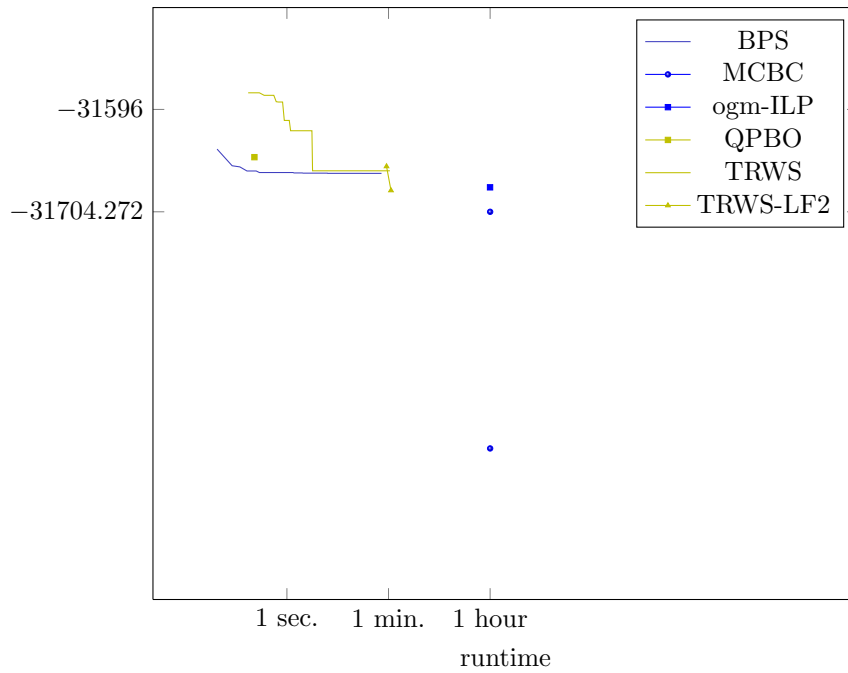


Figure 58: Runtime results for the instance *TST_test_0003_64_99* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

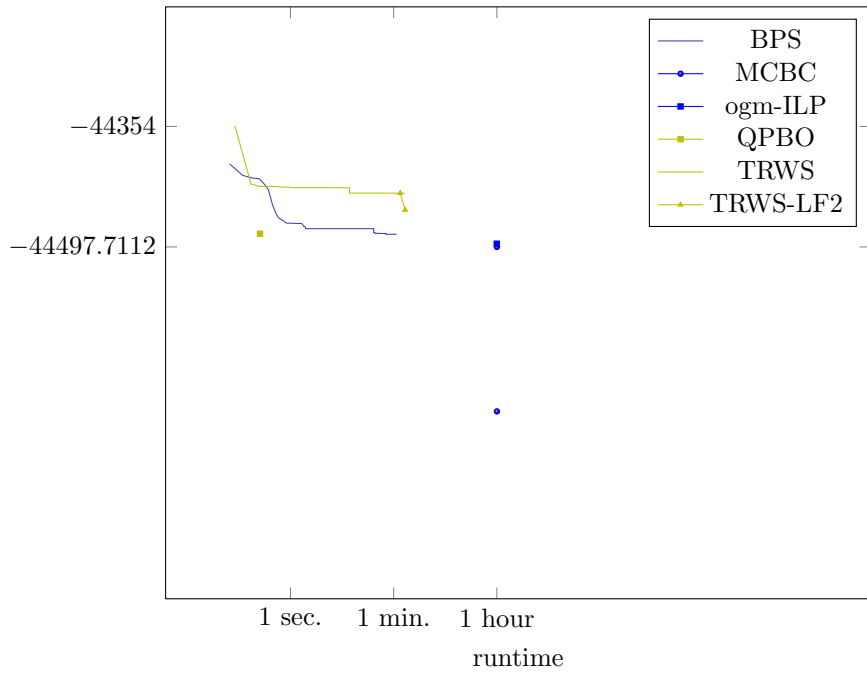


Figure 59: Runtime results for the instance *TST_test_0004_88_97* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

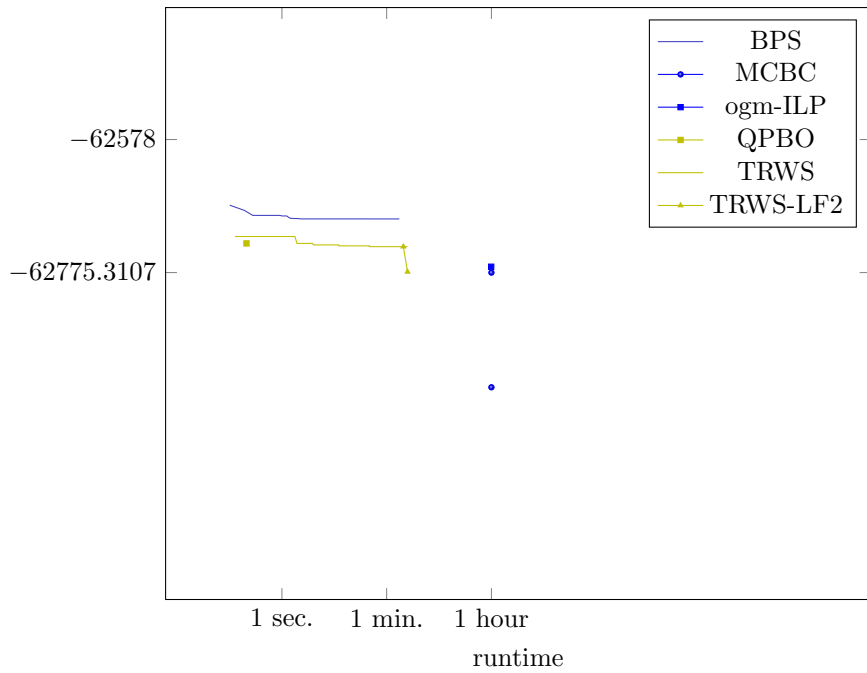


Figure 60: Runtime results for the instance *TST_test_0005_120_97* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

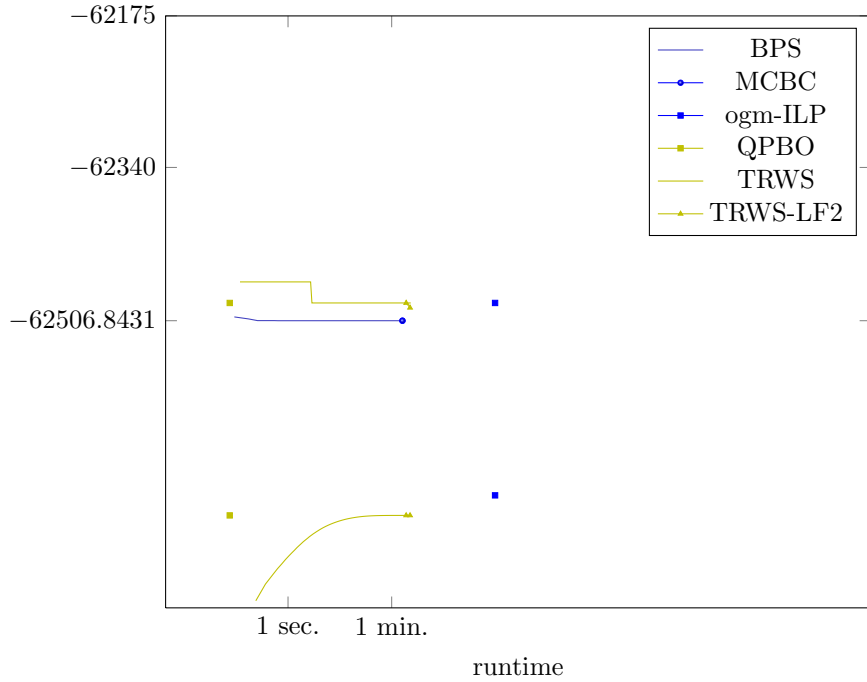


Figure 61: Runtime results for the instance *TST_test_0006_112_99* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

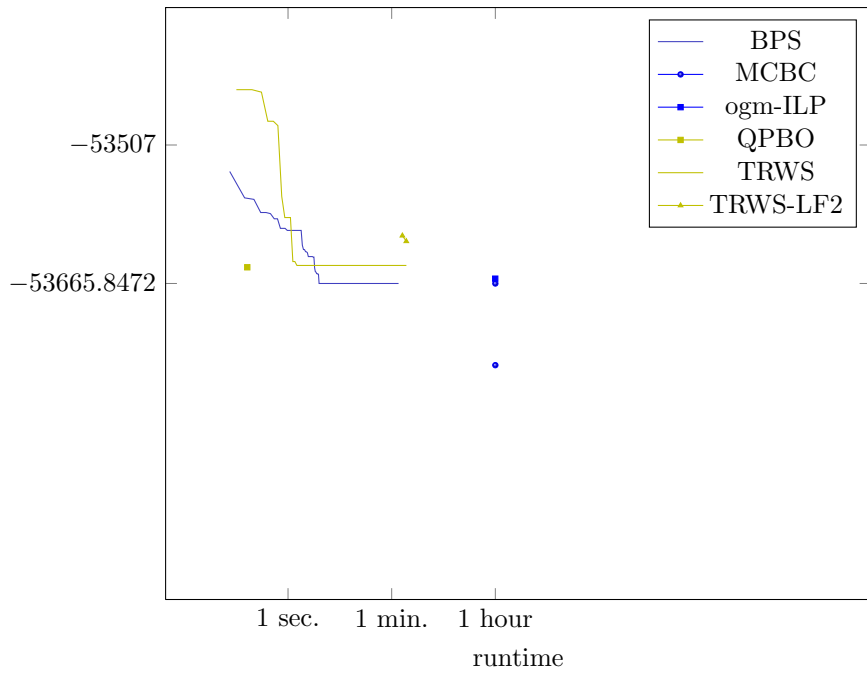


Figure 62: Runtime results for the instance *TST_test_0007_88_112* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

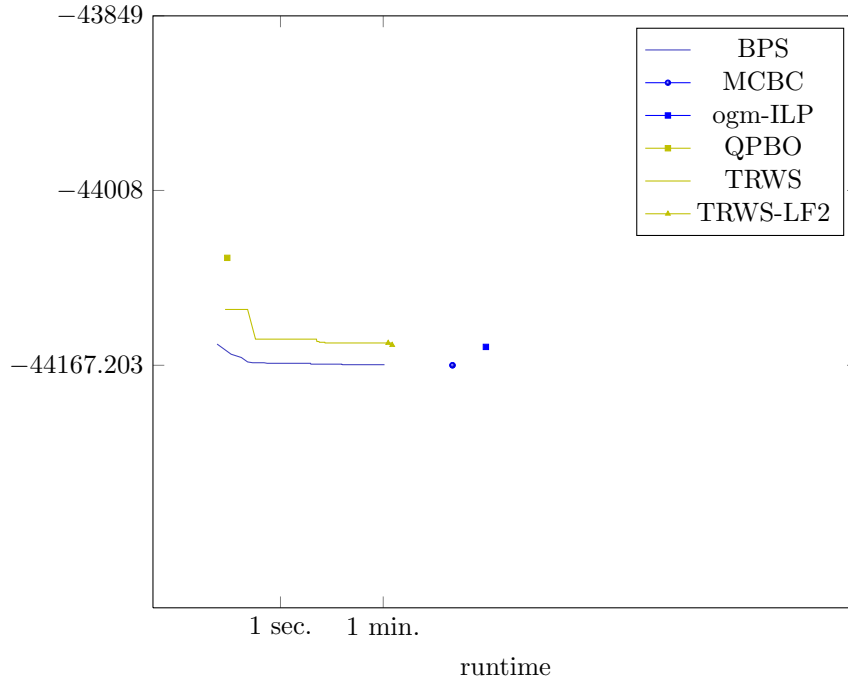


Figure 63: Runtime results for the instance *TST_test_0008_80_102* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

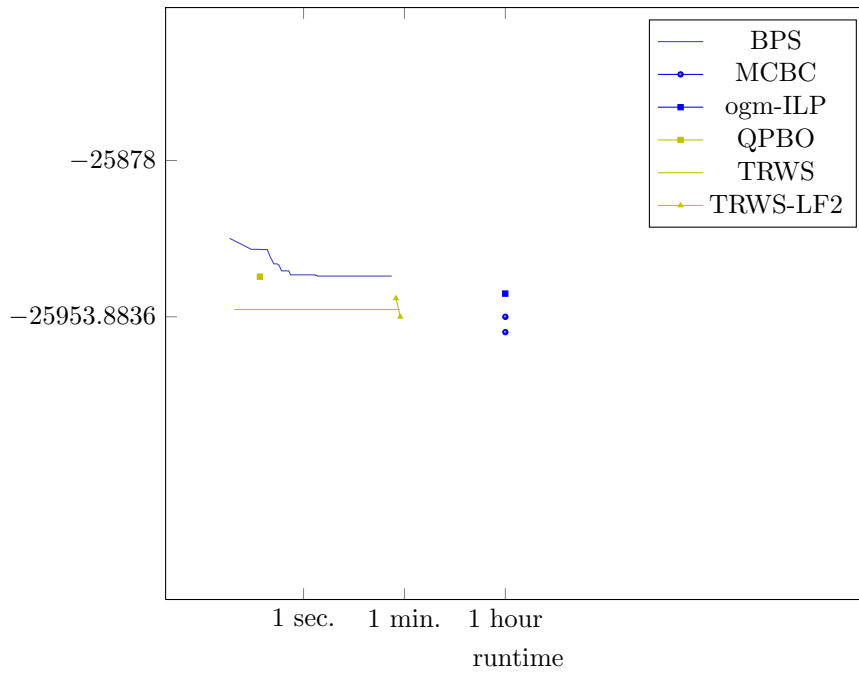


Figure 64: Runtime results for the instance *TST_test_0009_64_80* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

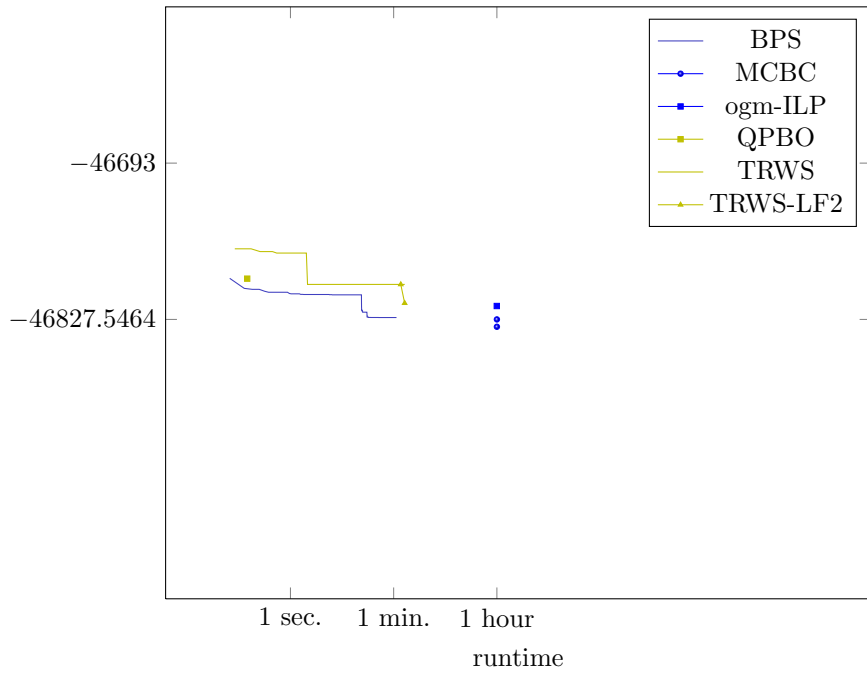


Figure 65: Runtime results for the instance *TST_test_0010_80_109* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

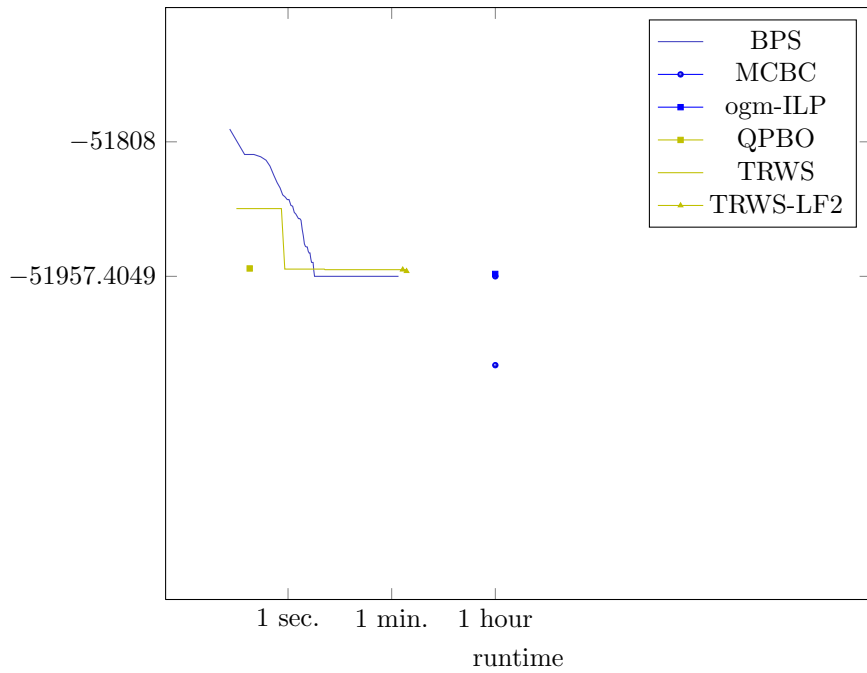


Figure 66: Runtime results for the instance *TST_test_0011_96_101* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

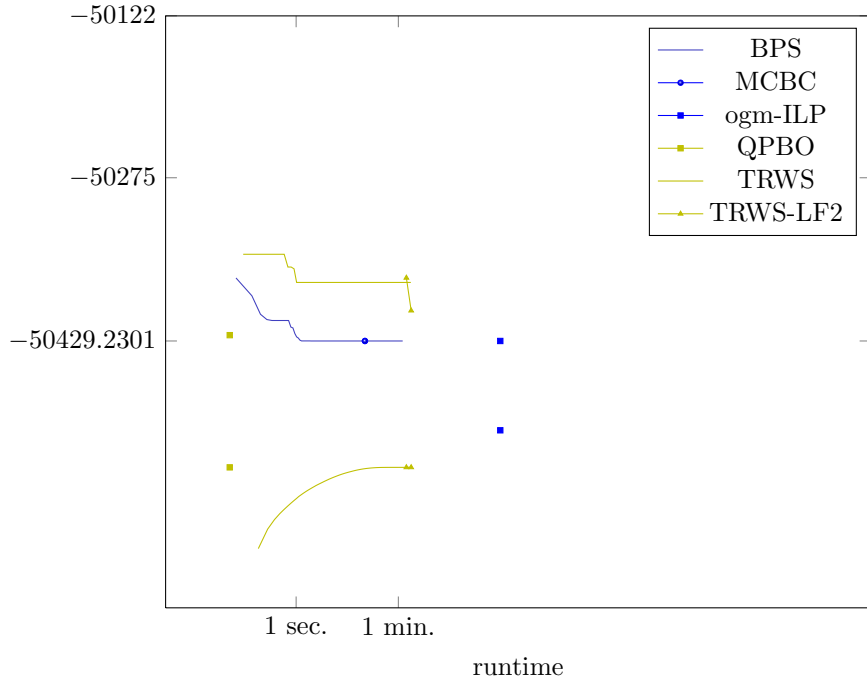


Figure 67: Runtime results for the instance *TST_test_0012_88_103* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

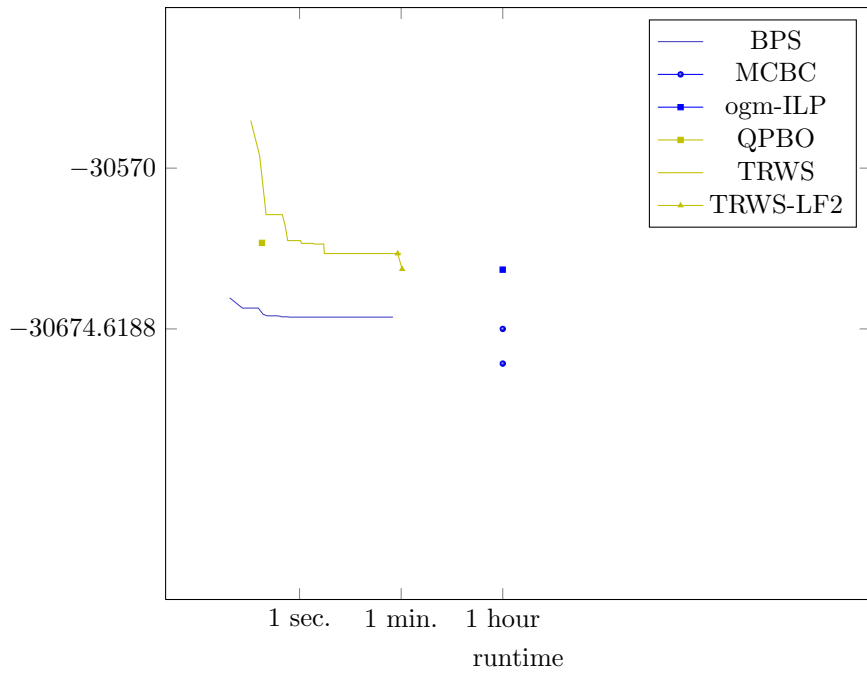


Figure 68: Runtime results for the instance *TST_test_0013_64_94* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

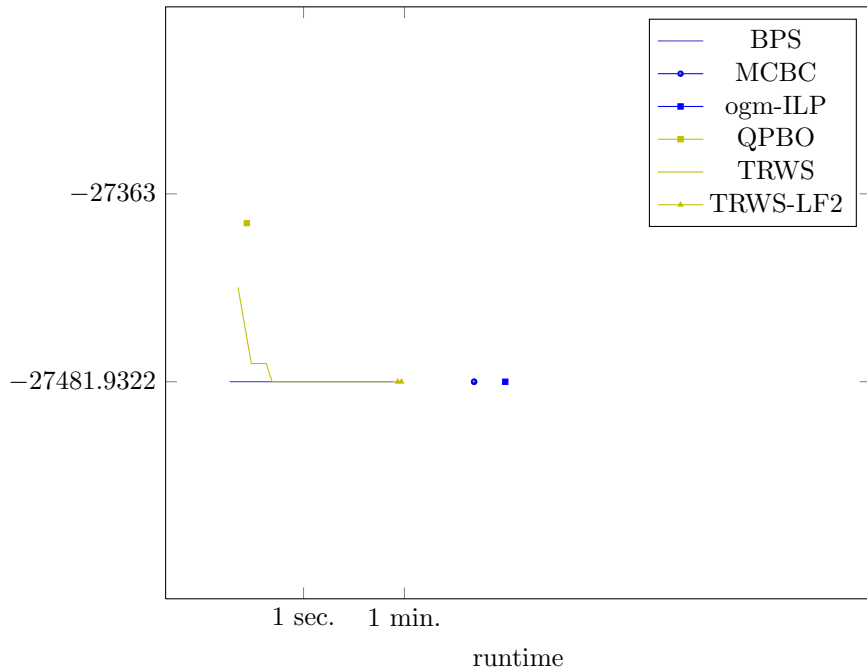


Figure 69: Runtime results for the instance *TST_test_0014_72_73* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

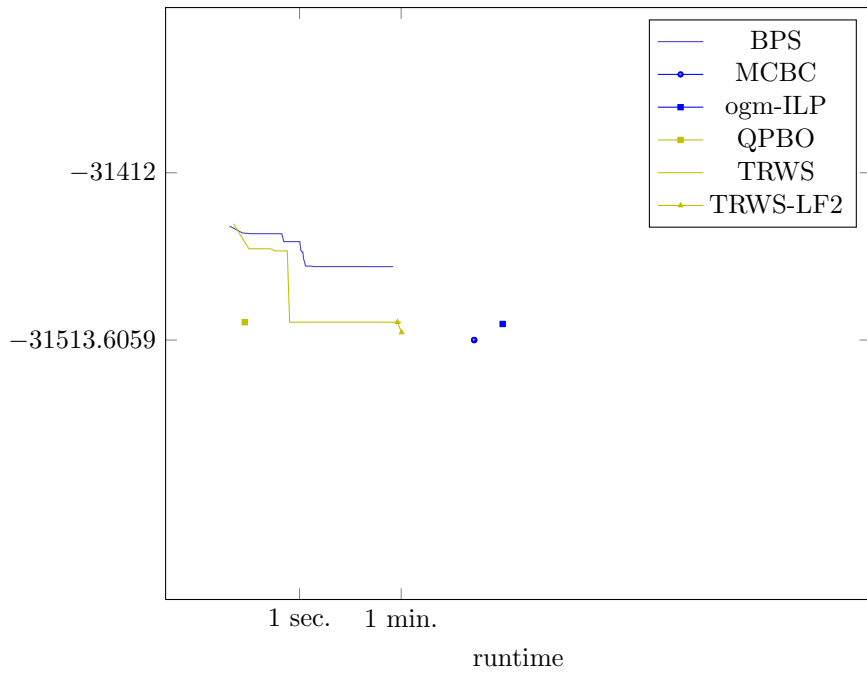


Figure 70: Runtime results for the instance *TST_test_0015_80_73* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

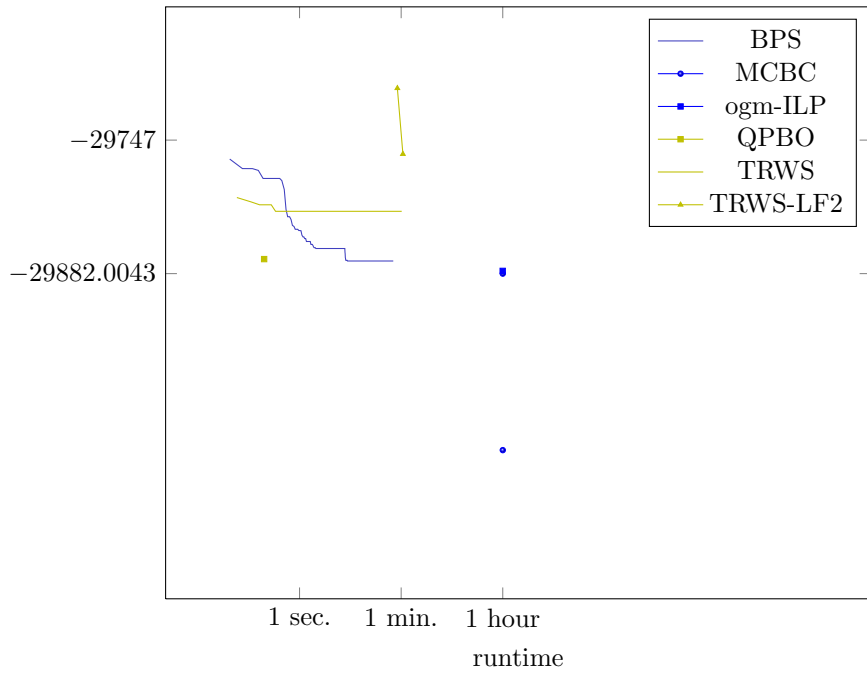


Figure 71: Runtime results for the instance *TST_test_0016_72_83* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

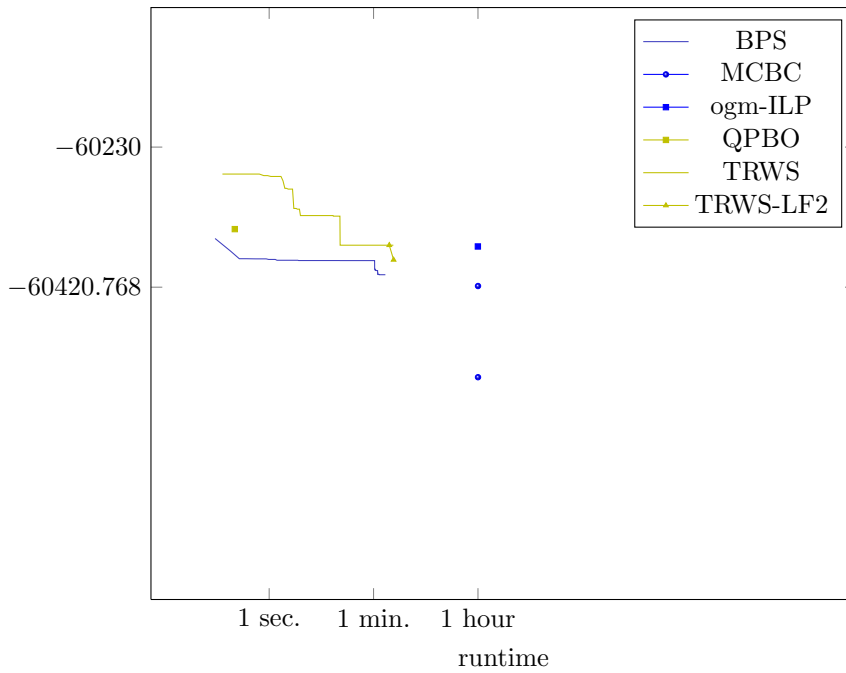


Figure 72: Runtime results for the instance *TST_test_0017_112_101* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

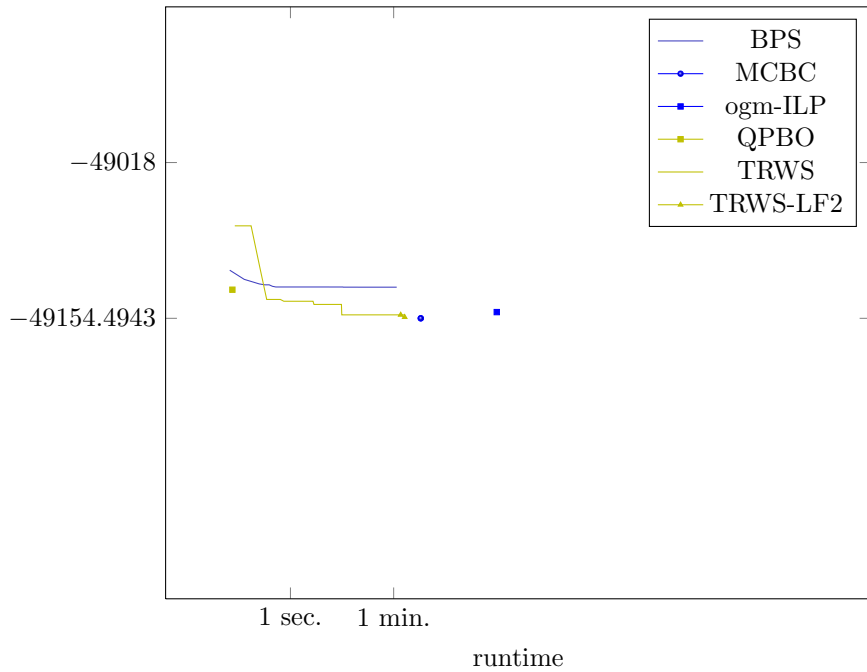


Figure 73: Runtime results for the instance *TST_test_0018_80_110* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

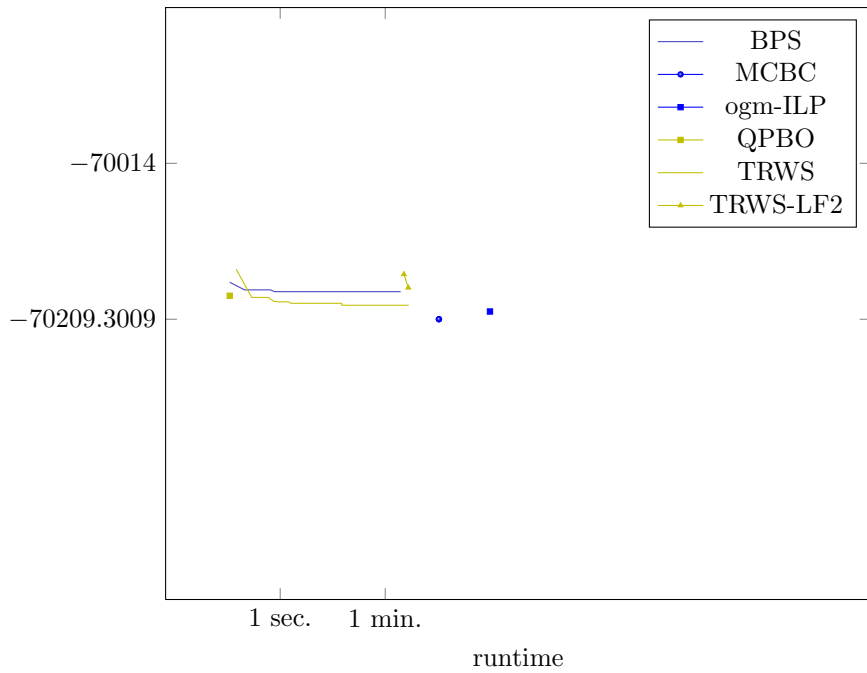


Figure 74: Runtime results for the instance *TST_test_0019_120_106* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

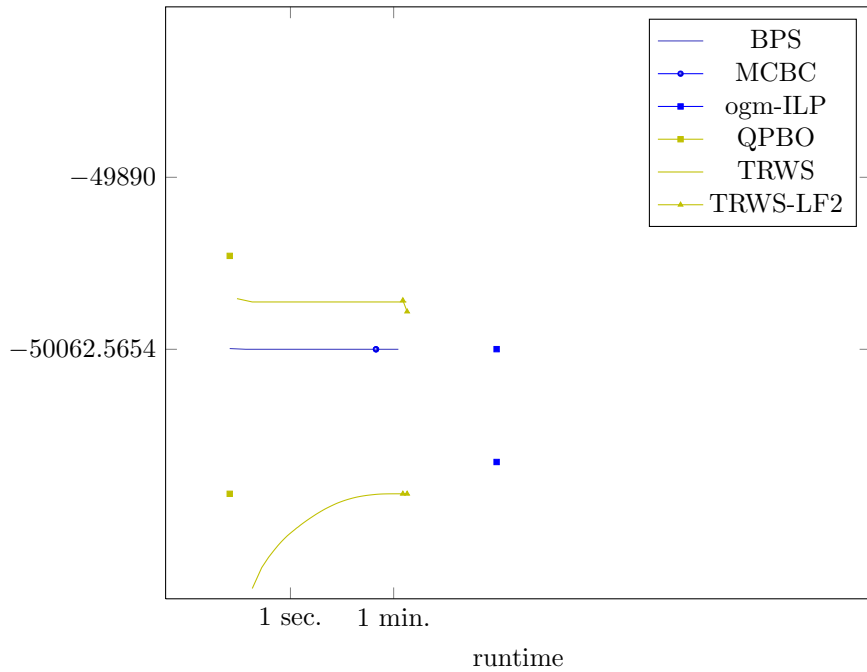


Figure 75: Runtime results for the instance *TST_test_0020_96_94* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

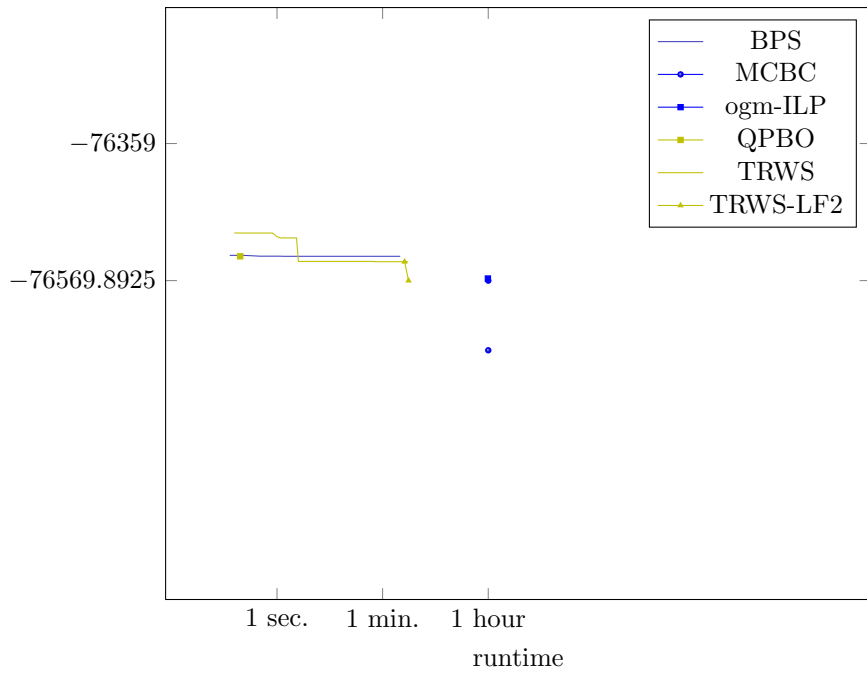


Figure 76: Runtime results for the instance *TST_test_0021_112_124* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

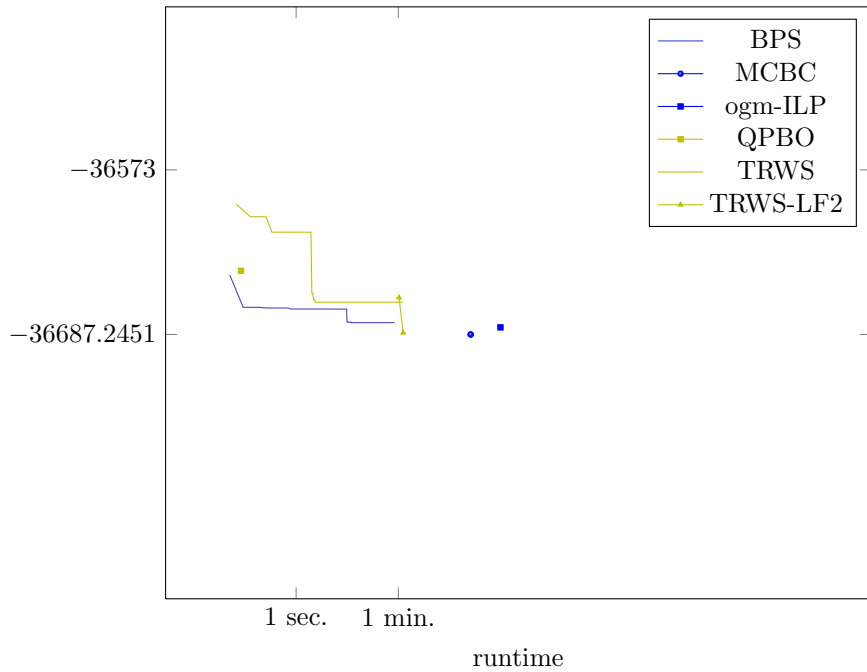


Figure 77: Runtime results for the instance *TST_test_0022_80_85* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

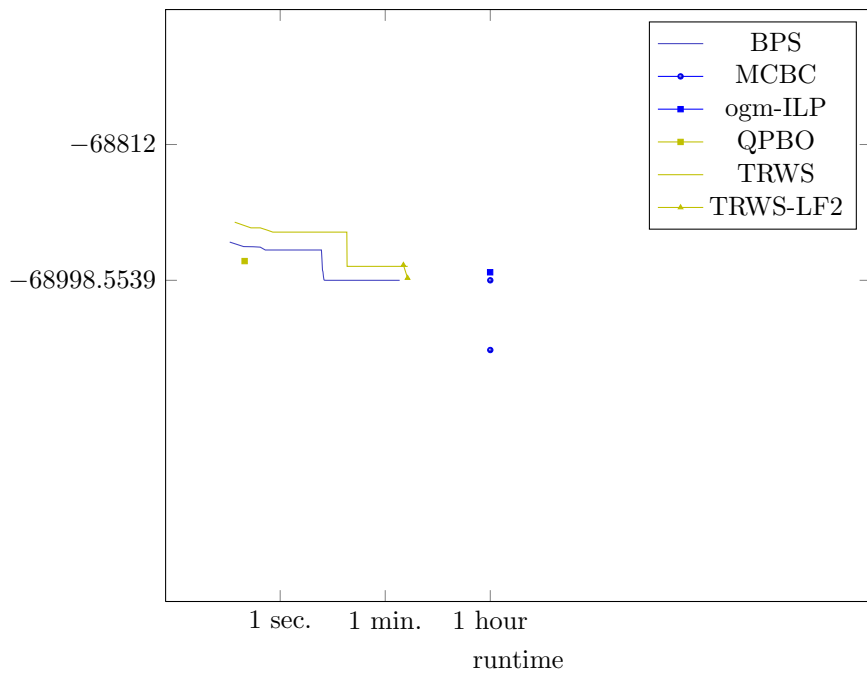


Figure 78: Runtime results for the instance *TST_test_0023_112_112* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

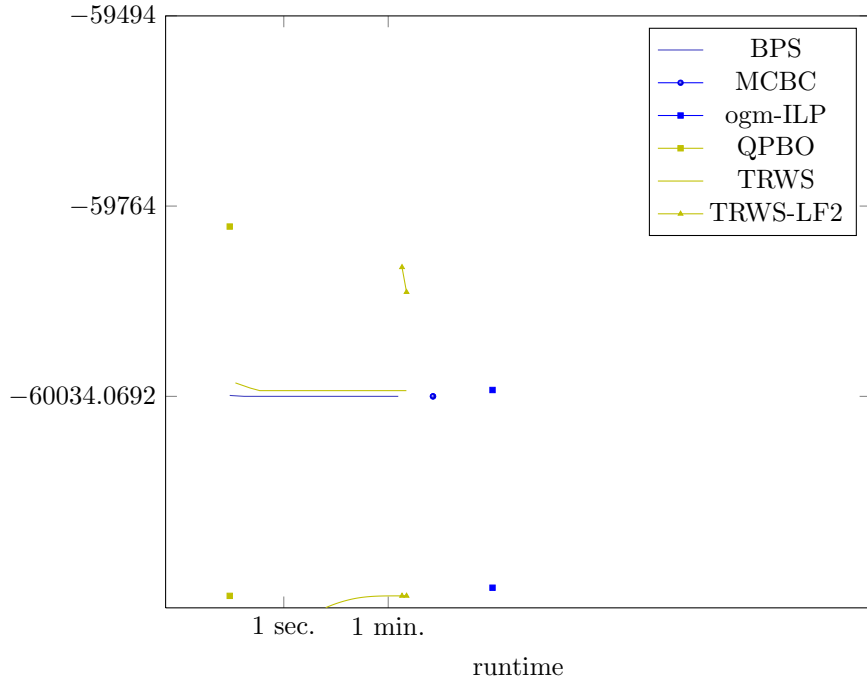


Figure 79: Runtime results for the instance *TST_test_0024_88_126* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

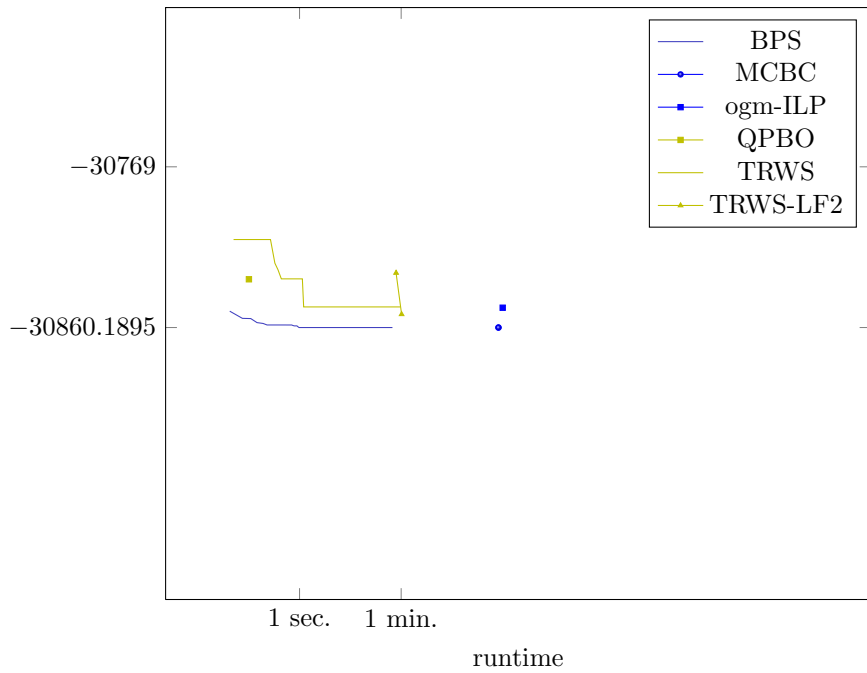


Figure 80: Runtime results for the instance *TST_test_0025_64_92* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

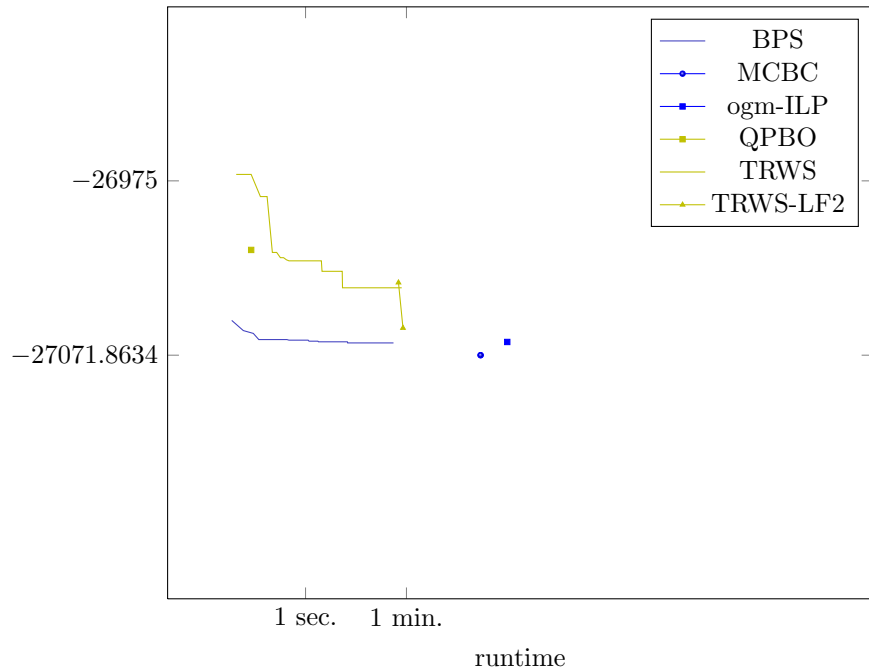


Figure 81: Runtime results for the instance *TST_test_0026_56_92* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

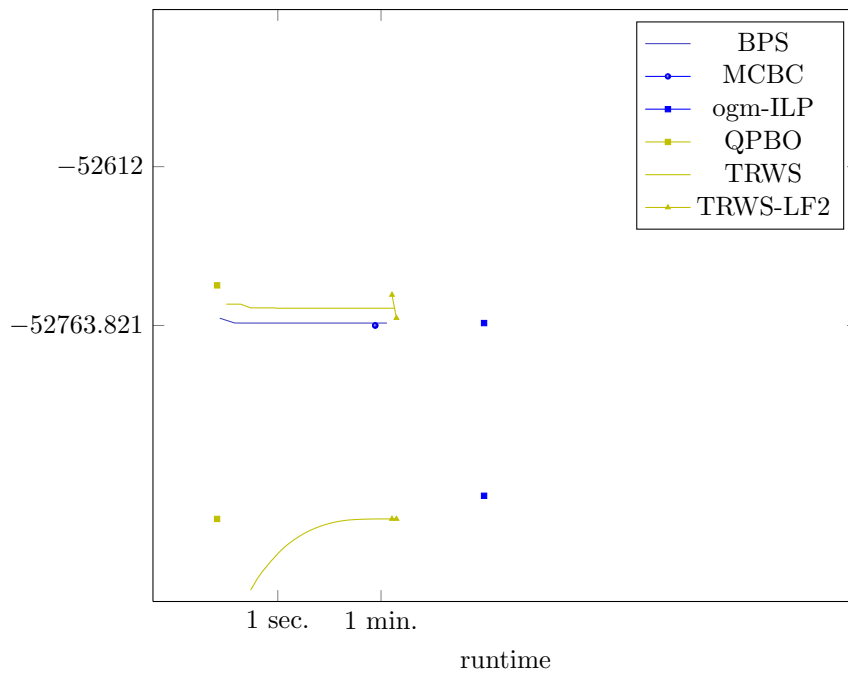


Figure 82: Runtime results for the instance *TST_test_0027_88_109* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

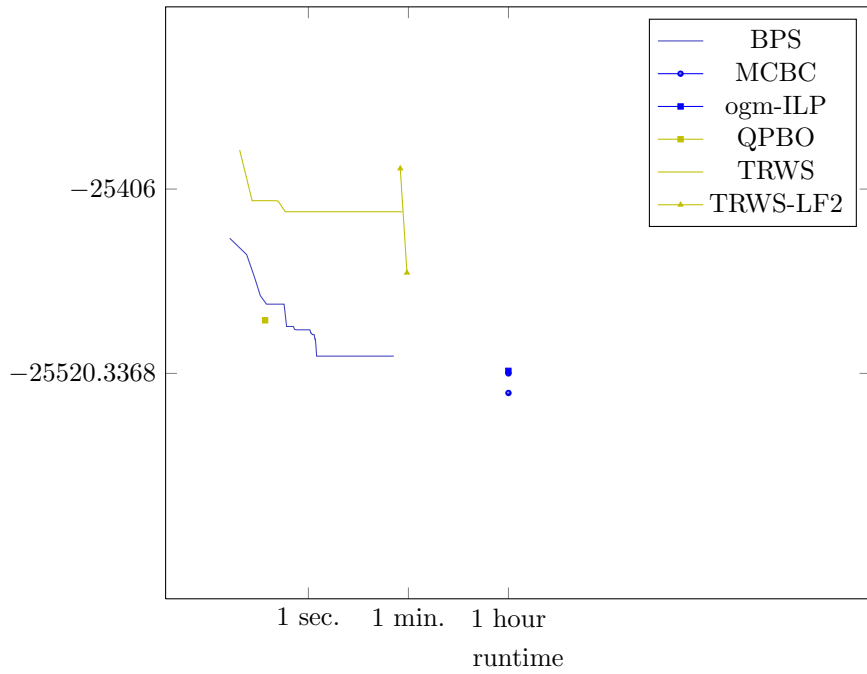


Figure 83: Runtime results for the instance *TST_test_0028_48_105* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

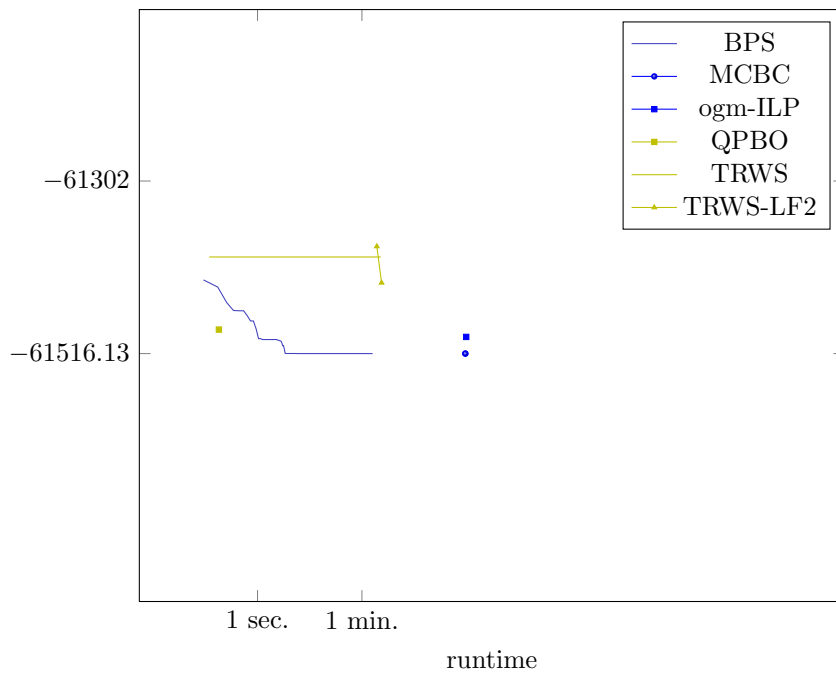


Figure 84: Runtime results for the instance *TST_test_0029_96_117* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

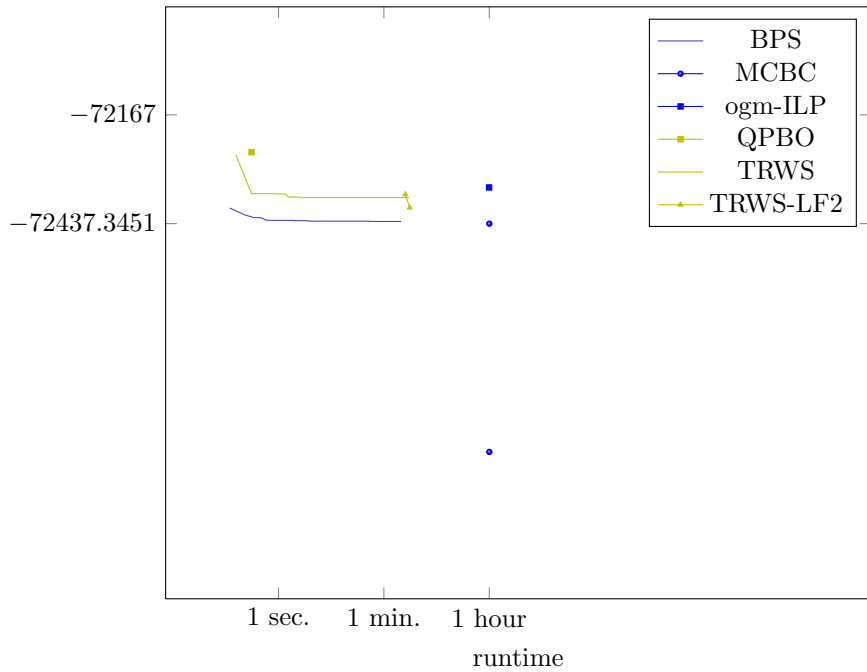


Figure 85: Runtime results for the instance *TST_test_0030_112_123* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

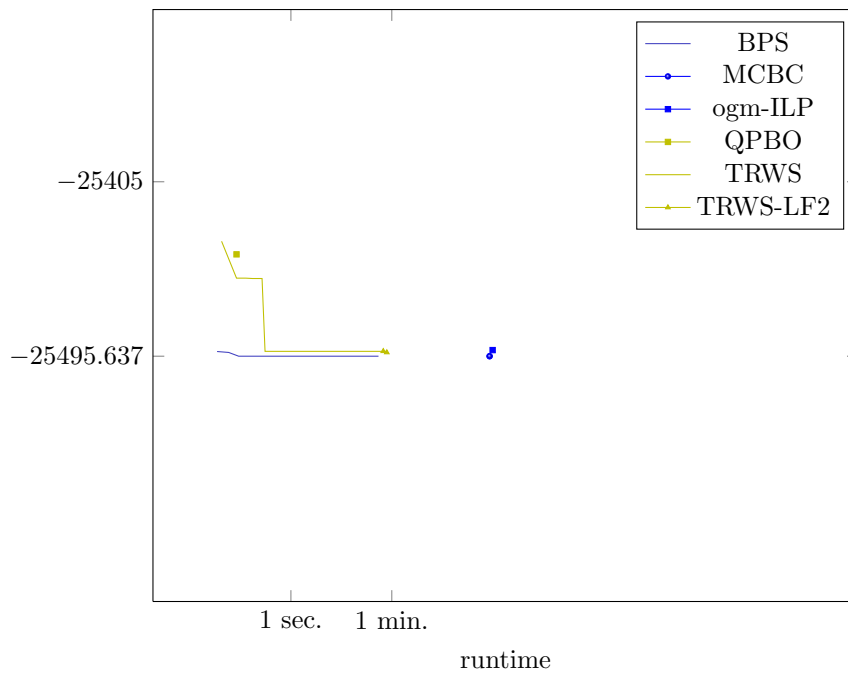


Figure 86: Runtime results for the instance *TST_test_0031_64_78* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

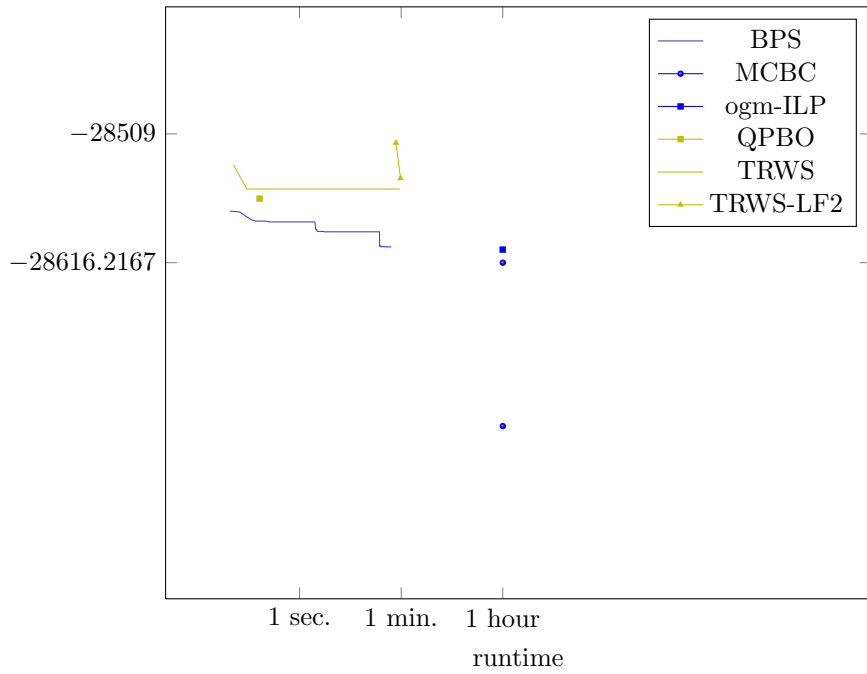


Figure 87: Runtime results for the instance *TST_test_0032_64_89* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

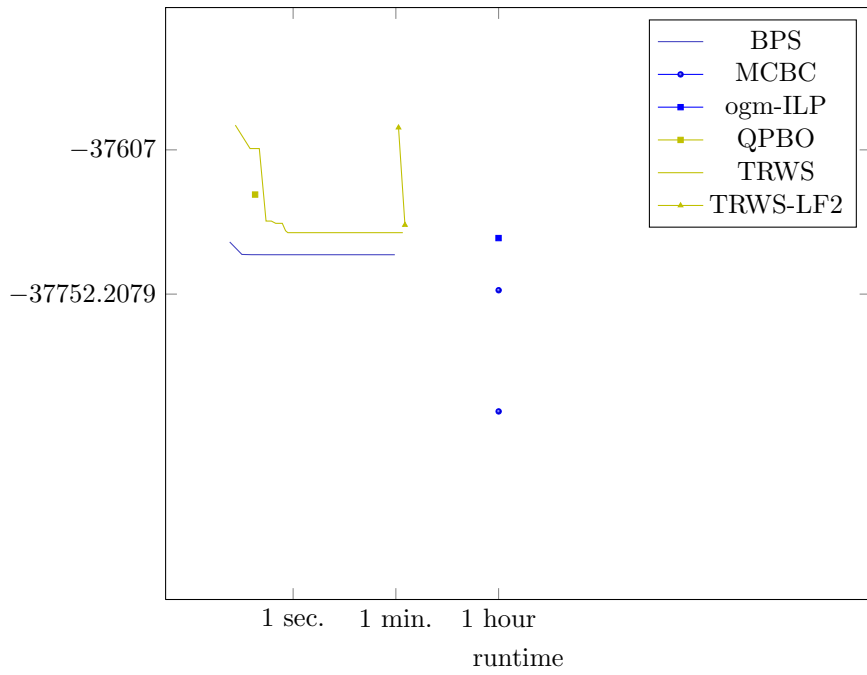


Figure 88: Runtime results for the instance *TST_test_0033_88_84* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

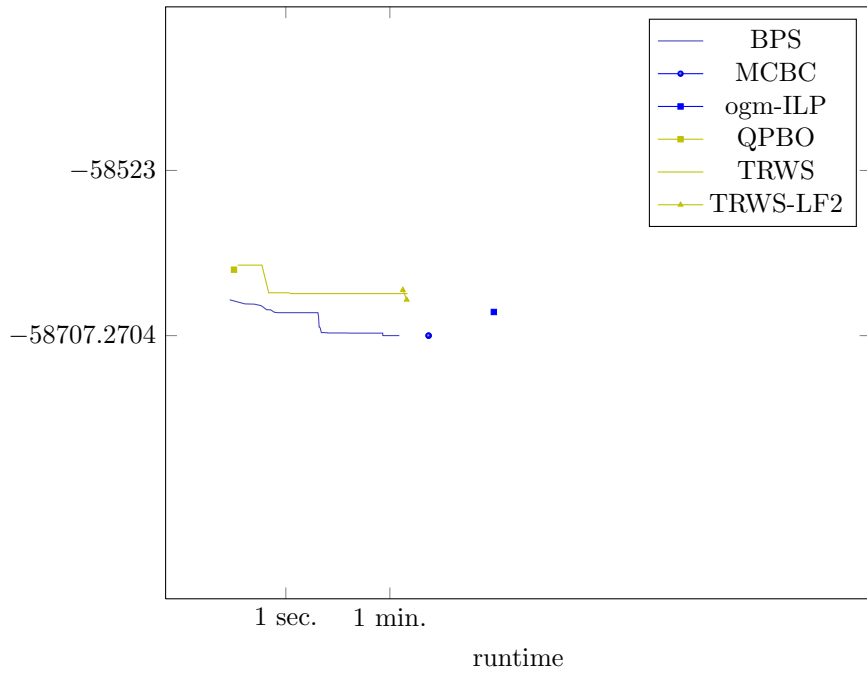


Figure 89: Runtime results for the instance *TST_test_0034_112_94* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

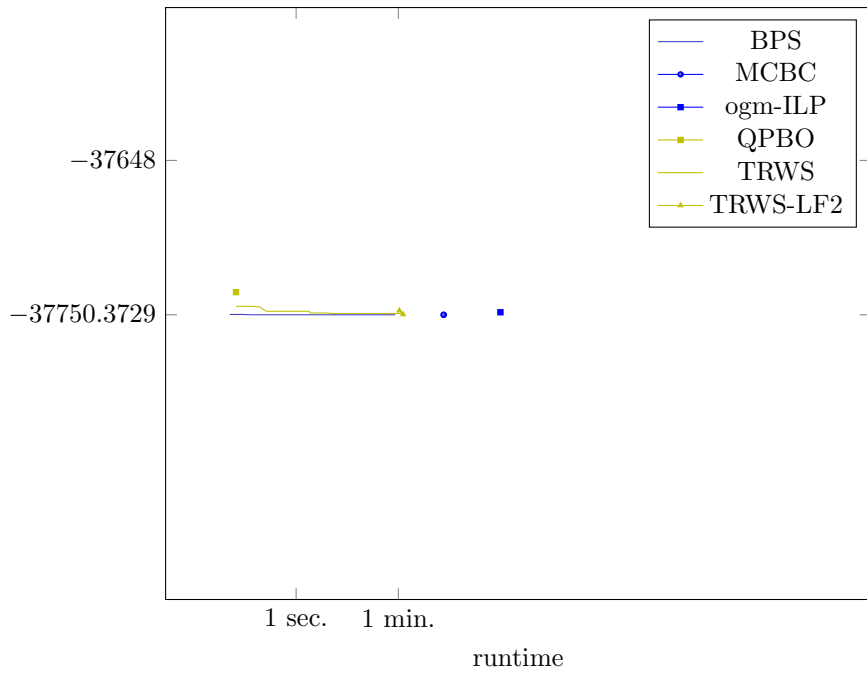


Figure 90: Runtime results for the instance *TST_test_0035_80_86* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

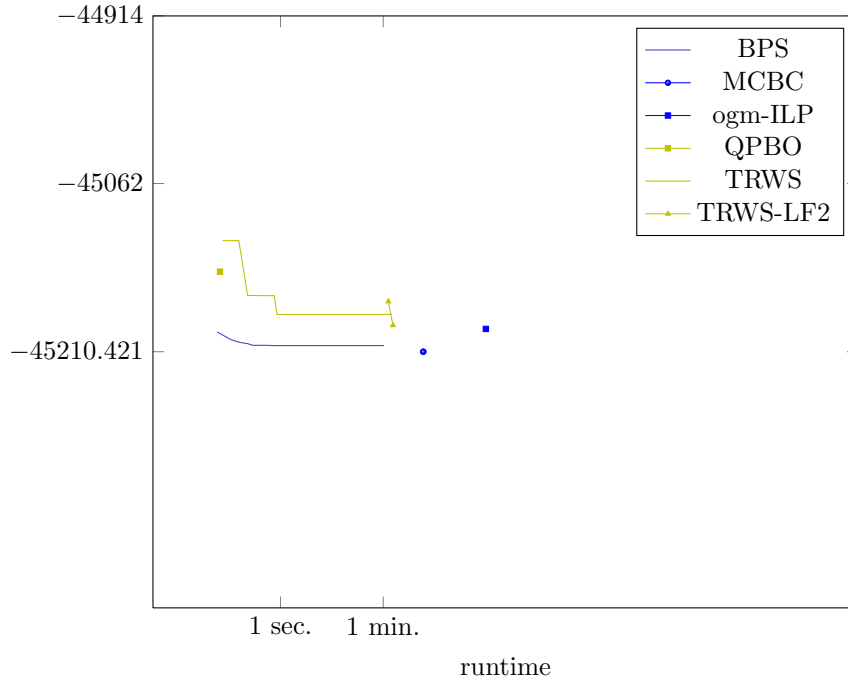


Figure 91: Runtime results for the instance *TST_test_0036_72_114* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

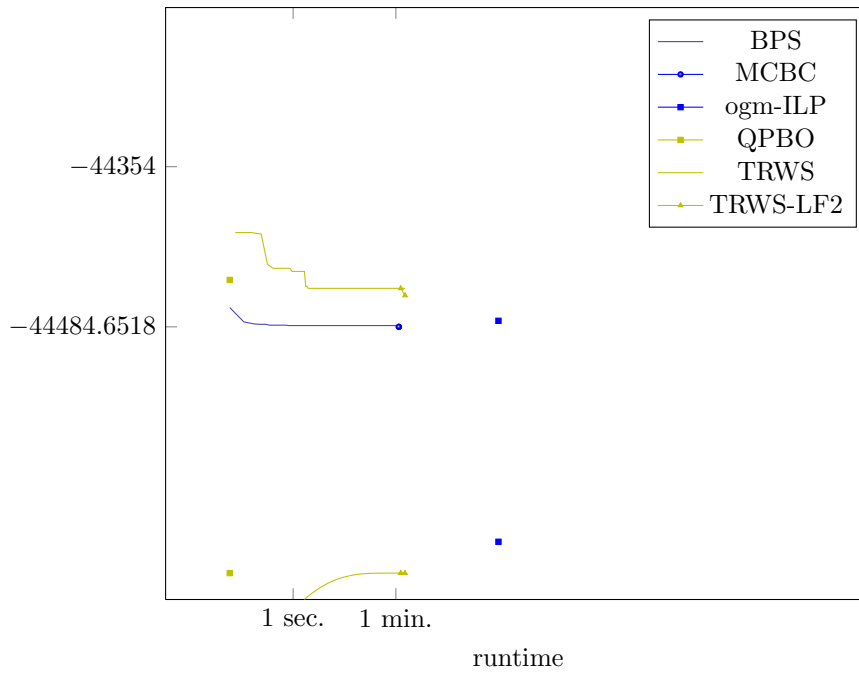


Figure 92: Runtime results for the instance *TST_test_0037_80_101* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

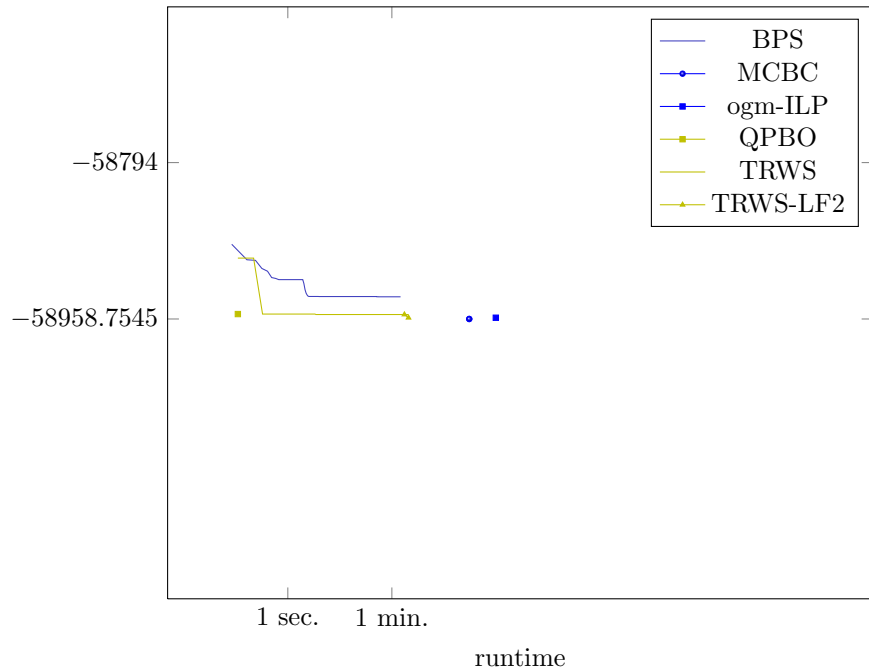


Figure 93: Runtime results for the instance $TST_test_0038_96_110$ of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

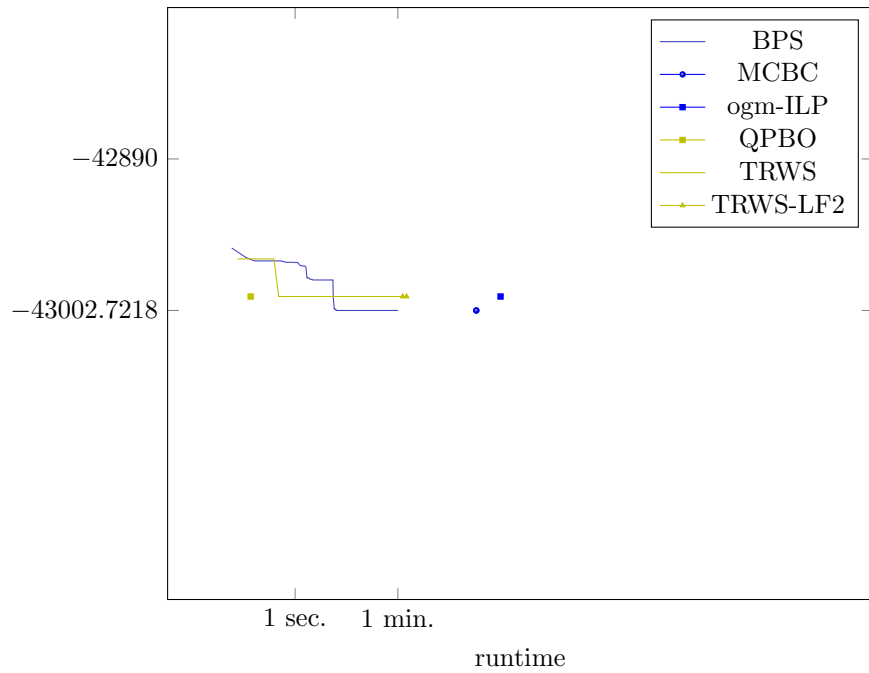


Figure 94: Runtime results for the instance $TST_test_0039_80_99$ of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

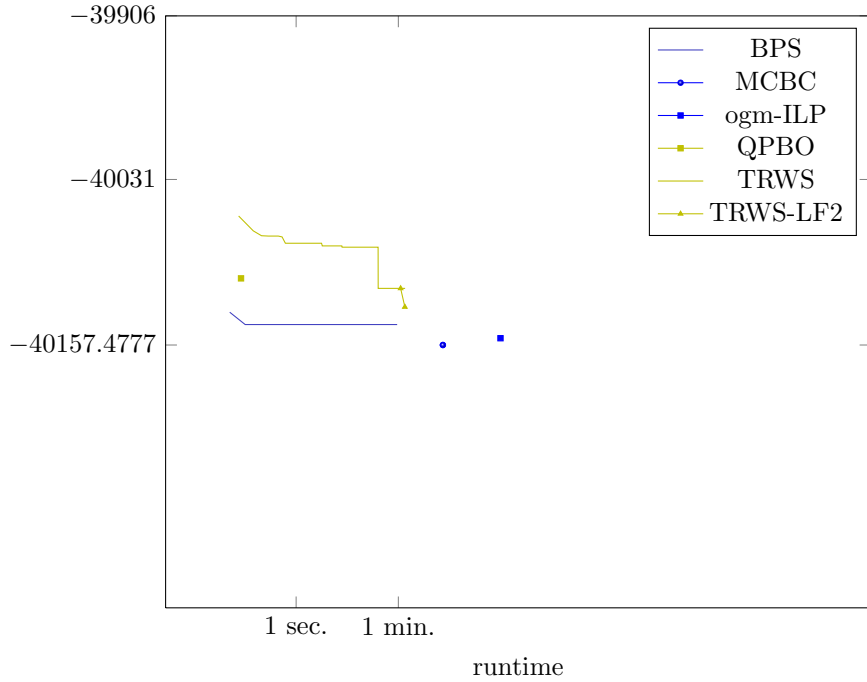


Figure 95: Runtime results for the instance *TST_test_0040_80_93* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

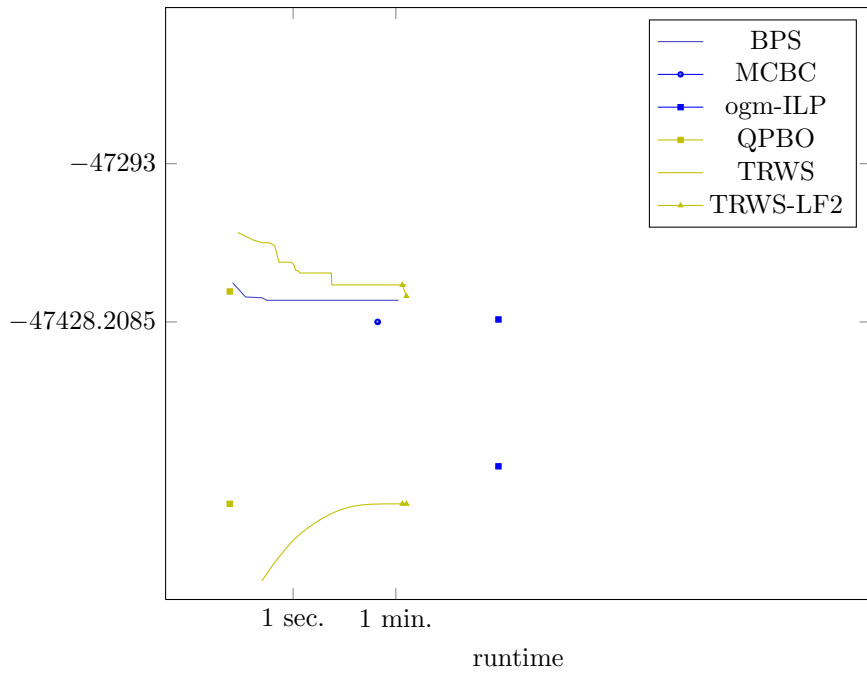


Figure 96: Runtime results for the instance *TST_test_0041_88_96* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

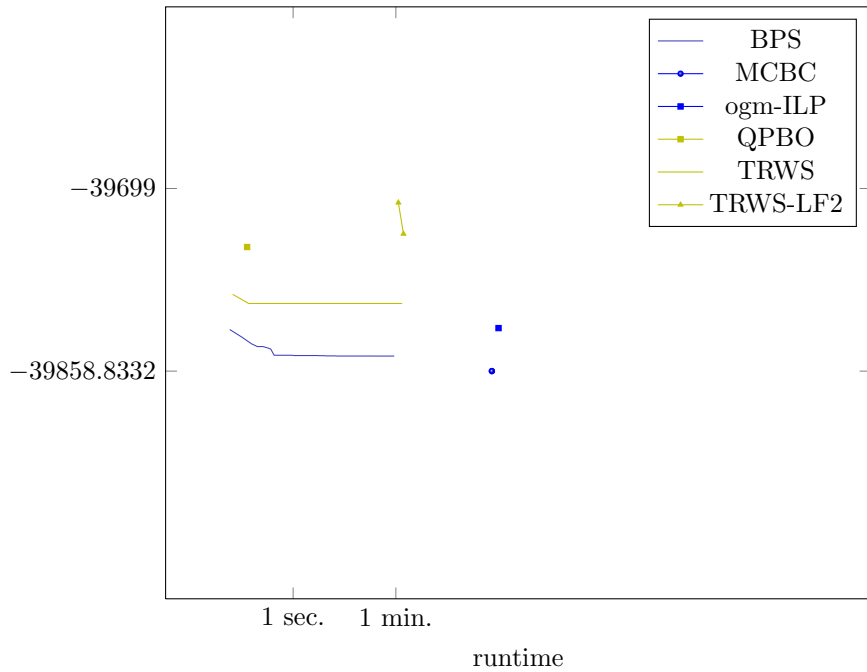


Figure 97: Runtime results for the instance *TST_test_0042_72_104* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

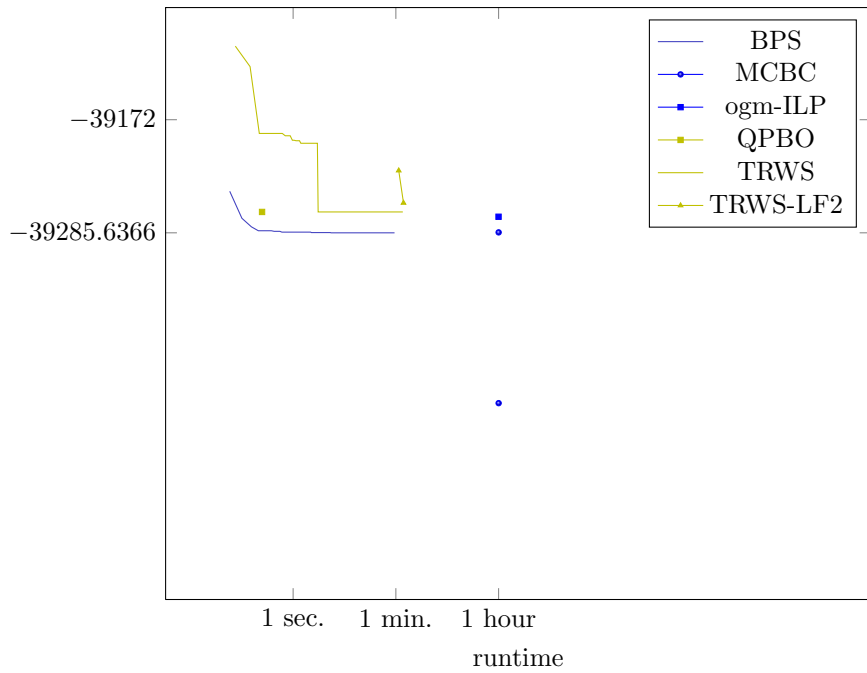


Figure 98: Runtime results for the instance *TST_test_0043_72_106* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

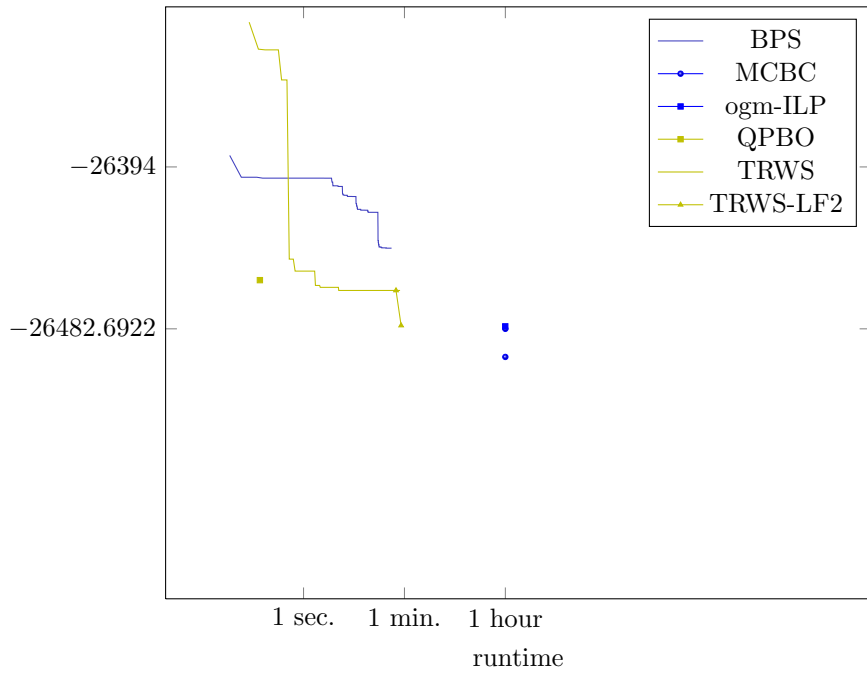


Figure 99: Runtime results for the instance *TST_test_0044_56_93* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

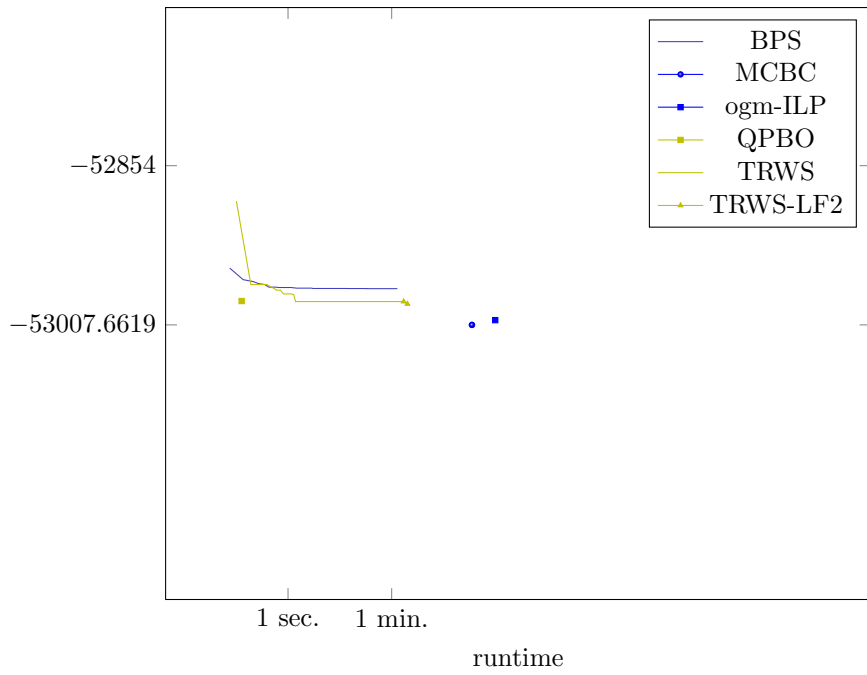


Figure 100: Runtime results for the instance *TST_test_0045_80_120* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

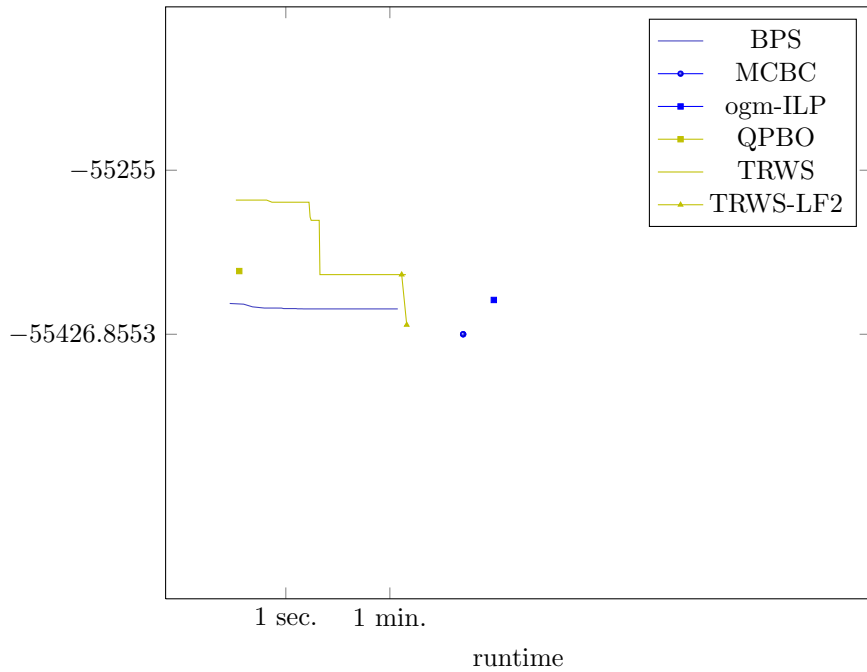


Figure 101: Runtime results for the instance *TST_test_0046_96_105* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

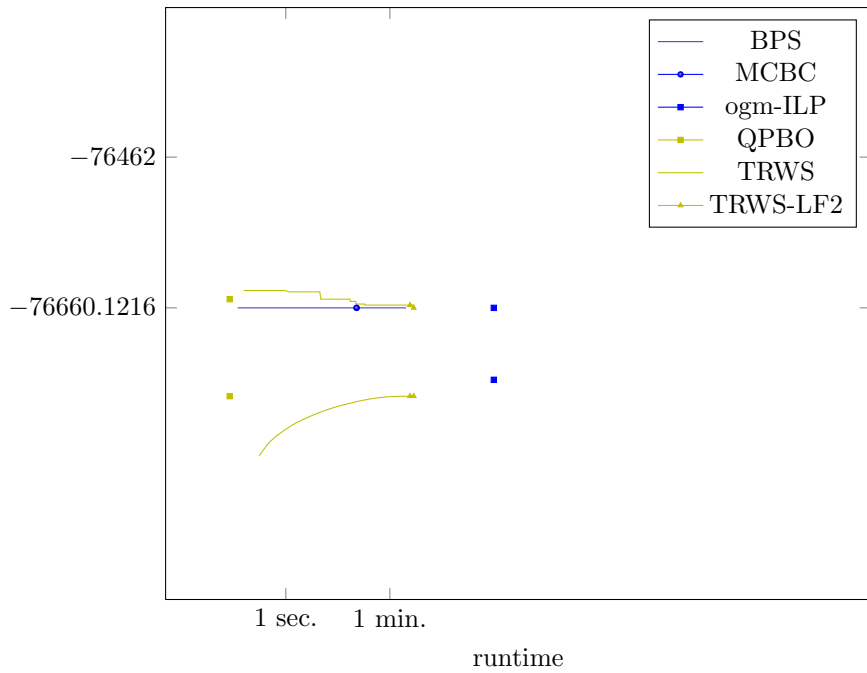


Figure 102: Runtime results for the instance *TST_test_0047_112_121* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

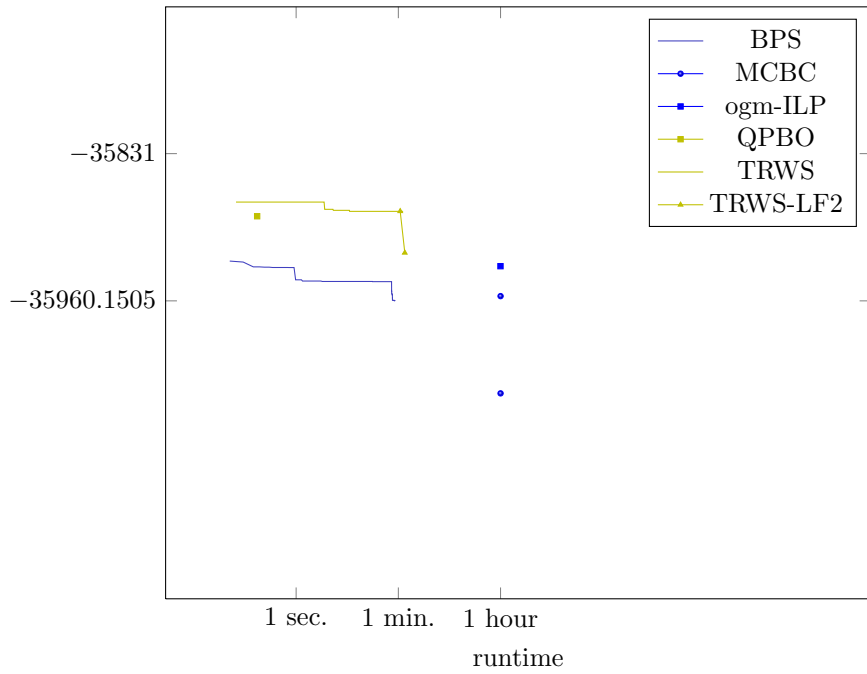


Figure 103: Runtime results for the instance *TST_test_0048_72_98* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

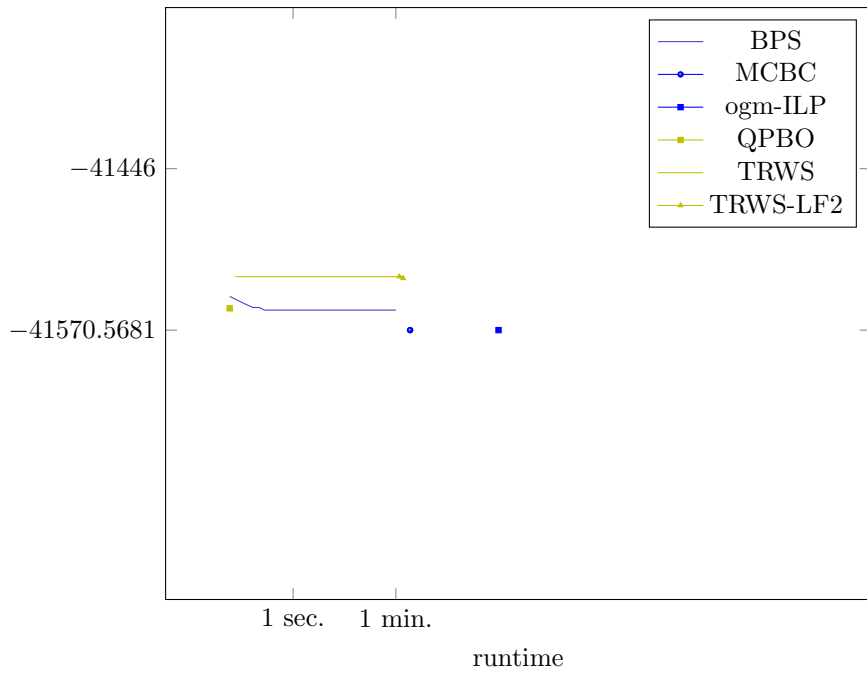


Figure 104: Runtime results for the instance *TST_test_0049_96_79* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

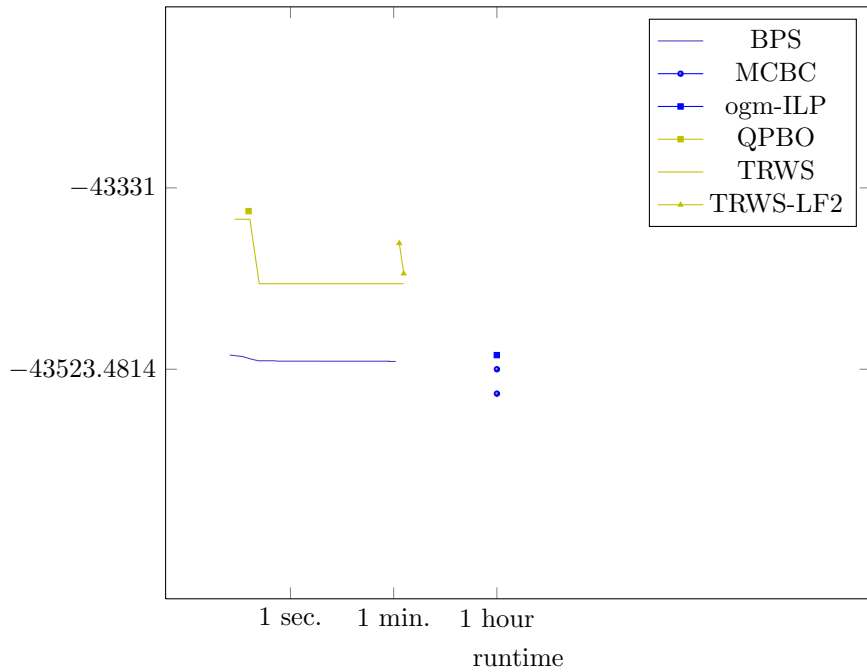


Figure 105: Runtime results for the instance *TST_test_0050_88_94* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

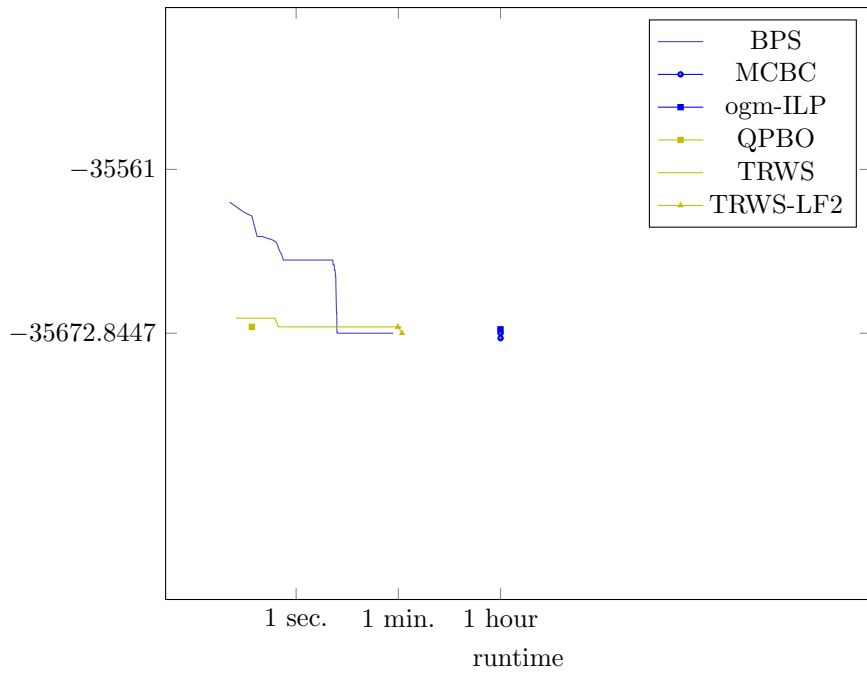


Figure 106: Runtime results for the instance *TST_test_0051_64_106* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

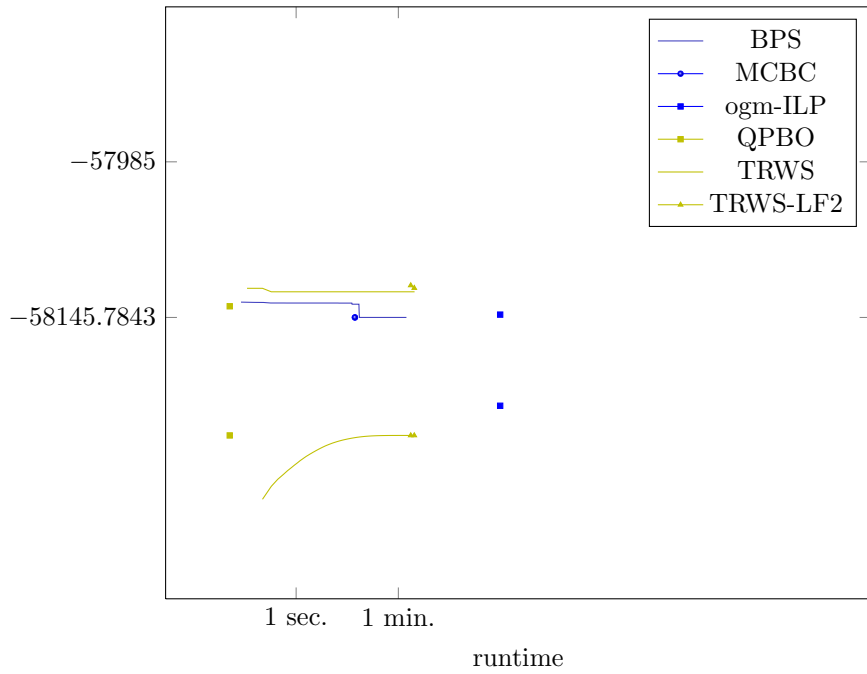


Figure 107: Runtime results for the instance *TST_test_0052_96_107* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

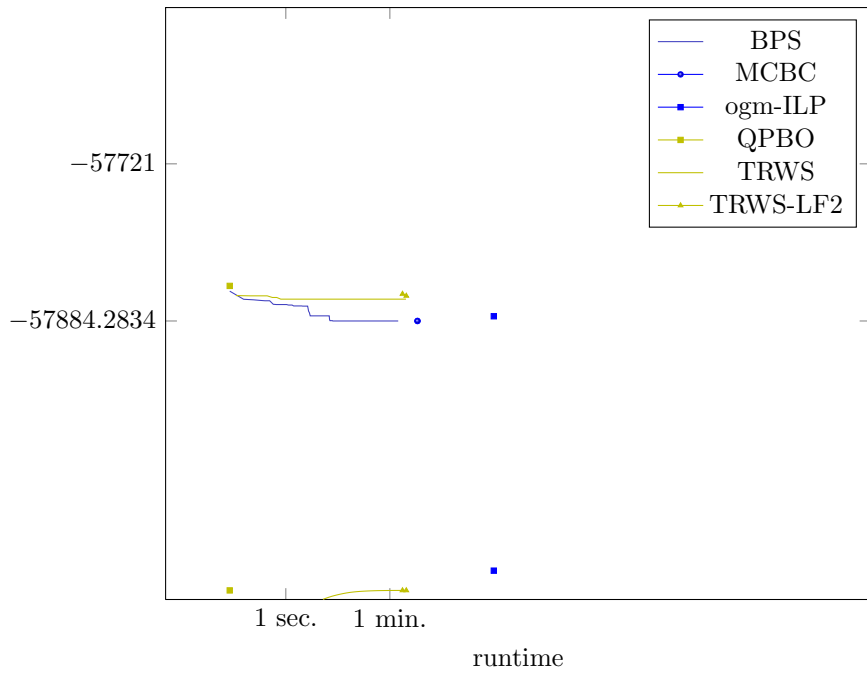


Figure 108: Runtime results for the instance *TST_test_0053_88_118* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

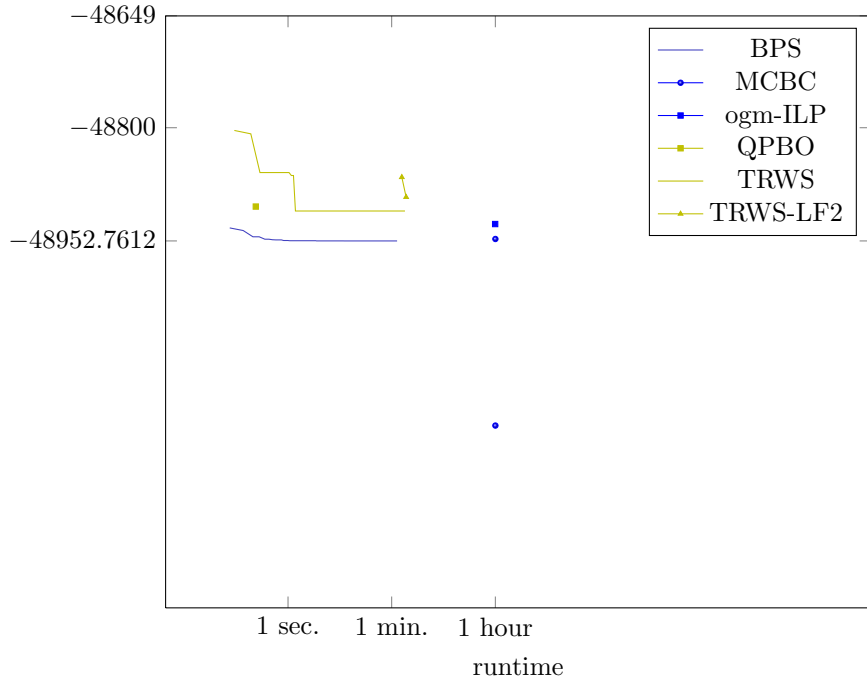


Figure 109: Runtime results for the instance *TST_test_0054_88_106* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

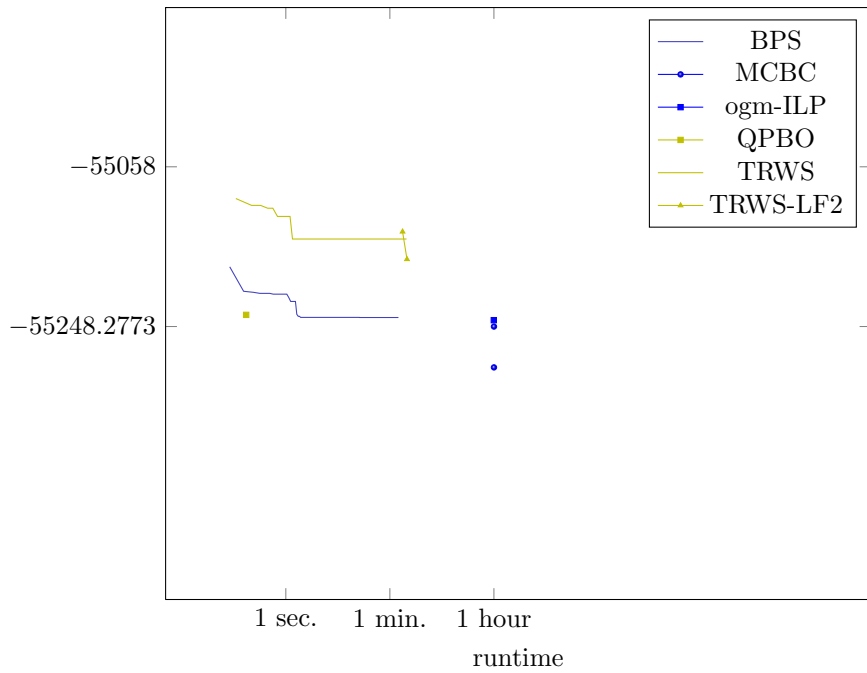


Figure 110: Runtime results for the instance *TST_test_0055_96_108* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

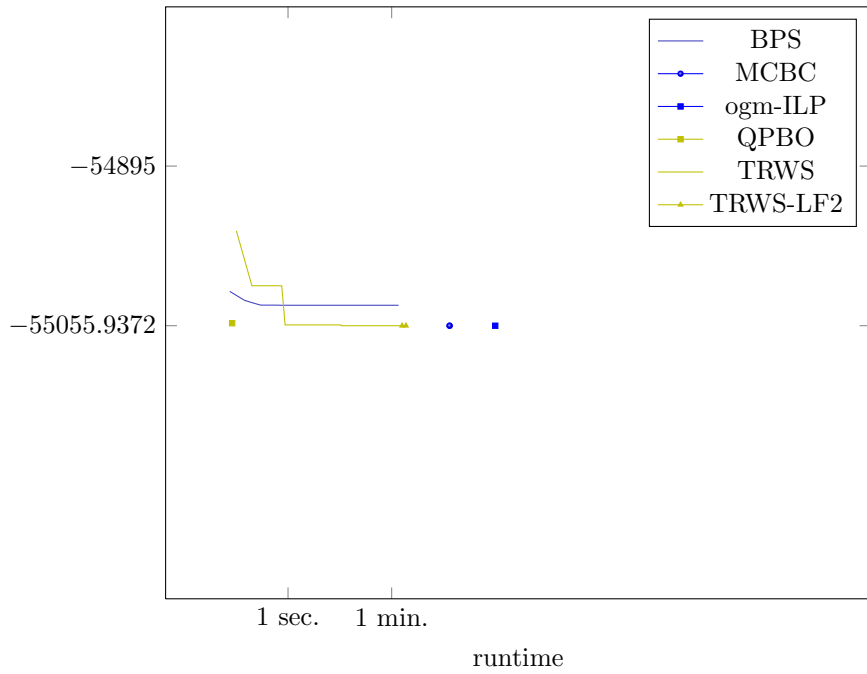


Figure 111: Runtime results for the instance *TST_test_0056_88_112* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

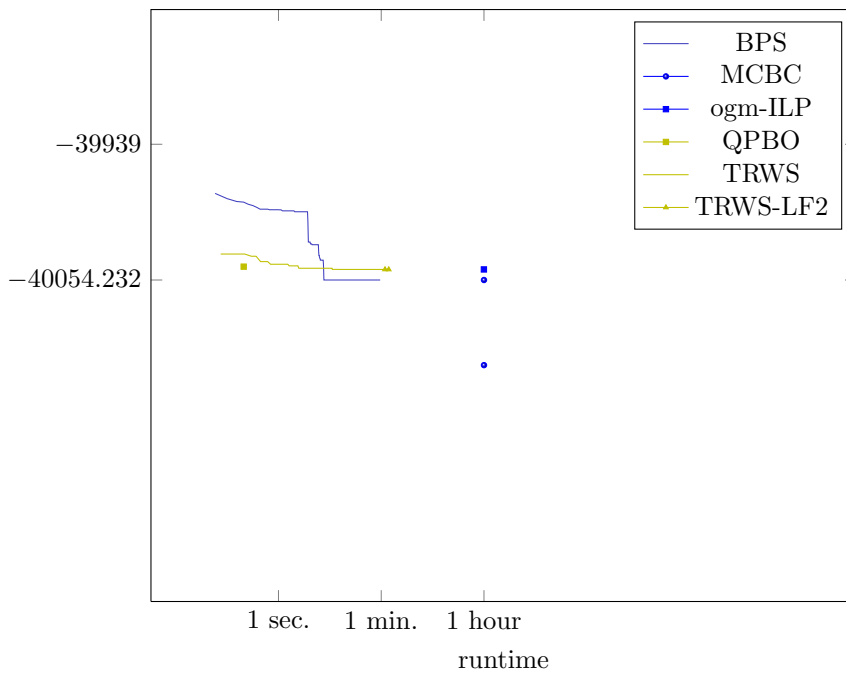


Figure 112: Runtime results for the instance *TST_test_0057_80_95* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

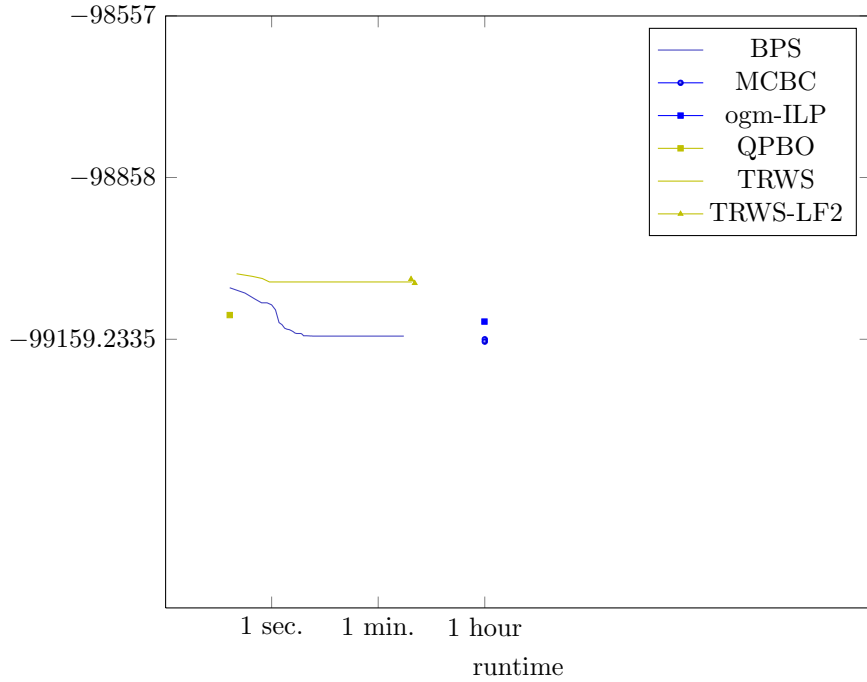


Figure 113: Runtime results for the instance *TST_test_0058_144_124* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

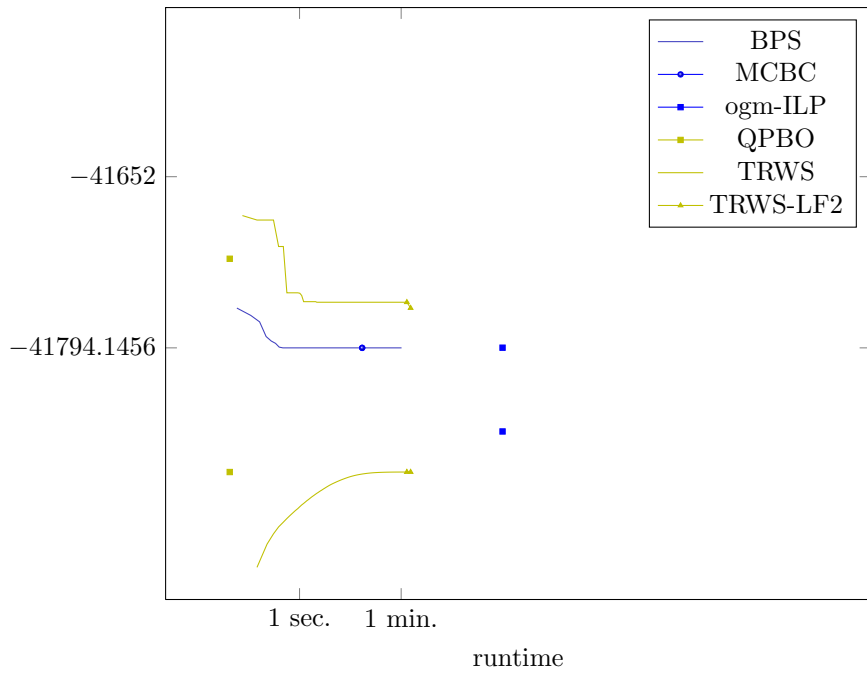


Figure 114: Runtime results for the instance *TST_test_0059_104_73* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

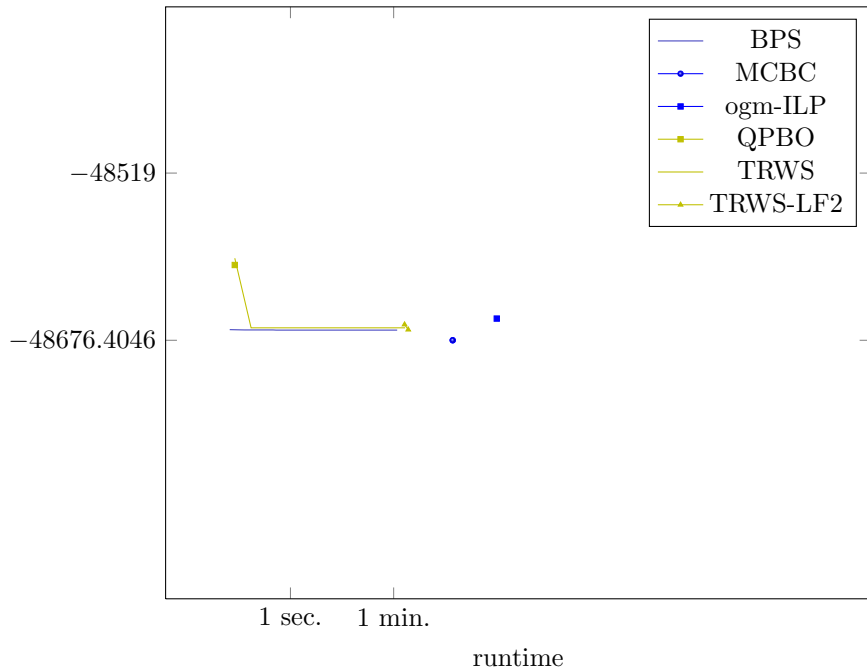


Figure 115: Runtime results for the instance *TST_test_0060_80_111* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

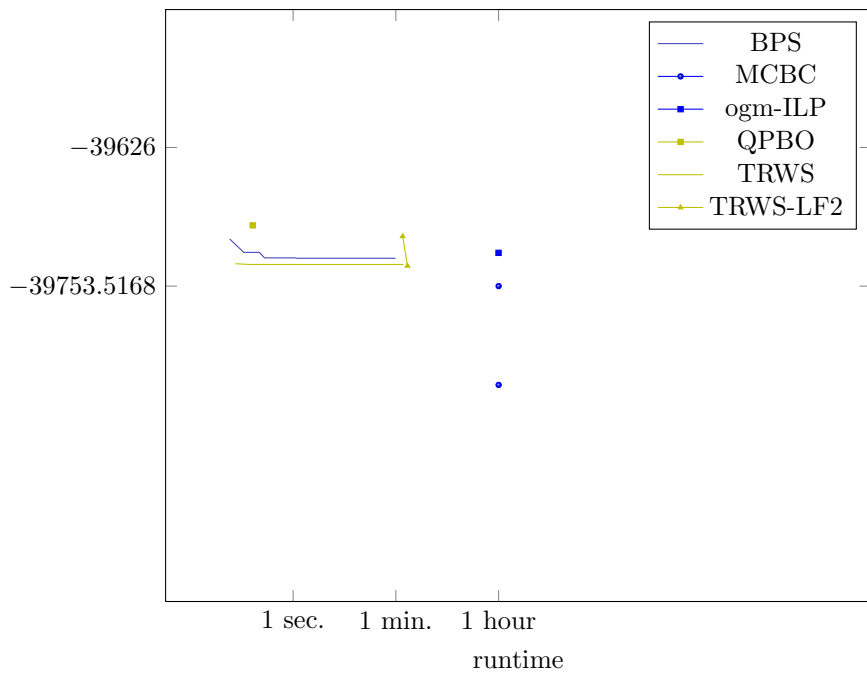


Figure 116: Runtime results for the instance *TST_test_0061_88_86* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

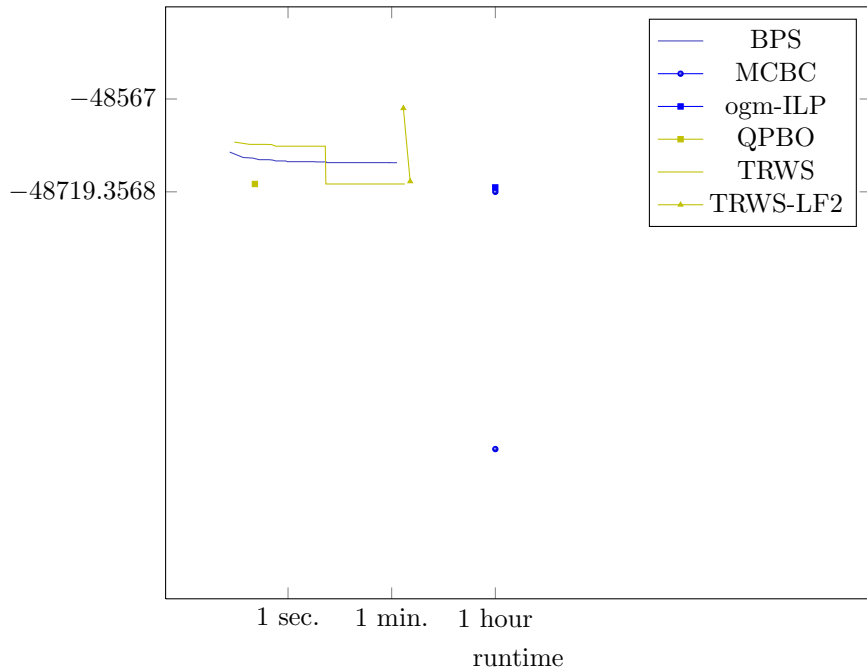


Figure 117: Runtime results for the instance *TST_test_0062_88_106* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

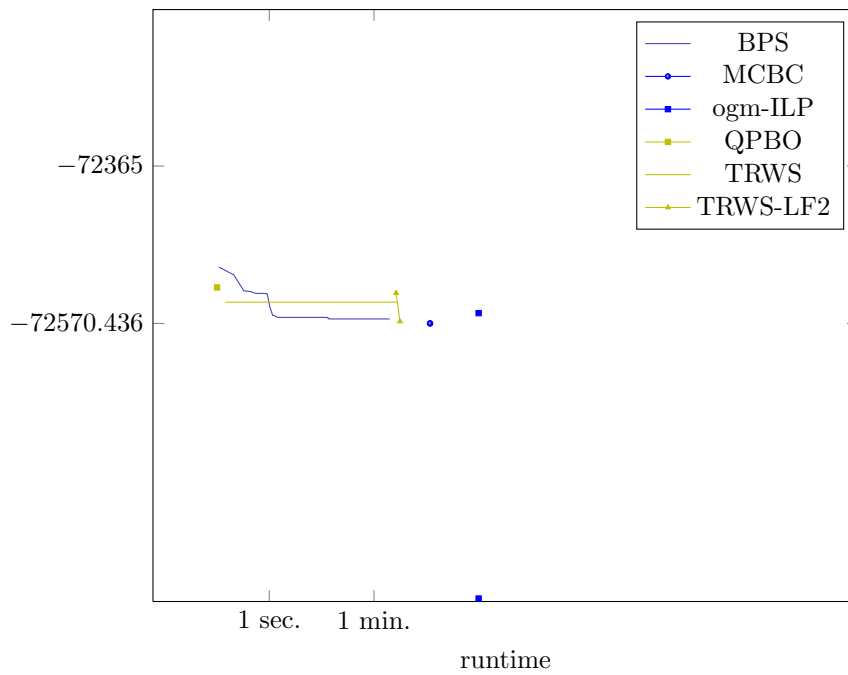


Figure 118: Runtime results for the instance *TST_test_0063_120_108* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

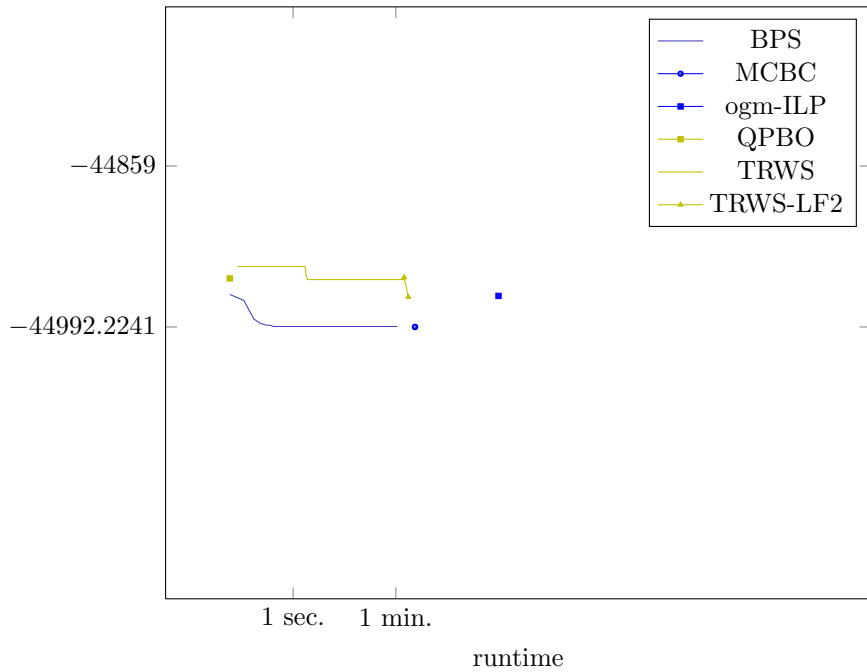


Figure 119: Runtime results for the instance *TST_test_0064_80_103* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

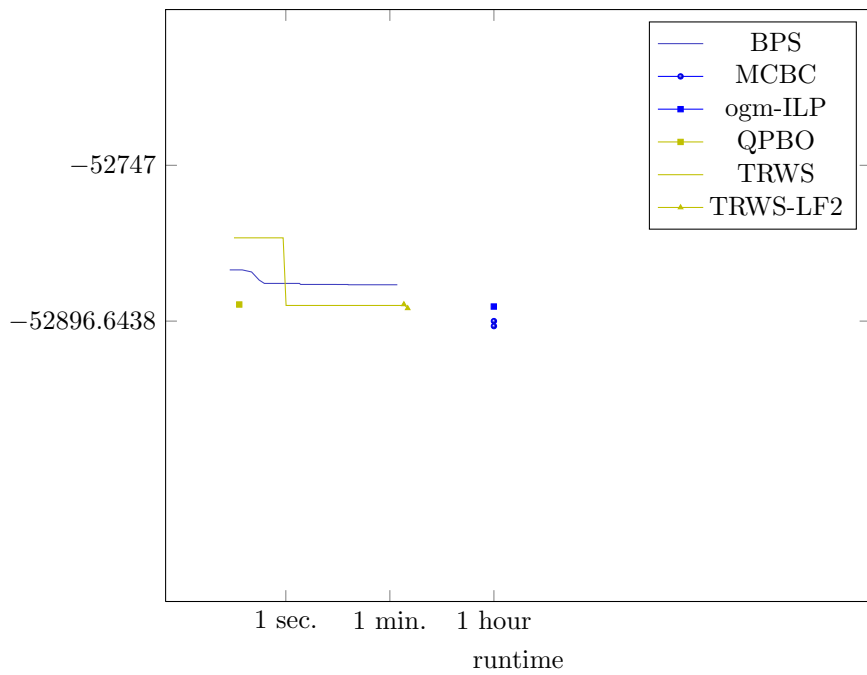


Figure 120: Runtime results for the instance *TST_test_0065_104_94* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

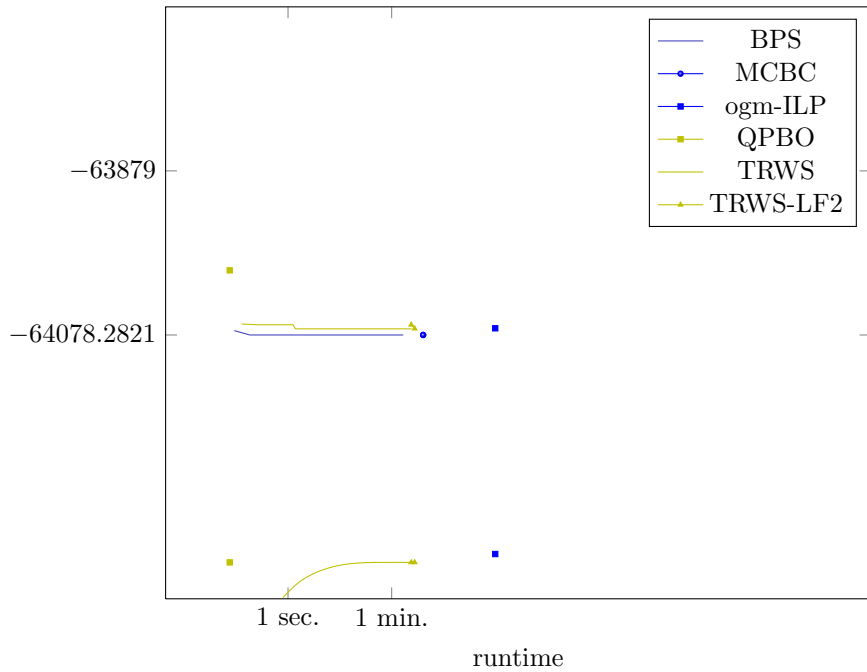


Figure 121: Runtime results for the instance *TST_test_0066_96_121* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

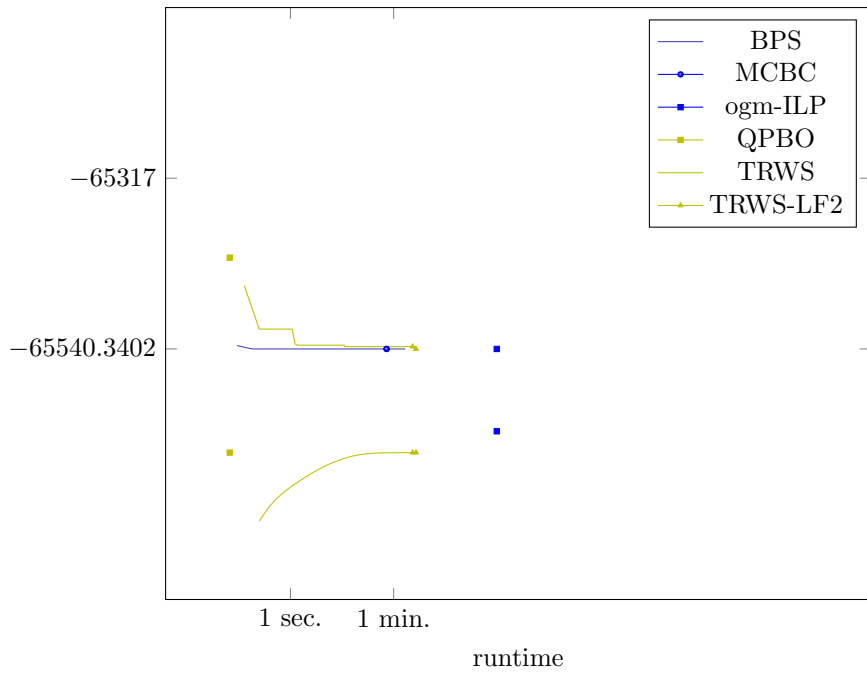


Figure 122: Runtime results for the instance *TST_test_0067_96_121* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

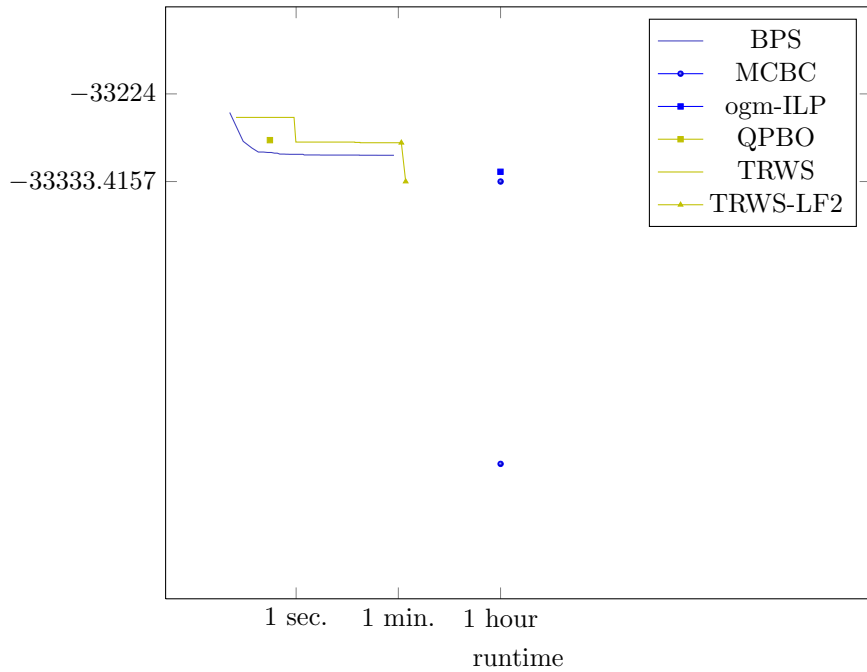


Figure 123: Runtime results for the instance *TST_test_0068_72_94* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

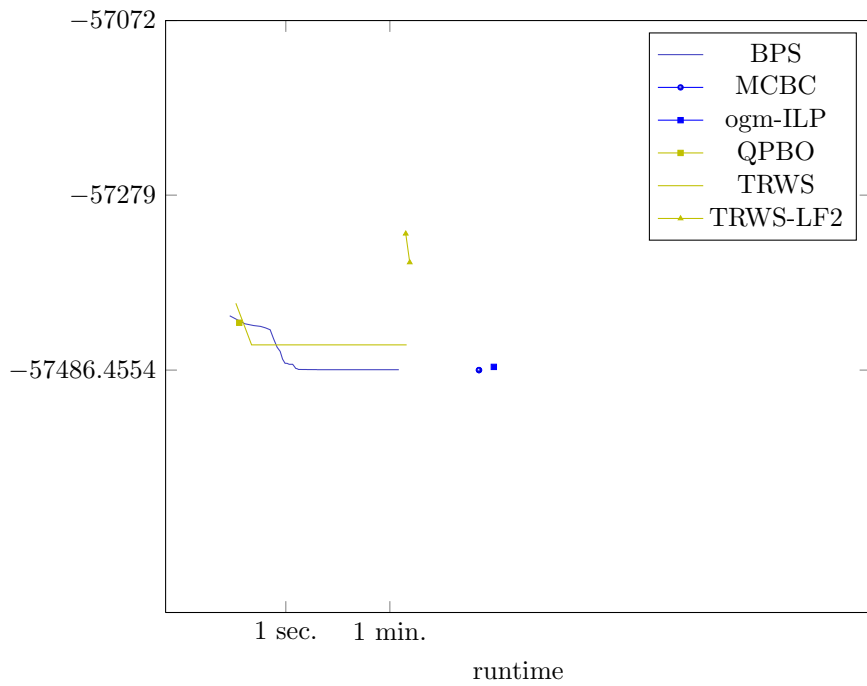


Figure 124: Runtime results for the instance *TST_test_0069_96_109* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

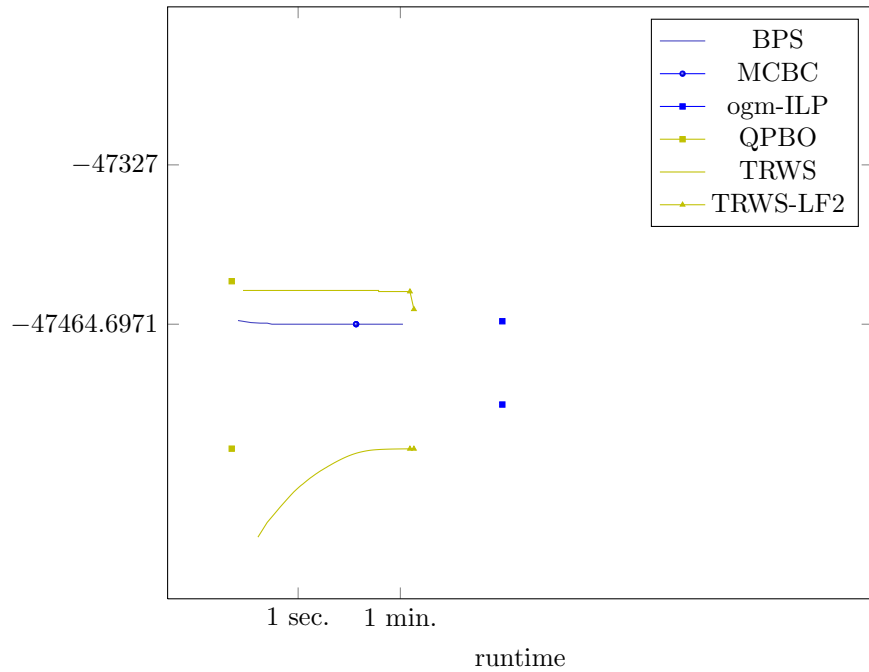


Figure 125: Runtime results for the instance *TST_test_0070_88_96* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

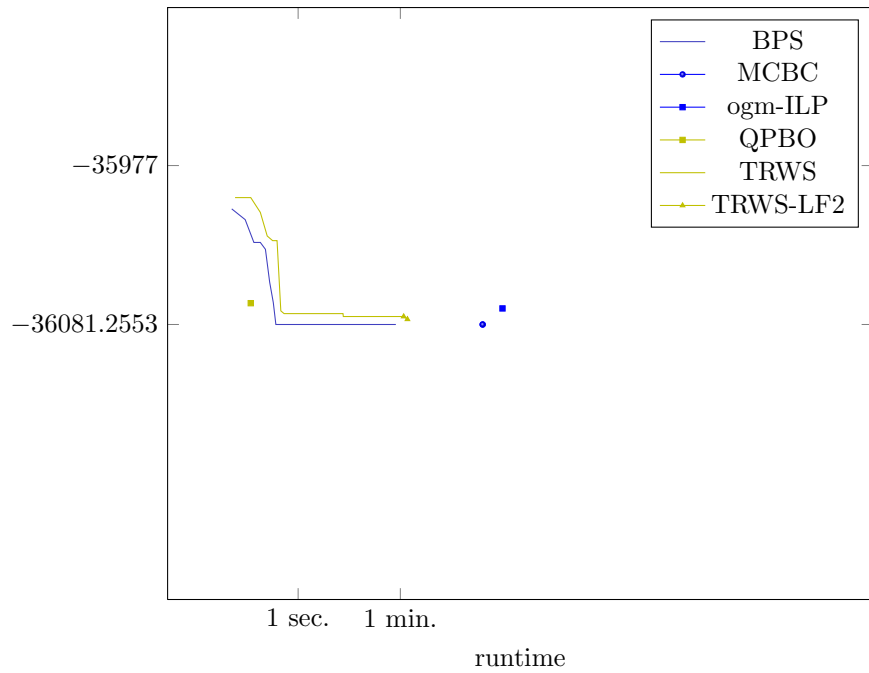


Figure 126: Runtime results for the instance *TST_test_0071_72_94* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

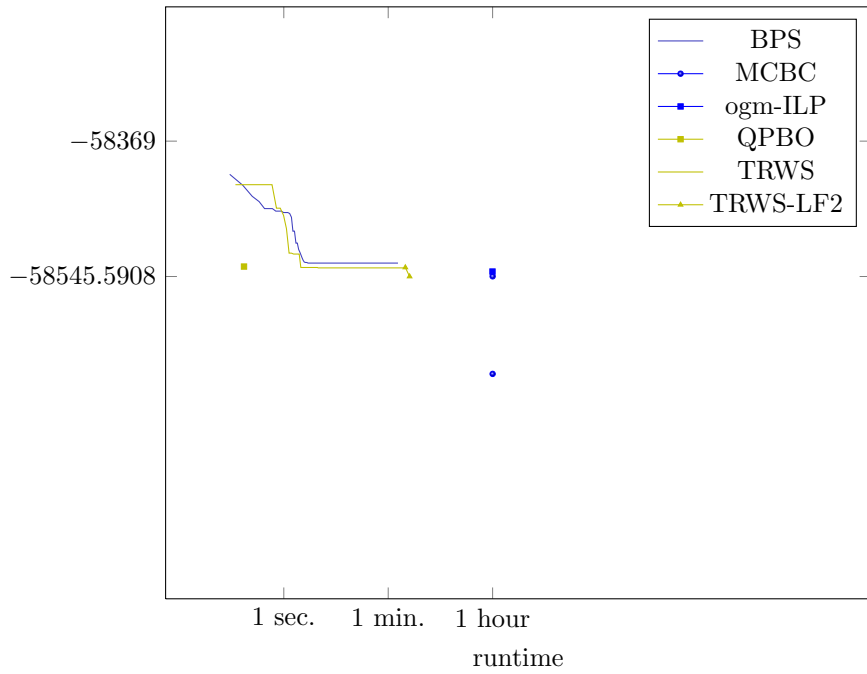


Figure 127: Runtime results for the instance *TST_test_0072_96_113* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

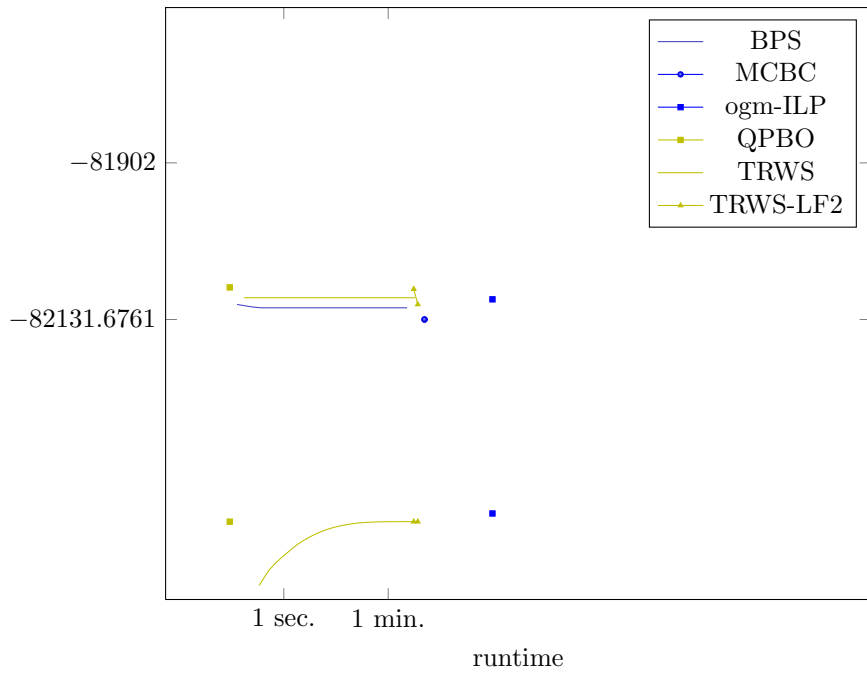


Figure 128: Runtime results for the instance *TST_test_0073_128_113* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

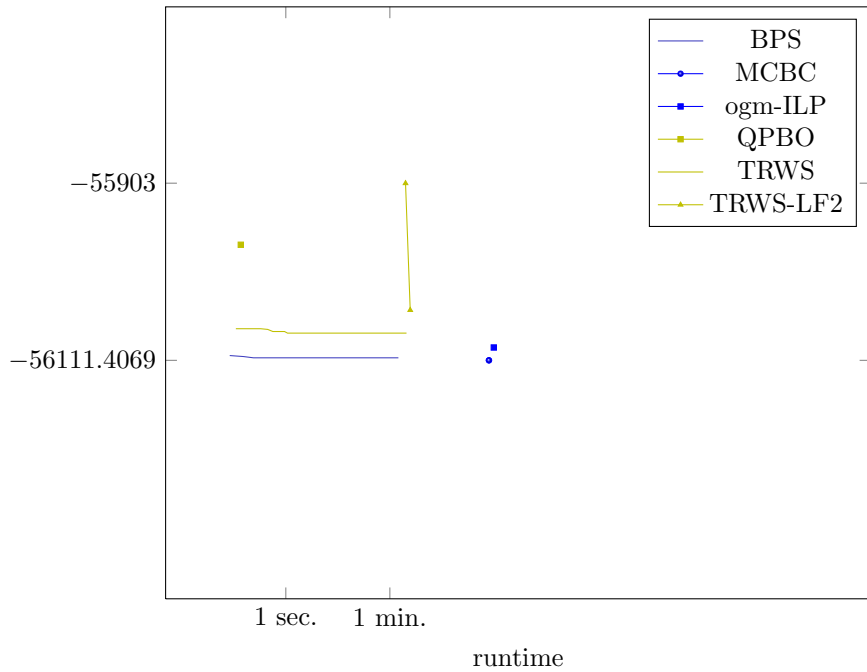


Figure 129: Runtime results for the instance *TST_test_0074_96_107* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

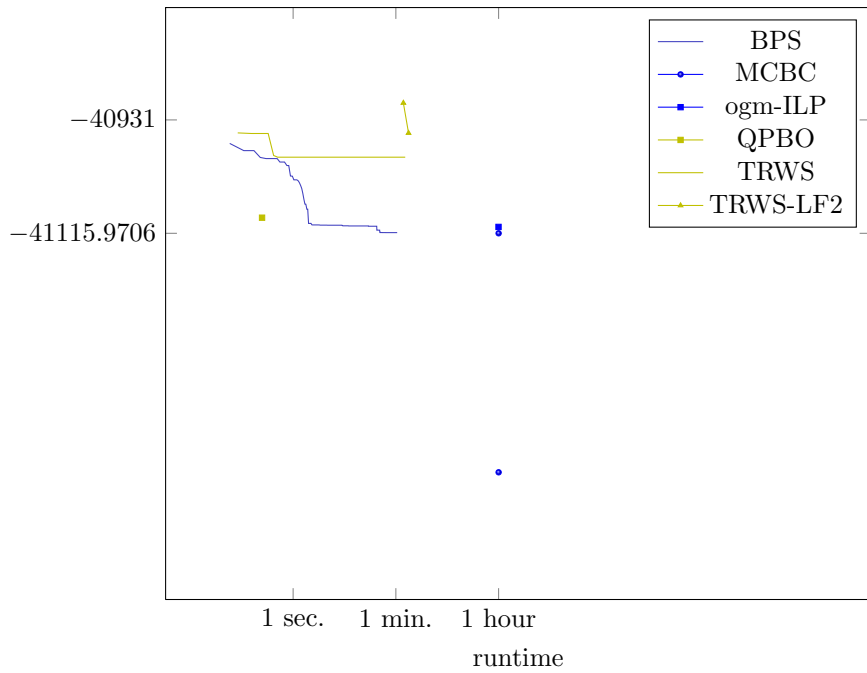


Figure 130: Runtime results for the instance *TST_test_0075_88_92* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

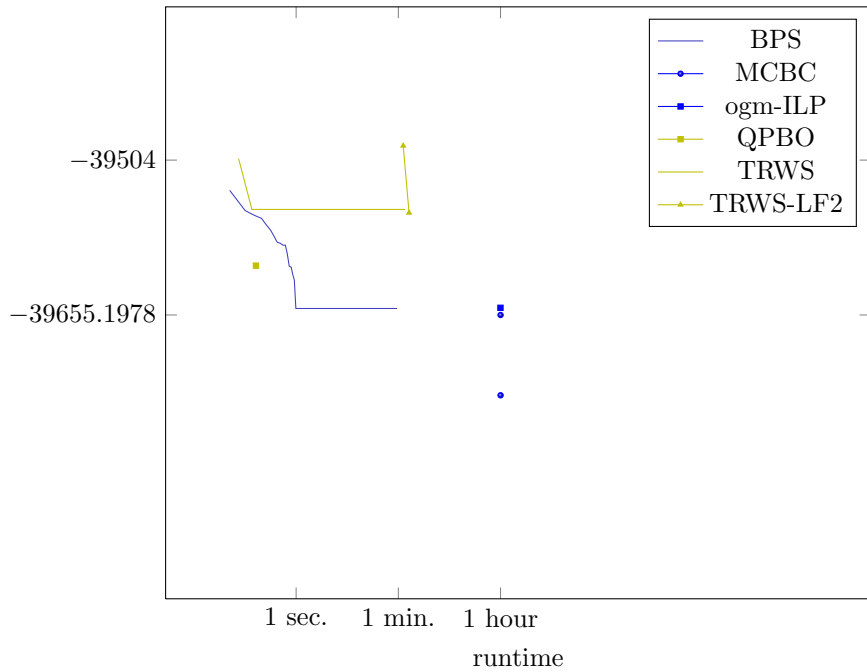


Figure 131: Runtime results for the instance *TST_test_0076_80_93* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

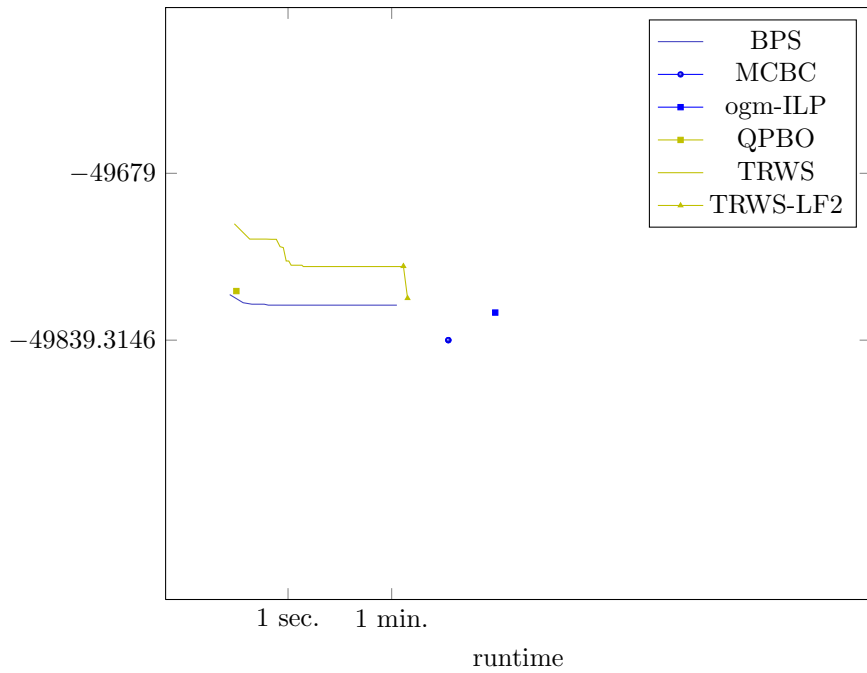


Figure 132: Runtime results for the instance *TST_test_0077_96_95* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

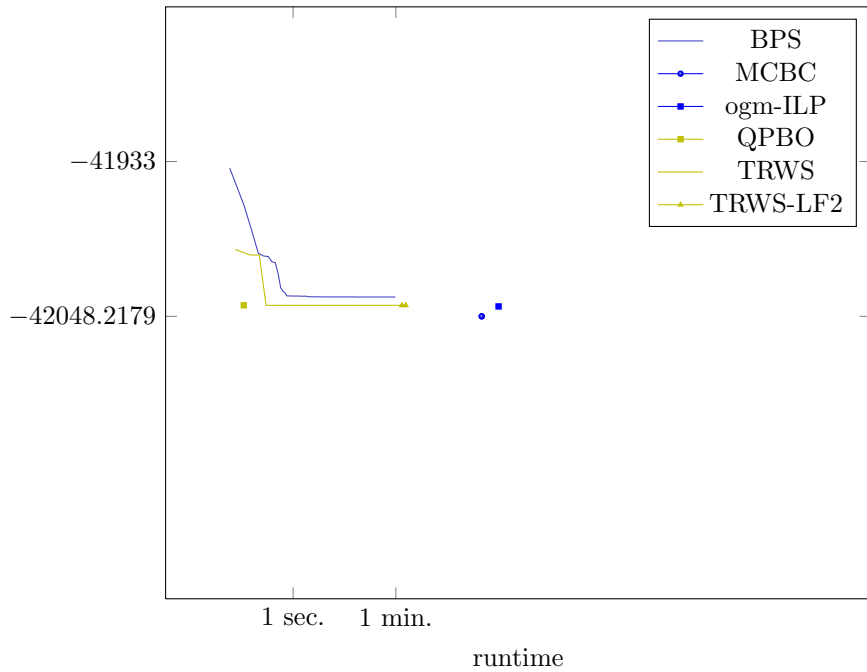


Figure 133: Runtime results for the instance *TST_test_0078_72_108* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

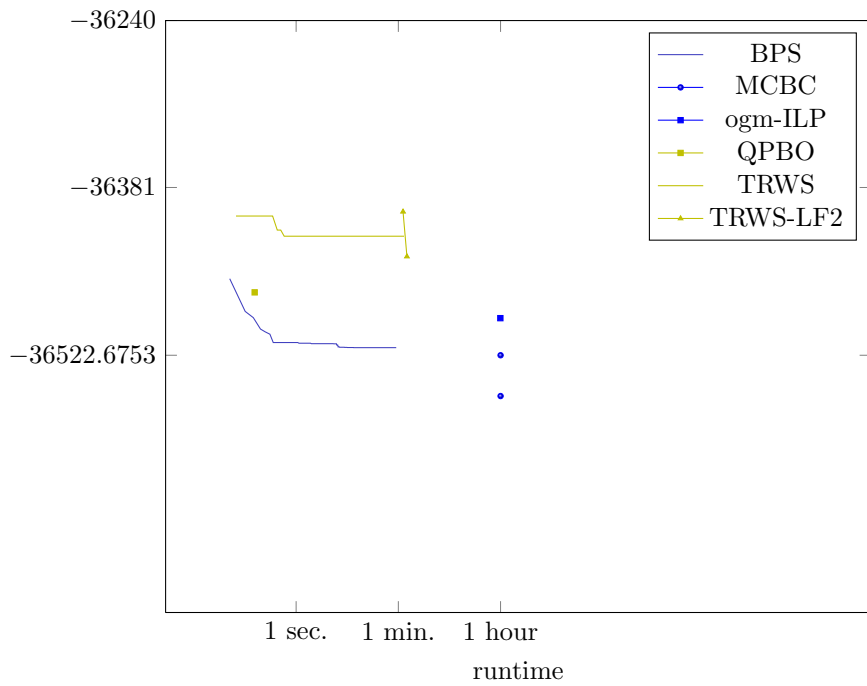


Figure 134: Runtime results for the instance *TST_test_0079_88_81* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

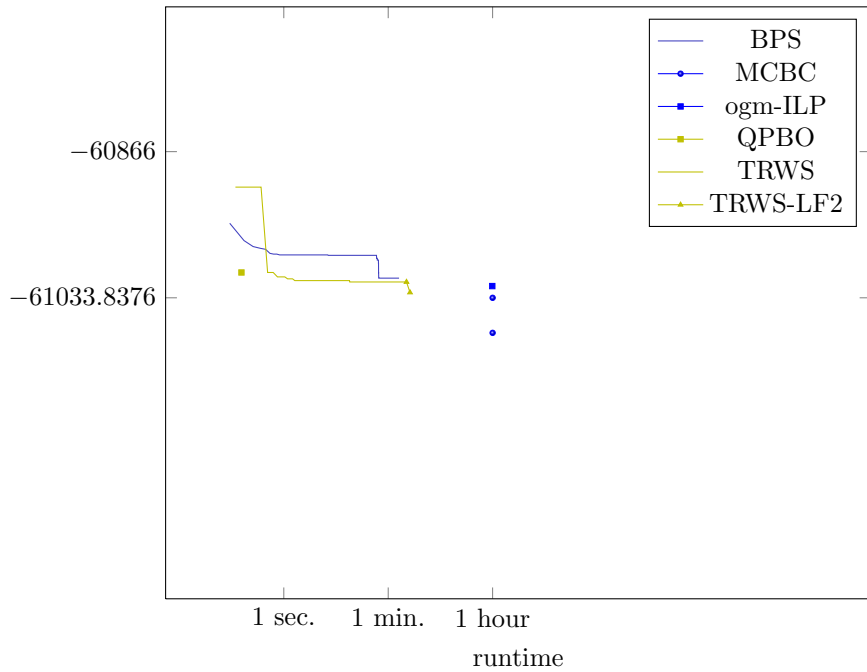


Figure 135: Runtime results for the instance *TST_test_0080_104_107* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

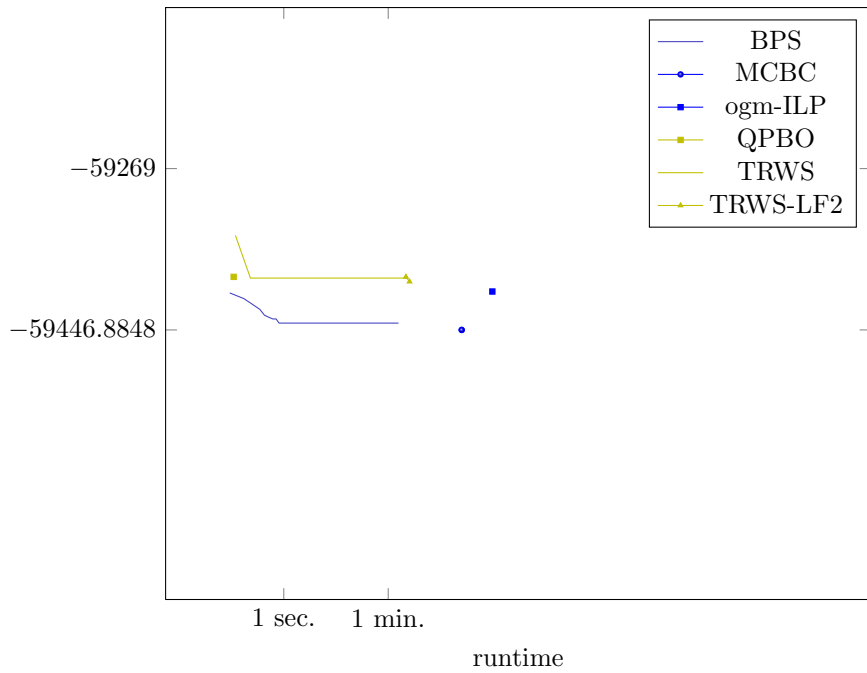


Figure 136: Runtime results for the instance *TST_test_0081_112_96* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

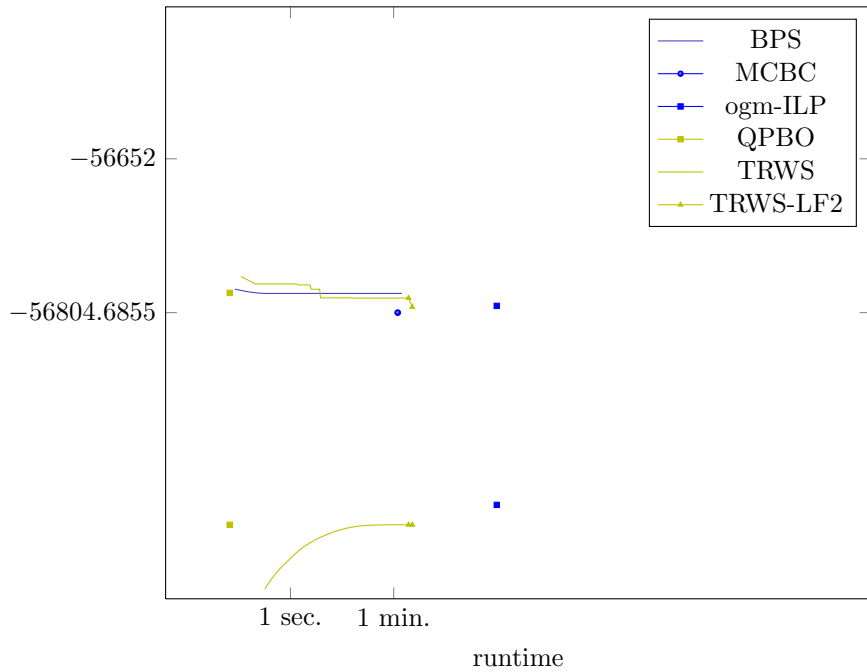


Figure 137: Runtime results for the instance *TST_test_0082_96_106* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

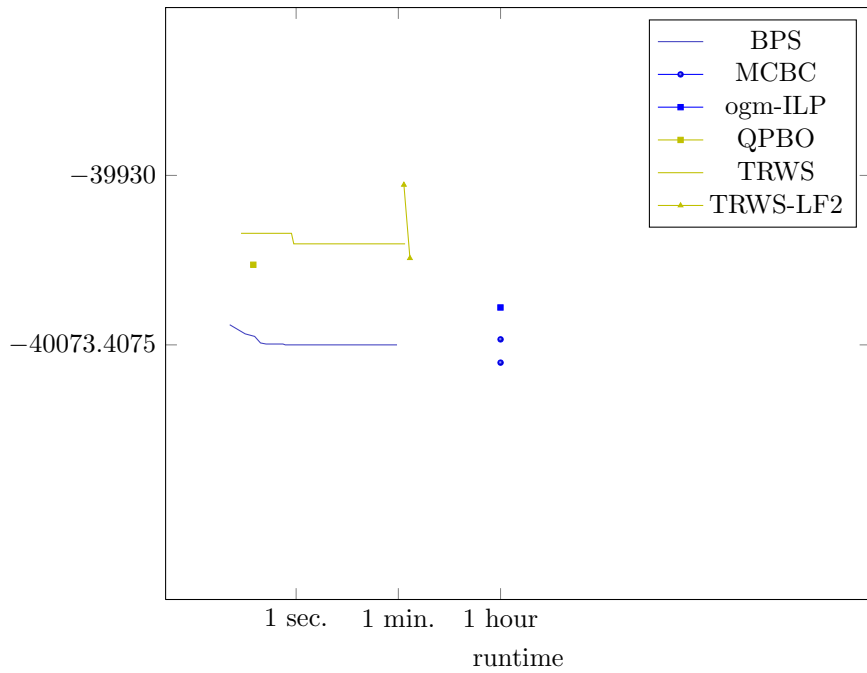


Figure 138: Runtime results for the instance *TST_test_0083_72_105* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

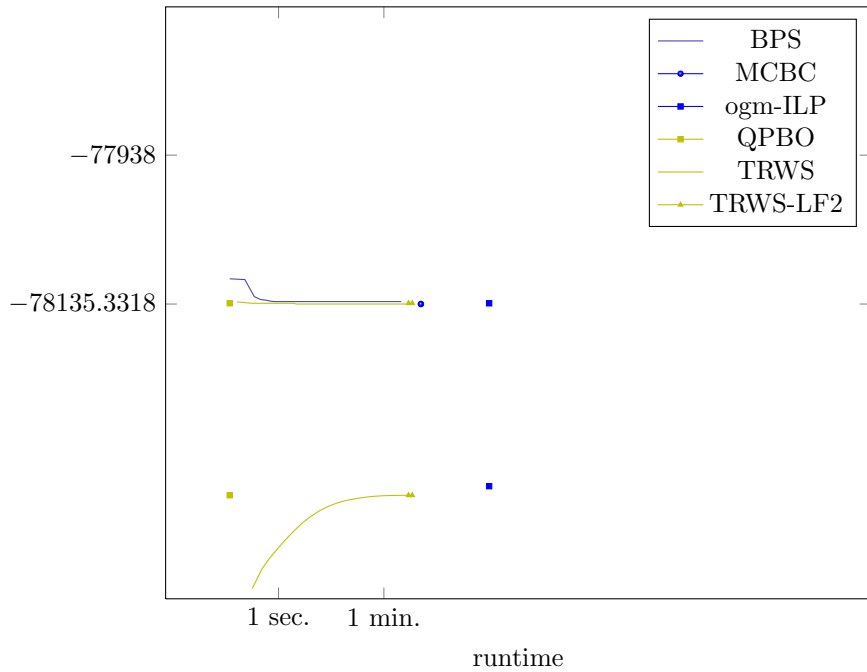


Figure 139: Runtime results for the instance *TST_test_0084_120_115* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

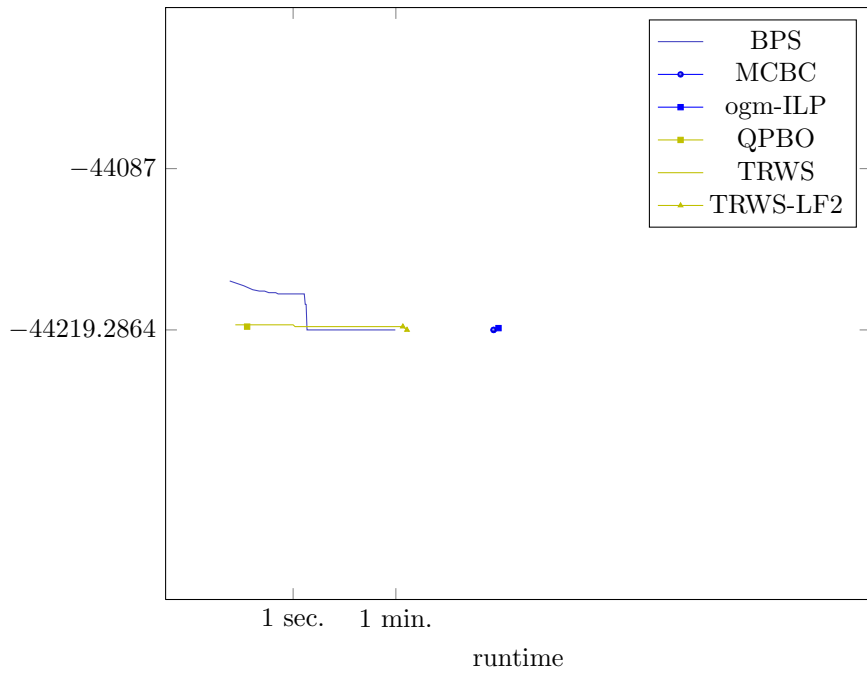


Figure 140: Runtime results for the instance *TST_test_0085_64_126* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

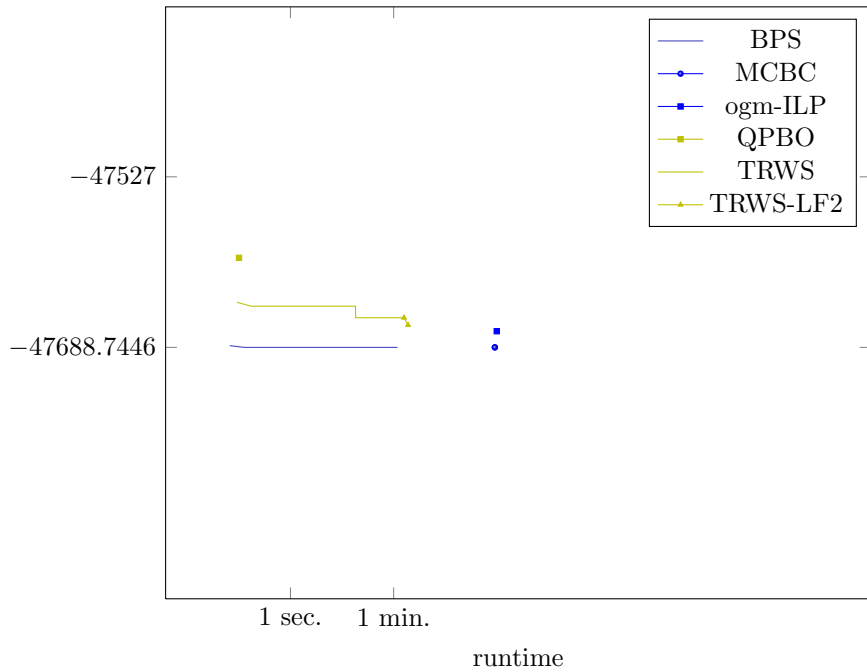


Figure 141: Runtime results for the instance *TST_test_0086_80_112* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

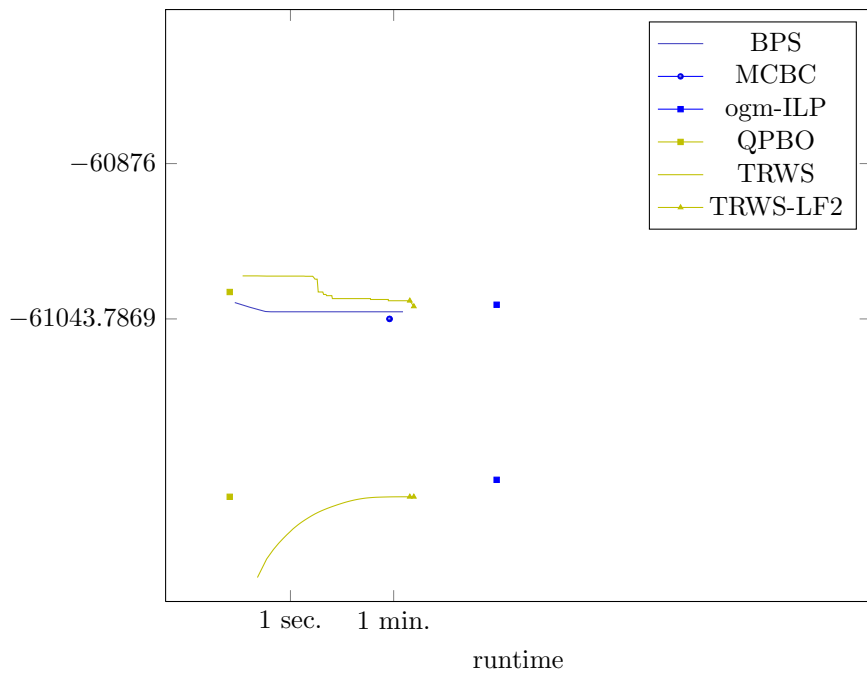


Figure 142: Runtime results for the instance *TST_test_0087_88_124* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

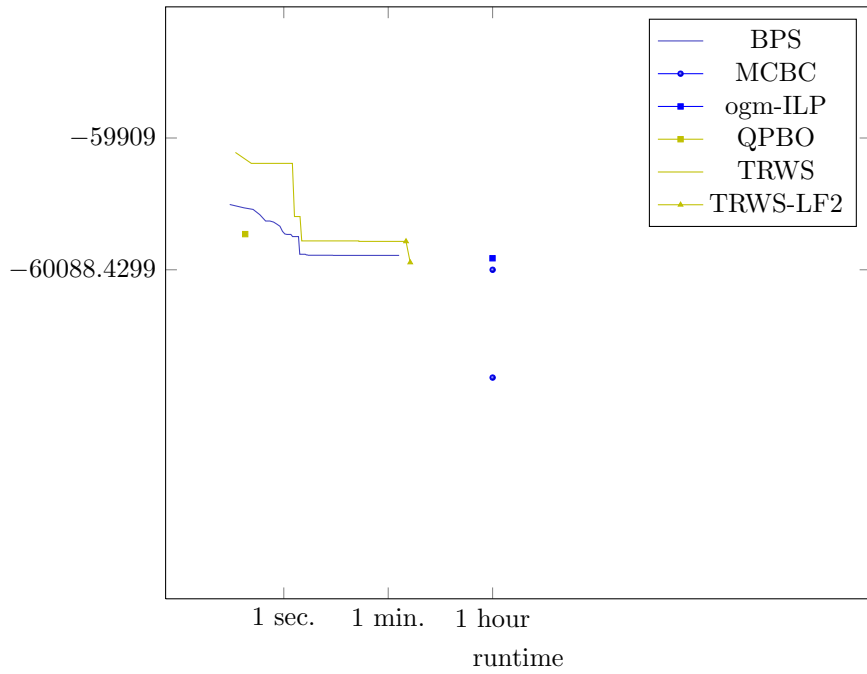


Figure 143: Runtime results for the instance *TST_test_0088_104_107* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

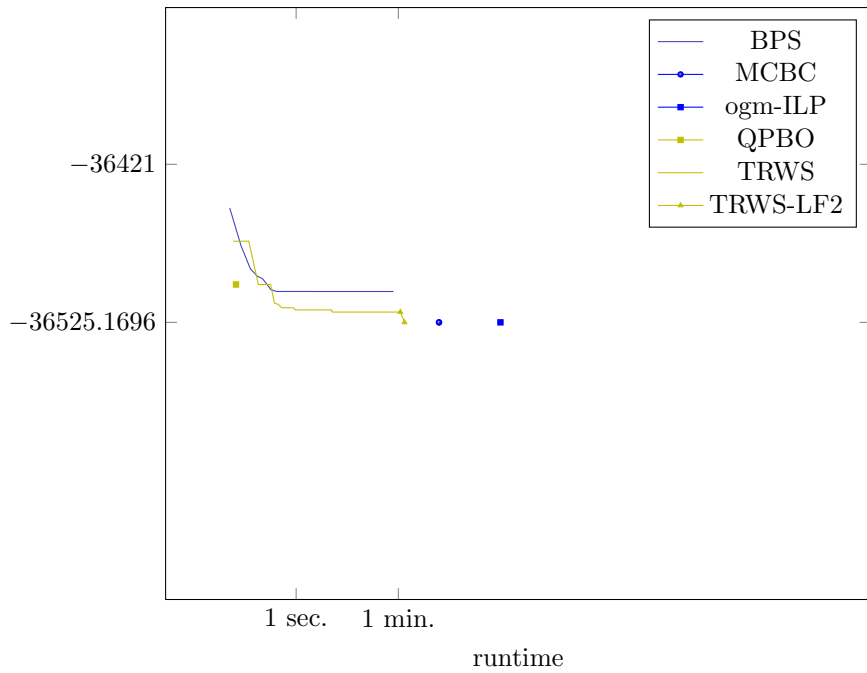


Figure 144: Runtime results for the instance *TST_test_0089_72_92* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

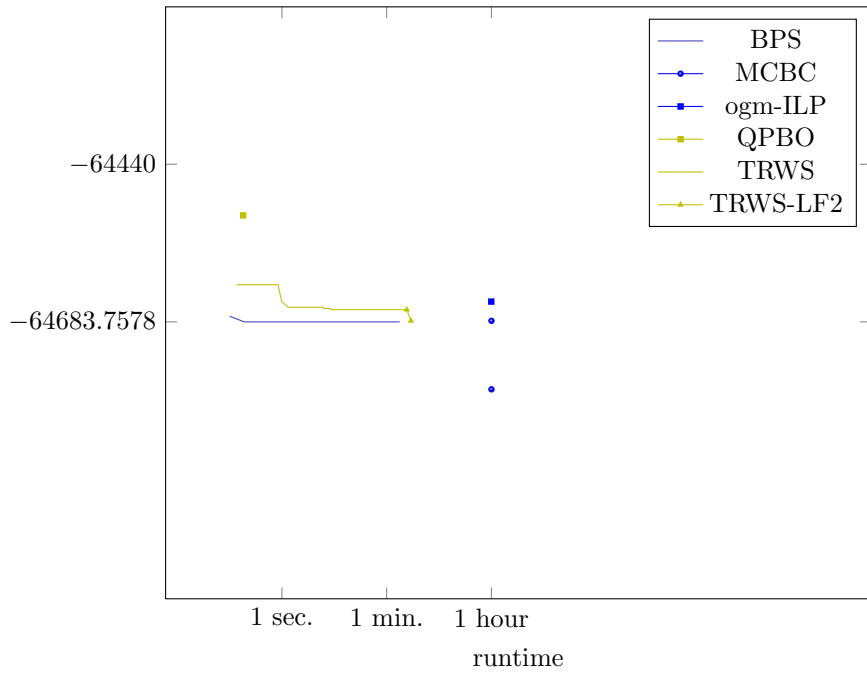


Figure 145: Runtime results for the instance *TST_test_0090_104_116* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

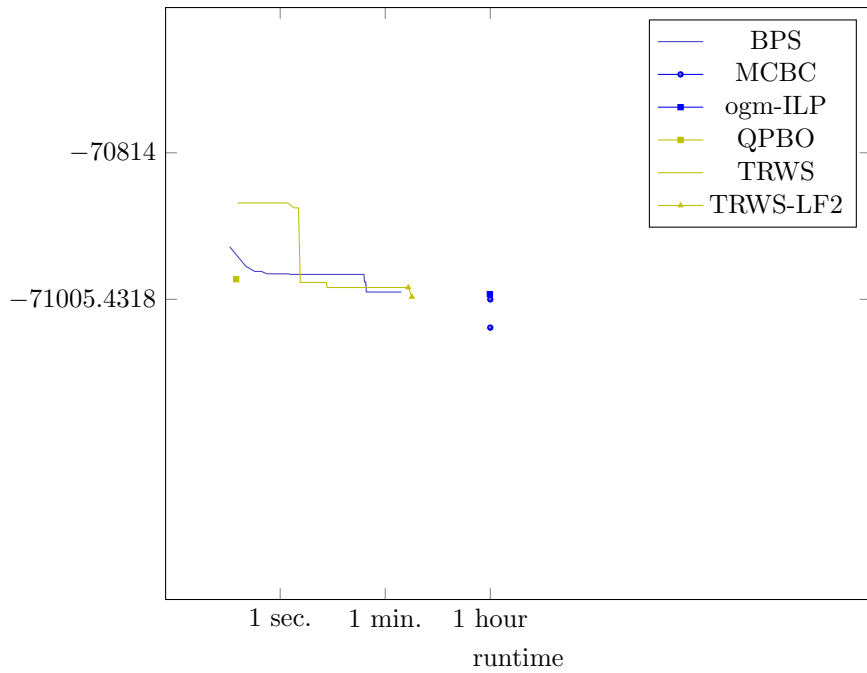


Figure 146: Runtime results for the instance *TST_test_0091_136_95* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

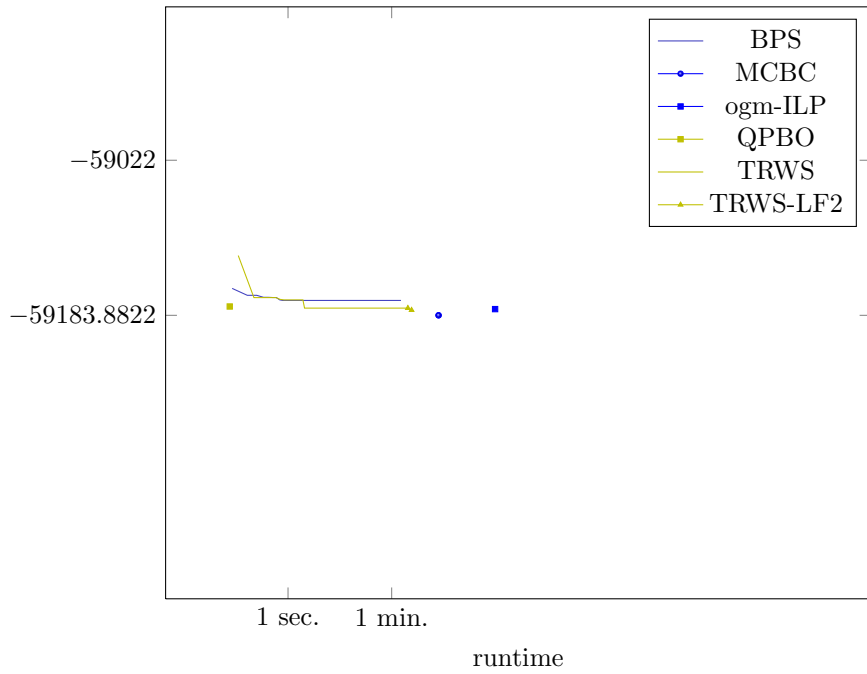


Figure 147: Runtime results for the instance *TST_test_0092_96_111* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

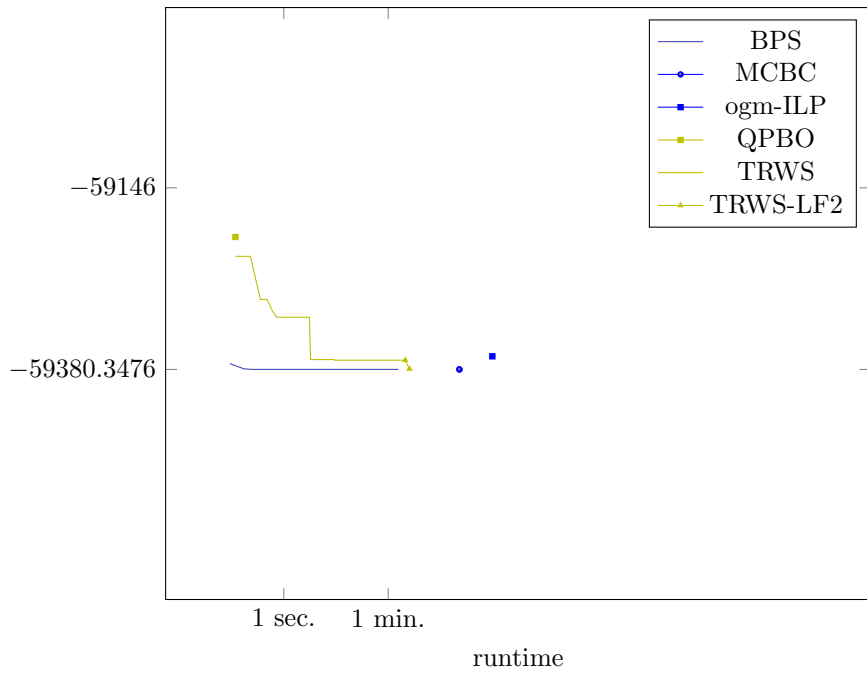


Figure 148: Runtime results for the instance *TST_test_0093_104_105* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

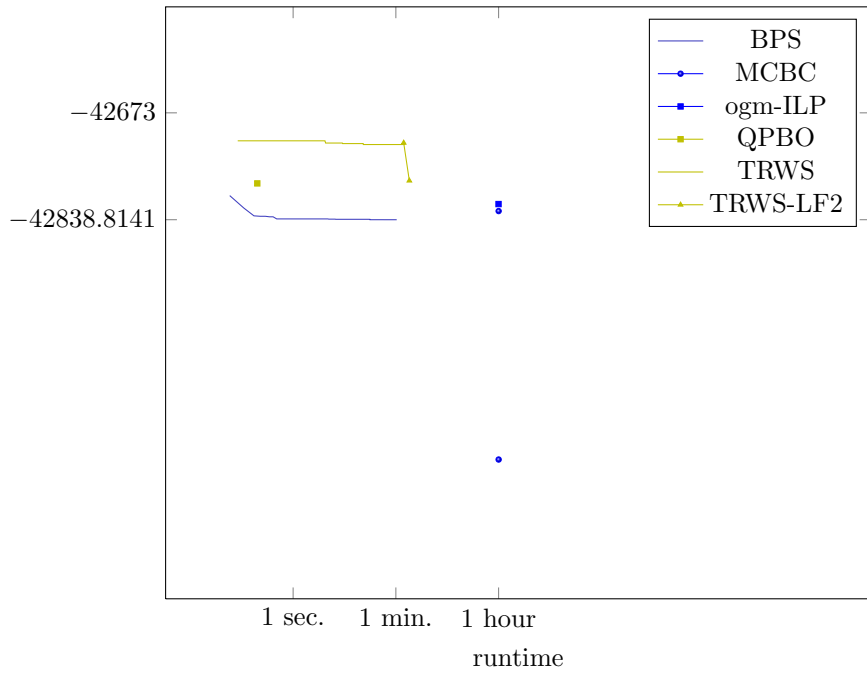


Figure 149: Runtime results for the instance *TST_test_0094_64_131* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

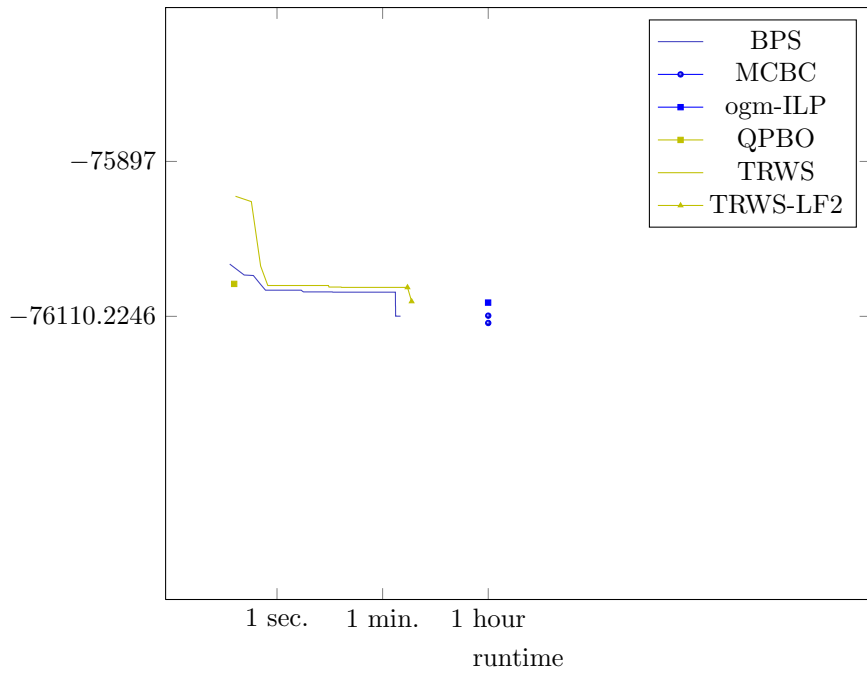


Figure 150: Runtime results for the instance *TST_test_0095_128_109* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

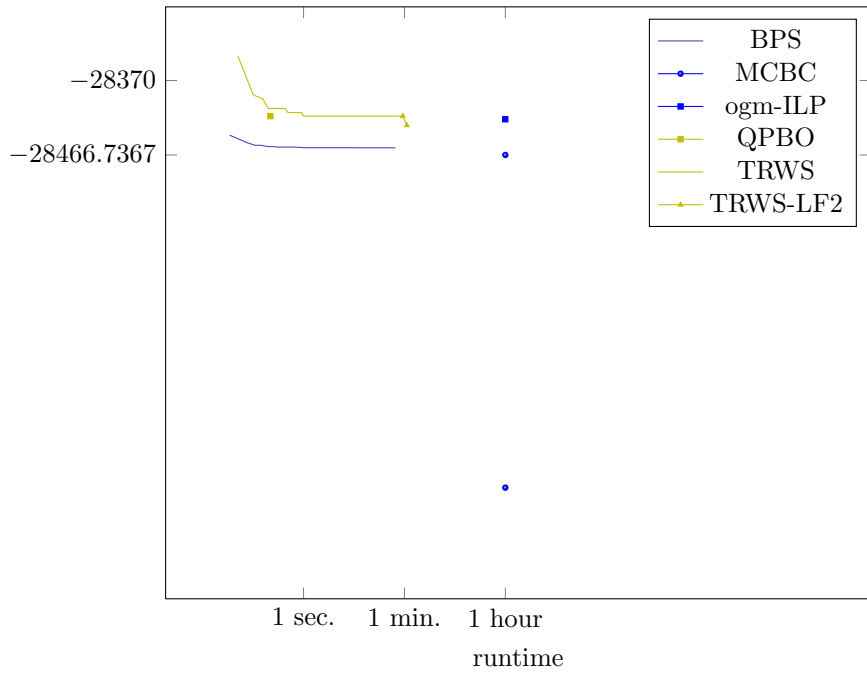


Figure 151: Runtime results for the instance *TST_test_0096_56_107* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

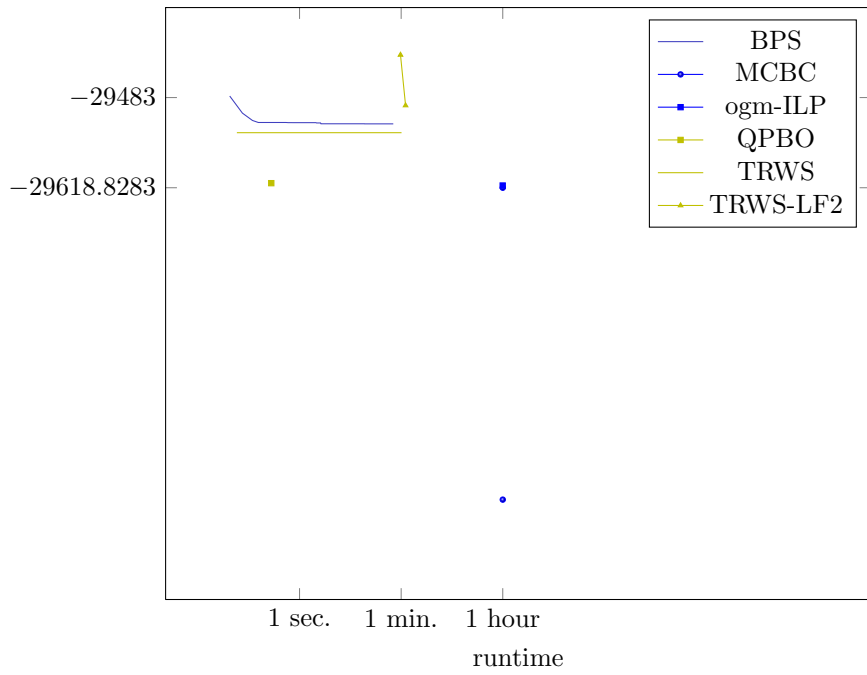


Figure 152: Runtime results for the instance *TST_test_0097_56_111* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

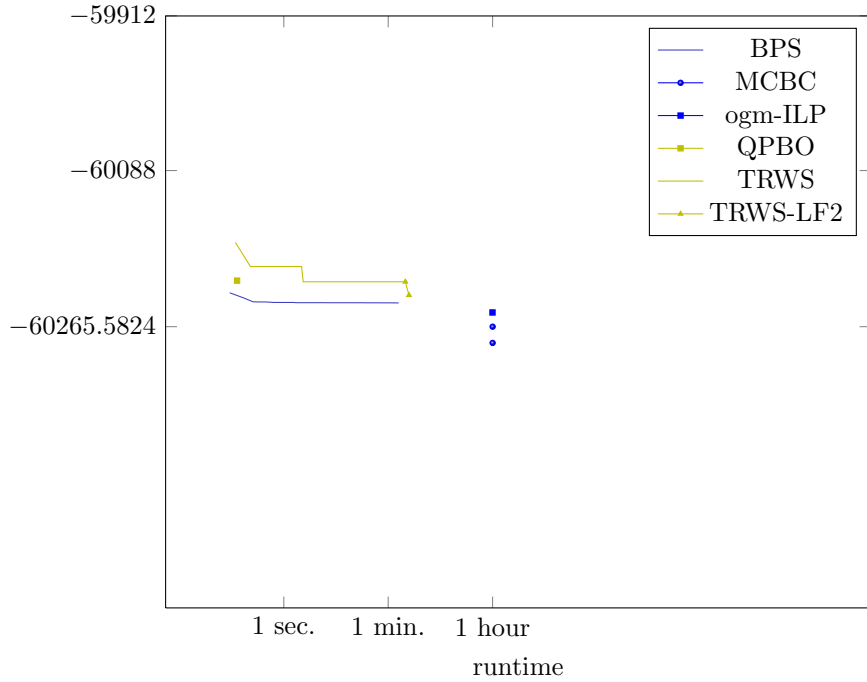


Figure 153: Runtime results for the instance *TST_test_0098_112_98* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

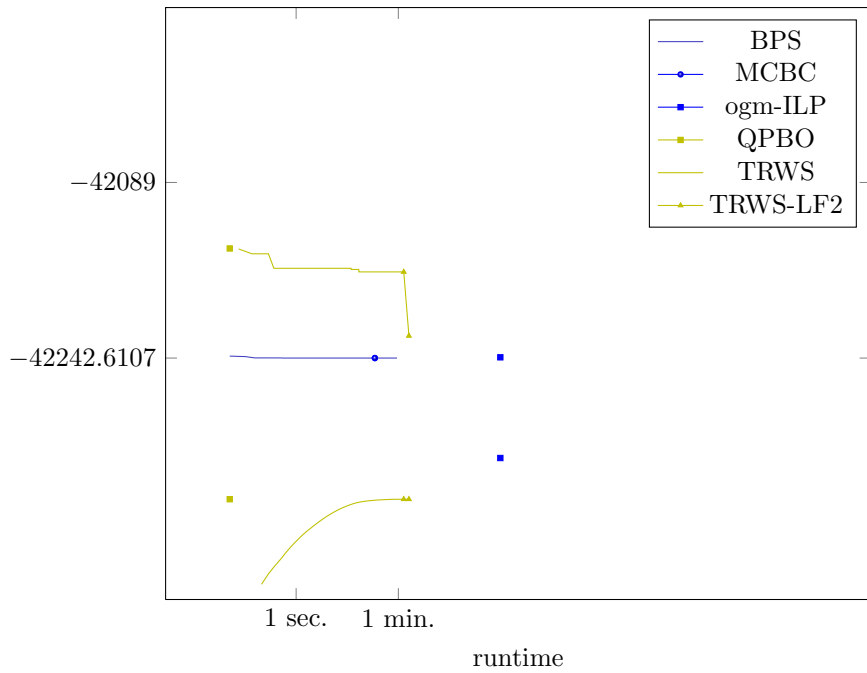


Figure 154: Runtime results for the instance *TST_test_0099_72_105* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

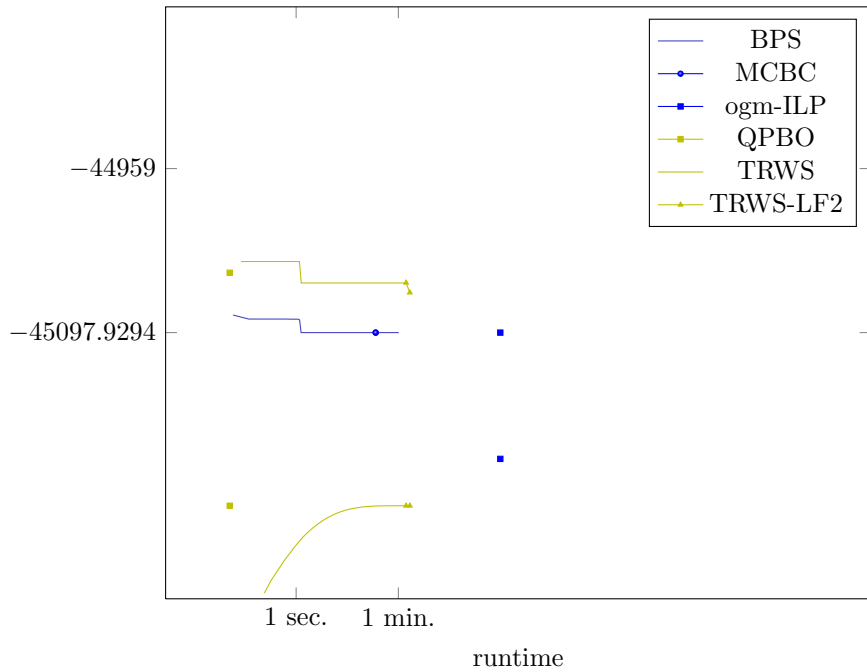


Figure 155: Runtime results for the instance *TST_test_0100_80_102* of the *dtf-chinesechar* models. Plots show best value of integer solution and (if provided) best lower bound.

5.12. Scene Labeling (scene-decomposition)

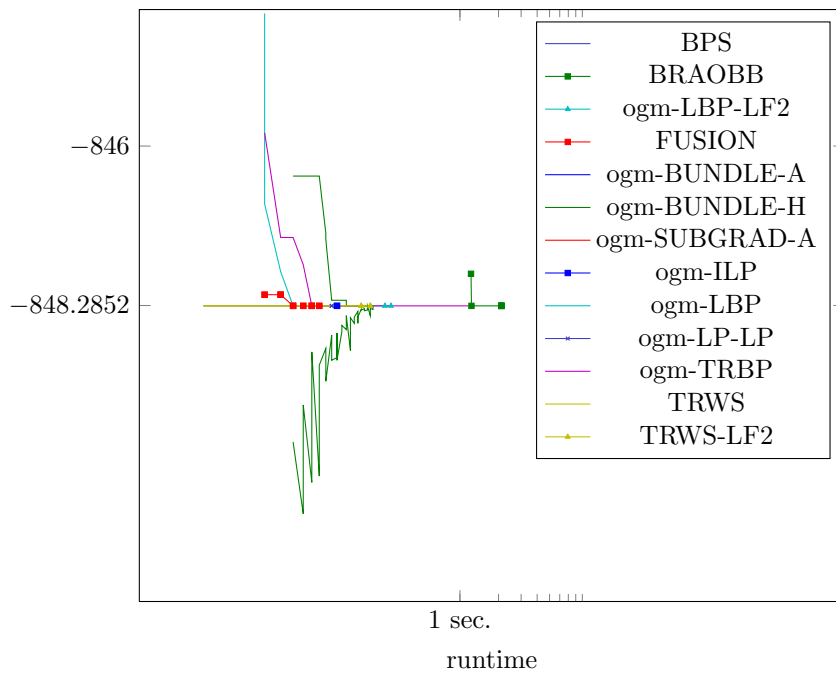


Figure 156: Runtime results for the instance *0000047* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

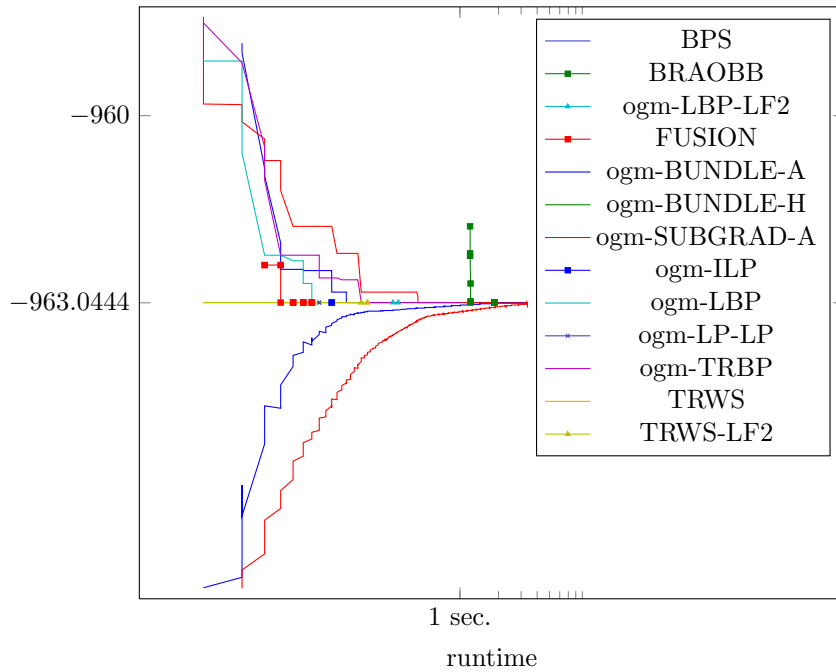


Figure 157: Runtime results for the instance *0000051* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

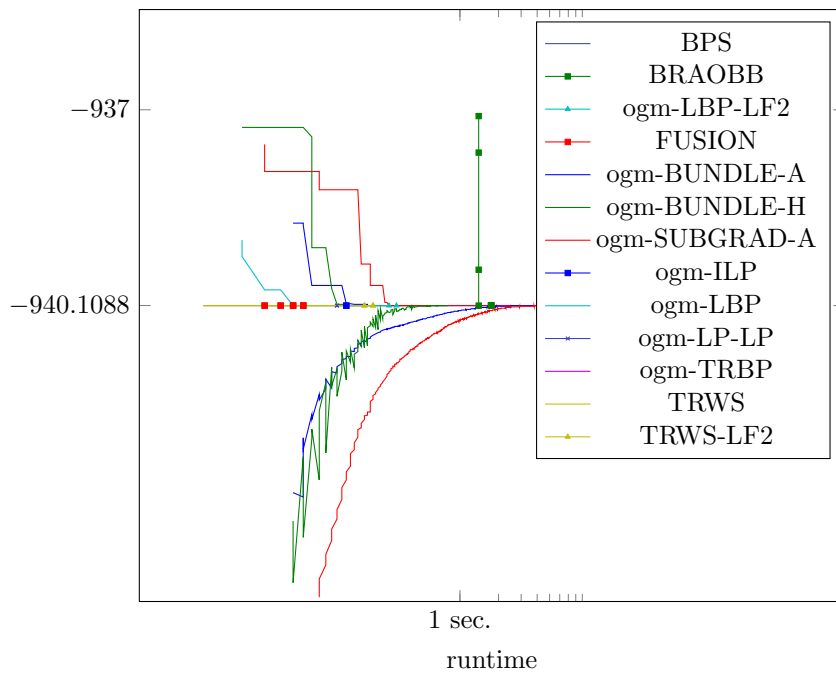


Figure 158: Runtime results for the instance *0000059* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

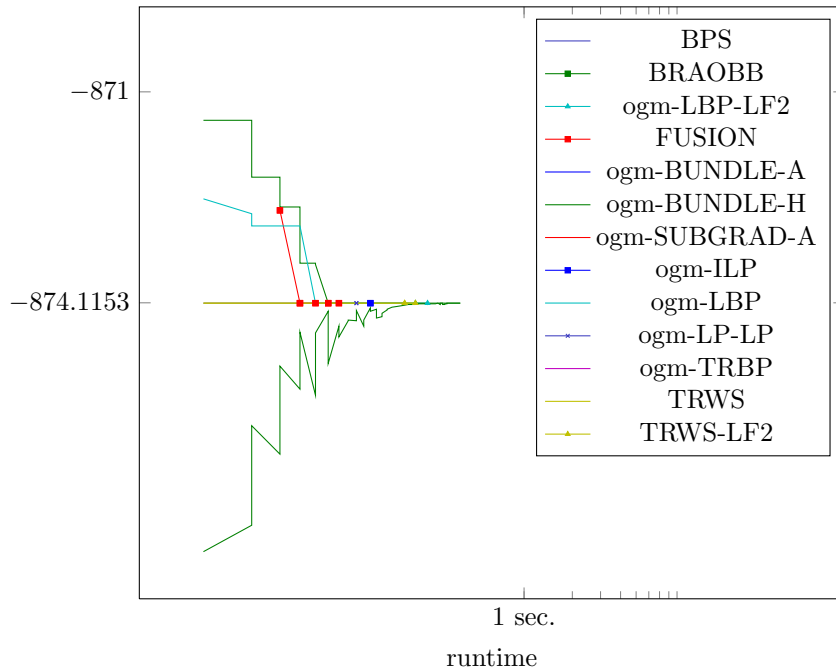


Figure 159: Runtime results for the instance 0000072 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

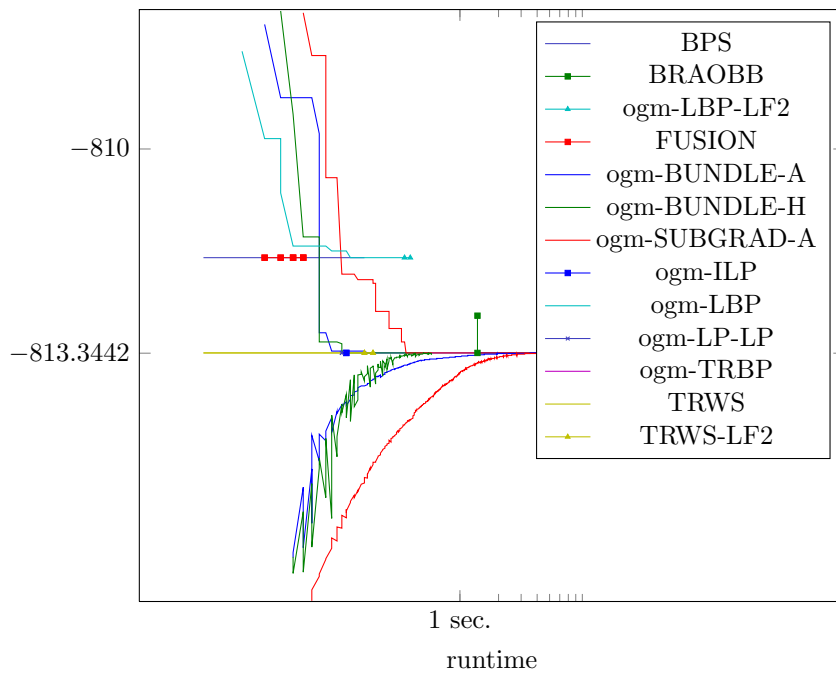


Figure 160: Runtime results for the instance 0000087 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

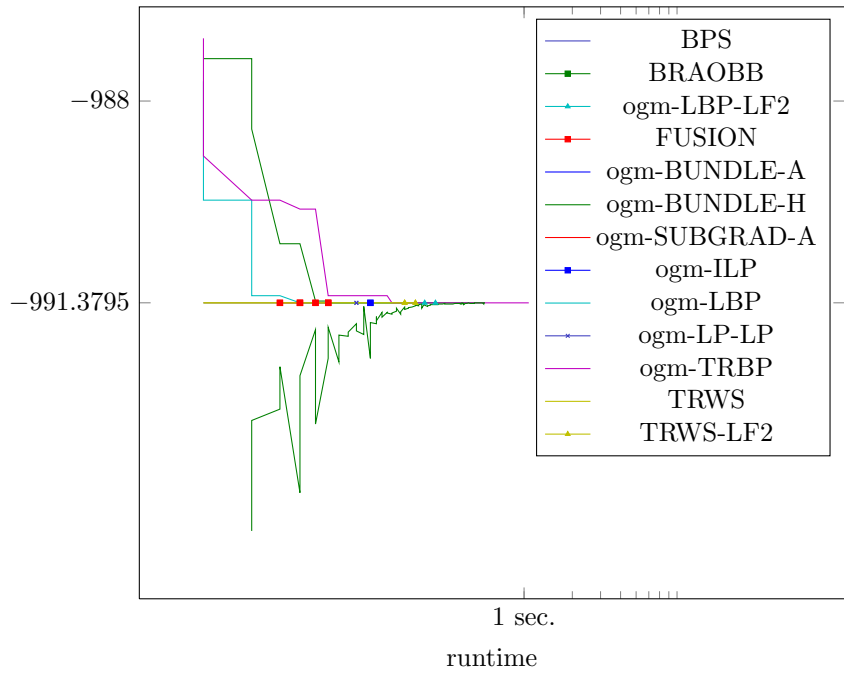


Figure 161: Runtime results for the instance 0000176 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

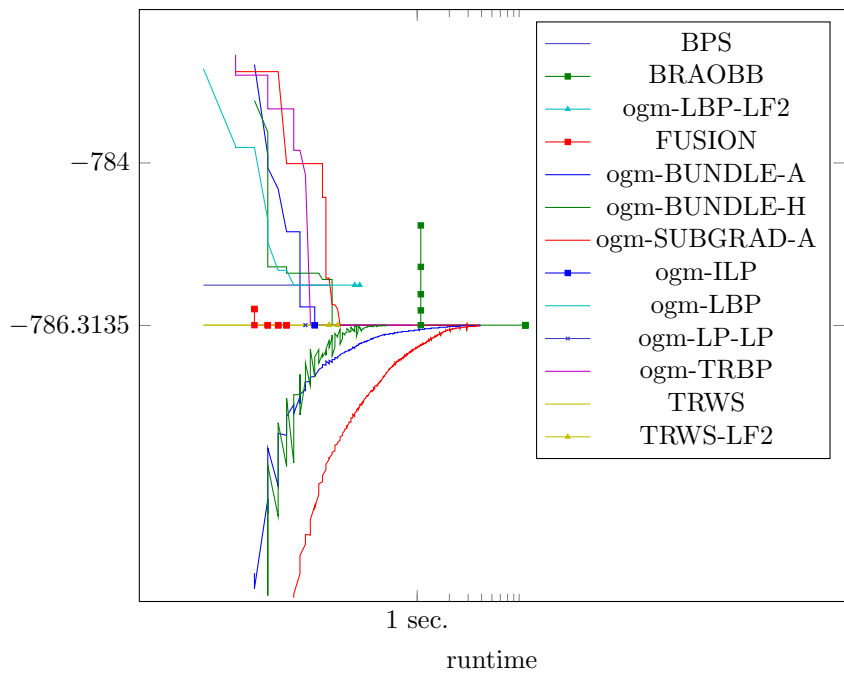


Figure 162: Runtime results for the instance 0000382 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

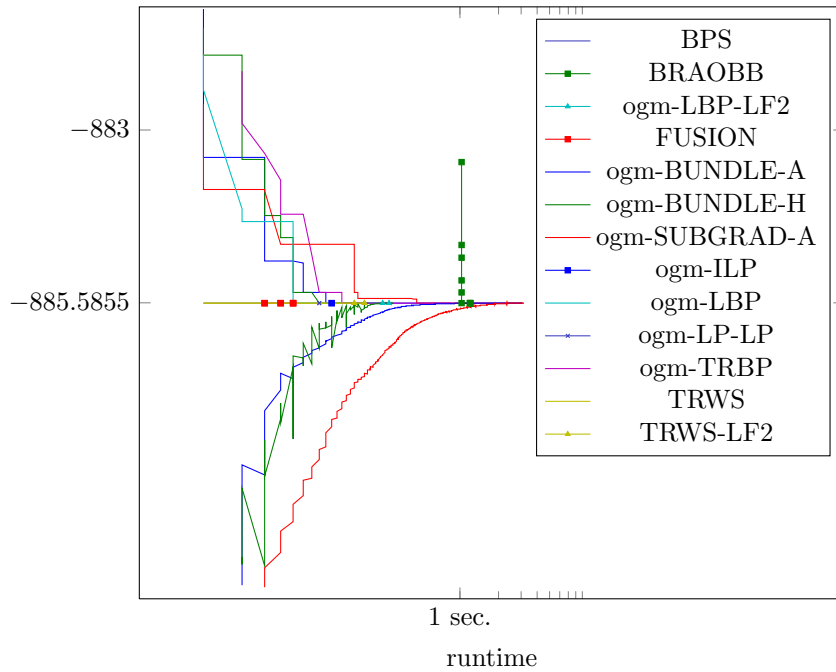


Figure 163: Runtime results for the instance 0000631 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

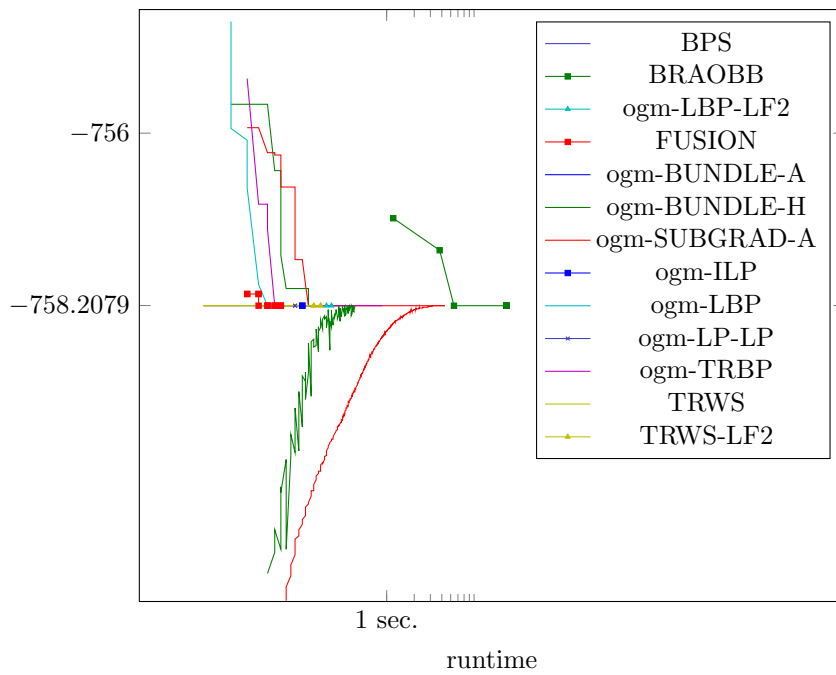


Figure 164: Runtime results for the instance 0000643 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

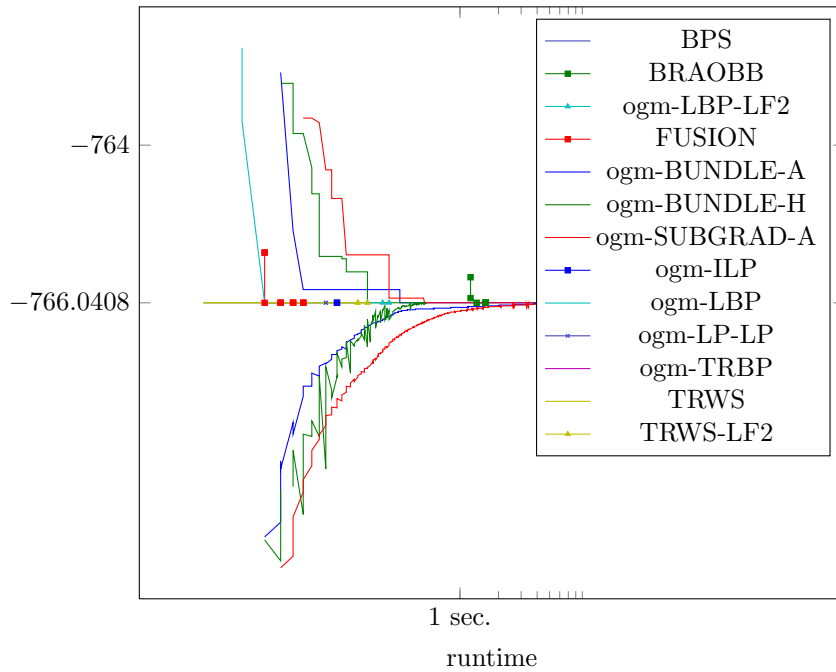


Figure 165: Runtime results for the instance 0000697 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

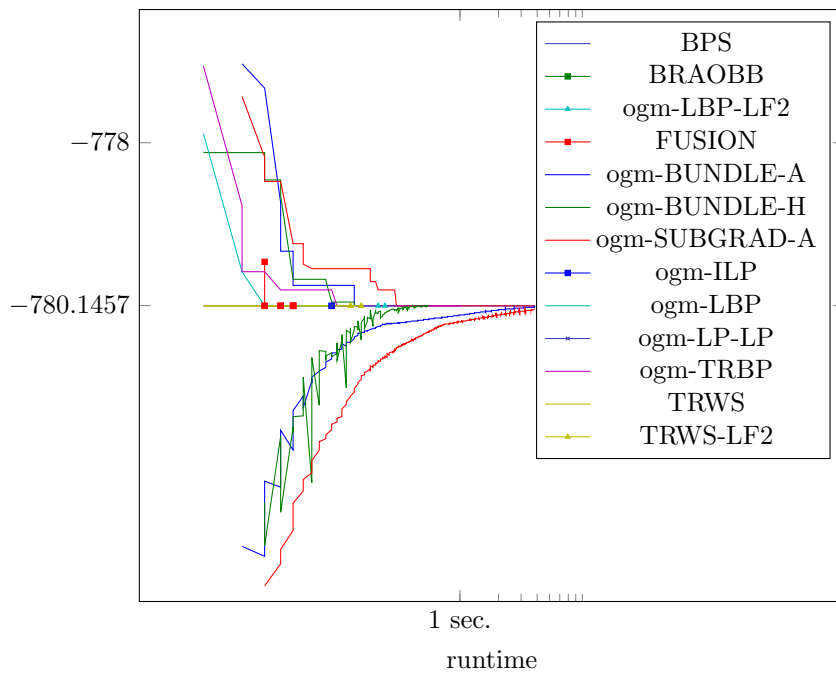


Figure 166: Runtime results for the instance 0000759 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

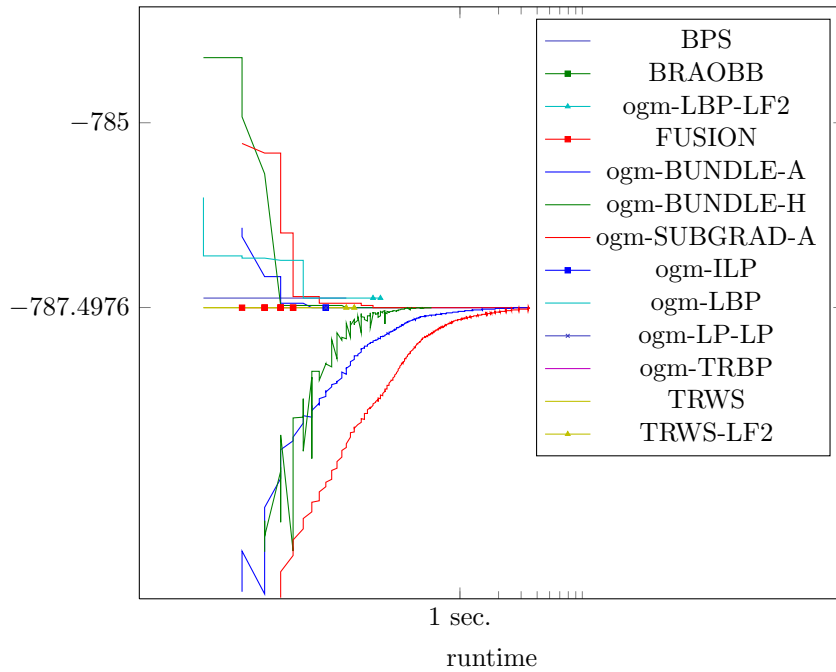


Figure 167: Runtime results for the instance 0000794 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

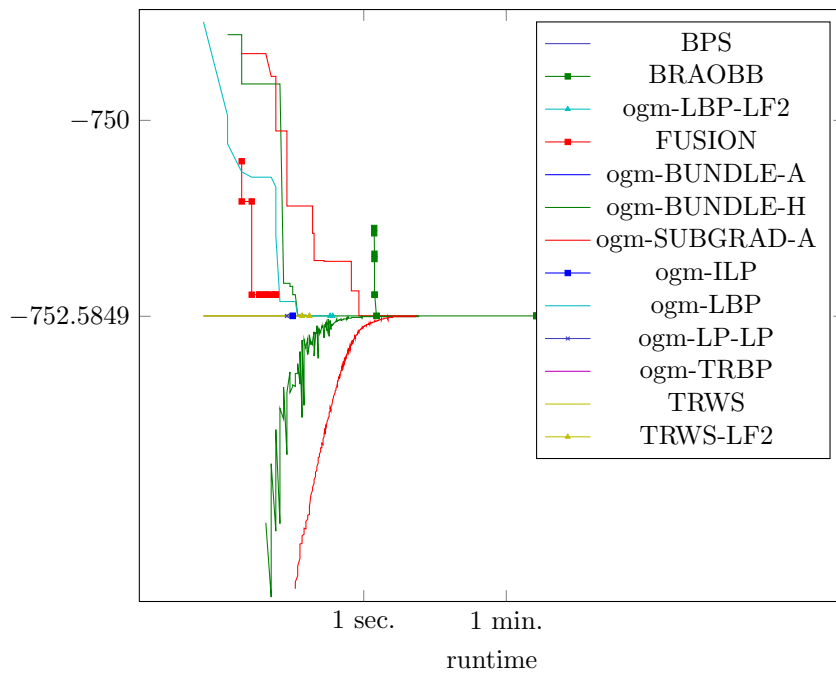


Figure 168: Runtime results for the instance 0000952 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

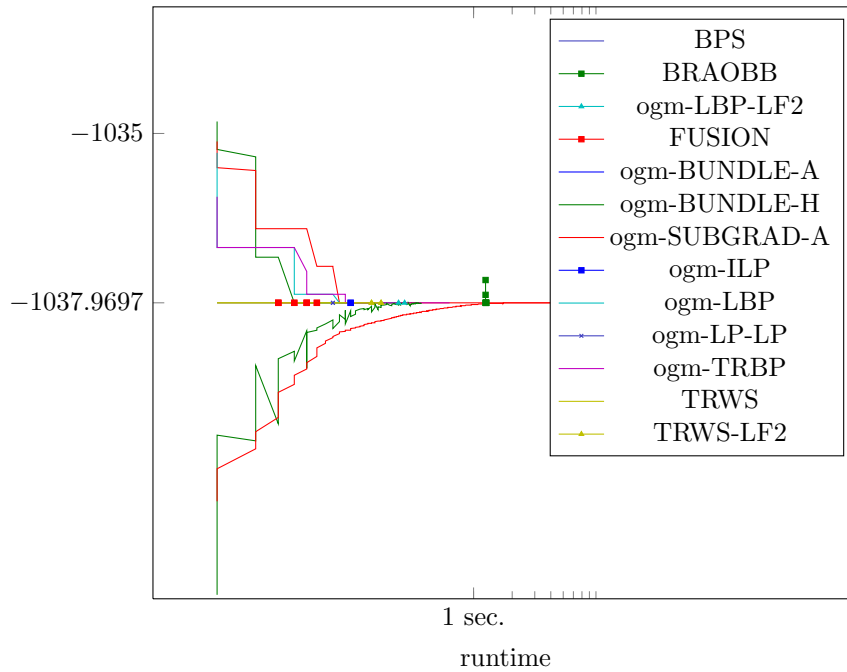


Figure 169: Runtime results for the instance *0001677* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

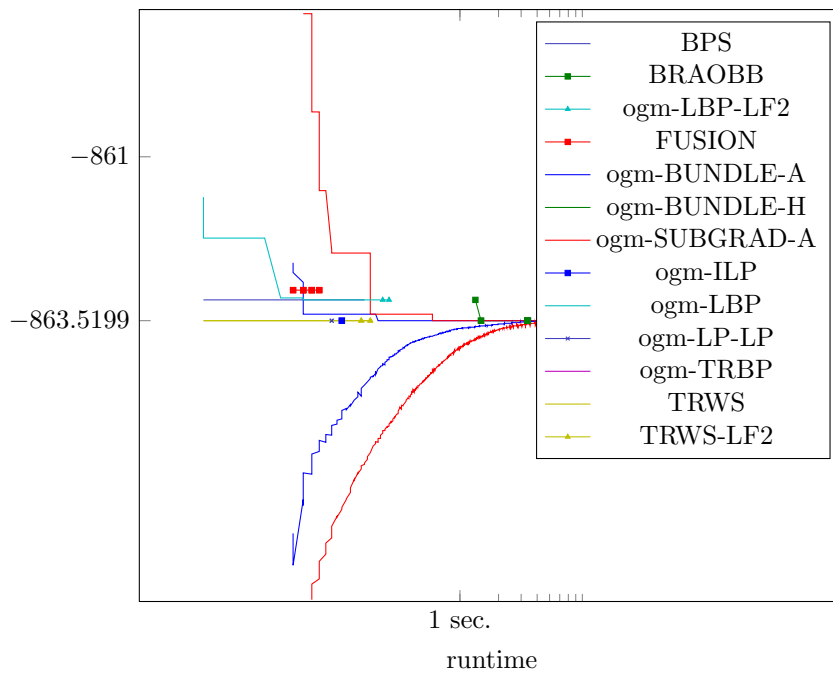


Figure 170: Runtime results for the instance *0002136* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

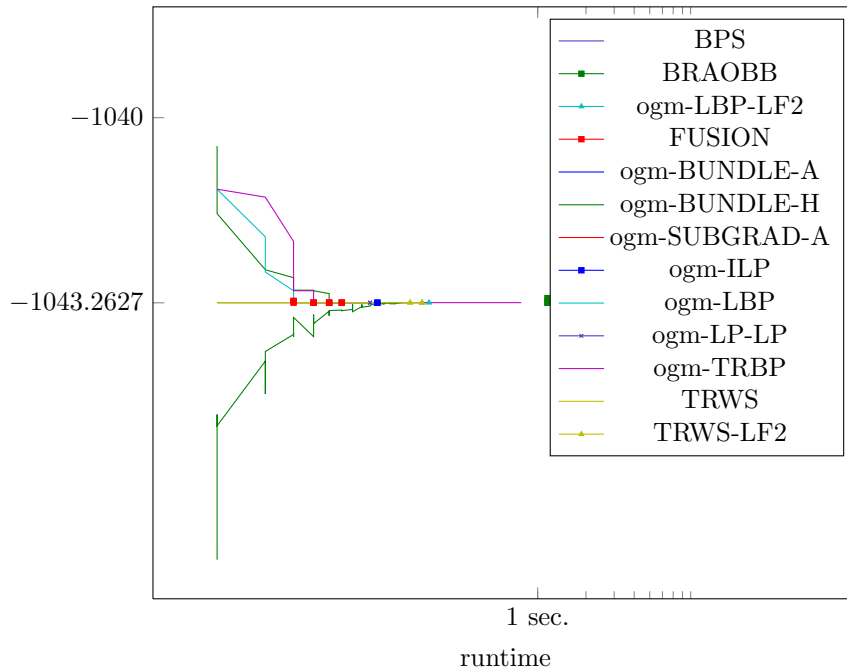


Figure 171: Runtime results for the instance 0002395 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

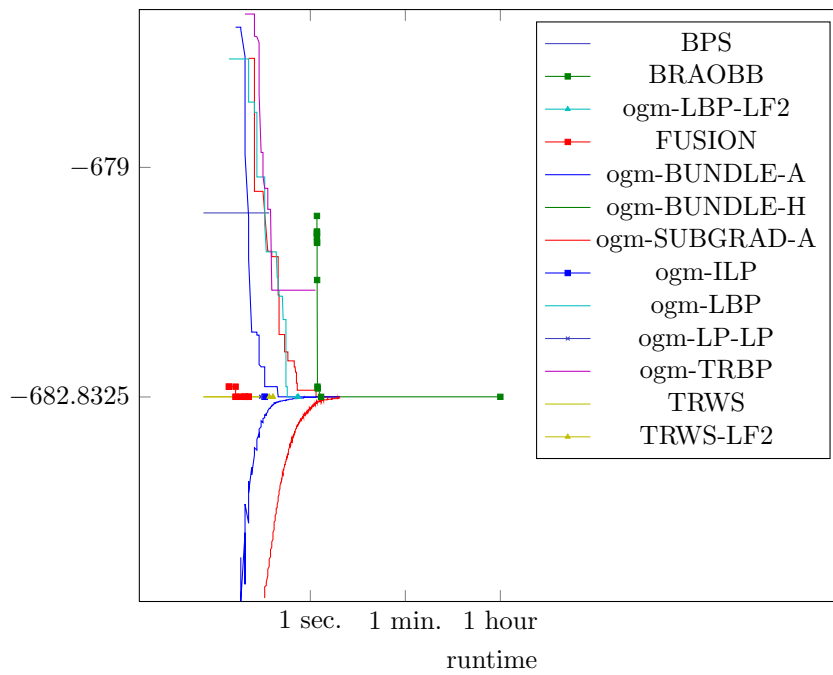


Figure 172: Runtime results for the instance 0002755 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

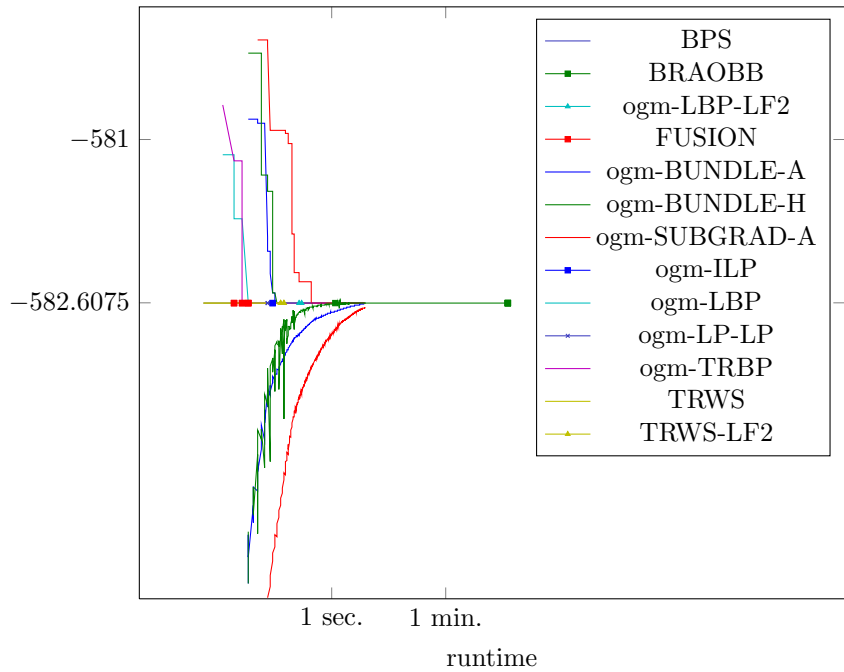


Figure 173: Runtime results for the instance 0003178 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

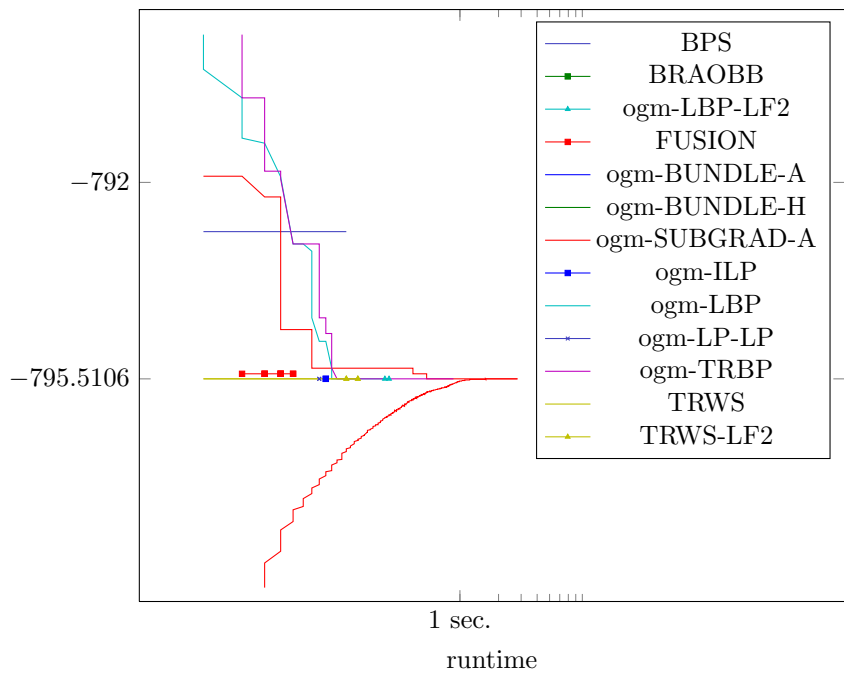


Figure 174: Runtime results for the instance 0003423 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

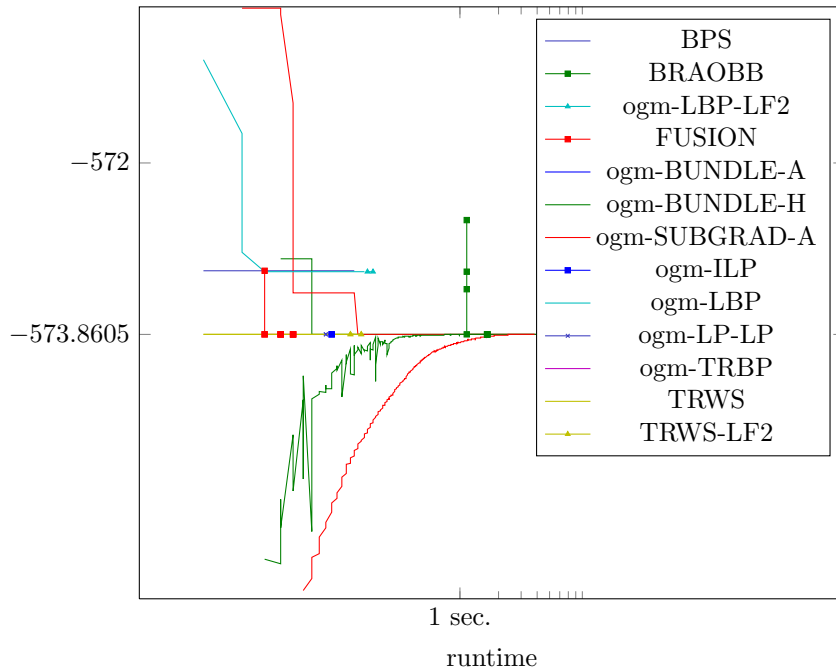


Figure 175: Runtime results for the instance 0003463 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

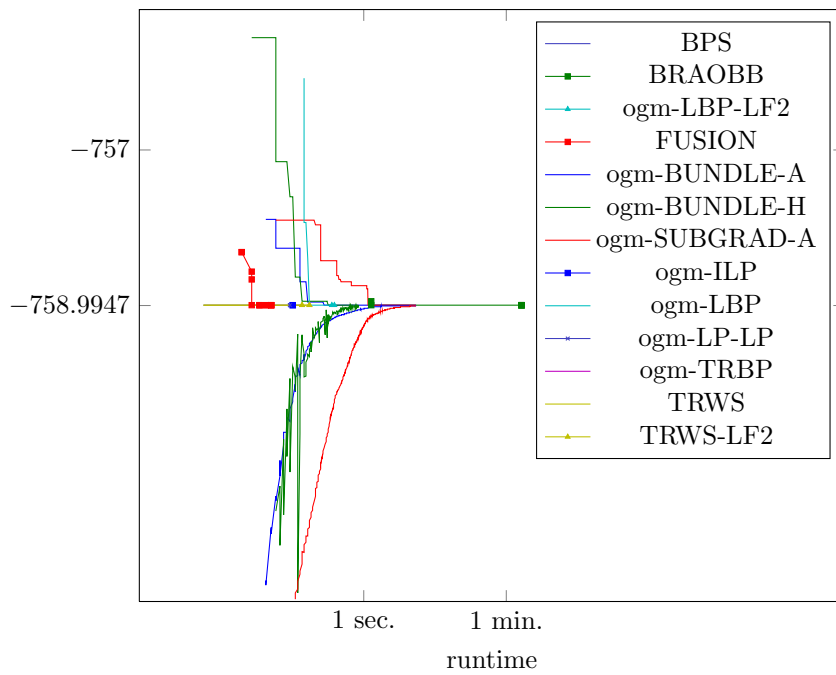


Figure 176: Runtime results for the instance 0003728 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

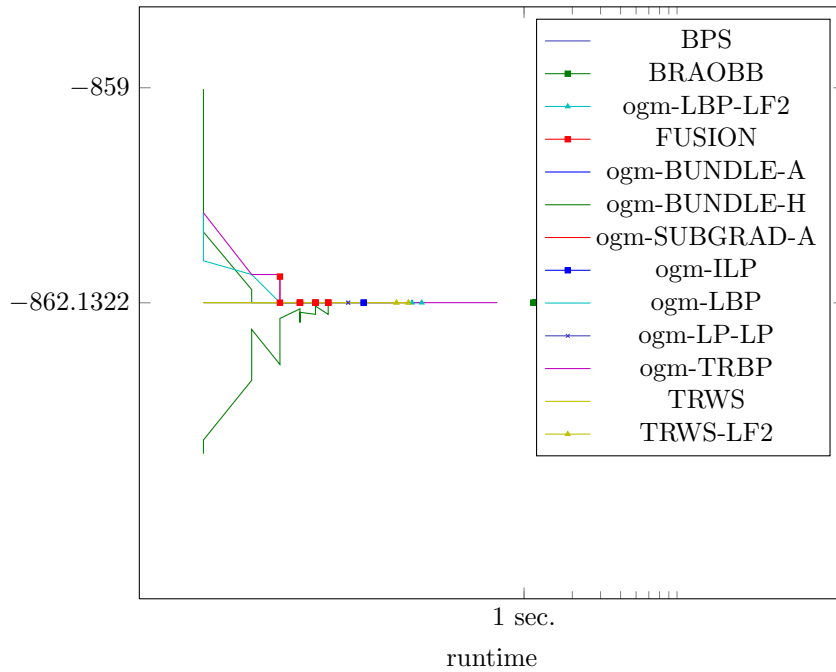


Figure 177: Runtime results for the instance 0003793 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

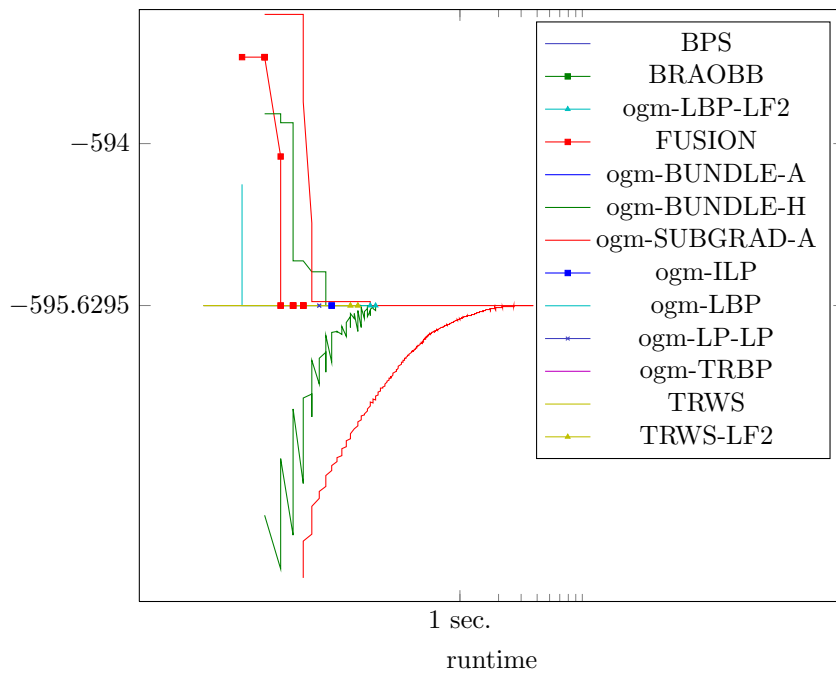


Figure 178: Runtime results for the instance 0003957 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

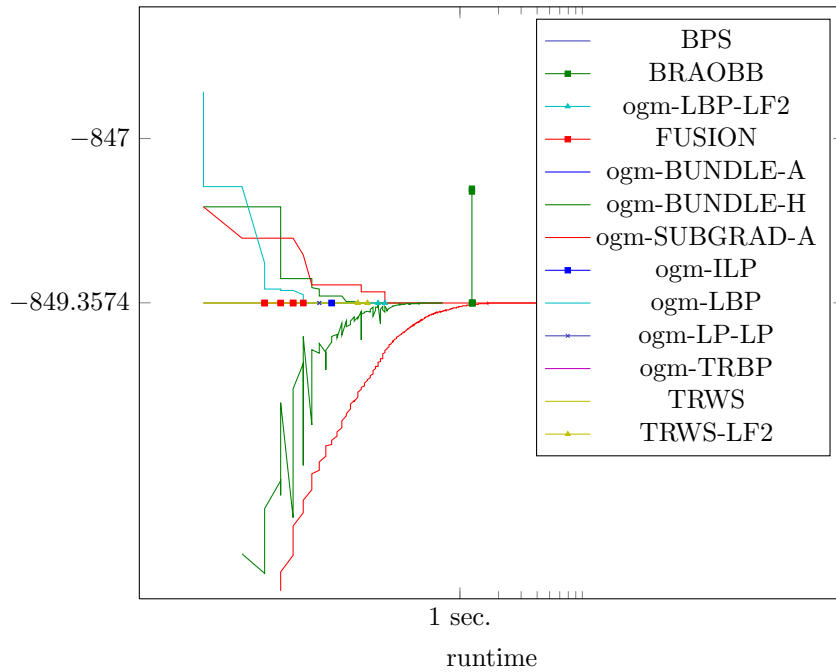


Figure 179: Runtime results for the instance *0004028* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

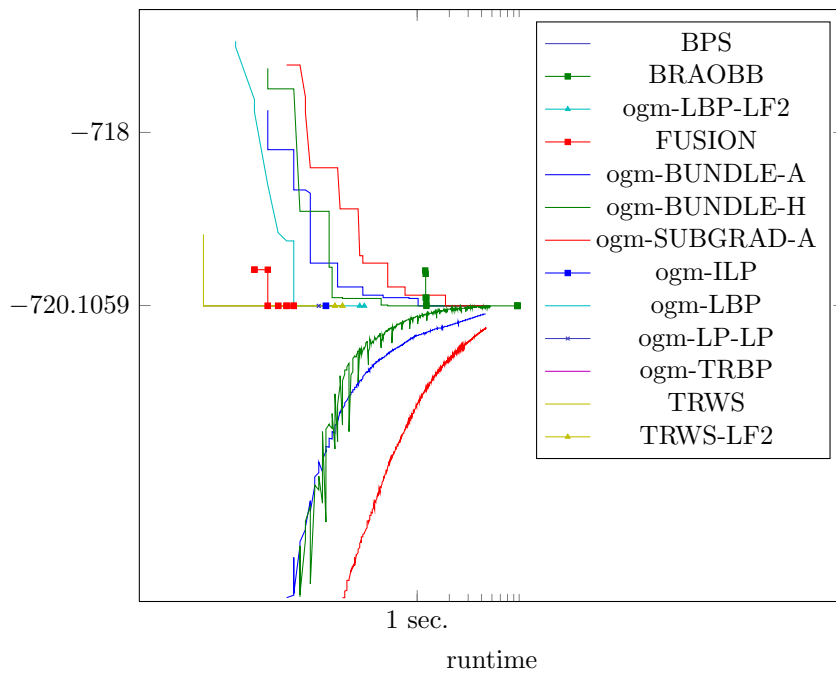


Figure 180: Runtime results for the instance *0004069* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

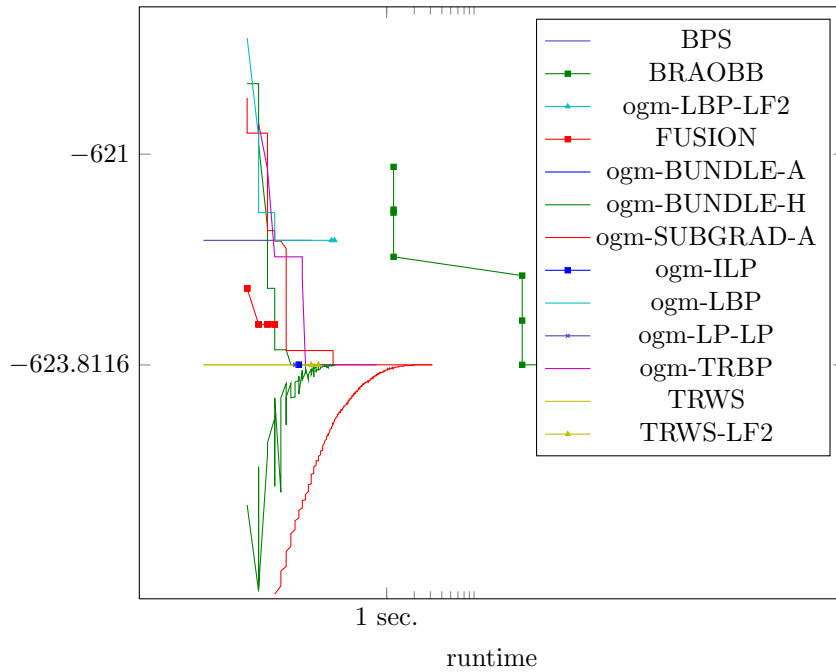


Figure 181: Runtime results for the instance 0004294 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

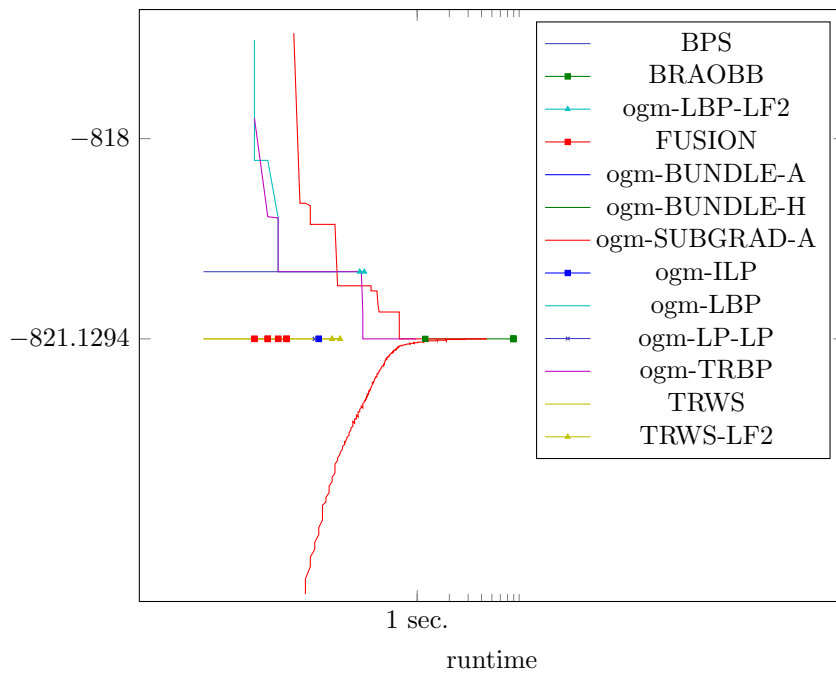


Figure 182: Runtime results for the instance 0004498 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

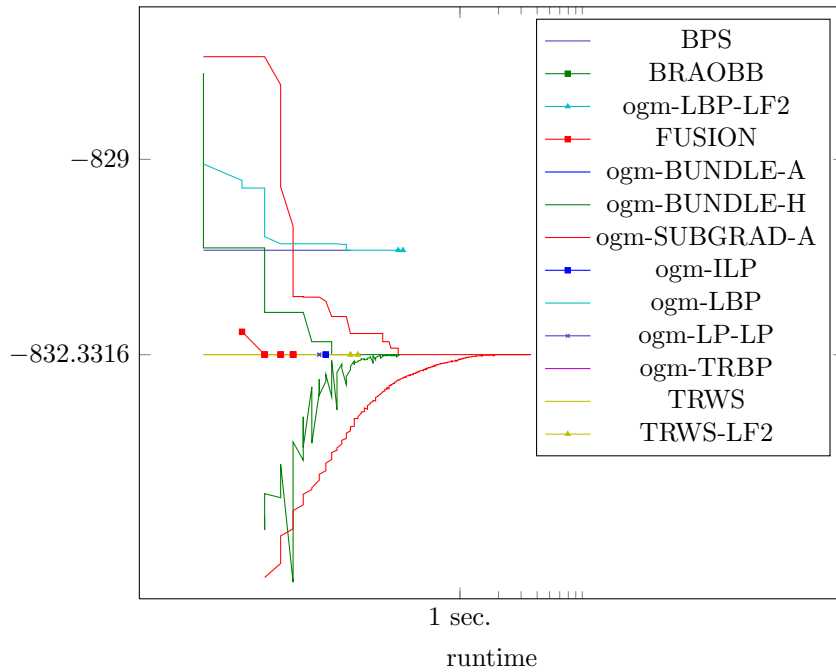


Figure 183: Runtime results for the instance 0004774 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

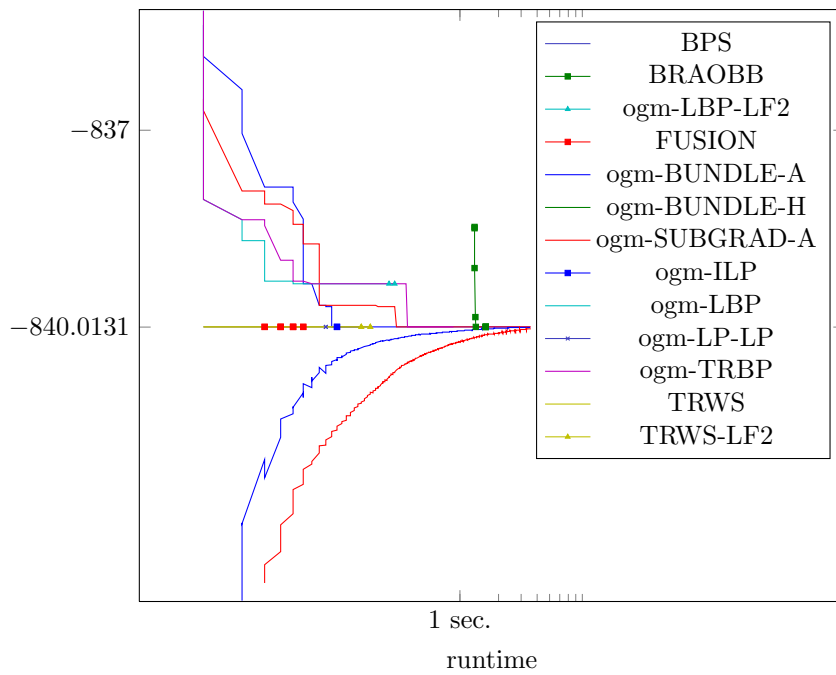


Figure 184: Runtime results for the instance 0005074 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

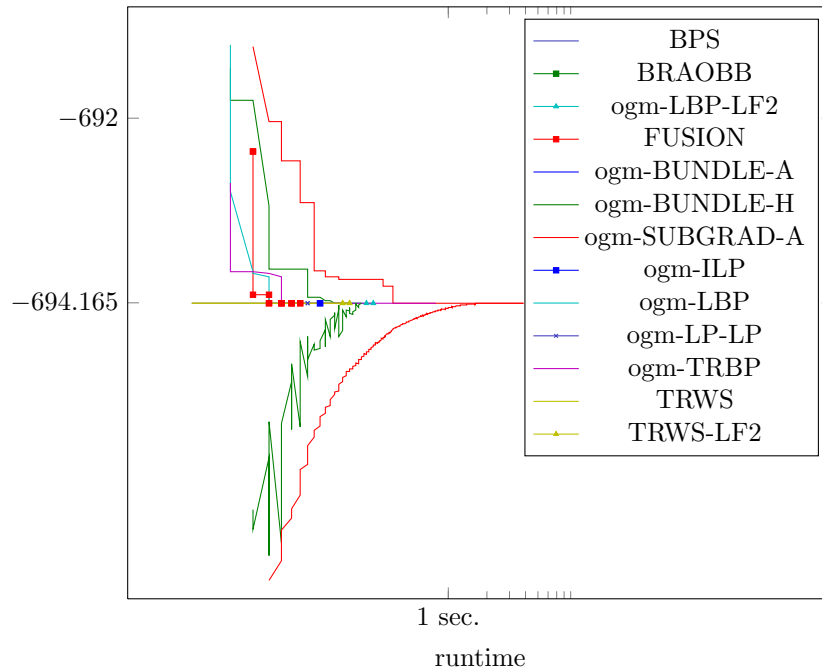


Figure 185: Runtime results for the instance 0005079 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

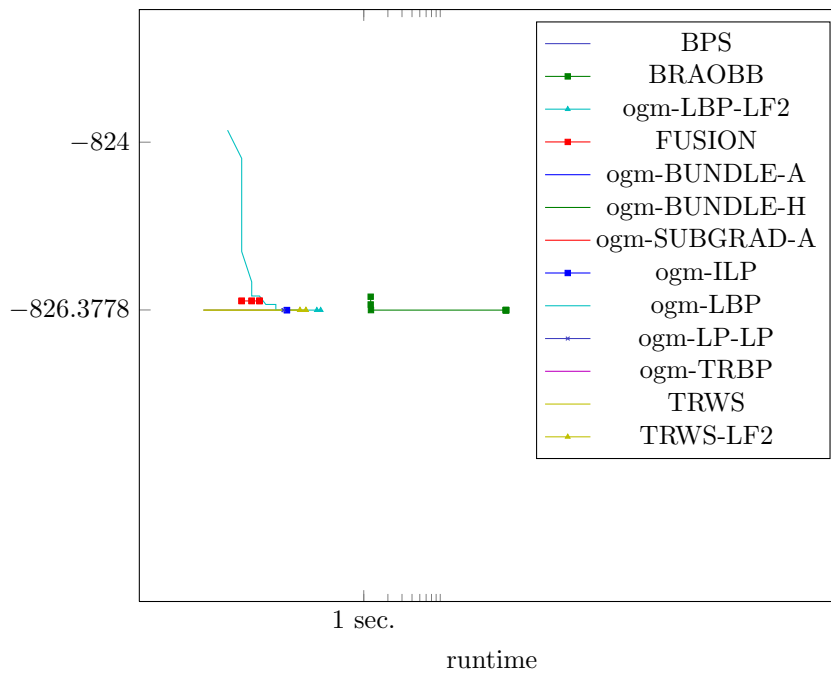


Figure 186: Runtime results for the instance 0005633 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

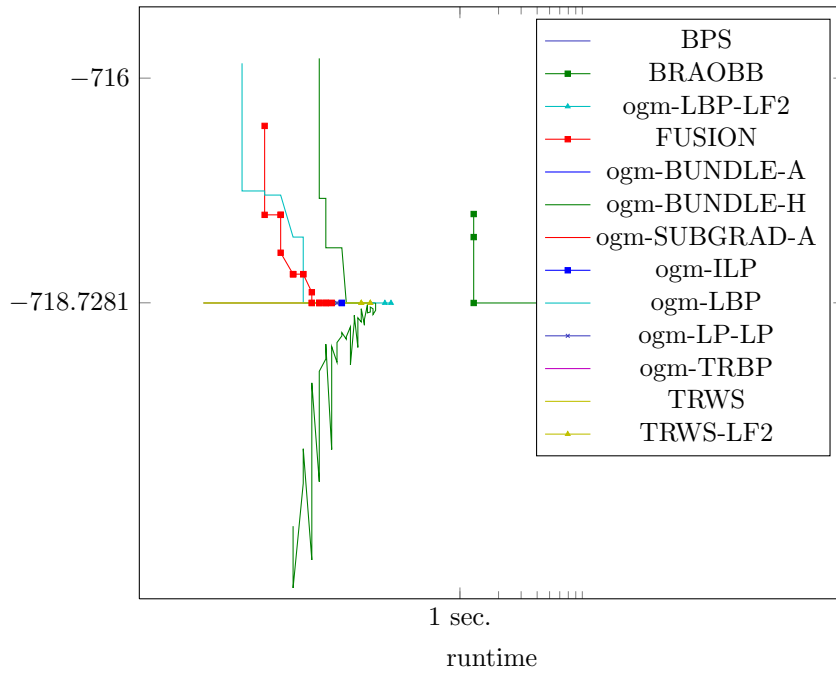


Figure 187: Runtime results for the instance 0006575 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

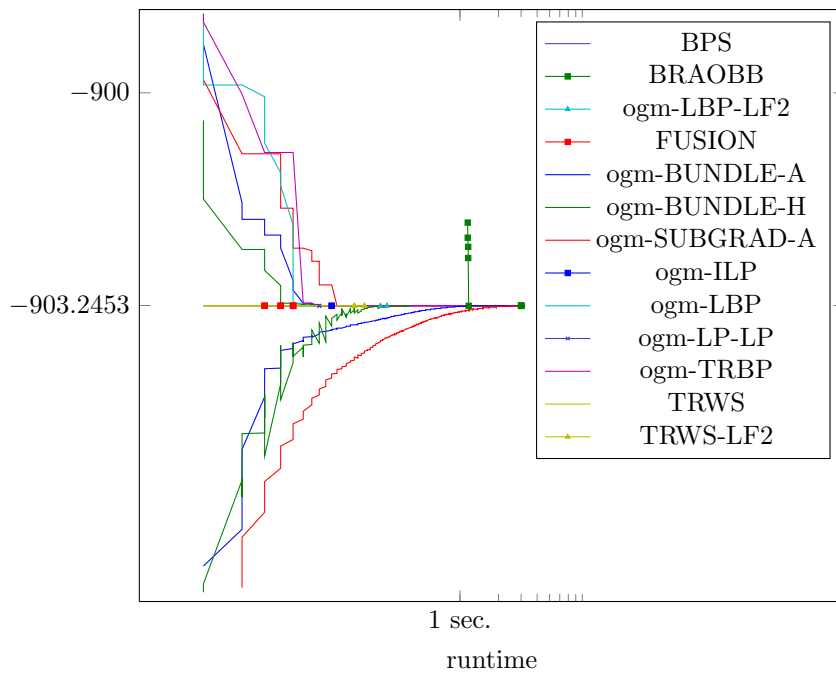


Figure 188: Runtime results for the instance 0007323 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

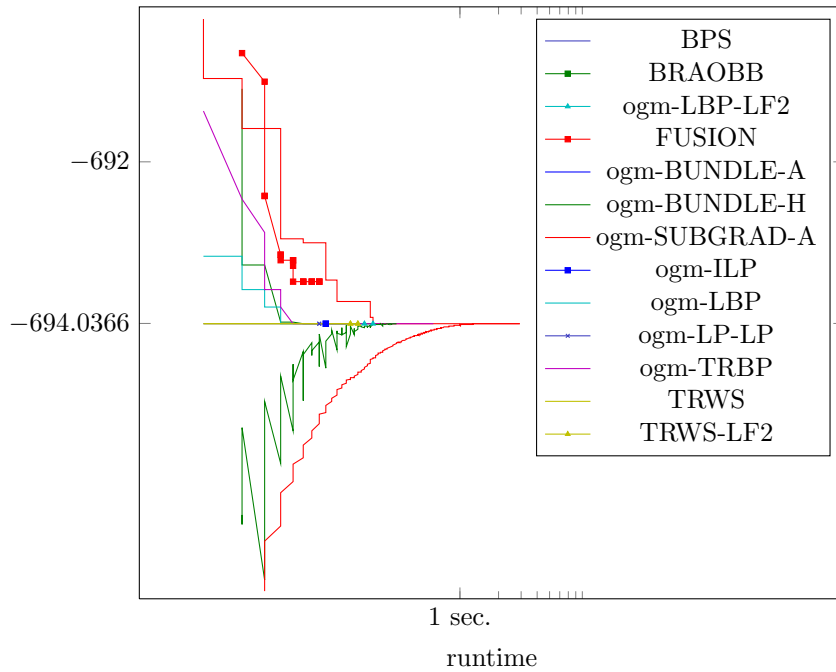


Figure 189: Runtime results for the instance 0007545 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

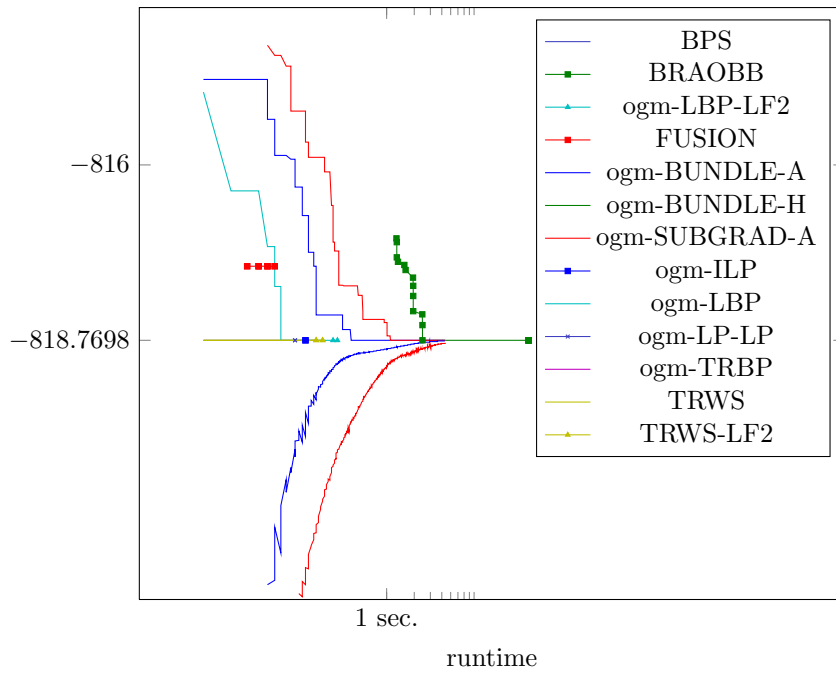


Figure 190: Runtime results for the instance 0007932 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

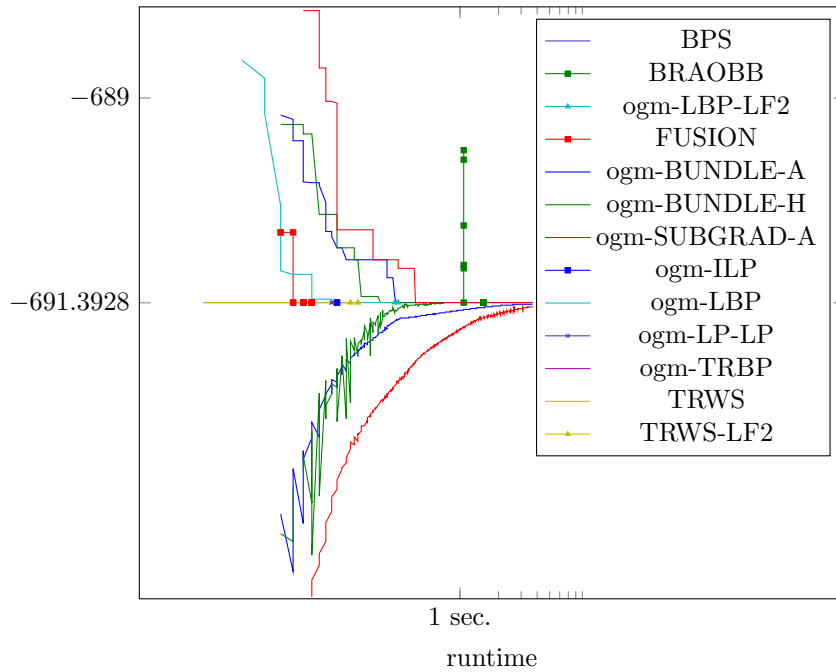


Figure 191: Runtime results for the instance 0009212 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

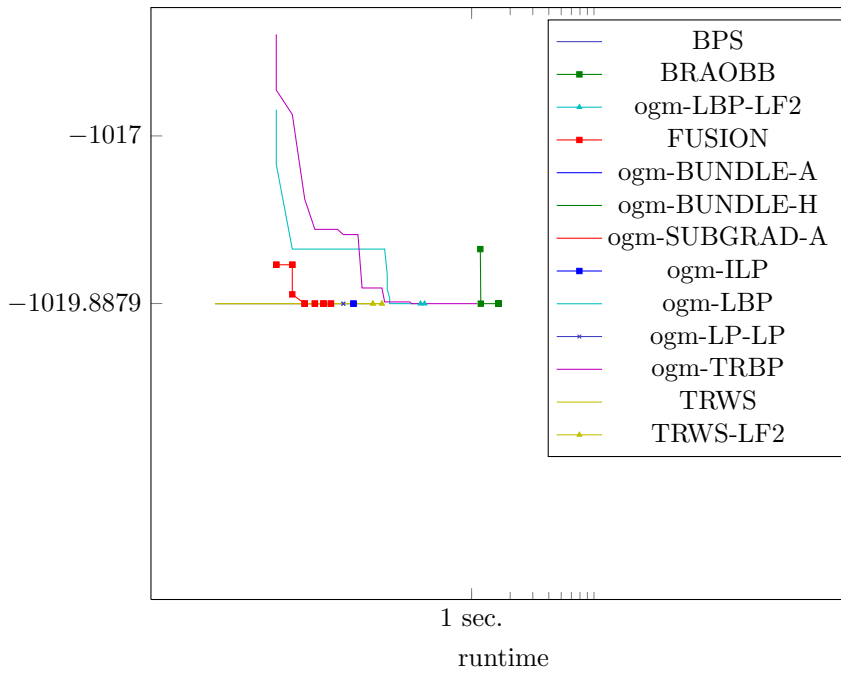


Figure 192: Runtime results for the instance 0010830 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

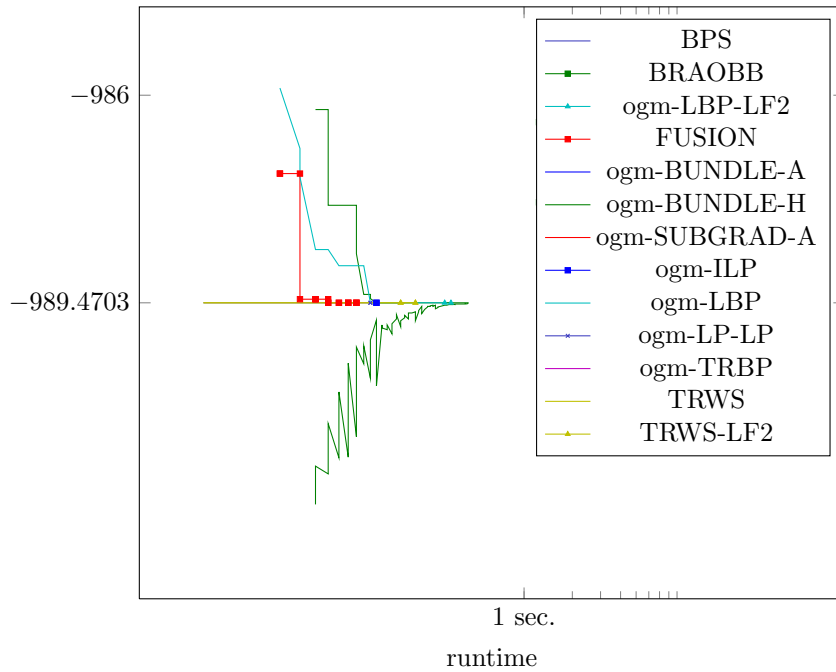


Figure 193: Runtime results for the instance *0010950* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

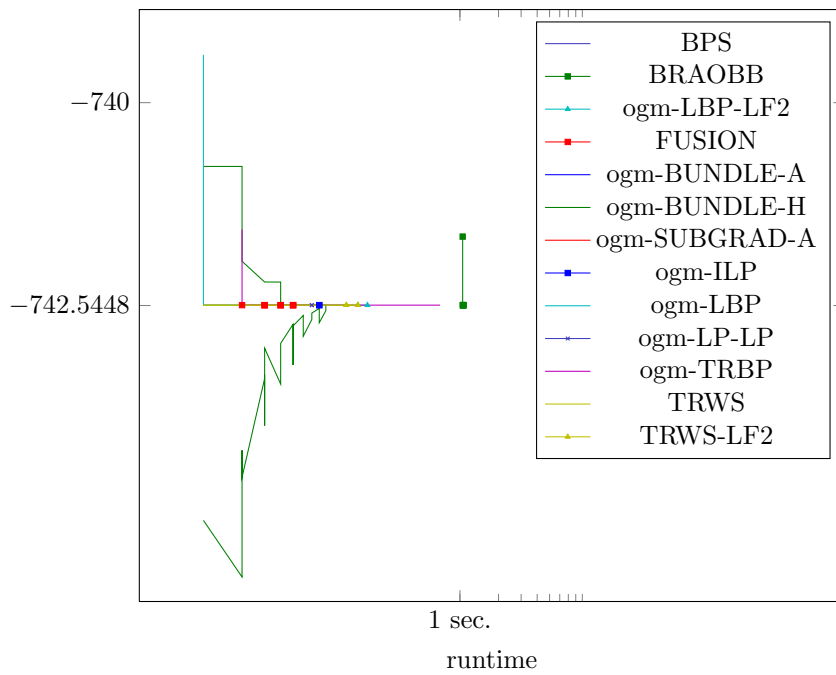


Figure 194: Runtime results for the instance *0011003* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

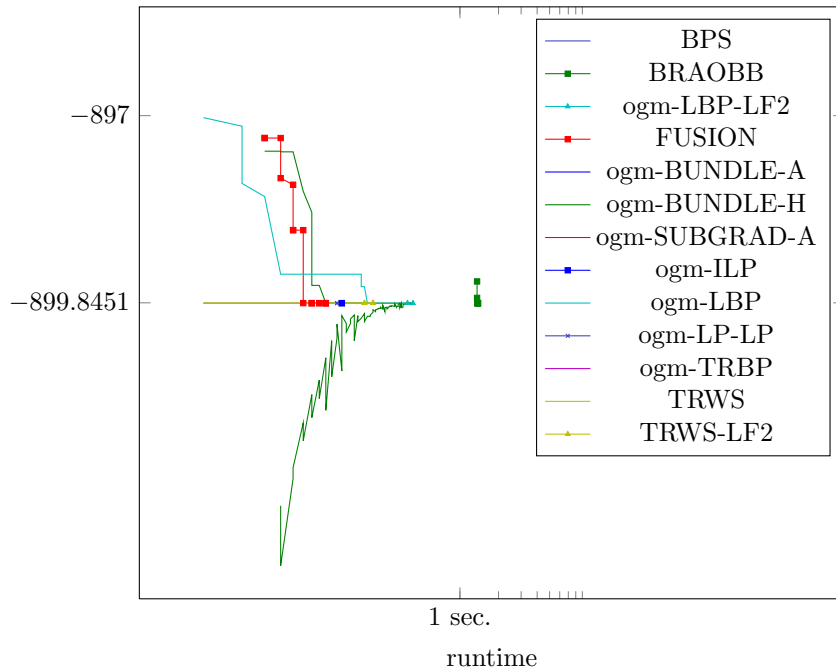


Figure 195: Runtime results for the instance 0011033 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

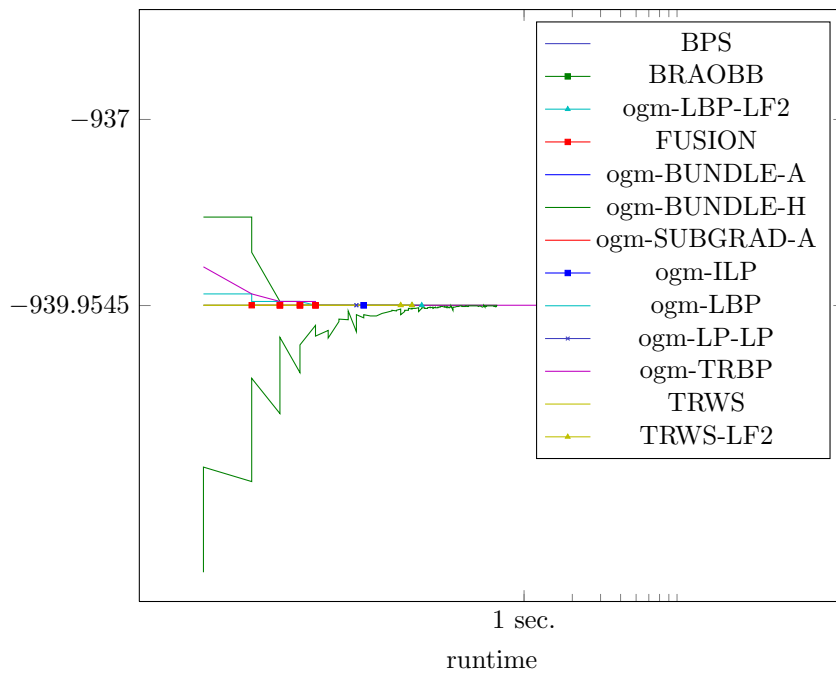


Figure 196: Runtime results for the instance 0011073 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

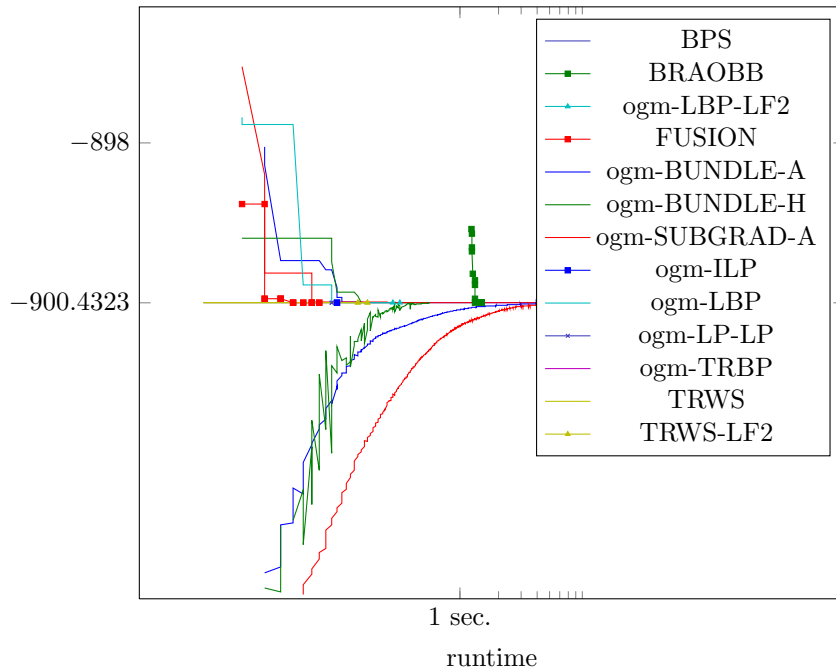


Figure 197: Runtime results for the instance *0011088* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

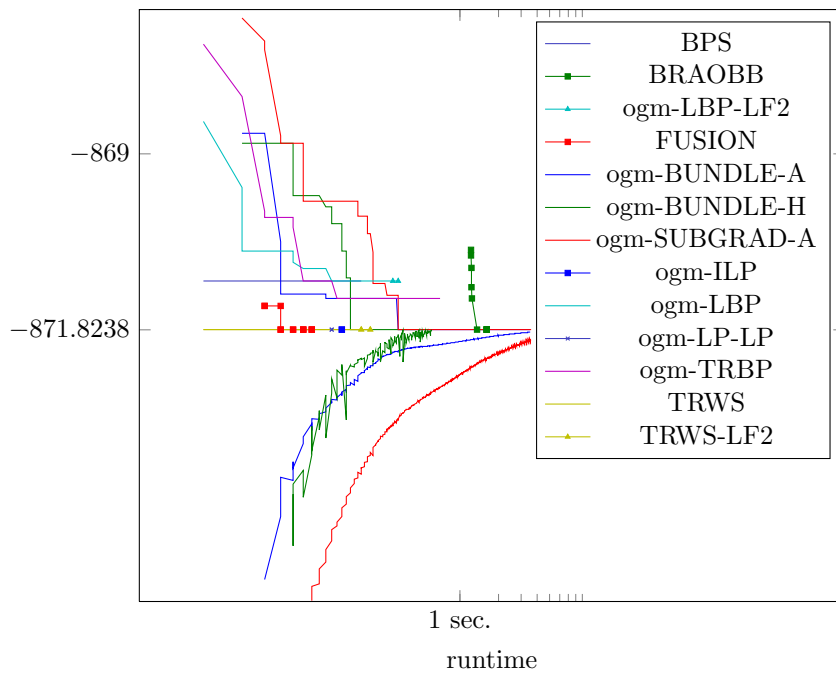


Figure 198: Runtime results for the instance *0011116* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

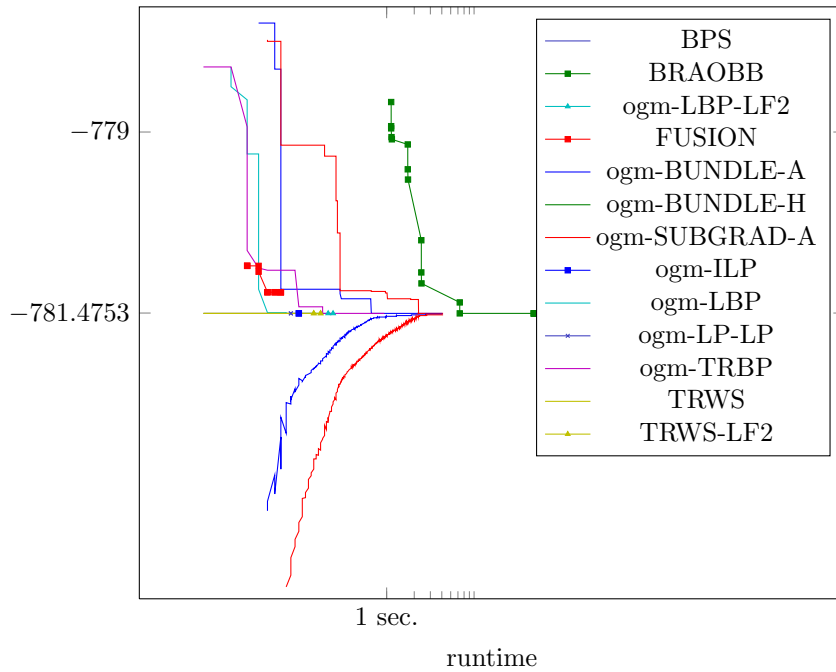


Figure 199: Runtime results for the instance 0011154 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

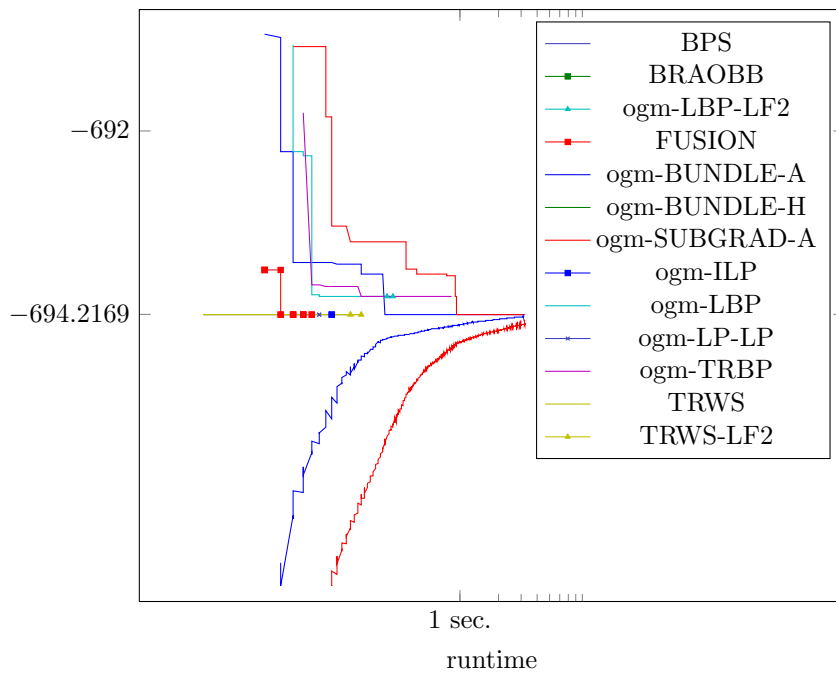


Figure 200: Runtime results for the instance 0100026 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

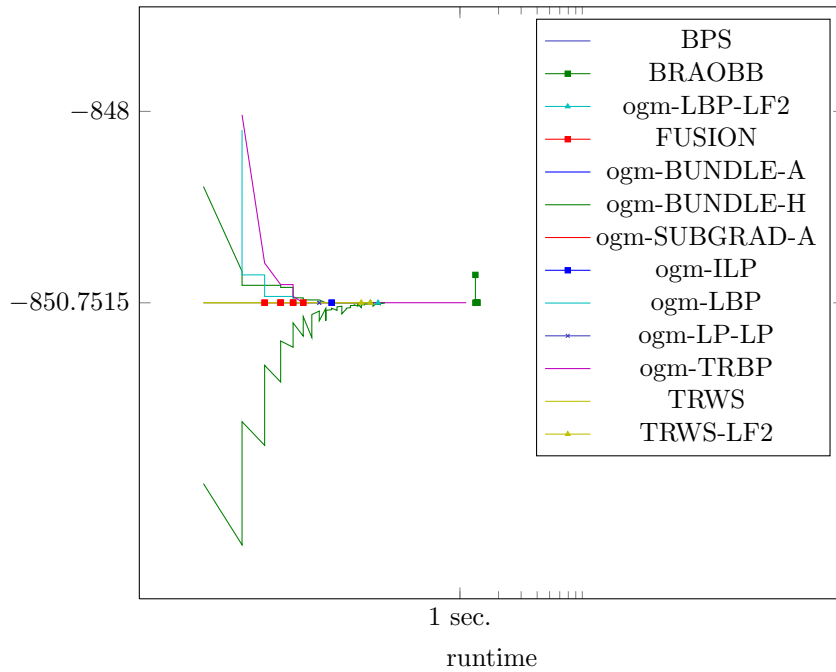


Figure 201: Runtime results for the instance *0100030* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

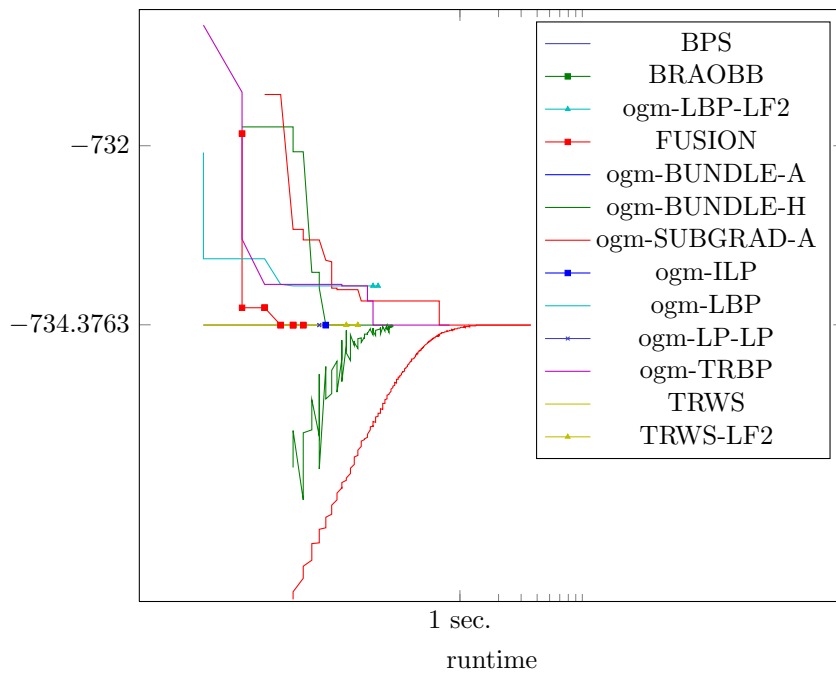


Figure 202: Runtime results for the instance *0100061* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

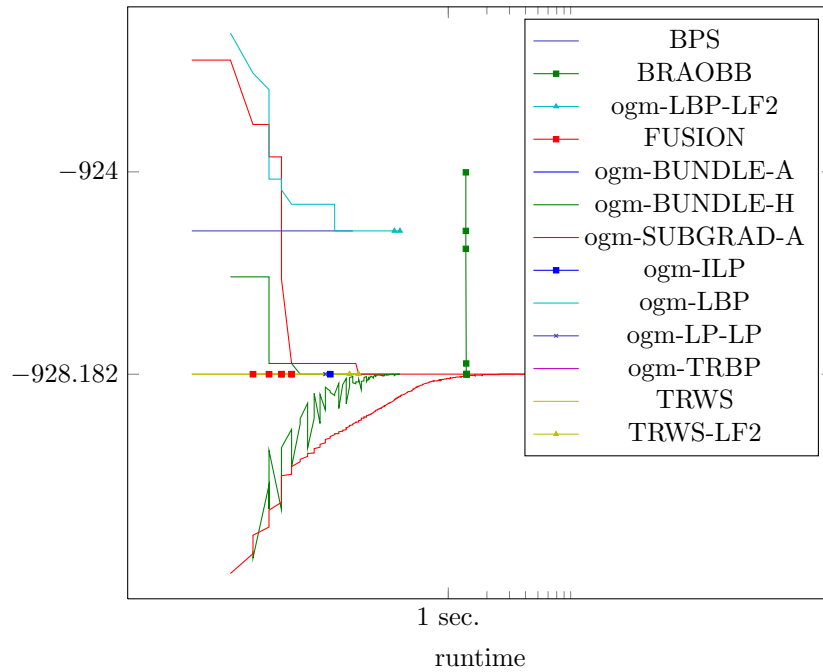


Figure 203: Runtime results for the instance *0100091* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

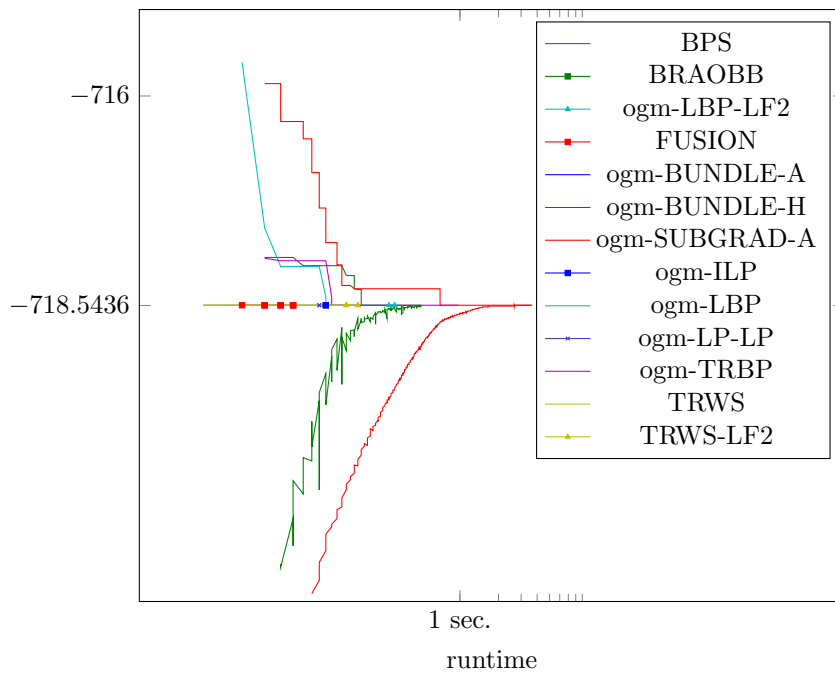


Figure 204: Runtime results for the instance *0100113* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

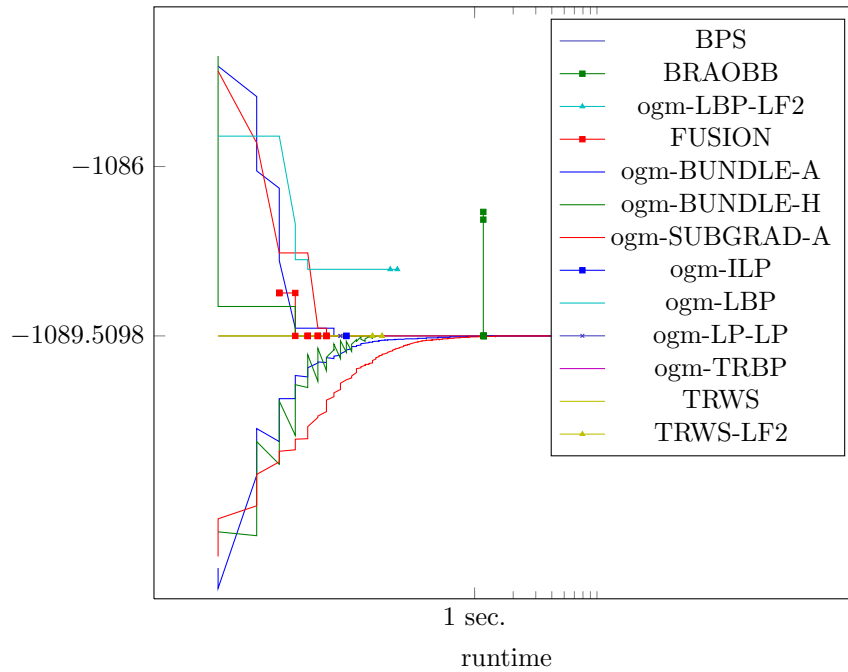


Figure 205: Runtime results for the instance *0100132* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

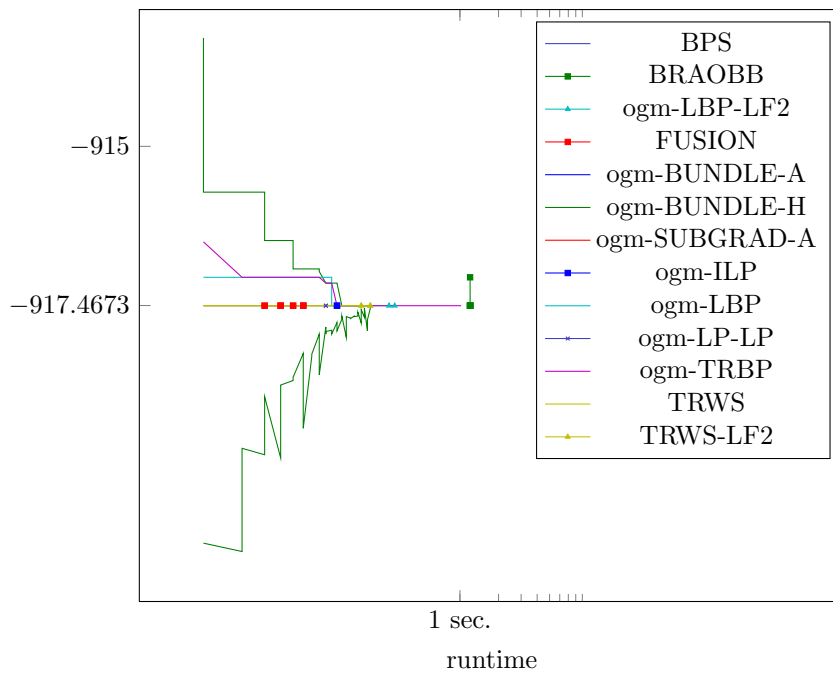


Figure 206: Runtime results for the instance *0100164* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

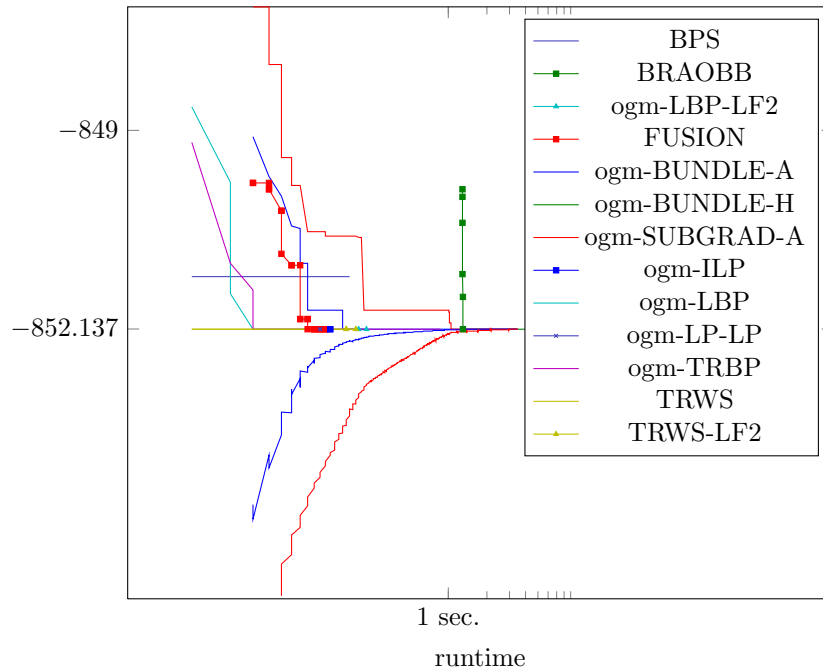


Figure 207: Runtime results for the instance *0100241* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

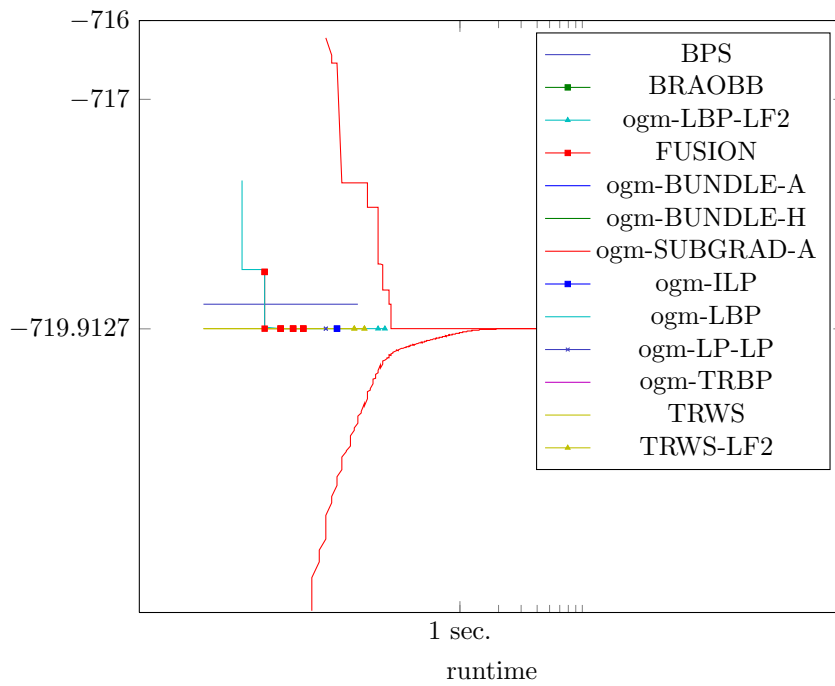


Figure 208: Runtime results for the instance *0100477* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

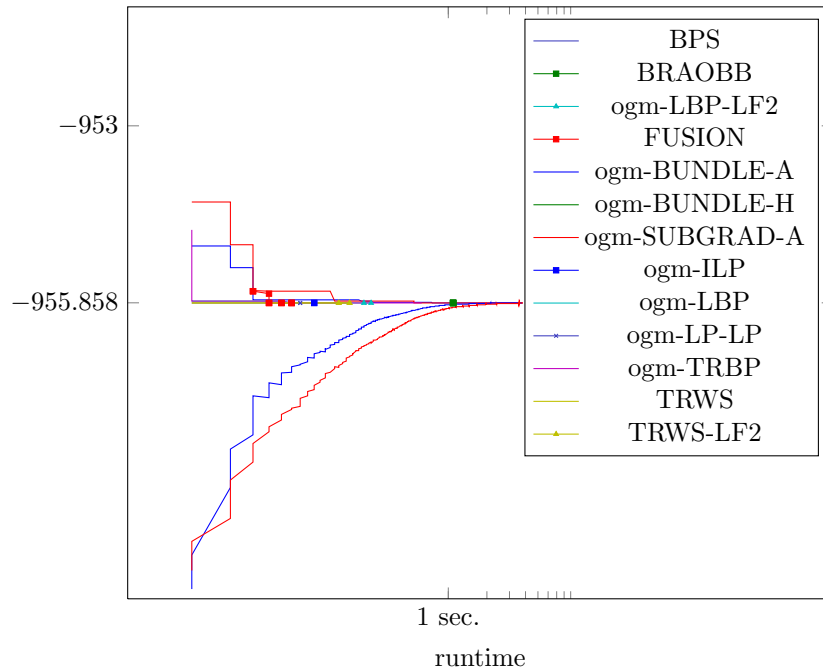


Figure 209: Runtime results for the instance *0100579* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

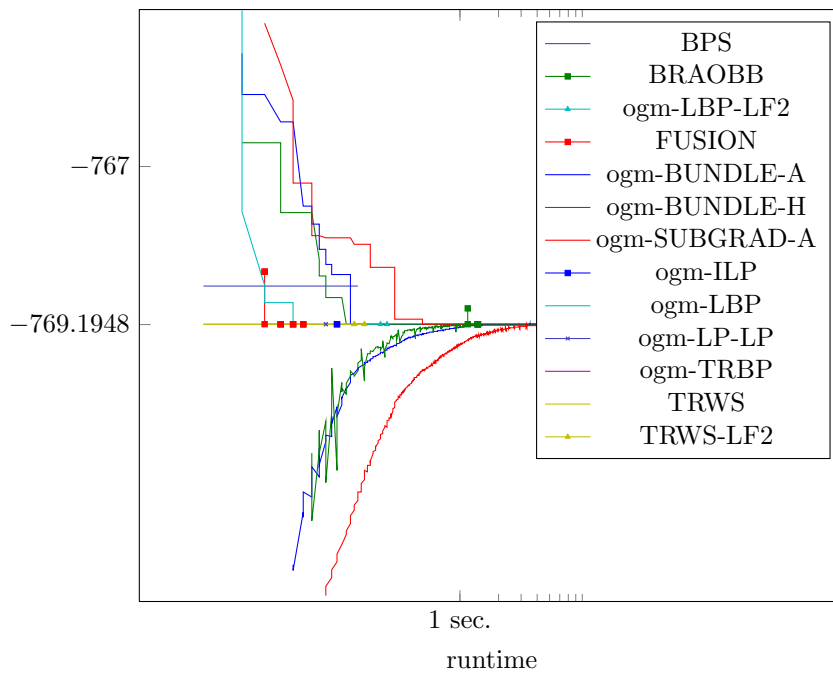


Figure 210: Runtime results for the instance *0100628* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

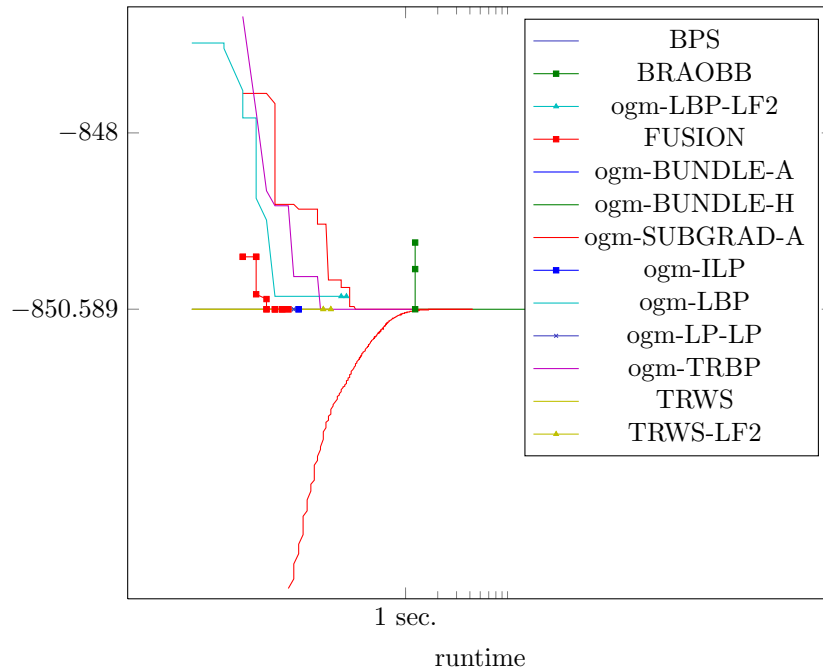


Figure 211: Runtime results for the instance *0100740* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

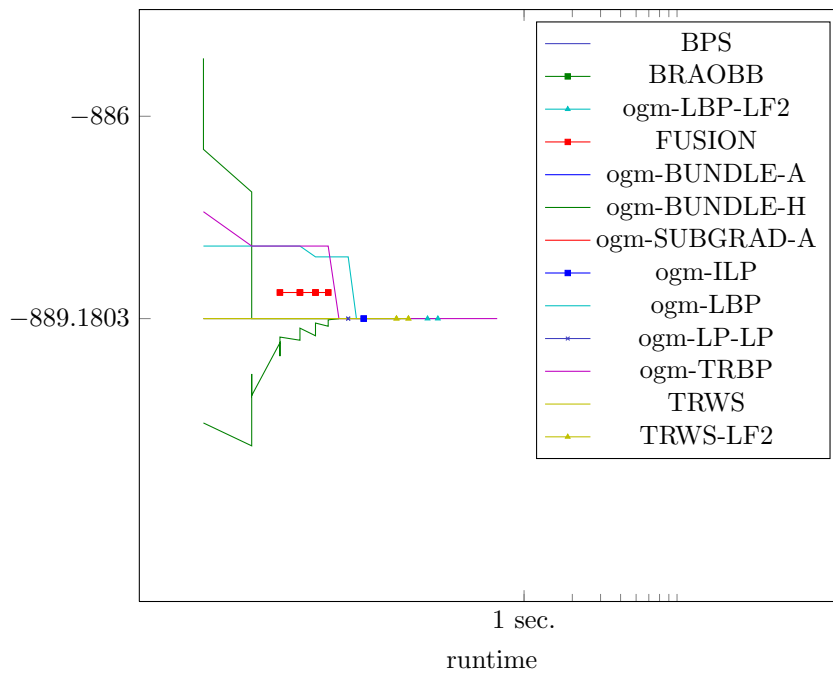


Figure 212: Runtime results for the instance *0100787* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

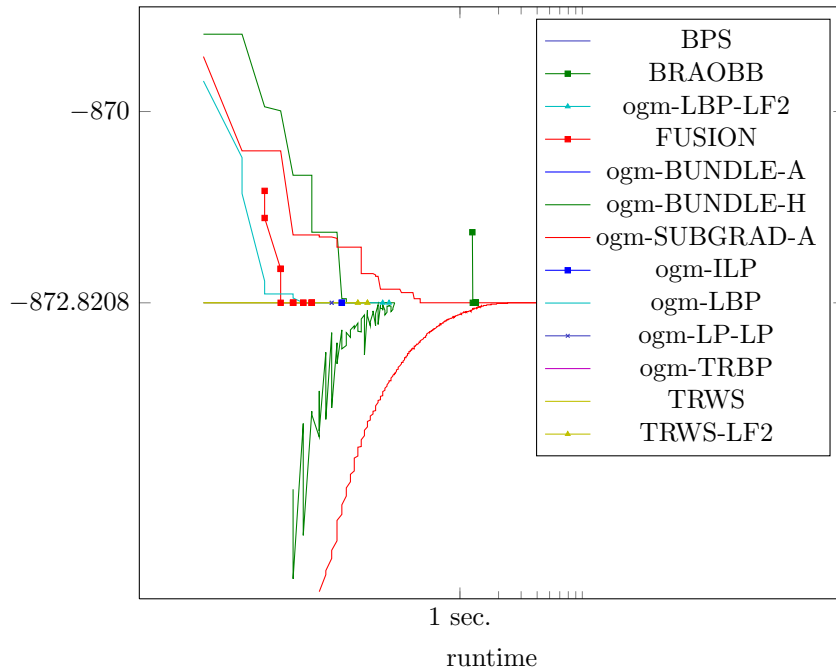


Figure 213: Runtime results for the instance *0100822* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

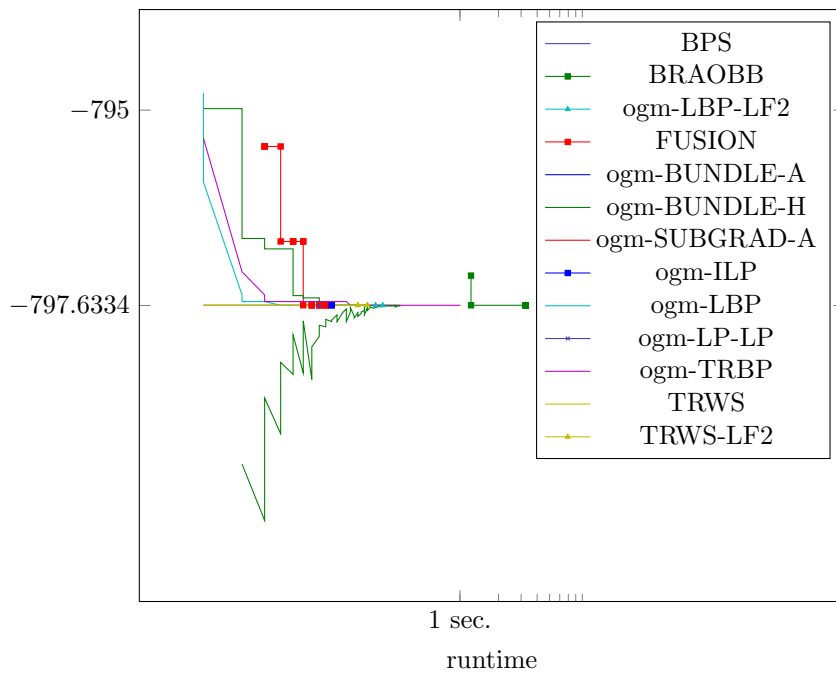


Figure 214: Runtime results for the instance *0100851* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

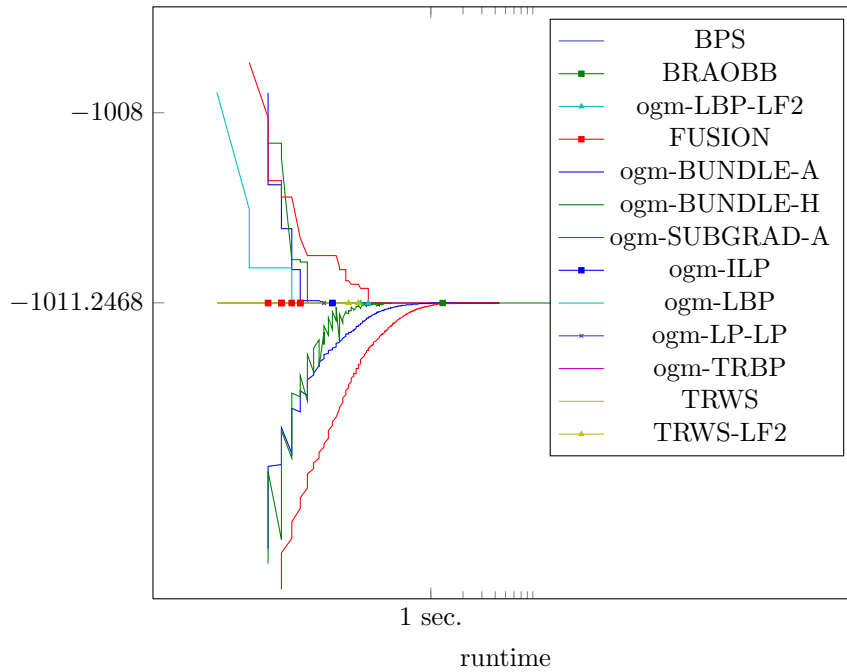


Figure 215: Runtime results for the instance *0100855* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

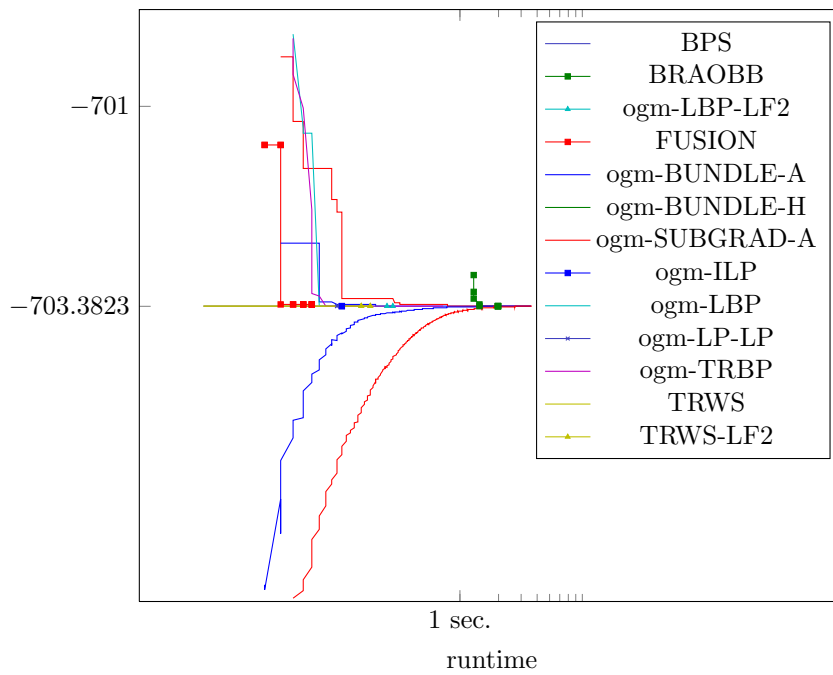


Figure 216: Runtime results for the instance *0100892* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

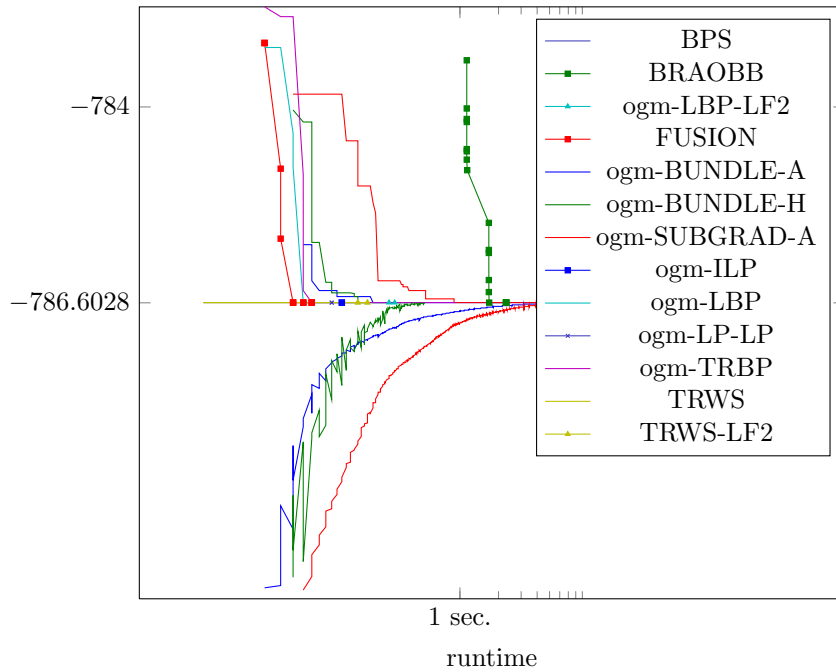


Figure 217: Runtime results for the instance *0100935* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

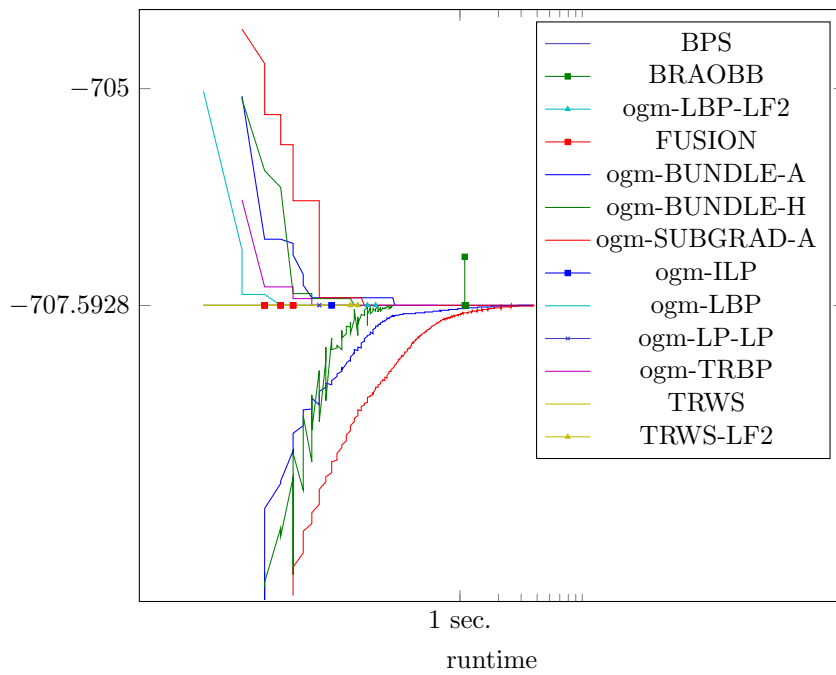


Figure 218: Runtime results for the instance *0101060* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

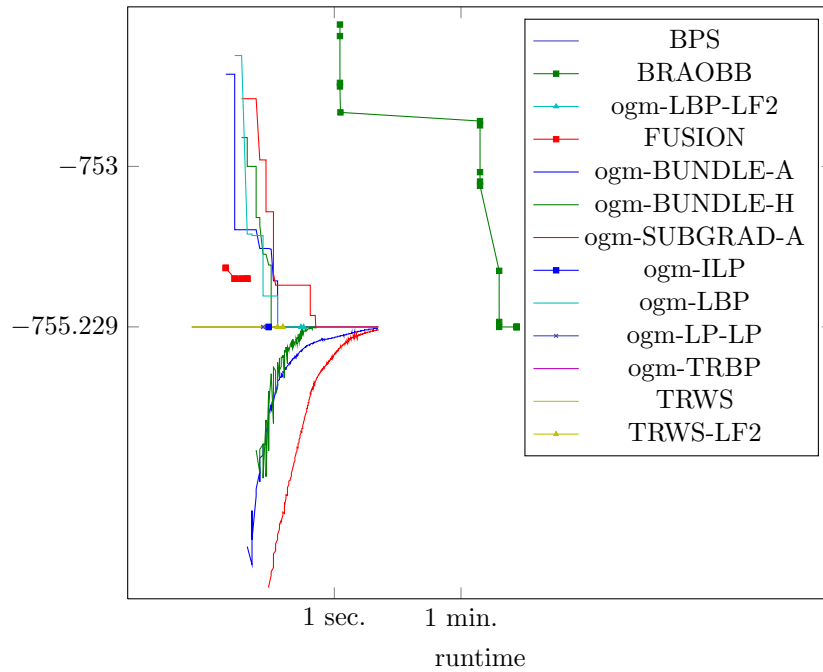


Figure 219: Runtime results for the instance *0101121* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

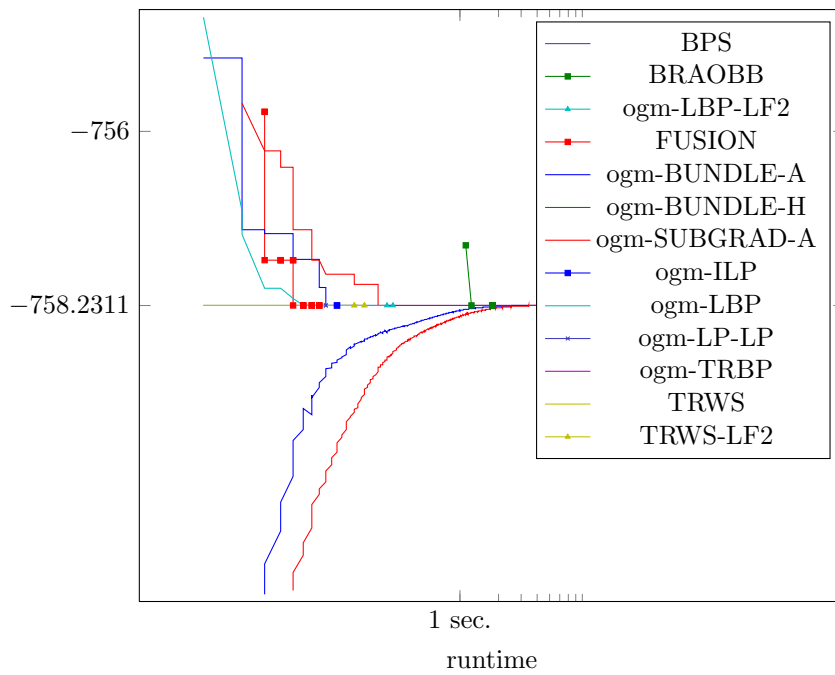


Figure 220: Runtime results for the instance *0101434* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

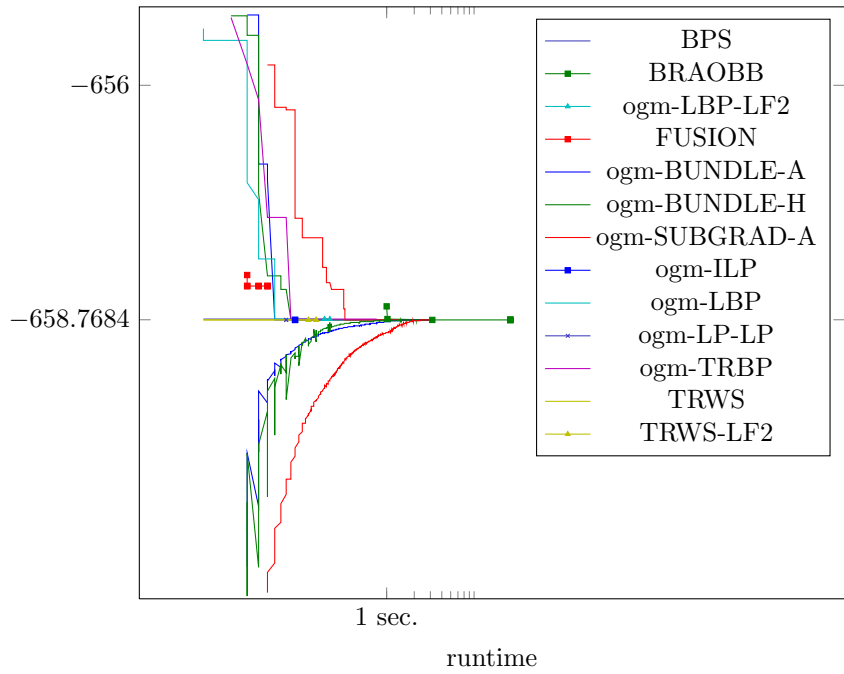


Figure 221: Runtime results for the instance *0101463* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

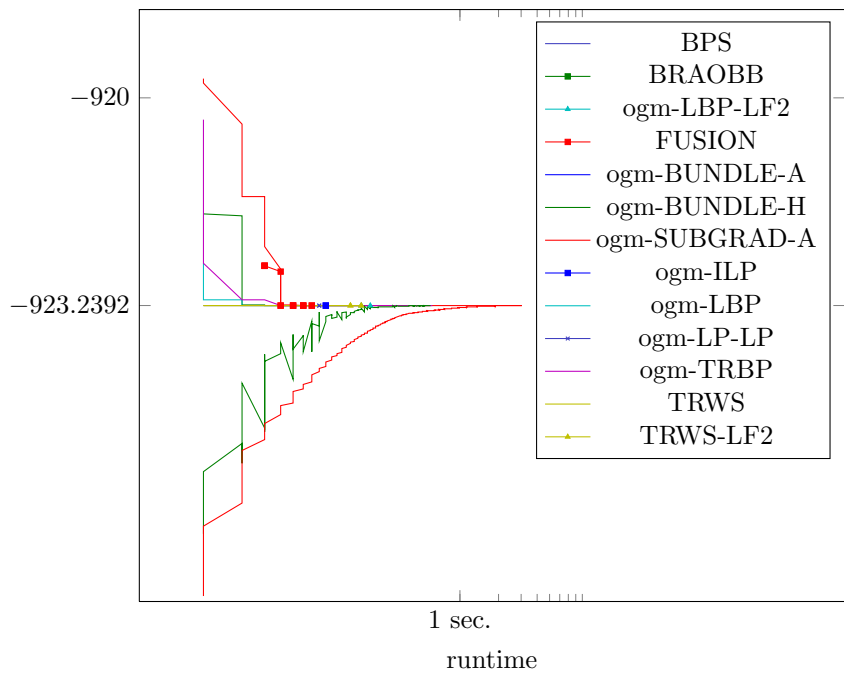


Figure 222: Runtime results for the instance *0101488* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

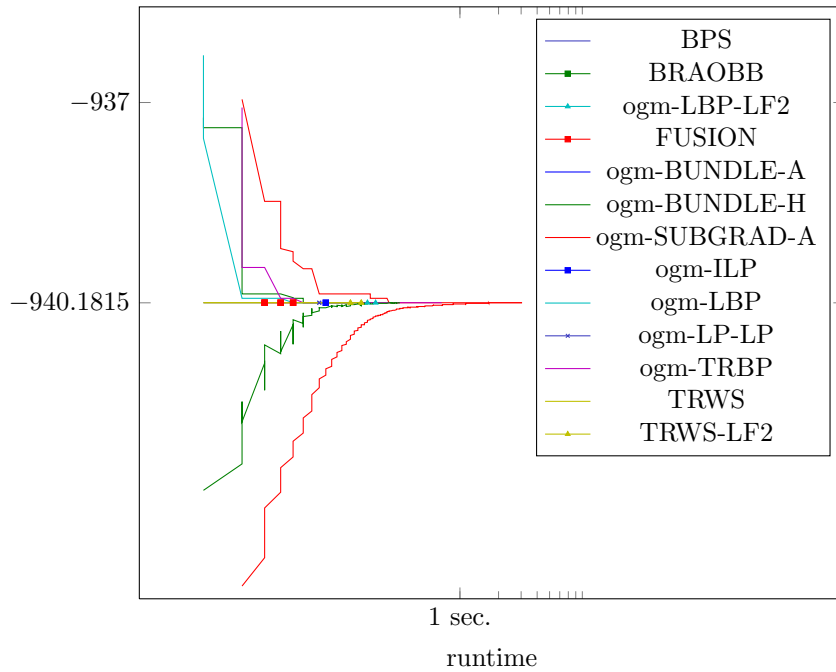


Figure 223: Runtime results for the instance *0101492* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

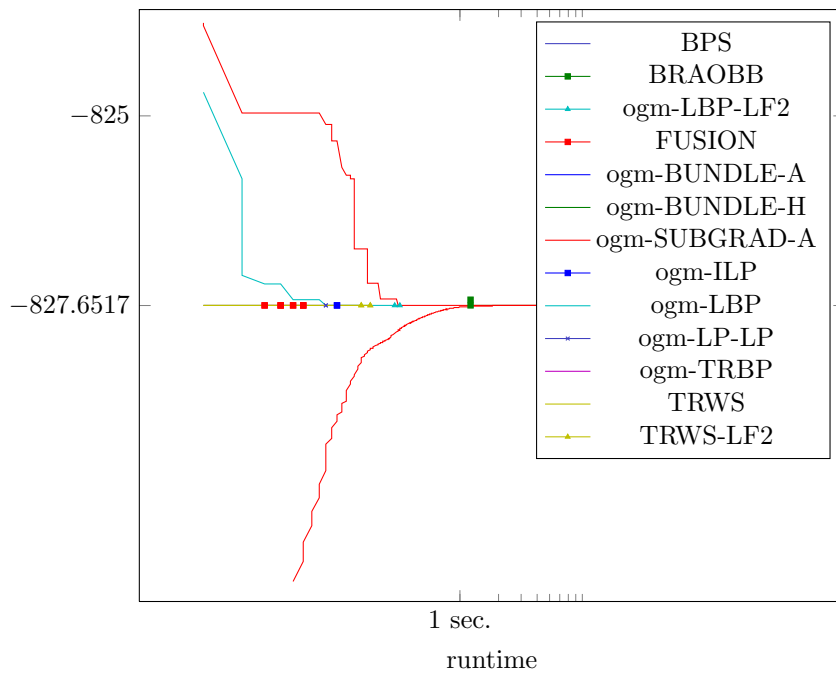


Figure 224: Runtime results for the instance *0101801* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

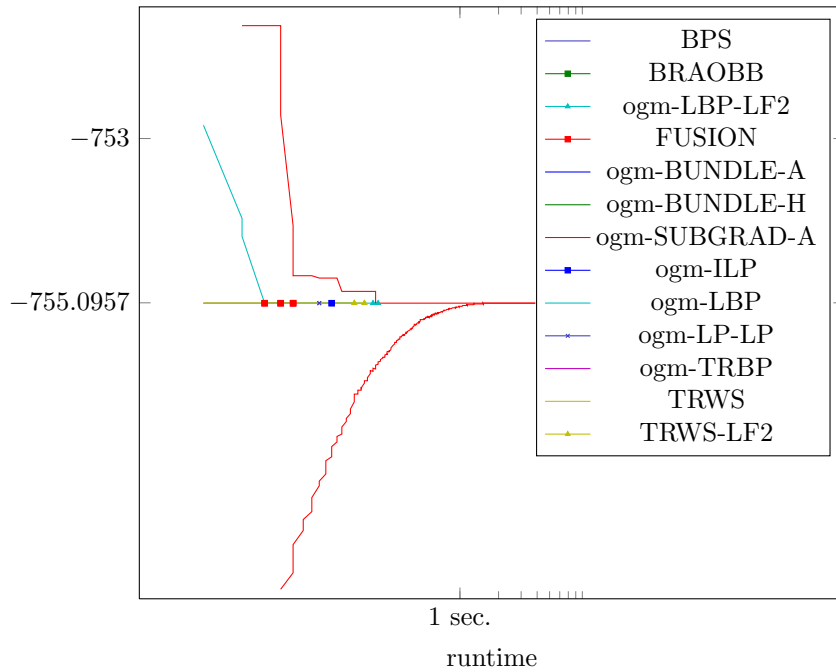


Figure 225: Runtime results for the instance *0102039* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

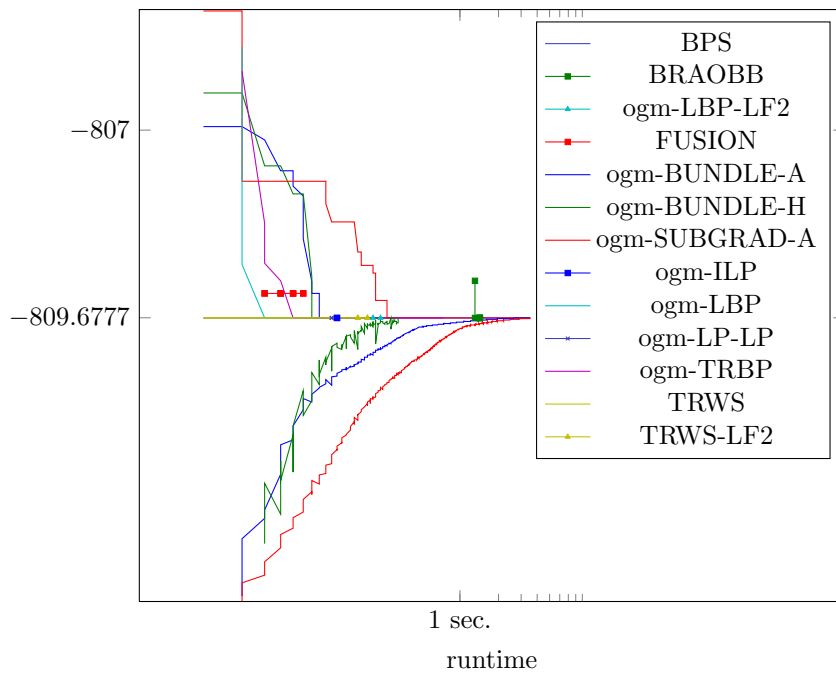


Figure 226: Runtime results for the instance *0102170* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

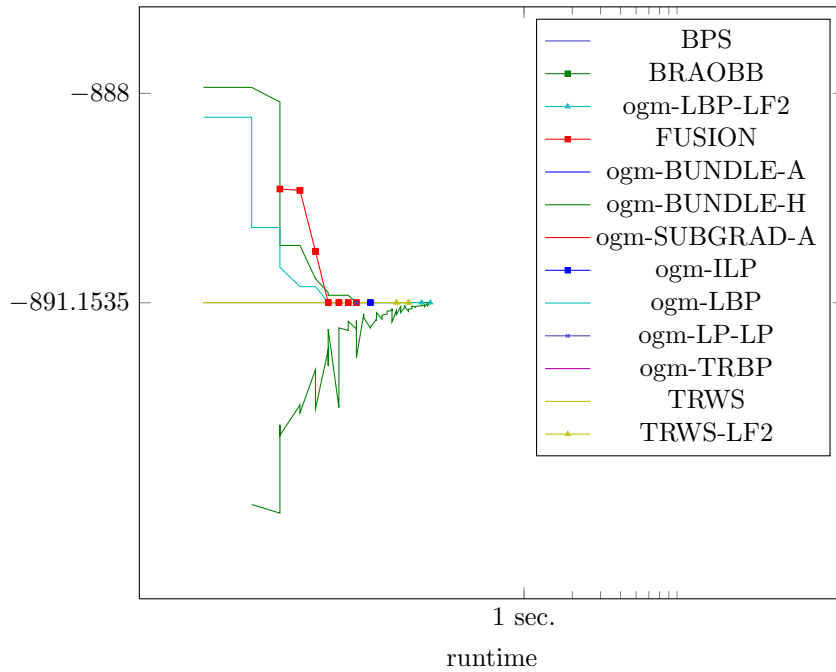


Figure 227: Runtime results for the instance *0102234* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

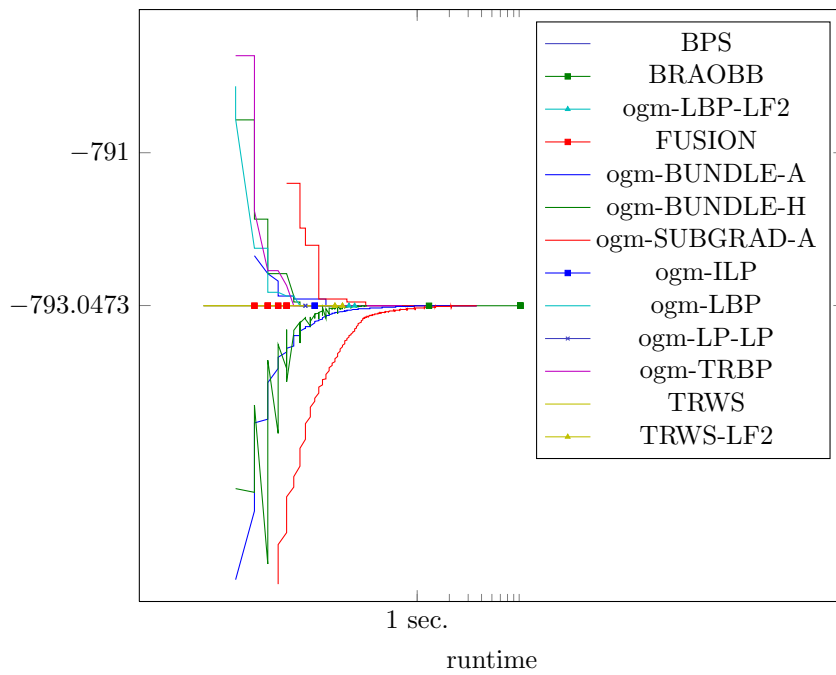


Figure 228: Runtime results for the instance *0102403* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

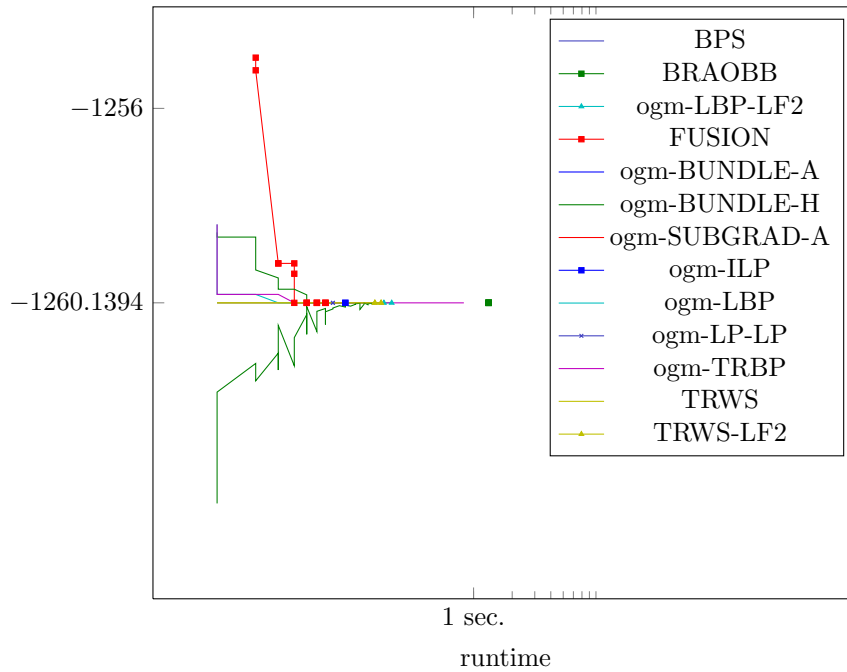


Figure 229: Runtime results for the instance *0102435* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

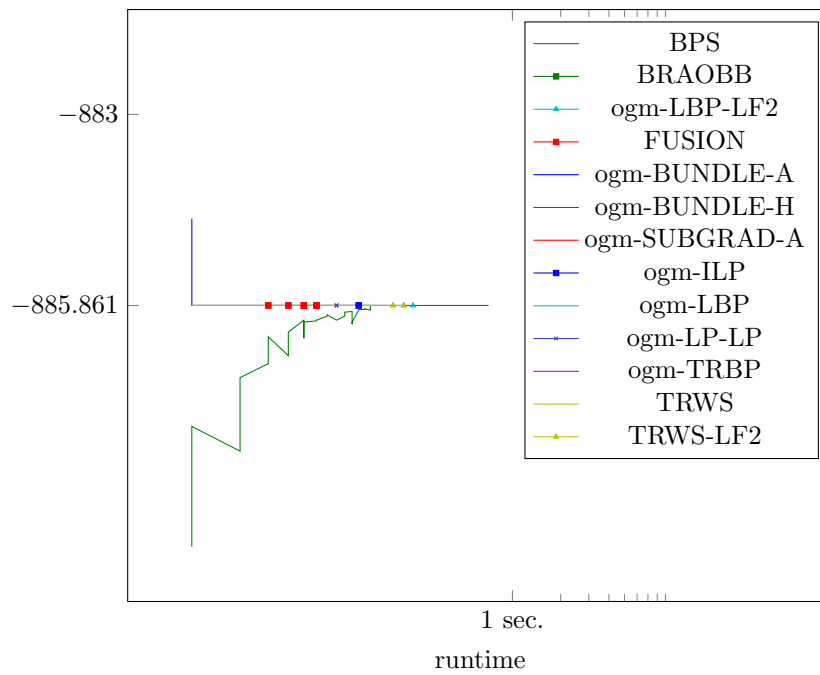


Figure 230: Runtime results for the instance *0102436* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

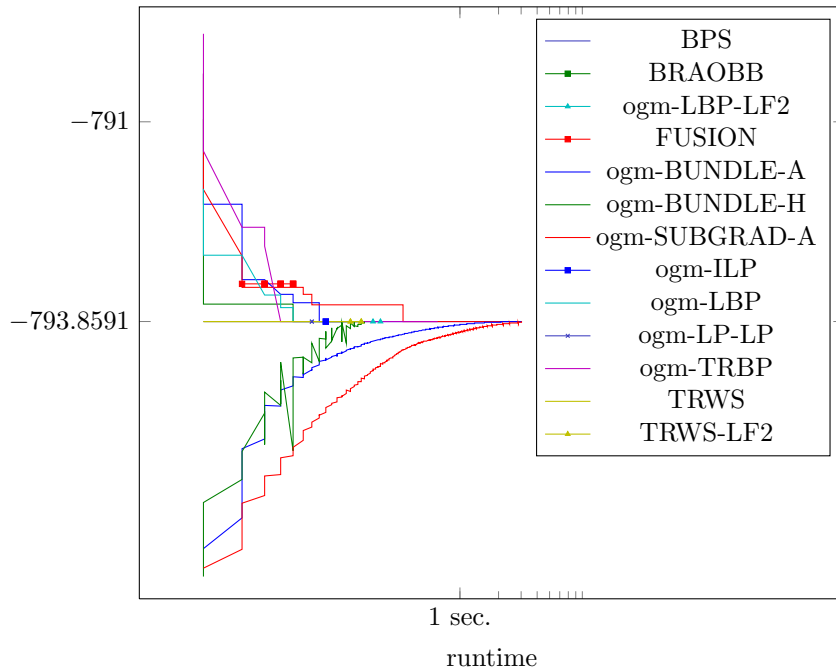


Figure 231: Runtime results for the instance 0102534 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

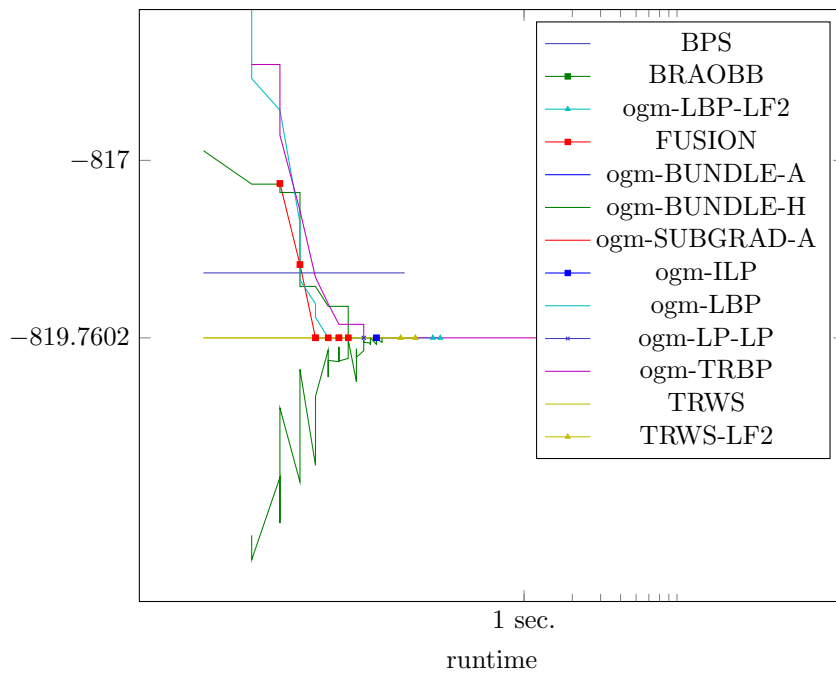


Figure 232: Runtime results for the instance 0102544 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

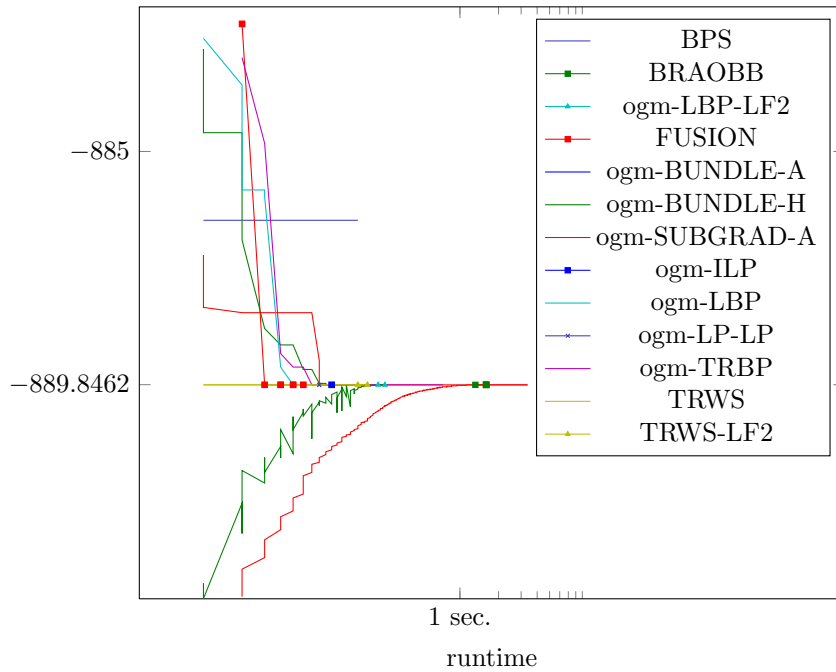


Figure 233: Runtime results for the instance *0102566* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

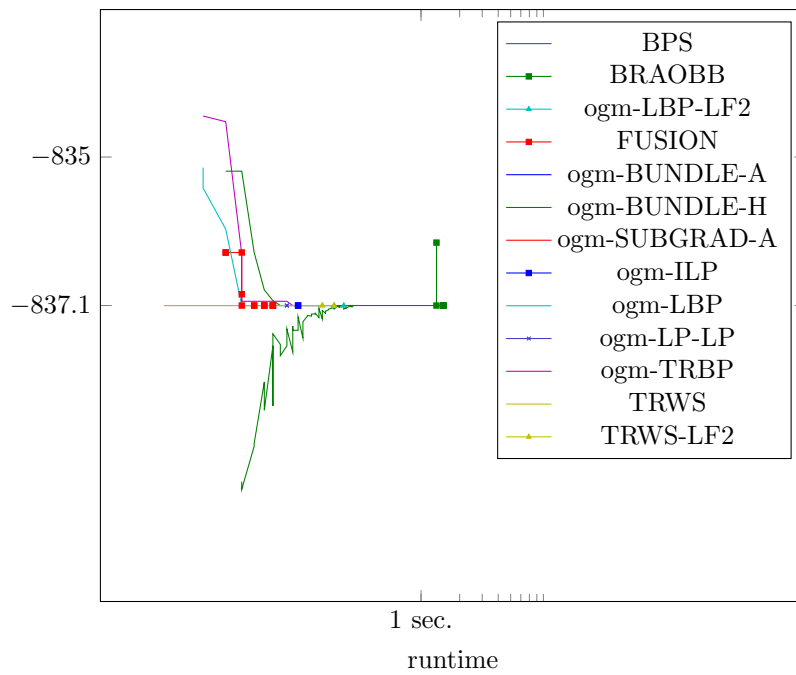


Figure 234: Runtime results for the instance *0103256* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

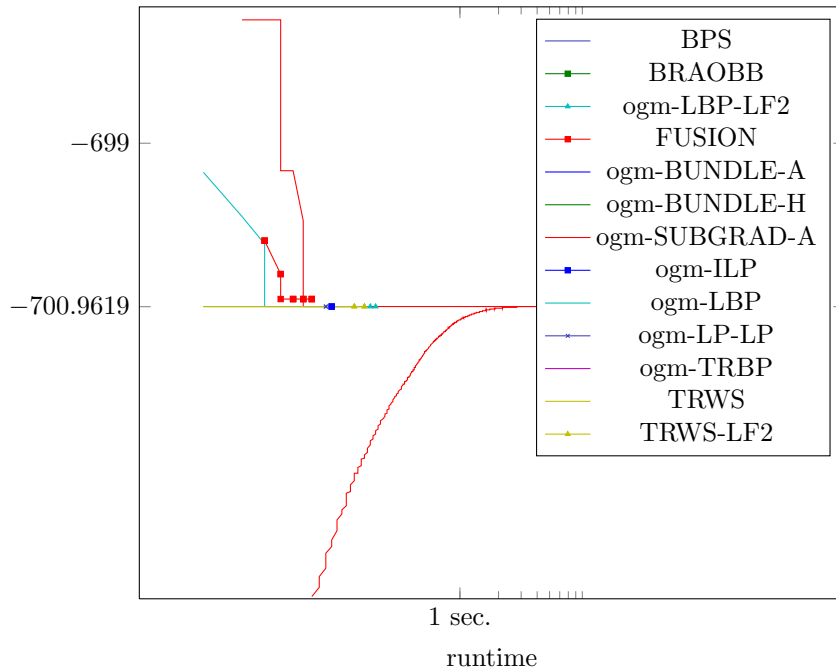


Figure 235: Runtime results for the instance *0103344* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

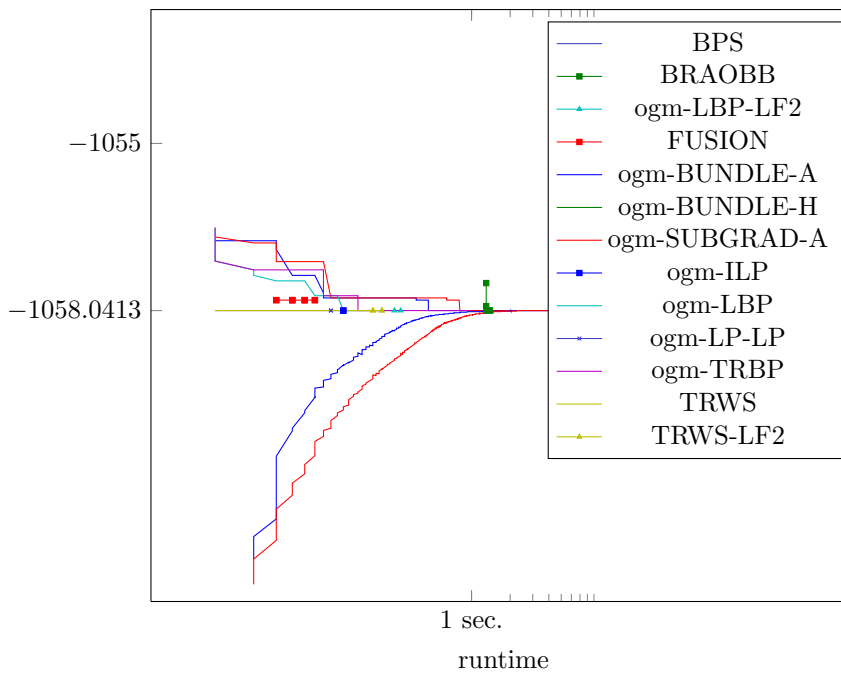


Figure 236: Runtime results for the instance *0103420* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

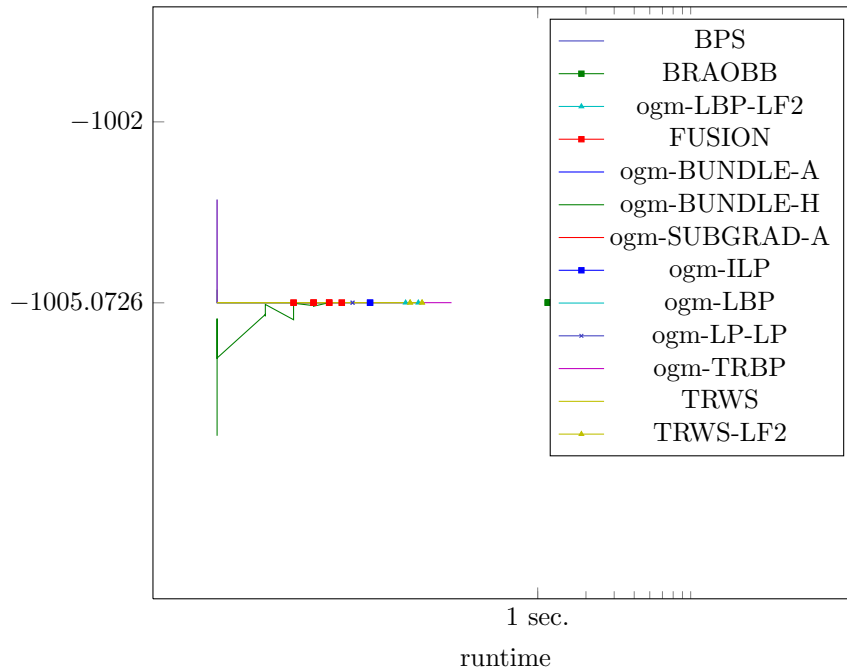


Figure 237: Runtime results for the instance *0103468* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

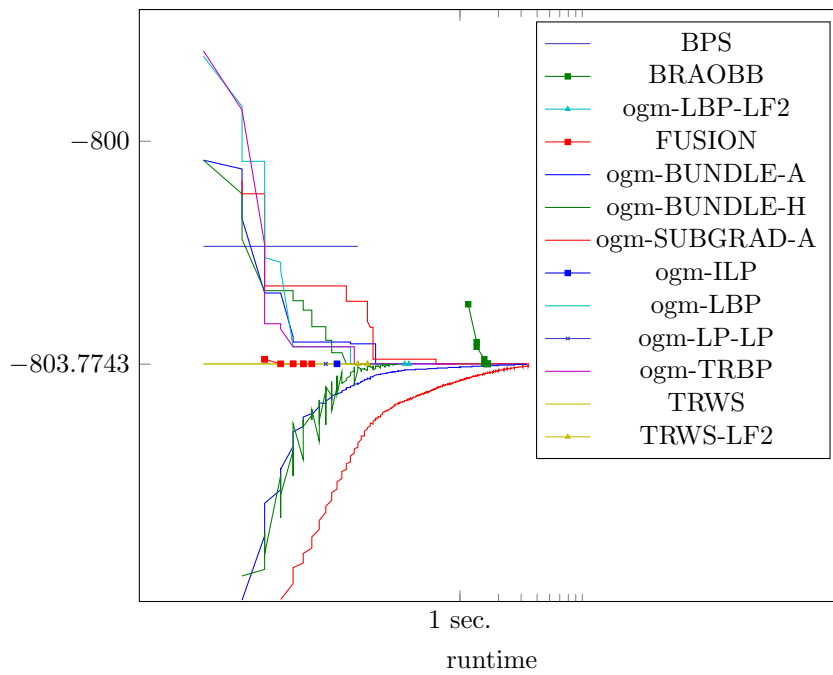


Figure 238: Runtime results for the instance *0103740* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

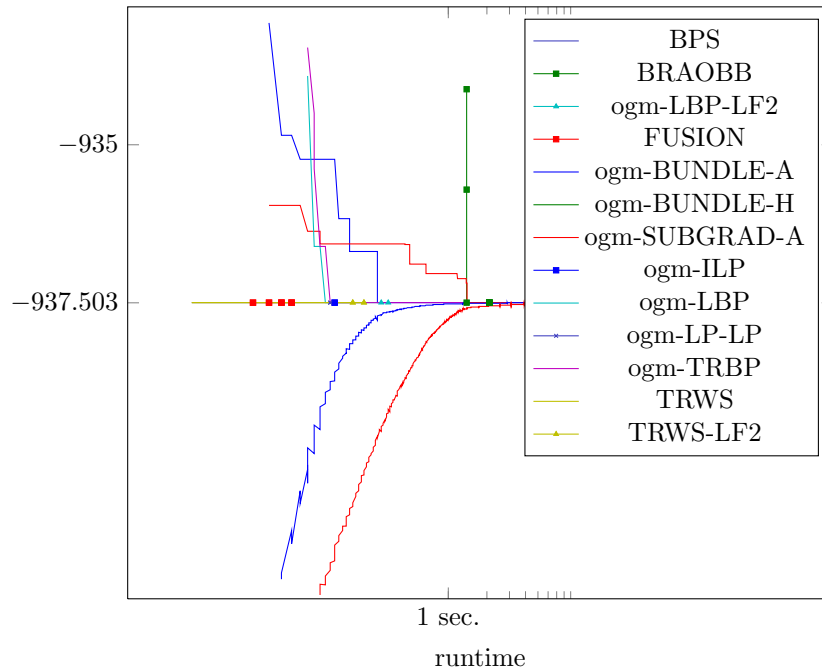


Figure 239: Runtime results for the instance 0104019 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

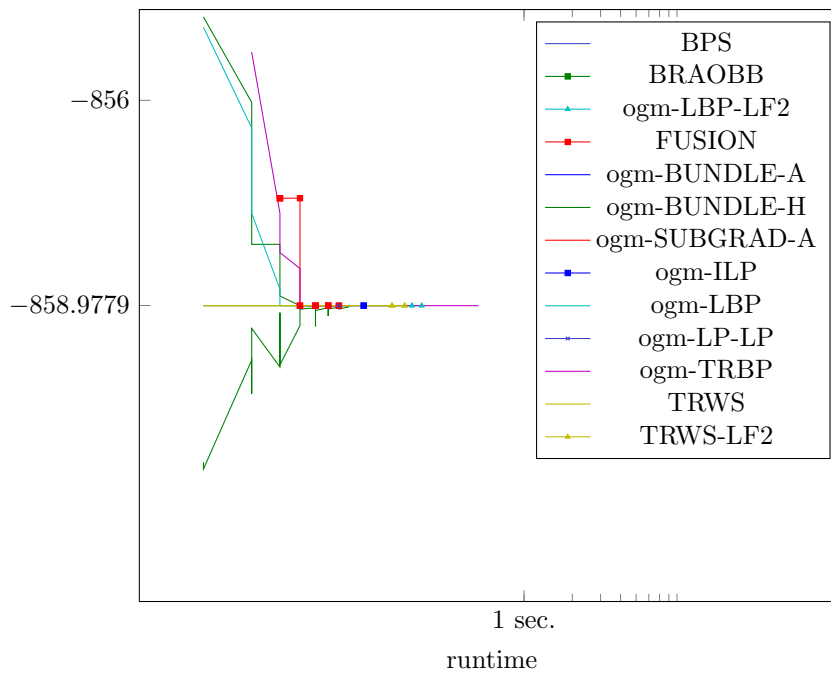


Figure 240: Runtime results for the instance 0104194 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

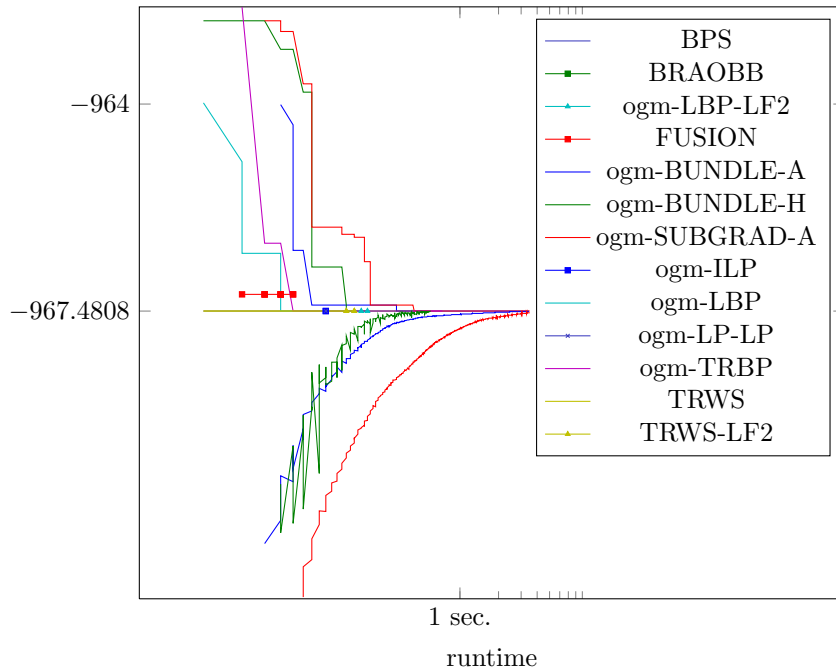


Figure 241: Runtime results for the instance 0104439 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

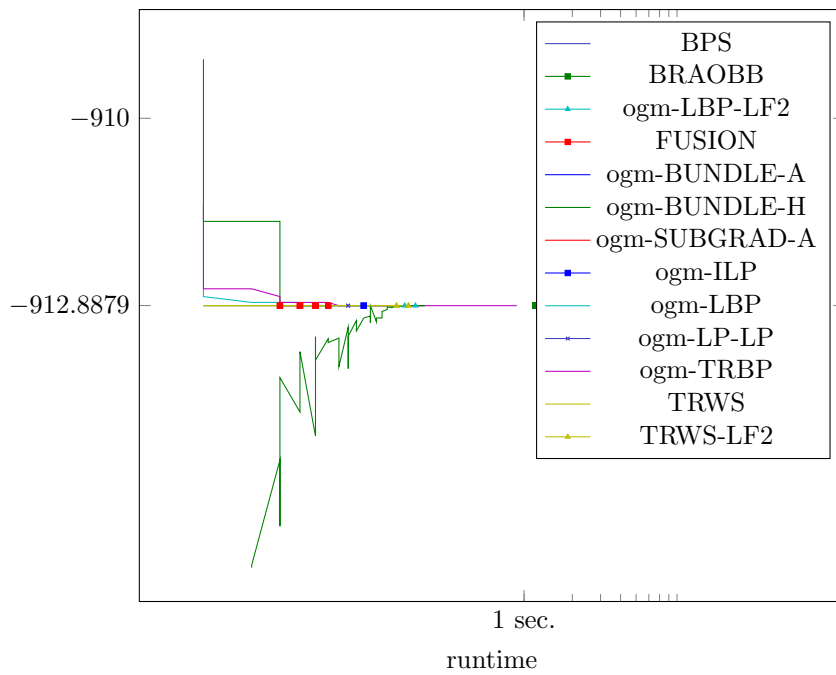


Figure 242: Runtime results for the instance 0104463 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

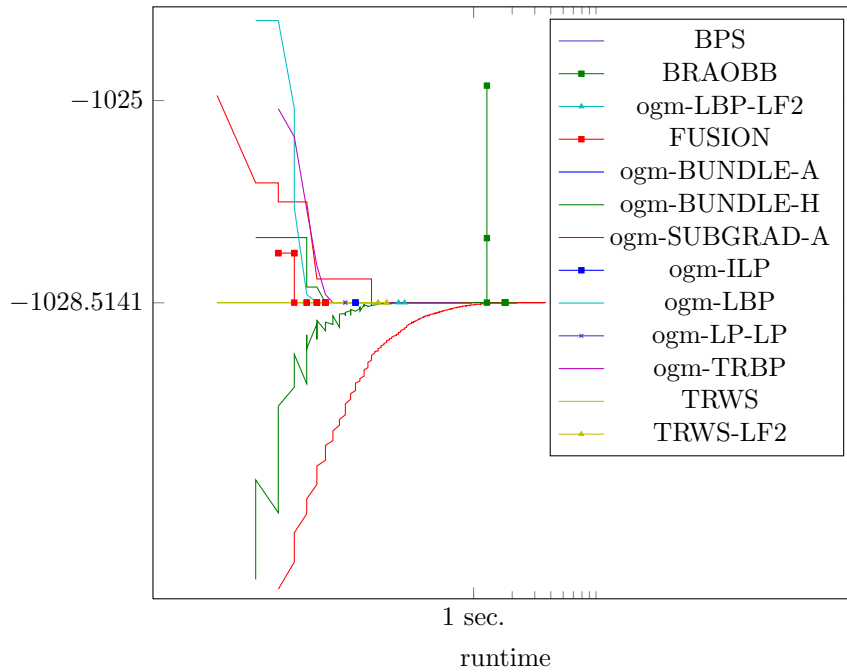


Figure 243: Runtime results for the instance *0104552* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

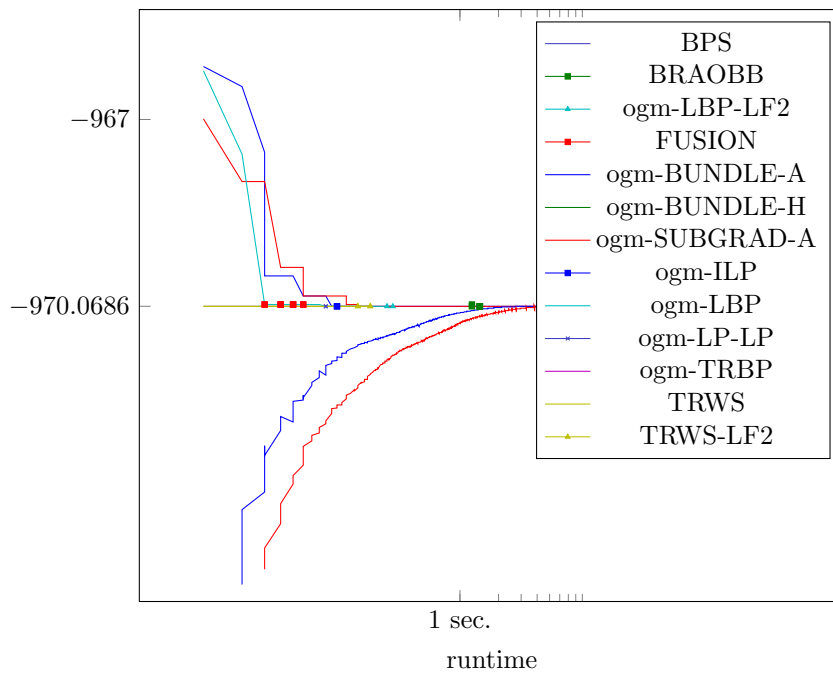


Figure 244: Runtime results for the instance *0104808* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

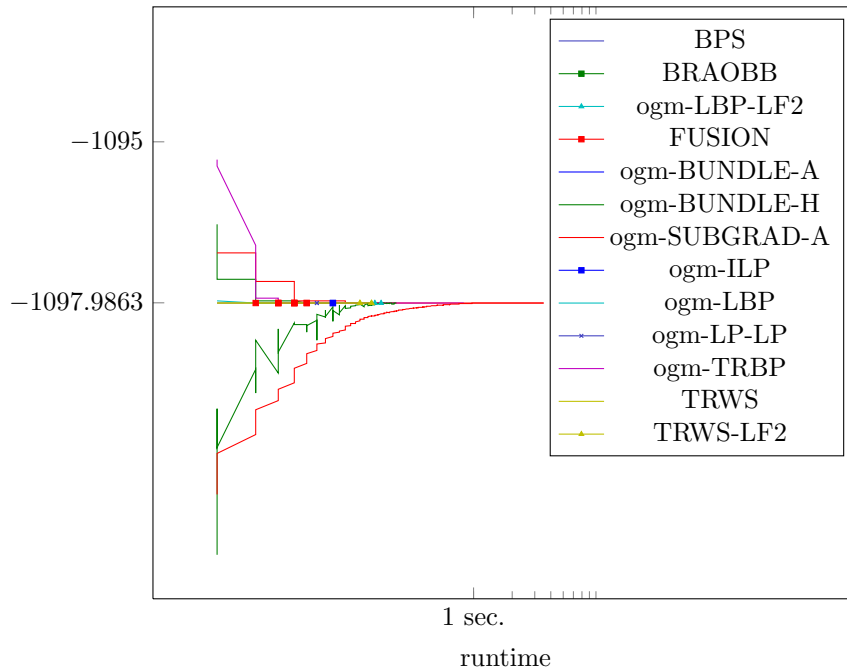


Figure 245: Runtime results for the instance *0104958* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

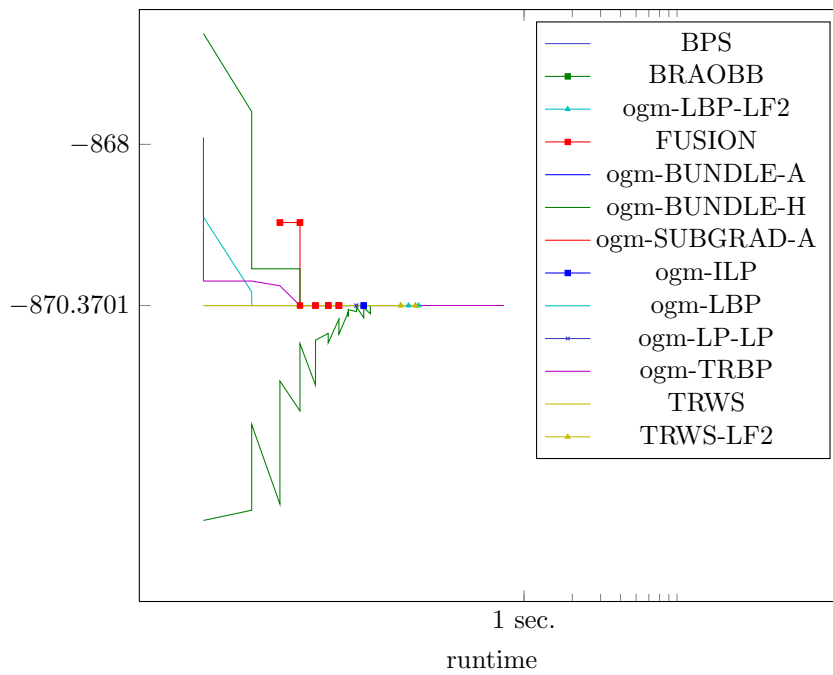


Figure 246: Runtime results for the instance *0105003* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

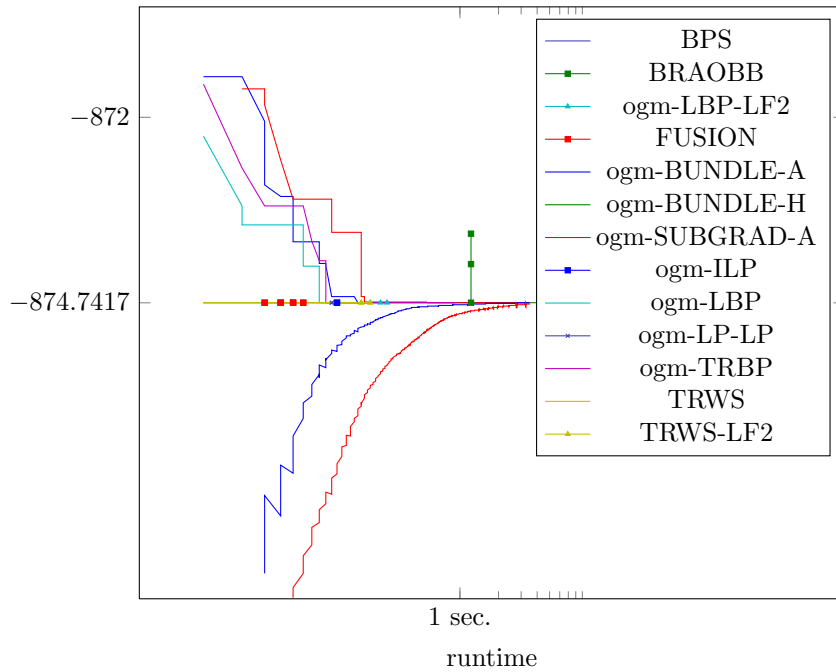


Figure 247: Runtime results for the instance *0105064* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

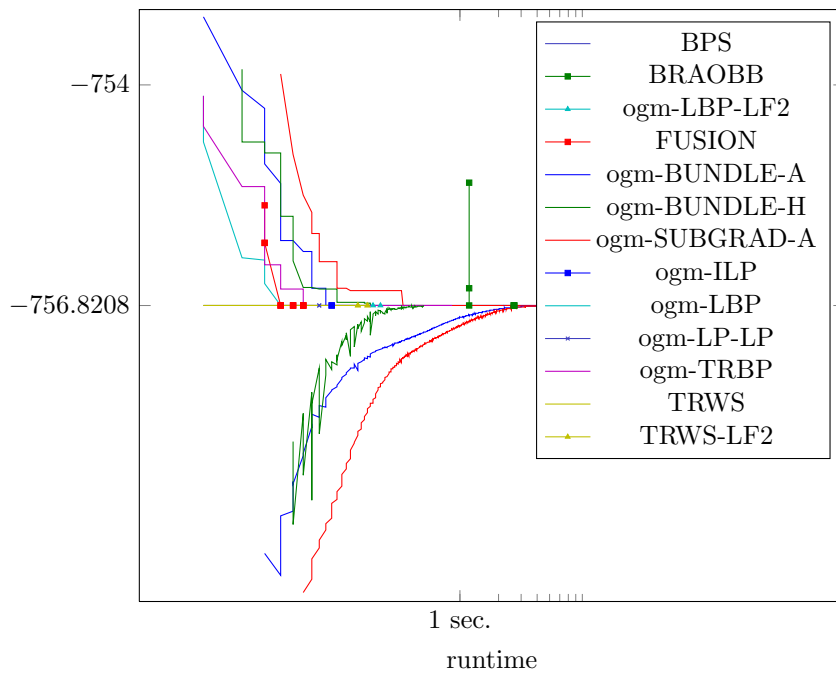


Figure 248: Runtime results for the instance *0105146* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

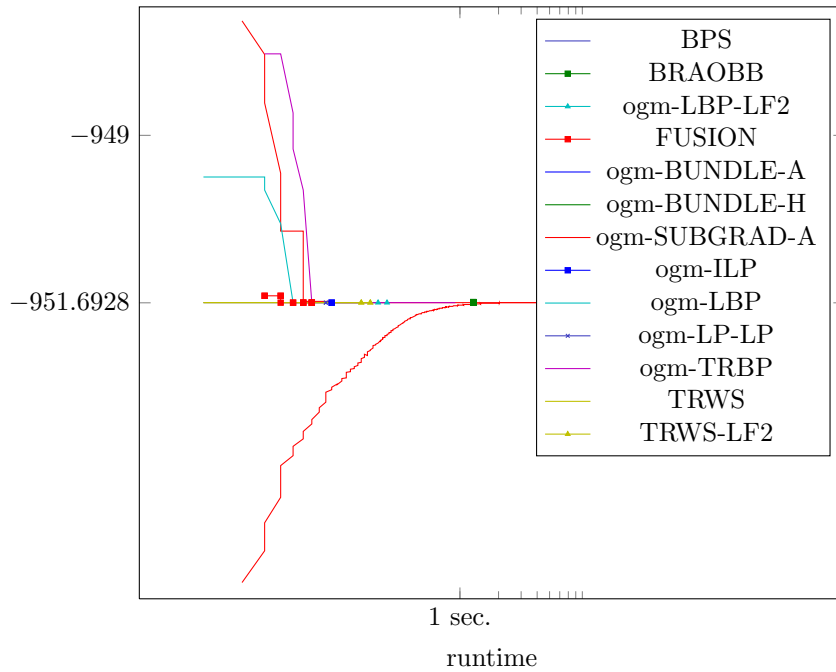


Figure 249: Runtime results for the instance *0105159* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

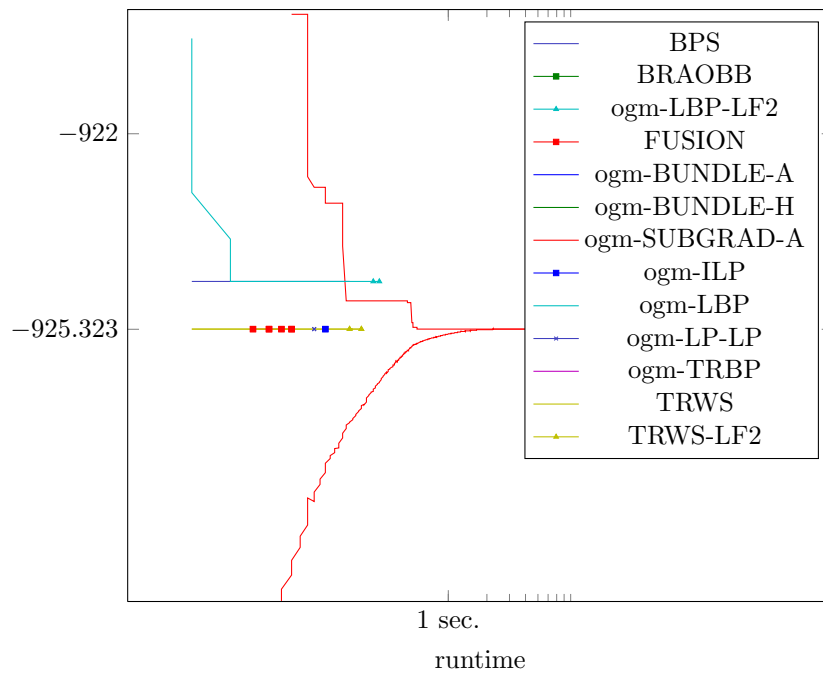


Figure 250: Runtime results for the instance *0105305* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

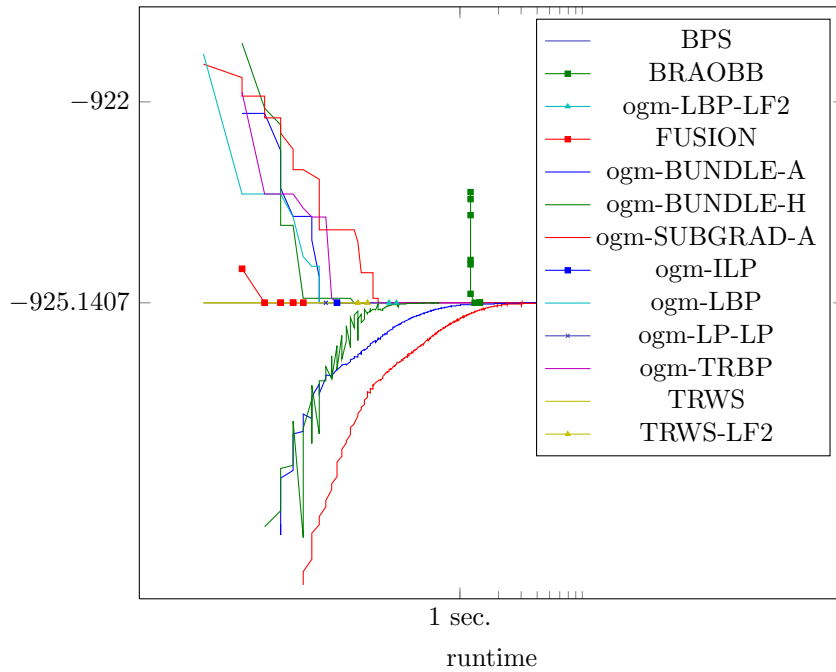


Figure 251: Runtime results for the instance *1000061* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

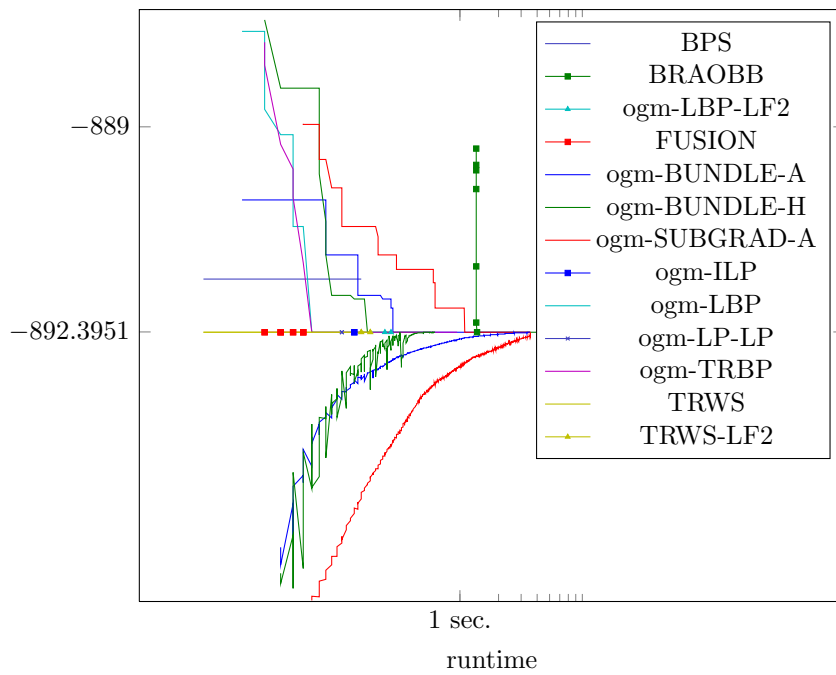


Figure 252: Runtime results for the instance *1000063* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

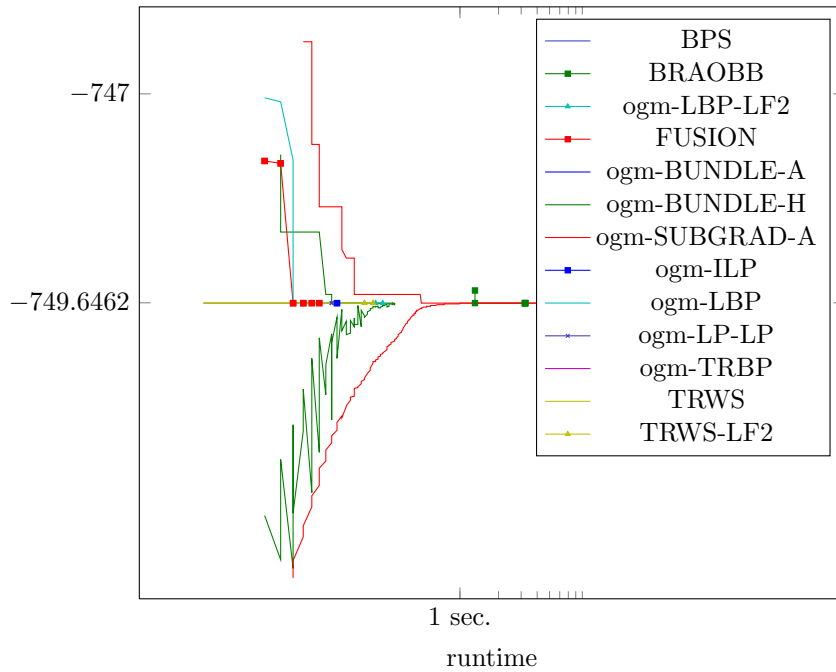


Figure 253: Runtime results for the instance *1000097* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

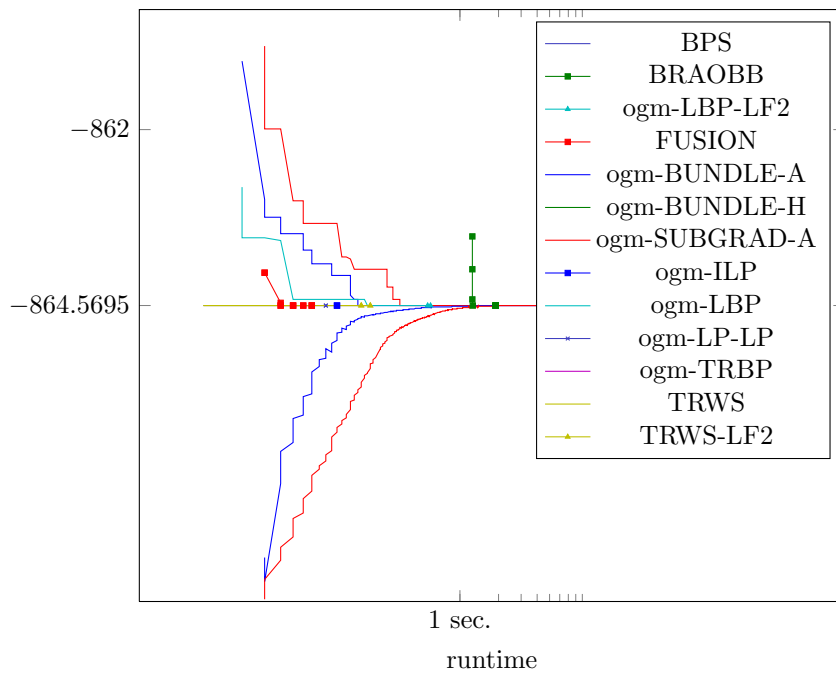


Figure 254: Runtime results for the instance *1000105* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

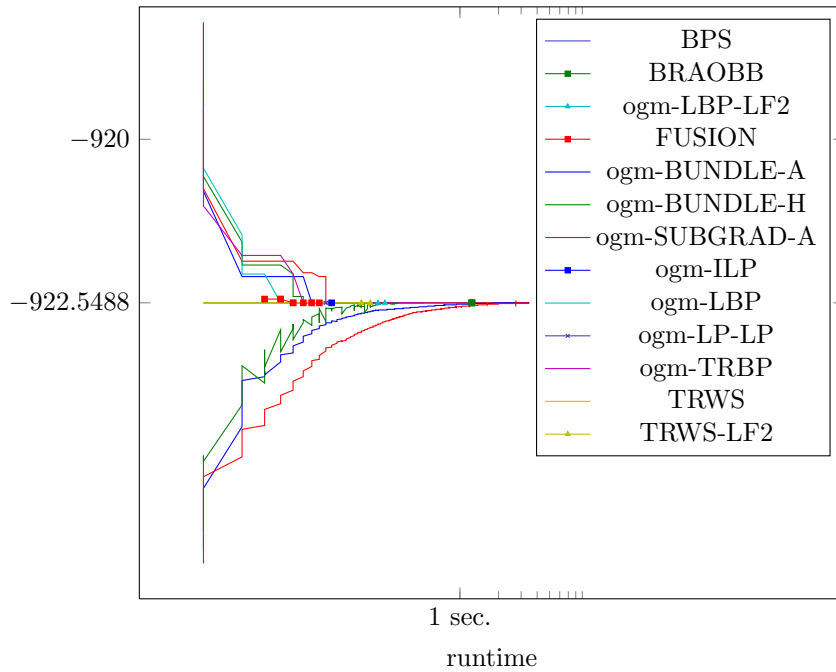


Figure 255: Runtime results for the instance 1000288 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

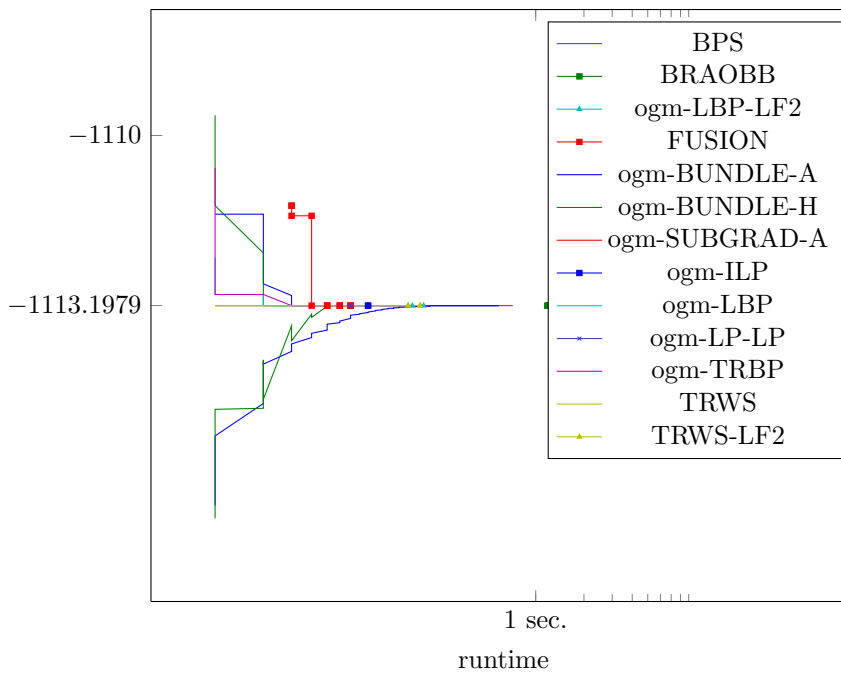


Figure 256: Runtime results for the instance 1000351 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

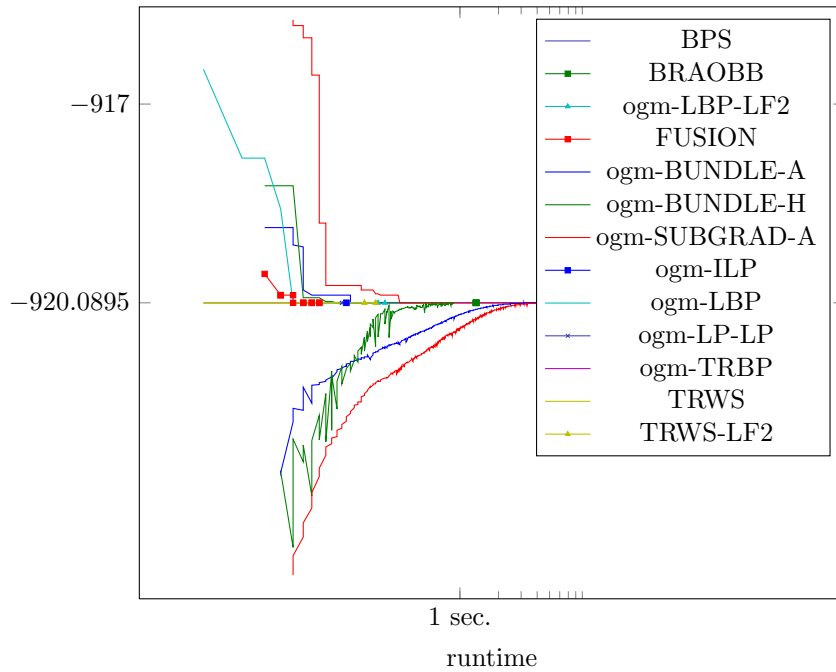


Figure 257: Runtime results for the instance *1000413* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

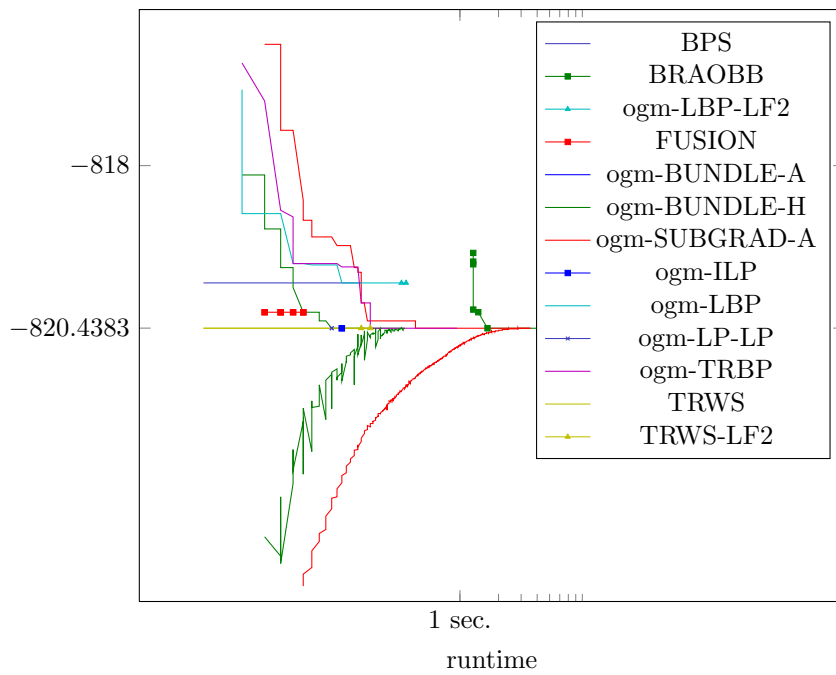


Figure 258: Runtime results for the instance *1000505* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

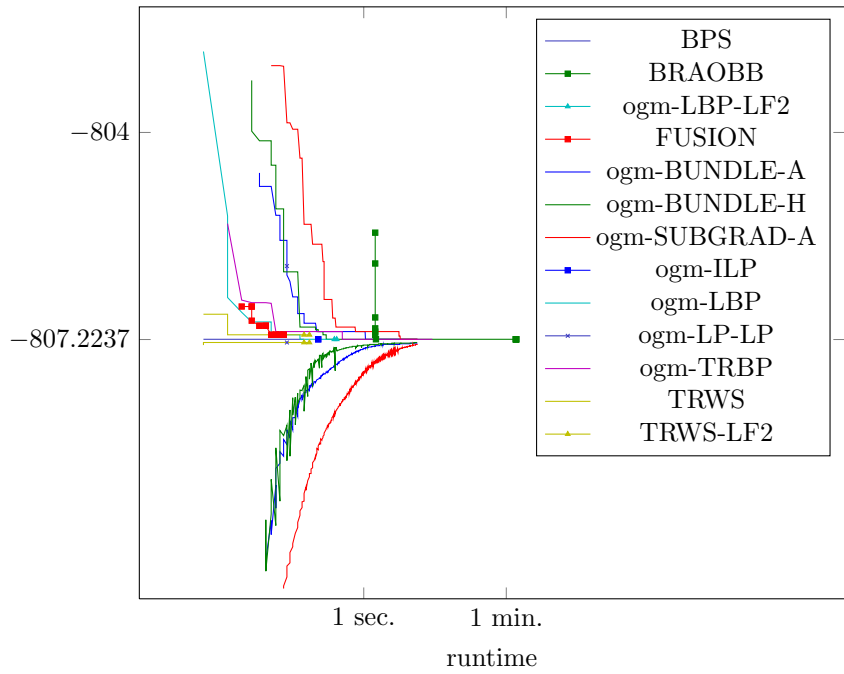


Figure 259: Runtime results for the instance 1000580 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

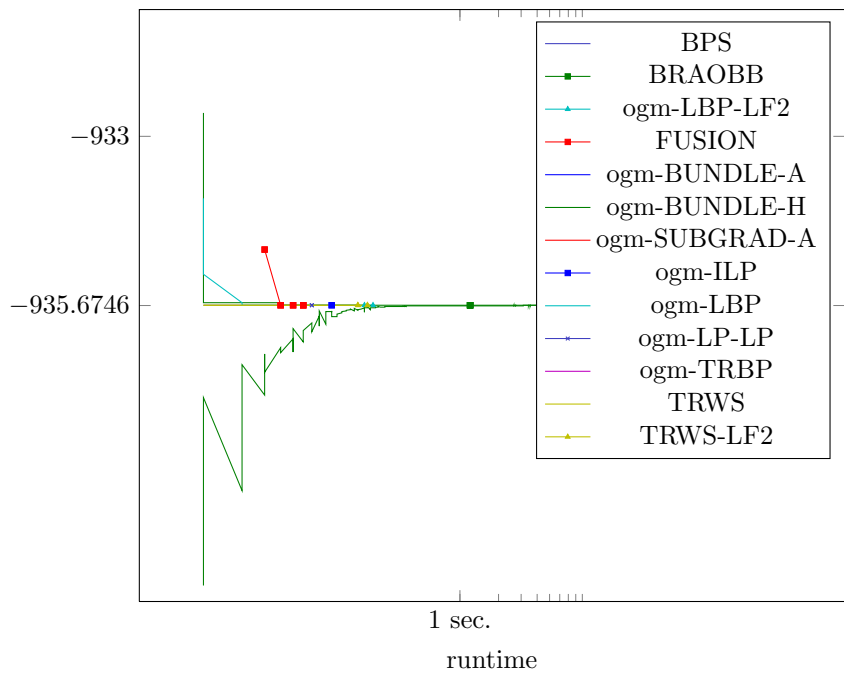


Figure 260: Runtime results for the instance 1000615 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

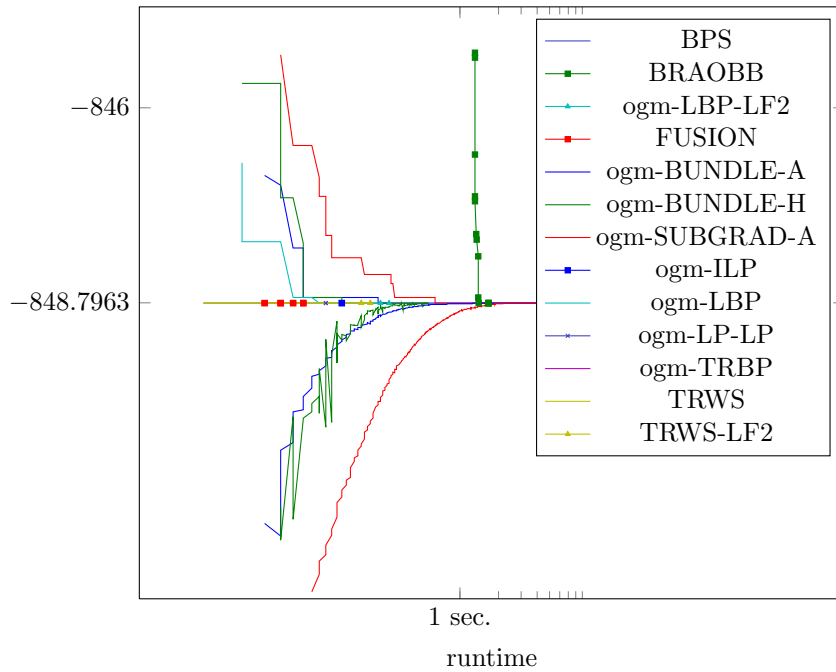


Figure 261: Runtime results for the instance *1000731* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

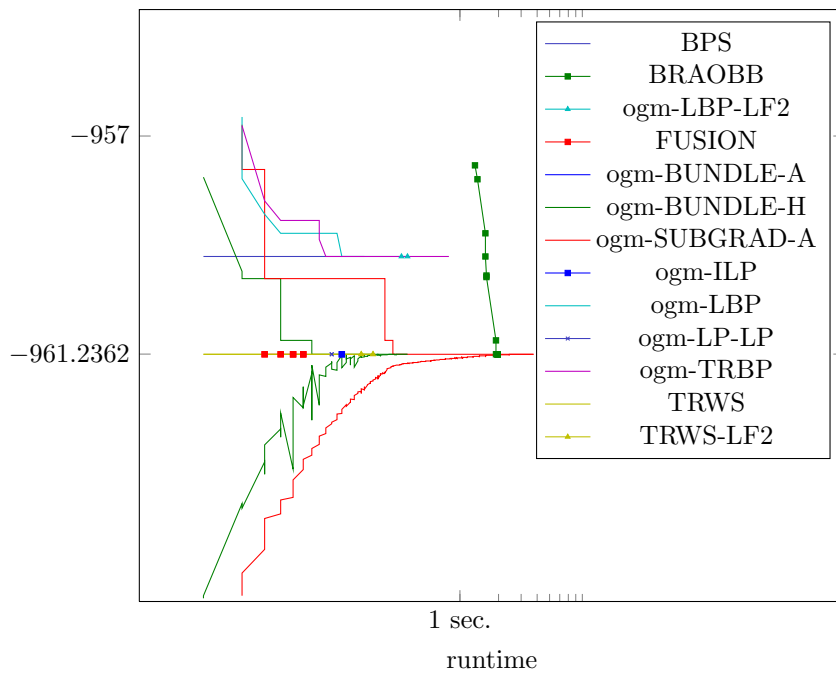


Figure 262: Runtime results for the instance *1000875* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

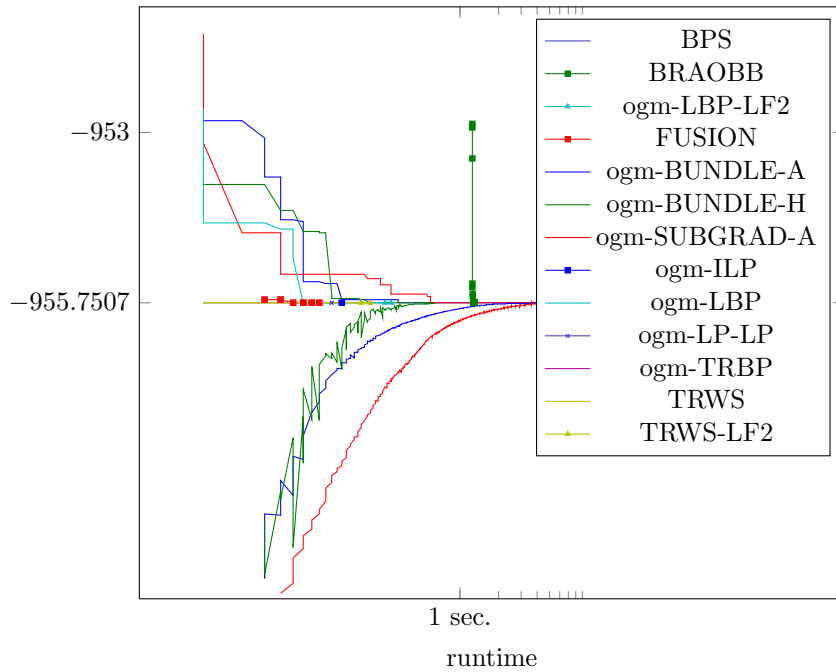


Figure 263: Runtime results for the instance *1000882* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

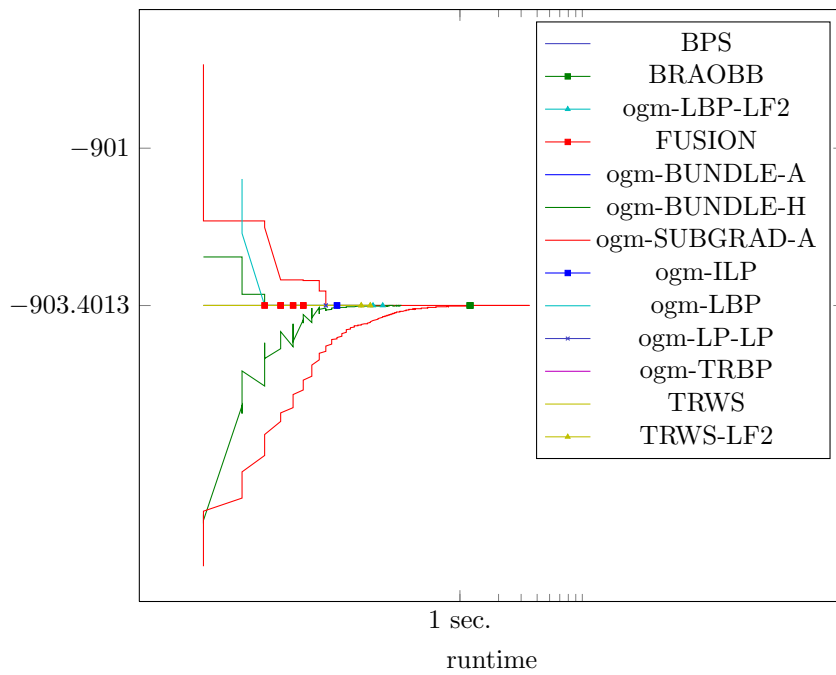


Figure 264: Runtime results for the instance *1000929* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

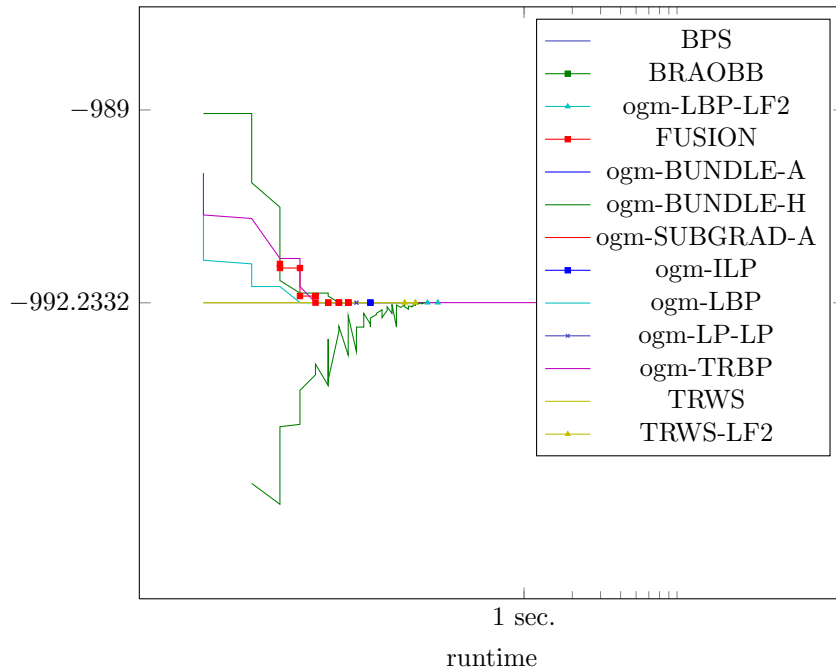


Figure 265: Runtime results for the instance *1000947* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

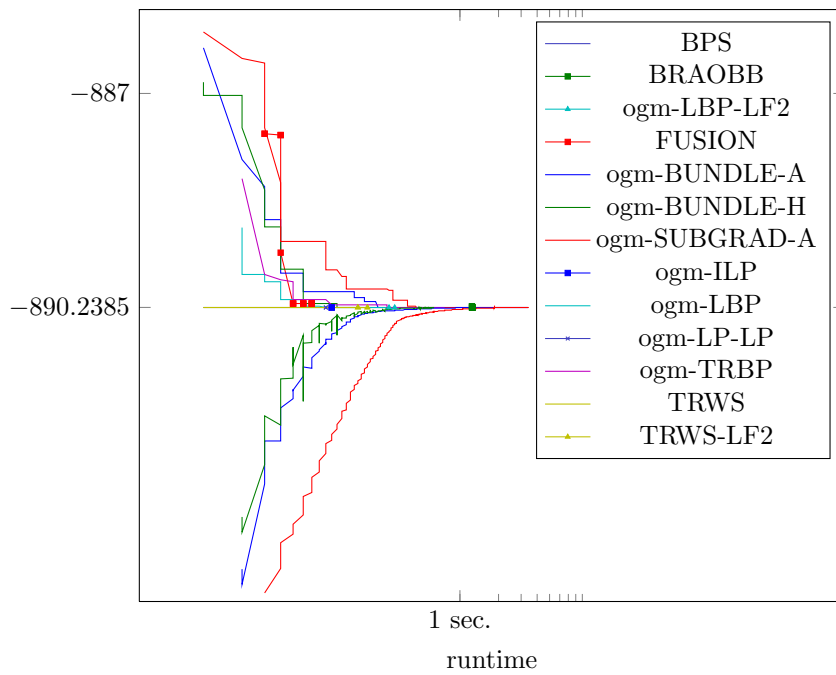


Figure 266: Runtime results for the instance *1000993* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

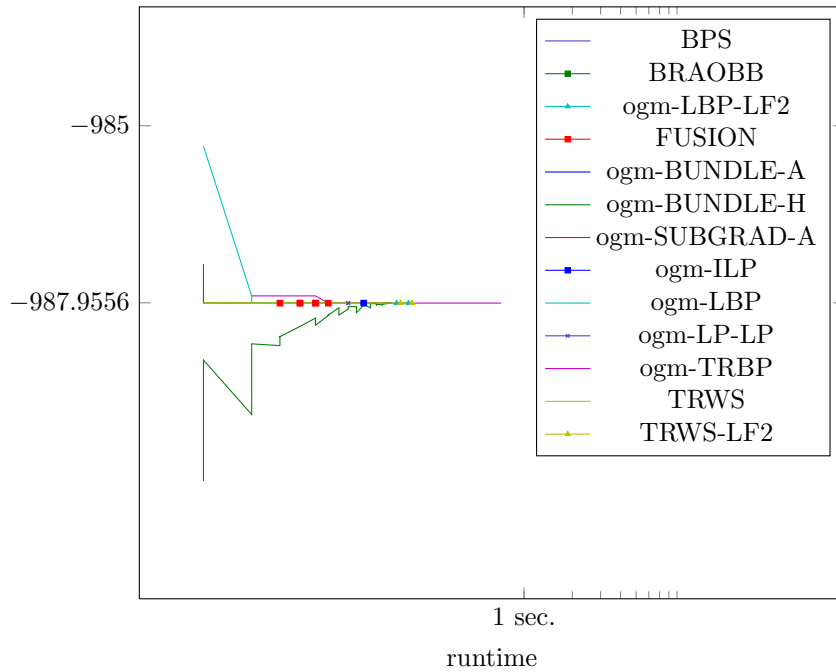


Figure 267: Runtime results for the instance *1001184* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

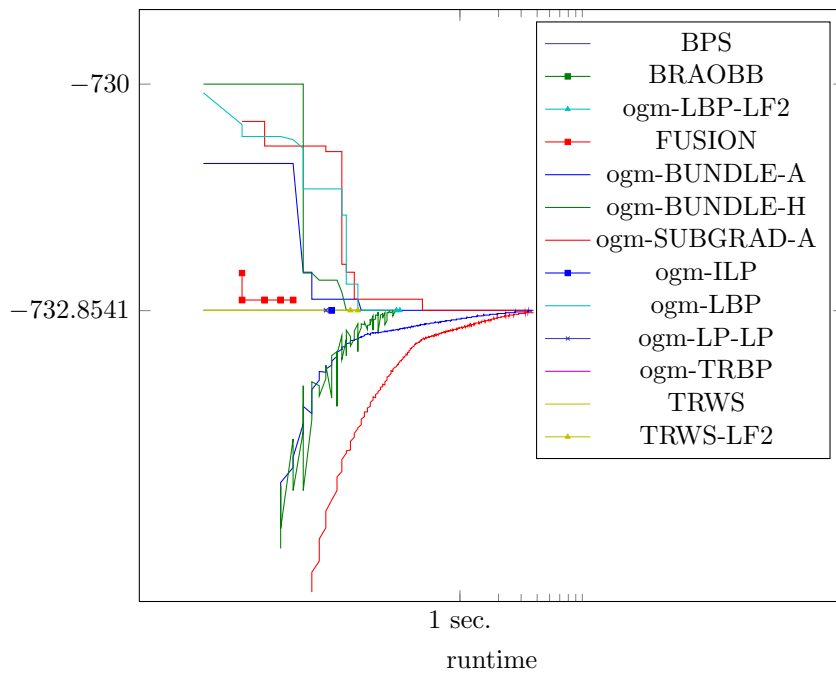


Figure 268: Runtime results for the instance *1001195* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

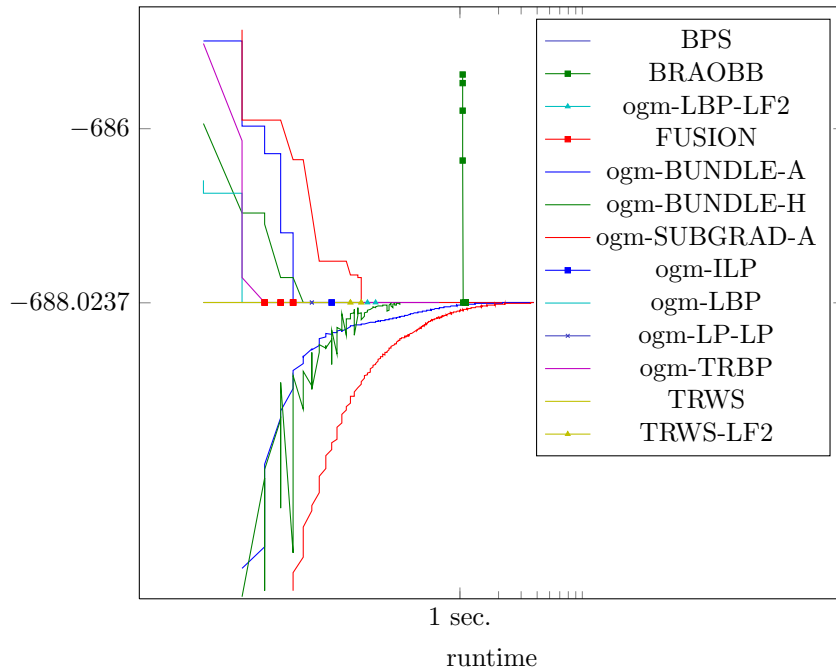


Figure 269: Runtime results for the instance *1001252* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

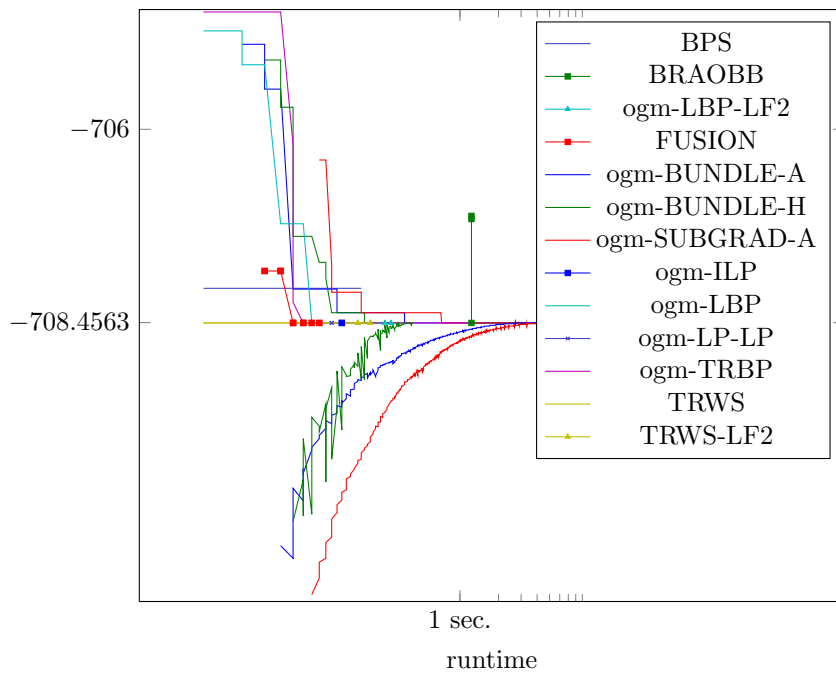


Figure 270: Runtime results for the instance *1001685* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

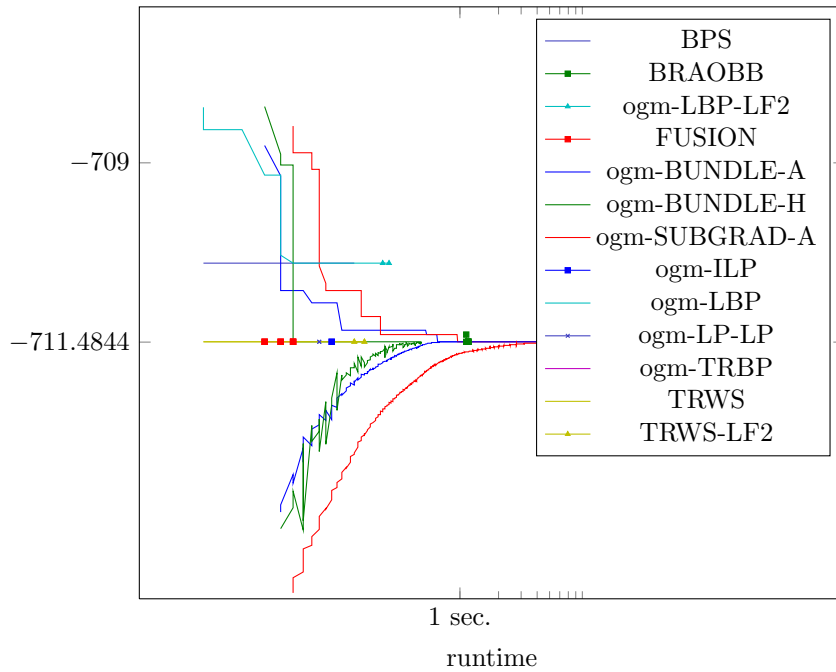


Figure 271: Runtime results for the instance *1001688* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

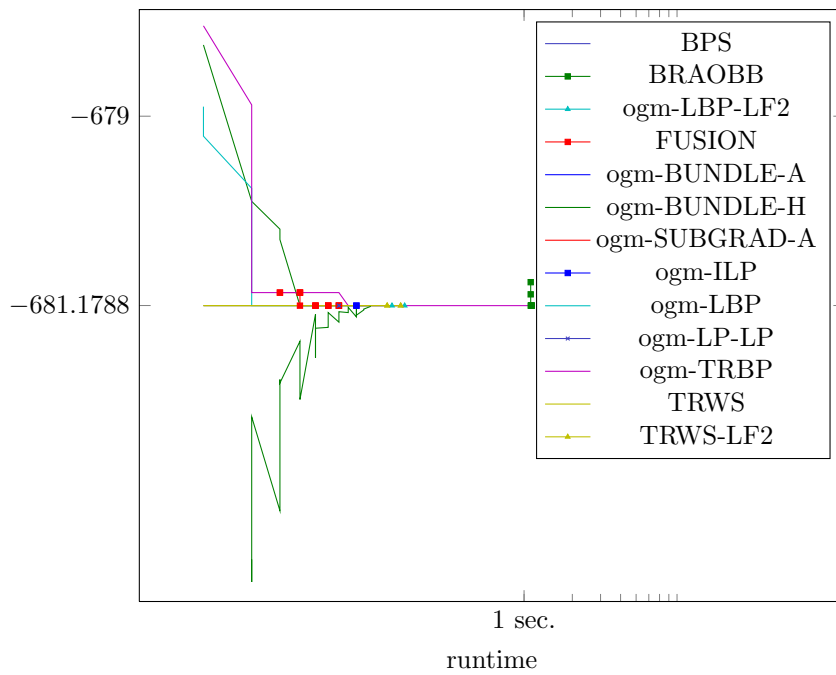


Figure 272: Runtime results for the instance *1001770* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

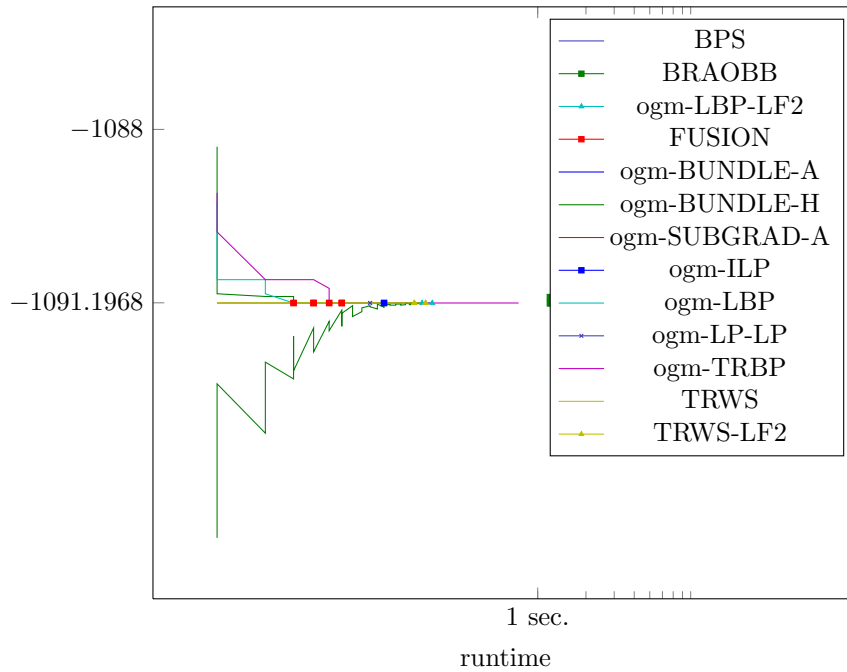


Figure 273: Runtime results for the instance *1001794* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

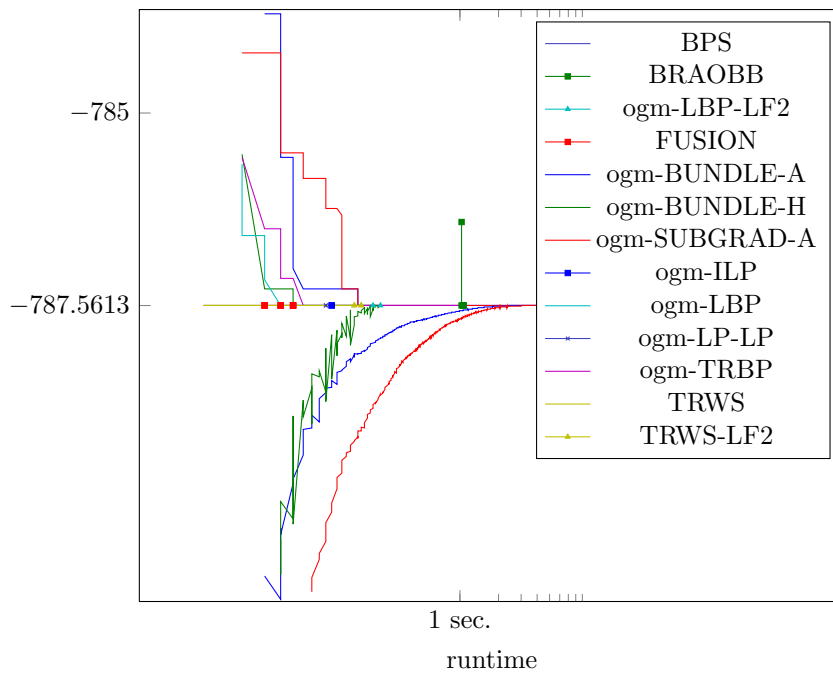


Figure 274: Runtime results for the instance *1001875* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

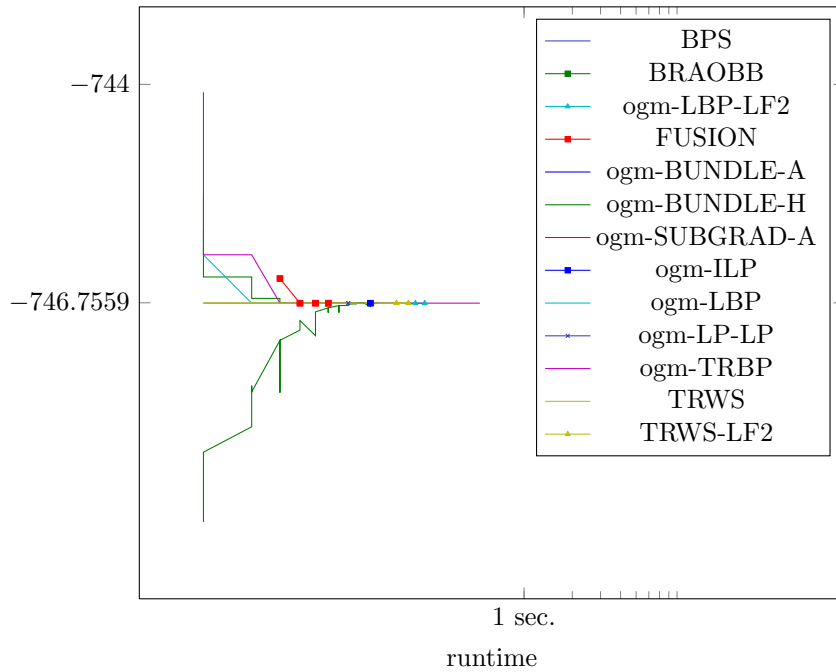


Figure 275: Runtime results for the instance 1001944 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

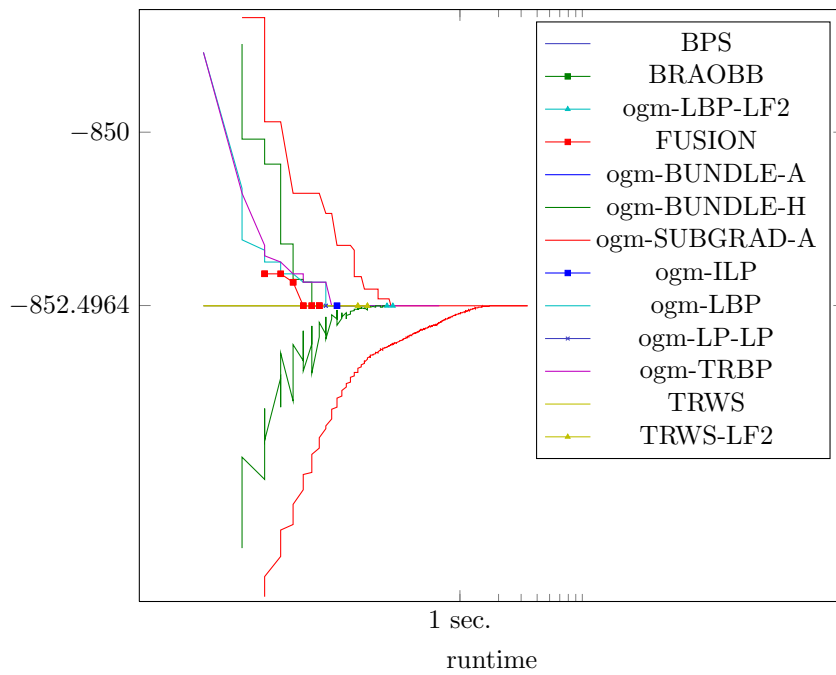


Figure 276: Runtime results for the instance 1100001 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

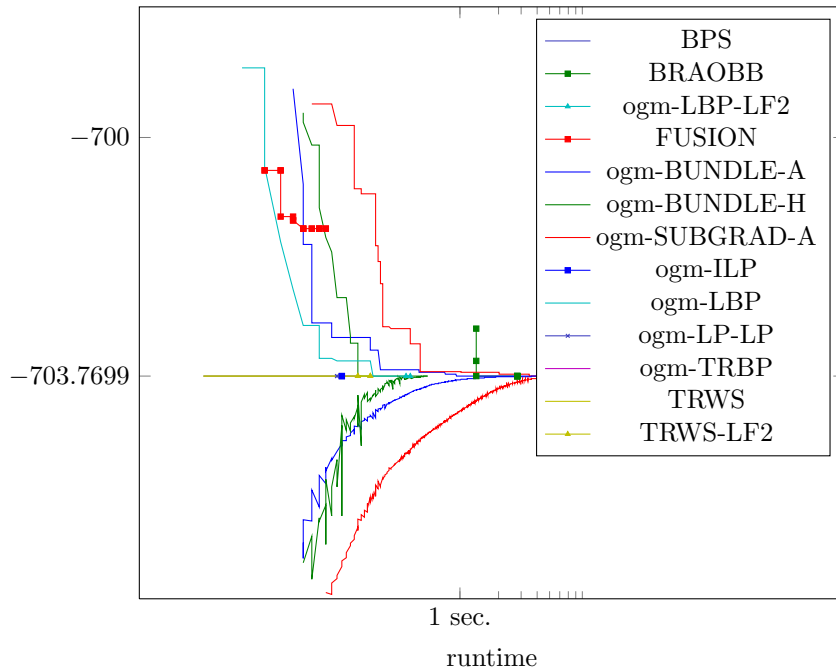


Figure 277: Runtime results for the instance 1100002 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

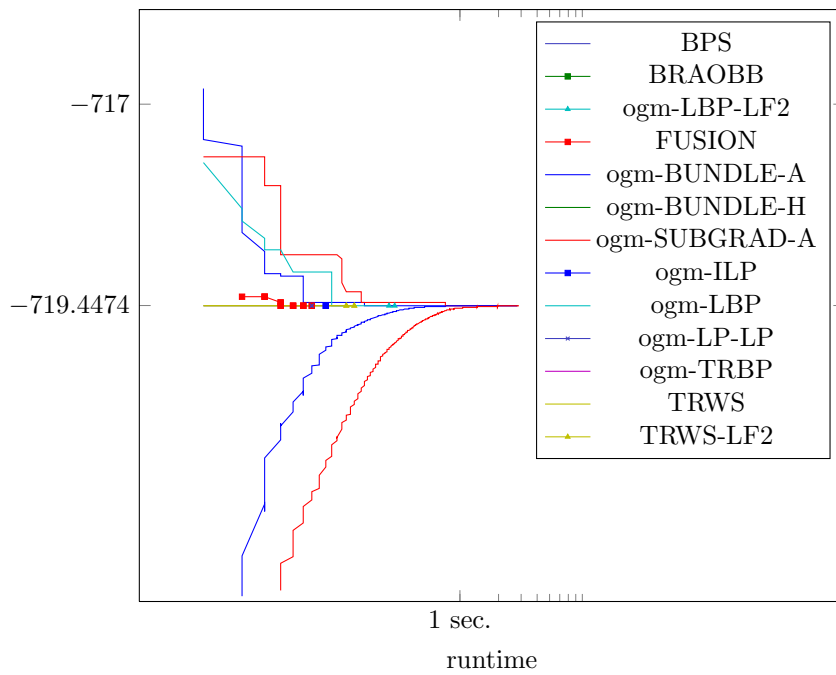


Figure 278: Runtime results for the instance 1100003 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

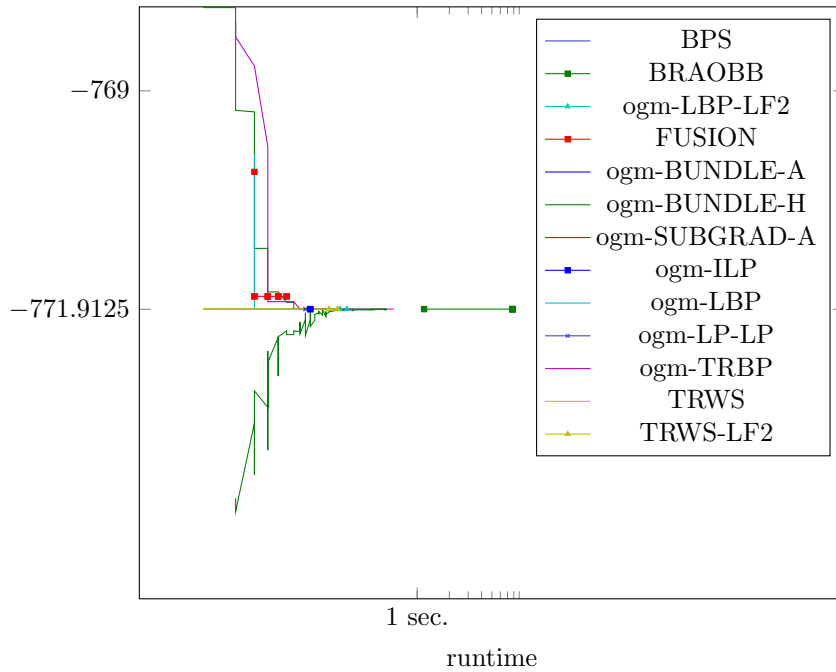


Figure 279: Runtime results for the instance *1100004* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

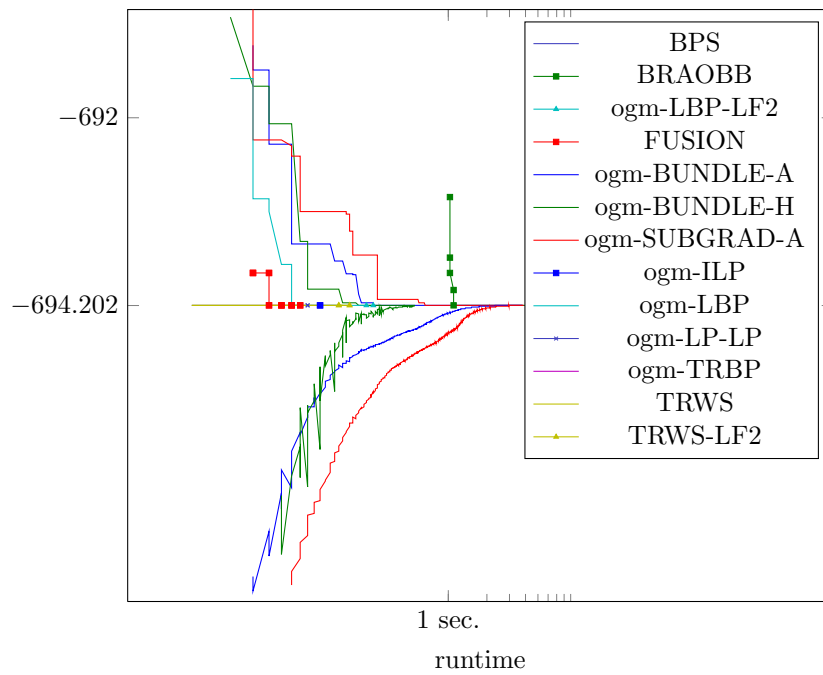


Figure 280: Runtime results for the instance *1100005* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

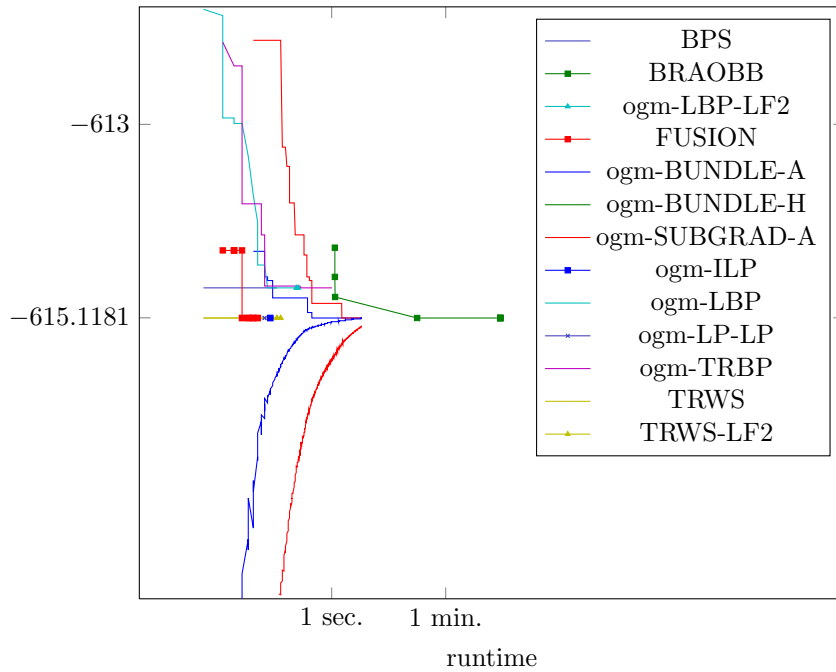


Figure 281: Runtime results for the instance 1100006 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

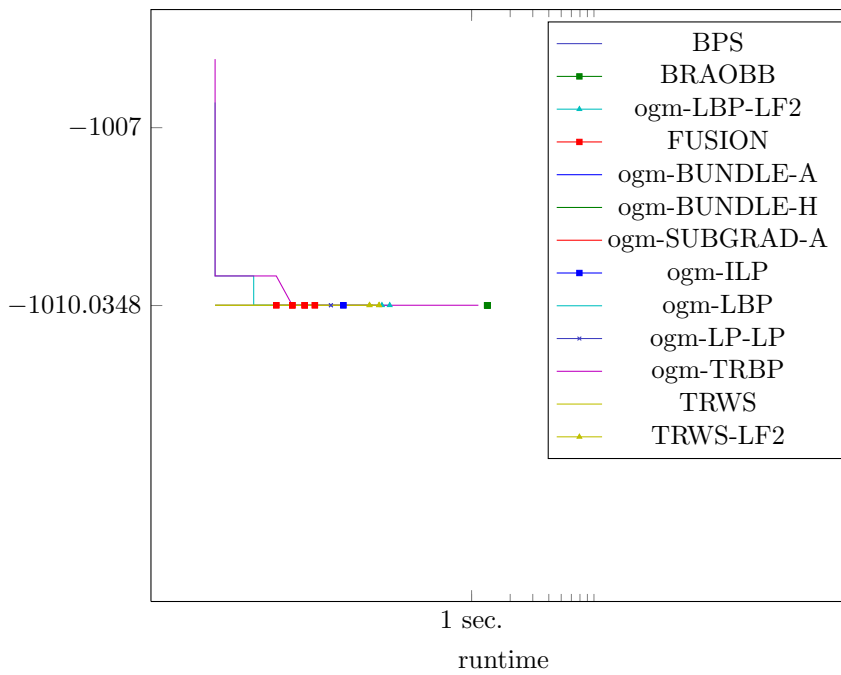


Figure 282: Runtime results for the instance 1100007 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

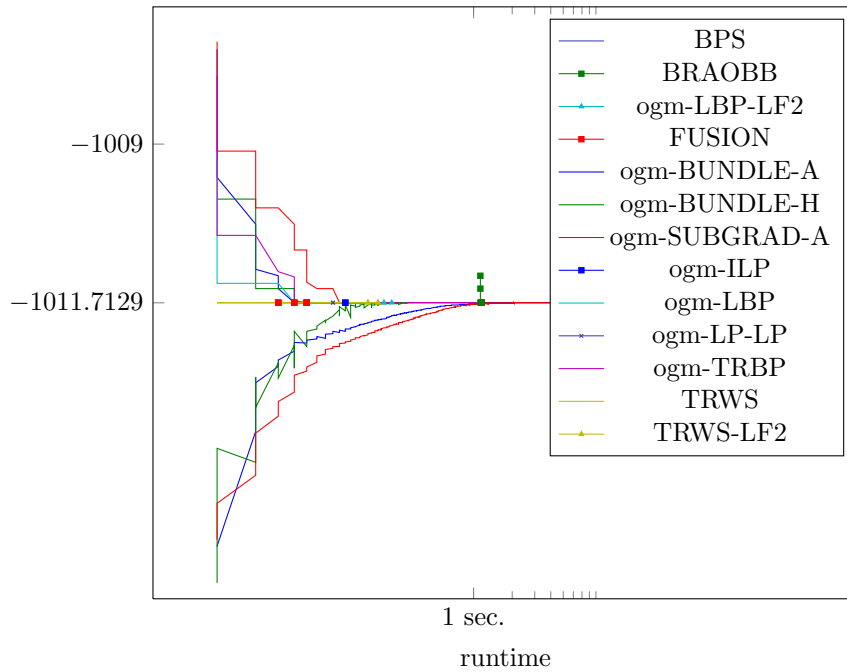


Figure 283: Runtime results for the instance 1100008 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

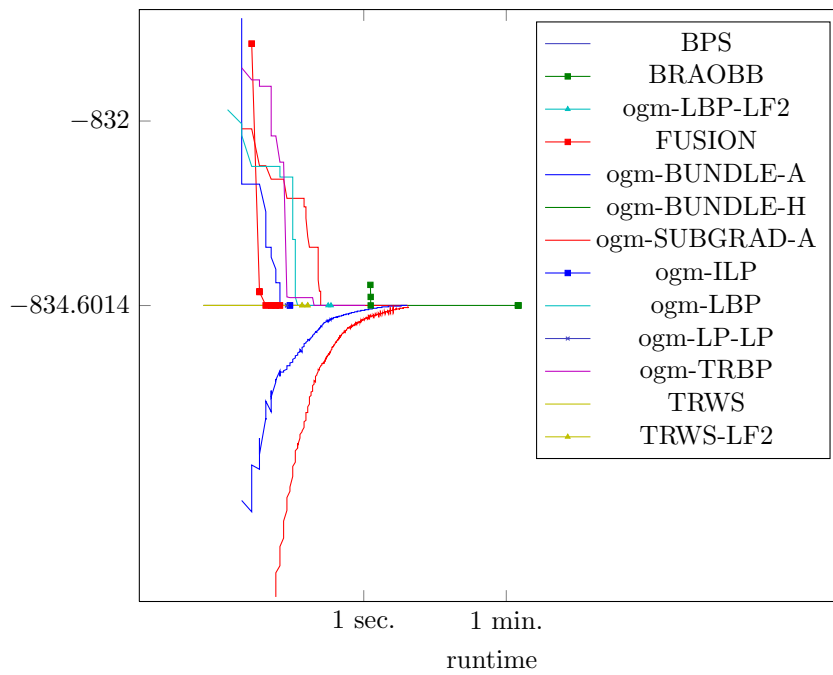


Figure 284: Runtime results for the instance 1100009 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

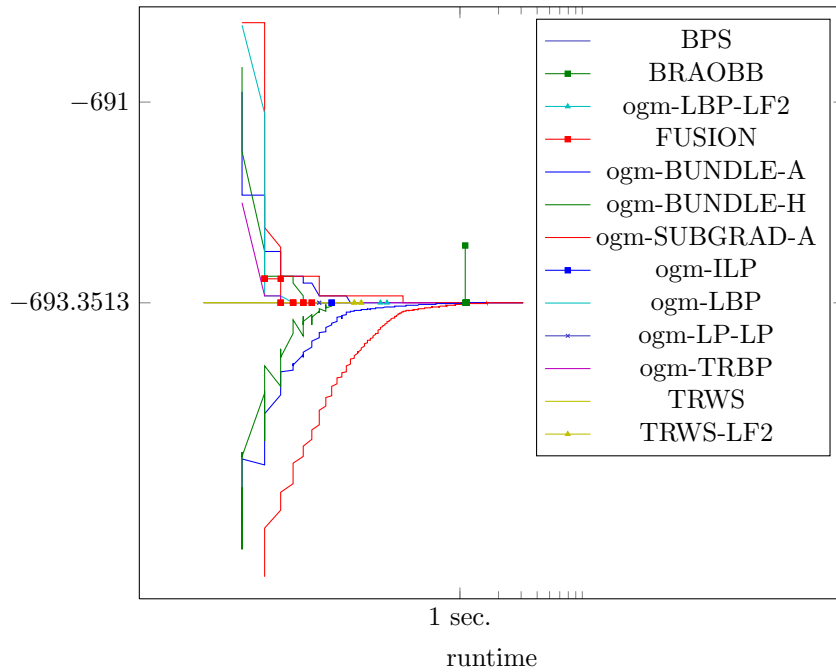


Figure 285: Runtime results for the instance 1100011 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

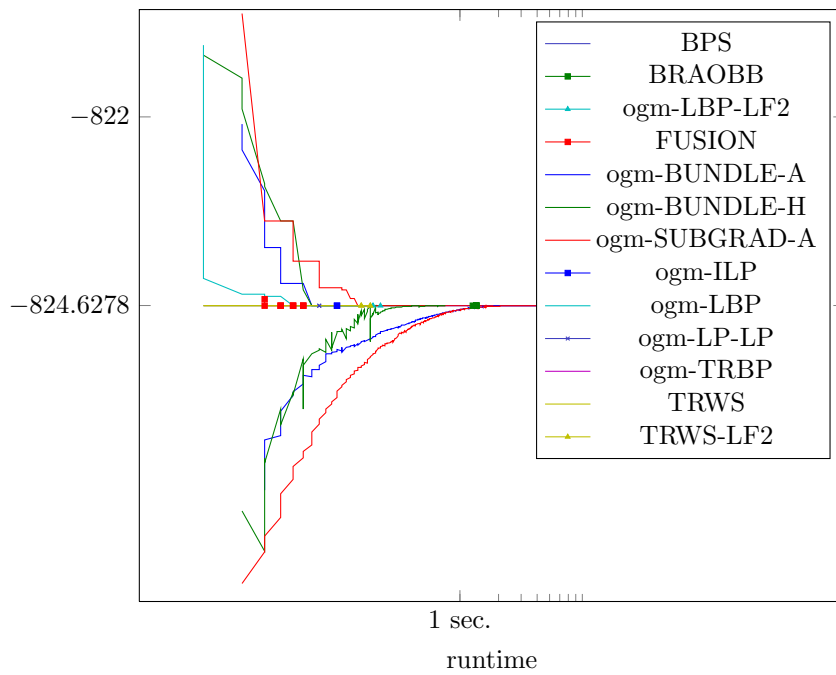


Figure 286: Runtime results for the instance 1100013 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

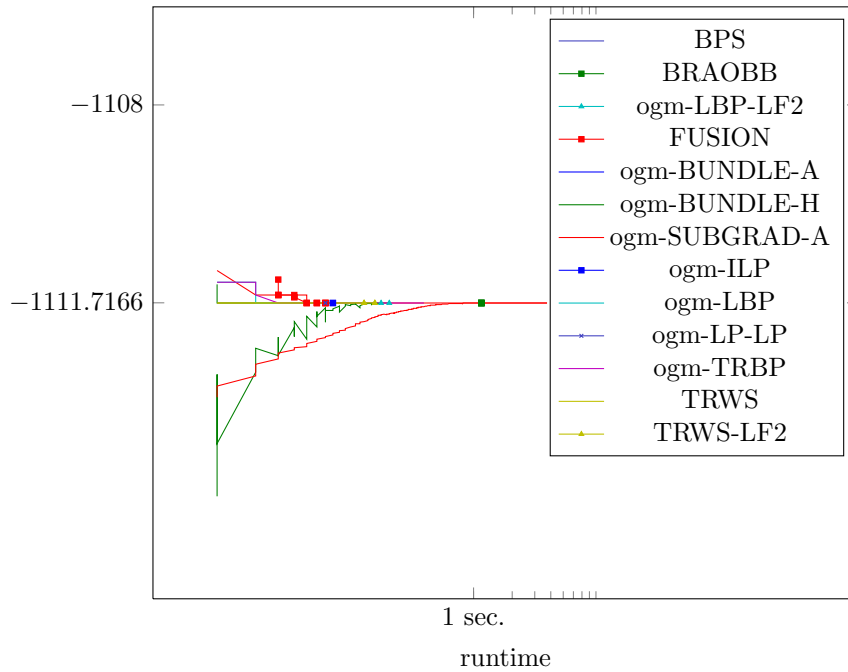


Figure 287: Runtime results for the instance 1100014 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

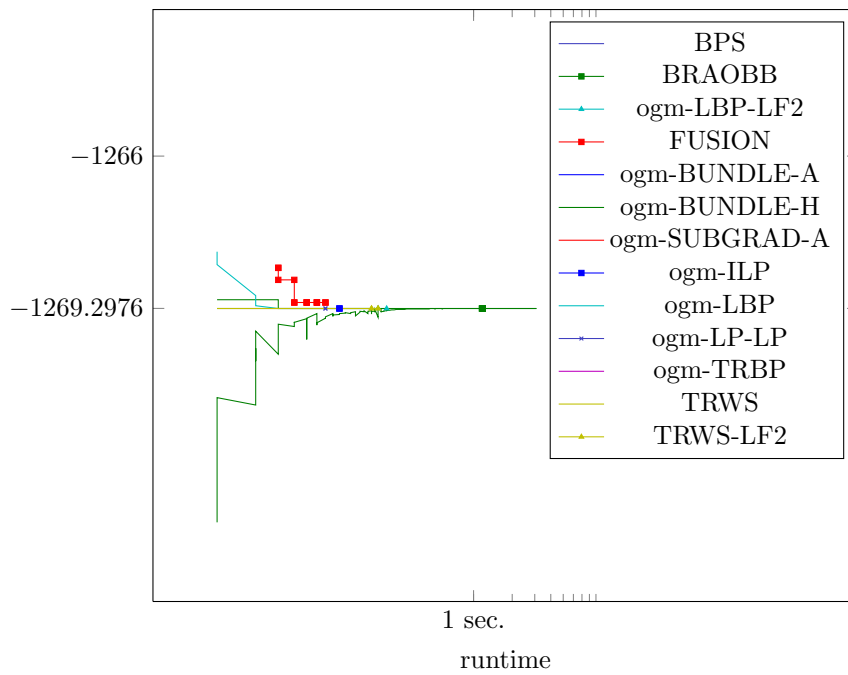


Figure 288: Runtime results for the instance 1100015 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

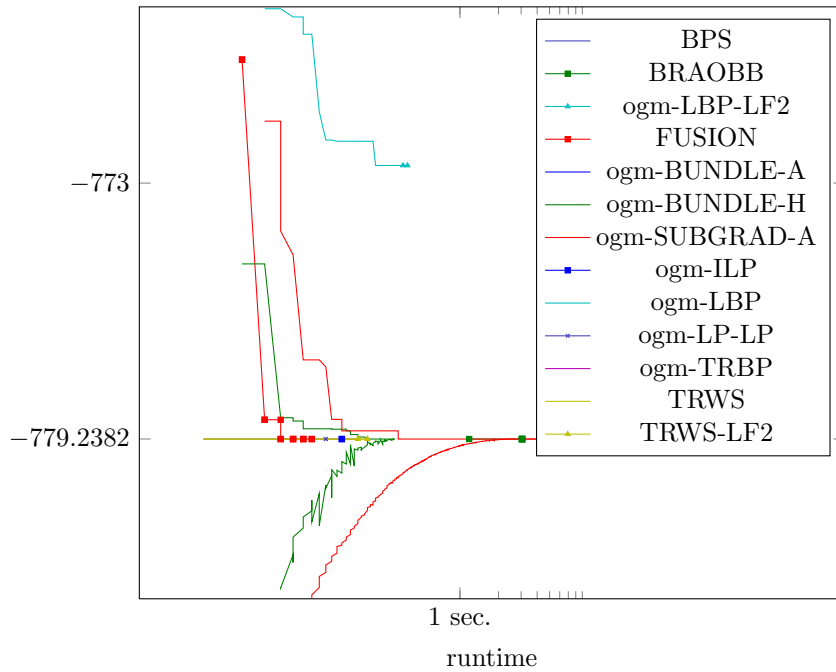


Figure 289: Runtime results for the instance 1100016 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

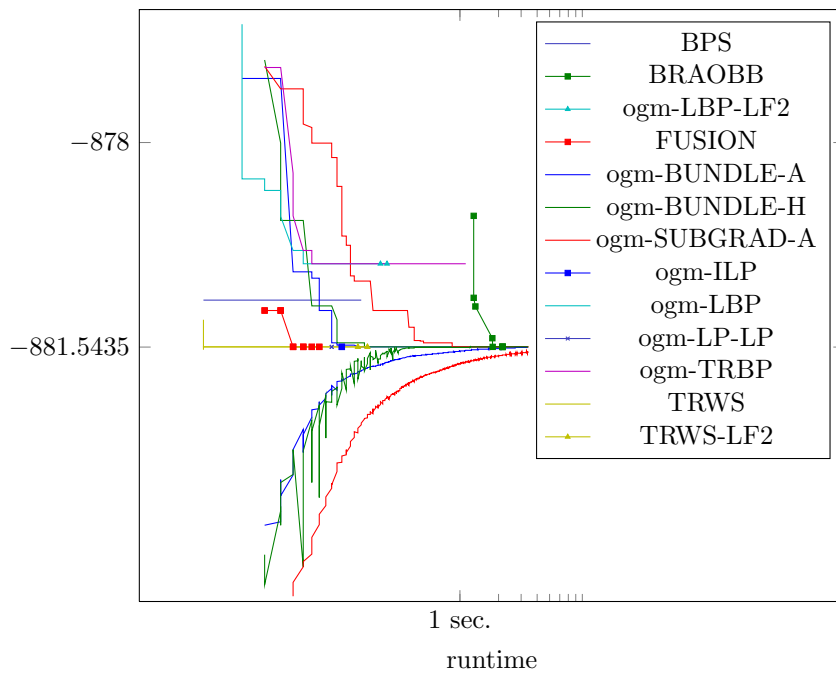


Figure 290: Runtime results for the instance 1100017 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

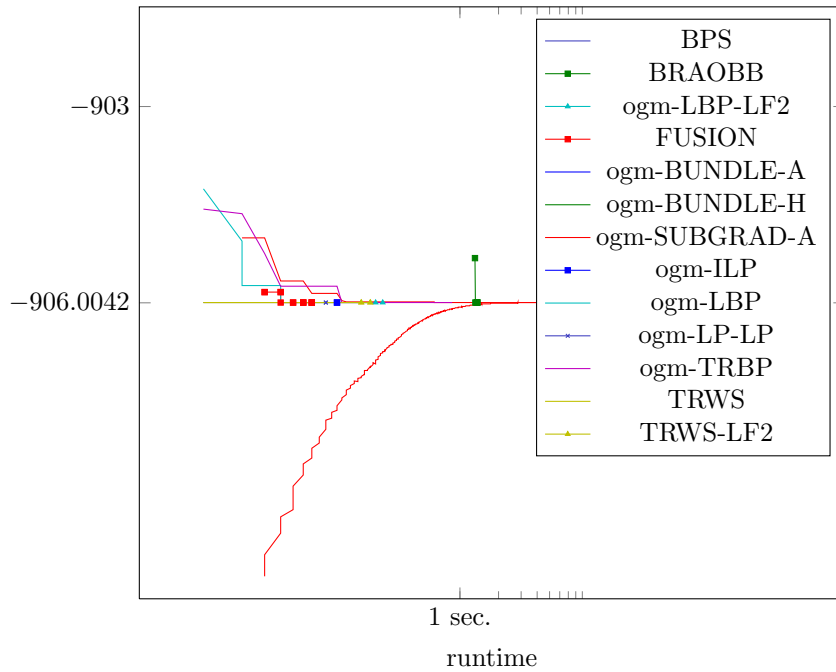


Figure 291: Runtime results for the instance *1100023* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

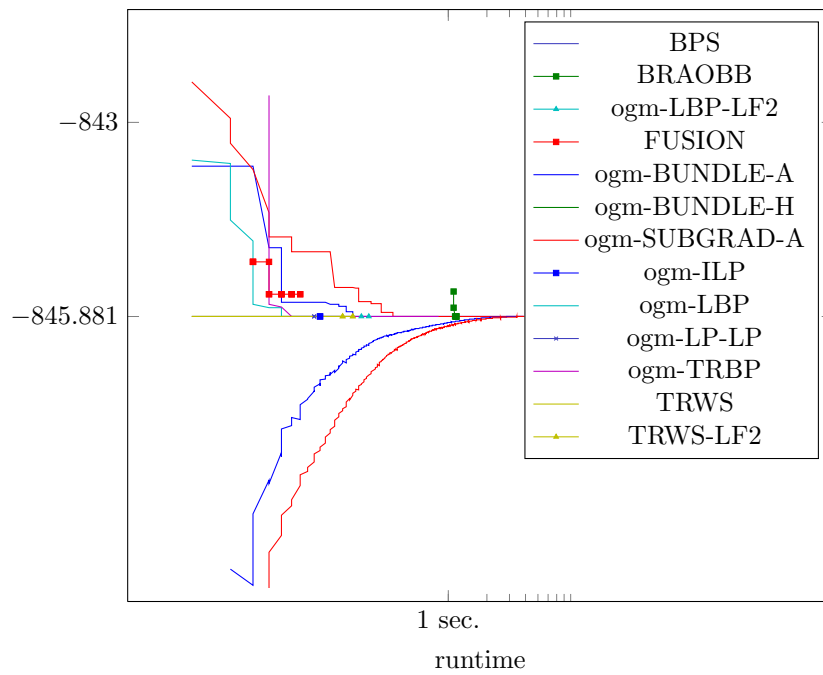


Figure 292: Runtime results for the instance *1100025* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

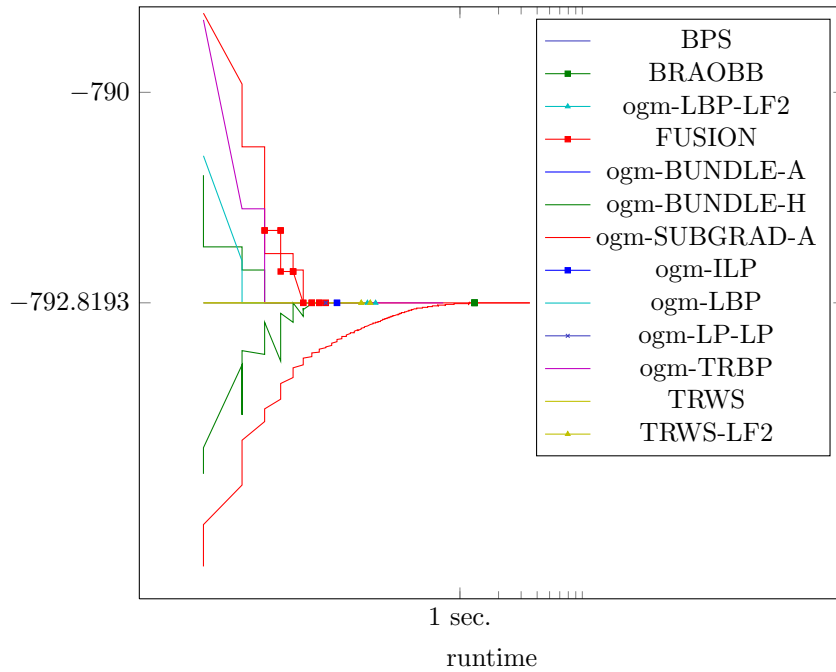


Figure 293: Runtime results for the instance 1100027 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

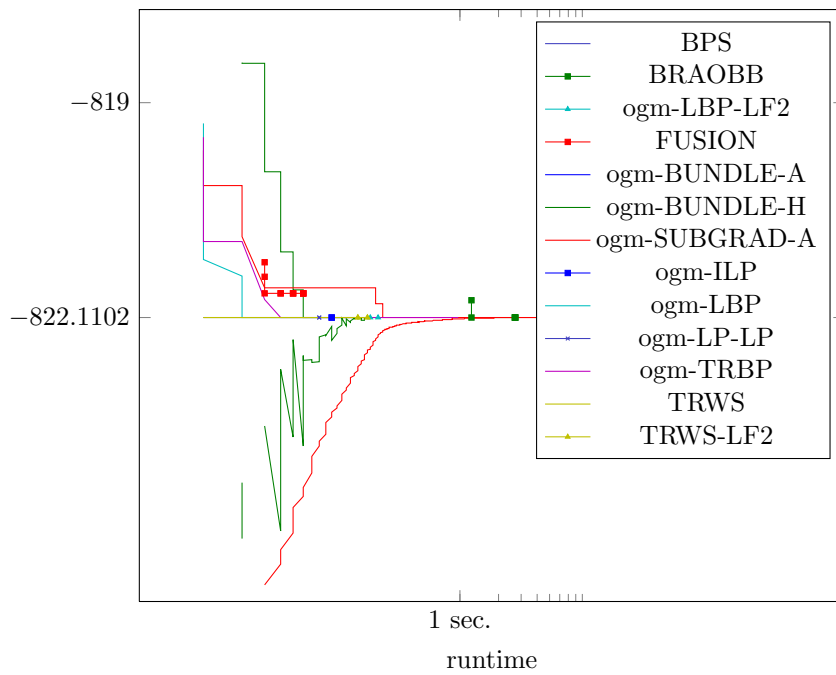


Figure 294: Runtime results for the instance 1100029 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

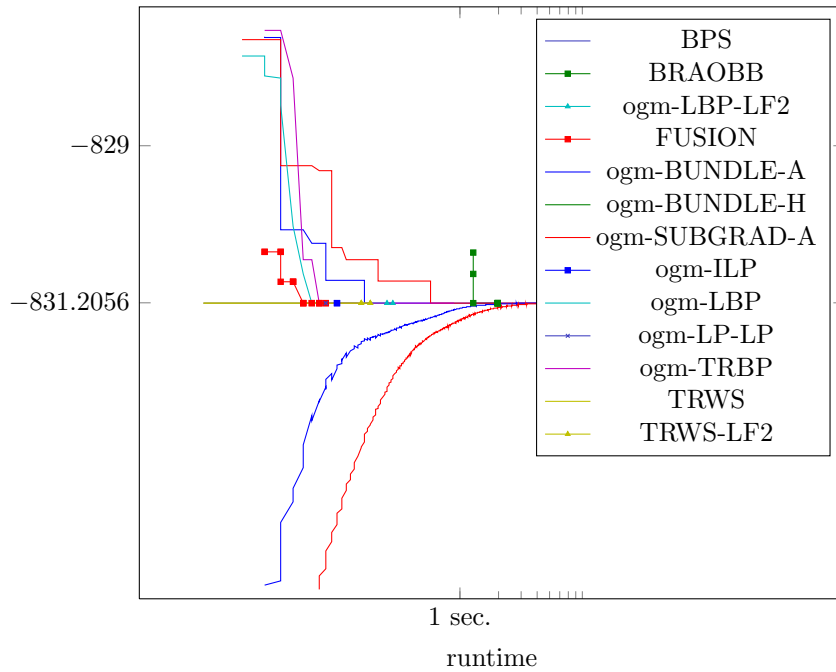


Figure 295: Runtime results for the instance *1100030* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

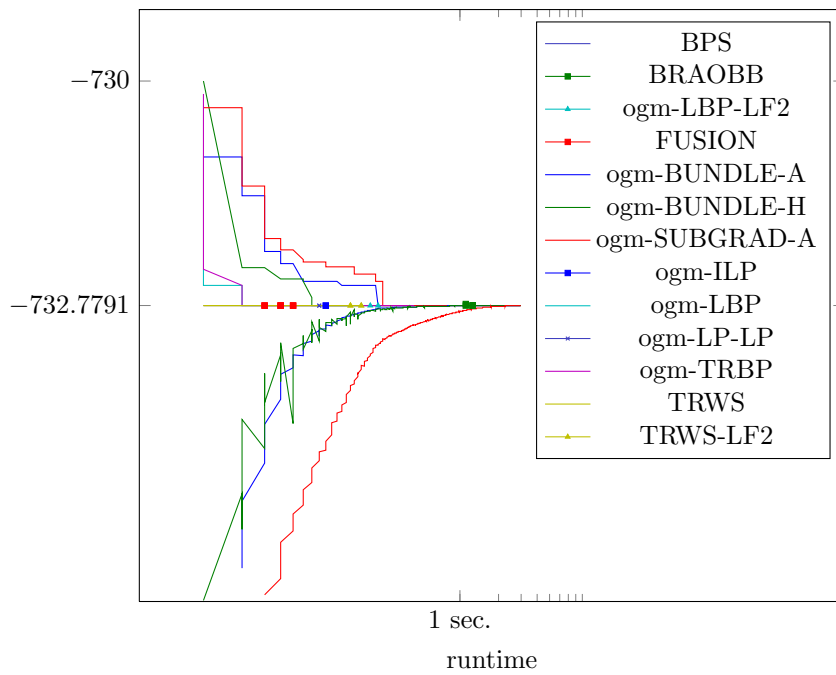


Figure 296: Runtime results for the instance *1100031* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

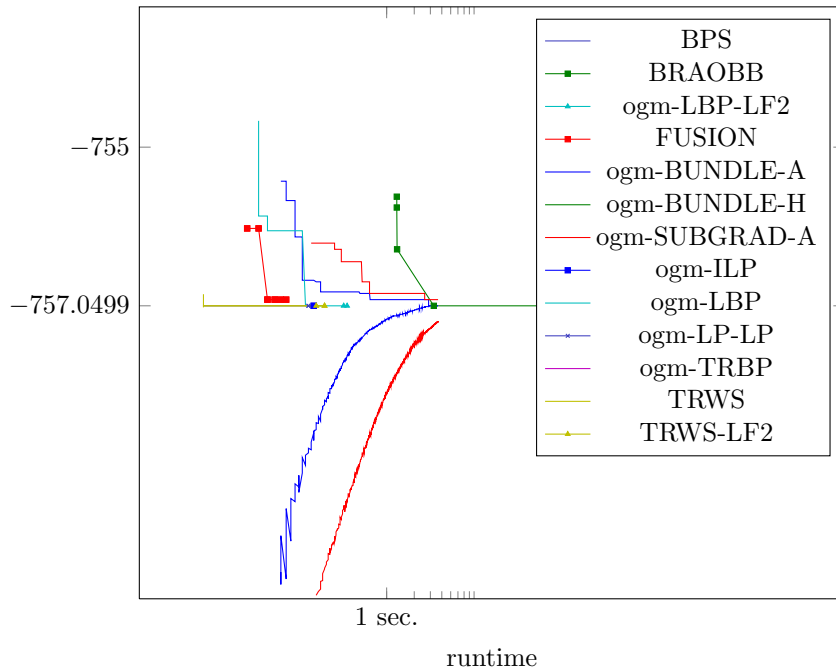


Figure 297: Runtime results for the instance 2000001 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

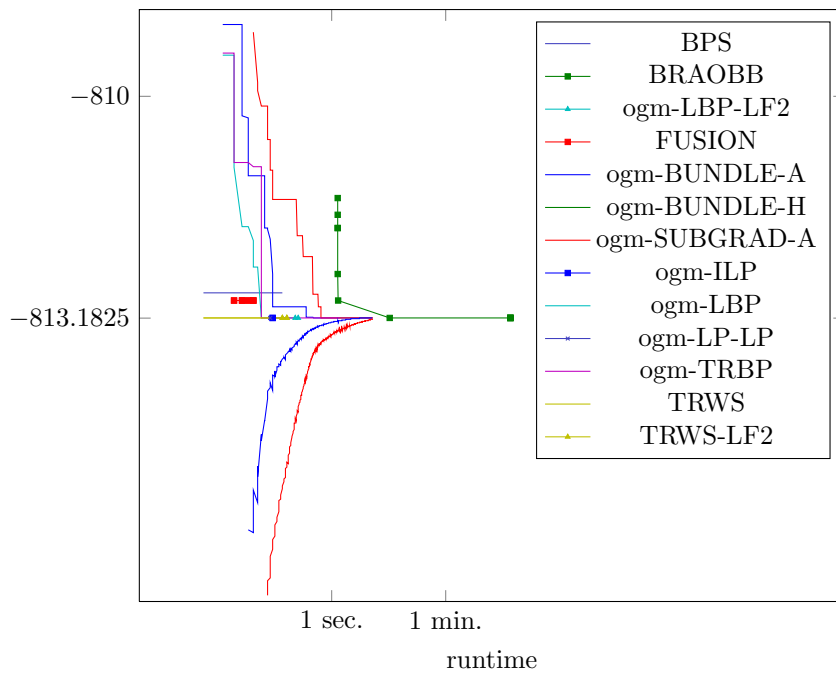


Figure 298: Runtime results for the instance 2000002 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

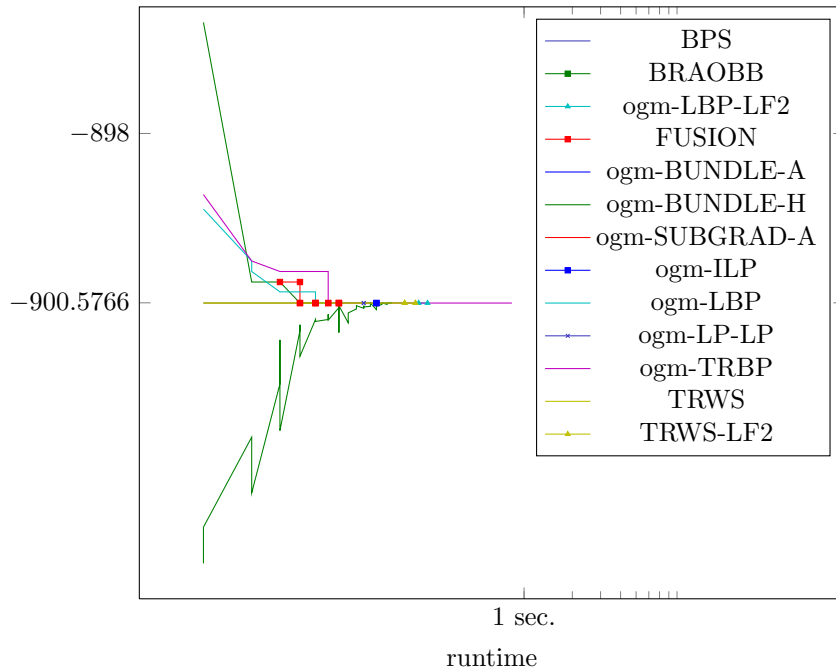


Figure 299: Runtime results for the instance 2000003 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

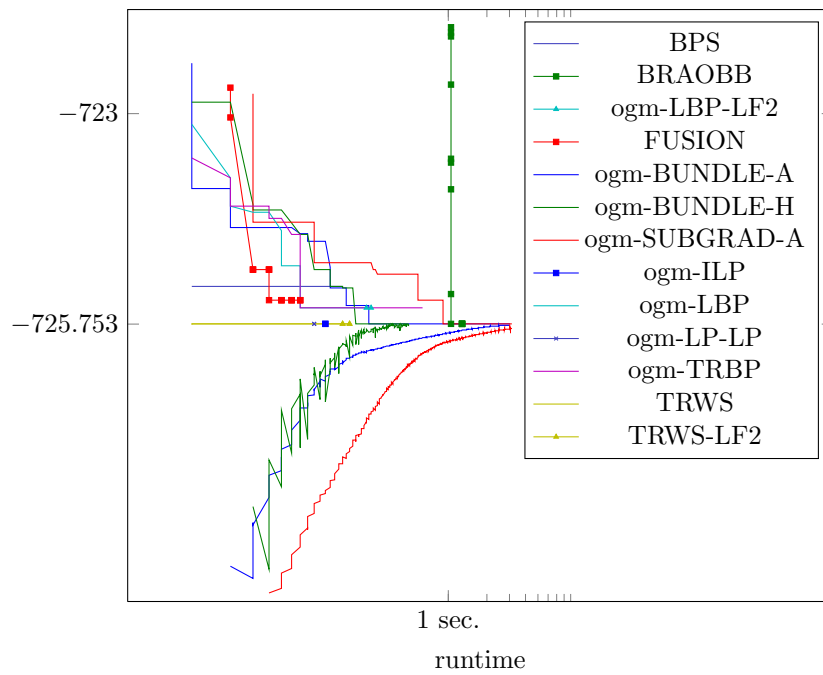


Figure 300: Runtime results for the instance 2000004 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

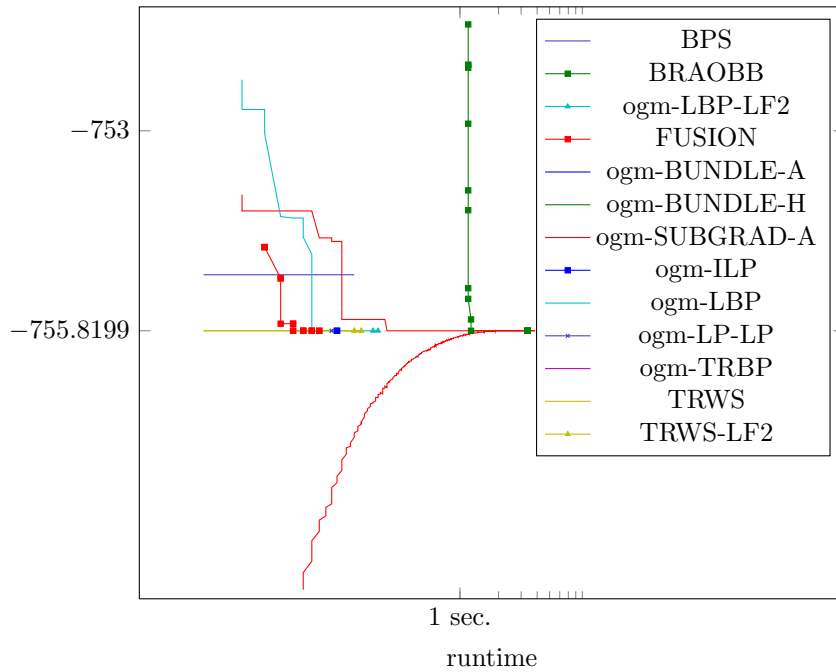


Figure 301: Runtime results for the instance 2000008 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

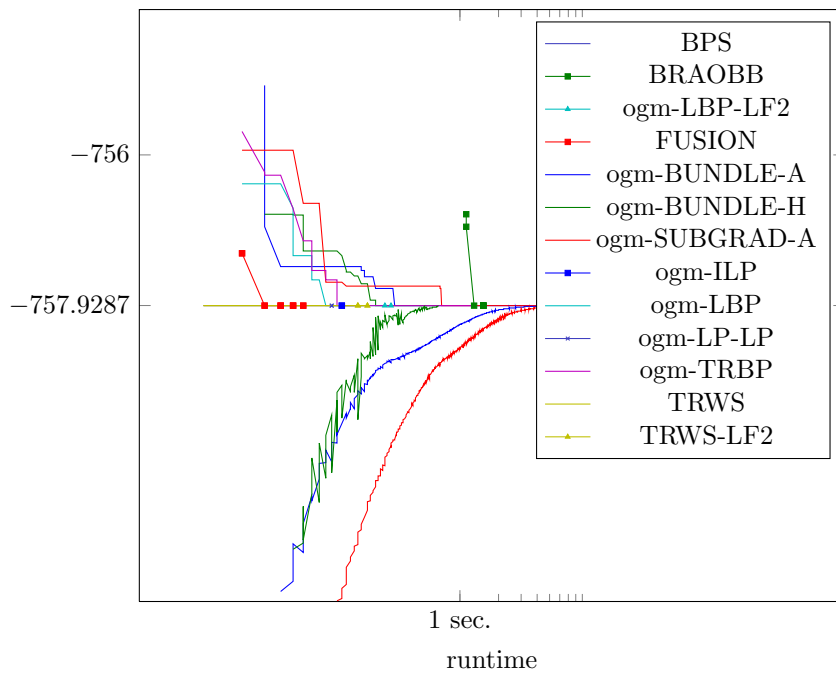


Figure 302: Runtime results for the instance 2000012 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

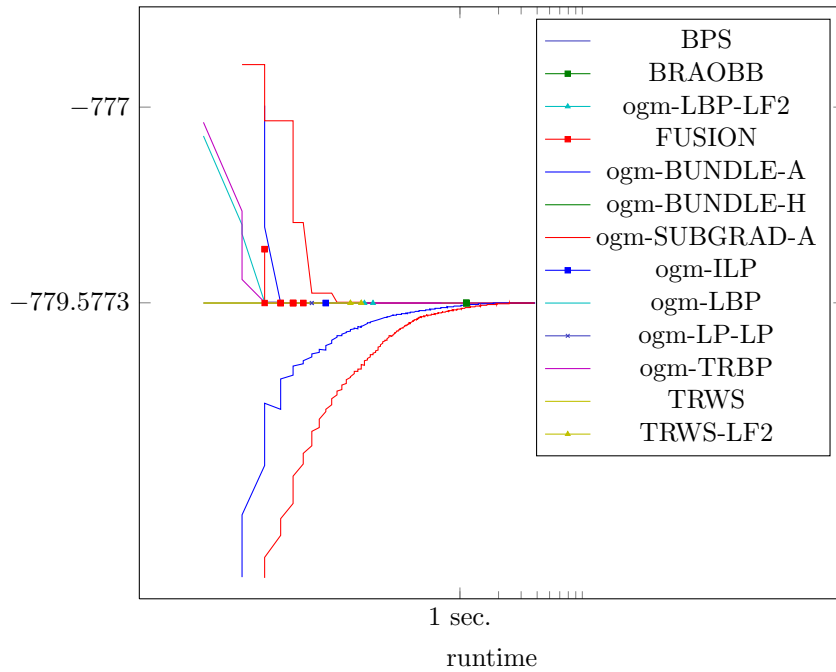


Figure 303: Runtime results for the instance 2000019 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

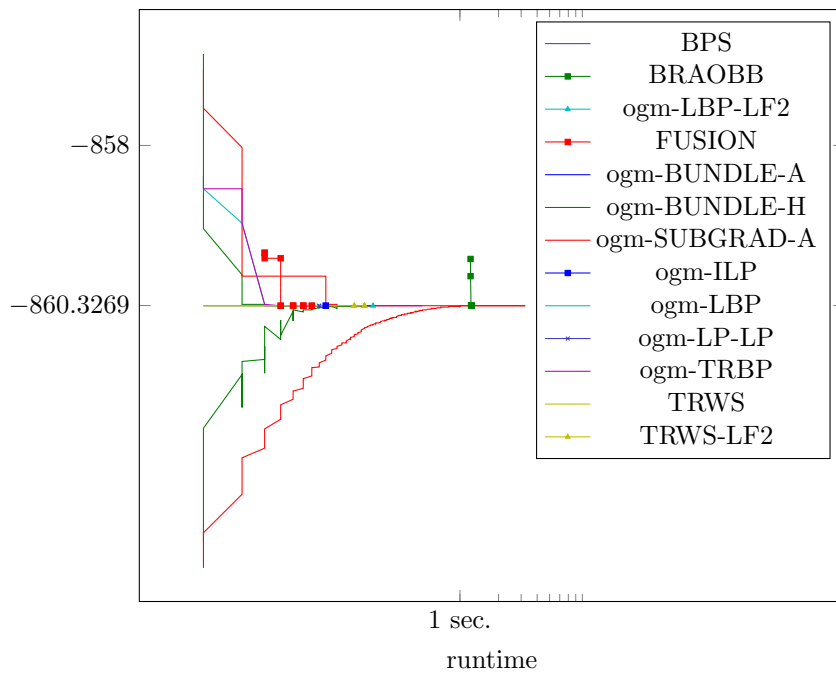


Figure 304: Runtime results for the instance 2000022 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

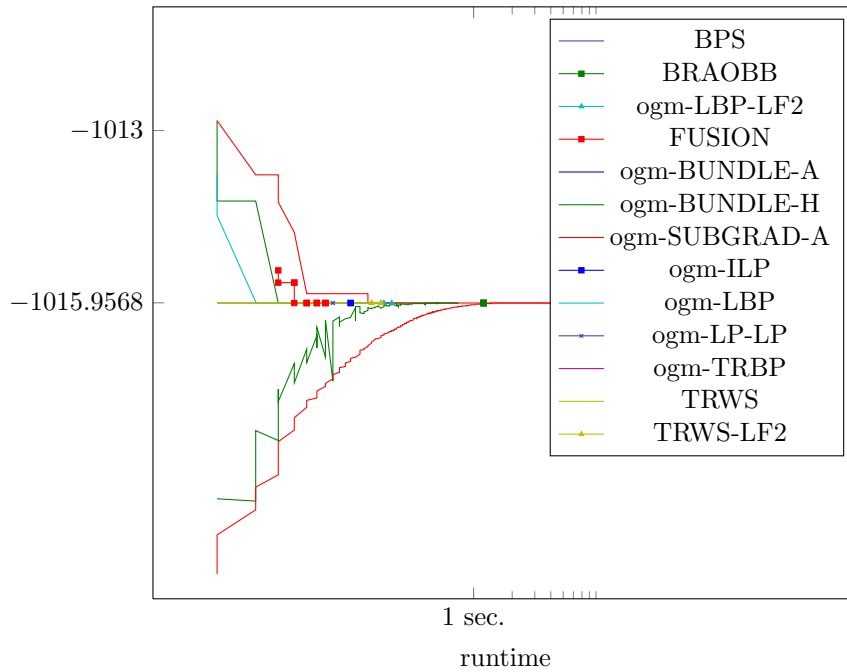


Figure 305: Runtime results for the instance 2000023 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

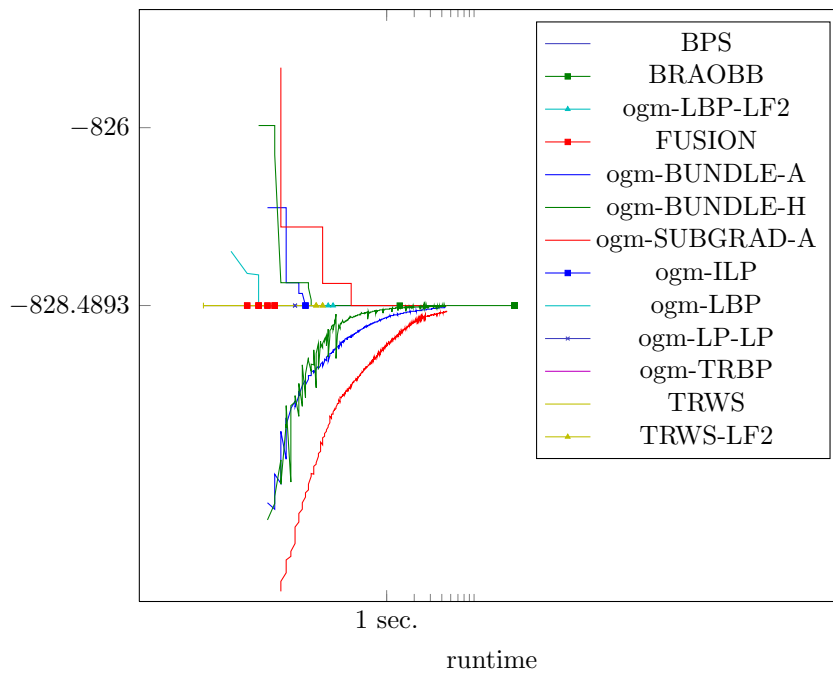


Figure 306: Runtime results for the instance 2000025 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

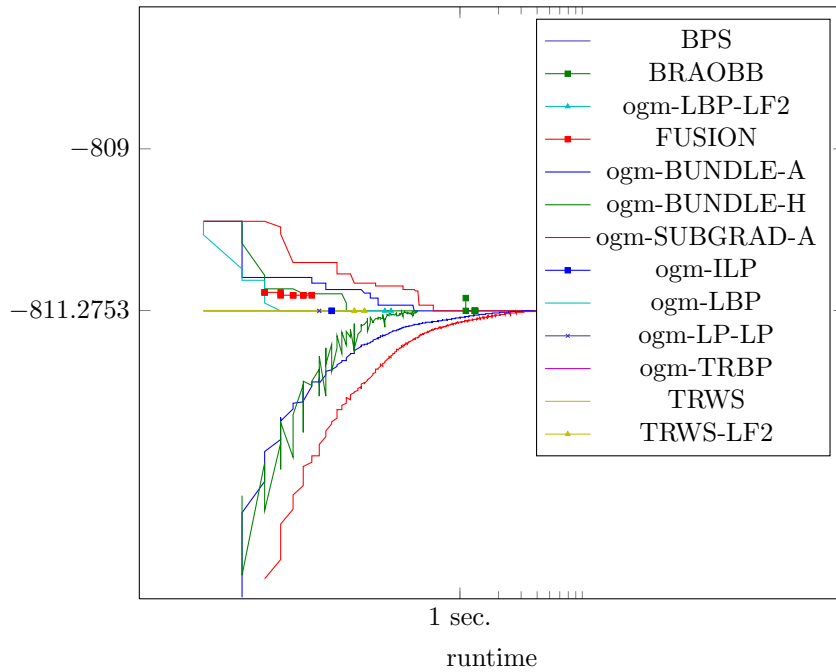


Figure 307: Runtime results for the instance 2000028 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

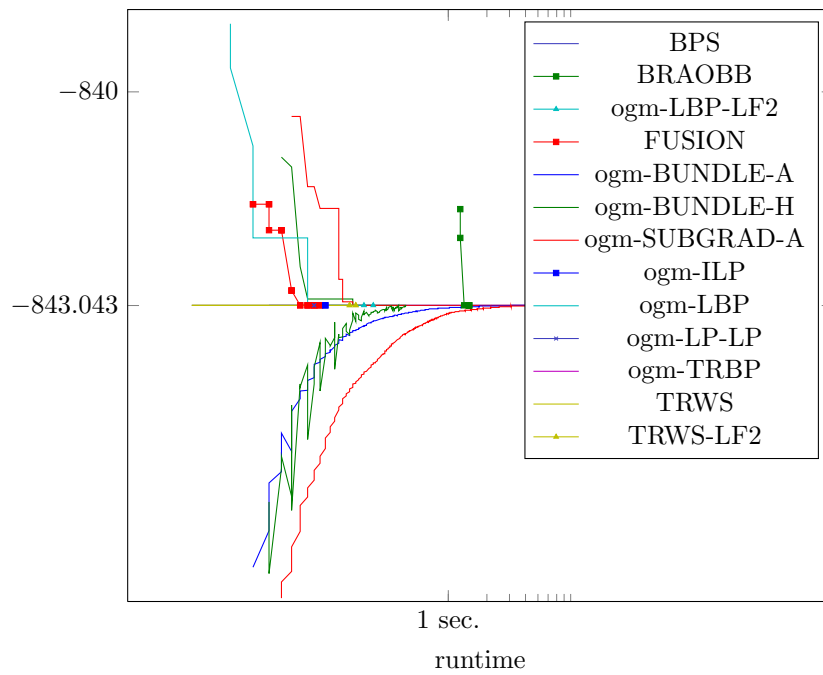


Figure 308: Runtime results for the instance 2000030 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

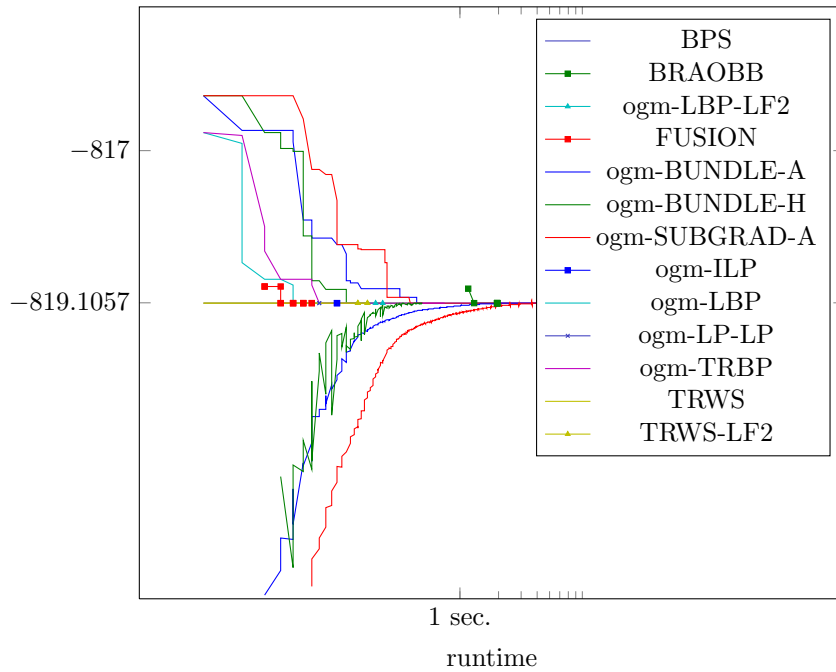


Figure 309: Runtime results for the instance 2000031 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

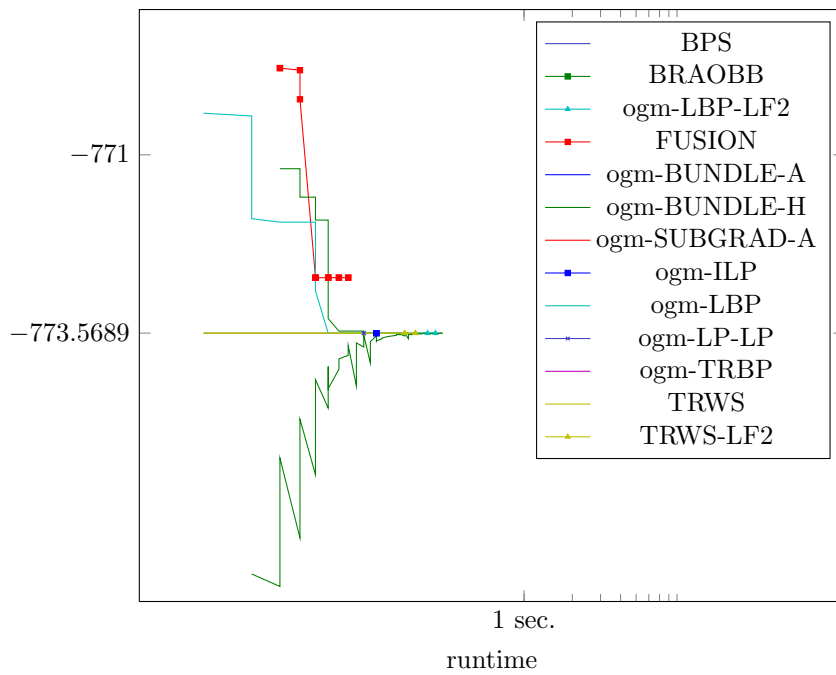


Figure 310: Runtime results for the instance 2000032 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

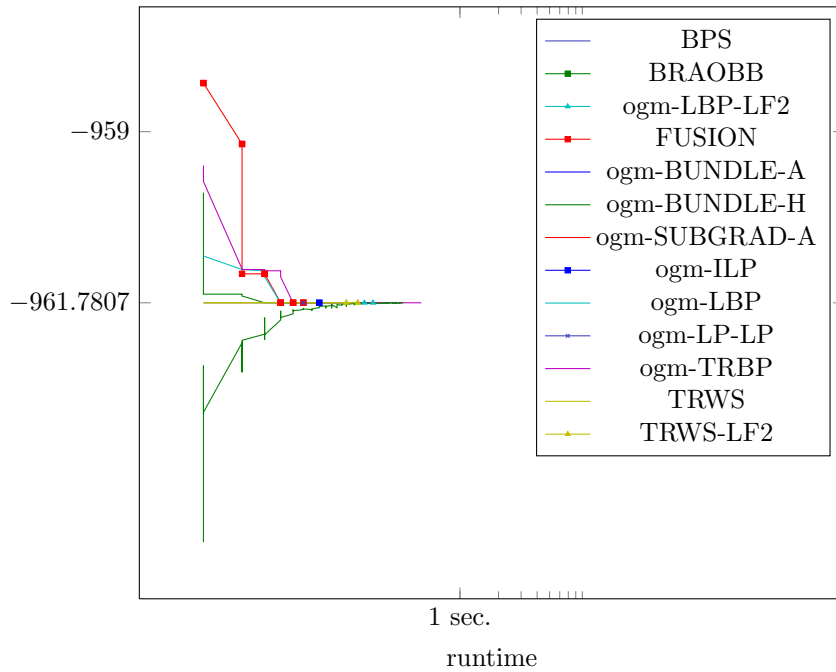


Figure 311: Runtime results for the instance 2000033 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

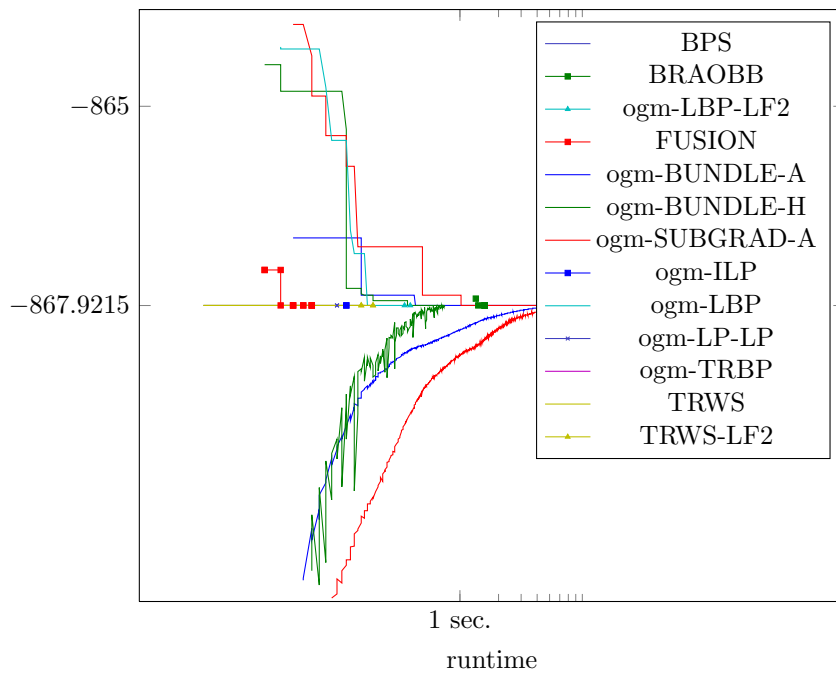


Figure 312: Runtime results for the instance 2000034 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

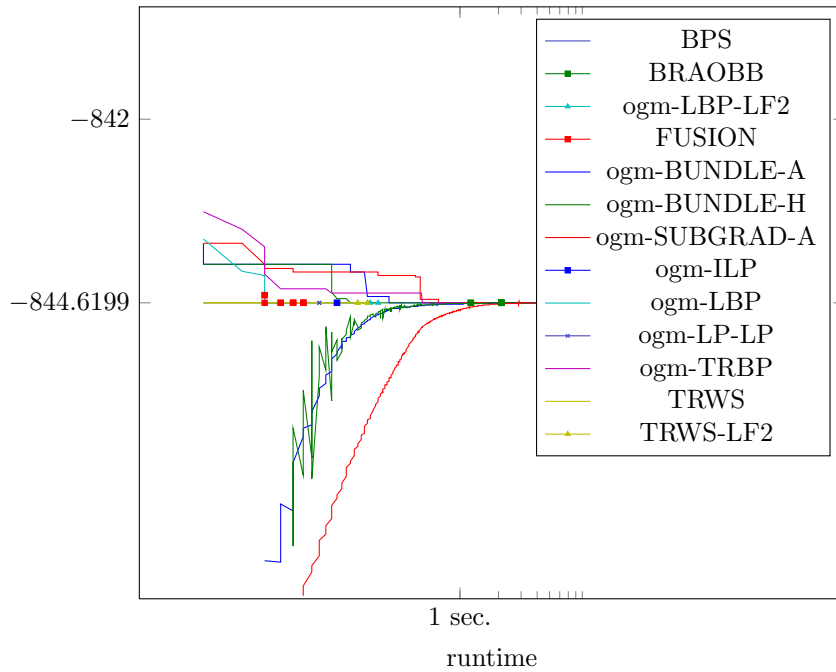


Figure 313: Runtime results for the instance 2000035 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

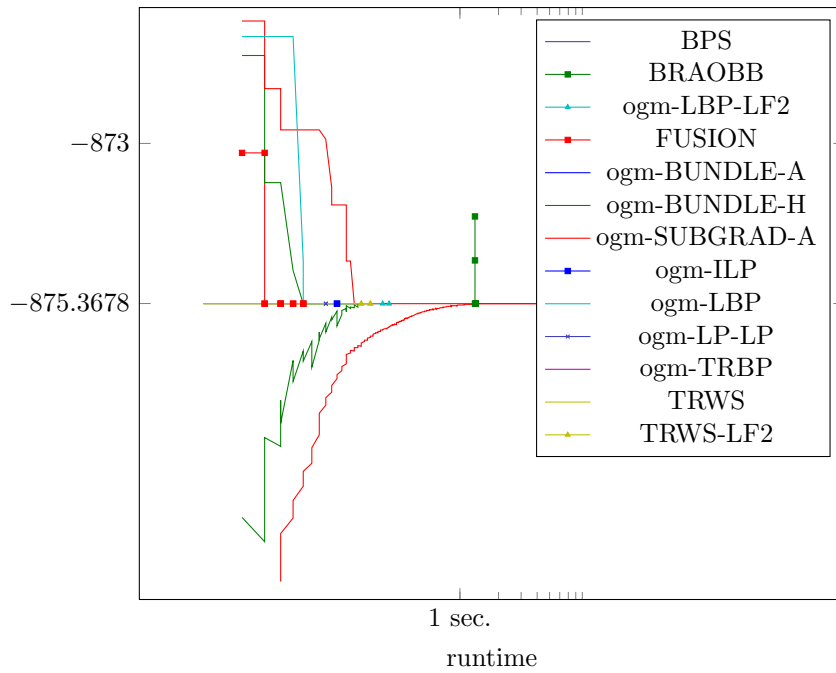


Figure 314: Runtime results for the instance 2000036 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

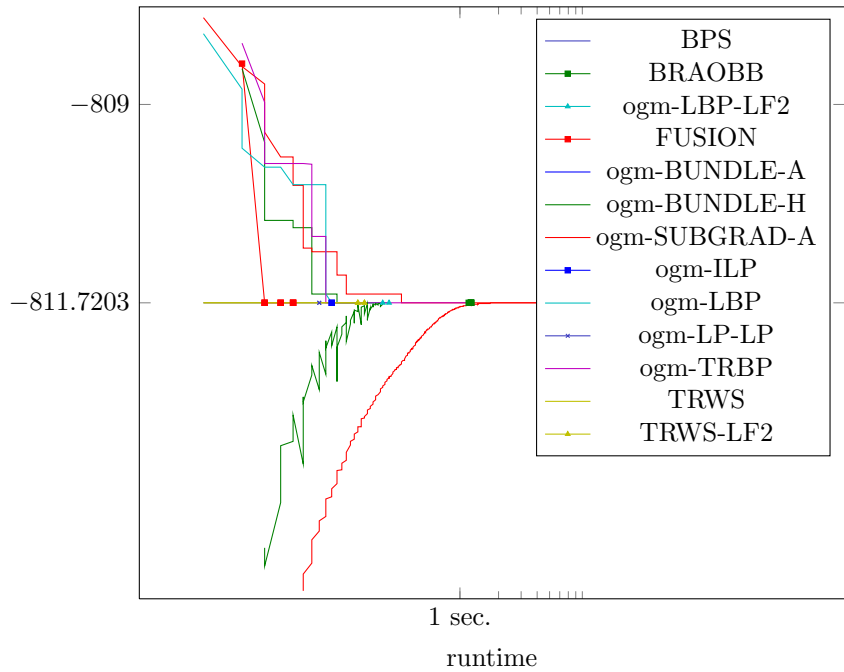


Figure 315: Runtime results for the instance 2000037 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

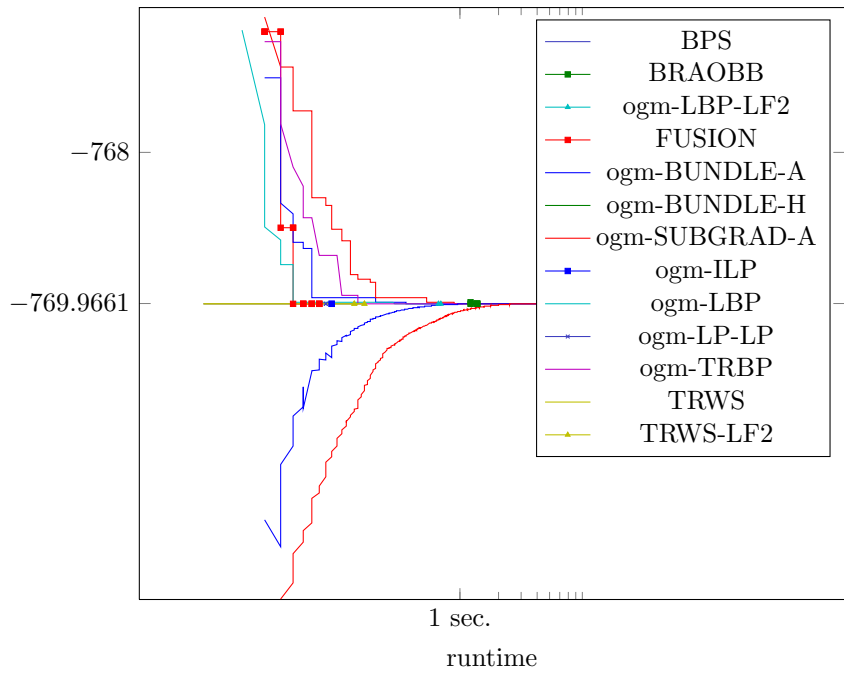


Figure 316: Runtime results for the instance 2000039 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

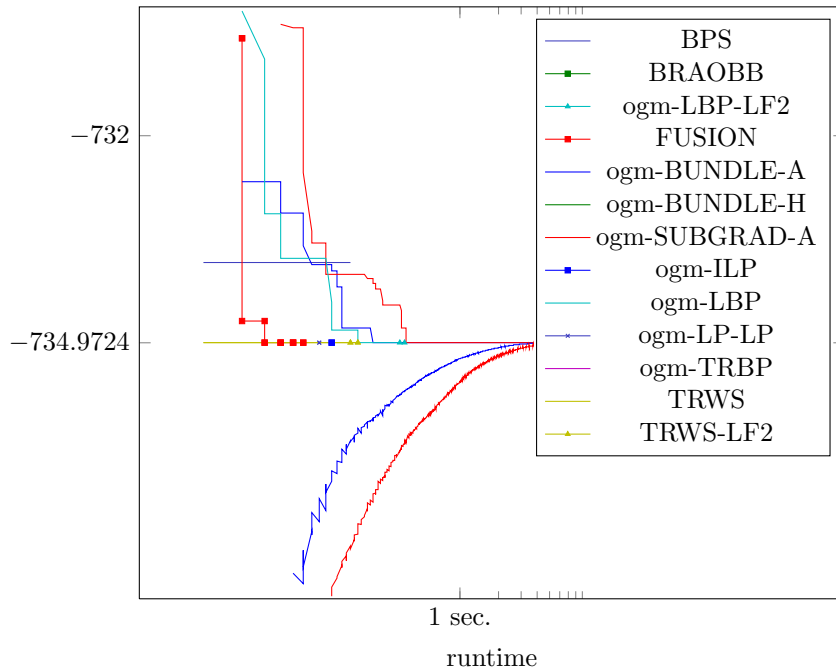


Figure 317: Runtime results for the instance 2000041 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

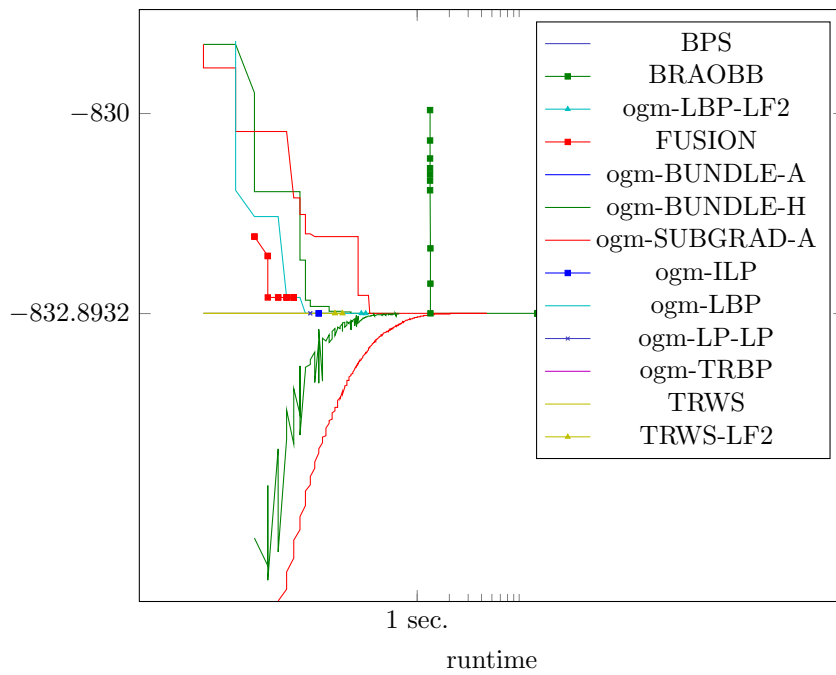


Figure 318: Runtime results for the instance 2000042 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

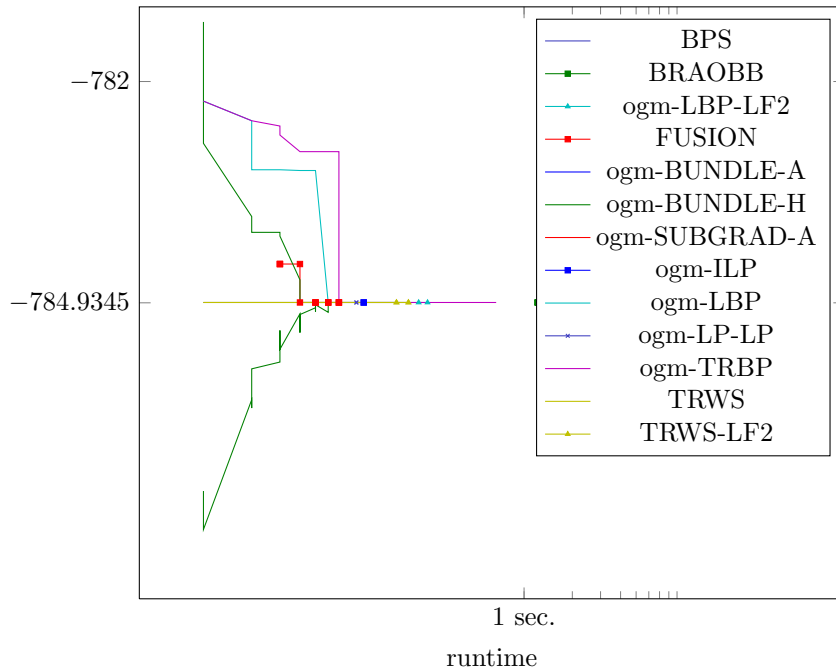


Figure 319: Runtime results for the instance 2000043 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

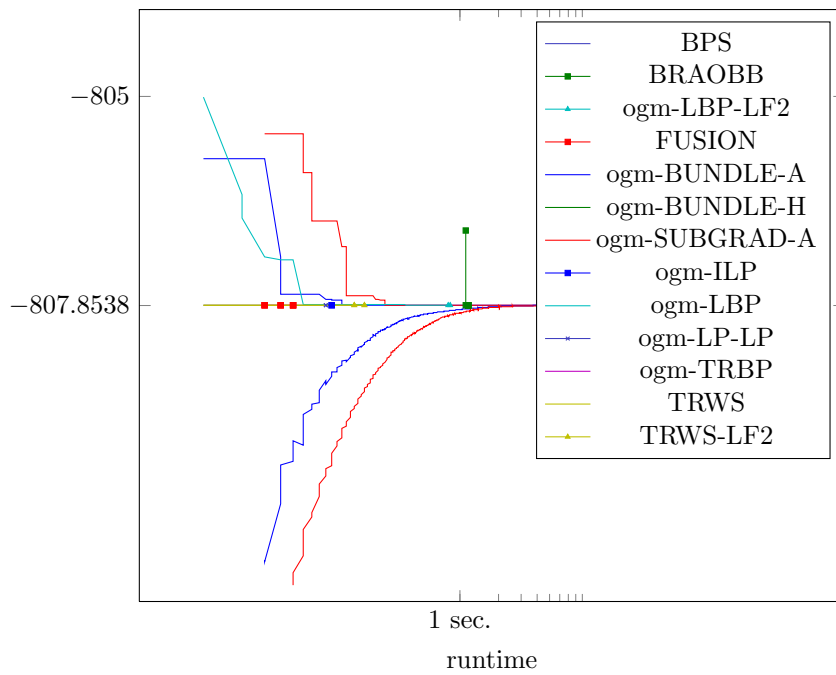


Figure 320: Runtime results for the instance 2000044 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

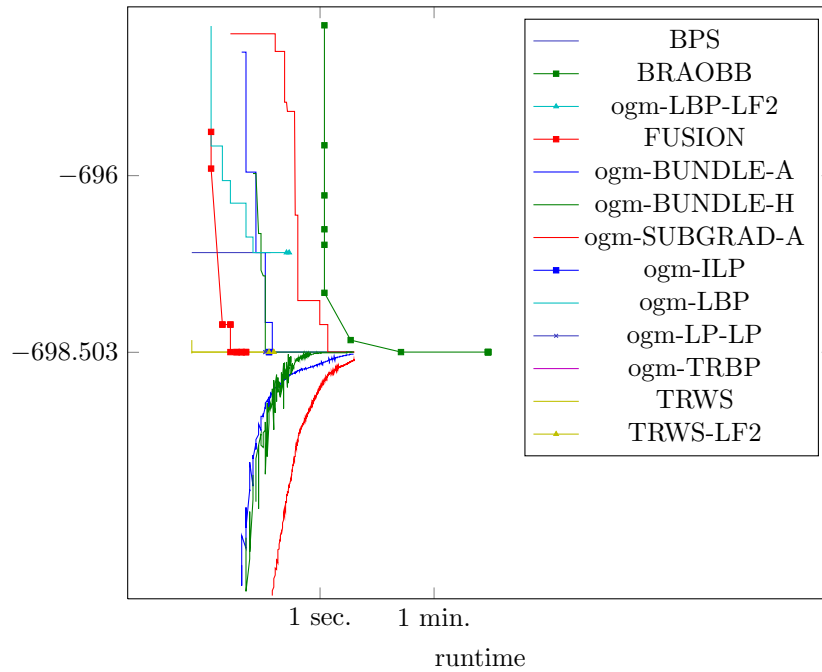


Figure 321: Runtime results for the instance 3000072 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

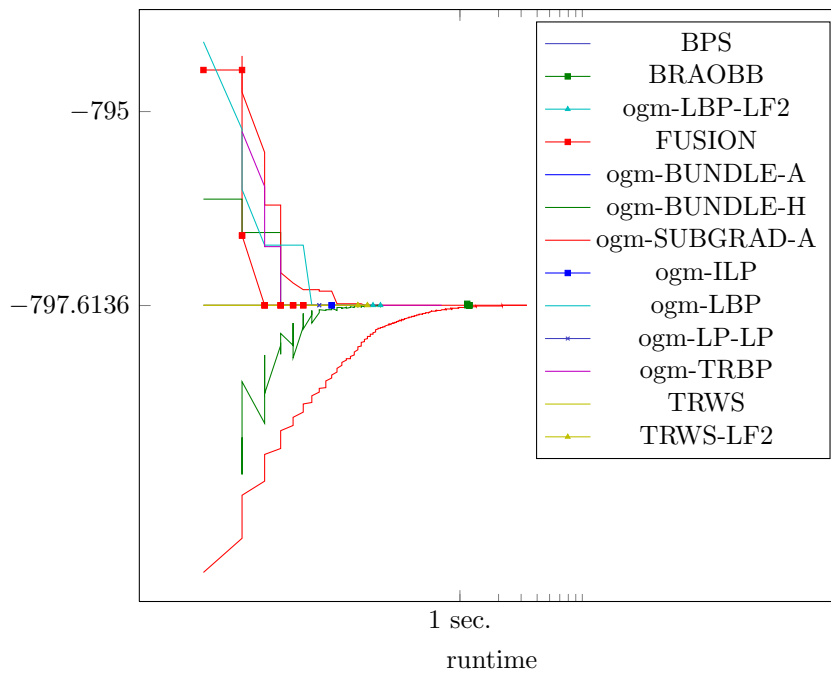


Figure 322: Runtime results for the instance 3000076 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

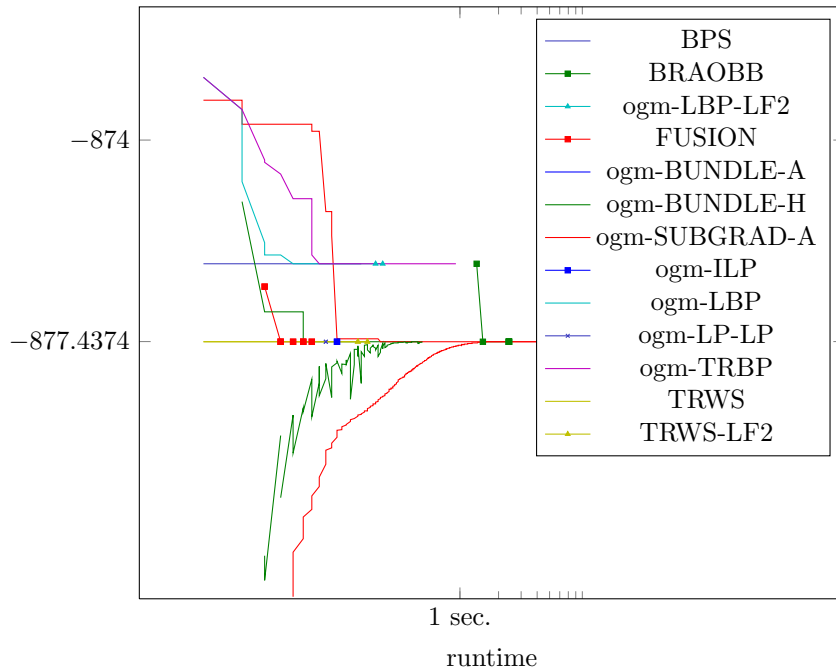


Figure 323: Runtime results for the instance 3000099 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

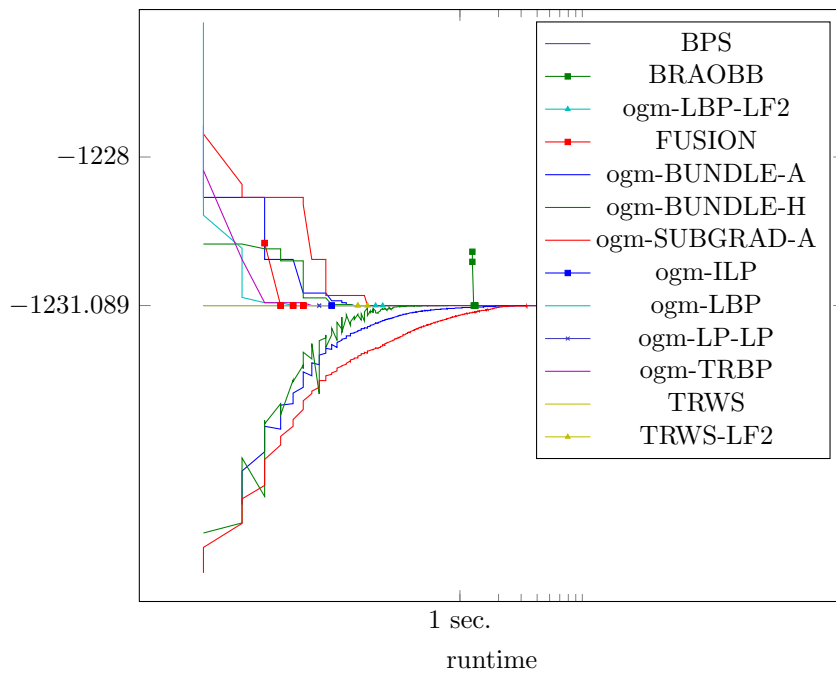


Figure 324: Runtime results for the instance 3000119 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

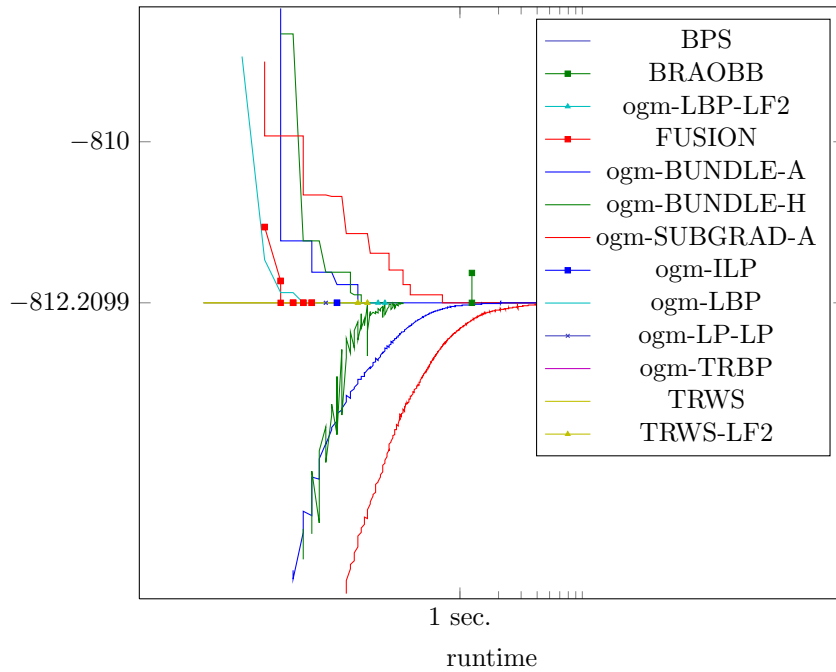


Figure 325: Runtime results for the instance 3000148 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

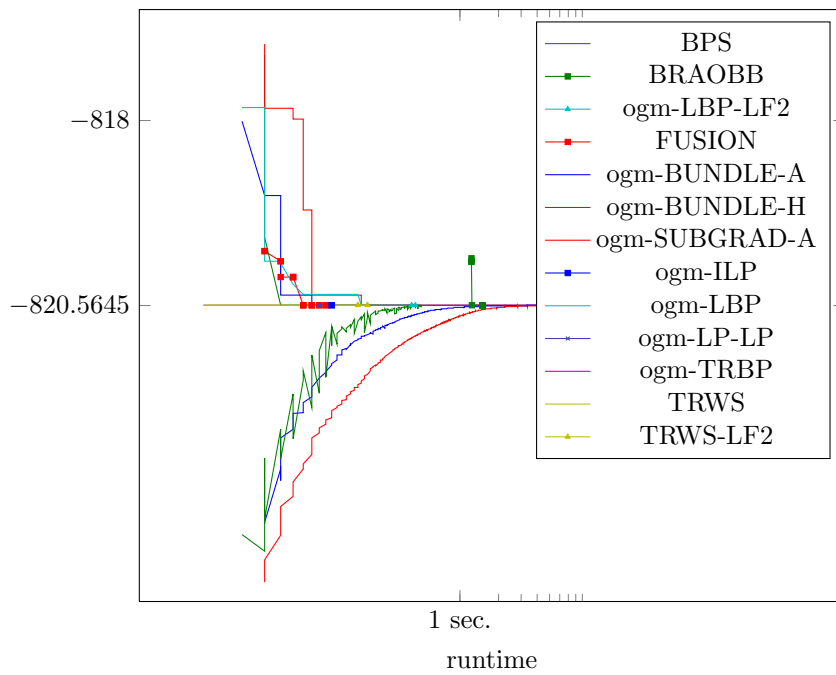


Figure 326: Runtime results for the instance 3000299 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

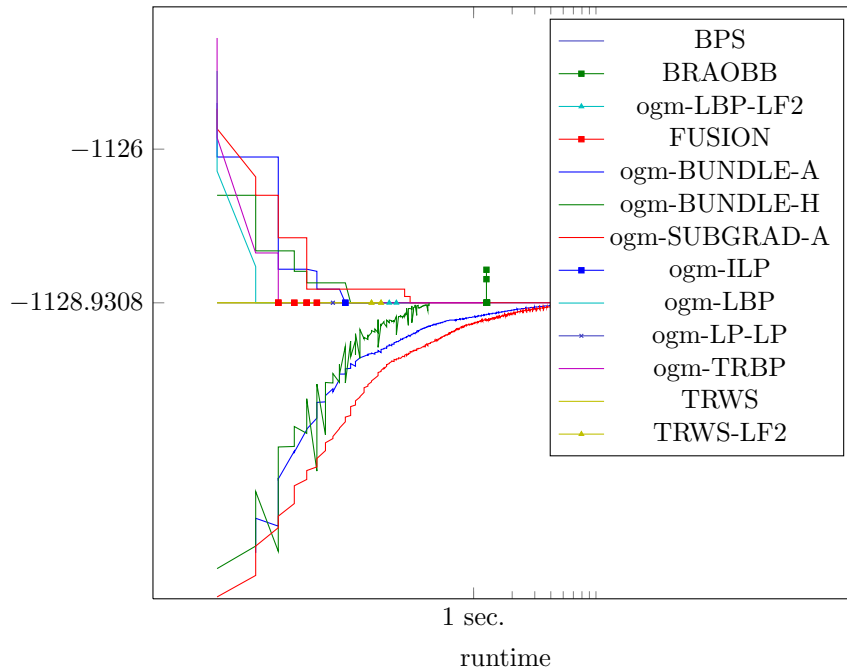


Figure 327: Runtime results for the instance 3000323 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

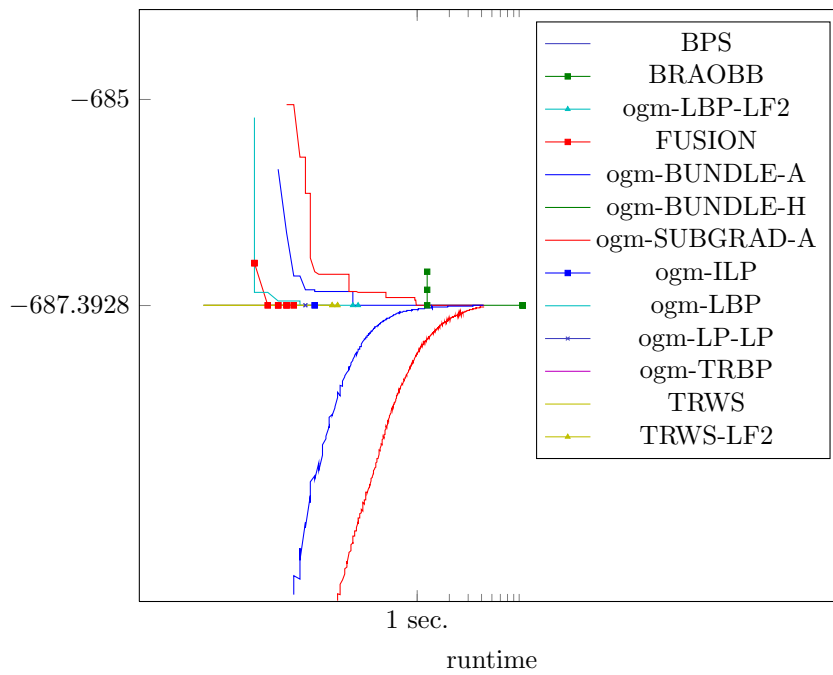


Figure 328: Runtime results for the instance 3000454 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

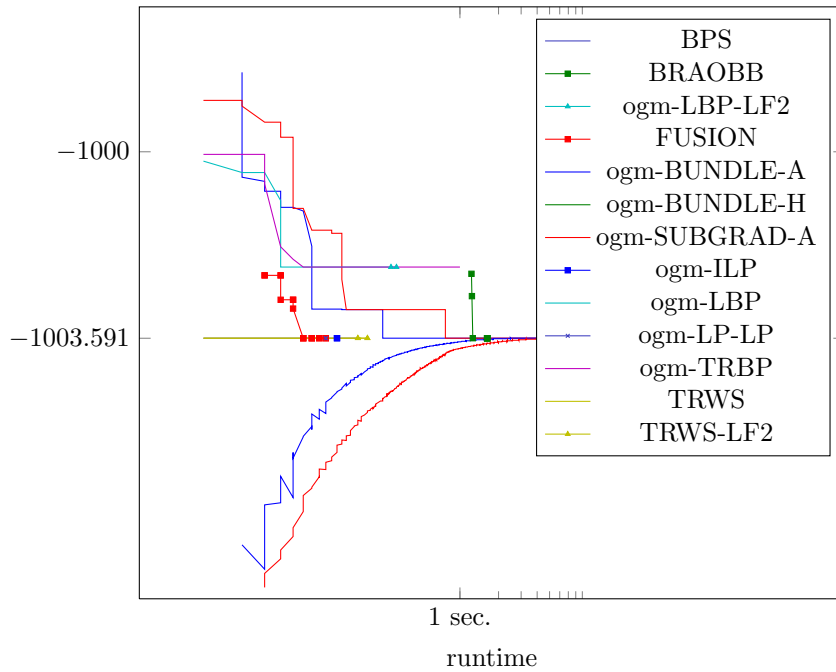


Figure 329: Runtime results for the instance 3000469 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

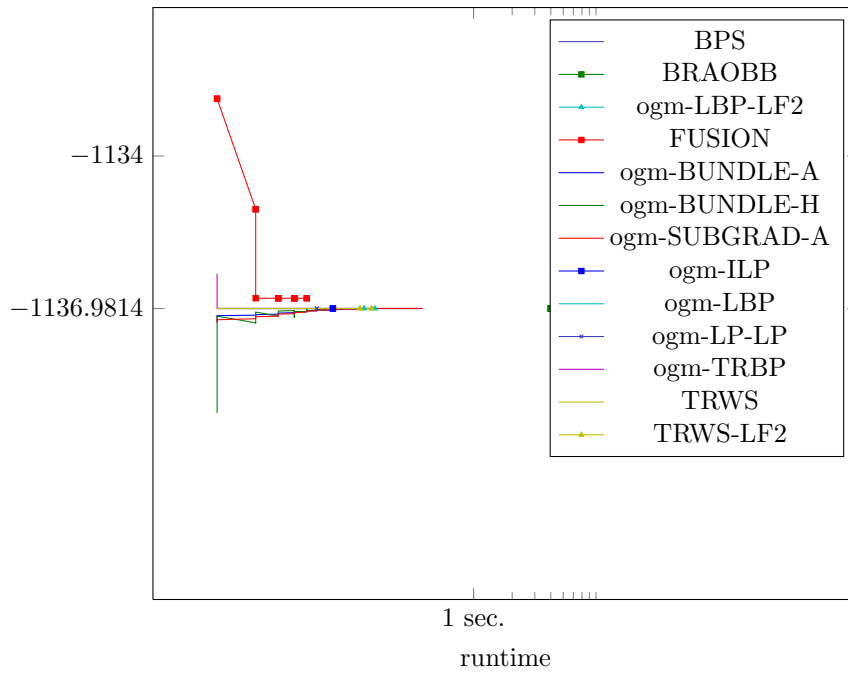


Figure 330: Runtime results for the instance 3000676 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

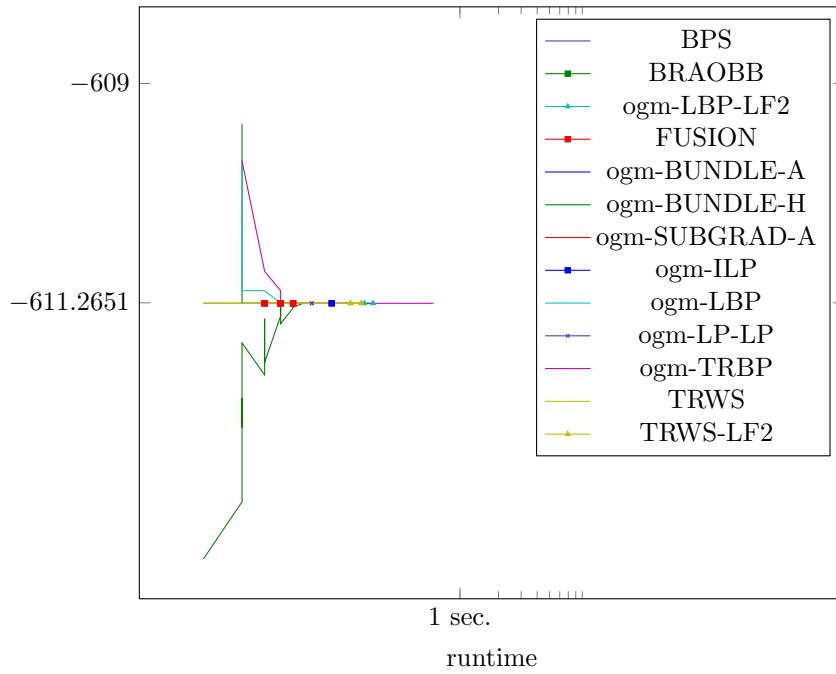


Figure 331: Runtime results for the instance 3000716 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

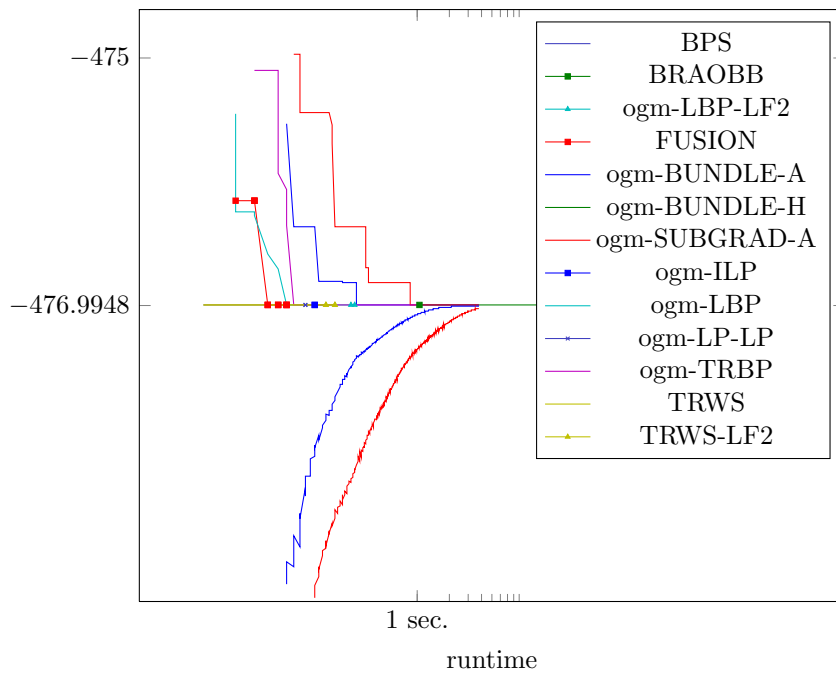


Figure 332: Runtime results for the instance 3000759 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

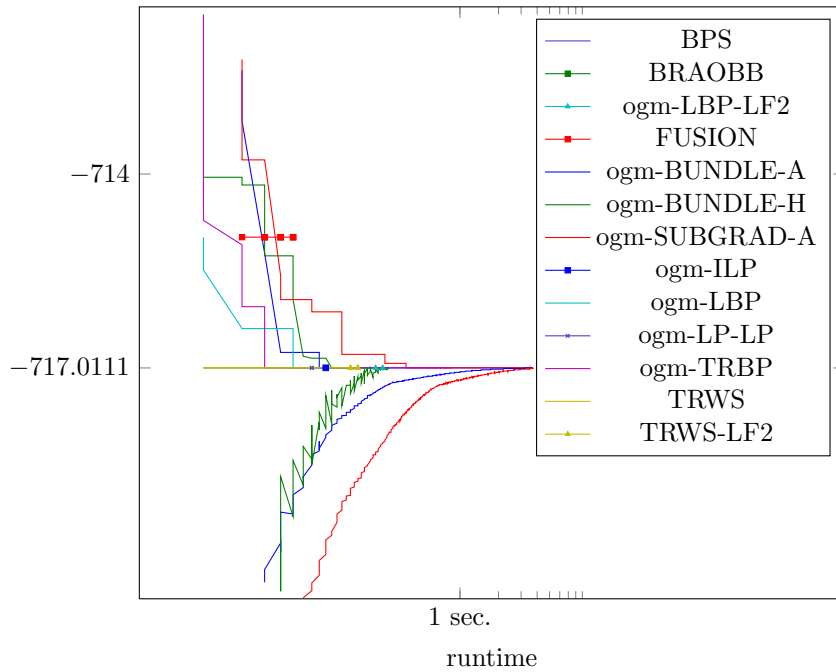


Figure 333: Runtime results for the instance 3000945 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

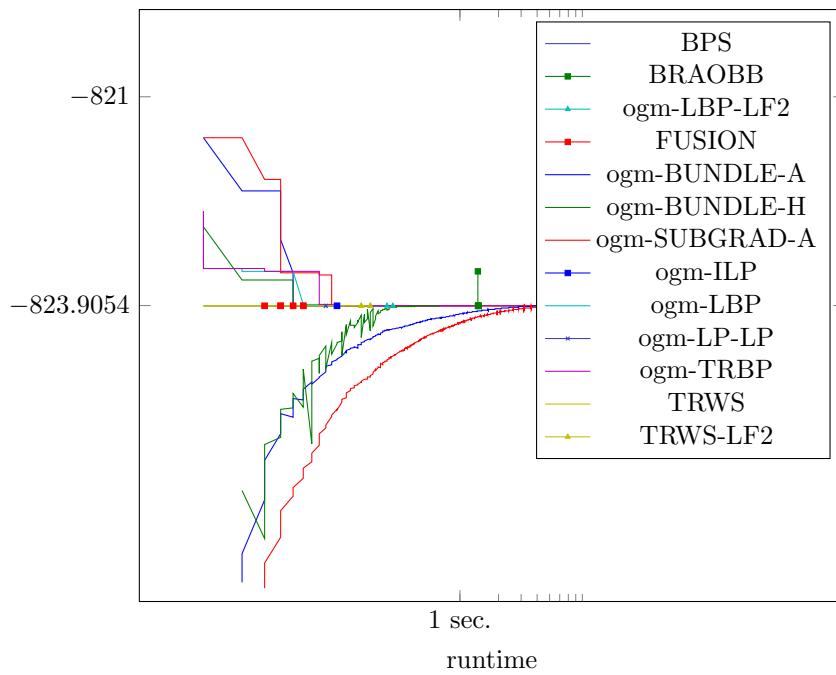


Figure 334: Runtime results for the instance 3001004 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

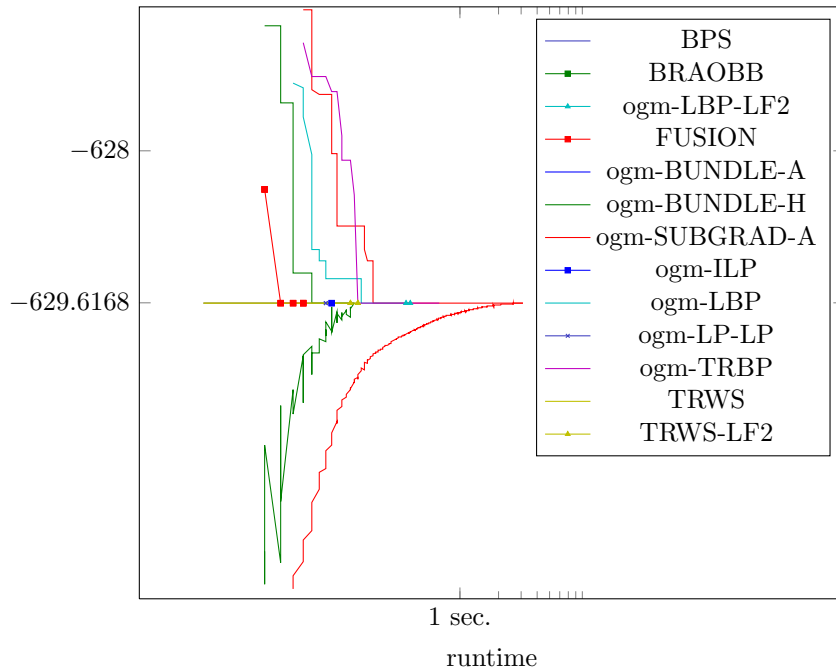


Figure 335: Runtime results for the instance 3001018 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

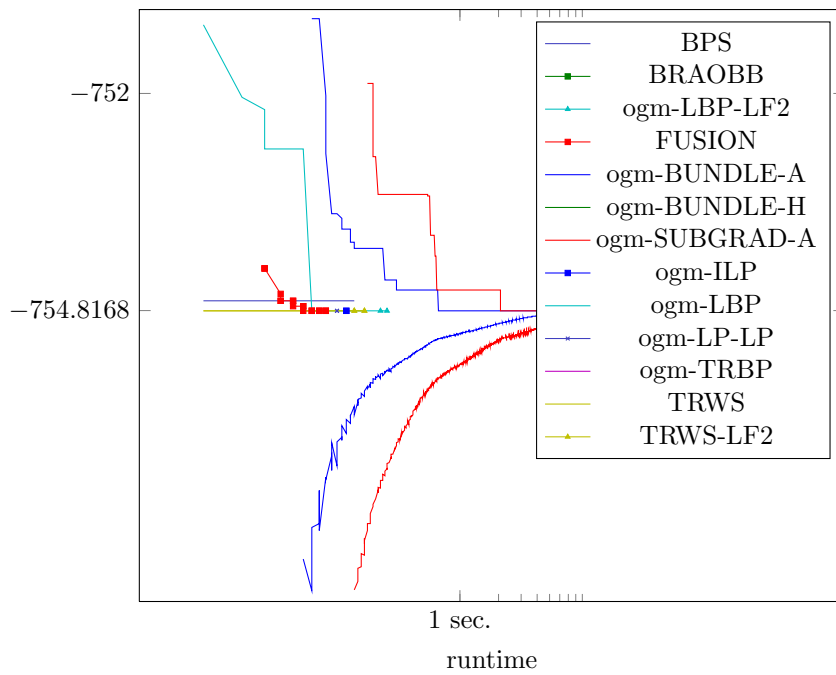


Figure 336: Runtime results for the instance 3001061 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

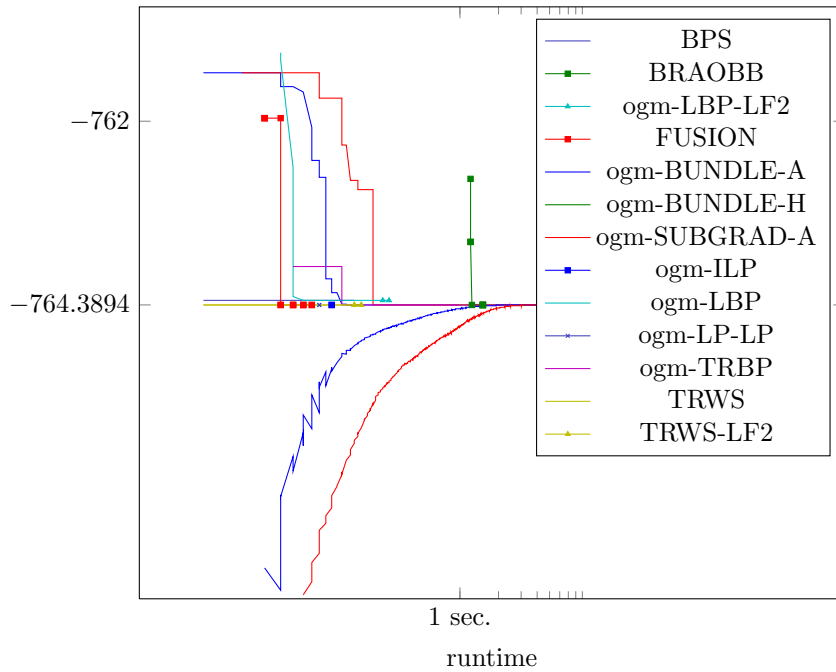


Figure 337: Runtime results for the instance 3001131 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

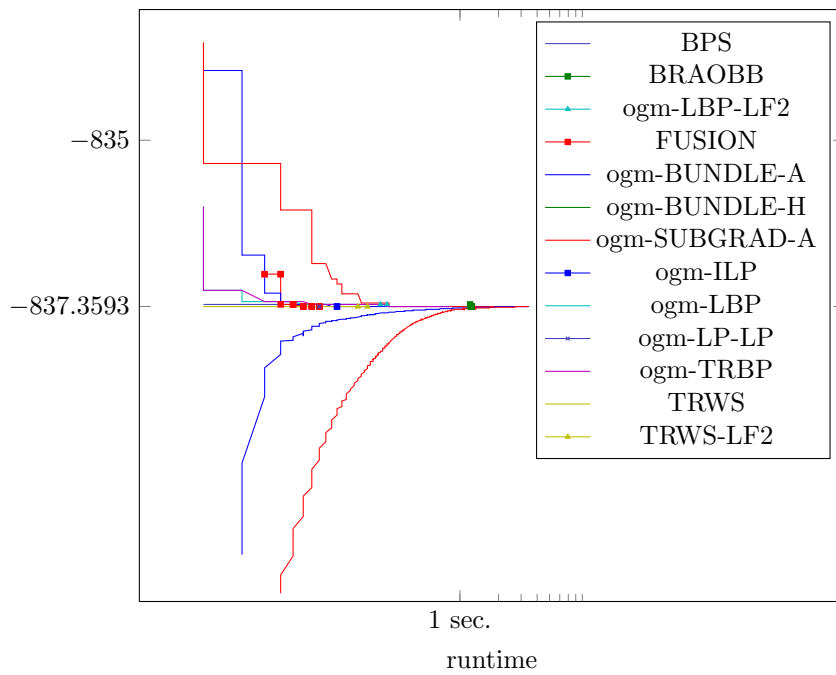


Figure 338: Runtime results for the instance 3001230 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

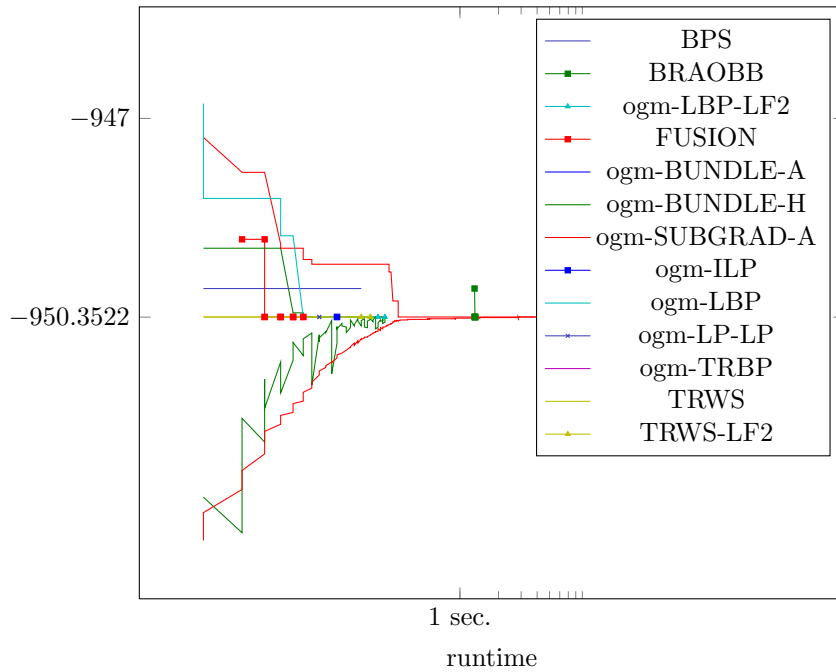


Figure 339: Runtime results for the instance 3001319 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

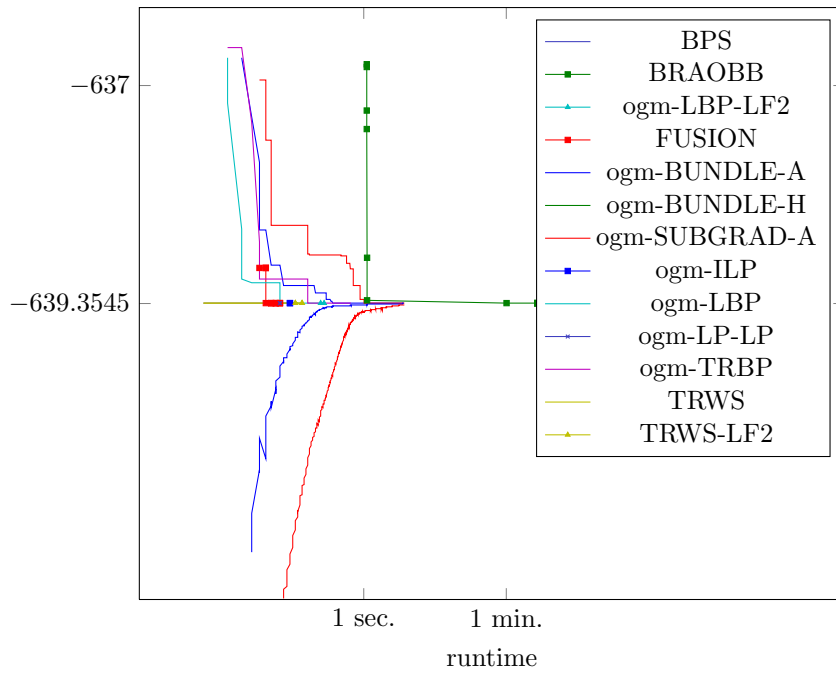


Figure 340: Runtime results for the instance 3001336 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

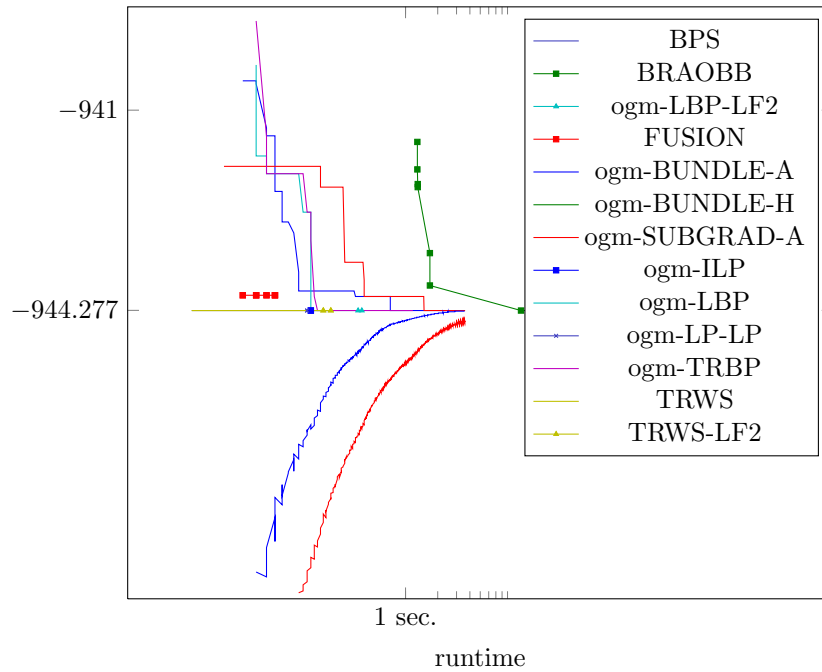


Figure 341: Runtime results for the instance 3001421 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

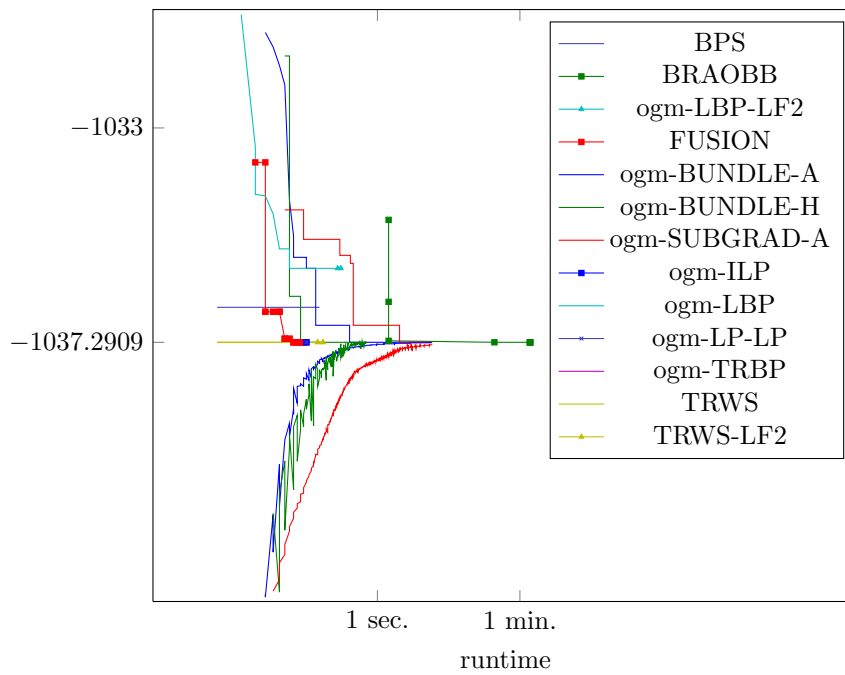


Figure 342: Runtime results for the instance 3001460 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

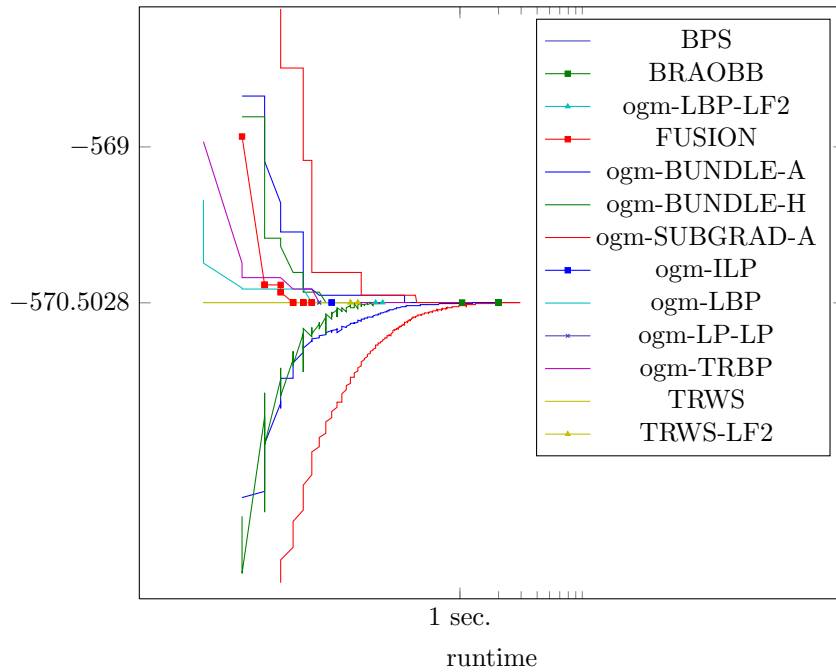


Figure 343: Runtime results for the instance 3001555 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

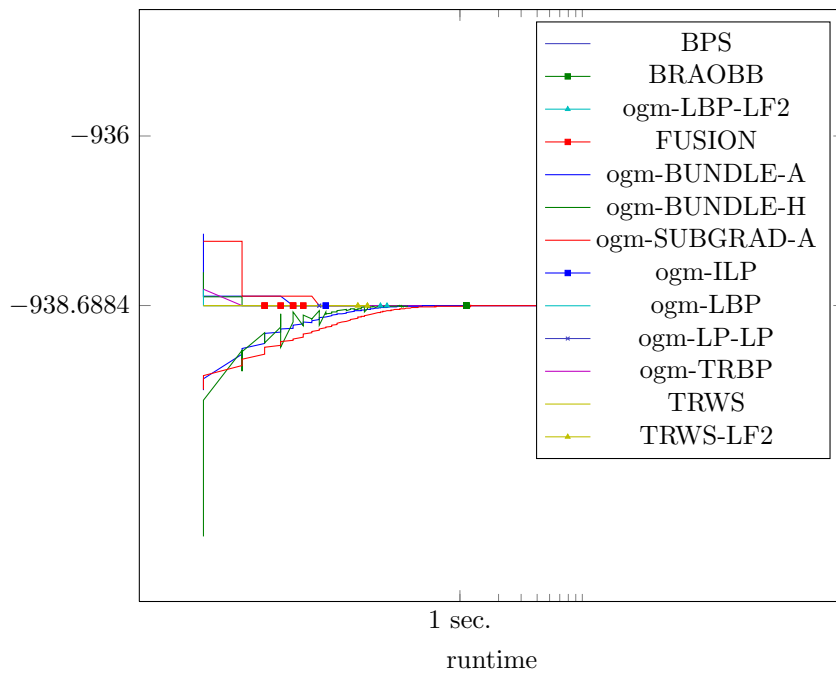


Figure 344: Runtime results for the instance 3001569 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

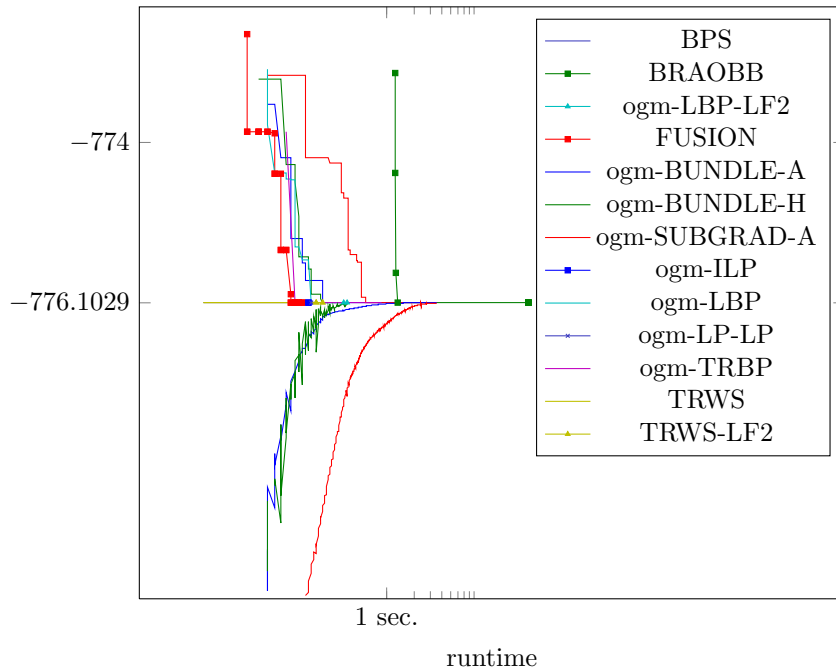


Figure 345: Runtime results for the instance 3001667 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

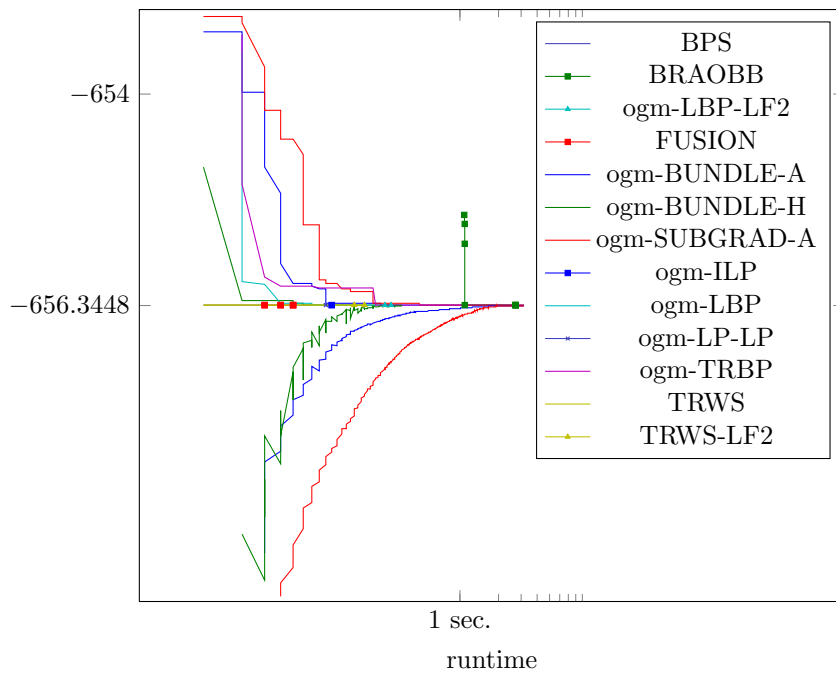


Figure 346: Runtime results for the instance 3001751 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

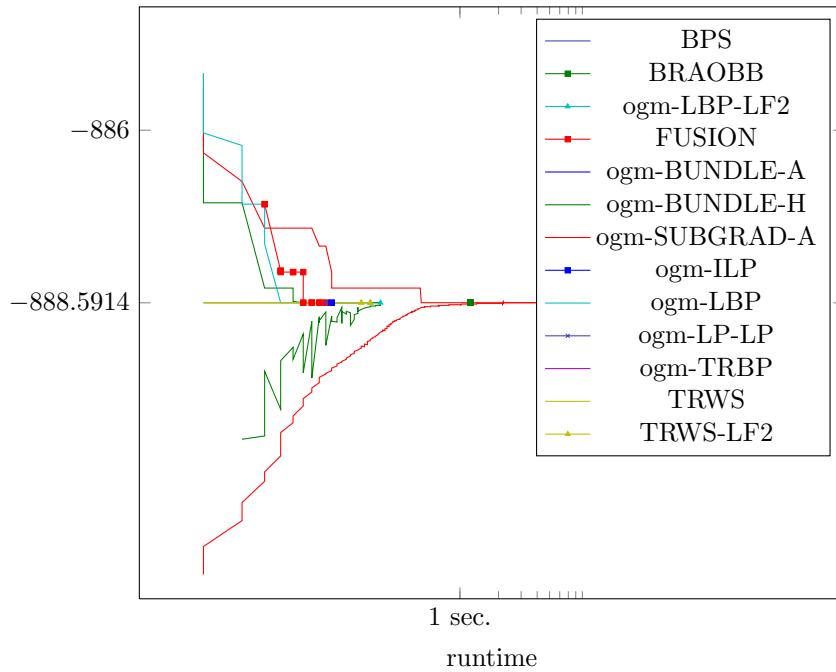


Figure 347: Runtime results for the instance 3001767 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

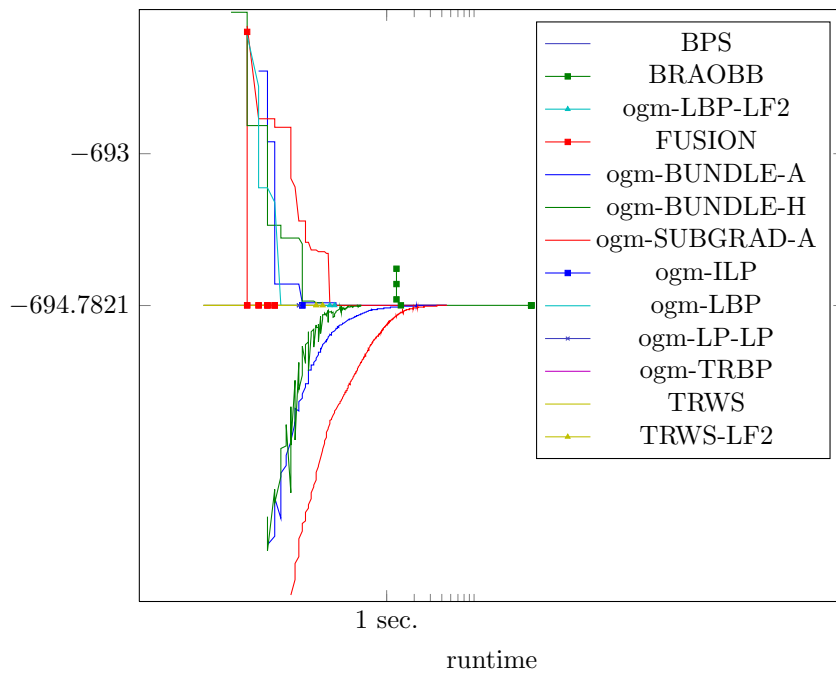


Figure 348: Runtime results for the instance 3001826 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

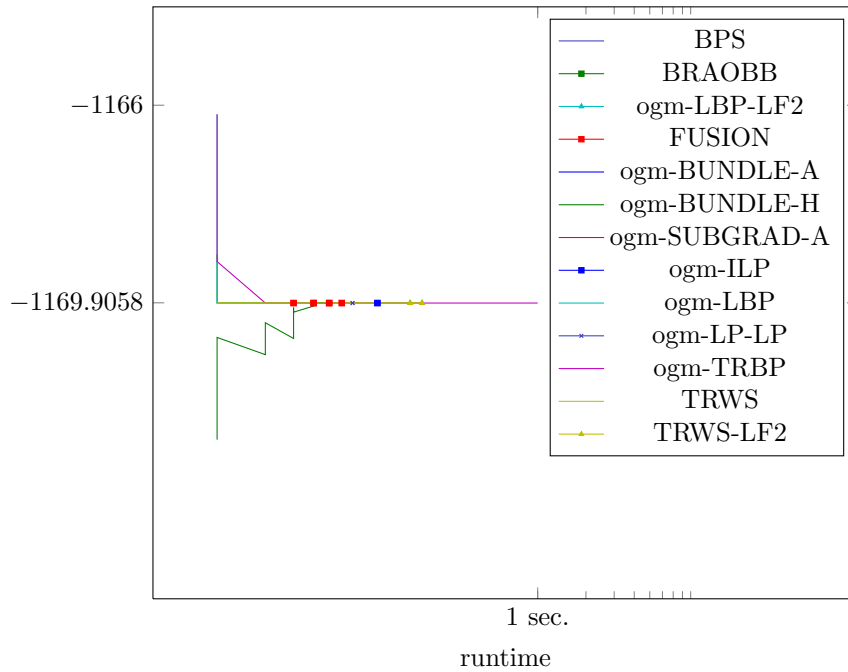


Figure 349: Runtime results for the instance 3001891 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

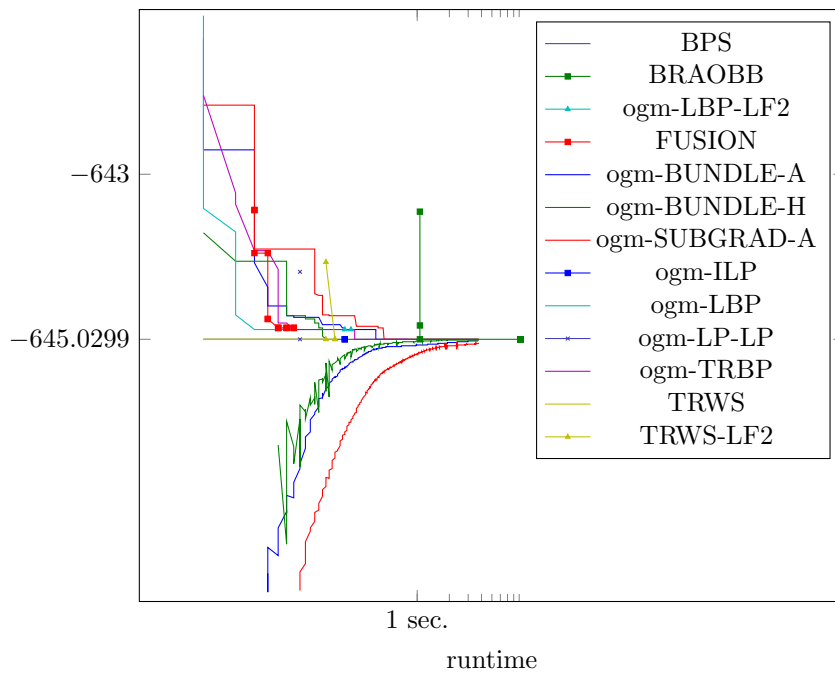


Figure 350: Runtime results for the instance 3001976 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

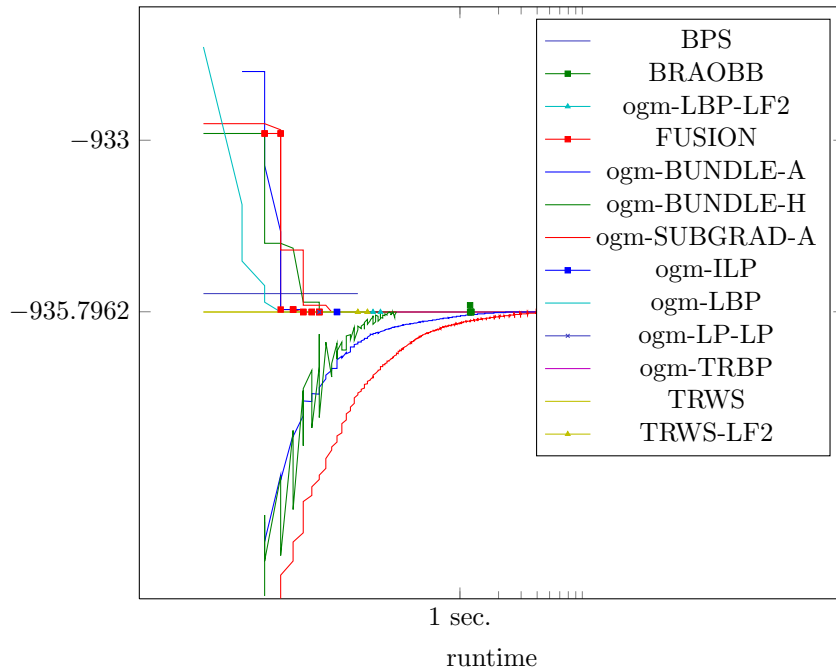


Figure 351: Runtime results for the instance 3002020 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

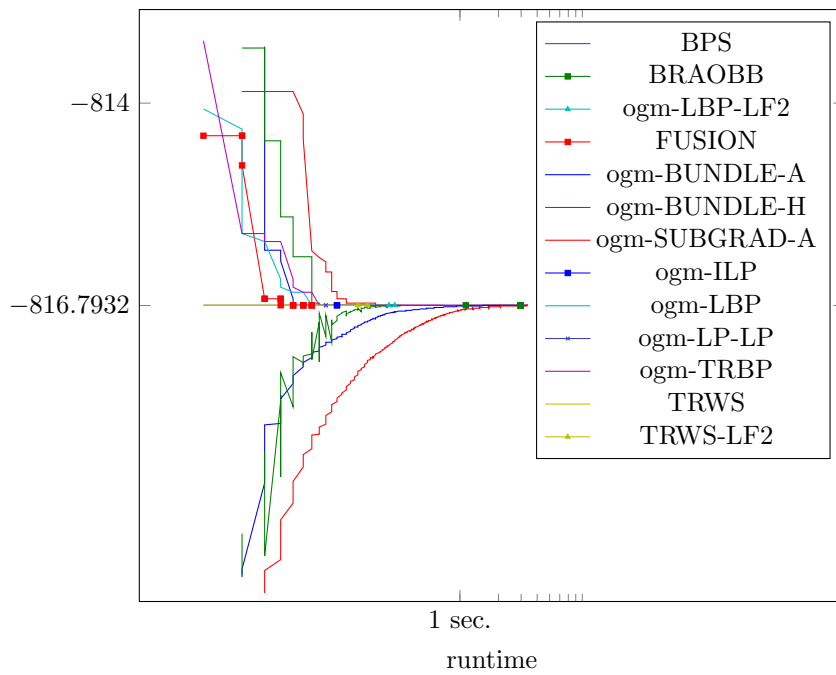


Figure 352: Runtime results for the instance 3002059 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

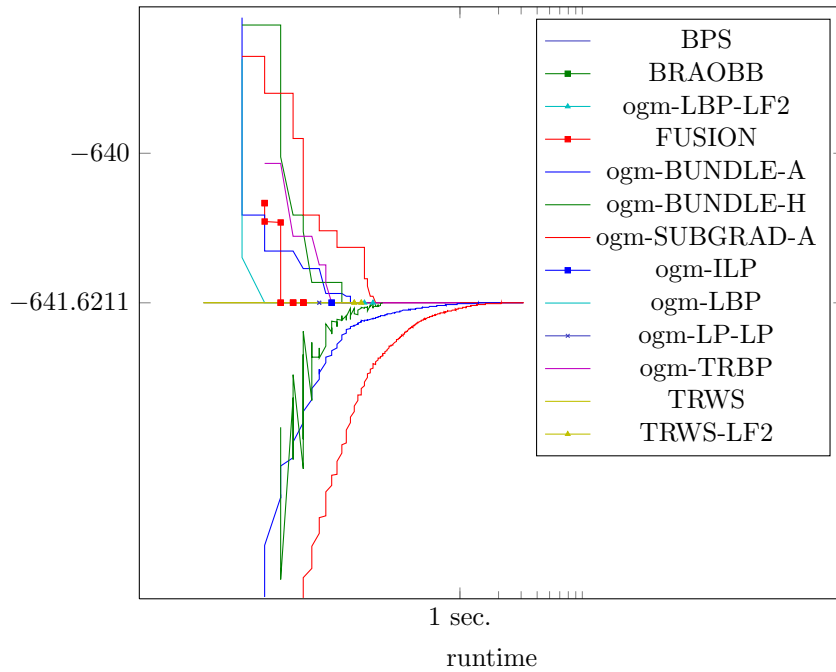


Figure 353: Runtime results for the instance 3002082 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

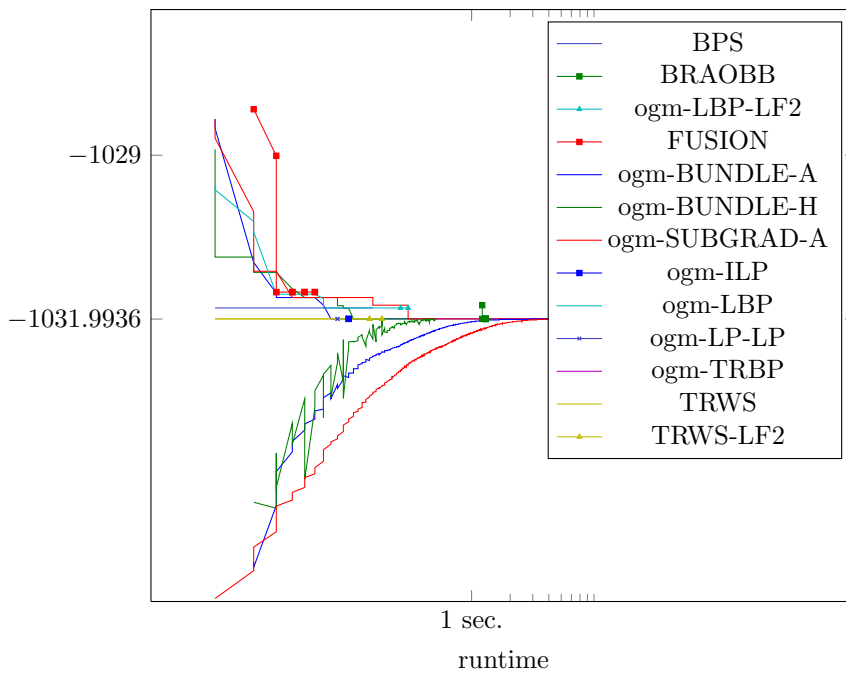


Figure 354: Runtime results for the instance 3002154 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

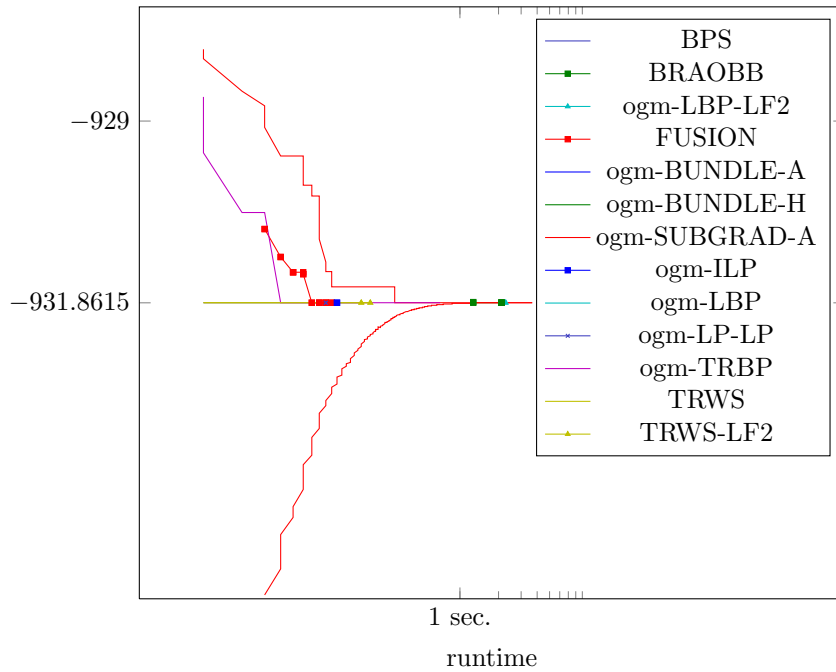


Figure 355: Runtime results for the instance 3002206 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

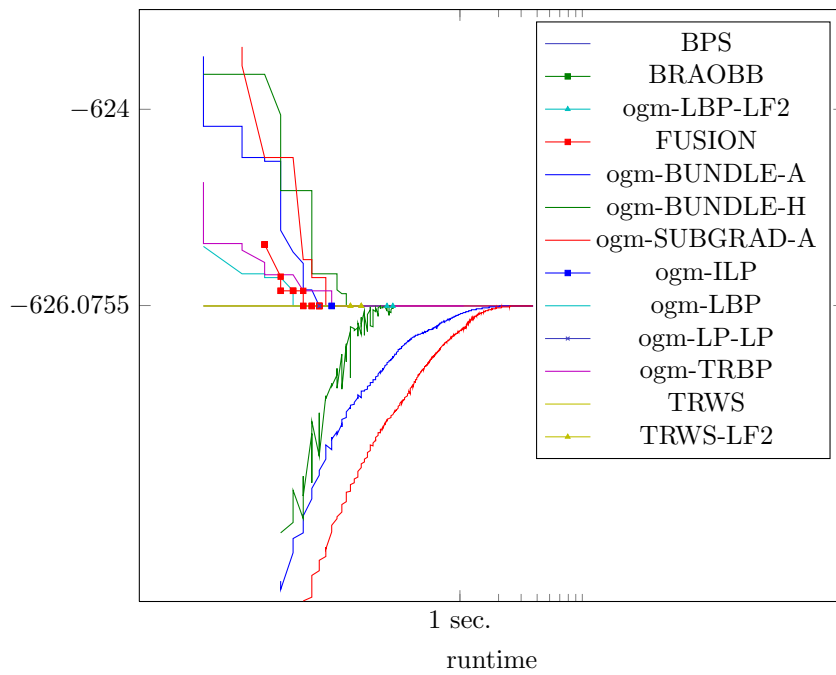


Figure 356: Runtime results for the instance 3002221 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

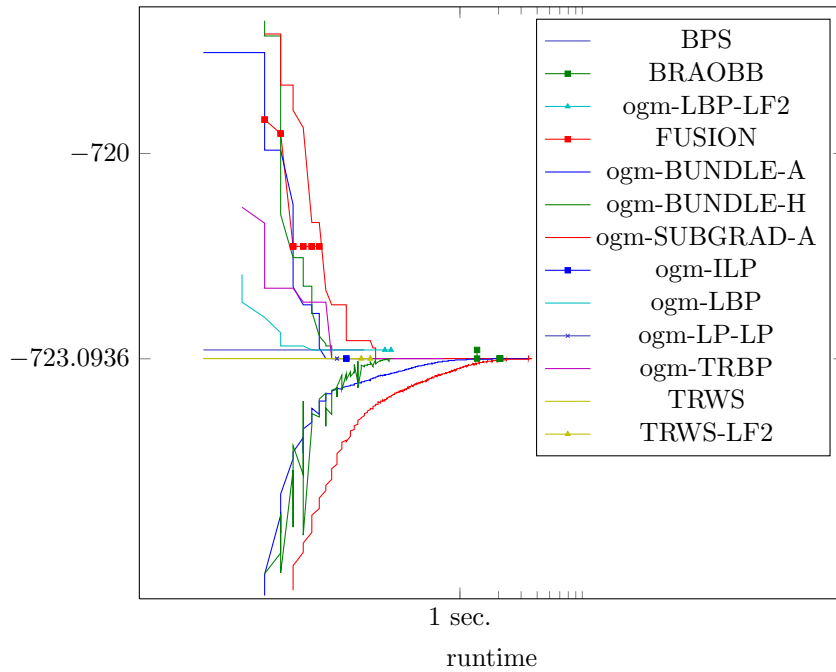


Figure 357: Runtime results for the instance 3002340 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

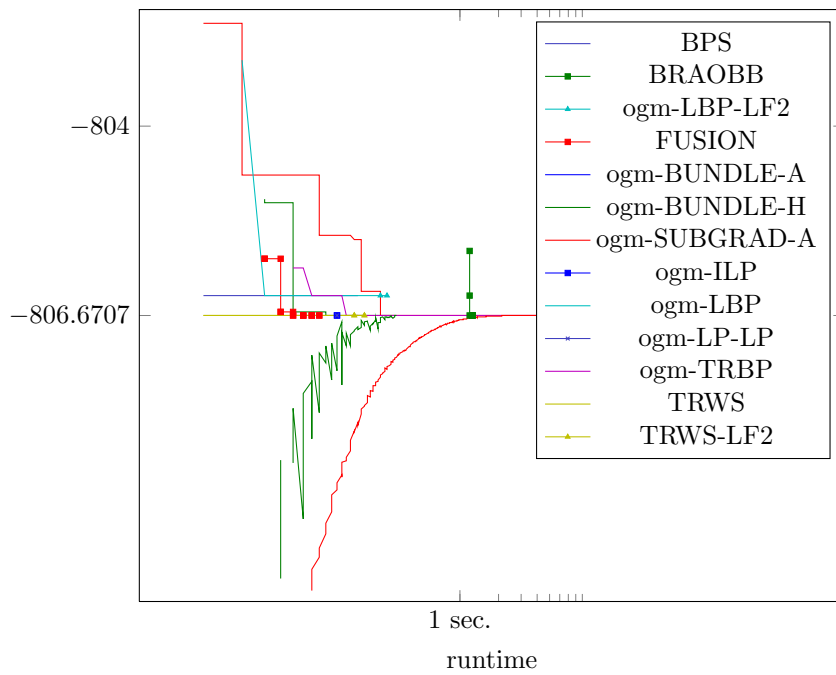


Figure 358: Runtime results for the instance 3002366 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

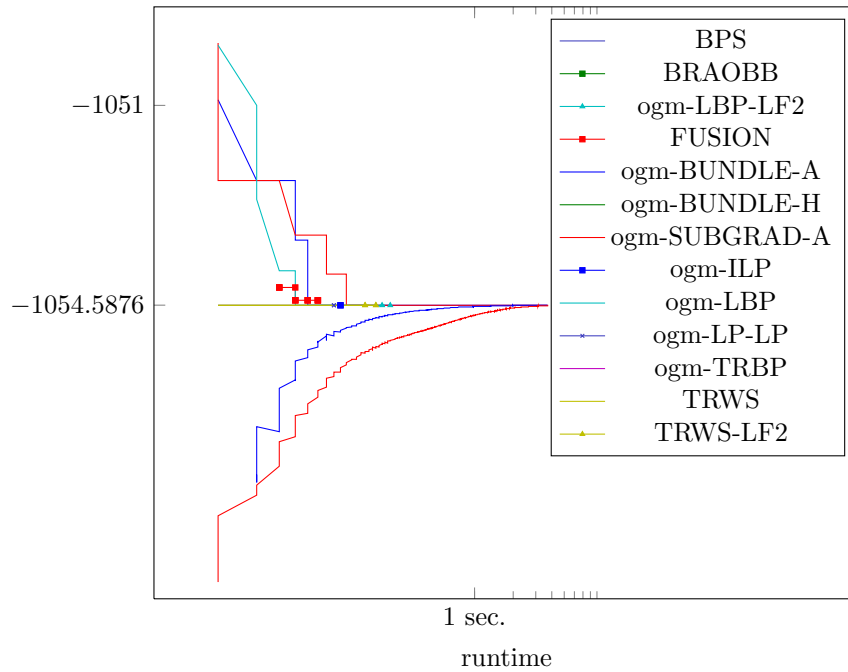


Figure 359: Runtime results for the instance 3002411 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

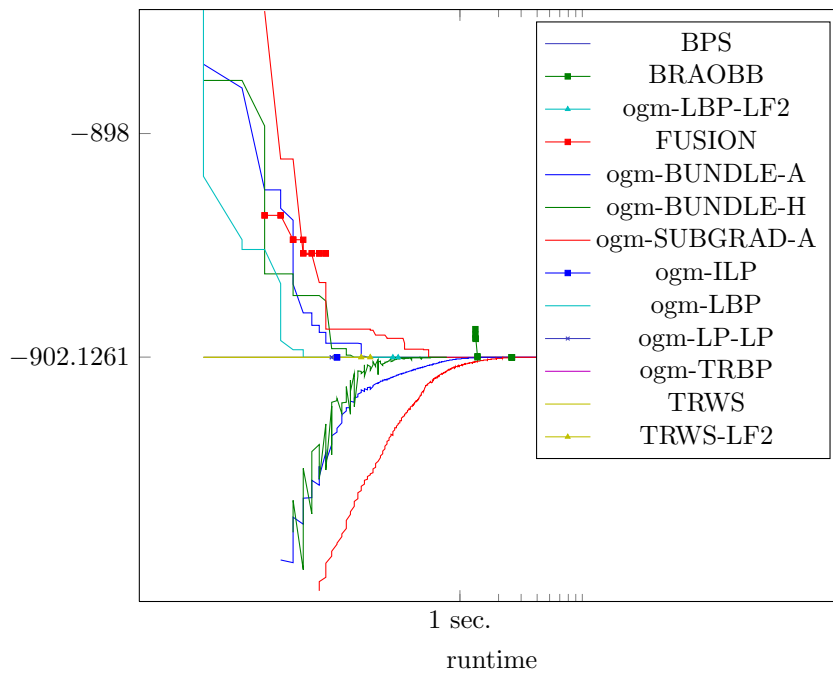


Figure 360: Runtime results for the instance 3002594 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

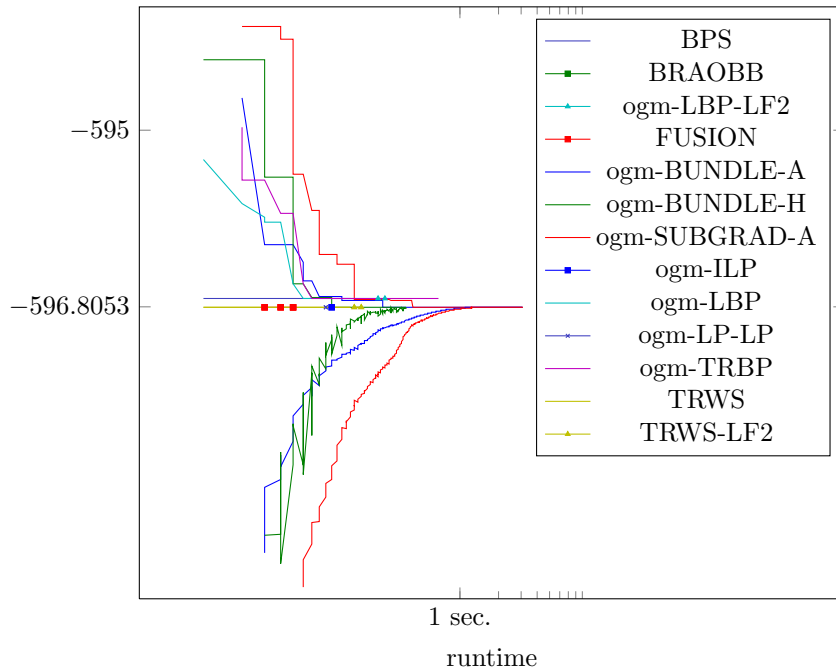


Figure 361: Runtime results for the instance 3002905 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

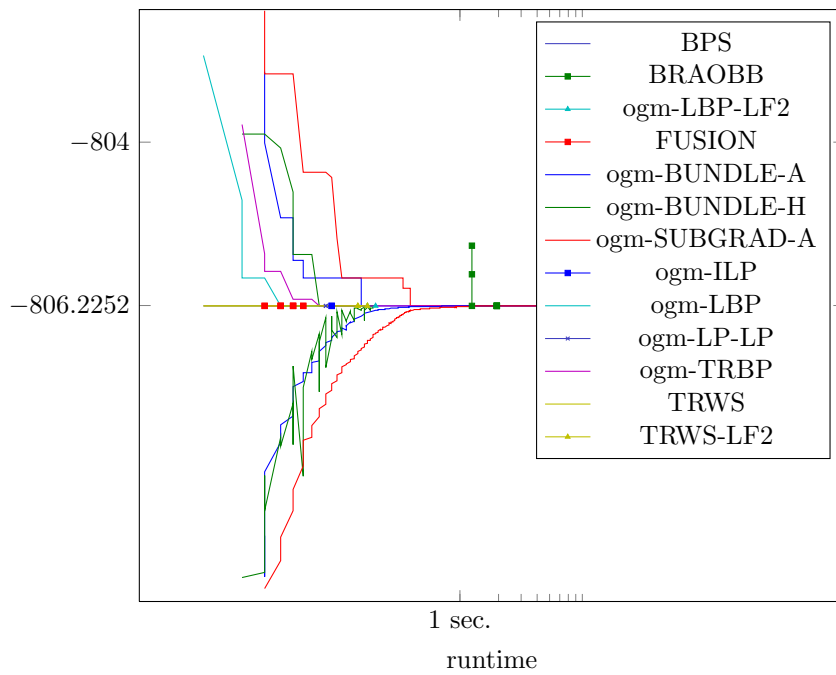


Figure 362: Runtime results for the instance 3002909 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

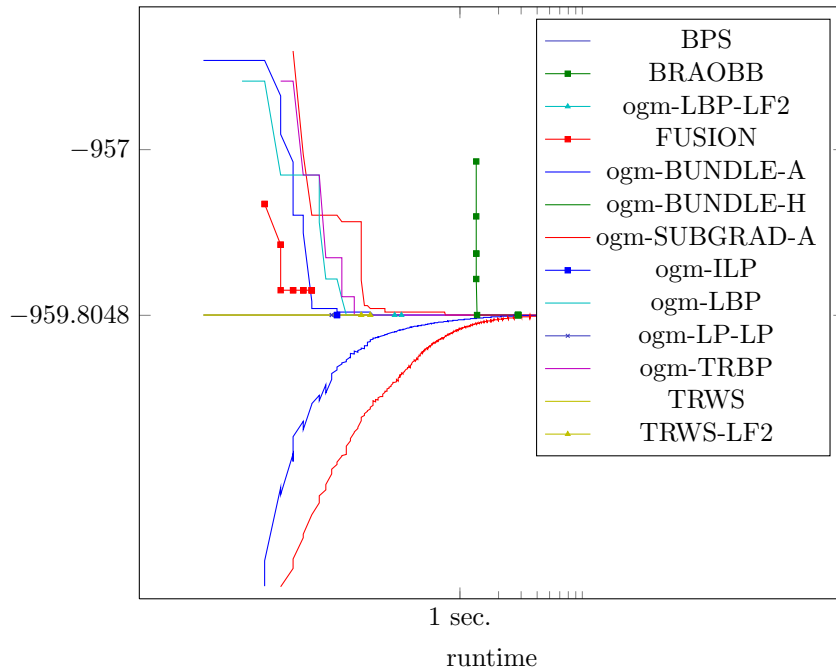


Figure 363: Runtime results for the instance 3003122 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

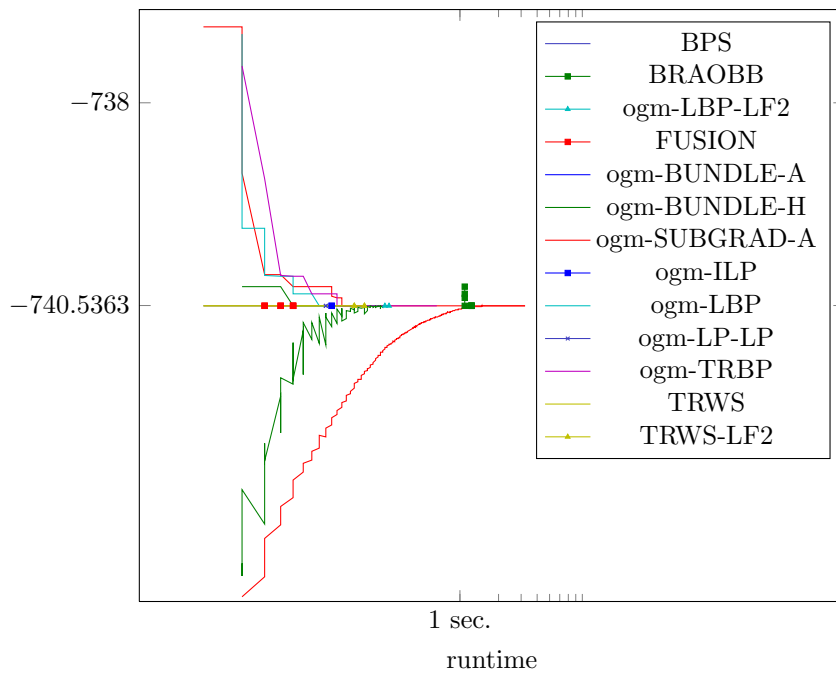


Figure 364: Runtime results for the instance 3003322 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

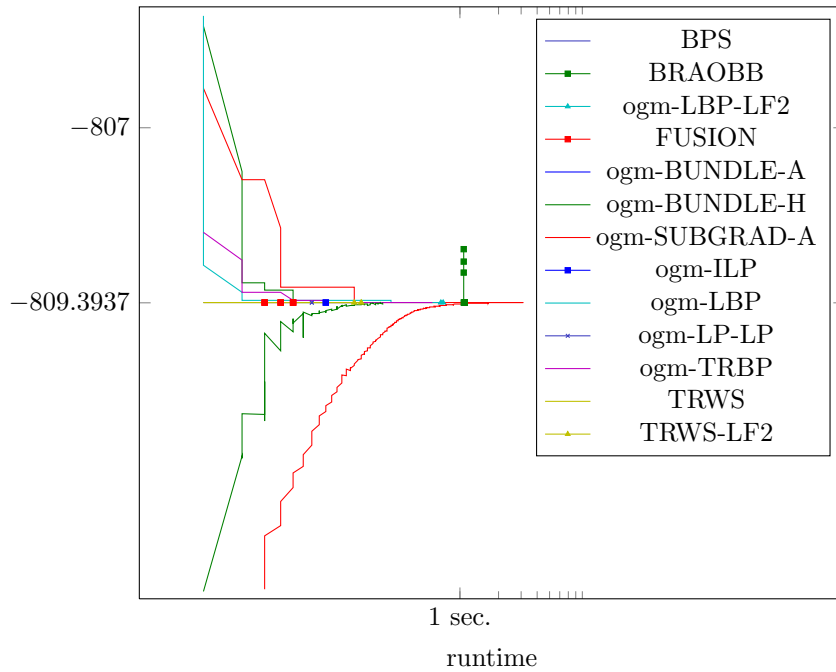


Figure 365: Runtime results for the instance 3003328 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

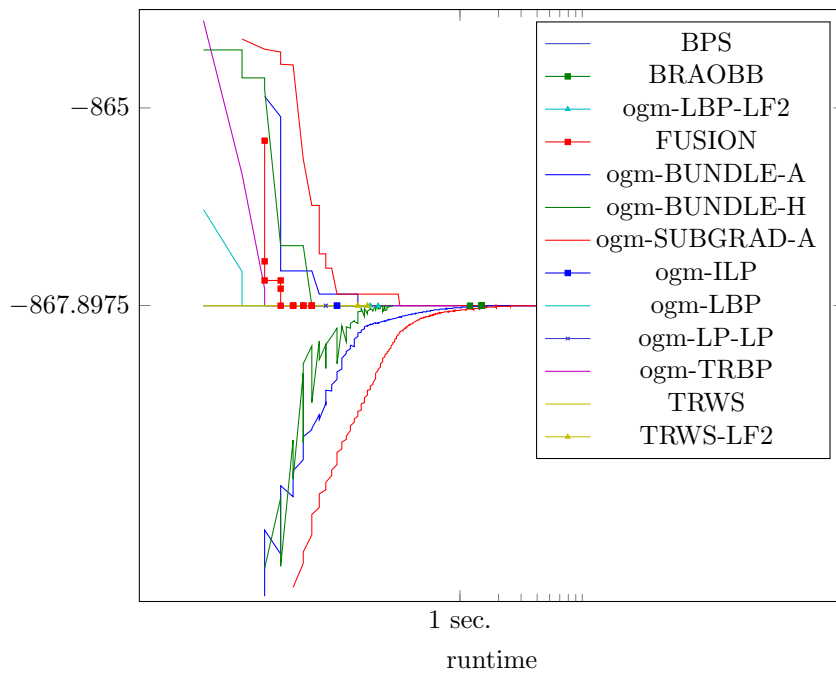


Figure 366: Runtime results for the instance 3003356 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

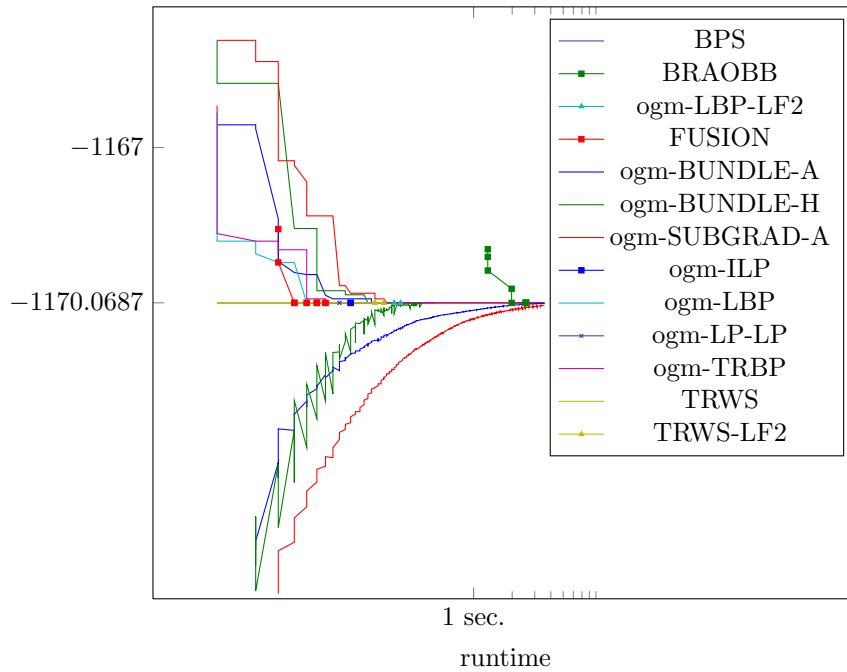


Figure 367: Runtime results for the instance 3003448 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

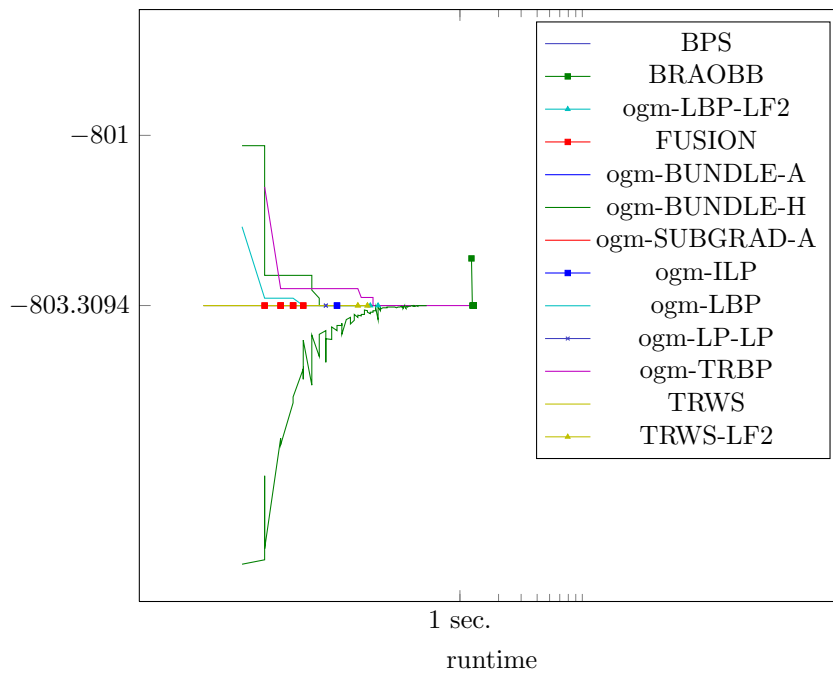


Figure 368: Runtime results for the instance 3003731 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

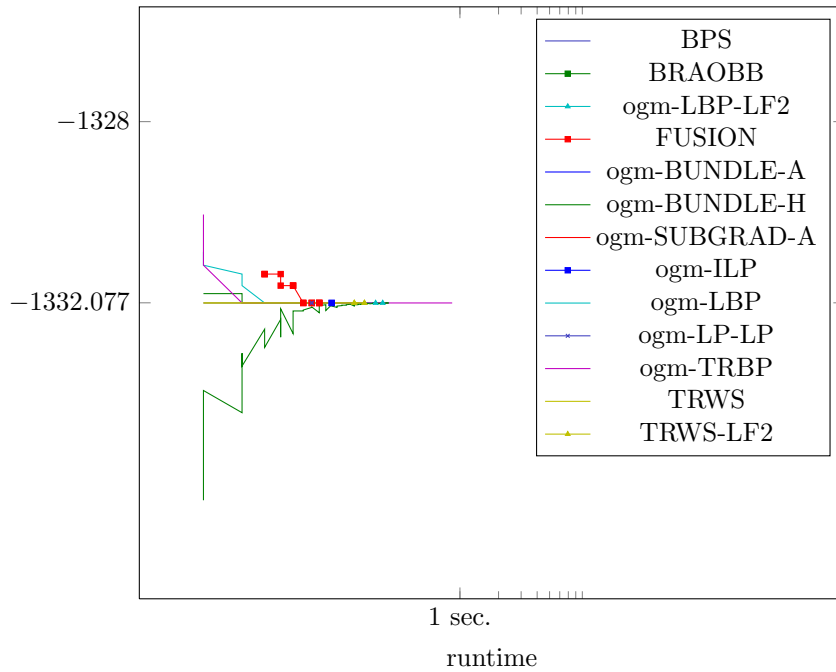


Figure 369: Runtime results for the instance 3003791 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

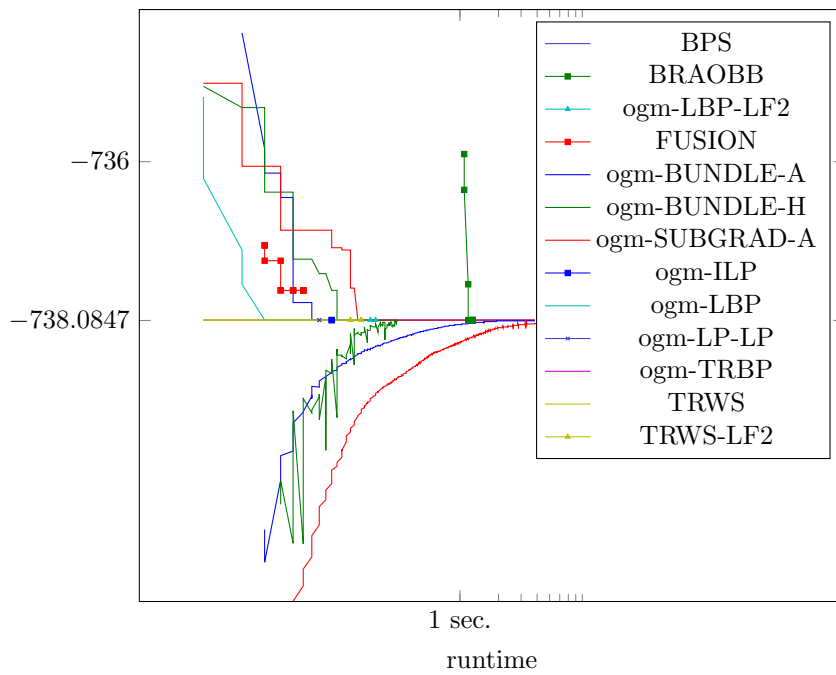


Figure 370: Runtime results for the instance 3003817 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

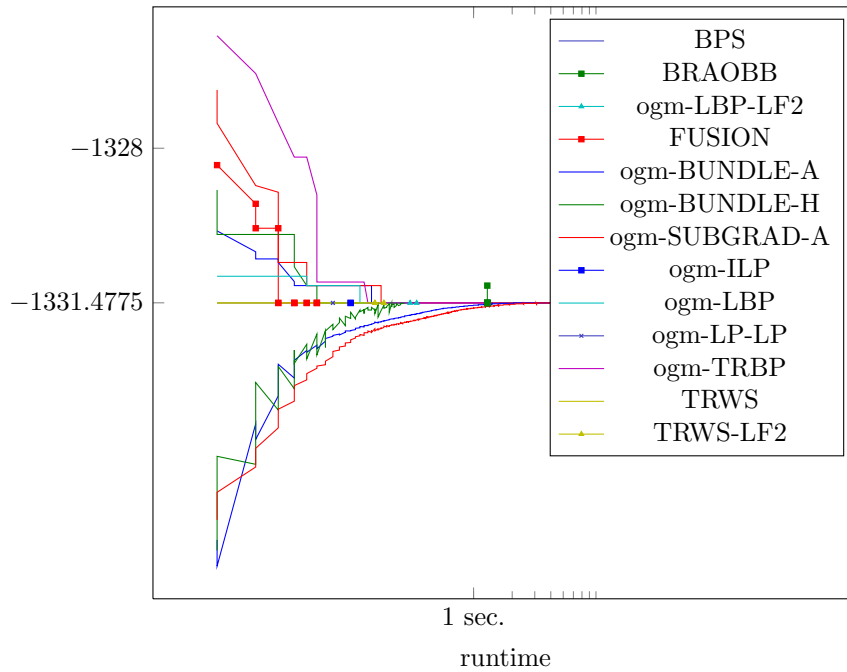


Figure 371: Runtime results for the instance 4000066 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

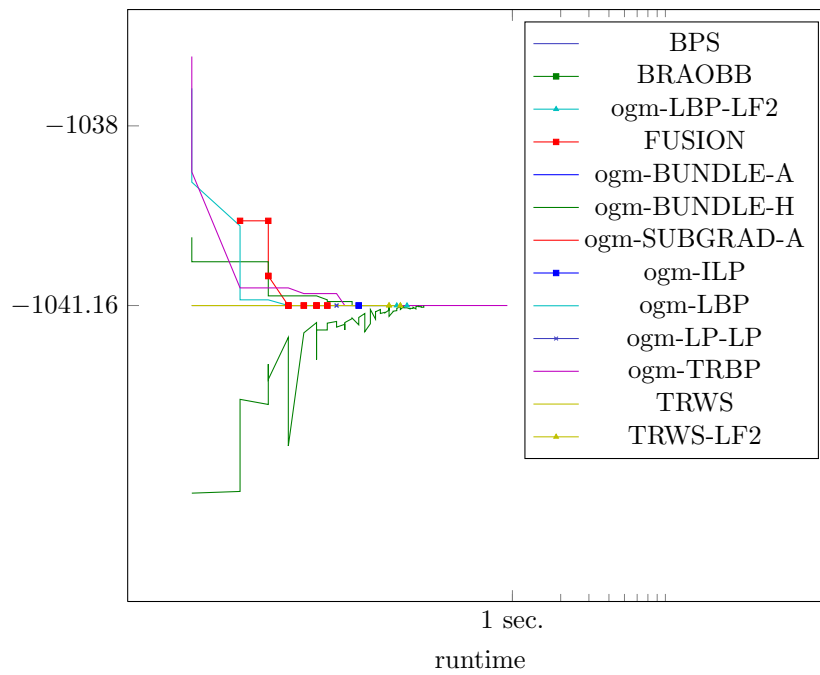


Figure 372: Runtime results for the instance 4000086 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

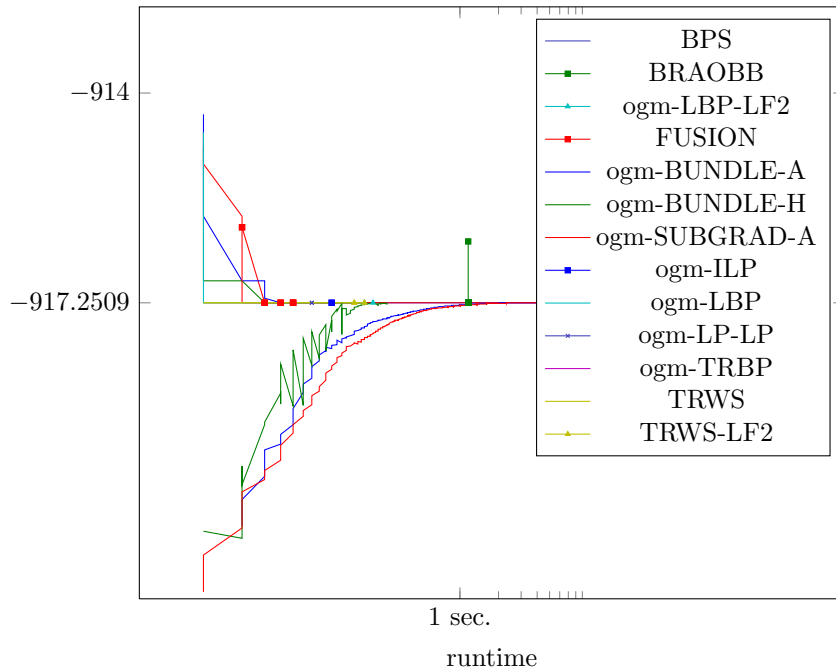


Figure 373: Runtime results for the instance 4100066 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

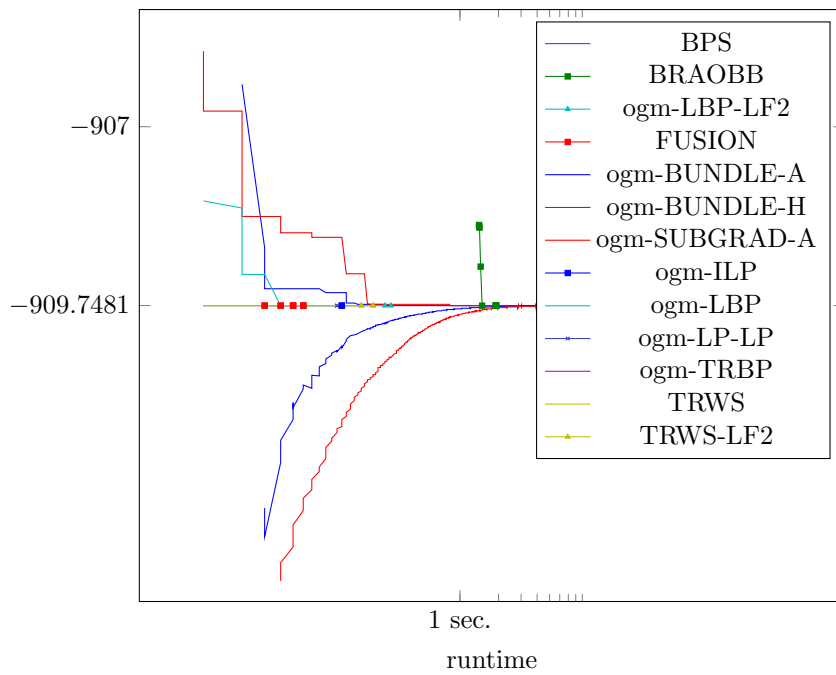


Figure 374: Runtime results for the instance 4100246 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

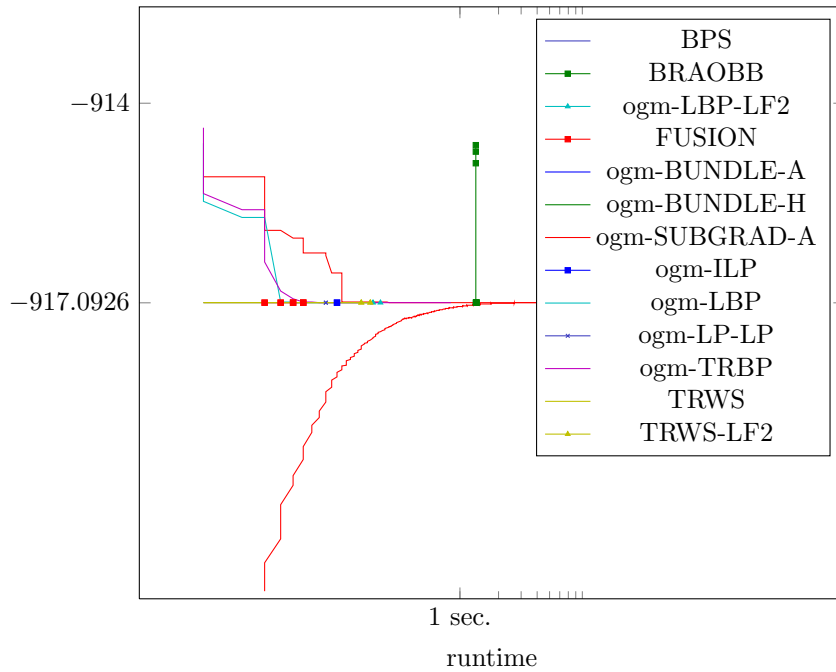


Figure 375: Runtime results for the instance 4100280 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

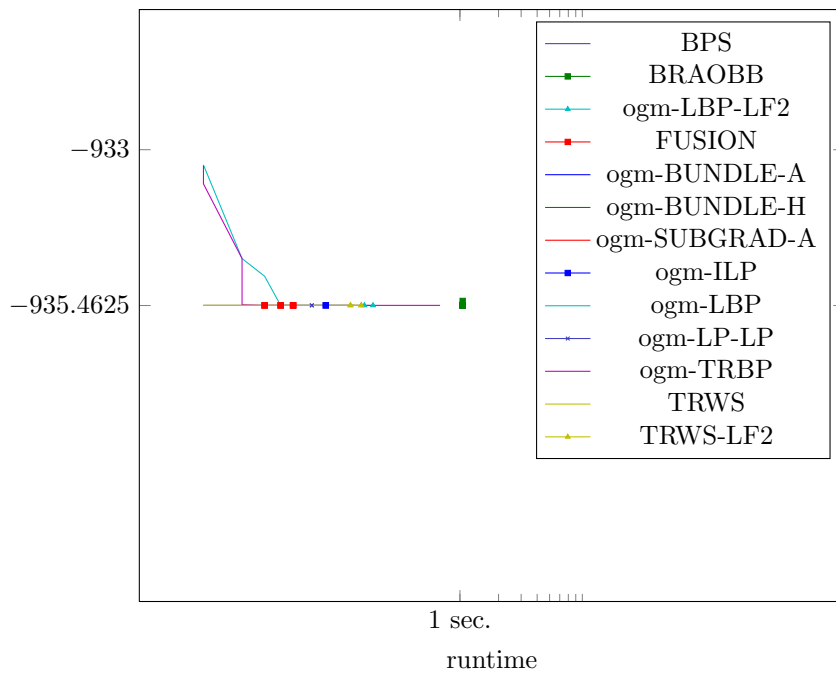


Figure 376: Runtime results for the instance 5000016 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

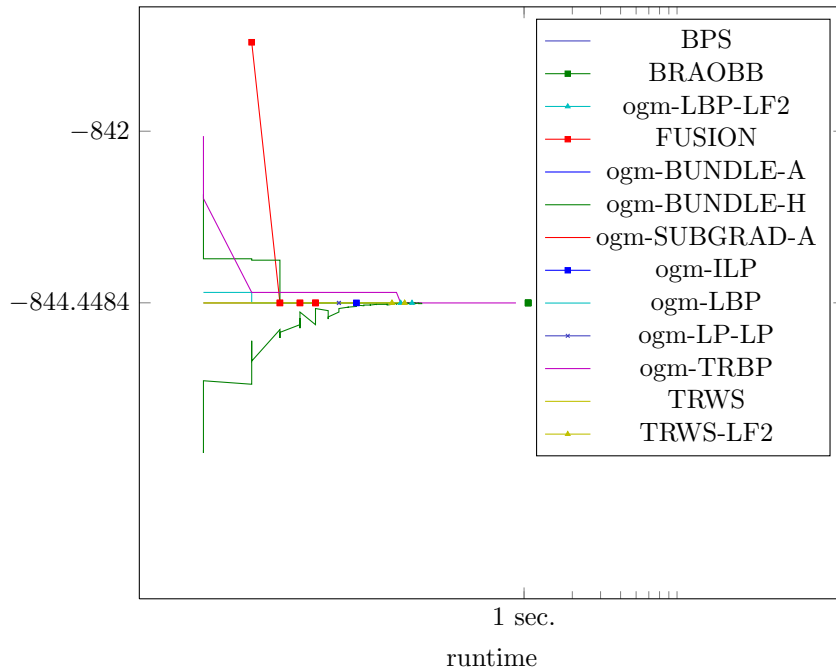


Figure 377: Runtime results for the instance 5000119 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

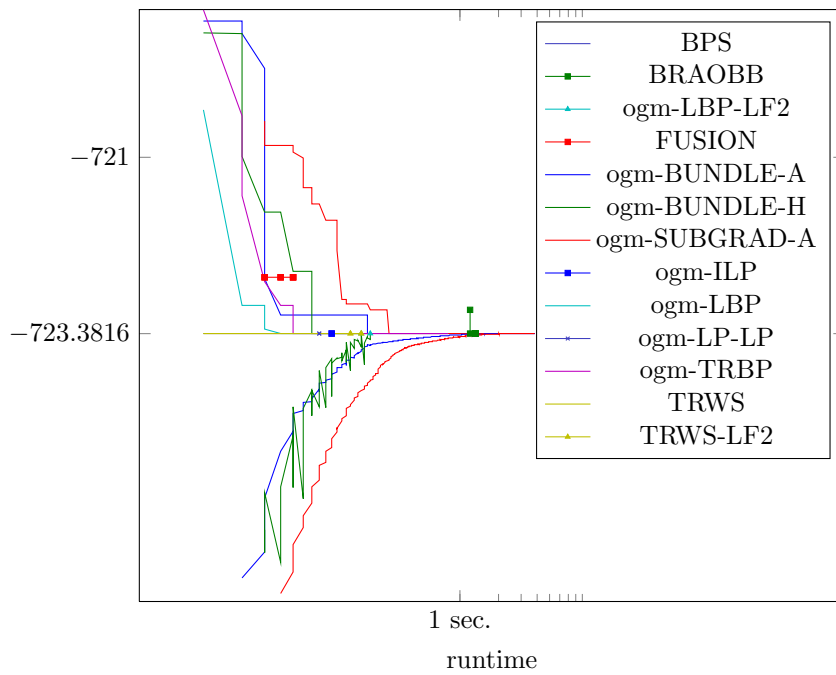


Figure 378: Runtime results for the instance 5000120 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

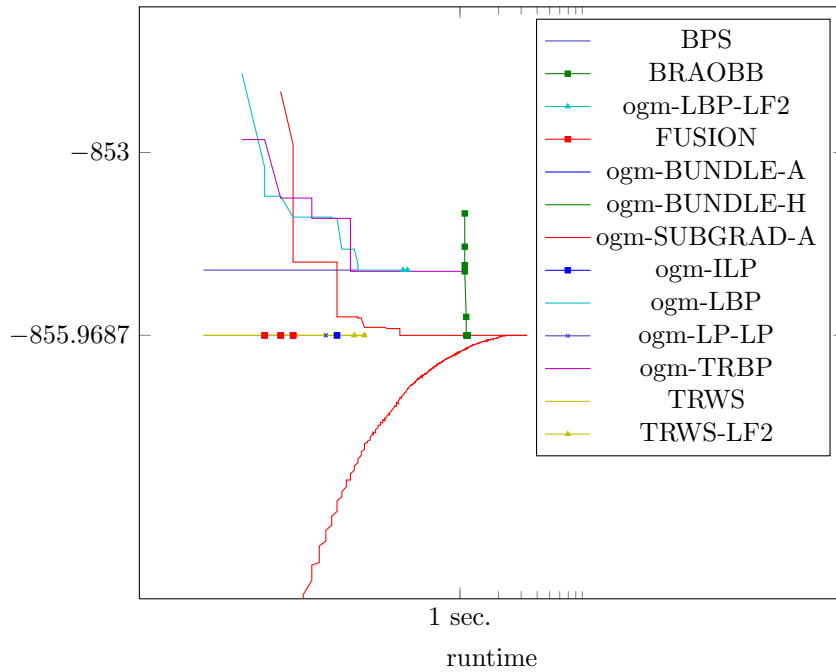


Figure 379: Runtime results for the instance 5000121 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

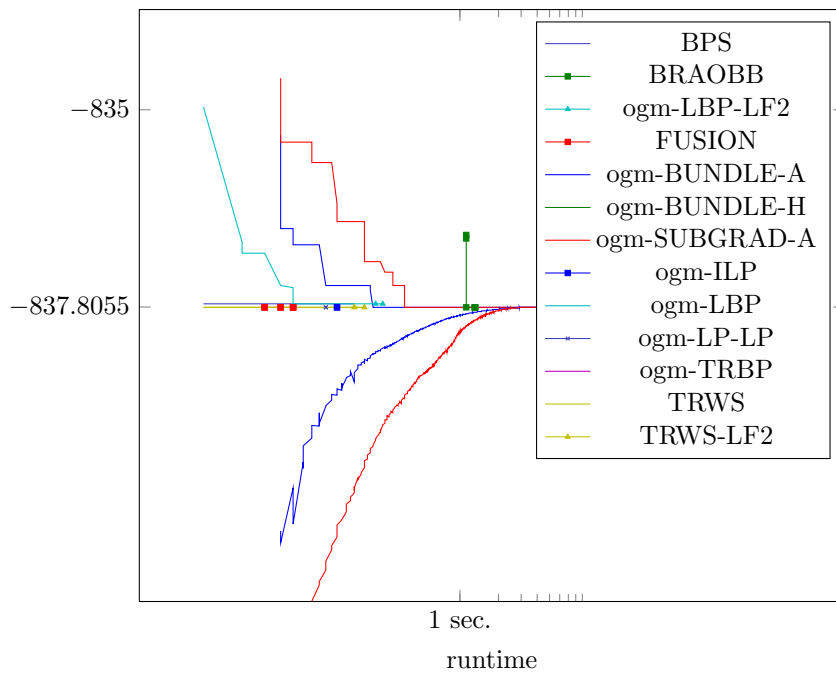


Figure 380: Runtime results for the instance 5000122 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

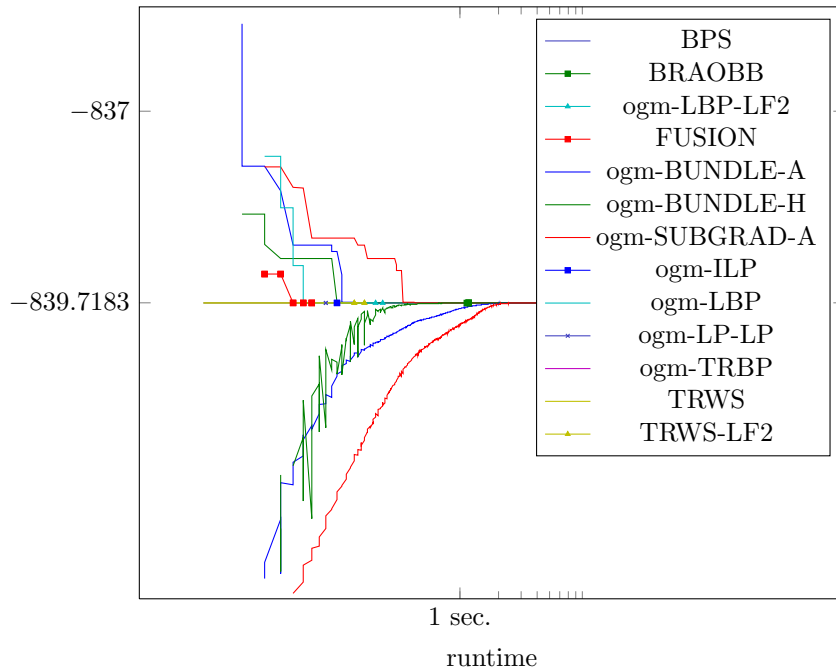


Figure 381: Runtime results for the instance 5000123 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

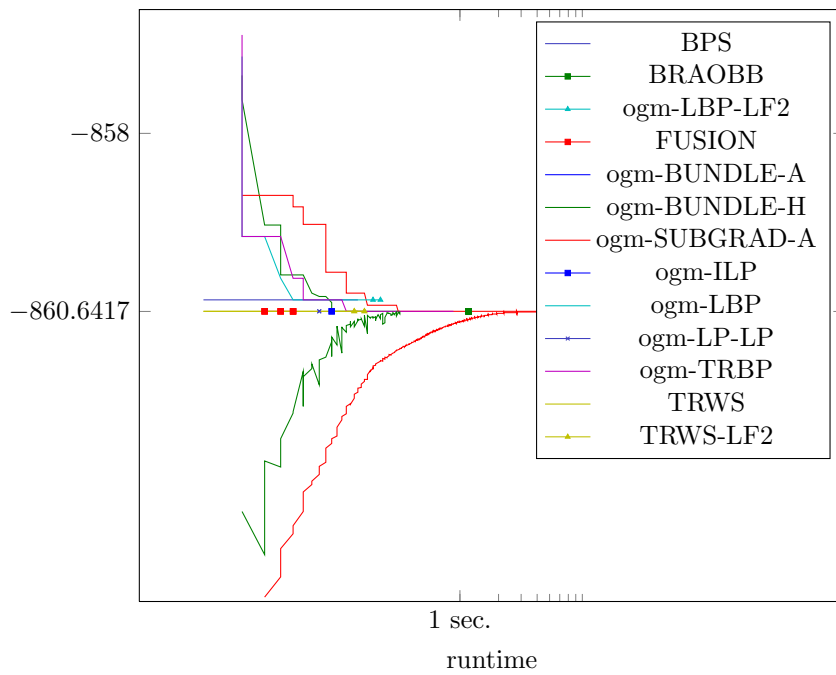


Figure 382: Runtime results for the instance 5000124 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

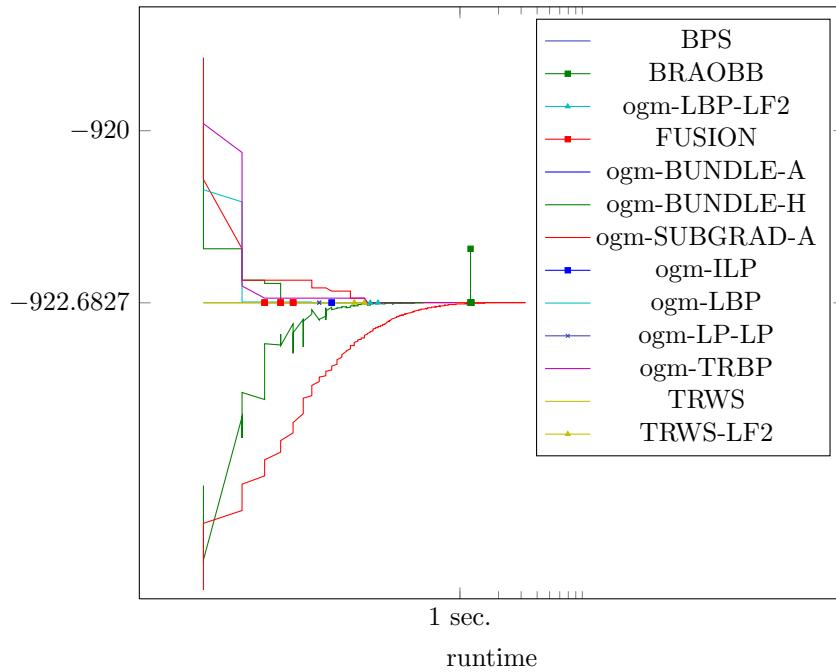


Figure 383: Runtime results for the instance 5000125 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

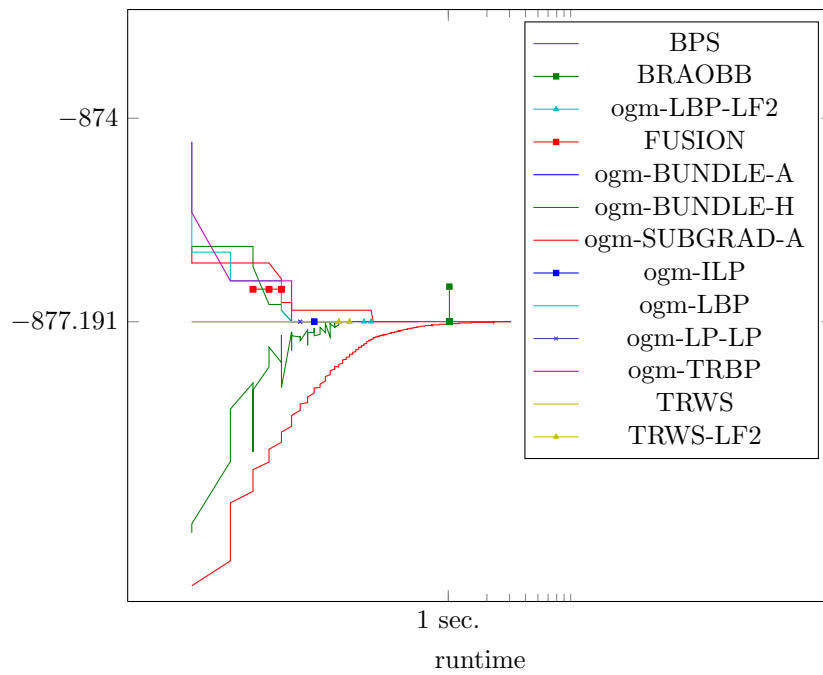


Figure 384: Runtime results for the instance 5000126 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

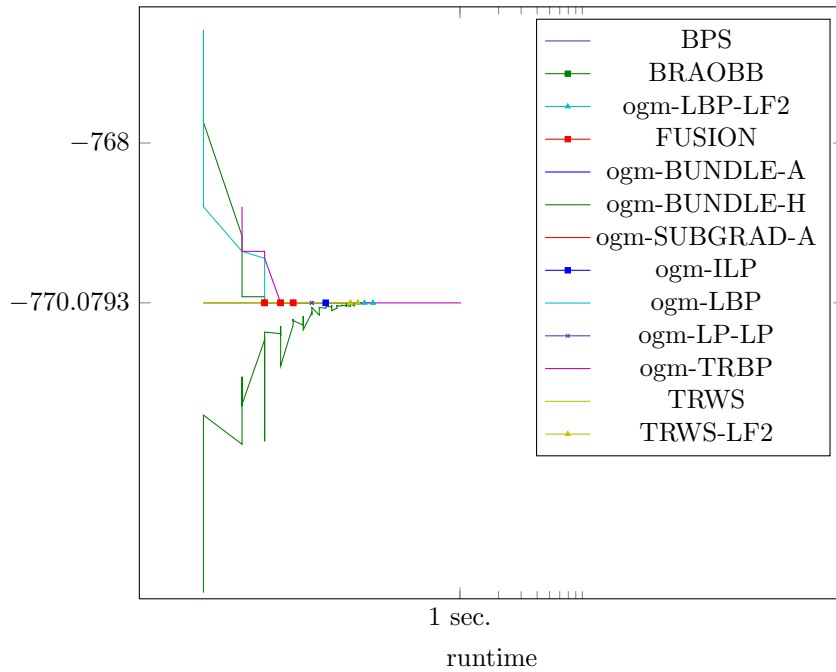


Figure 385: Runtime results for the instance 5000127 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

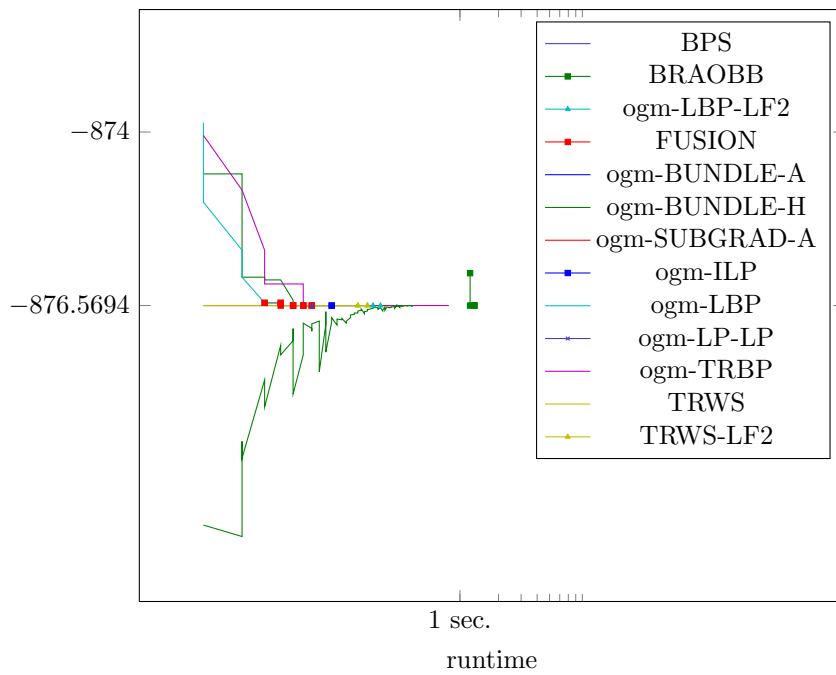


Figure 386: Runtime results for the instance 5000128 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

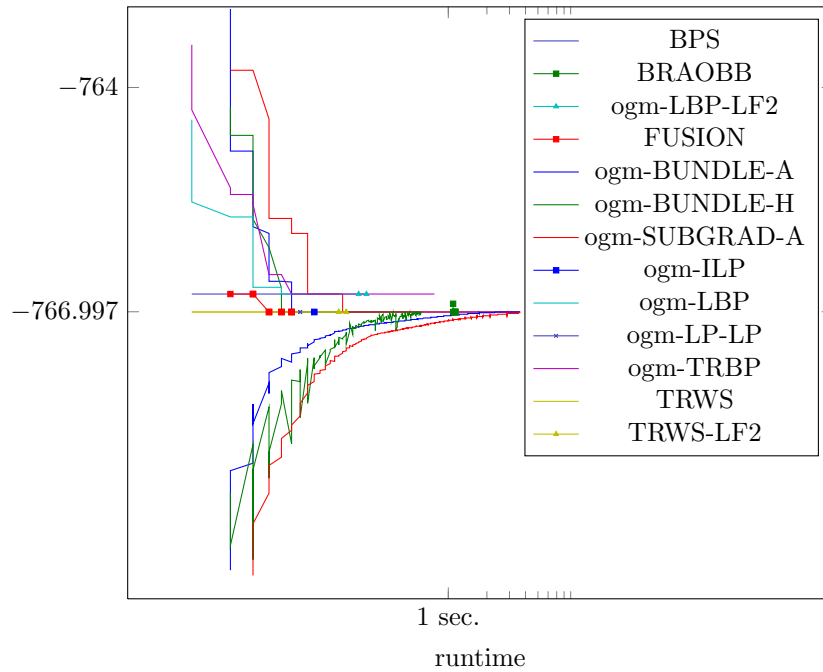


Figure 387: Runtime results for the instance 5000129 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

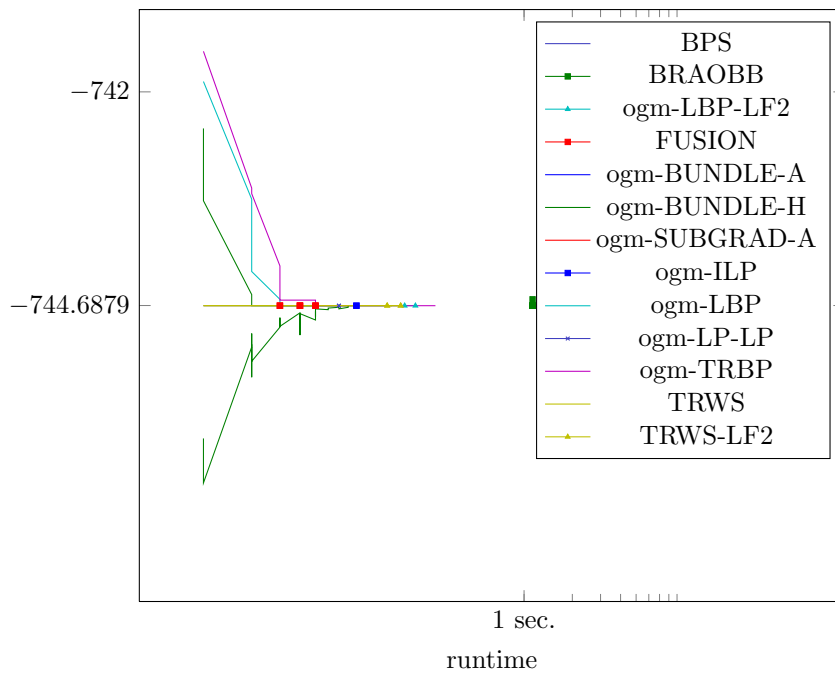


Figure 388: Runtime results for the instance 5000130 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

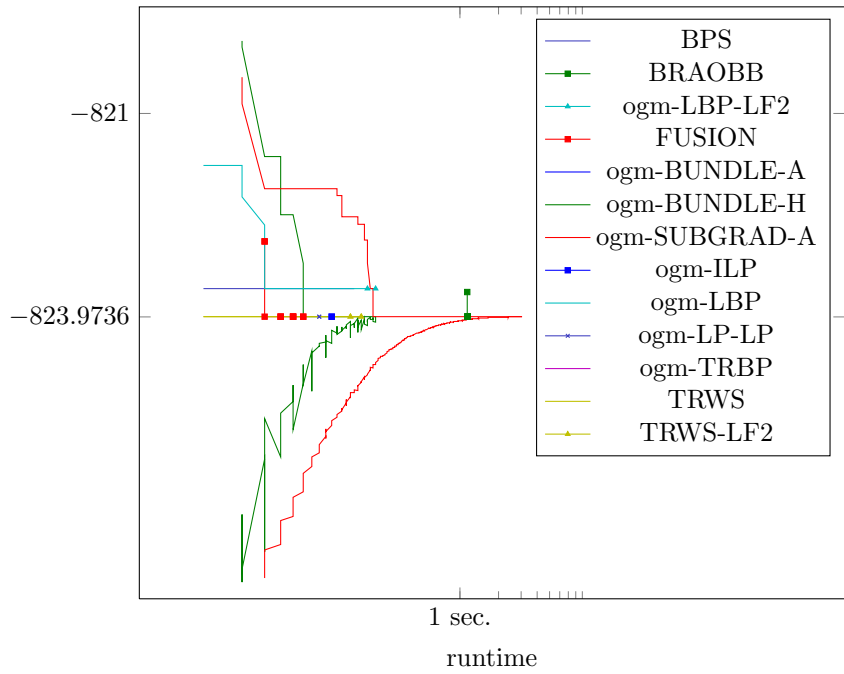


Figure 389: Runtime results for the instance 5000131 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

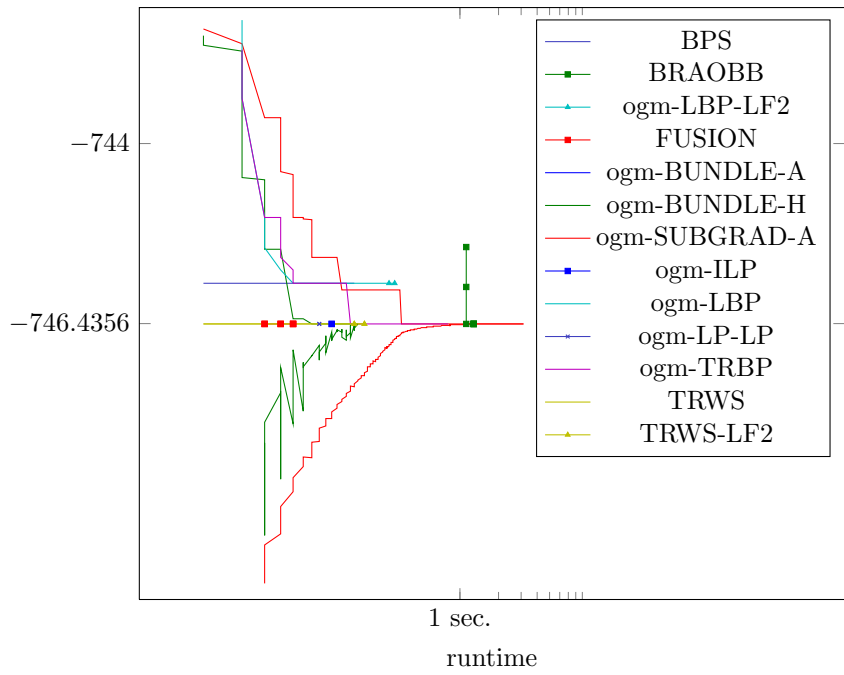


Figure 390: Runtime results for the instance 5000132 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

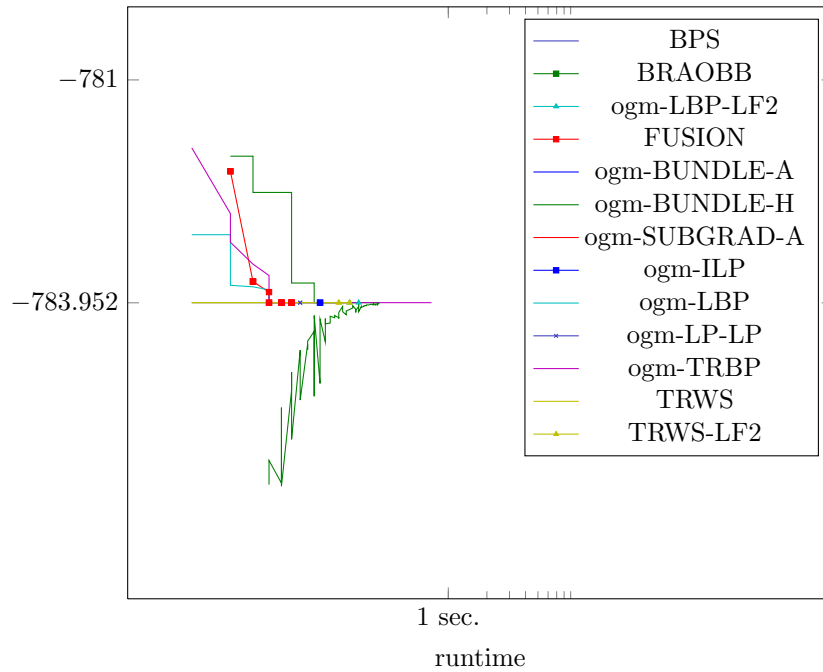


Figure 391: Runtime results for the instance 5000133 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

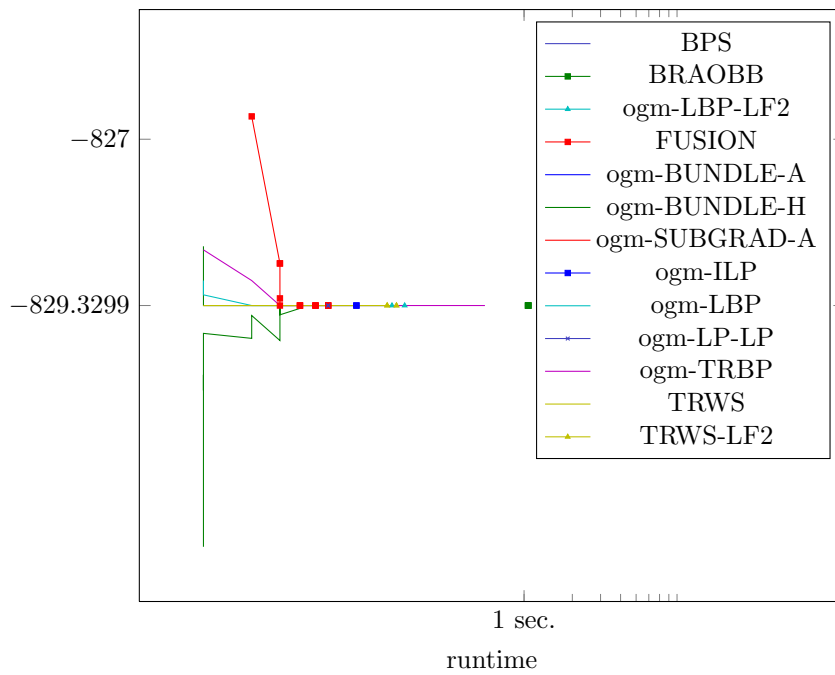


Figure 392: Runtime results for the instance 5000137 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

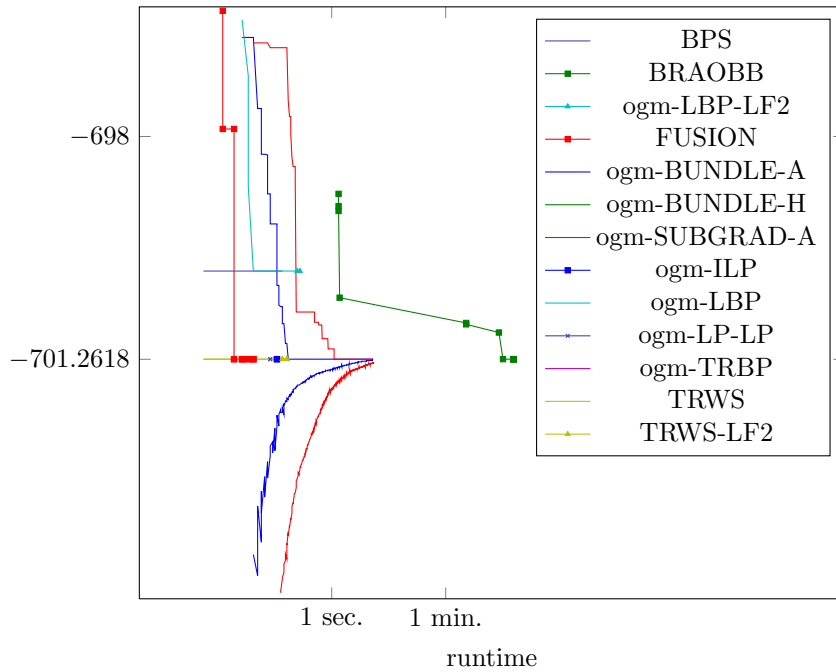


Figure 393: Runtime results for the instance 5000144 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

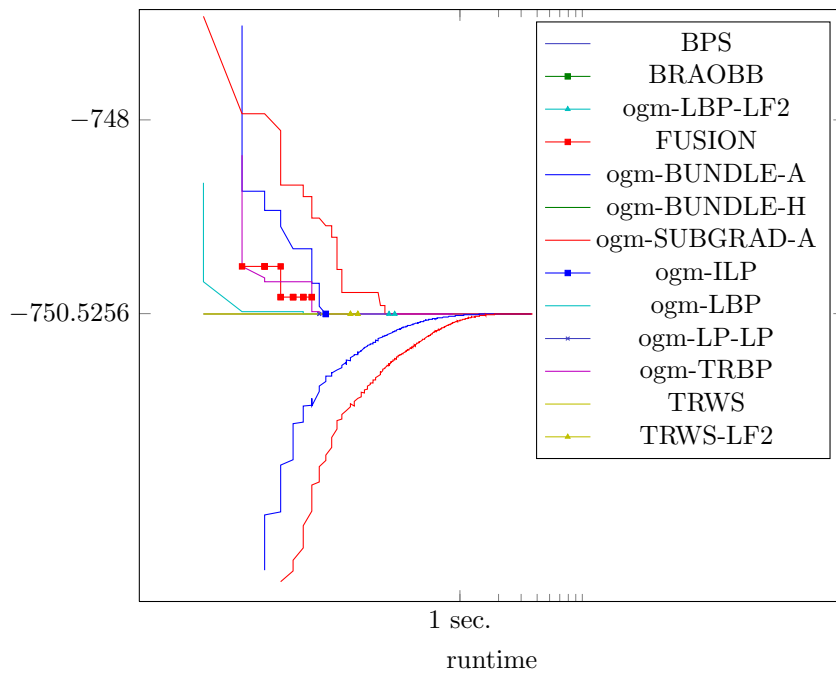


Figure 394: Runtime results for the instance 5000147 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

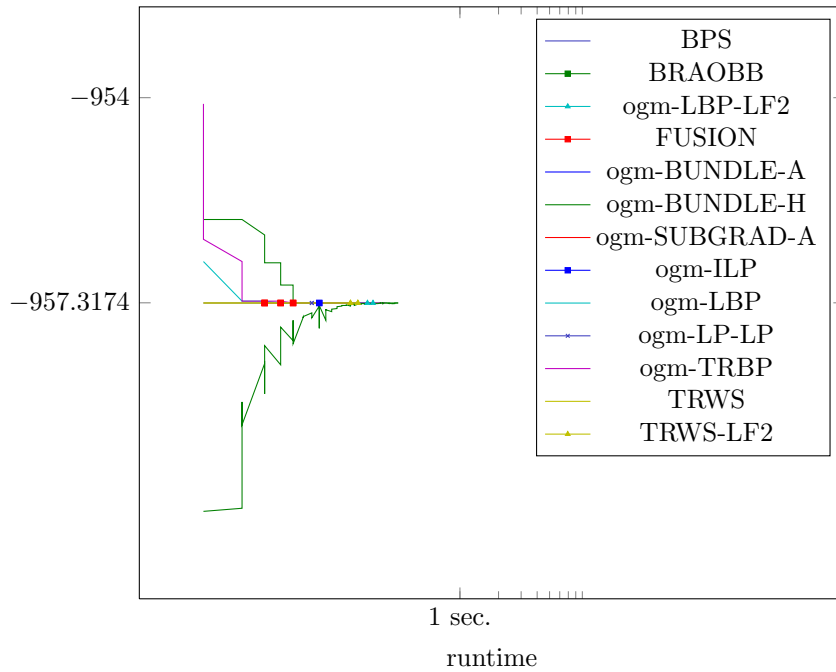


Figure 395: Runtime results for the instance 5000149 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

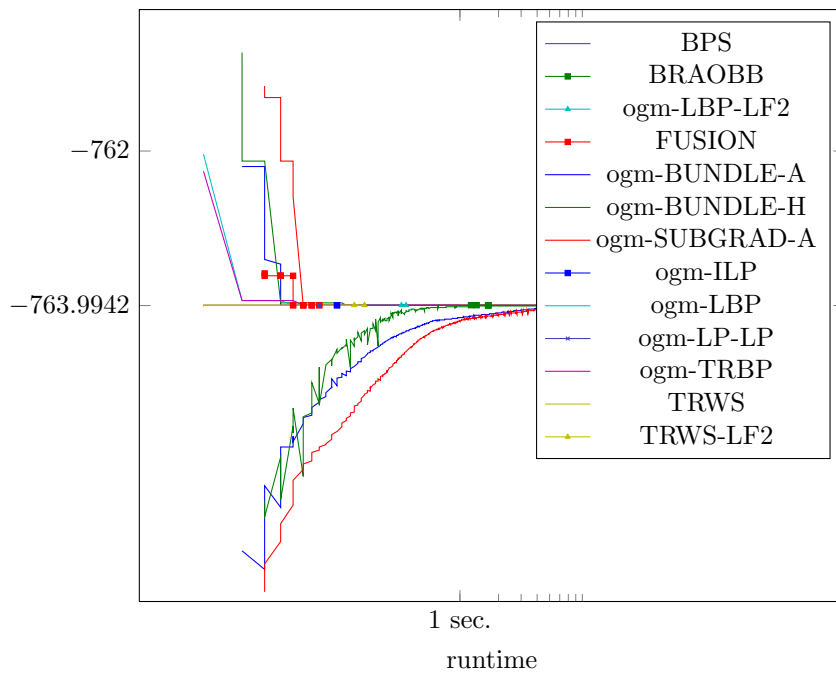


Figure 396: Runtime results for the instance 5000150 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

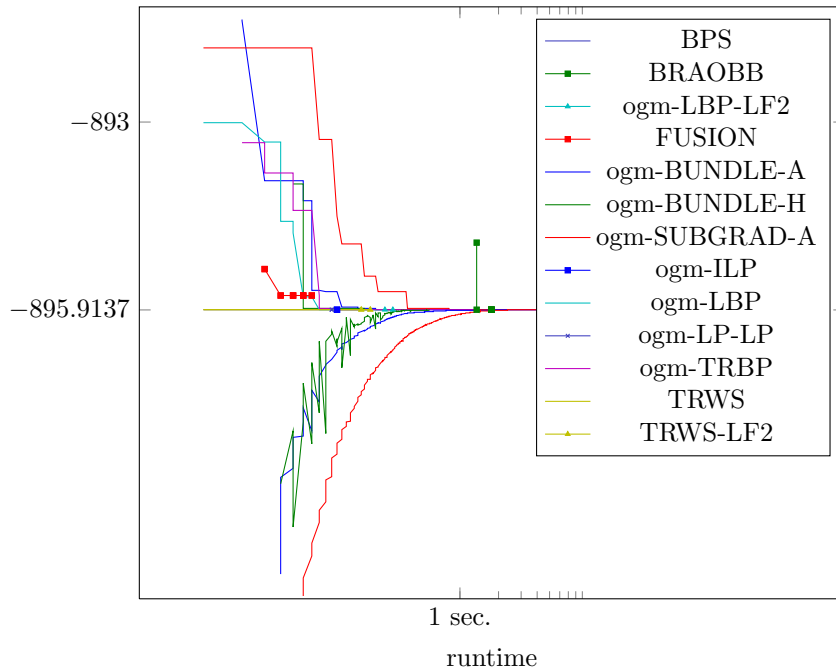


Figure 397: Runtime results for the instance 5000162 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

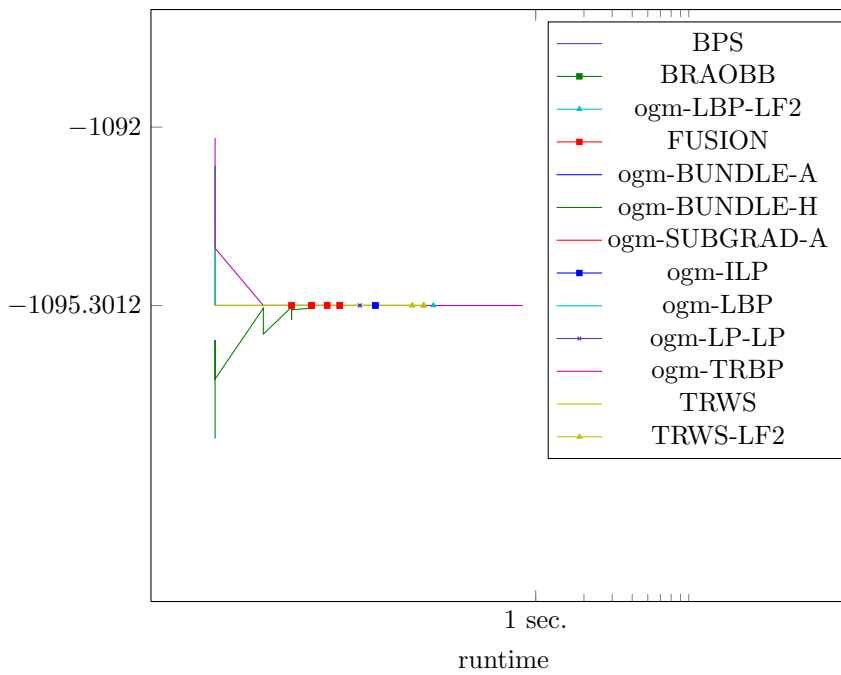


Figure 398: Runtime results for the instance 5000163 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

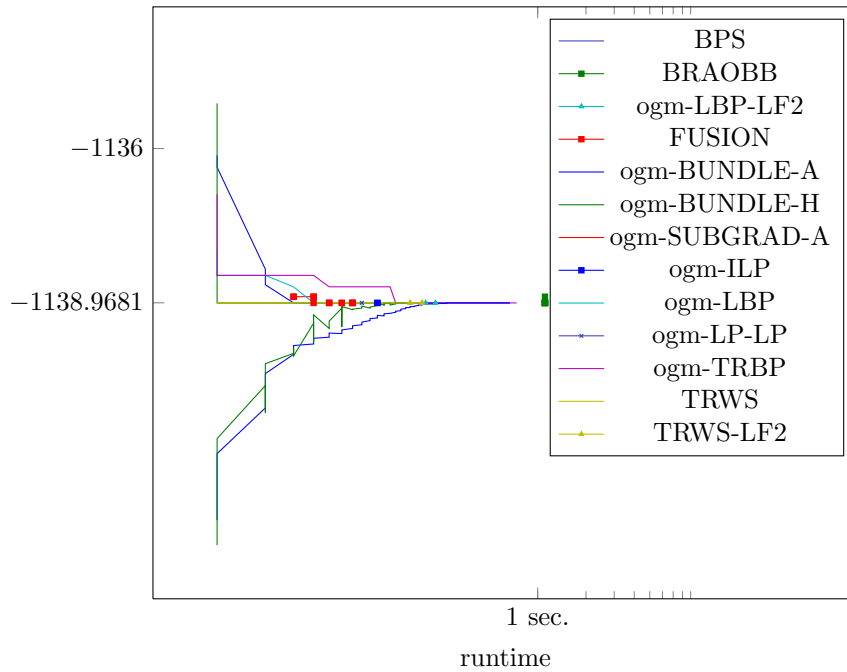


Figure 399: Runtime results for the instance 5000164 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

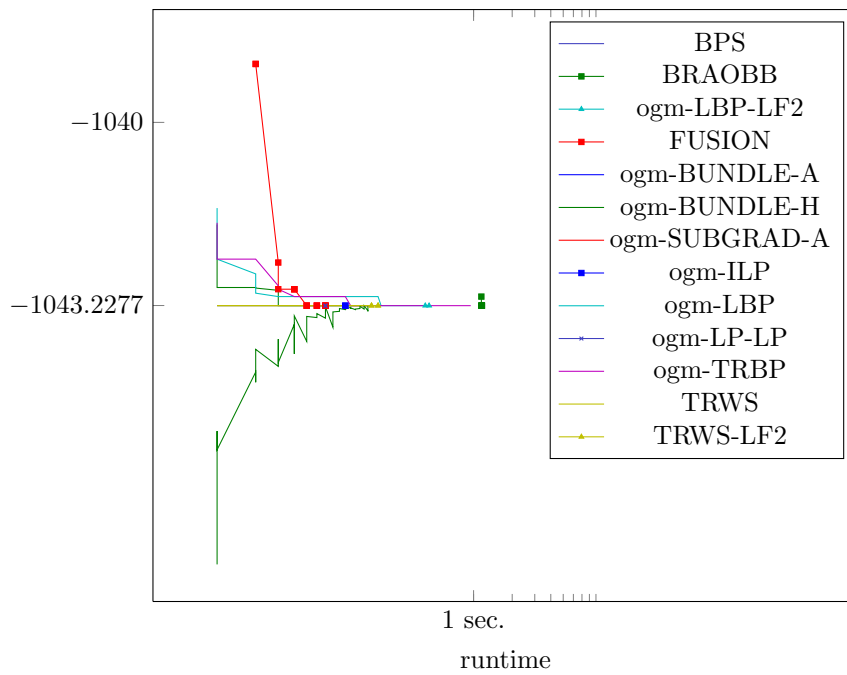


Figure 400: Runtime results for the instance 5000165 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

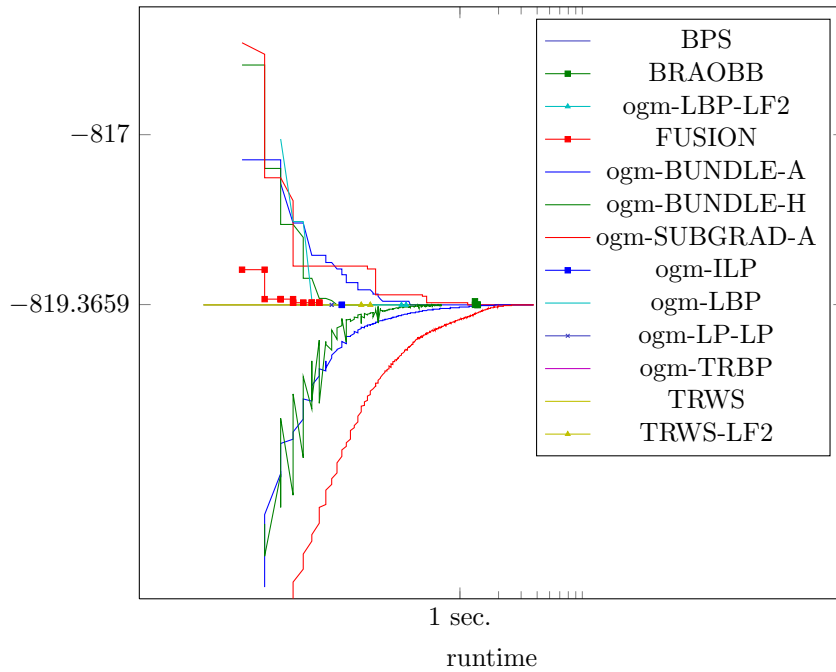


Figure 401: Runtime results for the instance 5000166 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

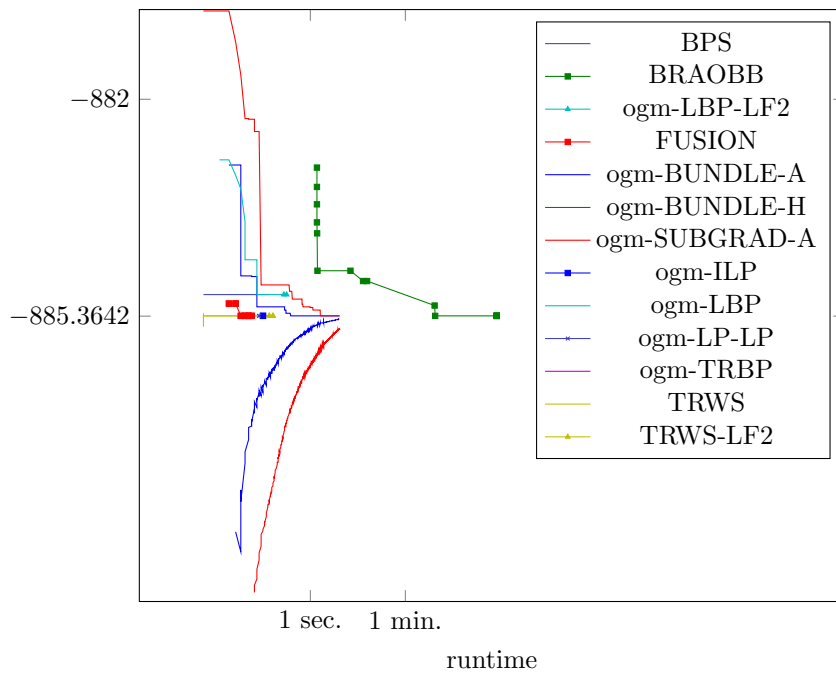


Figure 402: Runtime results for the instance 5000168 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

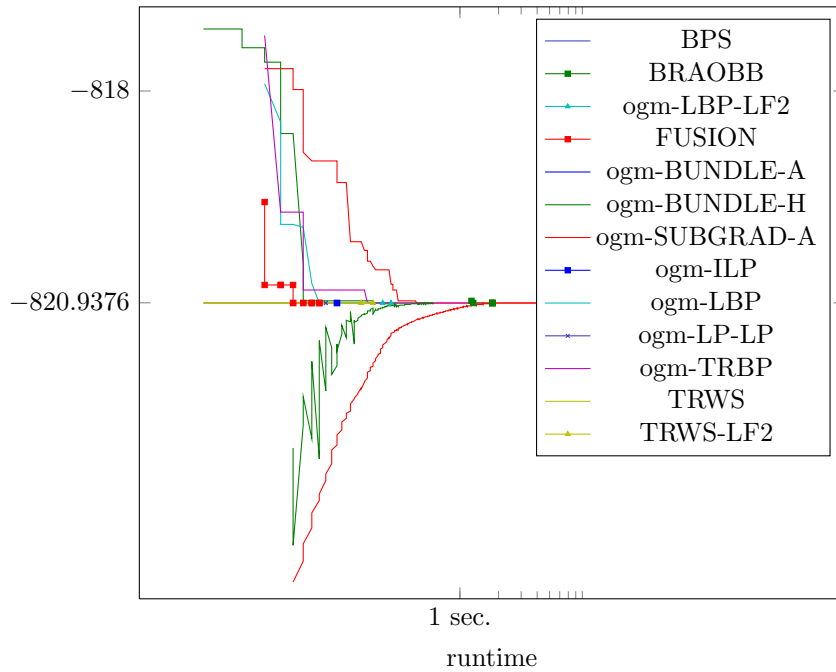


Figure 403: Runtime results for the instance 5000172 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

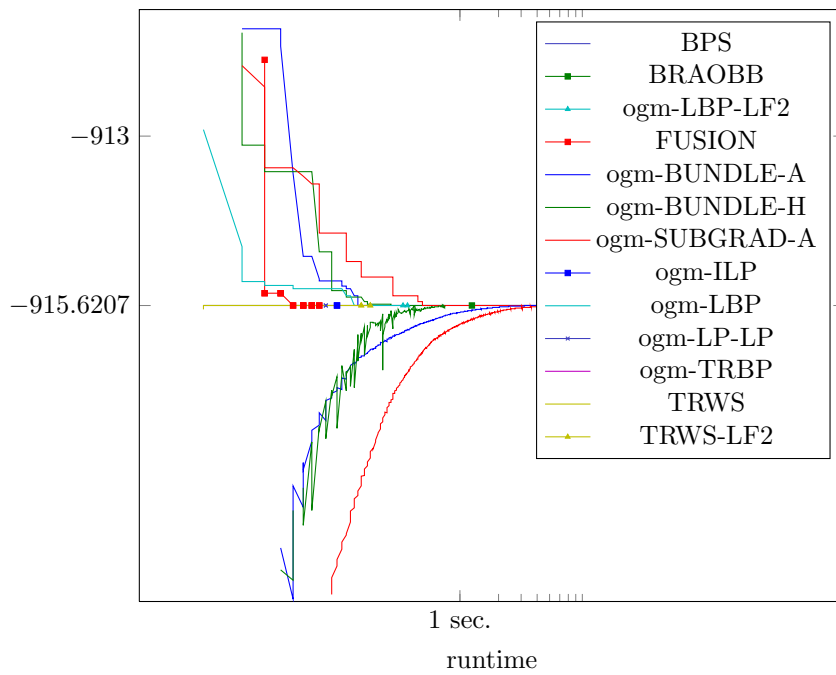


Figure 404: Runtime results for the instance 5000173 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

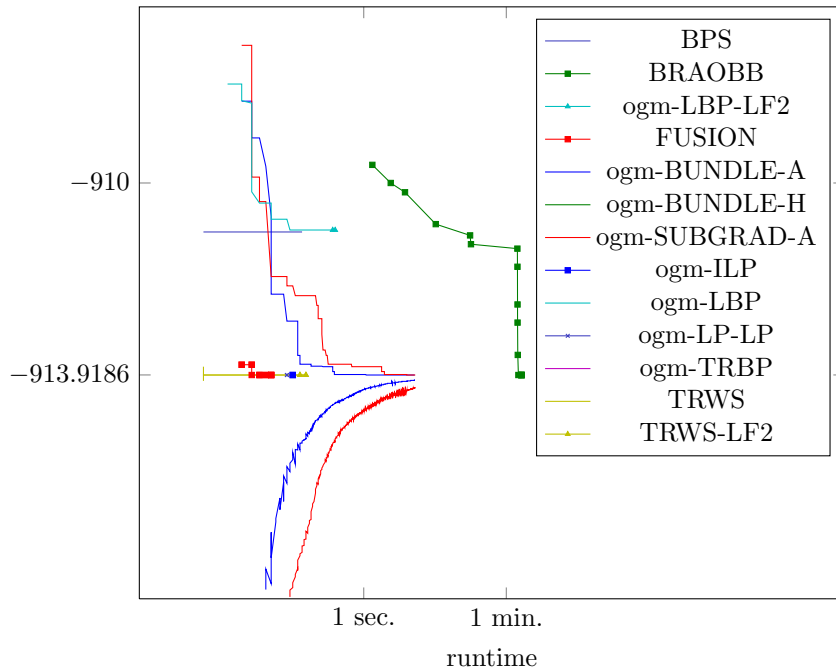


Figure 405: Runtime results for the instance 5000174 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

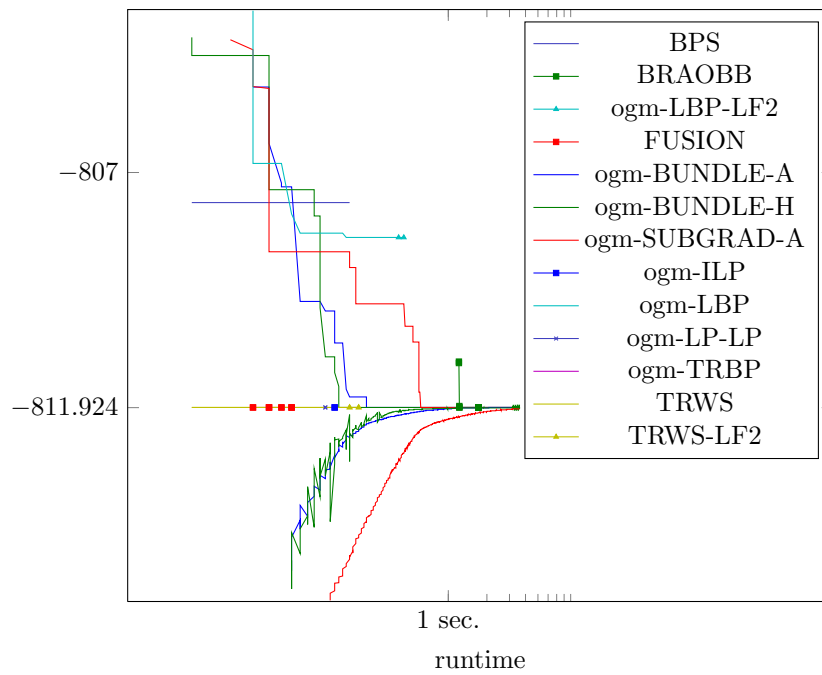


Figure 406: Runtime results for the instance 5000175 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

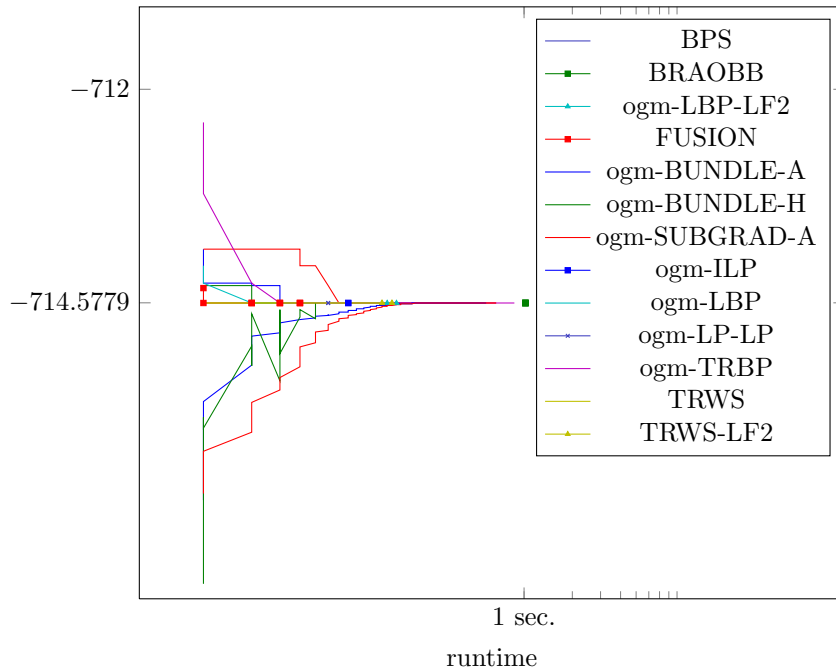


Figure 407: Runtime results for the instance 5000176 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

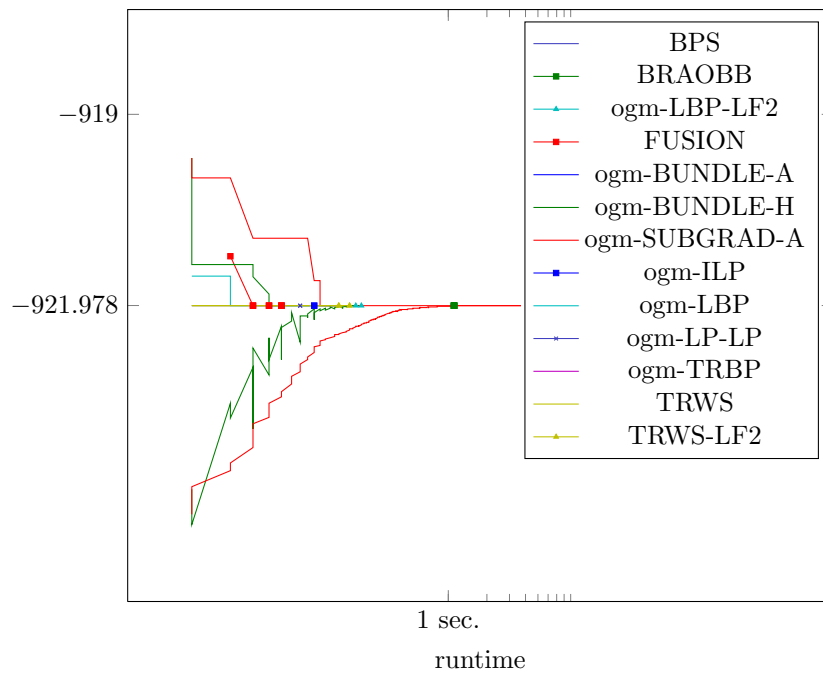


Figure 408: Runtime results for the instance 5000180 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

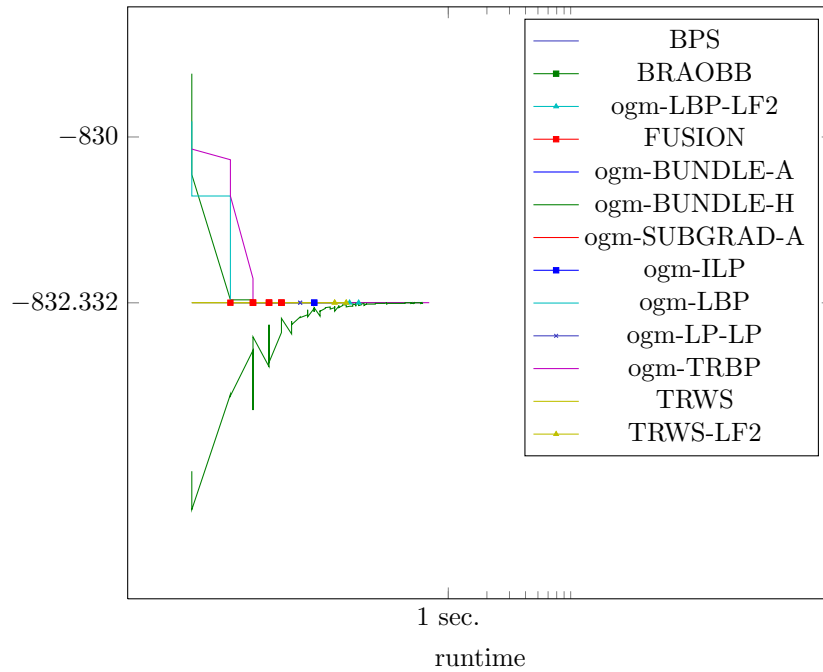


Figure 409: Runtime results for the instance 5000181 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

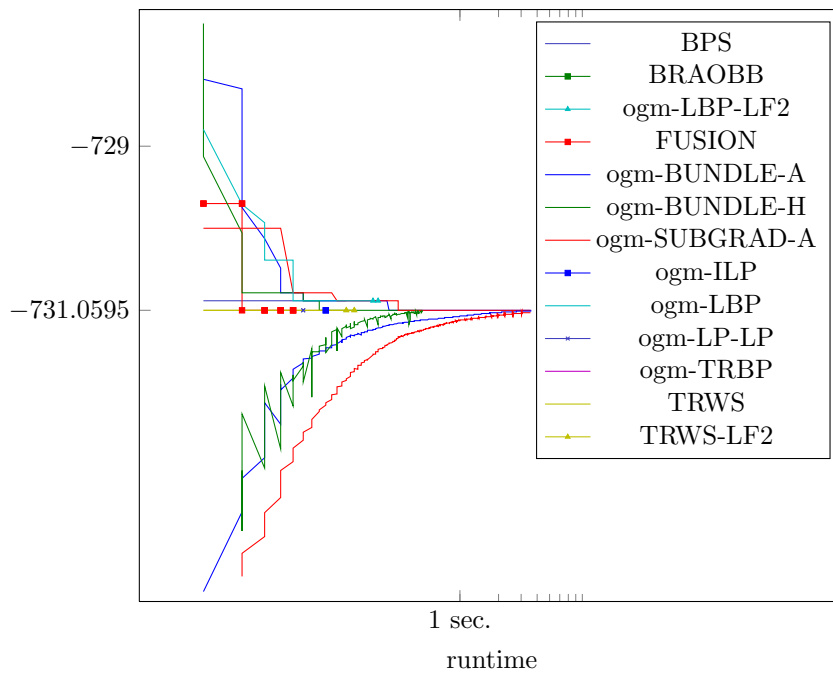


Figure 410: Runtime results for the instance 5000182 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

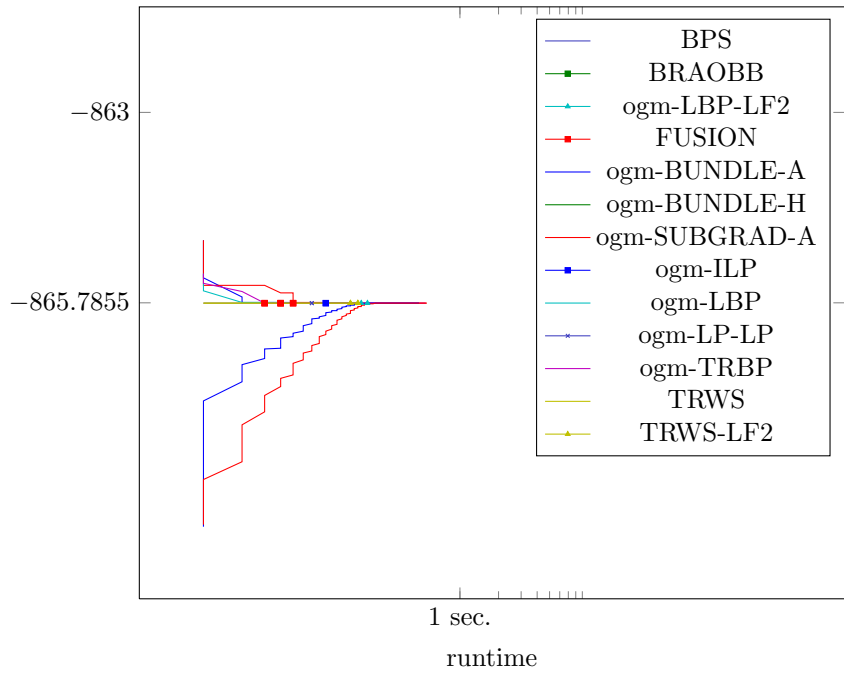


Figure 411: Runtime results for the instance 5000183 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

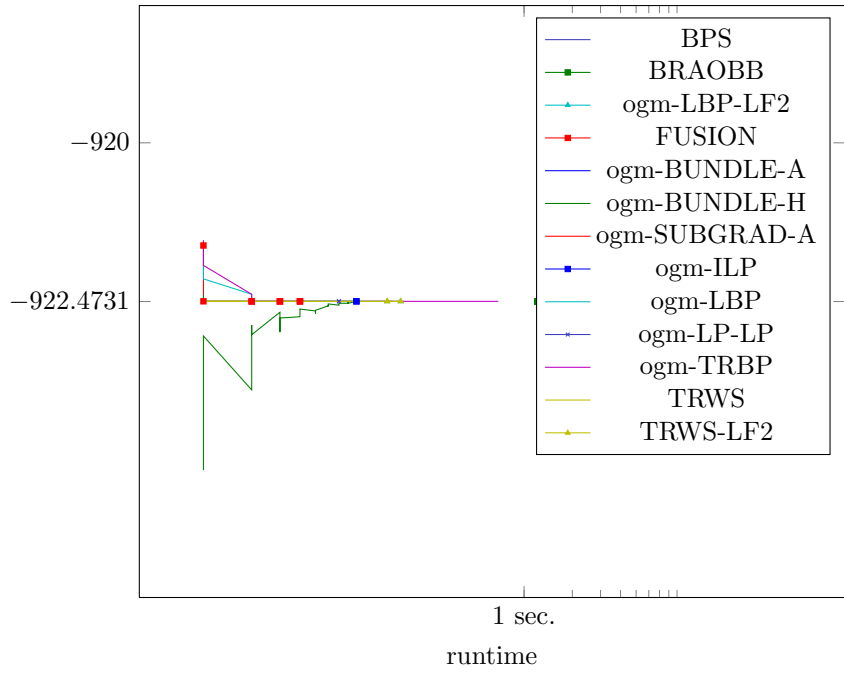


Figure 412: Runtime results for the instance 5000184 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

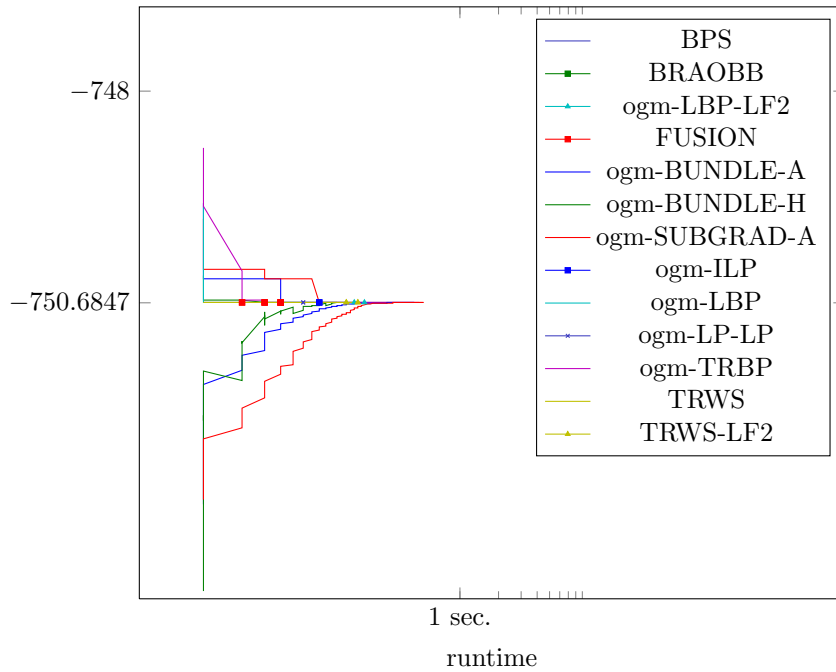


Figure 413: Runtime results for the instance 5000188 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

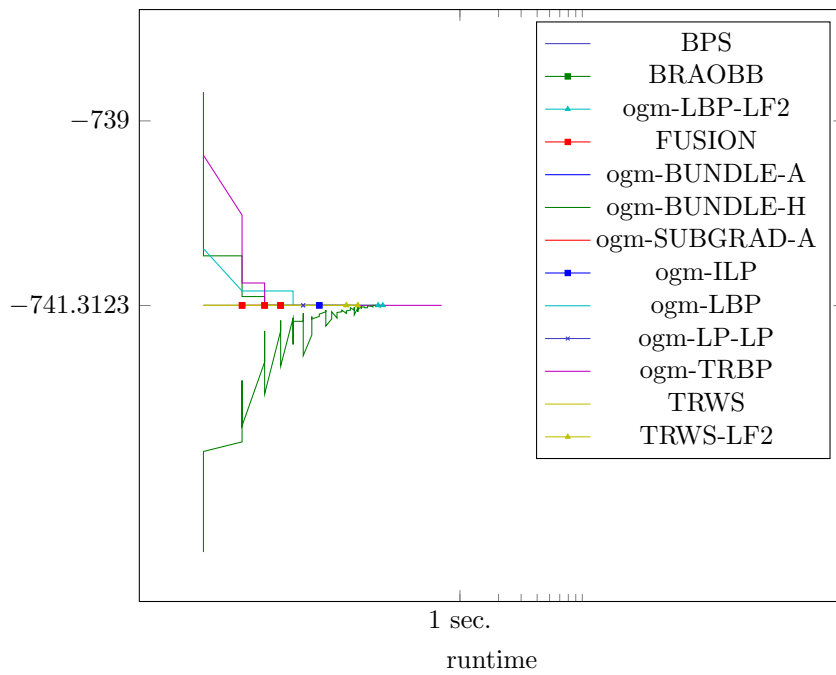


Figure 414: Runtime results for the instance 5000190 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

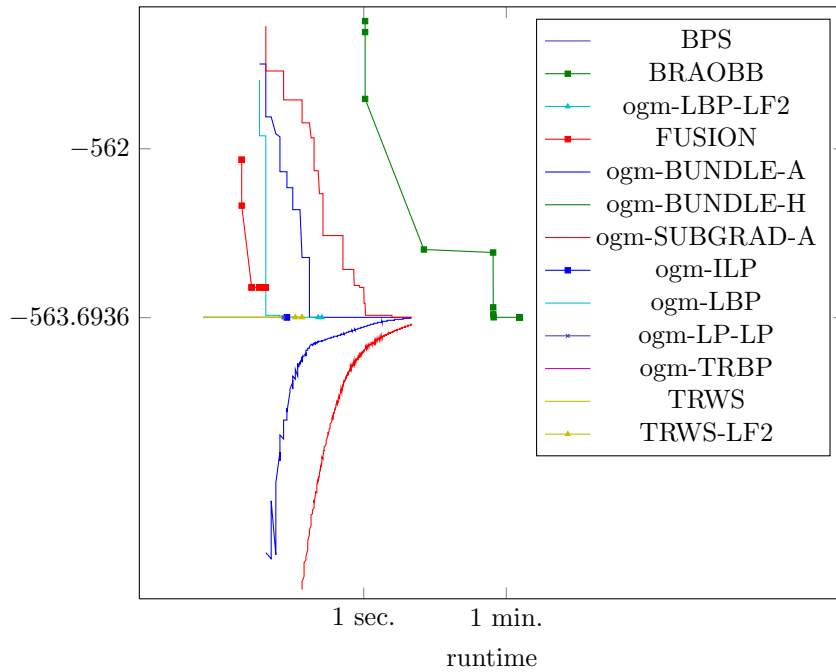


Figure 415: Runtime results for the instance 5000191 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

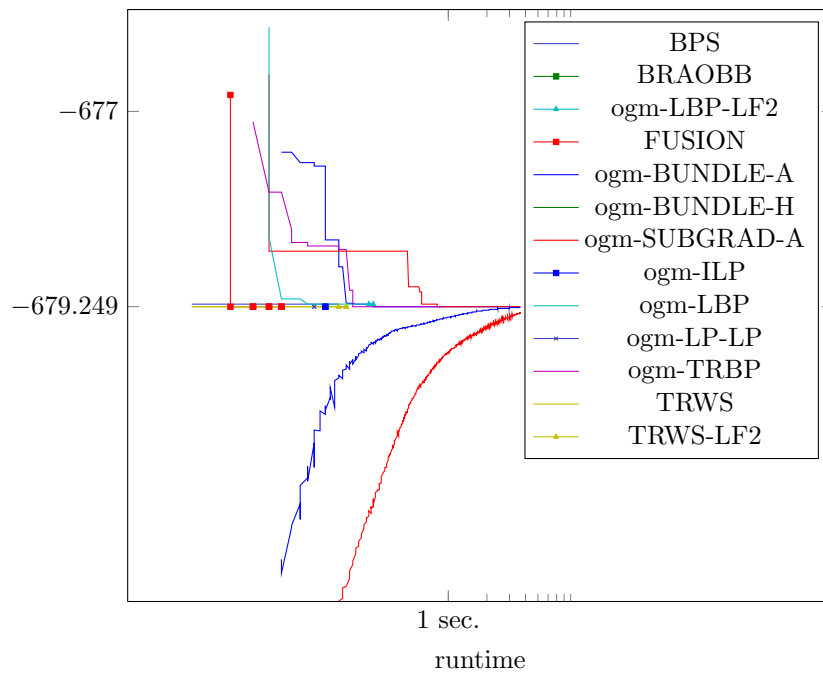


Figure 416: Runtime results for the instance 5000192 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

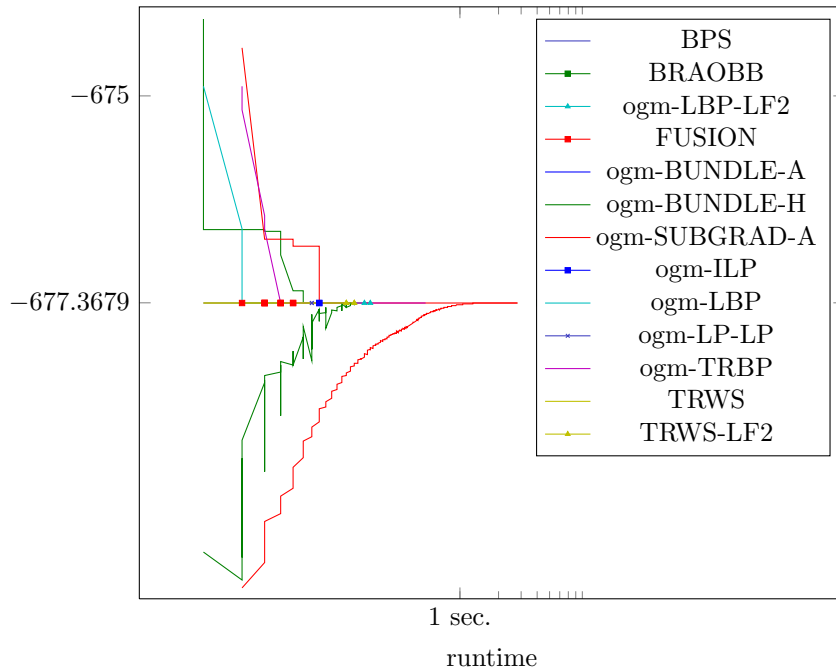


Figure 417: Runtime results for the instance 5000194 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

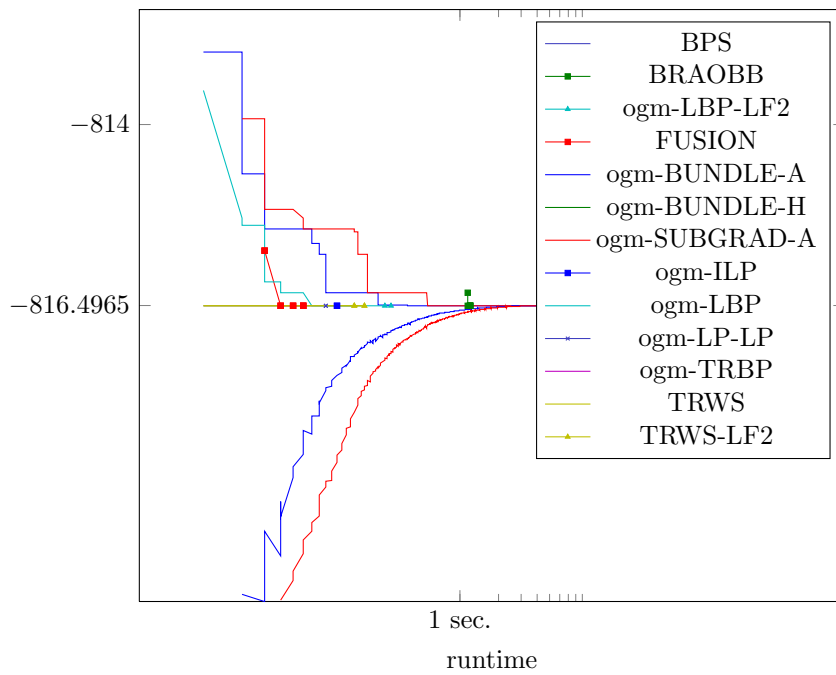


Figure 418: Runtime results for the instance 5000195 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

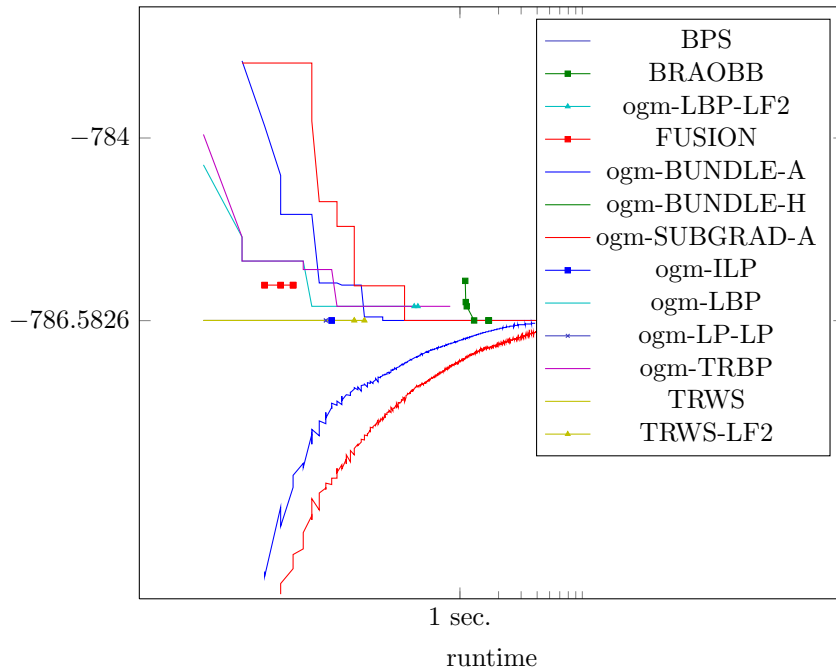


Figure 419: Runtime results for the instance 5000196 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

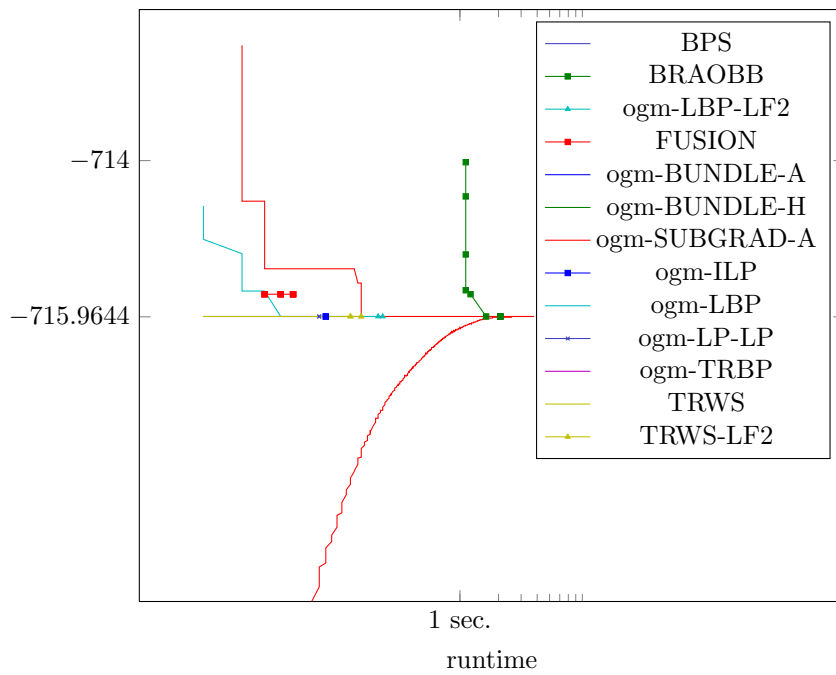


Figure 420: Runtime results for the instance 5000197 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

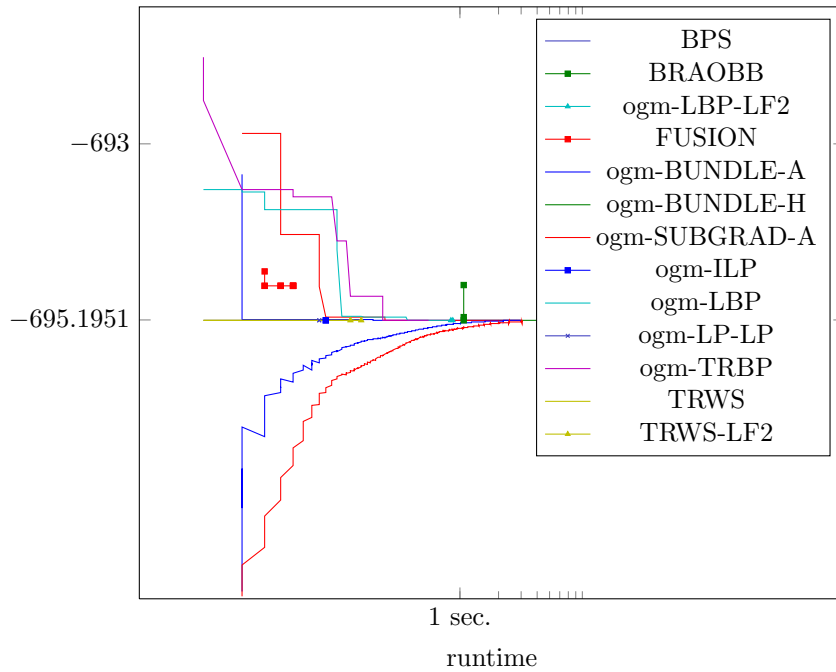


Figure 421: Runtime results for the instance 5000198 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

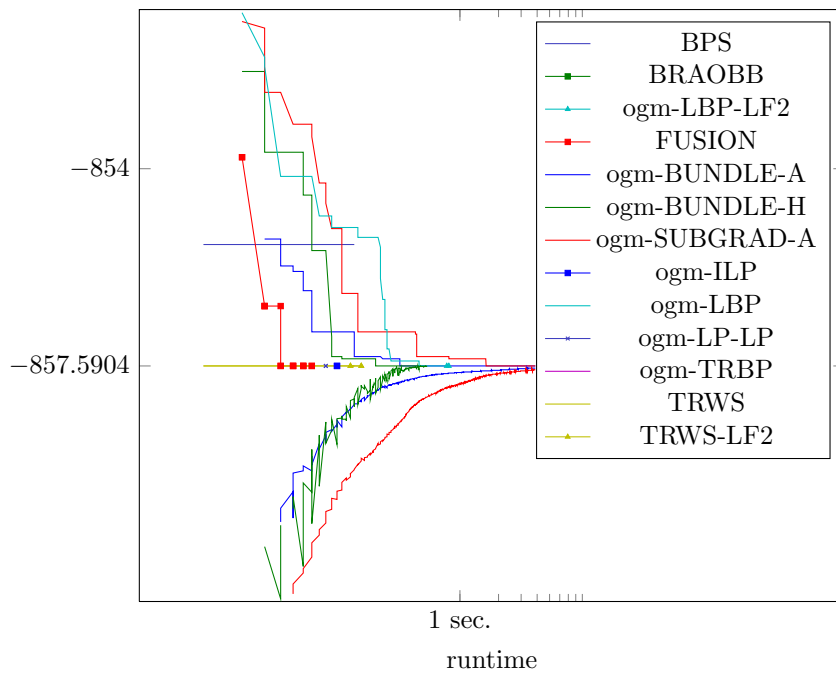


Figure 422: Runtime results for the instance 5000199 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

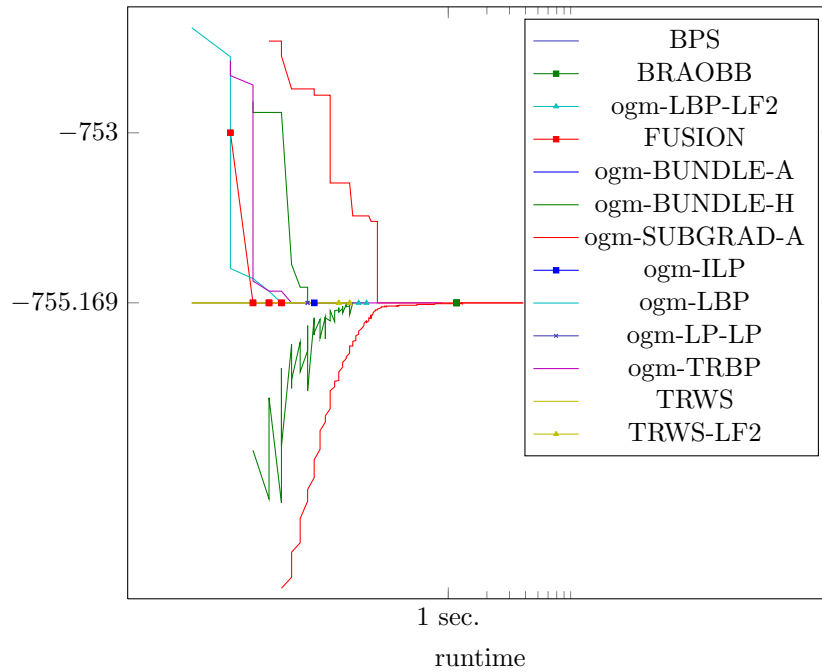


Figure 423: Runtime results for the instance 5000200 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

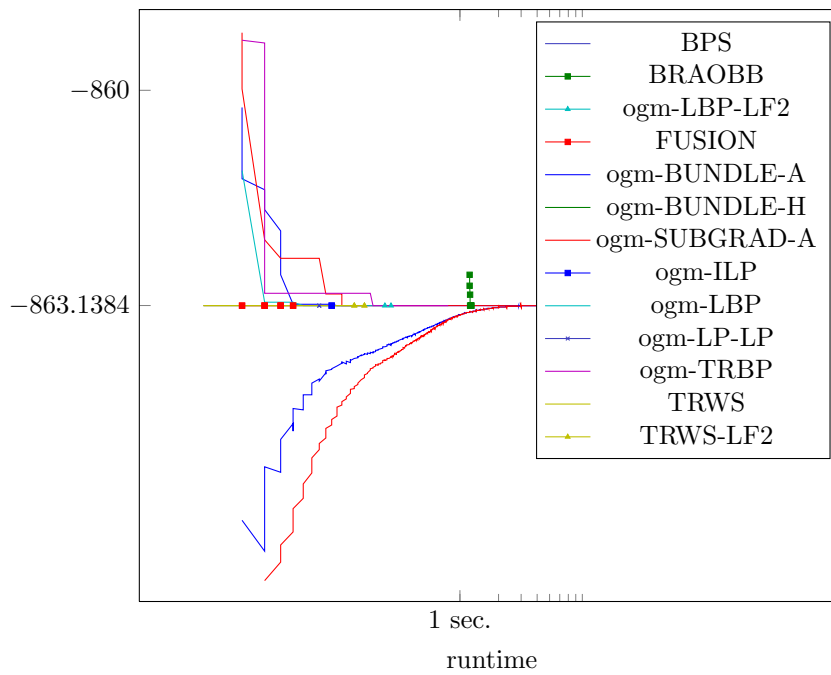


Figure 424: Runtime results for the instance 5000201 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

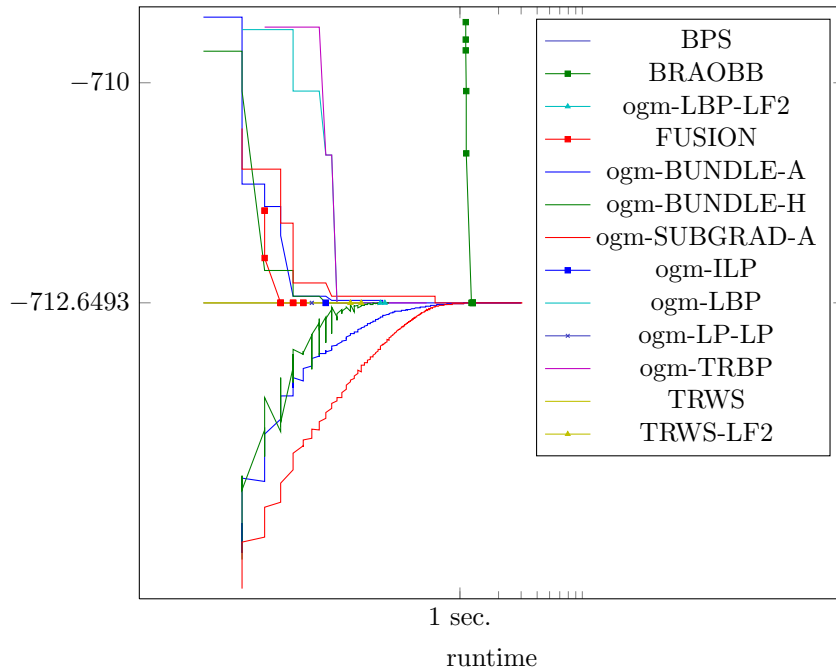


Figure 425: Runtime results for the instance 5000202 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

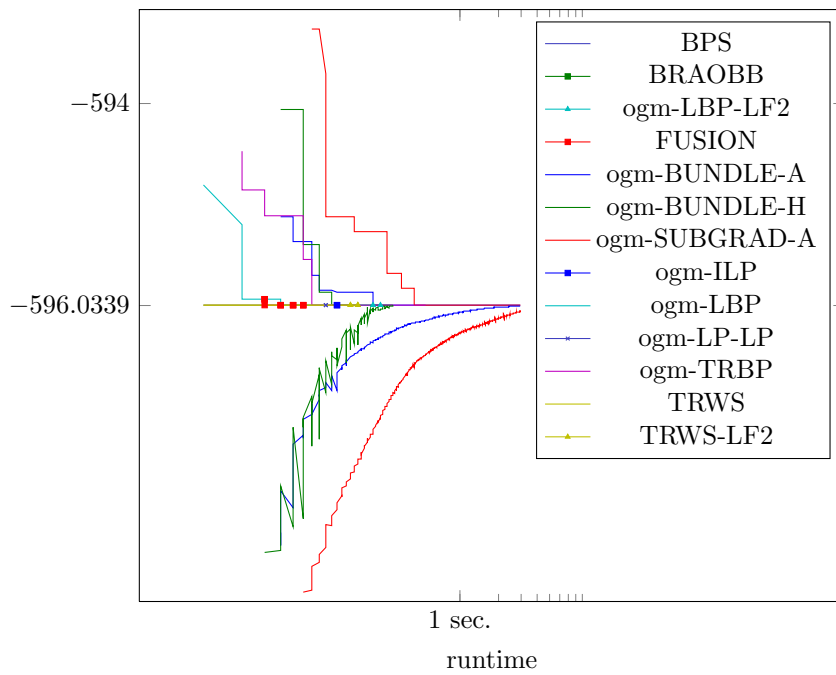


Figure 426: Runtime results for the instance 5000203 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

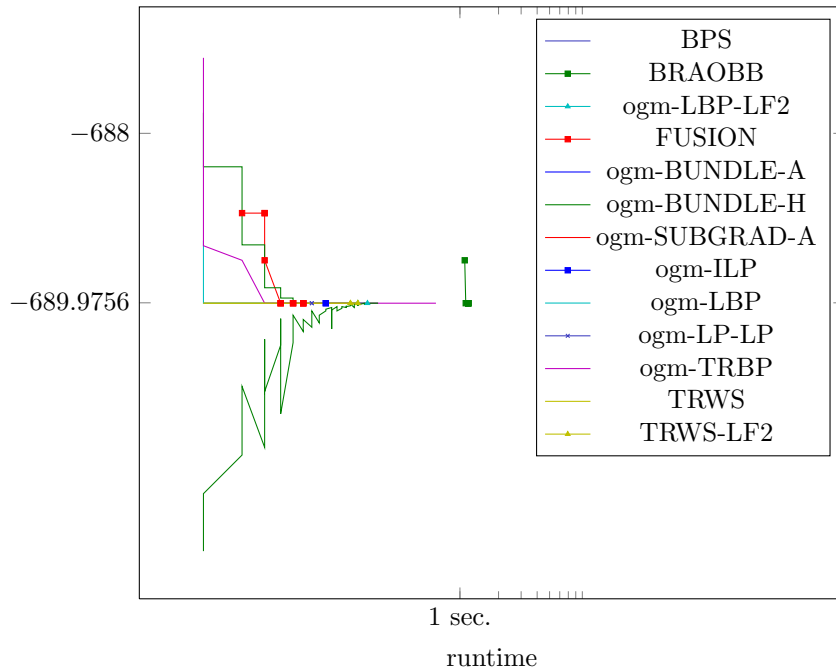


Figure 427: Runtime results for the instance 5000204 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

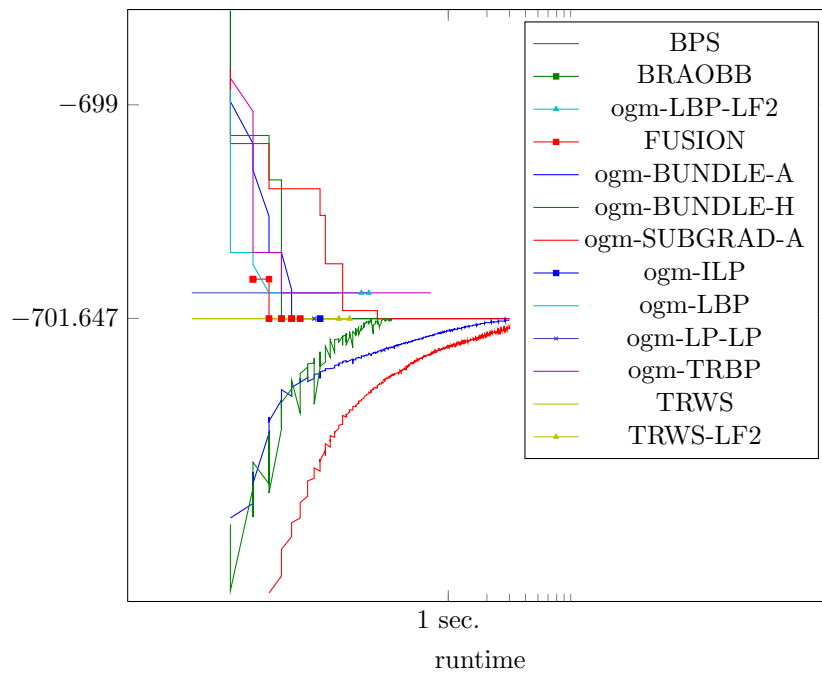


Figure 428: Runtime results for the instance 5000205 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

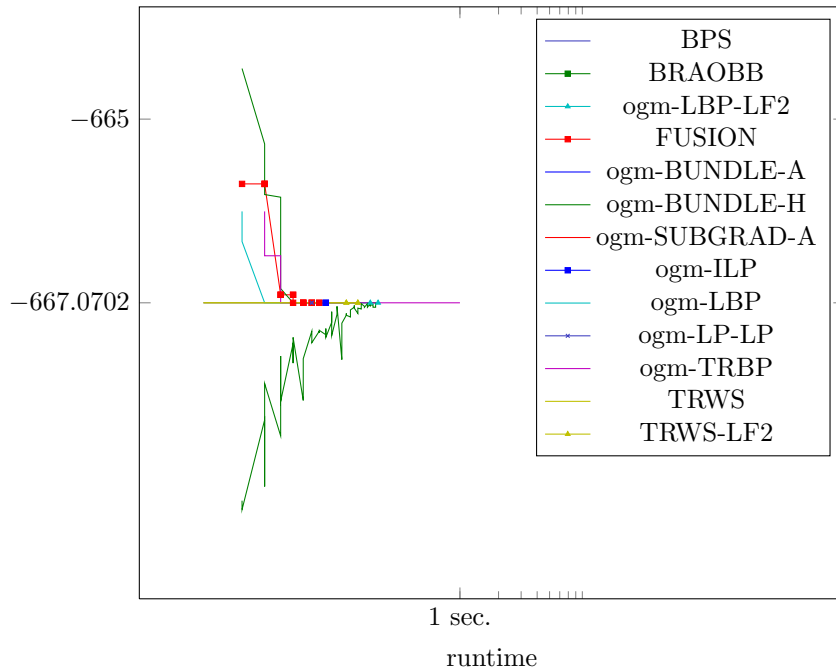


Figure 429: Runtime results for the instance 5000226 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

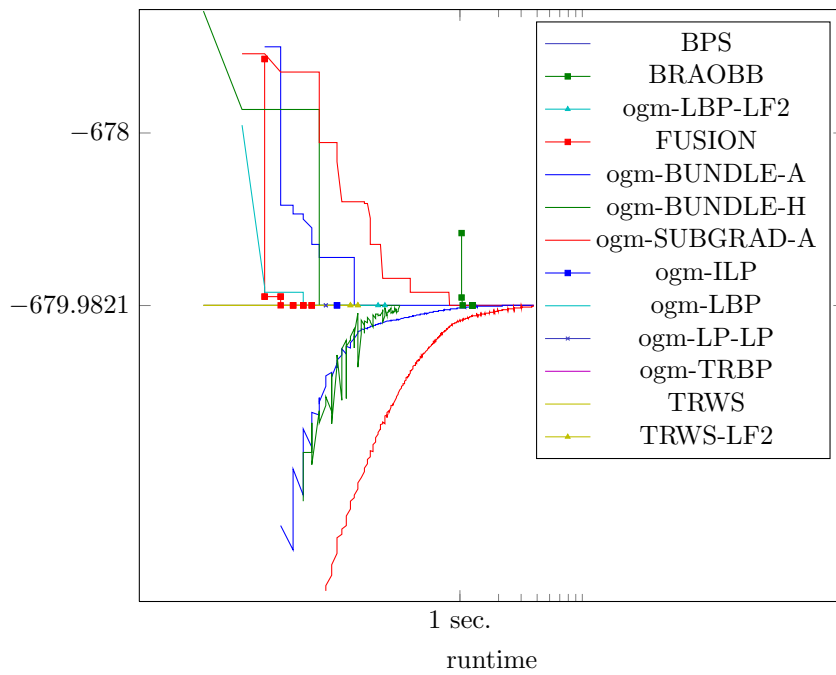


Figure 430: Runtime results for the instance 5000234 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

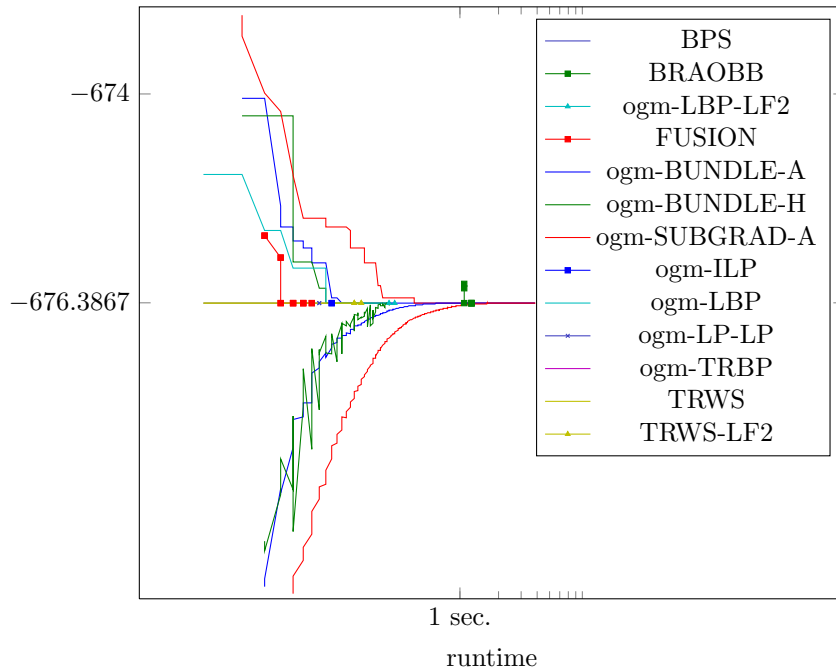


Figure 431: Runtime results for the instance 5000257 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

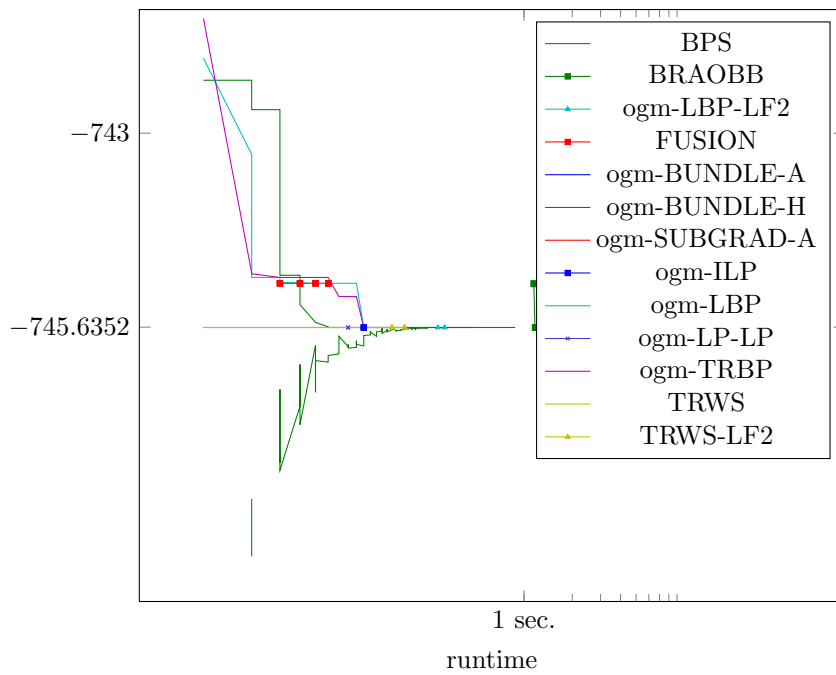


Figure 432: Runtime results for the instance 5000264 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

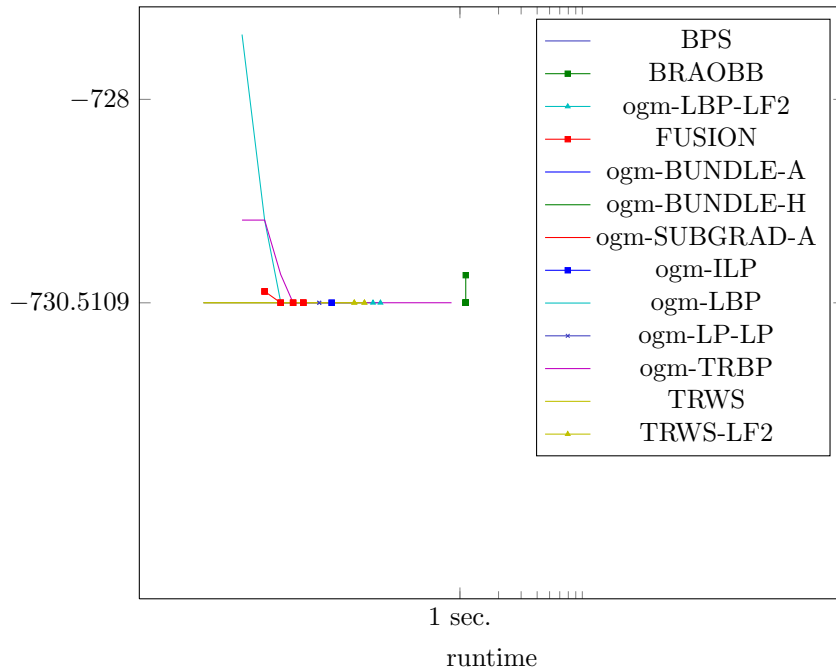


Figure 433: Runtime results for the instance 5000265 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

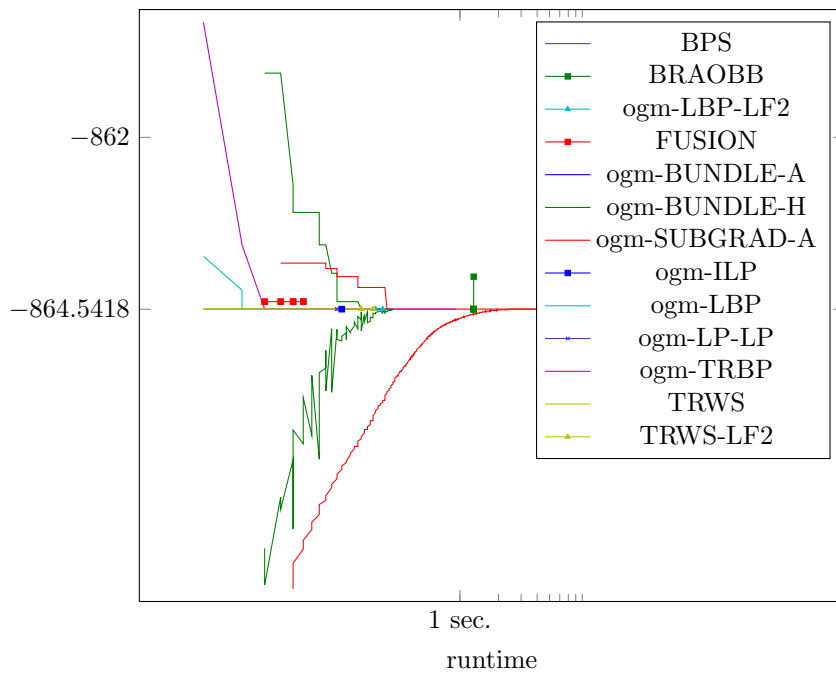


Figure 434: Runtime results for the instance 6000000 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

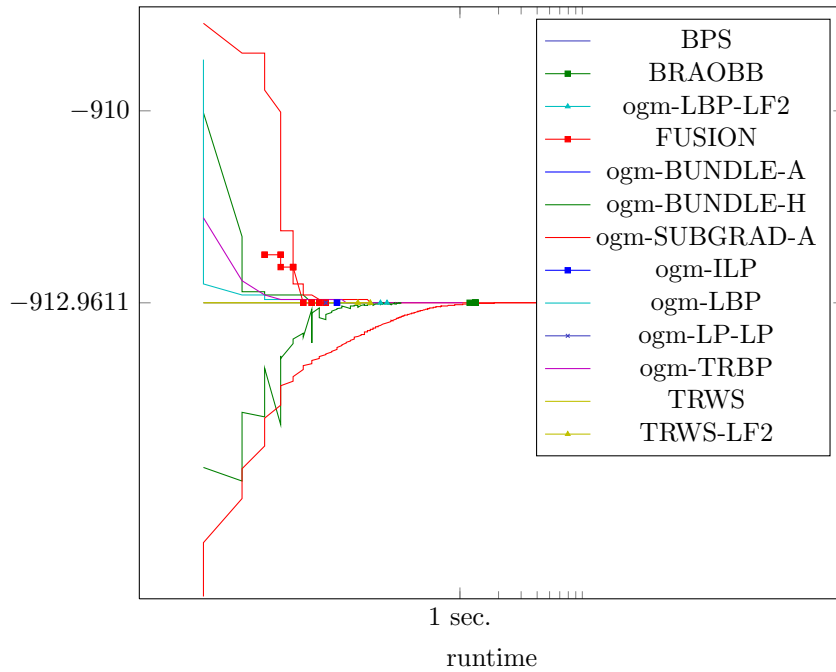


Figure 435: Runtime results for the instance 6000001 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

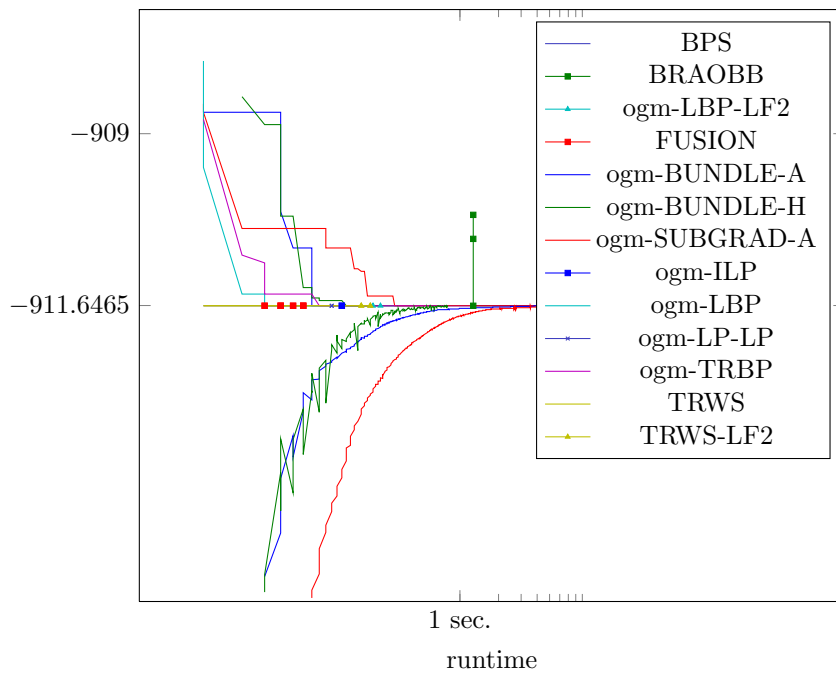


Figure 436: Runtime results for the instance 6000002 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

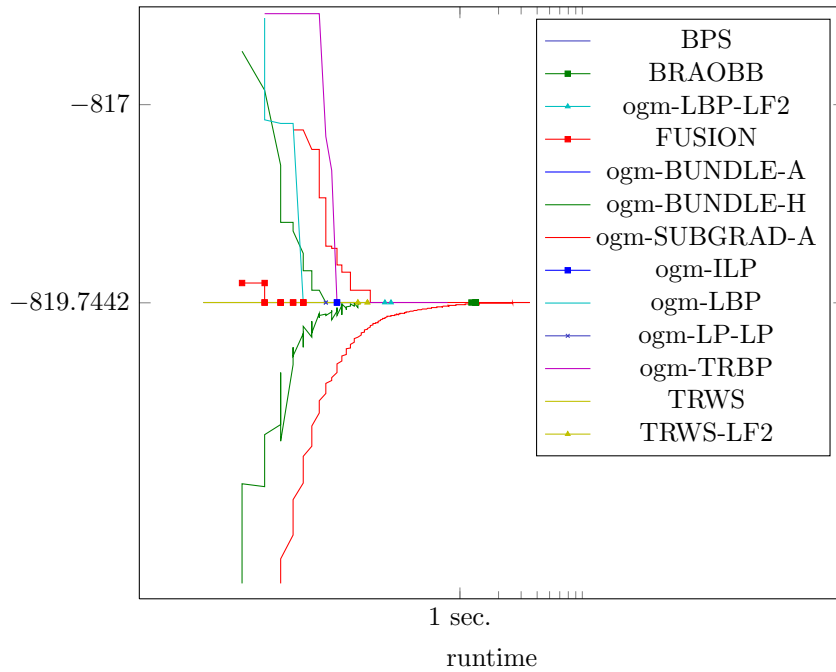


Figure 437: Runtime results for the instance 6000003 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

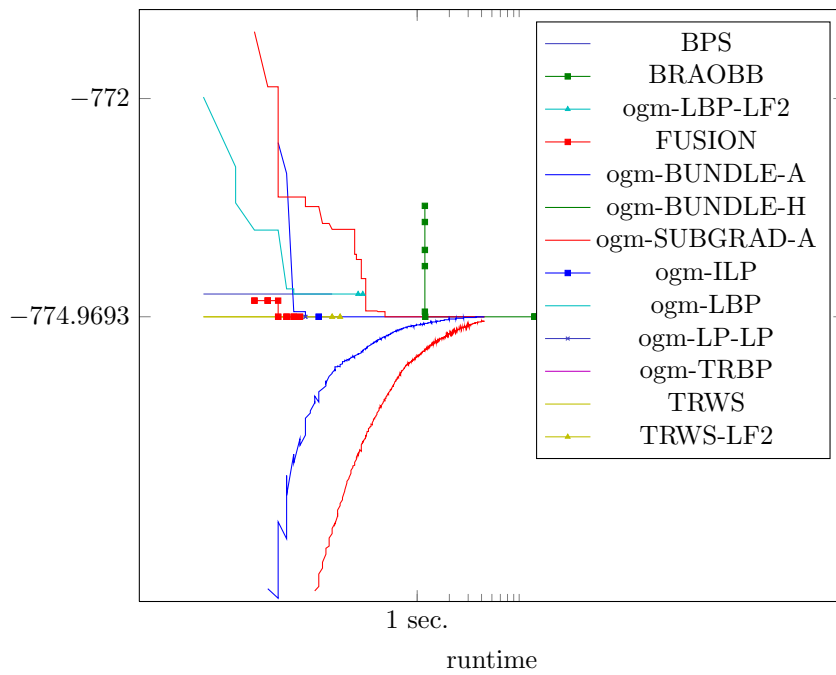


Figure 438: Runtime results for the instance 6000004 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

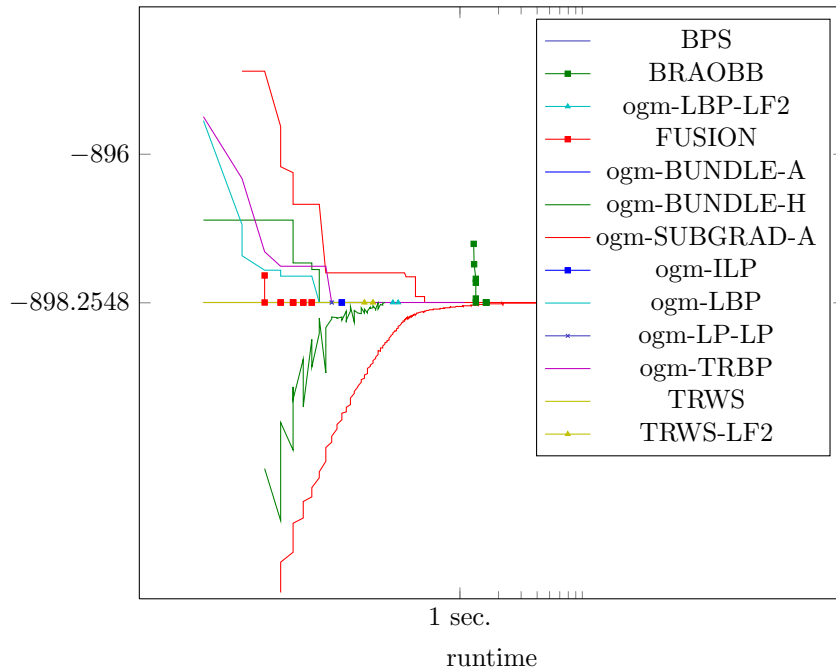


Figure 439: Runtime results for the instance 6000005 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

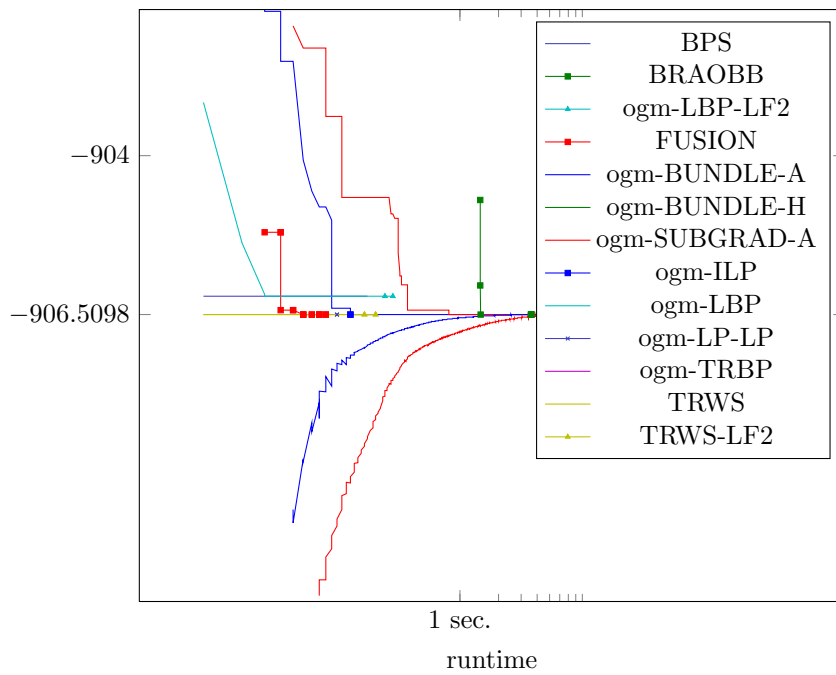


Figure 440: Runtime results for the instance 6000006 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

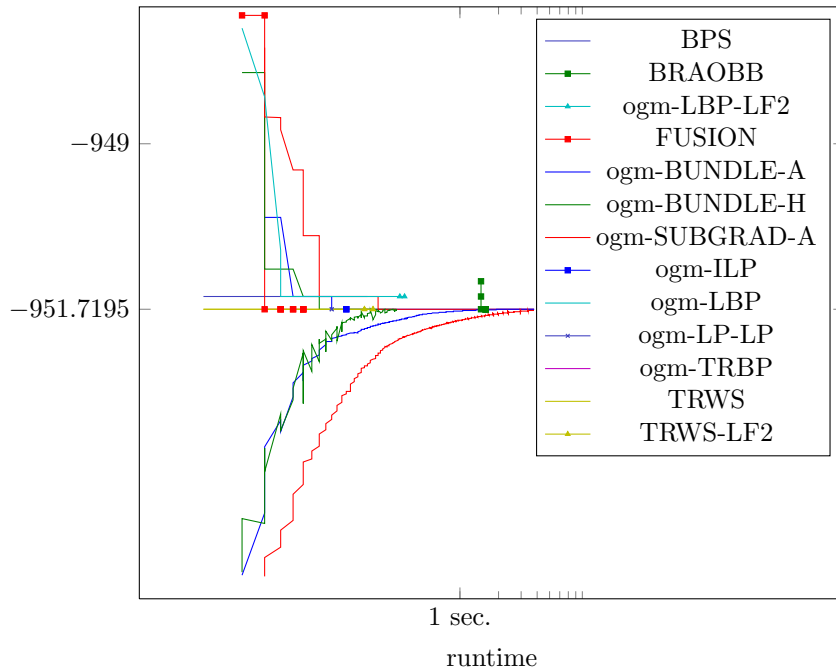


Figure 441: Runtime results for the instance 6000007 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

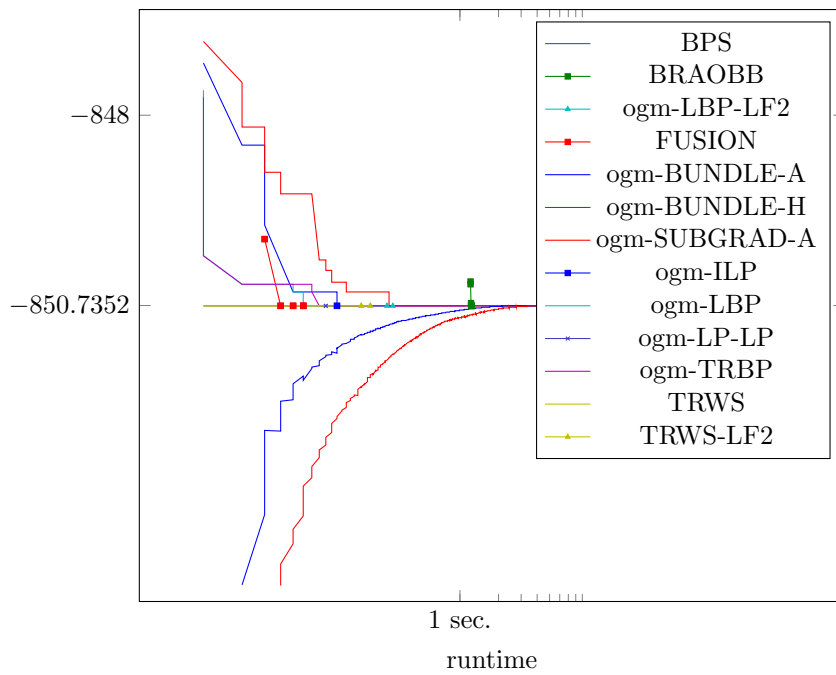


Figure 442: Runtime results for the instance 6000008 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

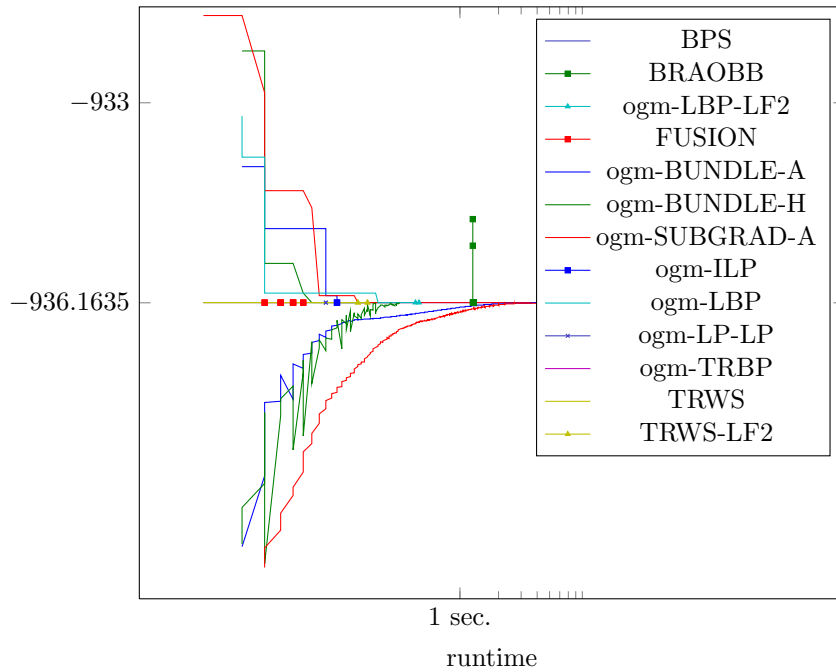


Figure 443: Runtime results for the instance 6000009 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

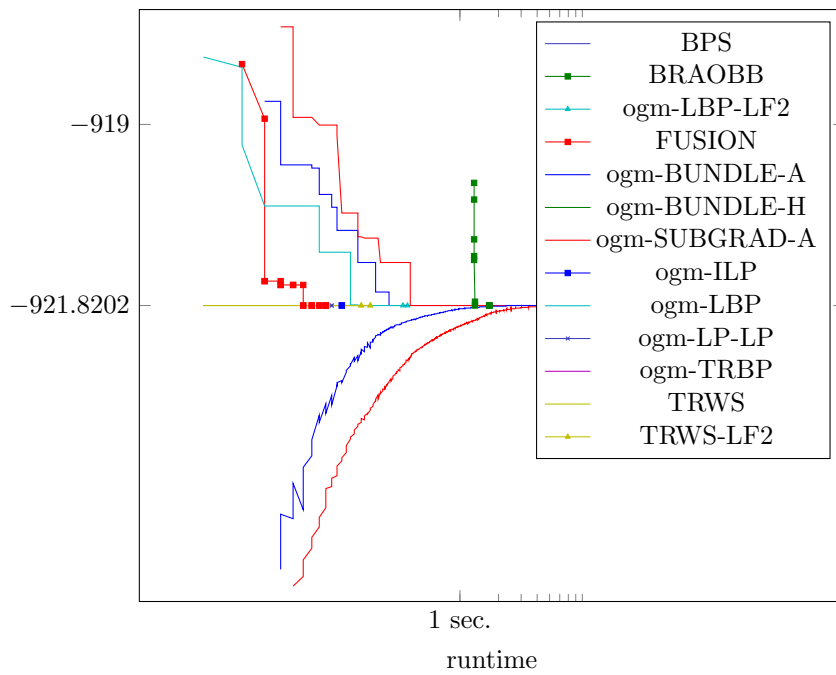


Figure 444: Runtime results for the instance 6000010 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

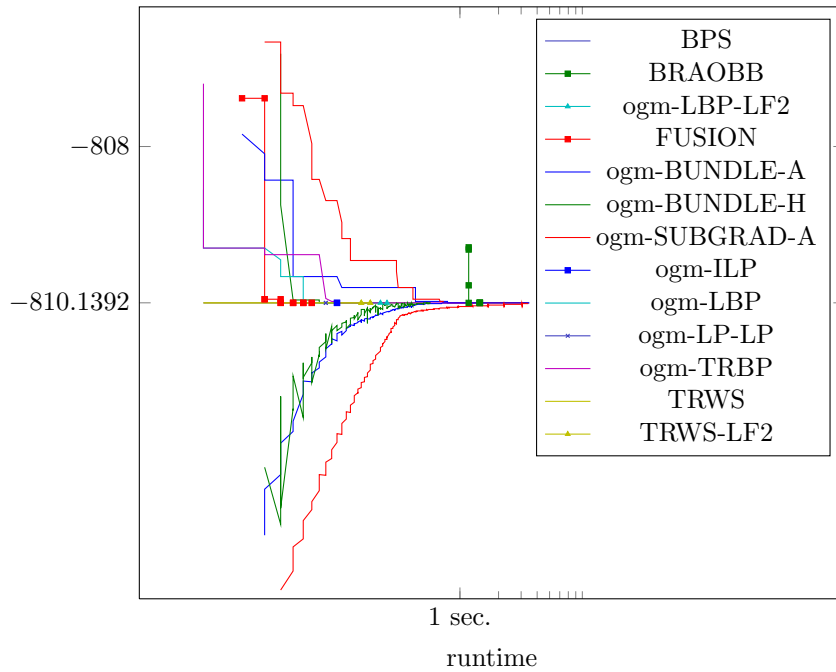


Figure 445: Runtime results for the instance 6000011 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

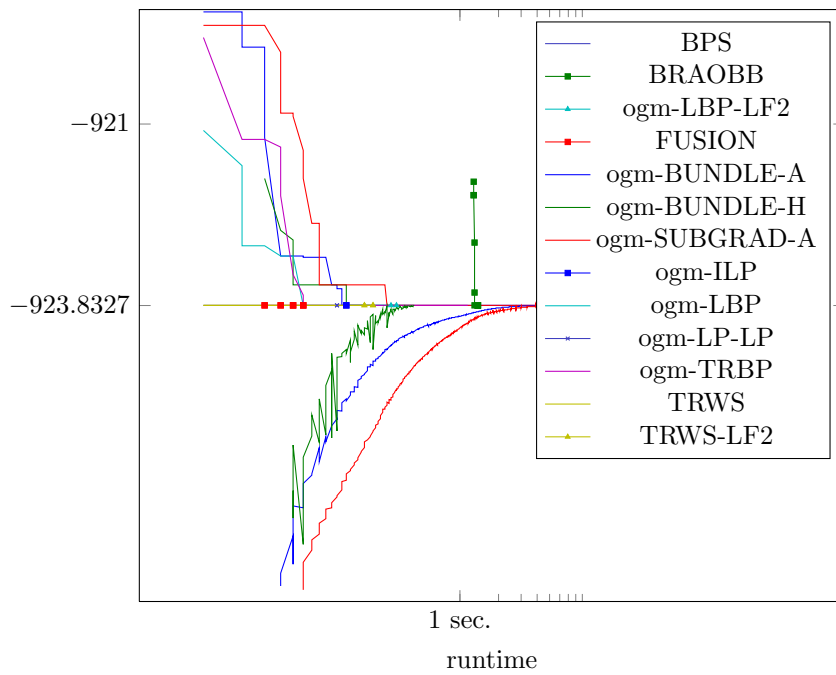


Figure 446: Runtime results for the instance 6000012 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

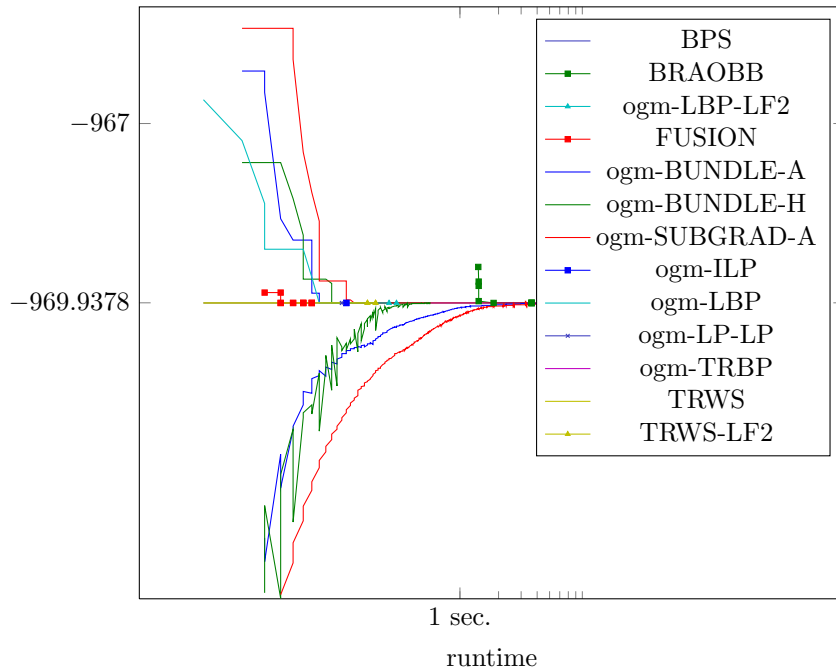


Figure 447: Runtime results for the instance 6000013 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

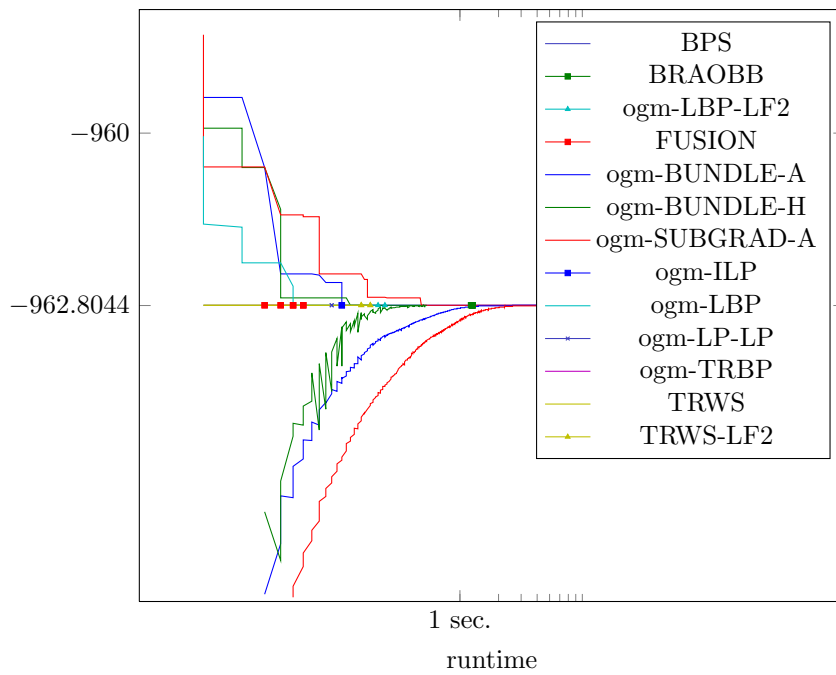


Figure 448: Runtime results for the instance 6000014 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

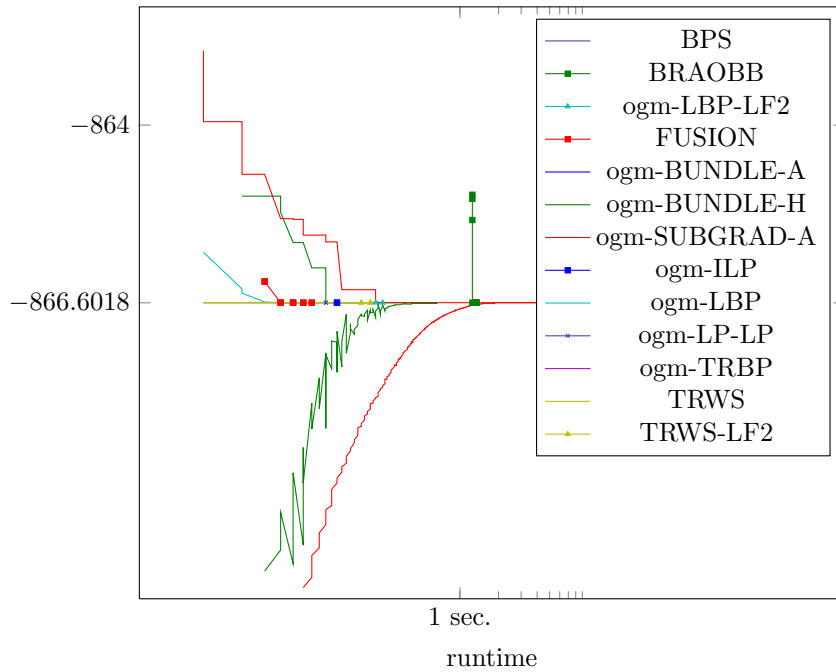


Figure 449: Runtime results for the instance 6000015 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

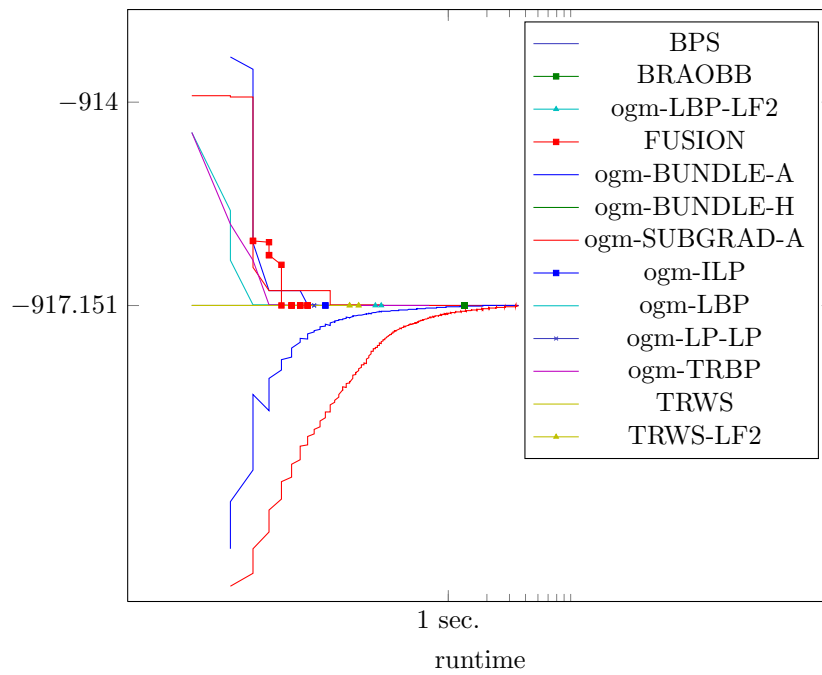


Figure 450: Runtime results for the instance 6000016 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

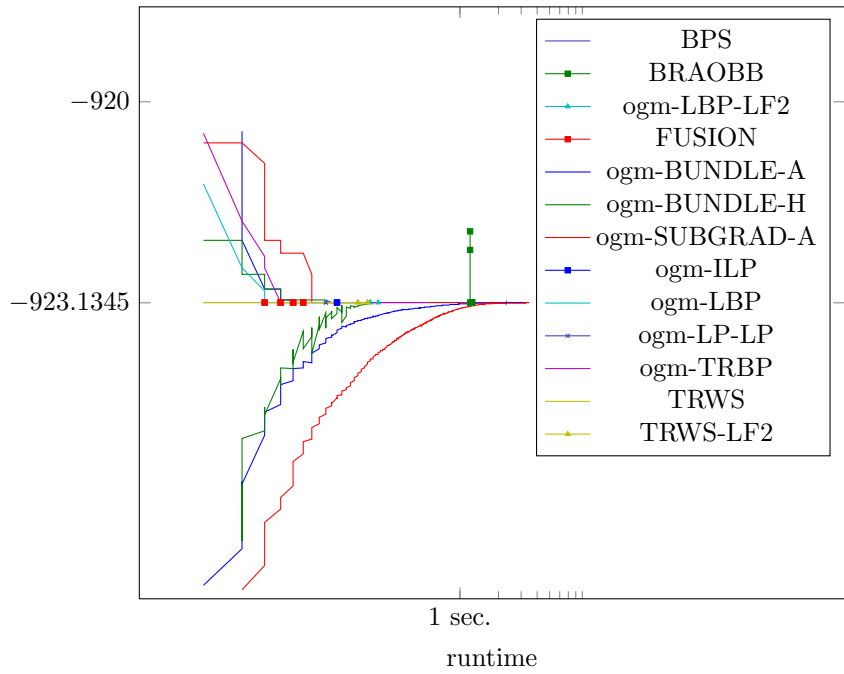


Figure 451: Runtime results for the instance 6000017 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

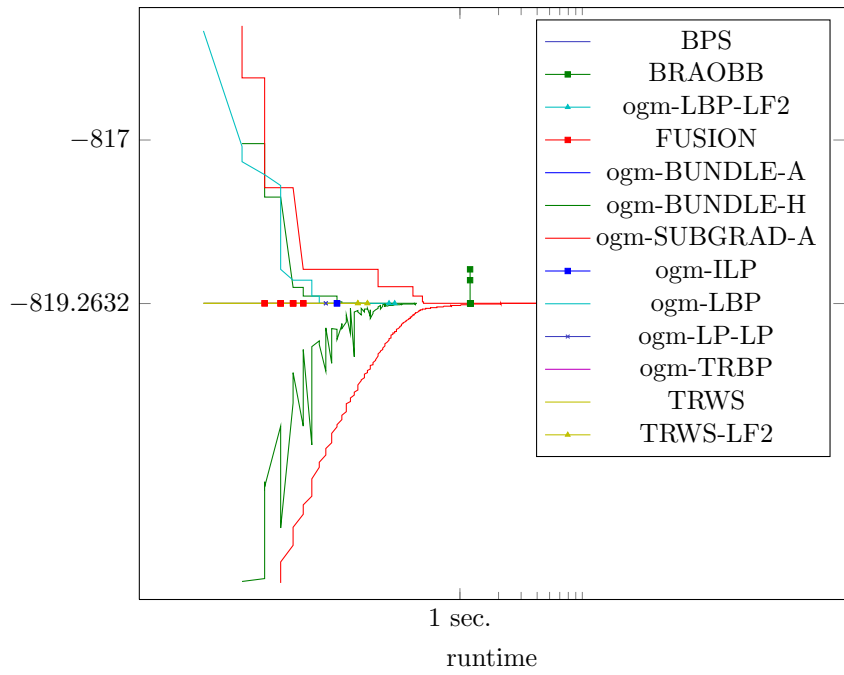


Figure 452: Runtime results for the instance 6000018 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

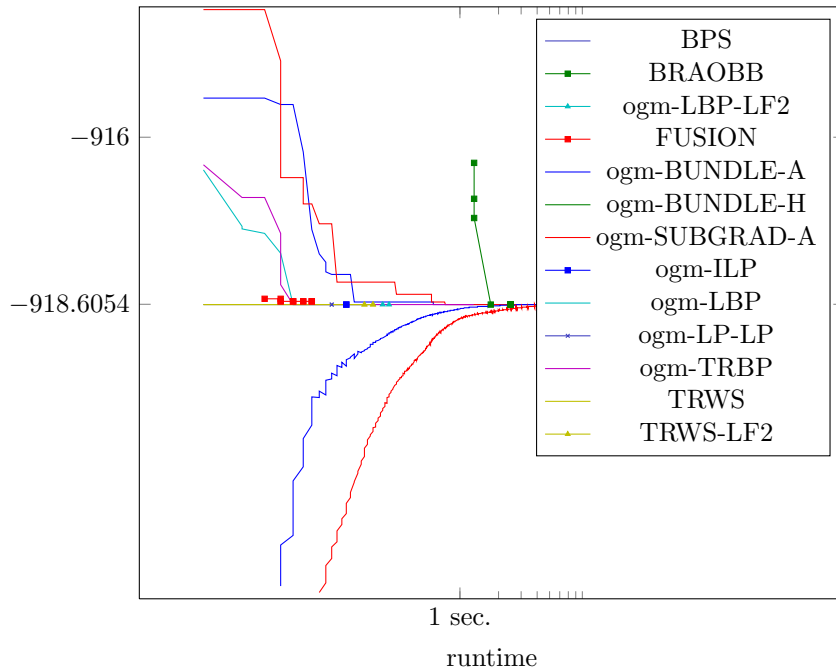


Figure 453: Runtime results for the instance 6000019 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

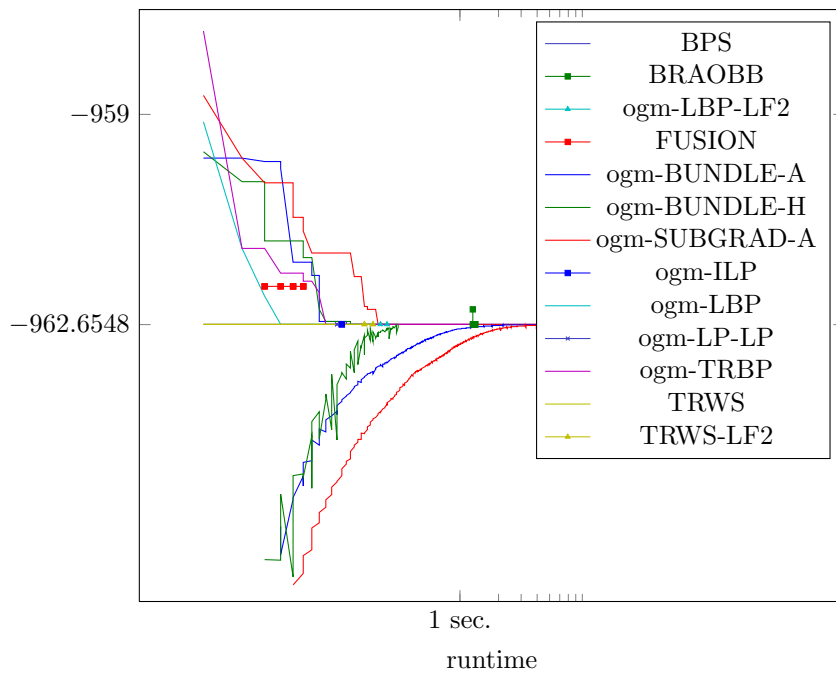


Figure 454: Runtime results for the instance 6000020 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

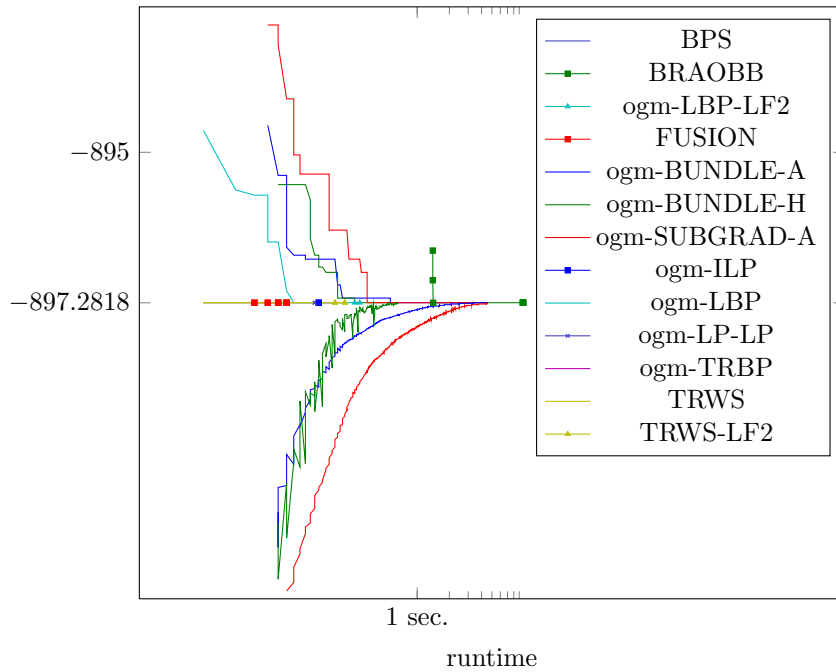


Figure 455: Runtime results for the instance 6000021 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

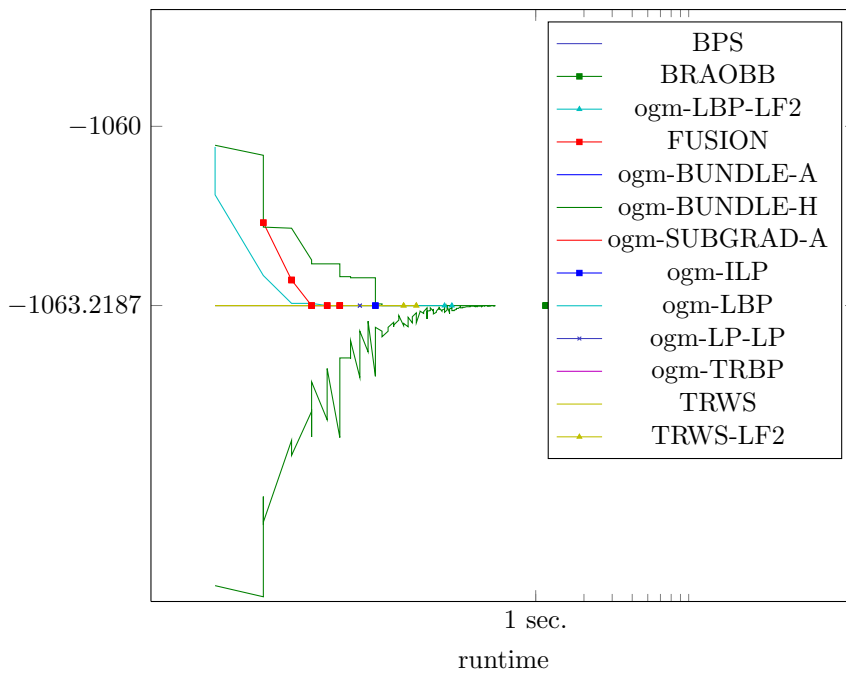


Figure 456: Runtime results for the instance 6000022 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

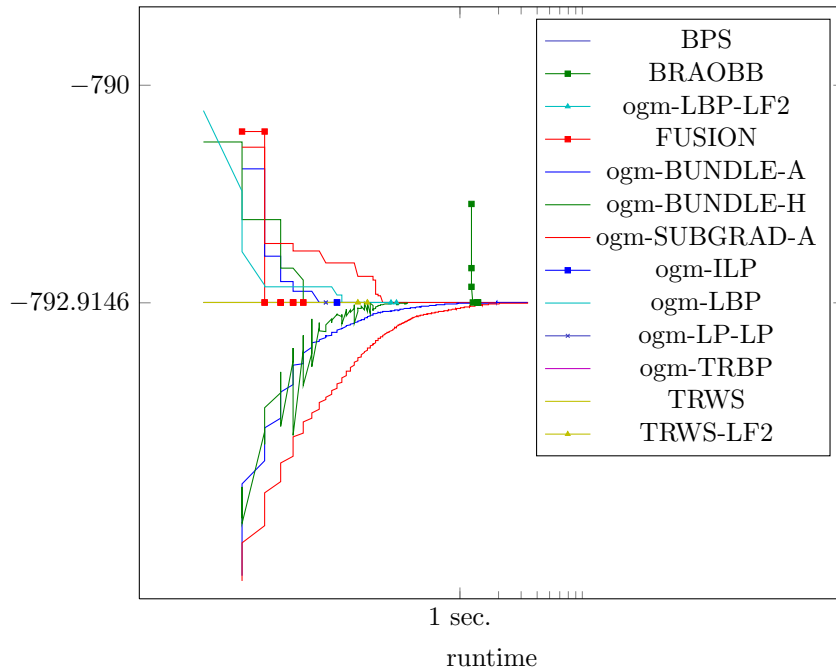


Figure 457: Runtime results for the instance 6000023 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

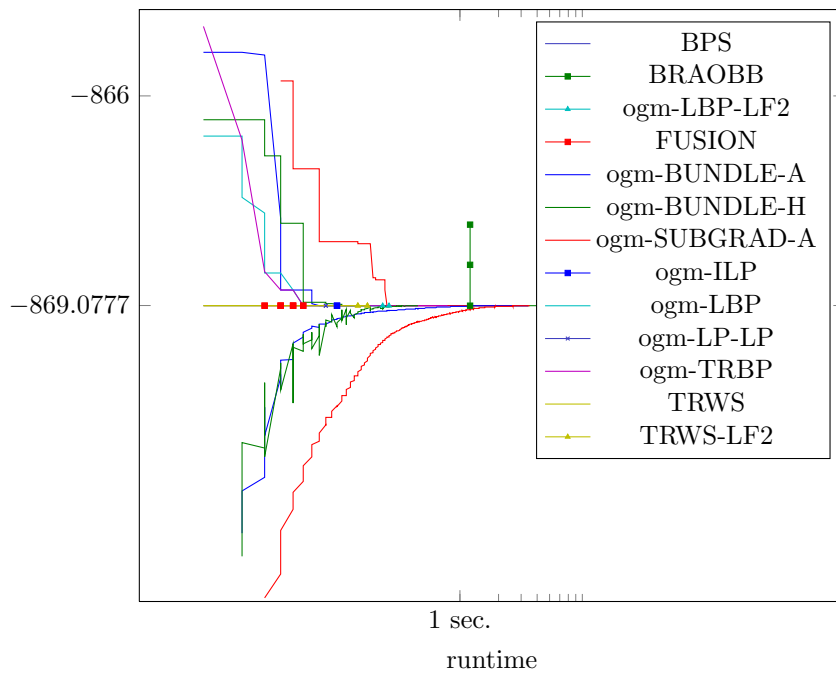


Figure 458: Runtime results for the instance 6000024 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

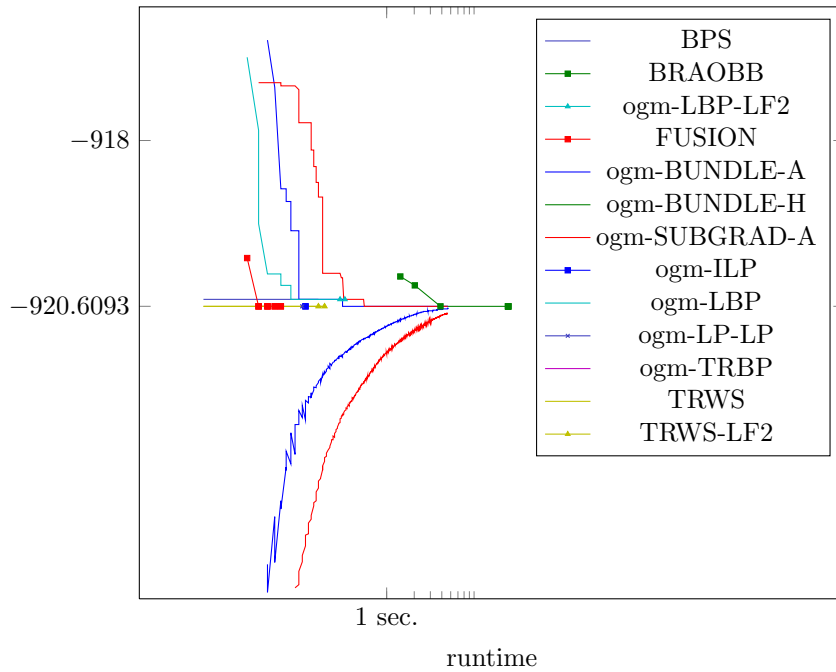


Figure 459: Runtime results for the instance 6000025 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

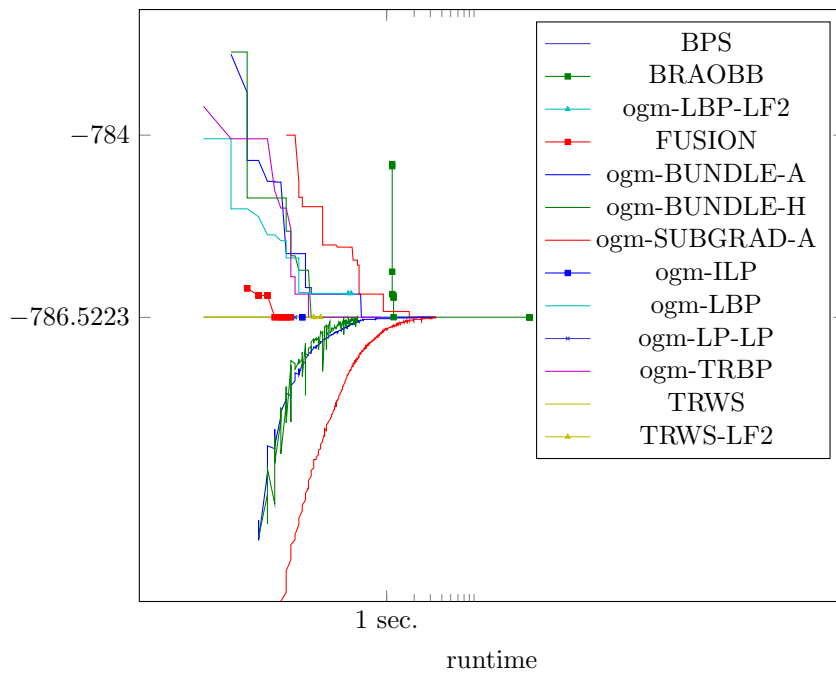


Figure 460: Runtime results for the instance 6000026 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

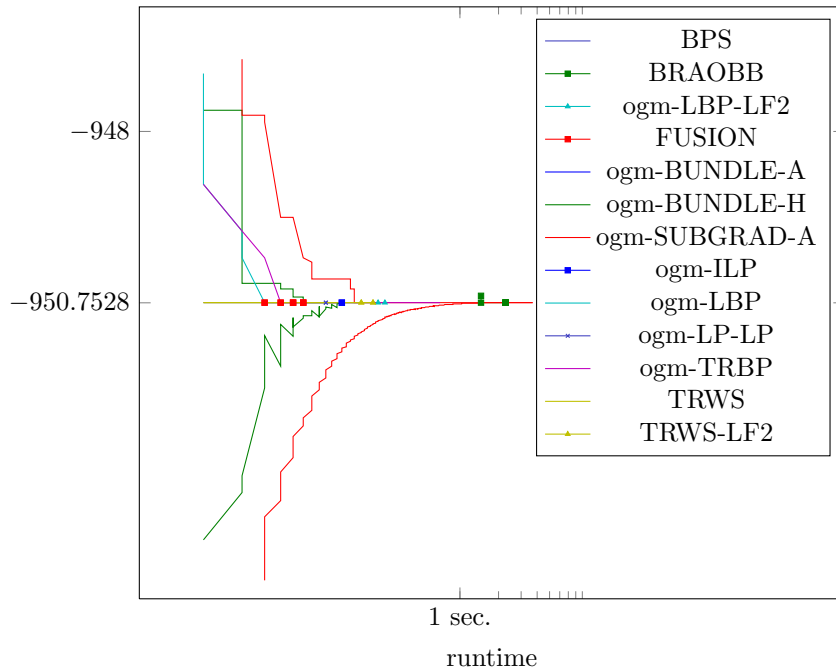


Figure 461: Runtime results for the instance 6000027 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

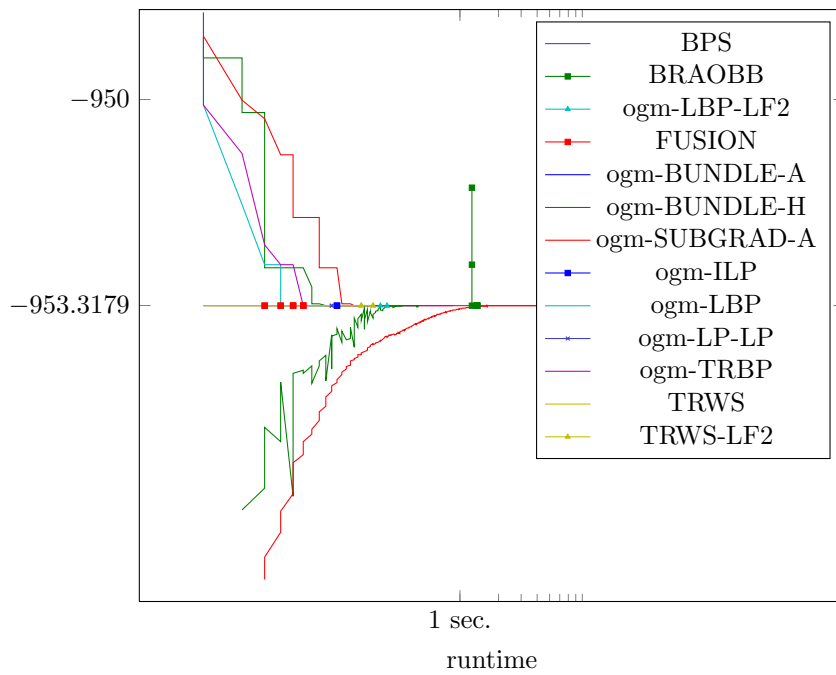


Figure 462: Runtime results for the instance 6000028 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

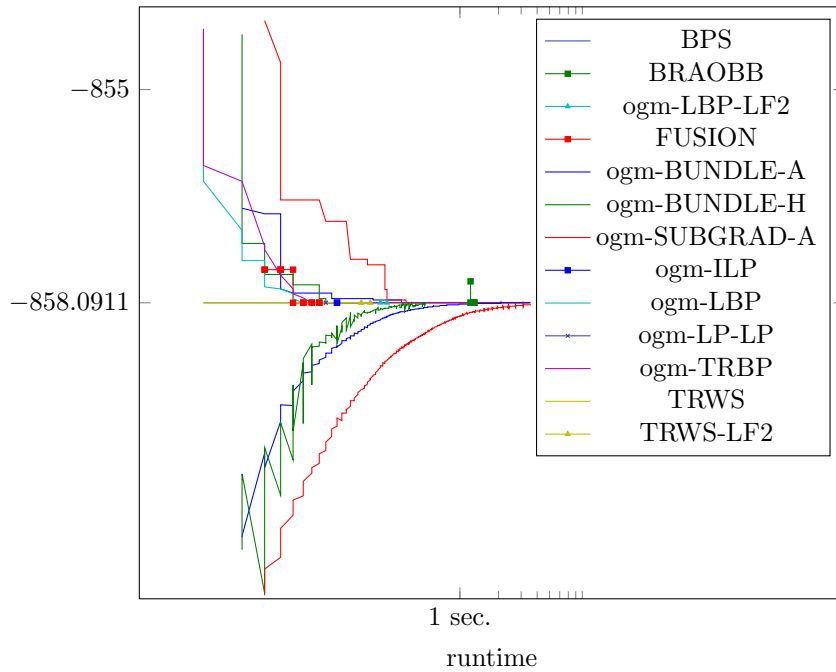


Figure 463: Runtime results for the instance 6000029 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

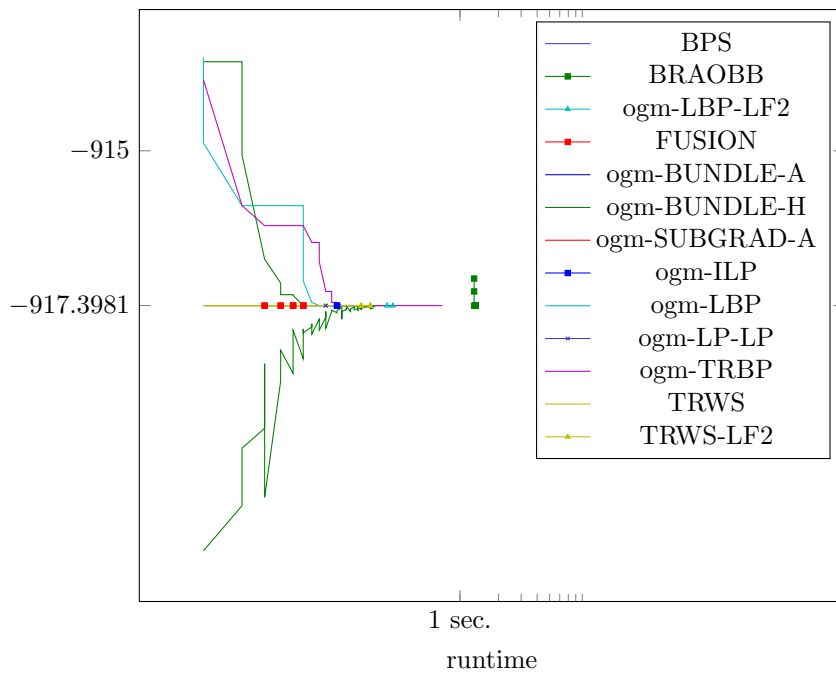


Figure 464: Runtime results for the instance 6000030 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

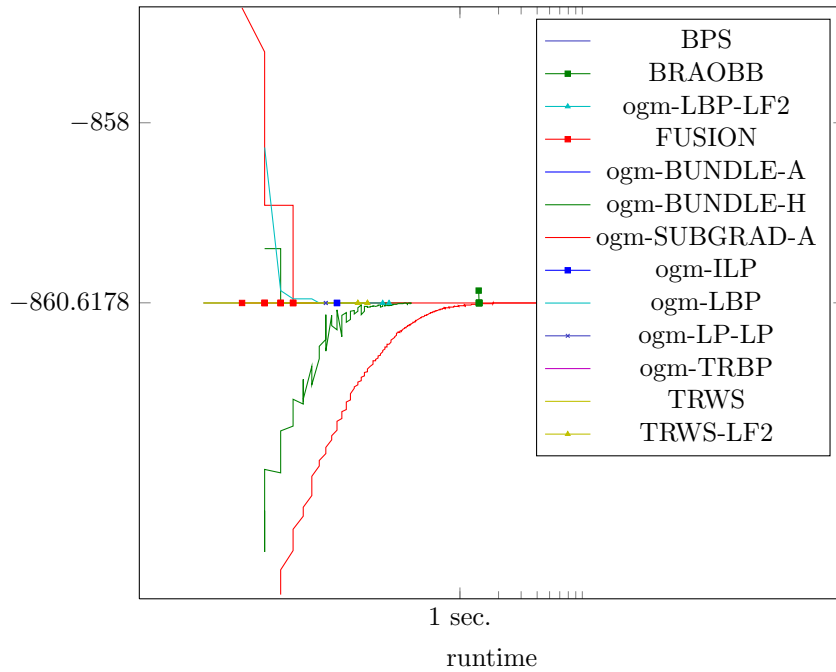


Figure 465: Runtime results for the instance 6000031 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

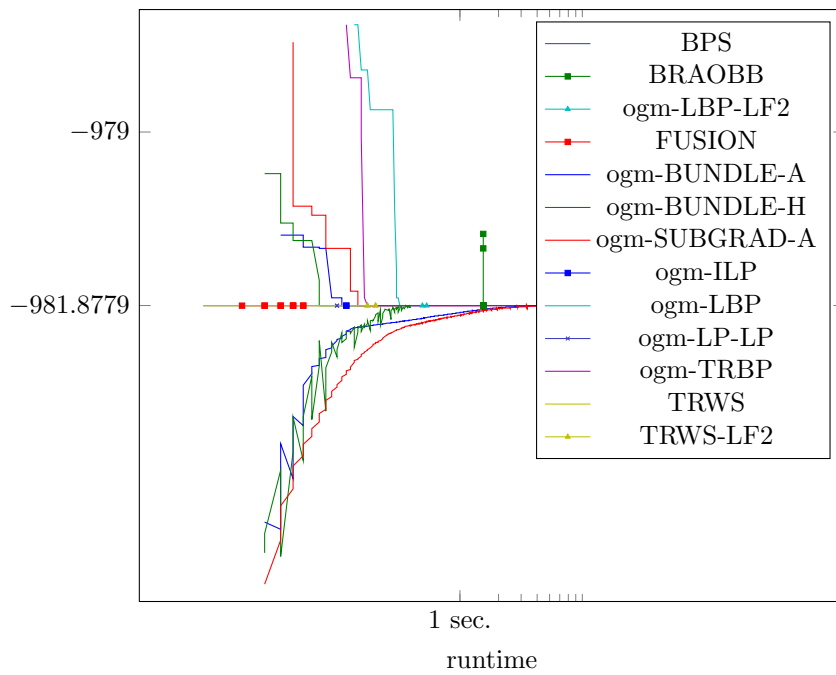


Figure 466: Runtime results for the instance 6000032 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

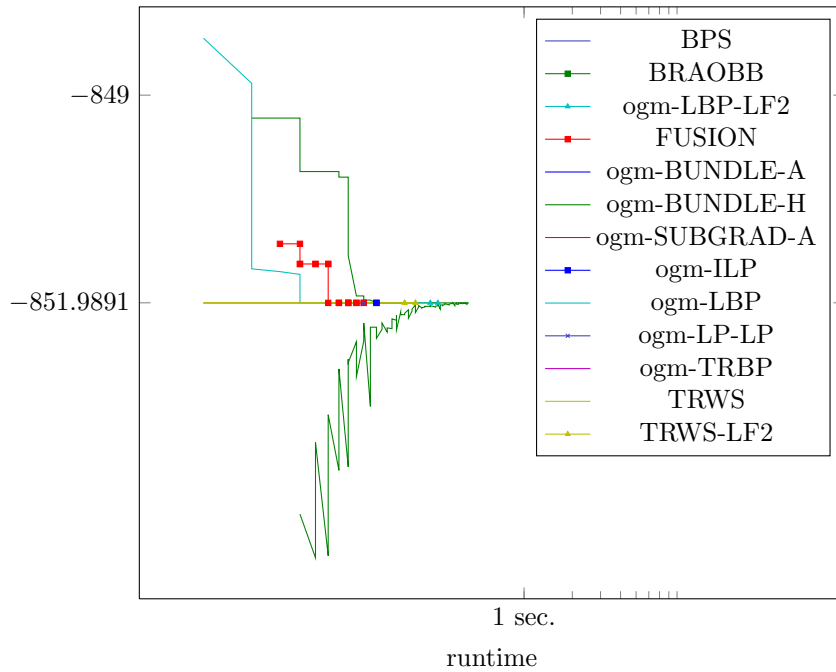


Figure 467: Runtime results for the instance 6000033 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

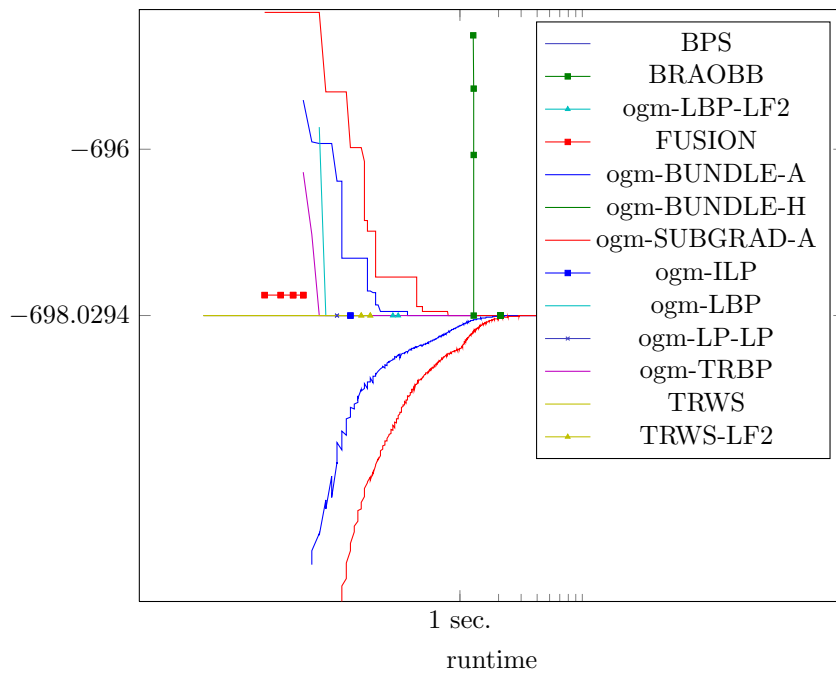


Figure 468: Runtime results for the instance 6000034 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

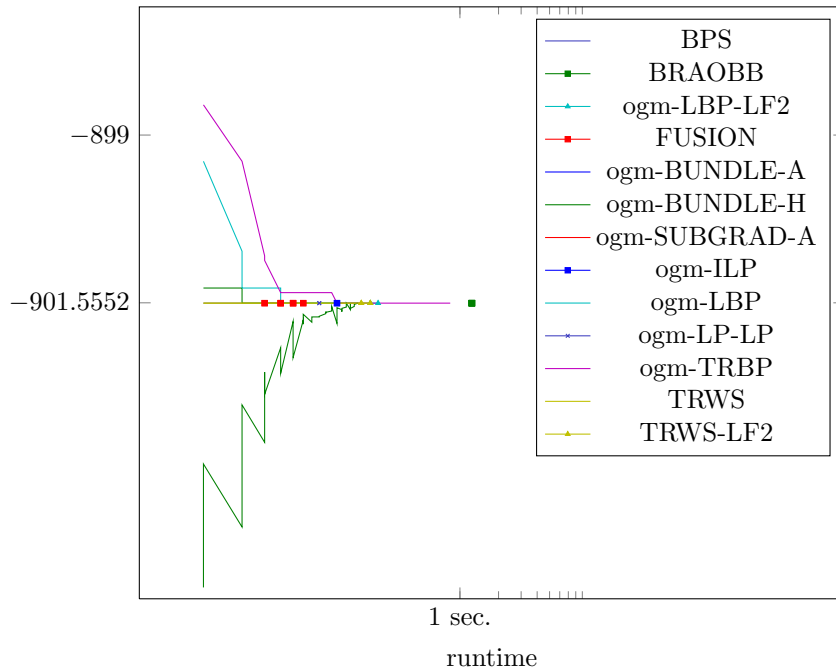


Figure 469: Runtime results for the instance 6000035 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

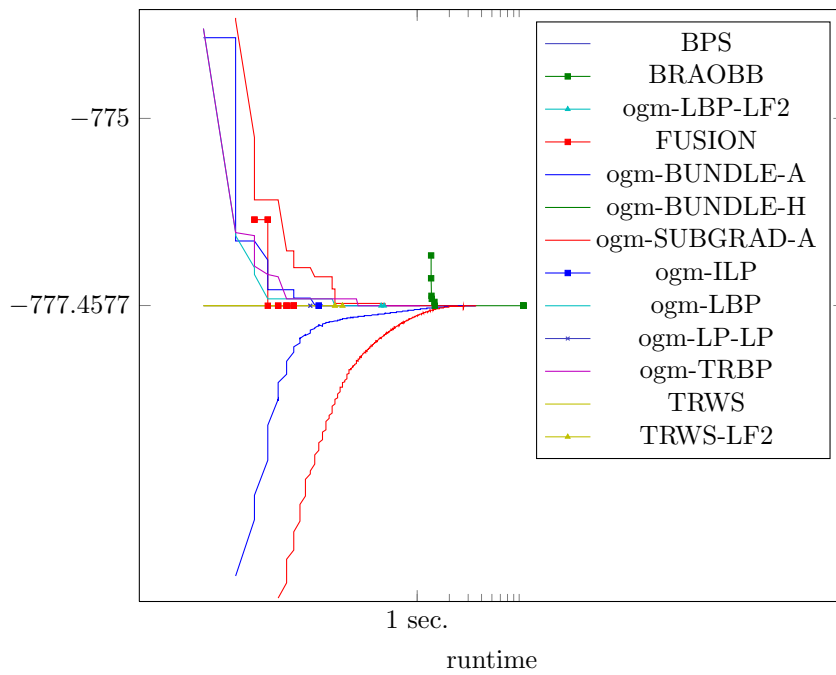


Figure 470: Runtime results for the instance 6000036 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

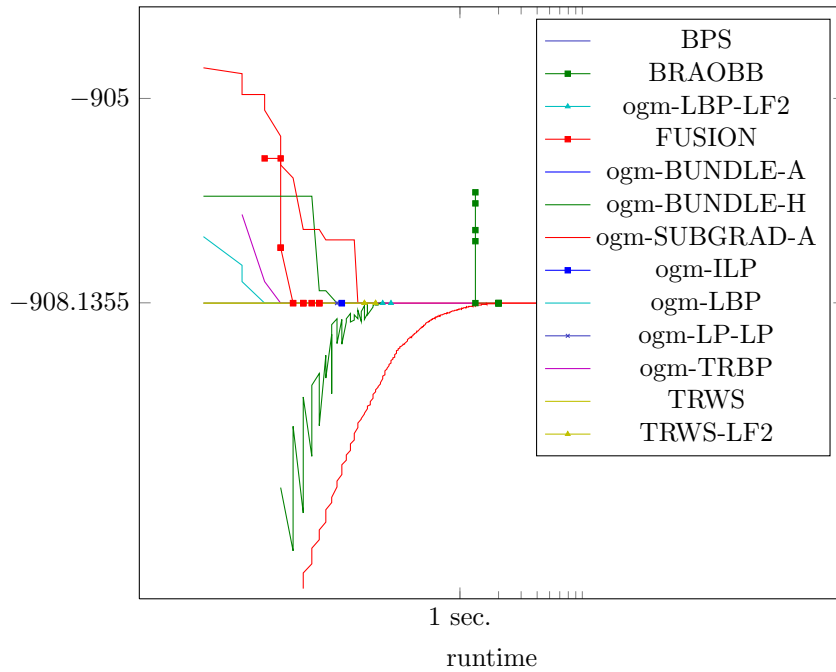


Figure 471: Runtime results for the instance 6000037 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

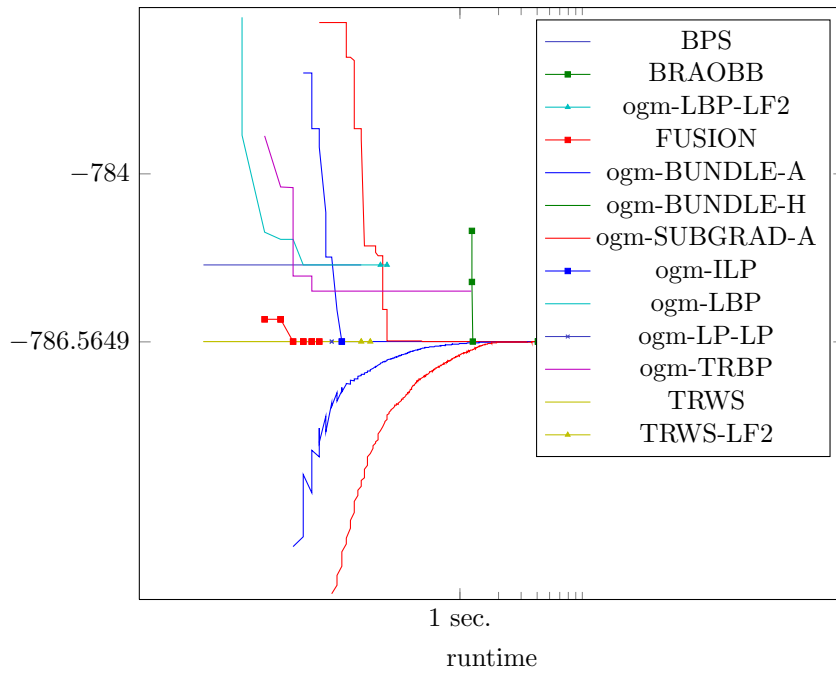


Figure 472: Runtime results for the instance 6000038 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

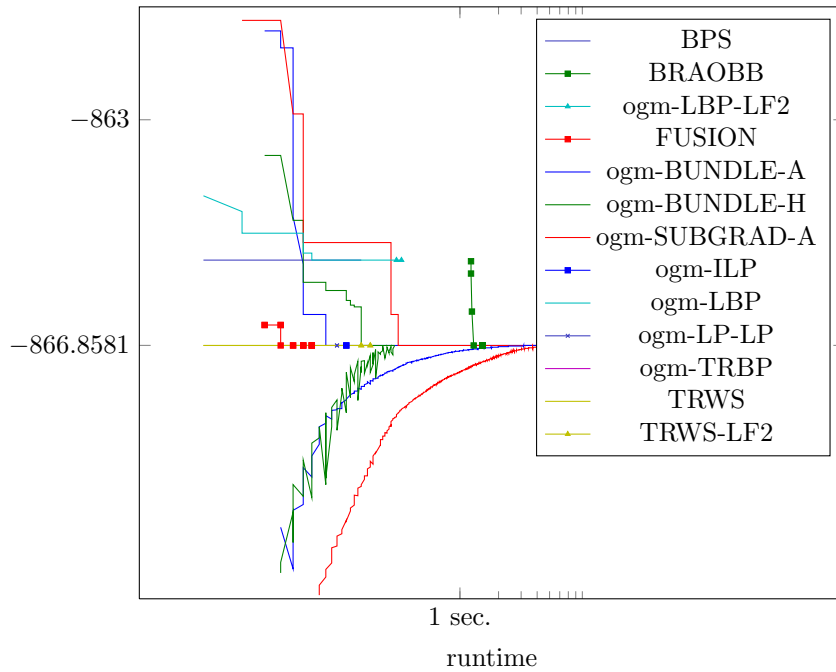


Figure 473: Runtime results for the instance 6000039 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

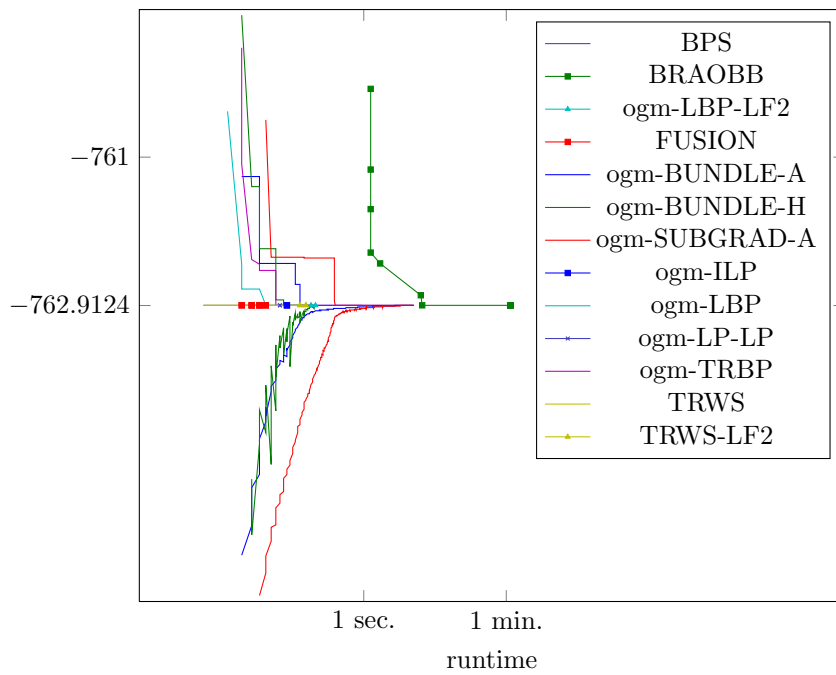


Figure 474: Runtime results for the instance 6000040 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

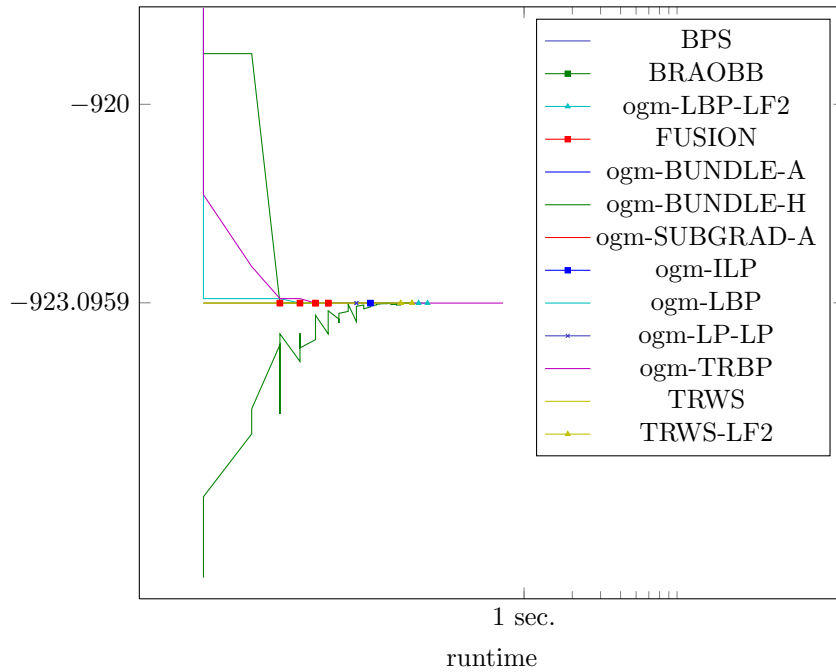


Figure 475: Runtime results for the instance 6000041 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

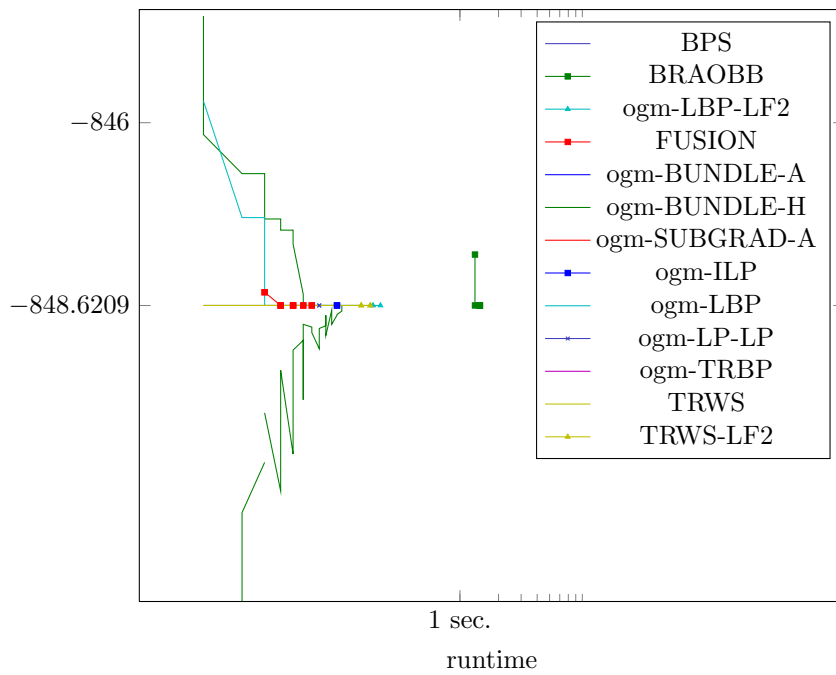


Figure 476: Runtime results for the instance 6000042 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

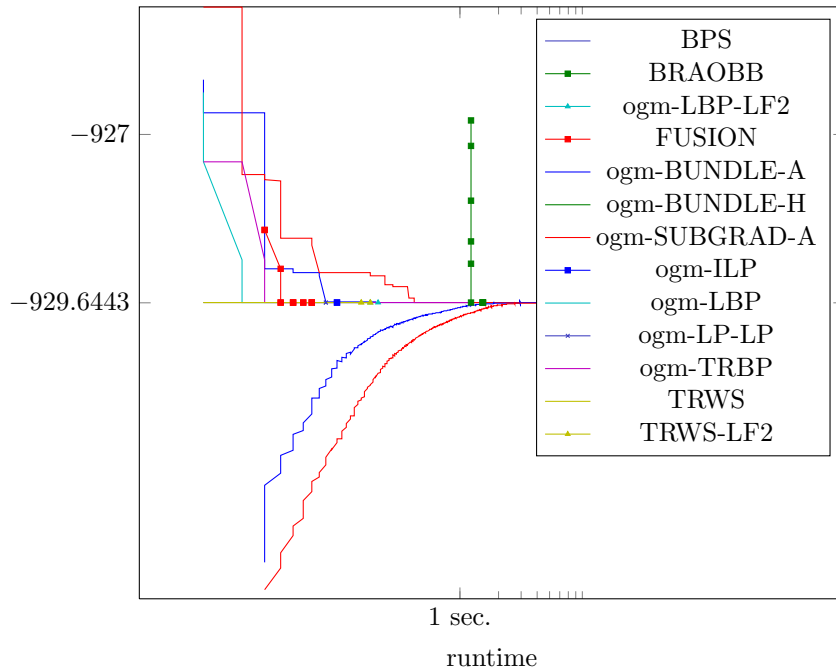


Figure 477: Runtime results for the instance 6000043 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

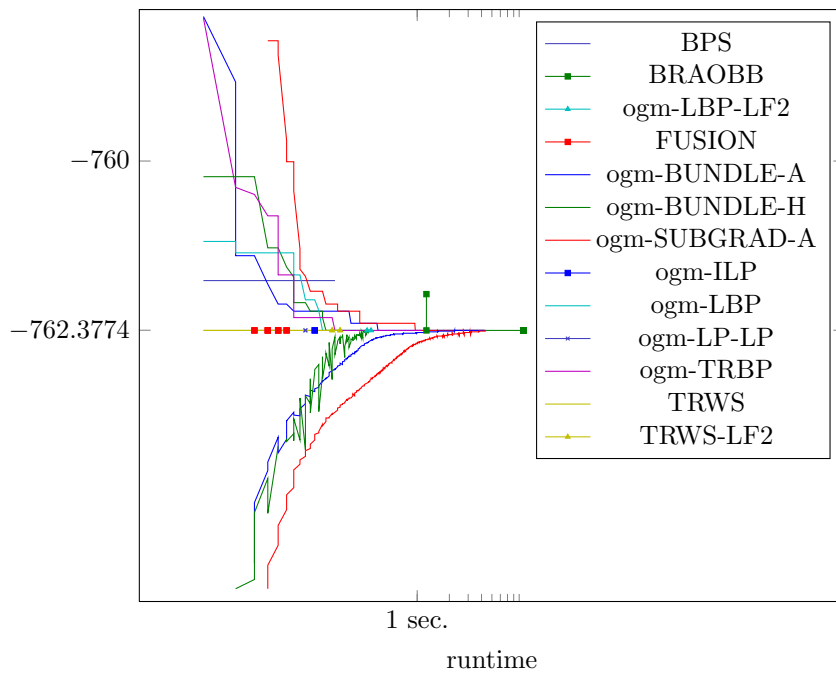


Figure 478: Runtime results for the instance 6000044 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

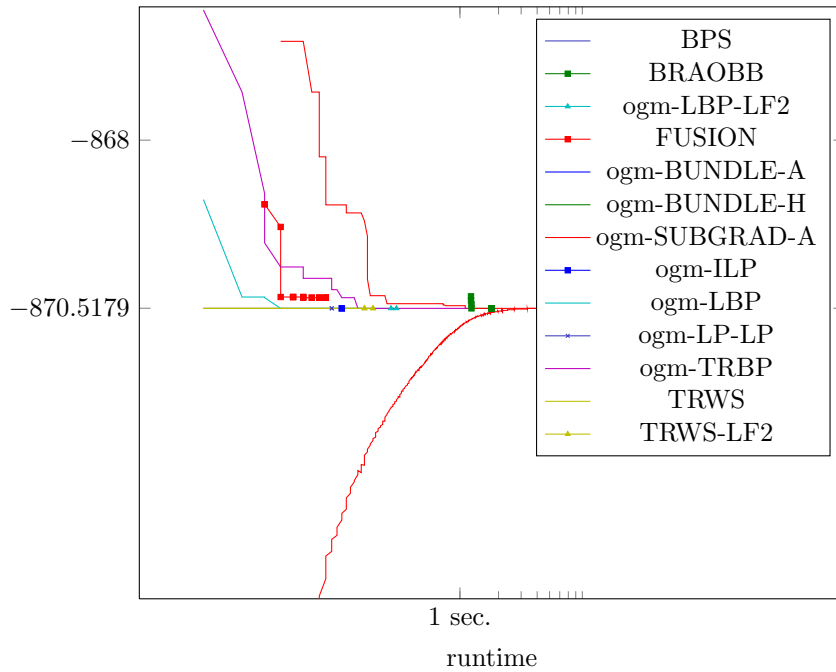


Figure 479: Runtime results for the instance 6000045 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

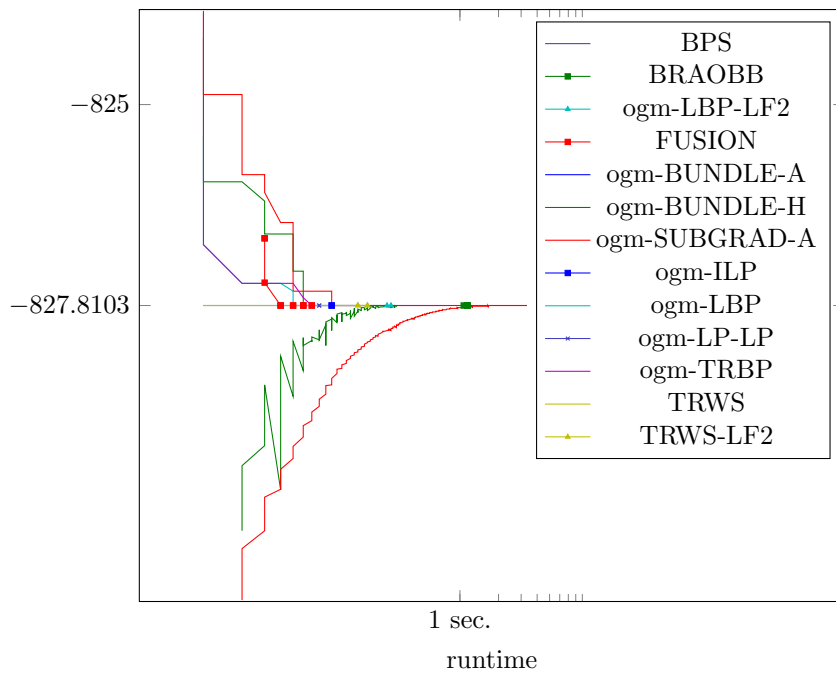


Figure 480: Runtime results for the instance 6000046 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

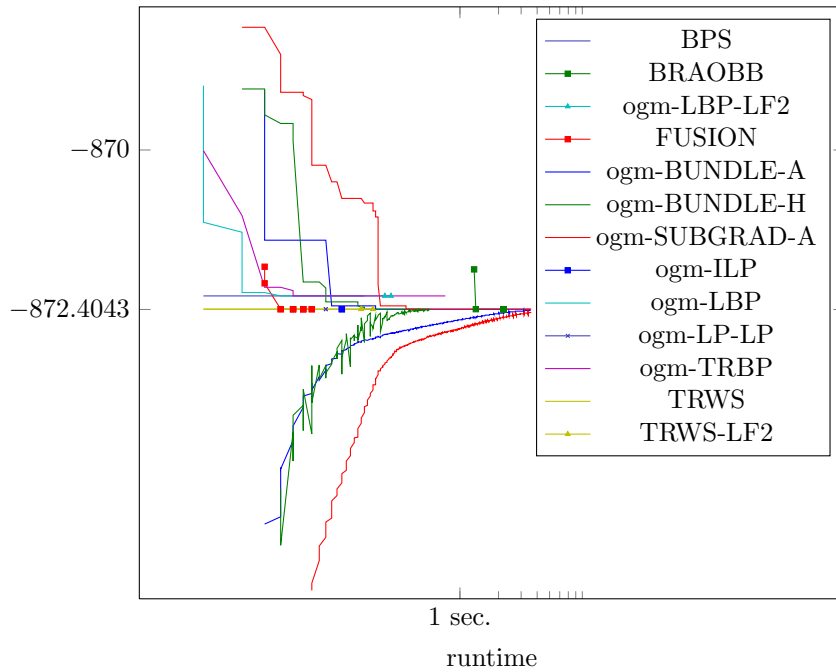


Figure 481: Runtime results for the instance 6000047 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

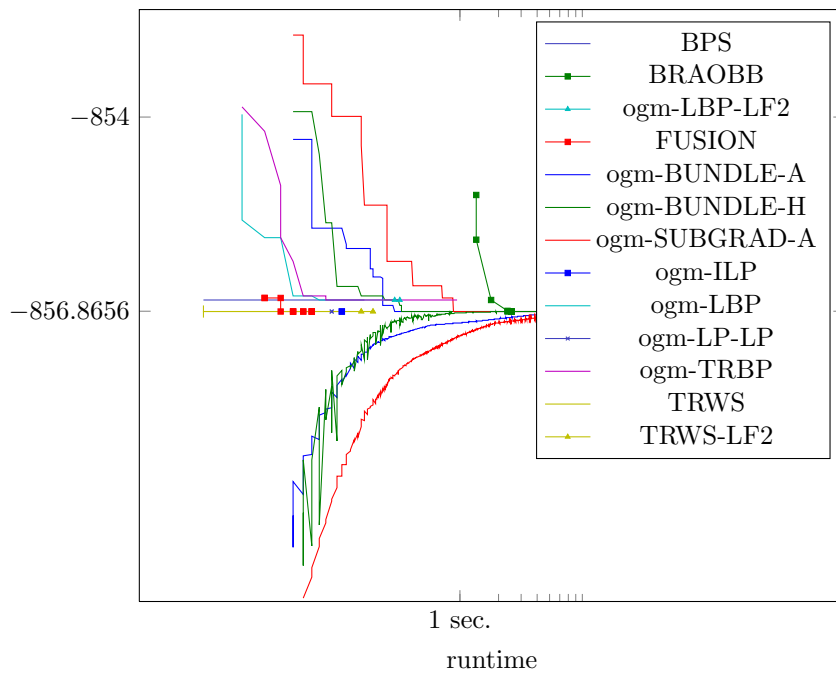


Figure 482: Runtime results for the instance 6000048 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

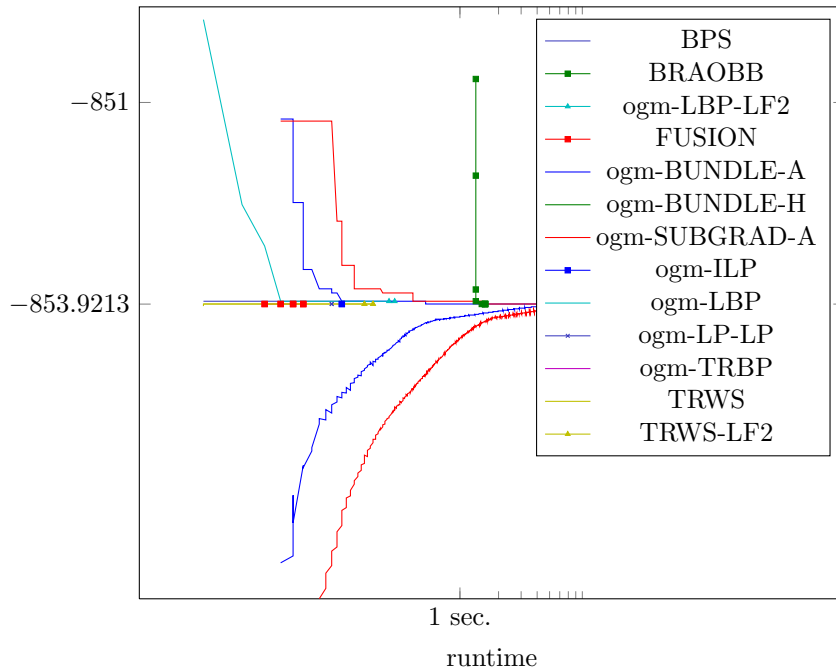


Figure 483: Runtime results for the instance 6000049 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

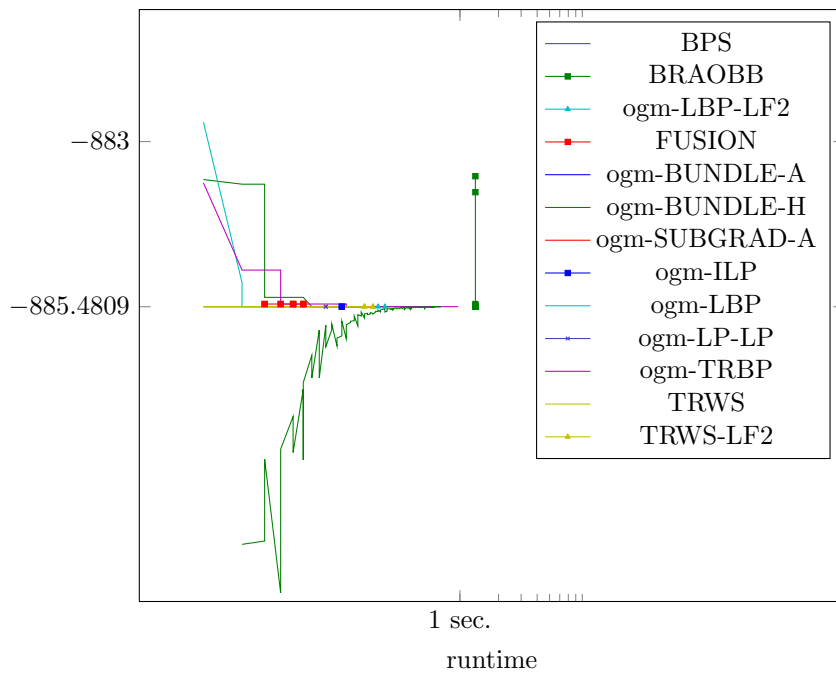


Figure 484: Runtime results for the instance 6000050 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

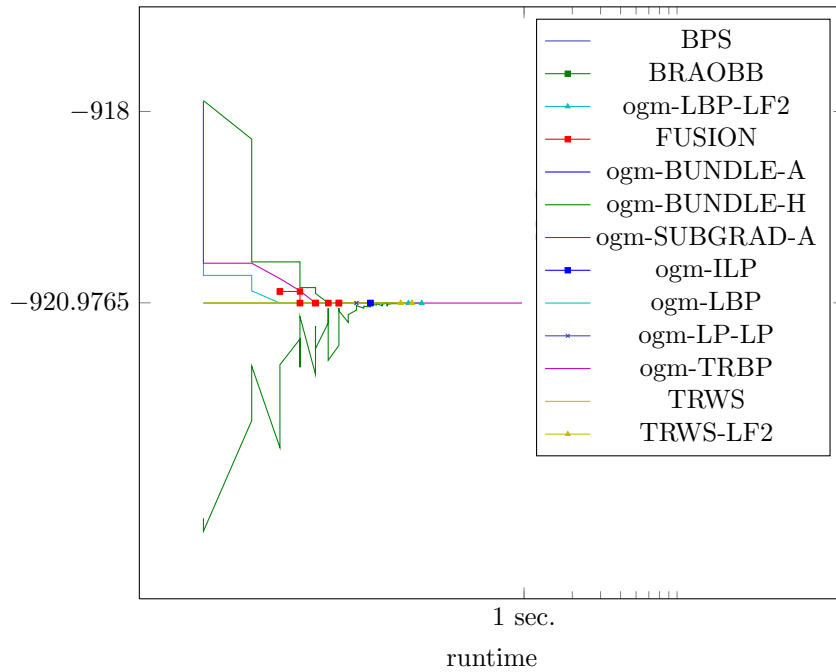


Figure 485: Runtime results for the instance 6000051 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

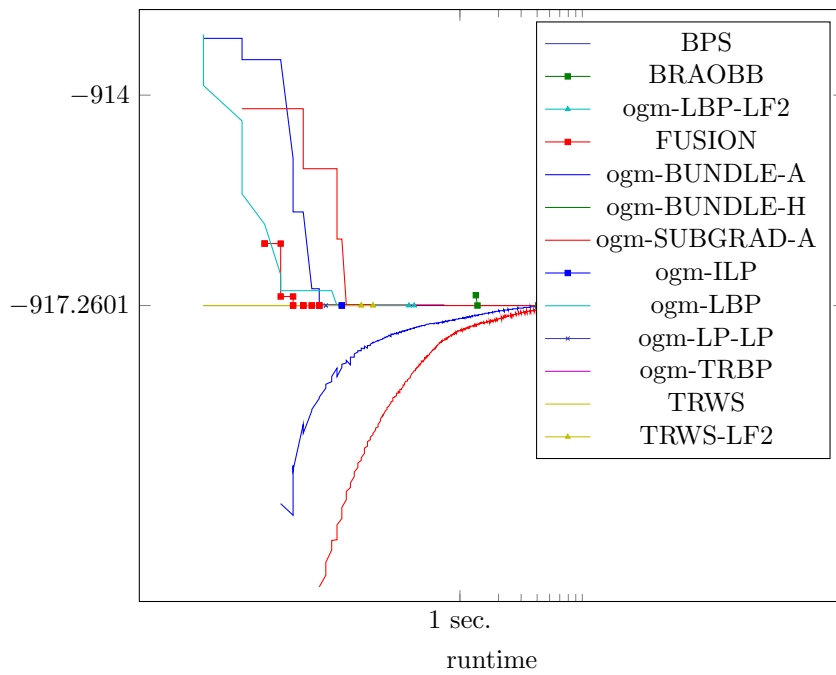


Figure 486: Runtime results for the instance 6000052 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

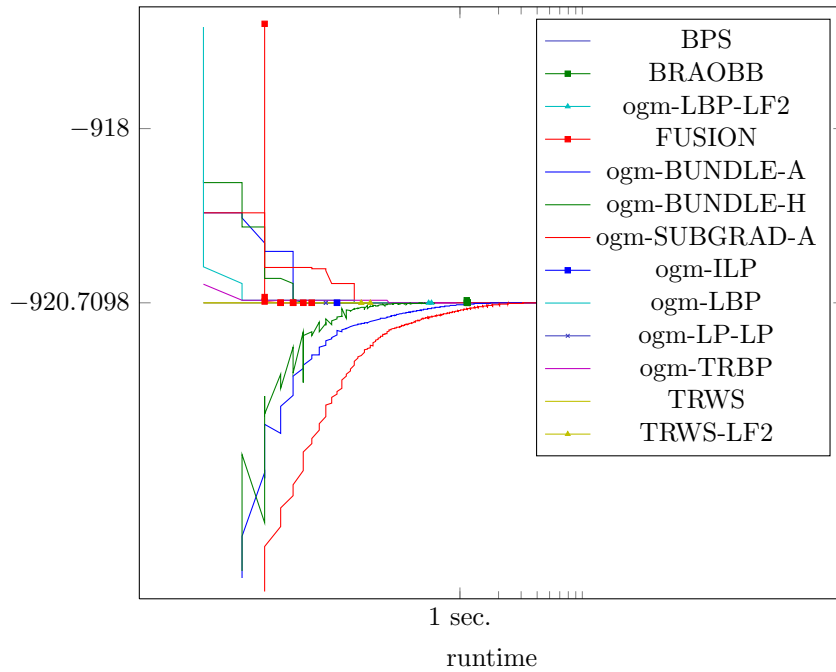


Figure 487: Runtime results for the instance 6000053 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

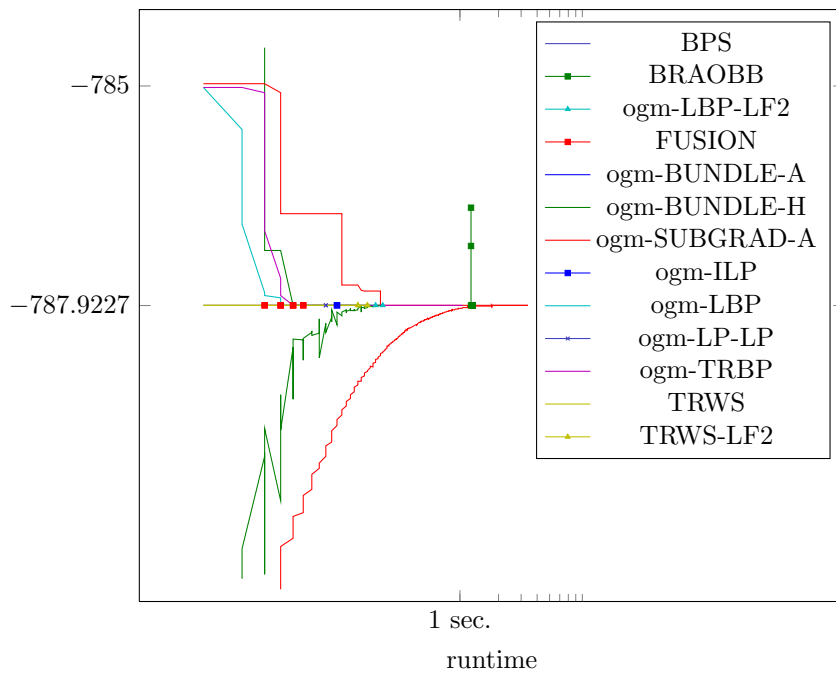


Figure 488: Runtime results for the instance 6000054 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

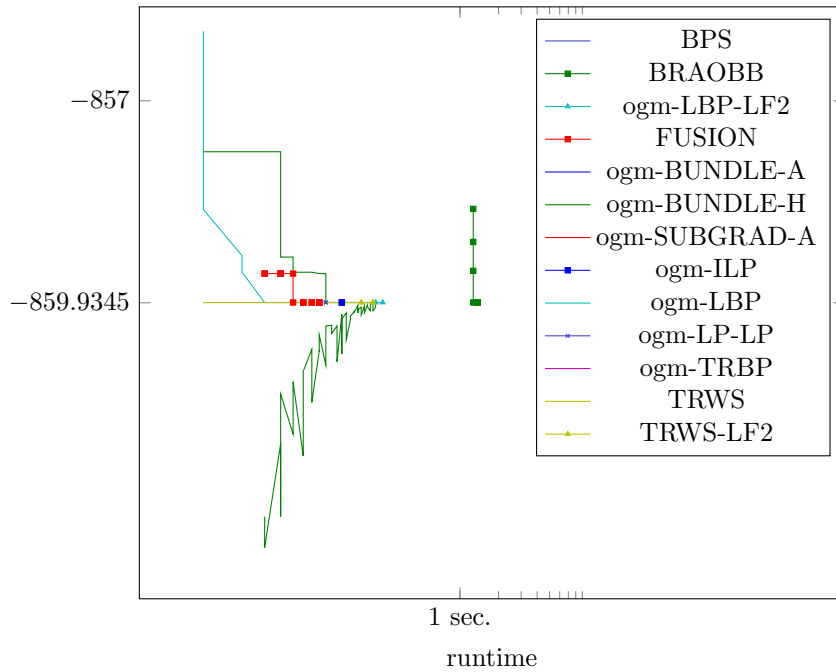


Figure 489: Runtime results for the instance 6000055 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

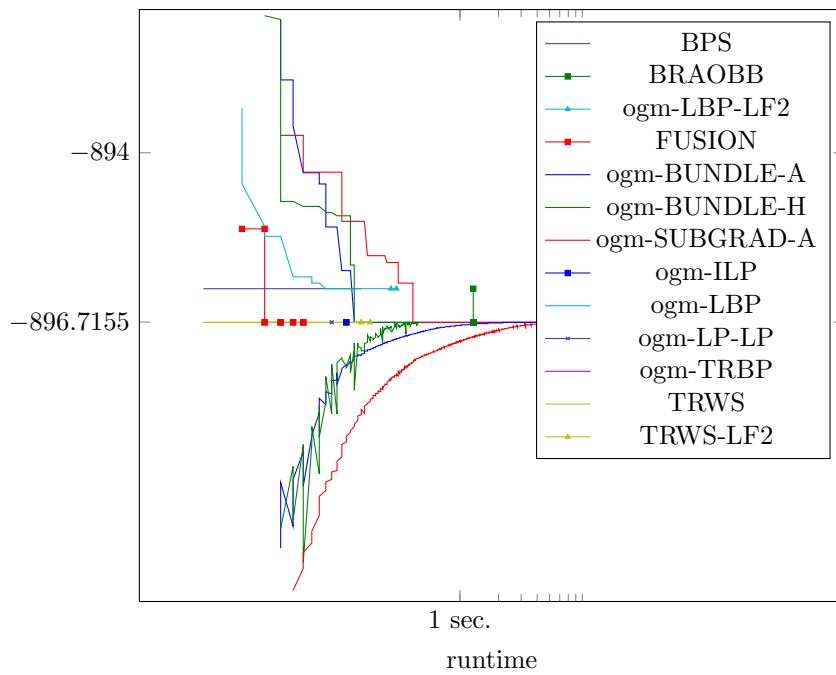


Figure 490: Runtime results for the instance 6000056 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

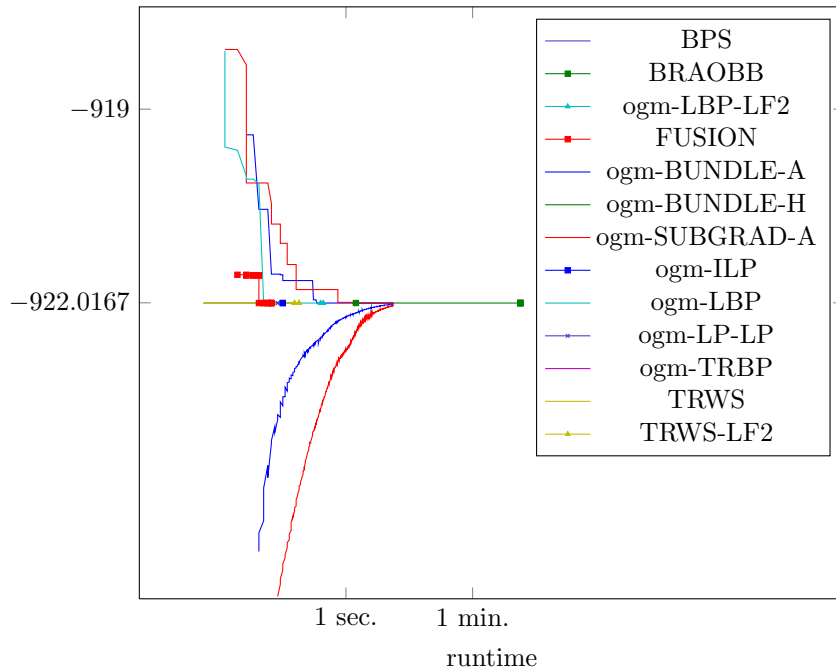


Figure 491: Runtime results for the instance 6000057 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

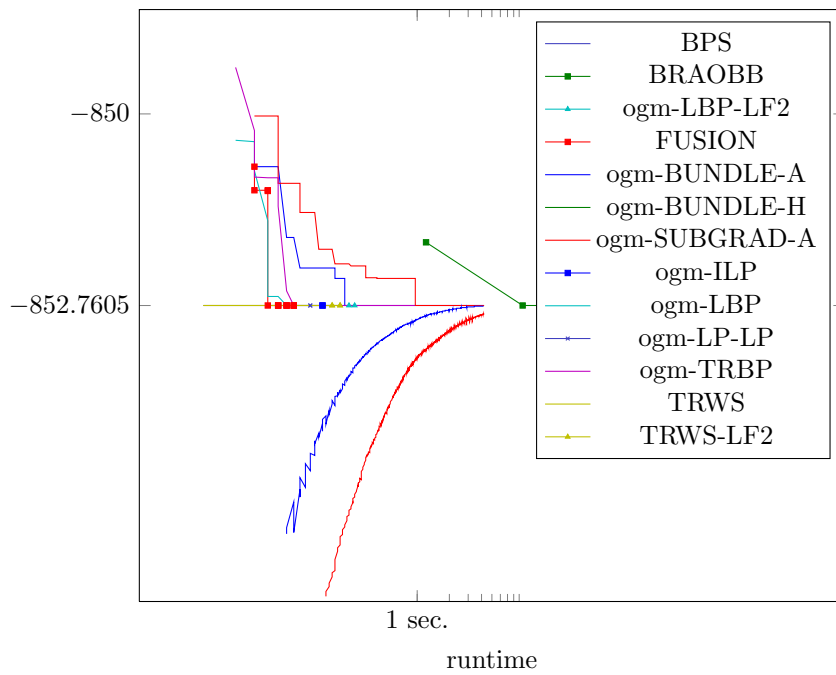


Figure 492: Runtime results for the instance 6000058 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

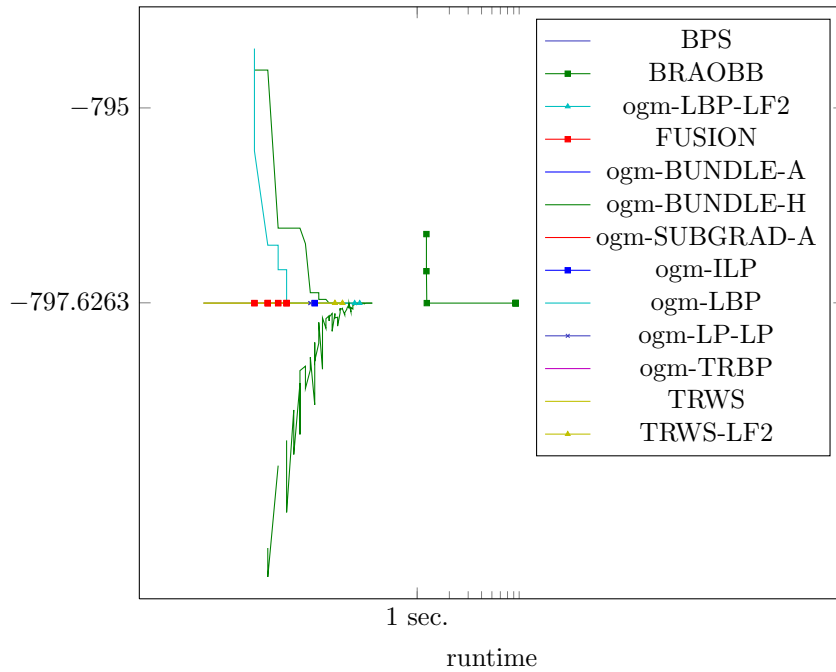


Figure 493: Runtime results for the instance 6000059 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

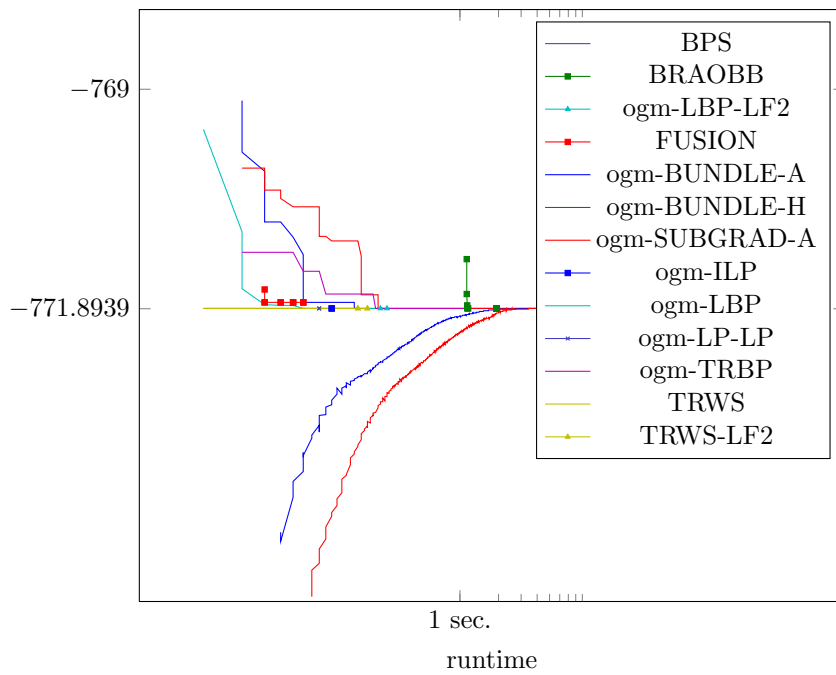


Figure 494: Runtime results for the instance 6000060 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

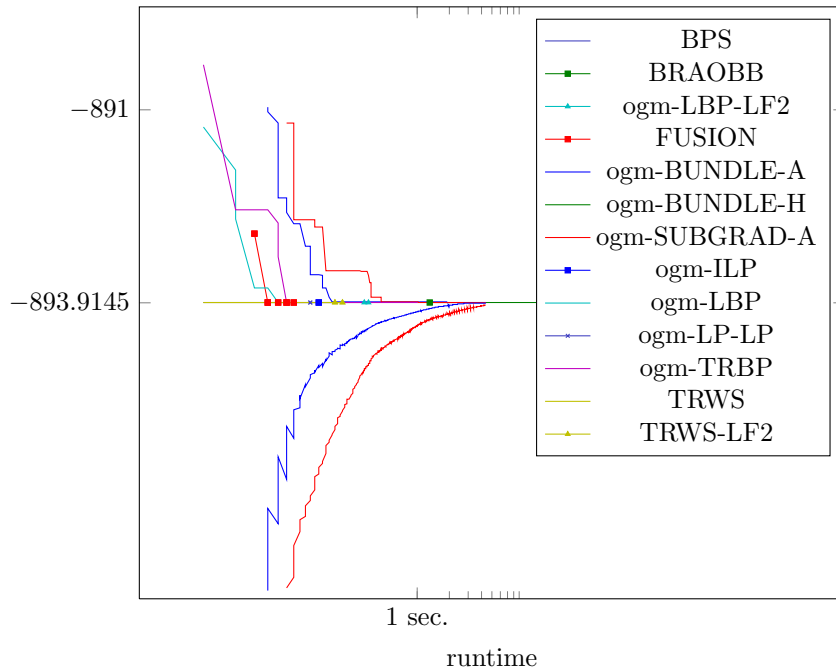


Figure 495: Runtime results for the instance *6000061* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

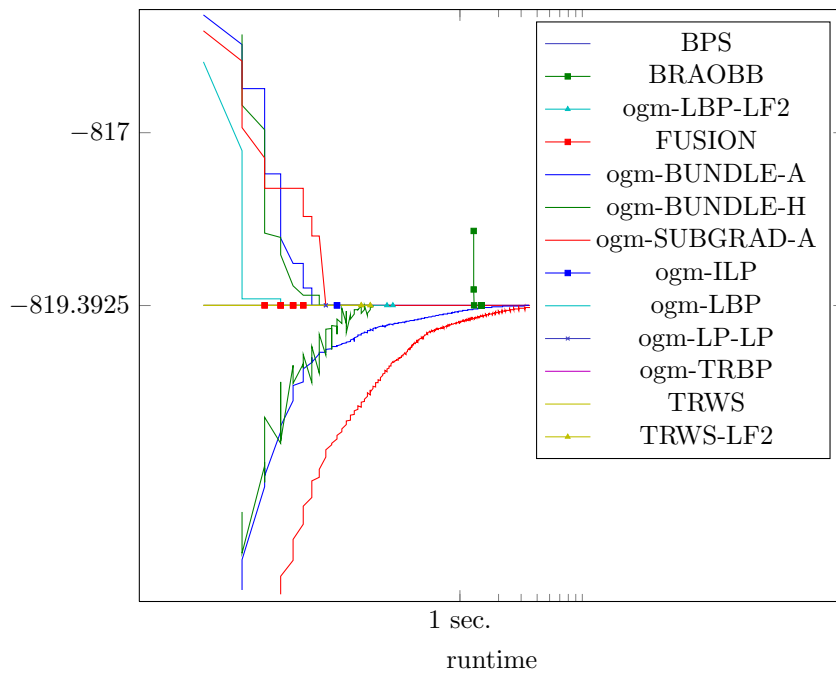


Figure 496: Runtime results for the instance *6000062* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

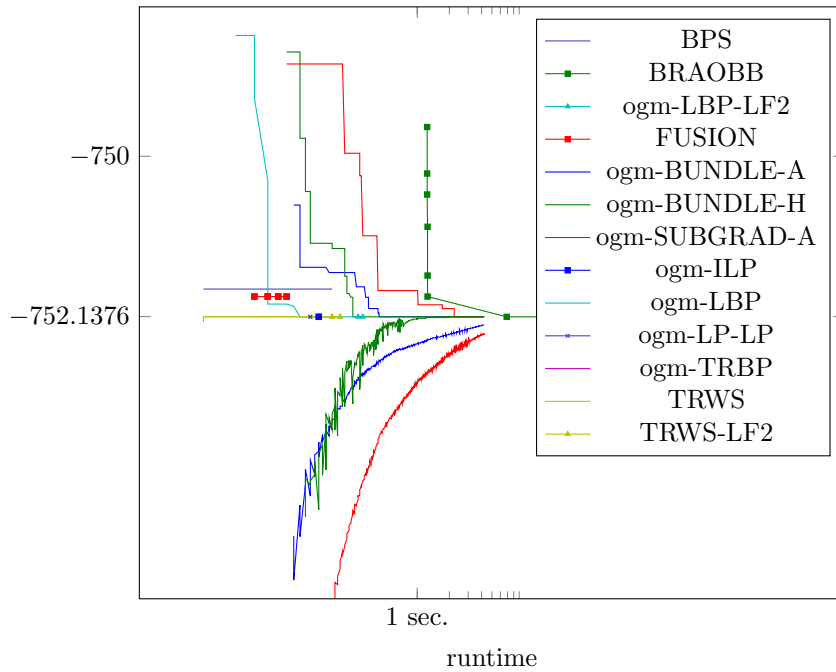


Figure 497: Runtime results for the instance 6000063 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

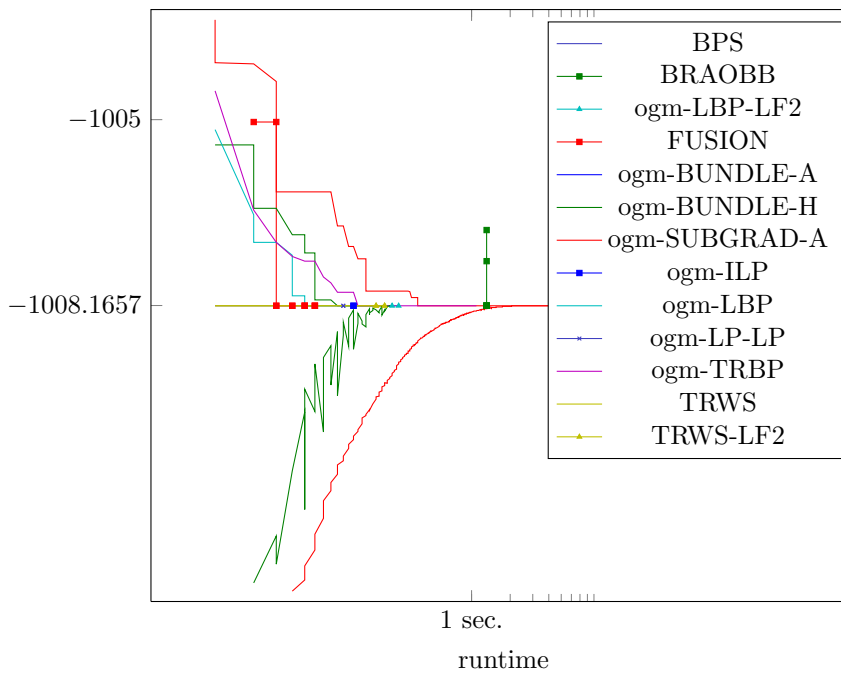


Figure 498: Runtime results for the instance 6000064 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

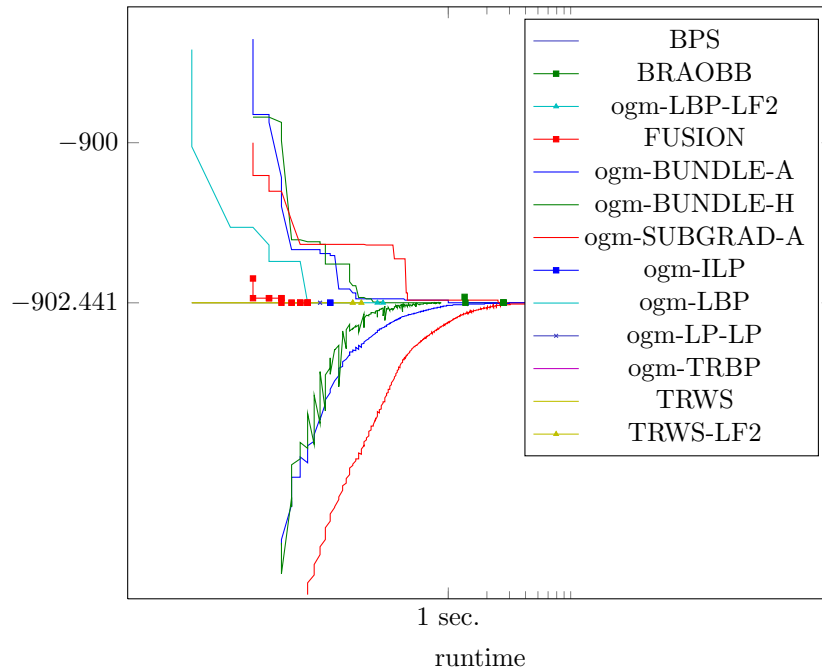


Figure 499: Runtime results for the instance 6000065 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

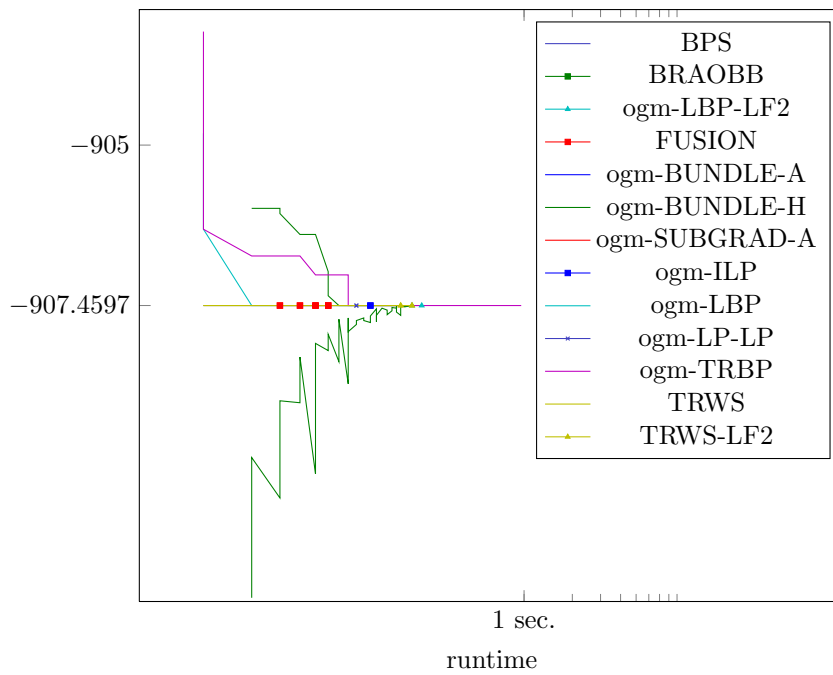


Figure 500: Runtime results for the instance 6000066 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

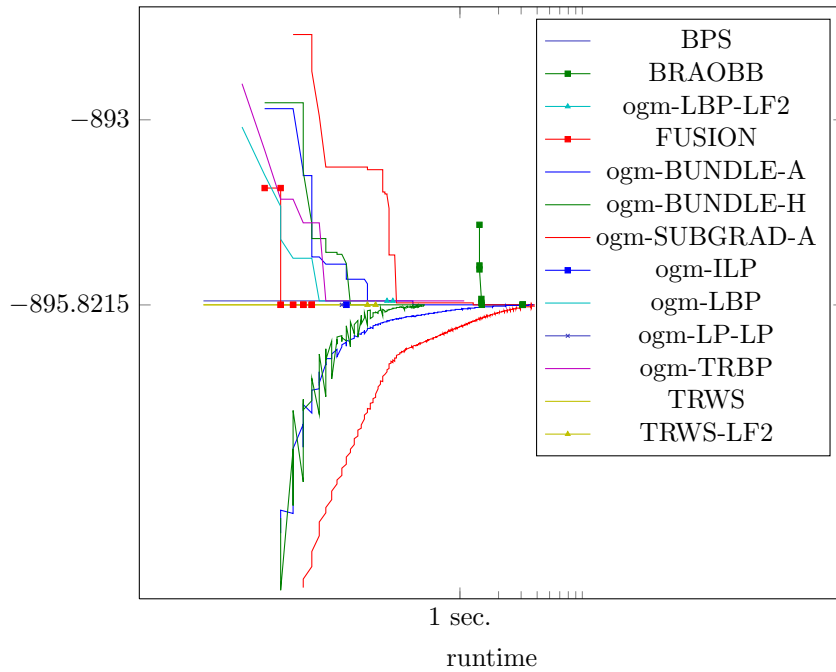


Figure 501: Runtime results for the instance 6000067 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

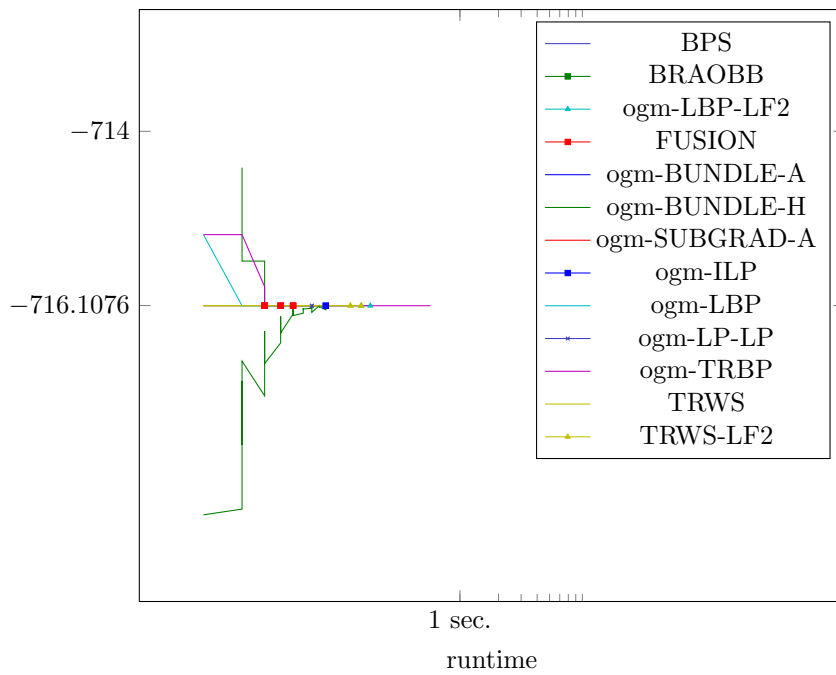


Figure 502: Runtime results for the instance 6000068 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

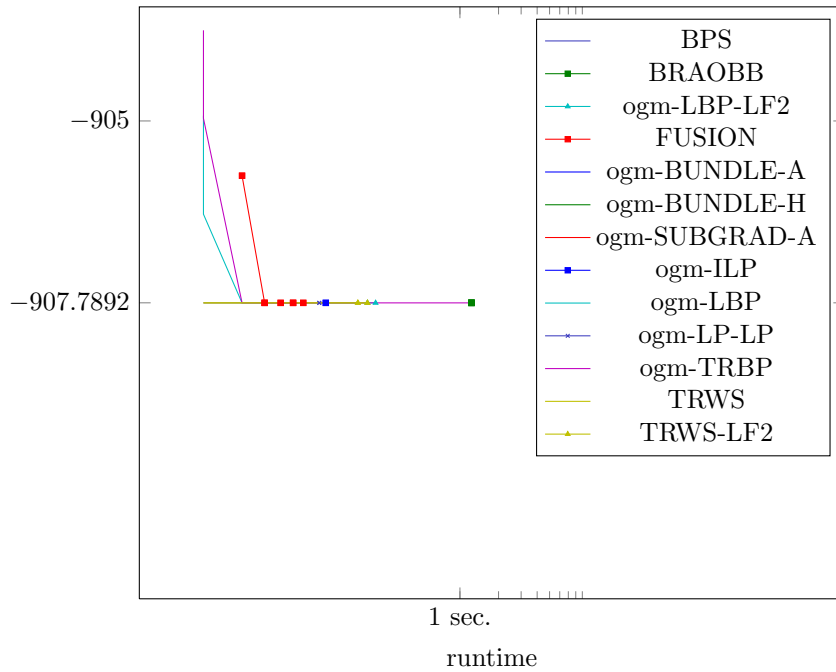


Figure 503: Runtime results for the instance 6000069 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

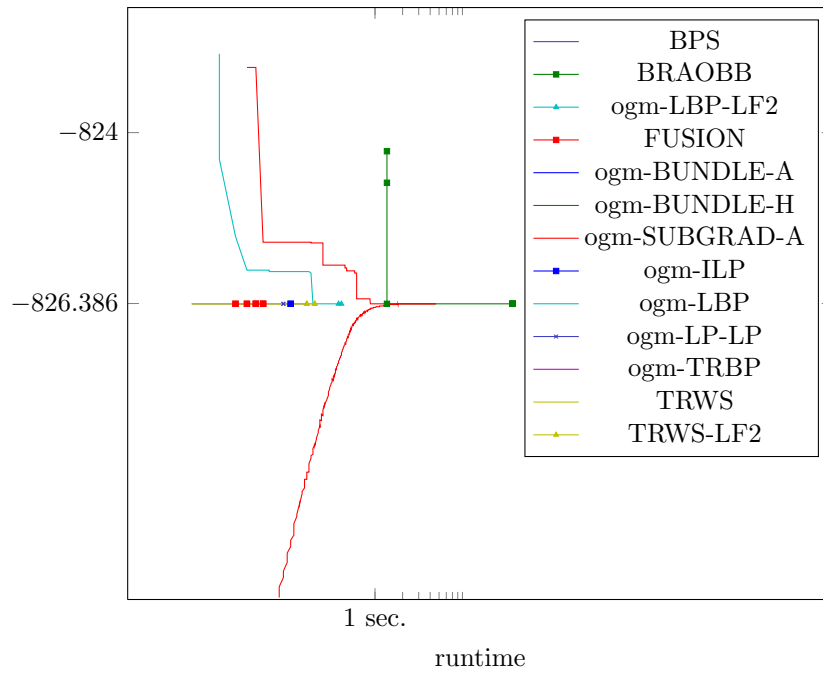


Figure 504: Runtime results for the instance 6000070 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

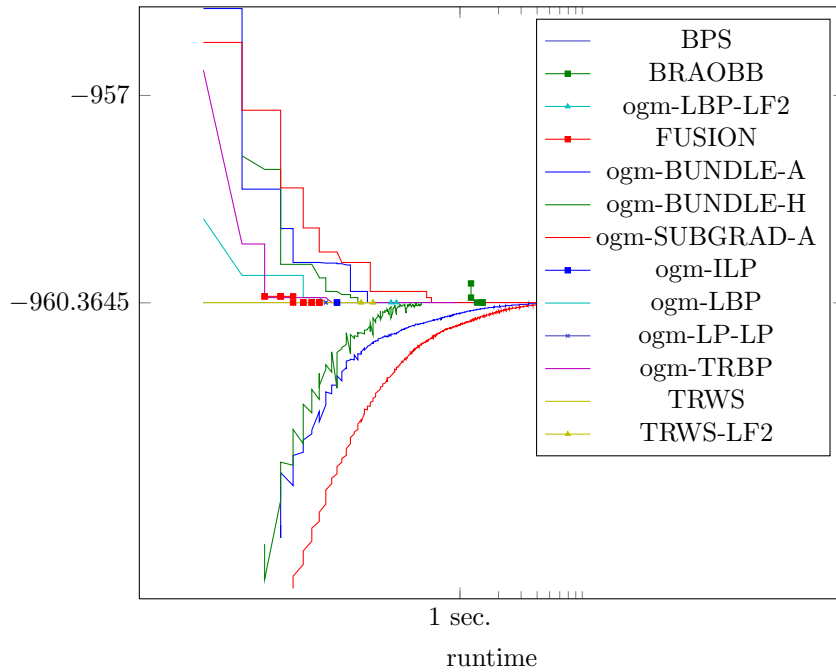


Figure 505: Runtime results for the instance 6000071 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

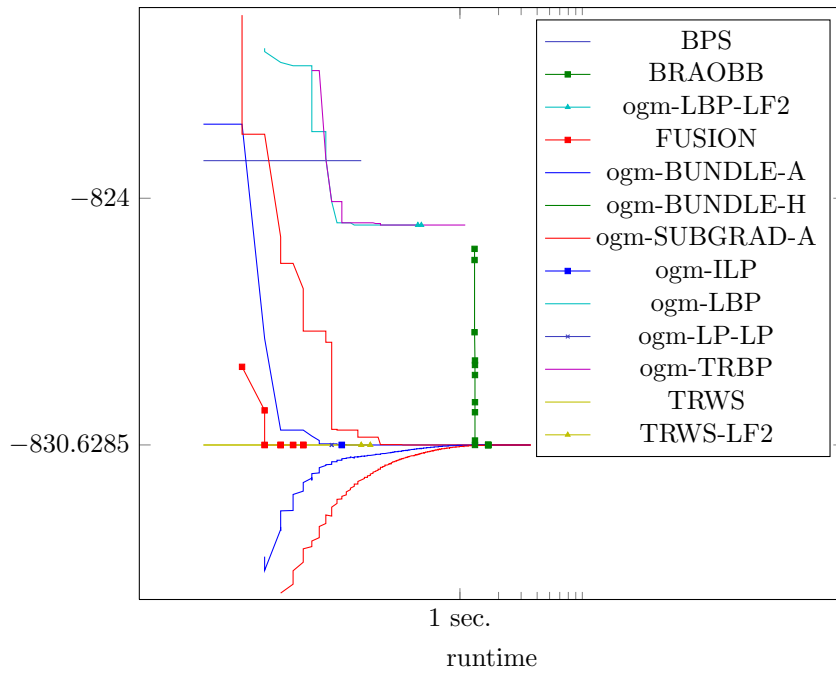


Figure 506: Runtime results for the instance 6000072 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

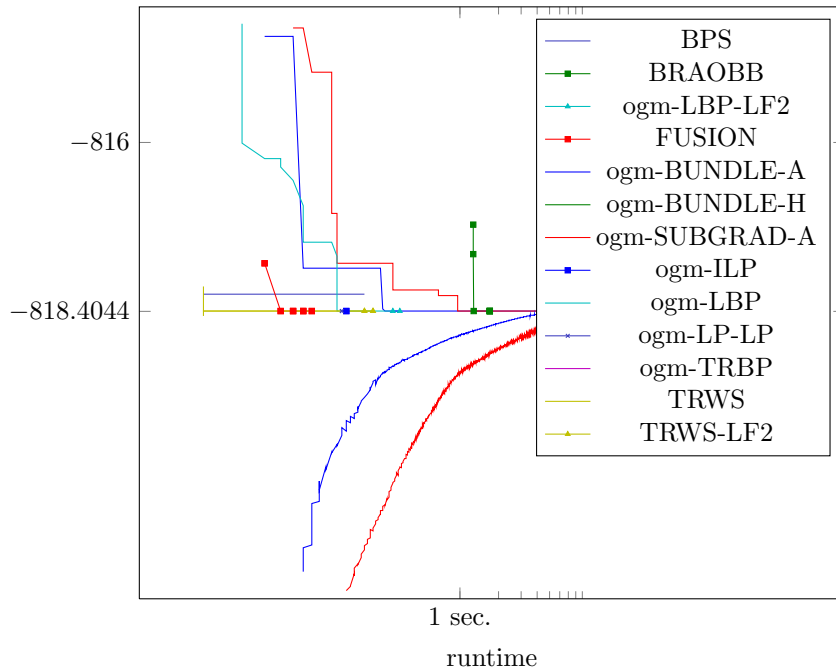


Figure 507: Runtime results for the instance 6000073 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

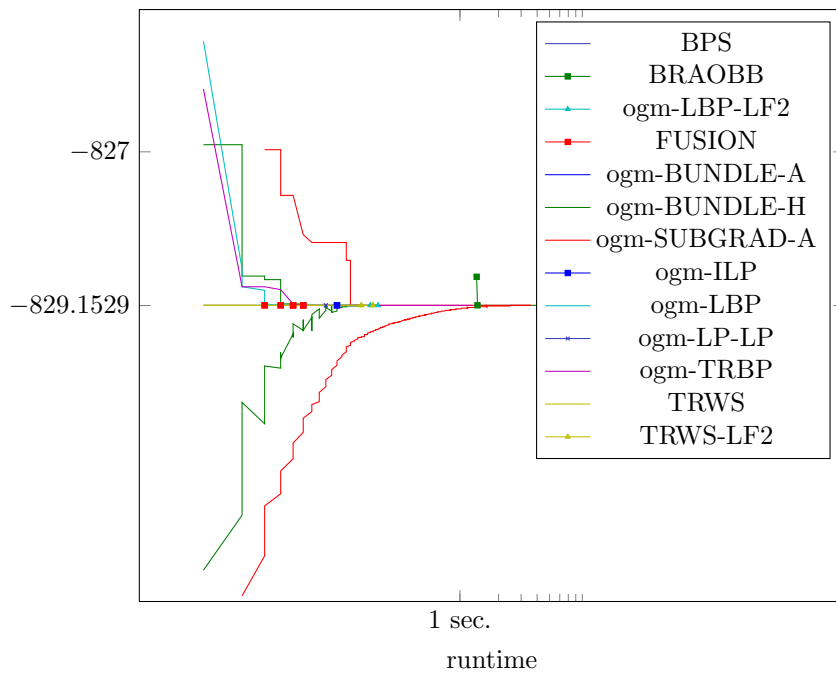


Figure 508: Runtime results for the instance 6000074 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

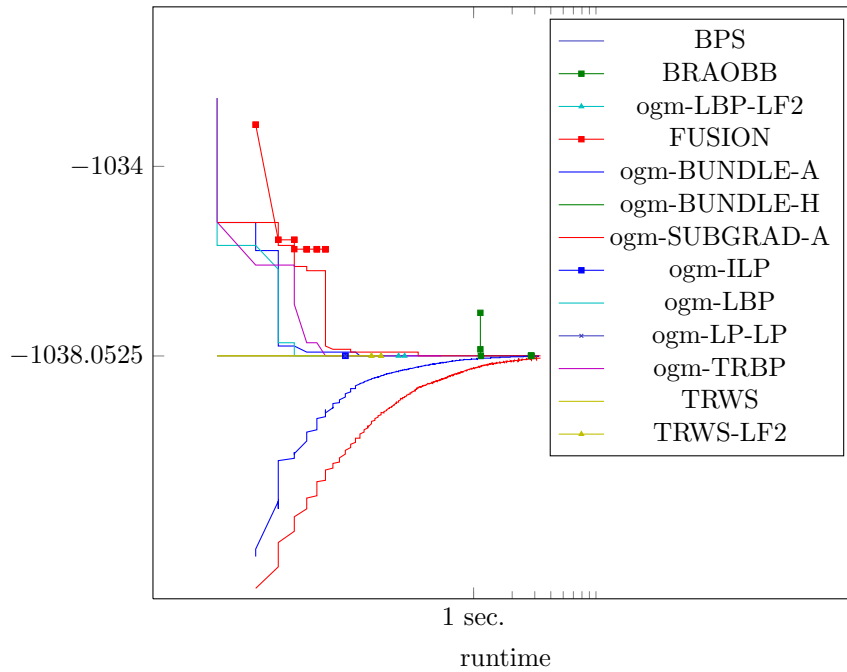


Figure 509: Runtime results for the instance 6000075 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

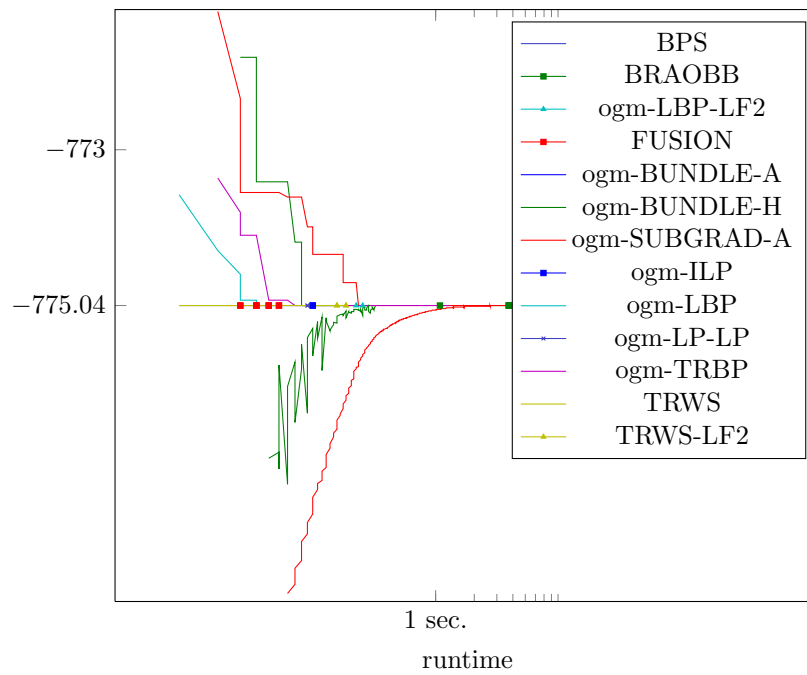


Figure 510: Runtime results for the instance 6000076 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

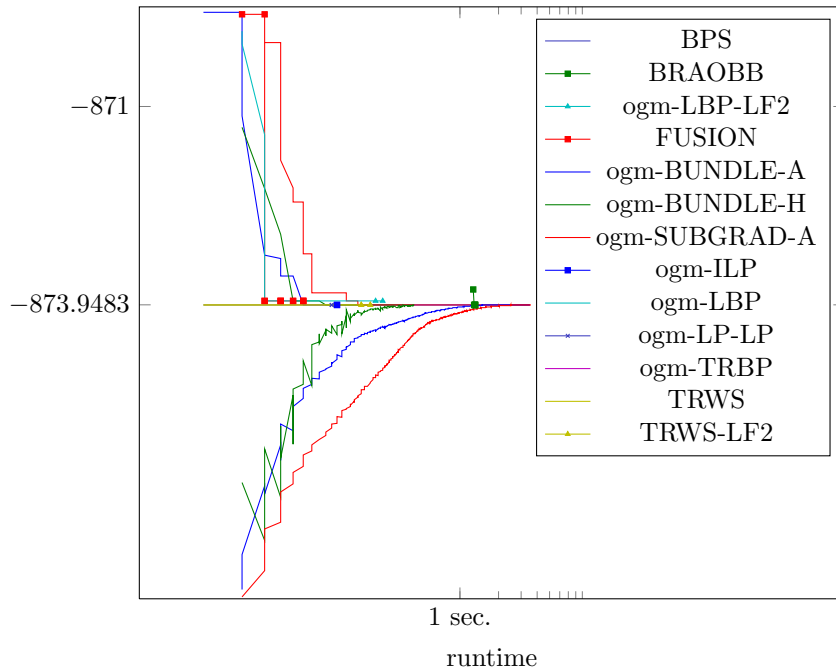


Figure 511: Runtime results for the instance 6000077 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

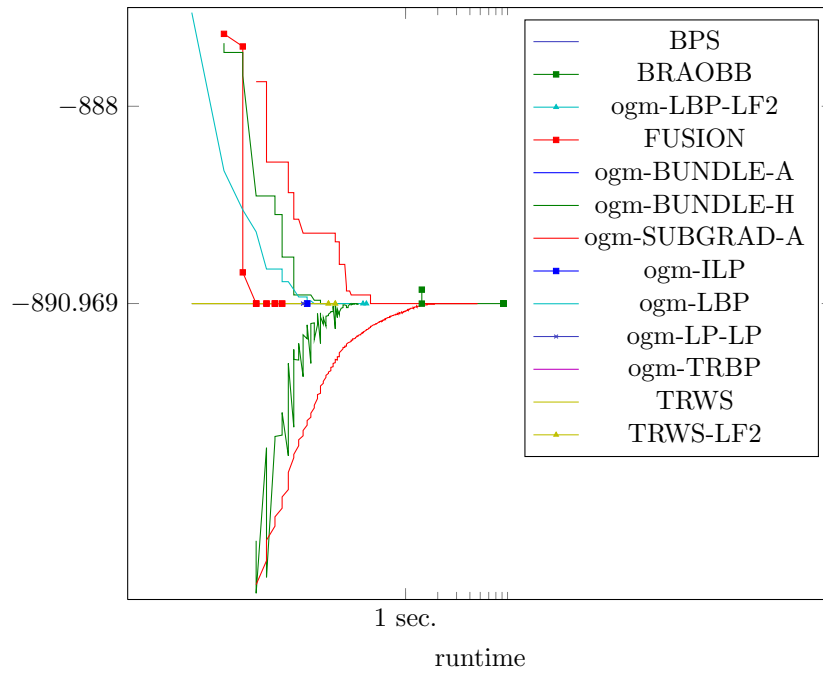


Figure 512: Runtime results for the instance 6000078 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

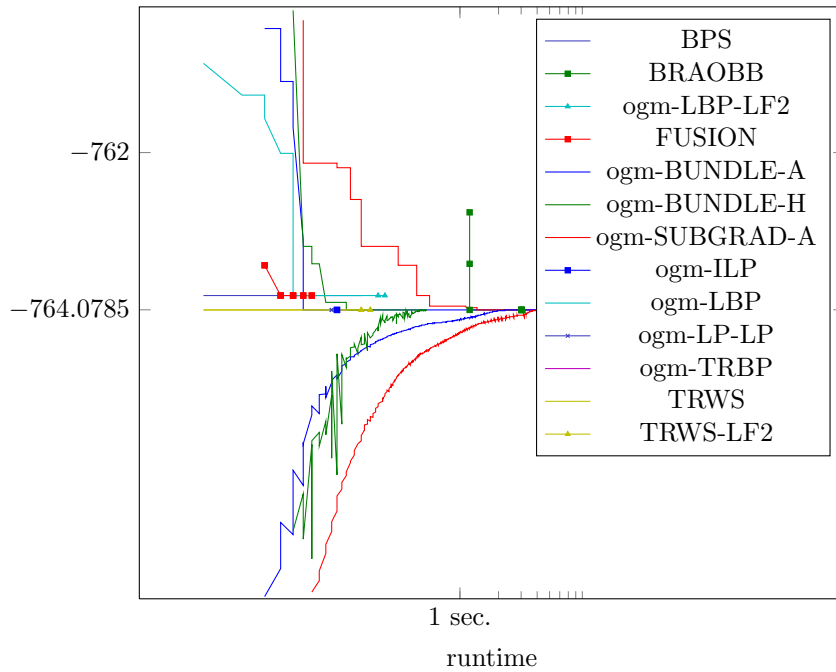


Figure 513: Runtime results for the instance 6000079 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

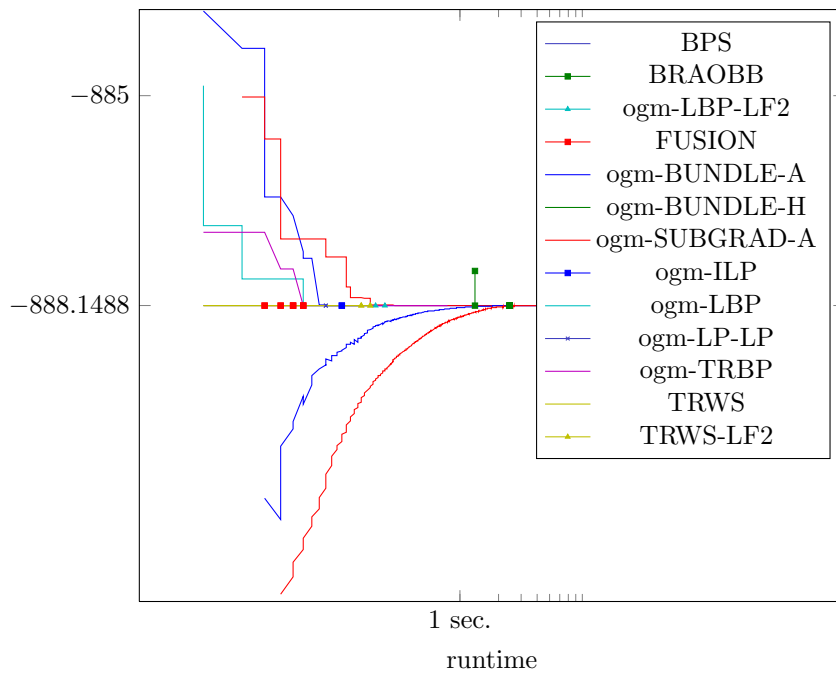


Figure 514: Runtime results for the instance 6000080 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

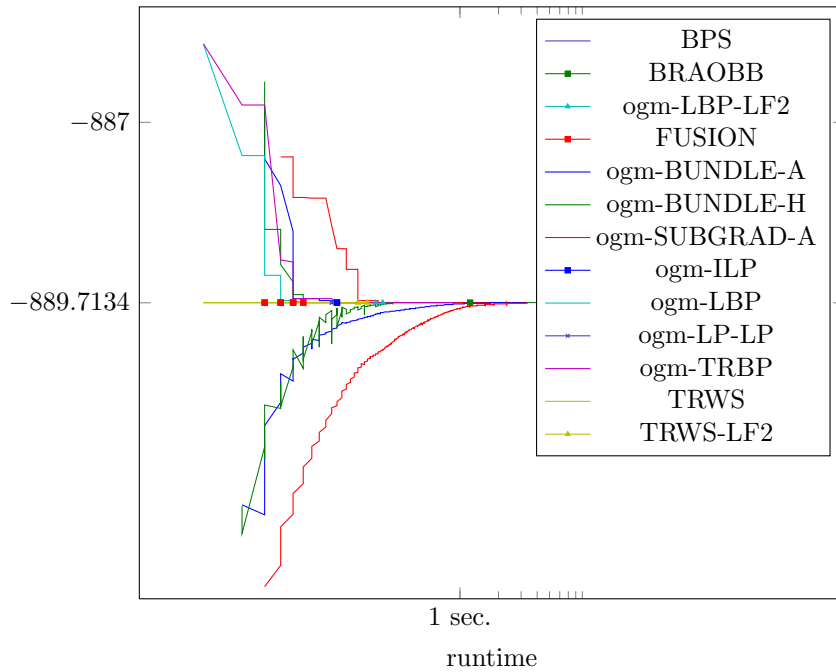


Figure 515: Runtime results for the instance *6000081* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

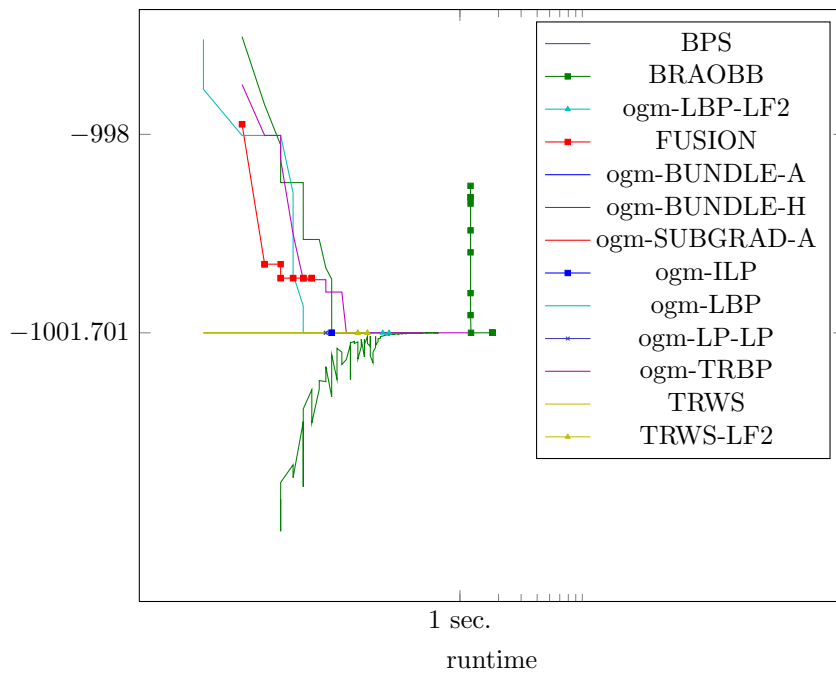


Figure 516: Runtime results for the instance *6000082* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

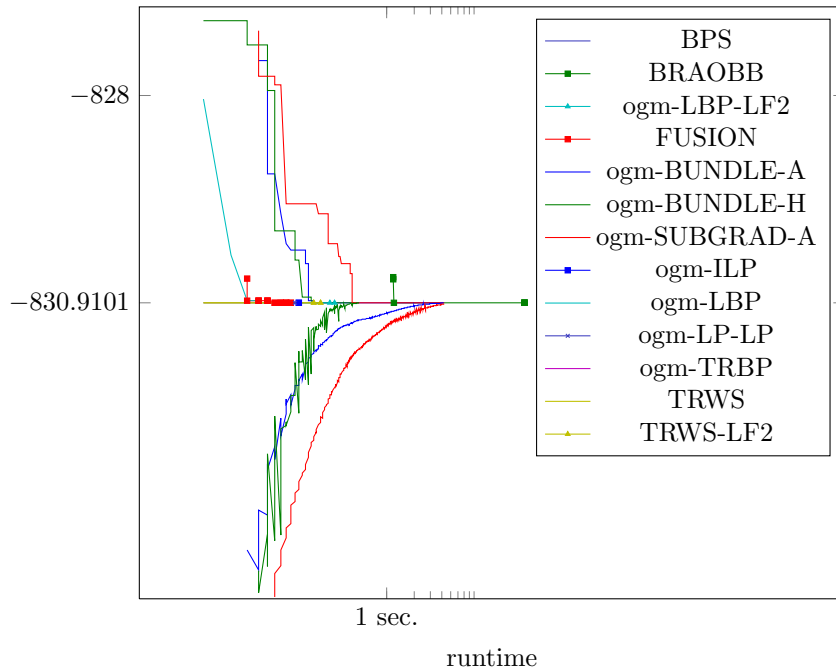


Figure 517: Runtime results for the instance 6000083 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

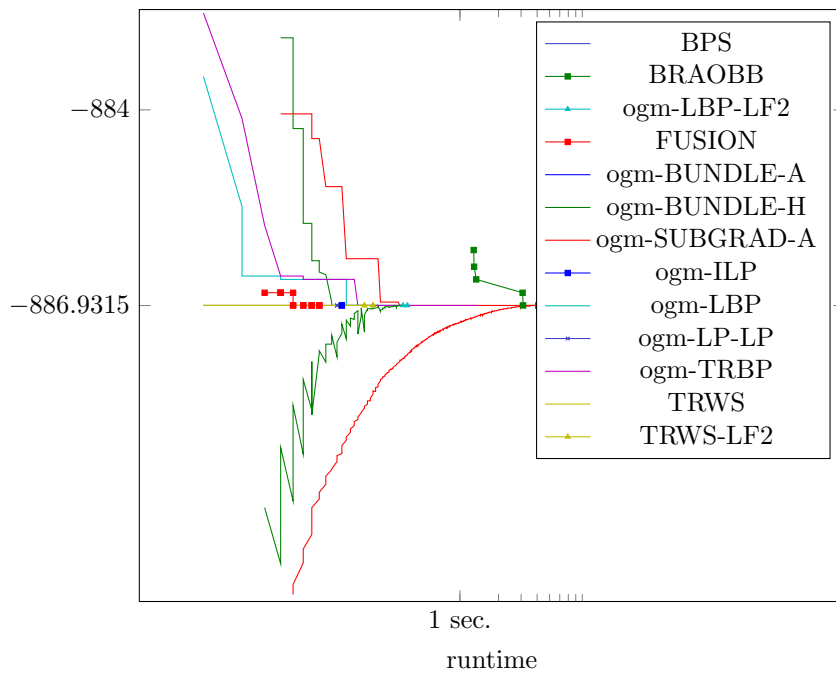


Figure 518: Runtime results for the instance 6000084 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

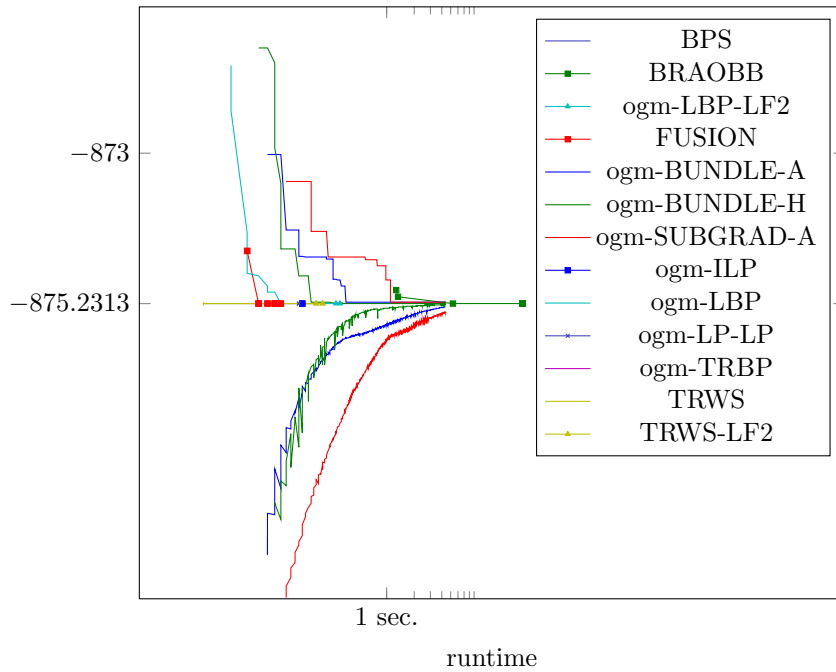


Figure 519: Runtime results for the instance 6000085 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

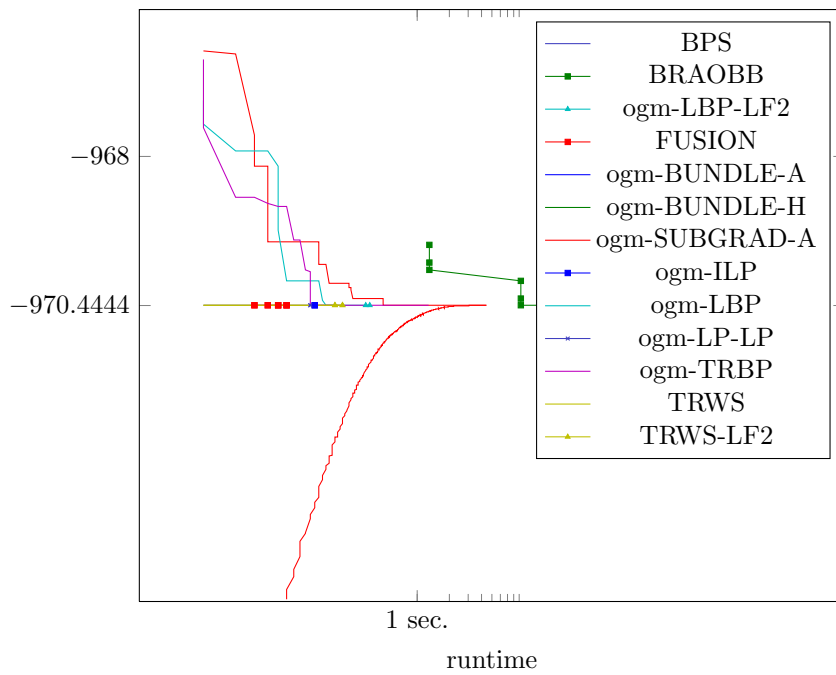


Figure 520: Runtime results for the instance 6000086 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

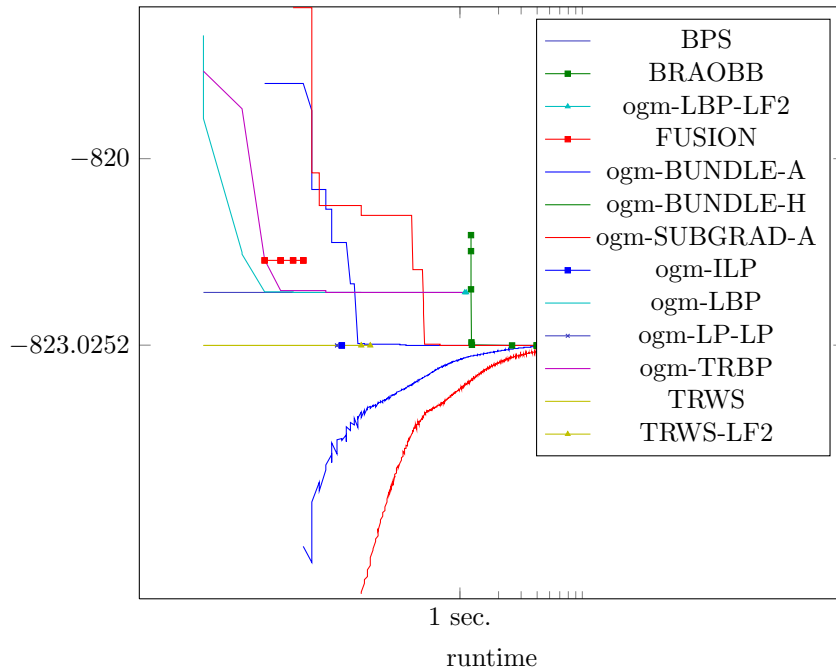


Figure 521: Runtime results for the instance 6000087 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

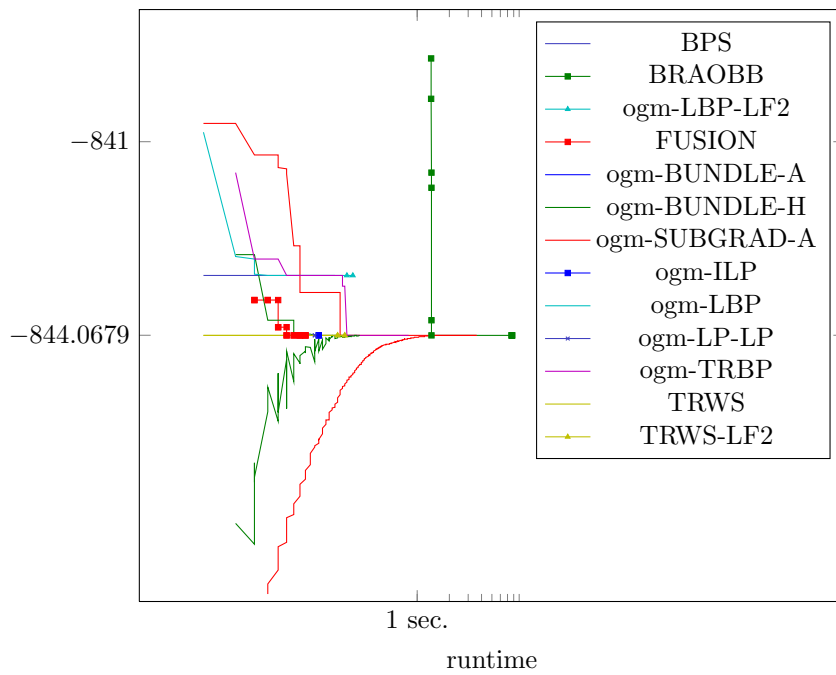


Figure 522: Runtime results for the instance 6000088 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

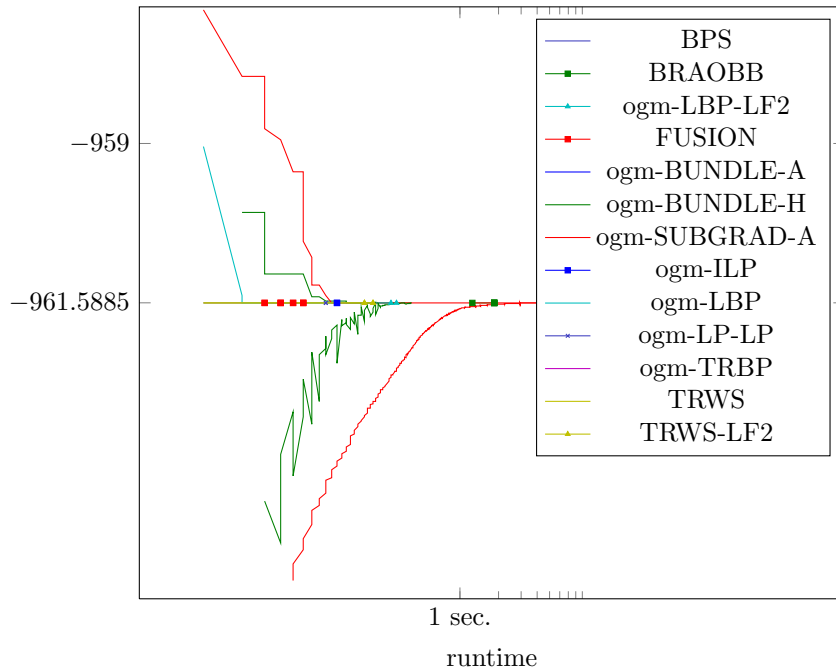


Figure 523: Runtime results for the instance 6000089 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

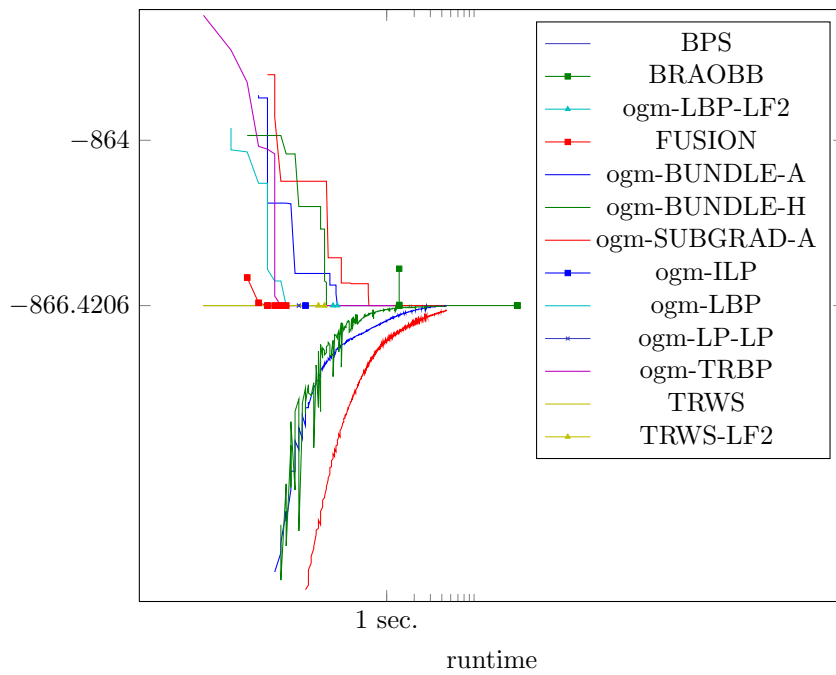


Figure 524: Runtime results for the instance 6000090 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

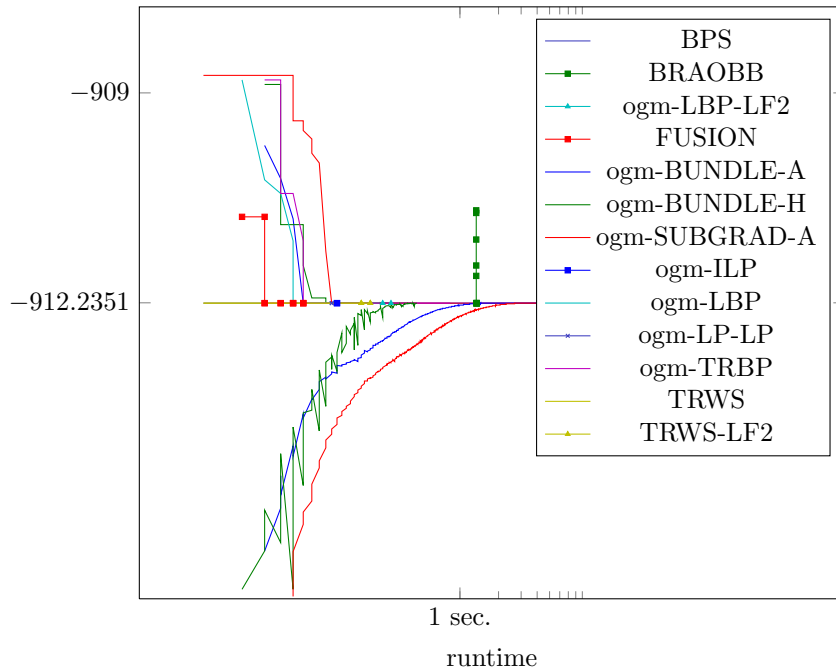


Figure 525: Runtime results for the instance 6000091 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

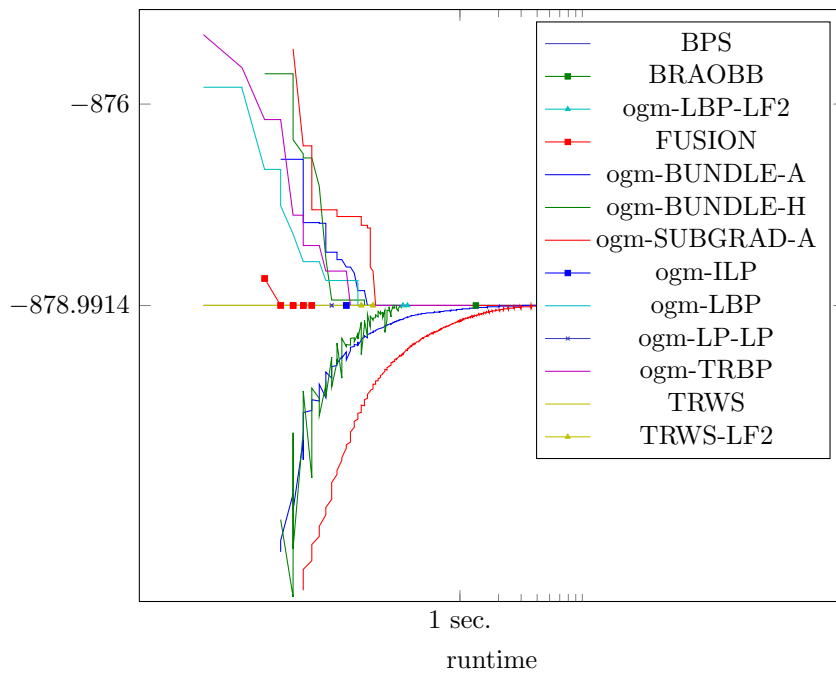


Figure 526: Runtime results for the instance 6000092 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

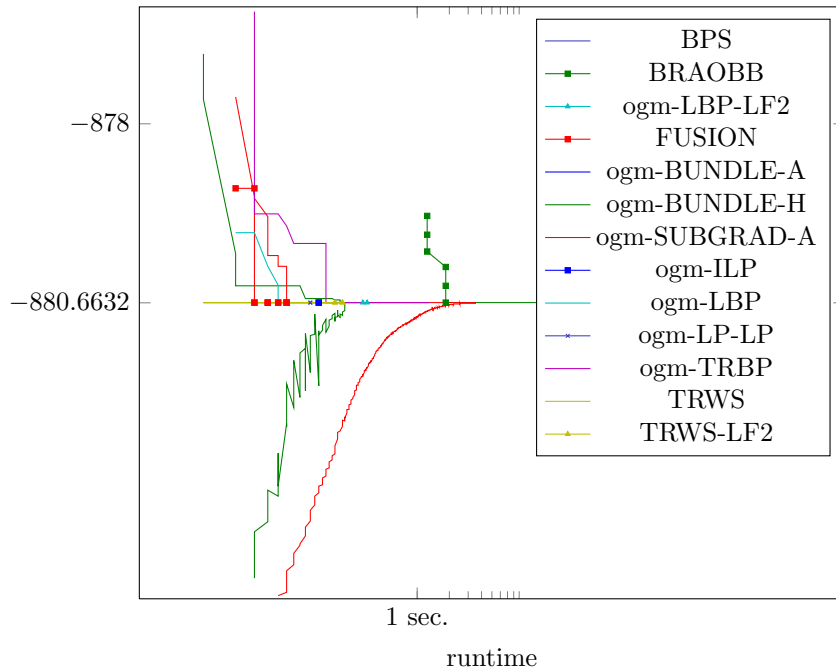


Figure 527: Runtime results for the instance 6000093 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

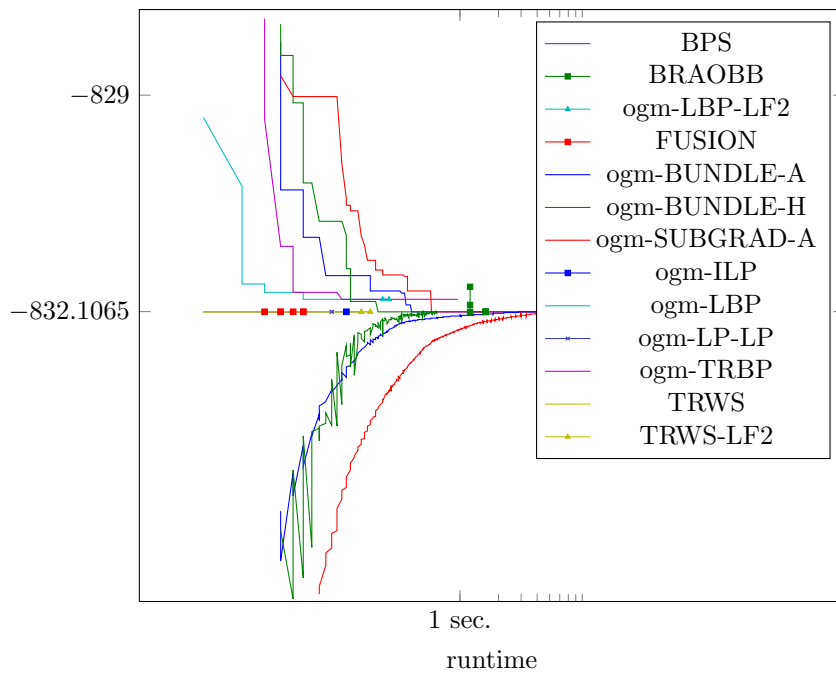


Figure 528: Runtime results for the instance 6000094 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

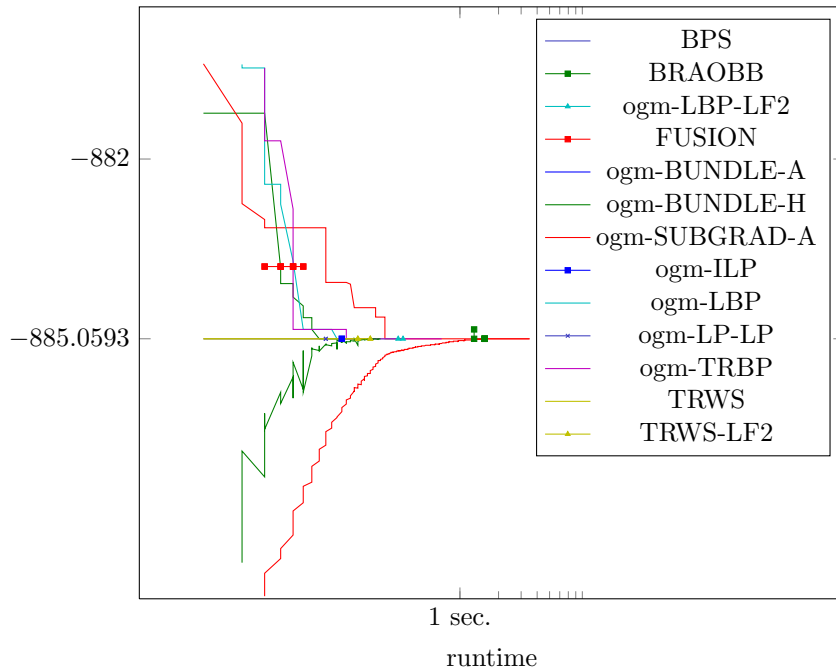


Figure 529: Runtime results for the instance 6000095 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

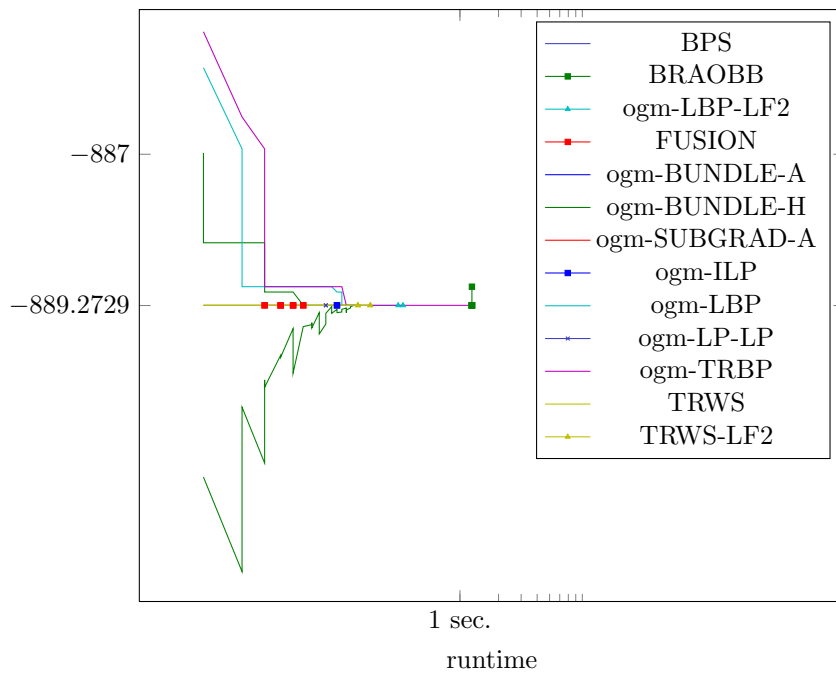


Figure 530: Runtime results for the instance 6000096 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

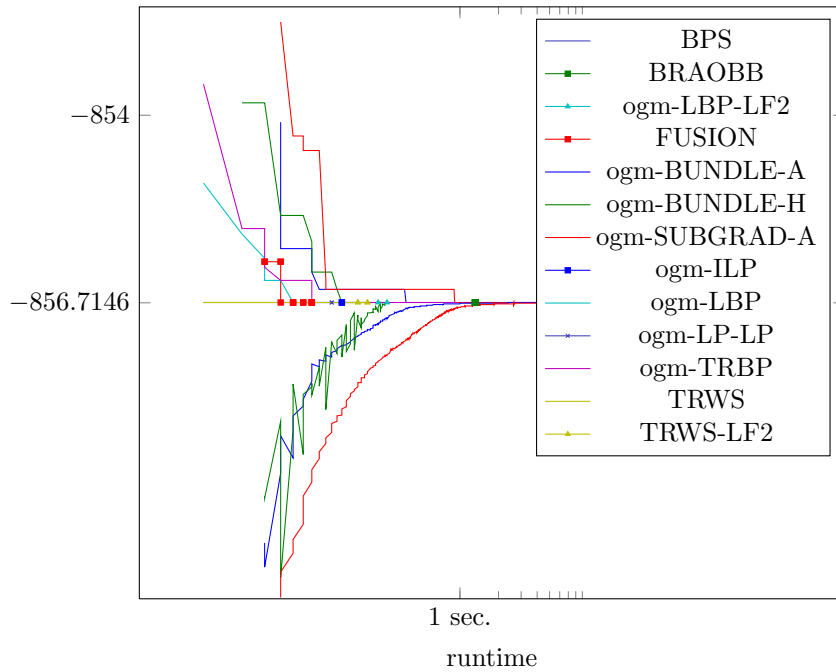


Figure 531: Runtime results for the instance 6000097 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

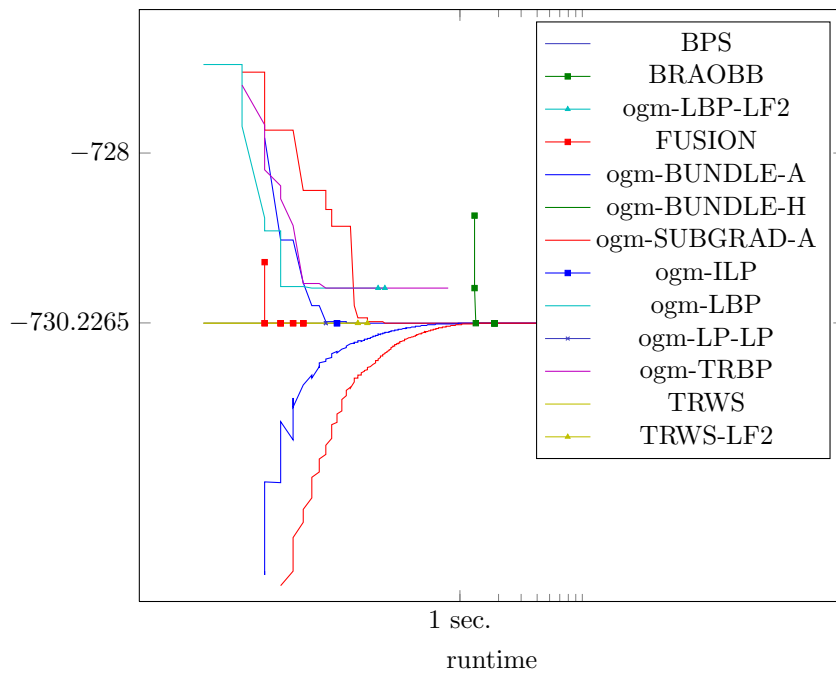


Figure 532: Runtime results for the instance 6000098 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

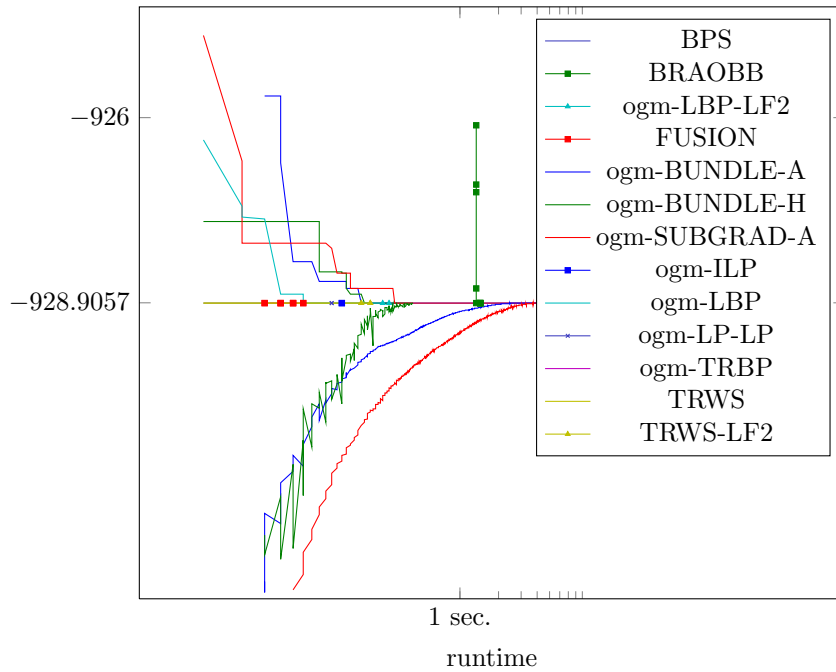


Figure 533: Runtime results for the instance 6000099 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

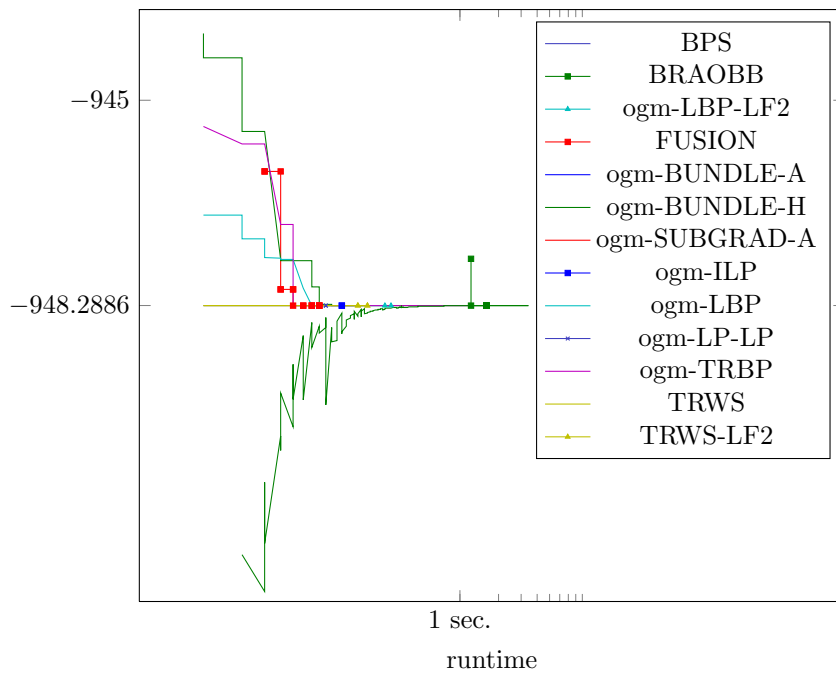


Figure 534: Runtime results for the instance 6000100 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

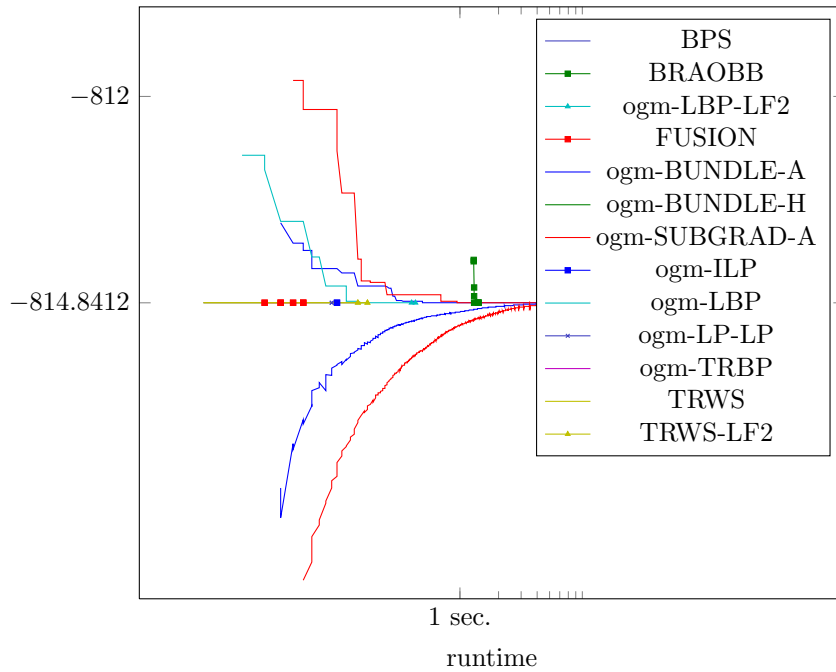


Figure 535: Runtime results for the instance 6000101 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

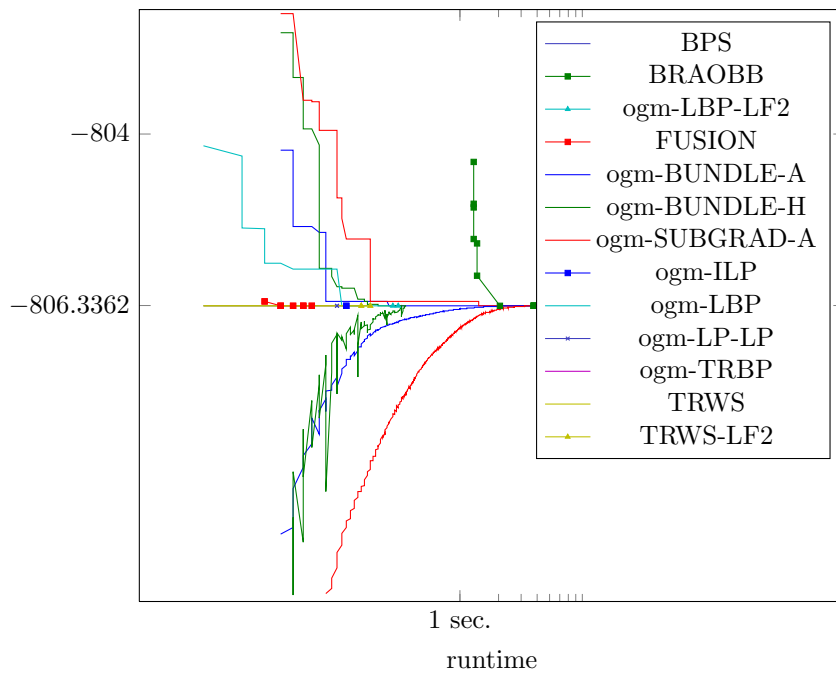


Figure 536: Runtime results for the instance 6000102 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

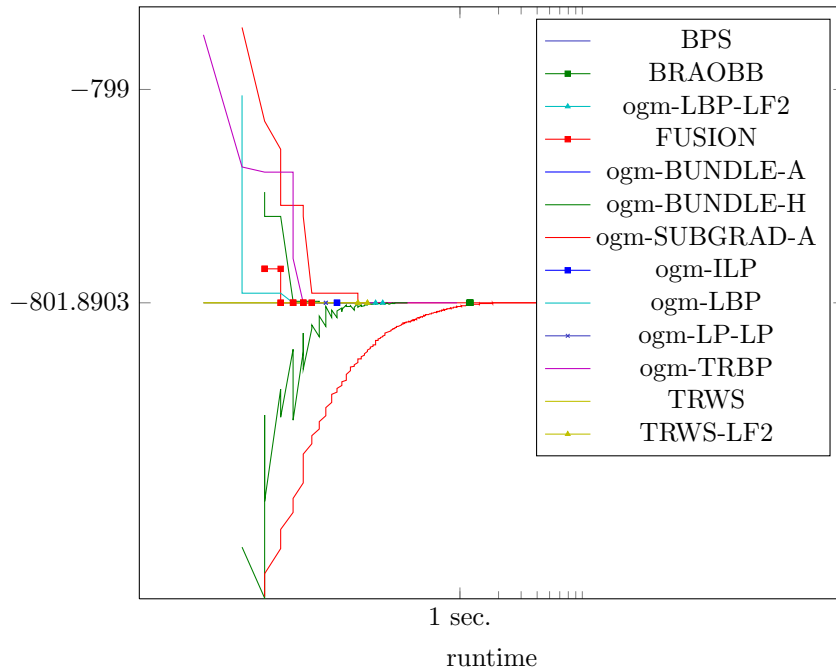


Figure 537: Runtime results for the instance 6000103 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

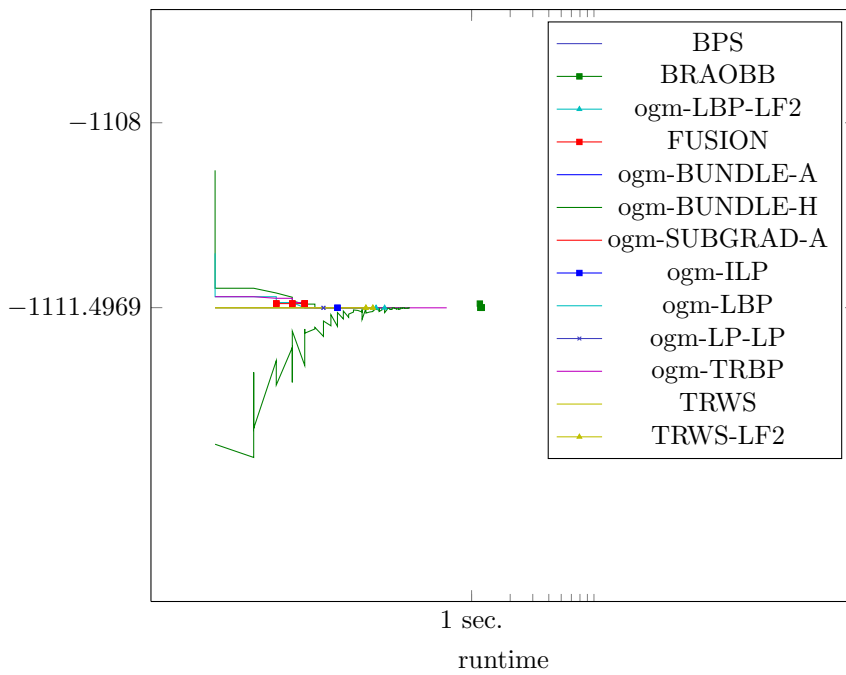


Figure 538: Runtime results for the instance 6000104 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

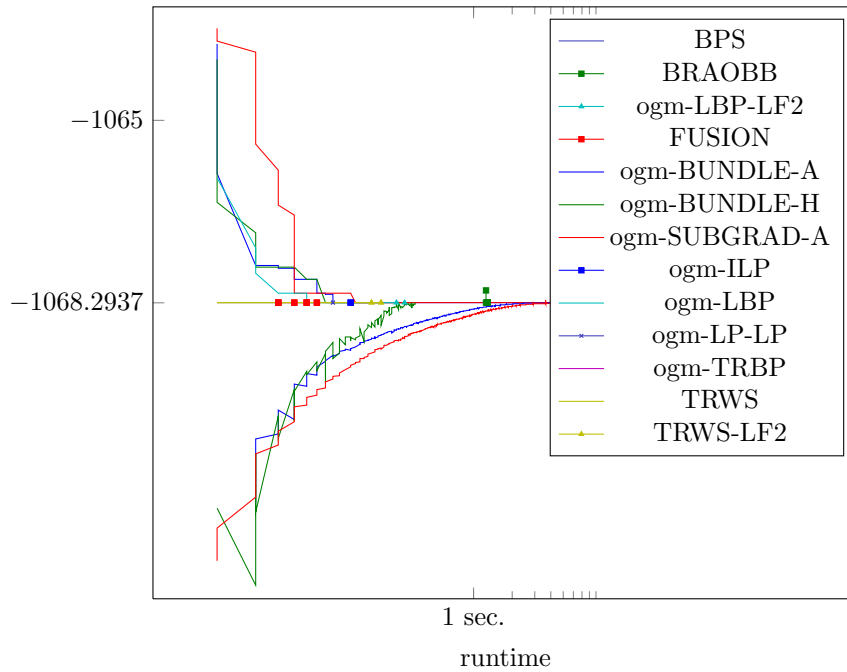


Figure 539: Runtime results for the instance 6000105 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

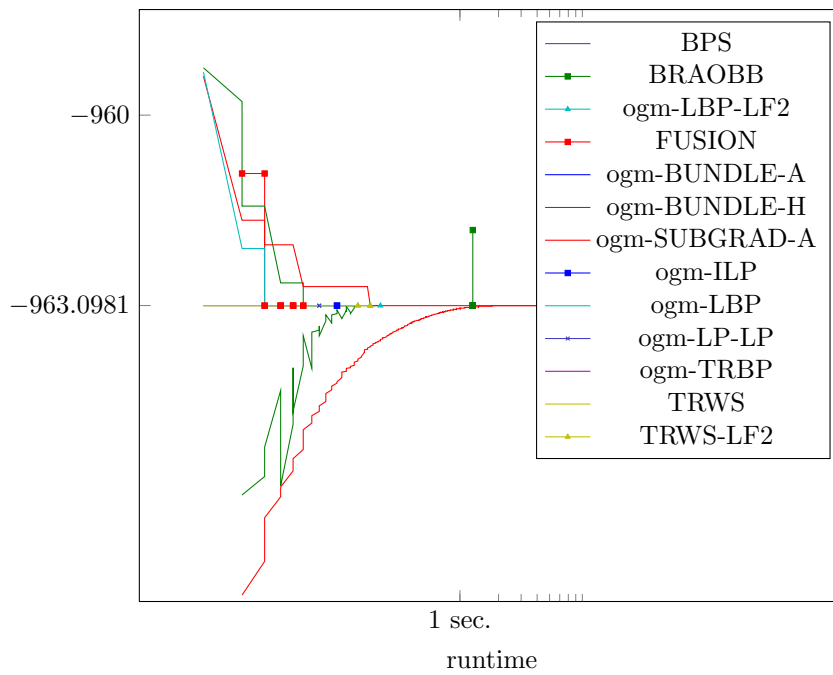


Figure 540: Runtime results for the instance 6000106 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

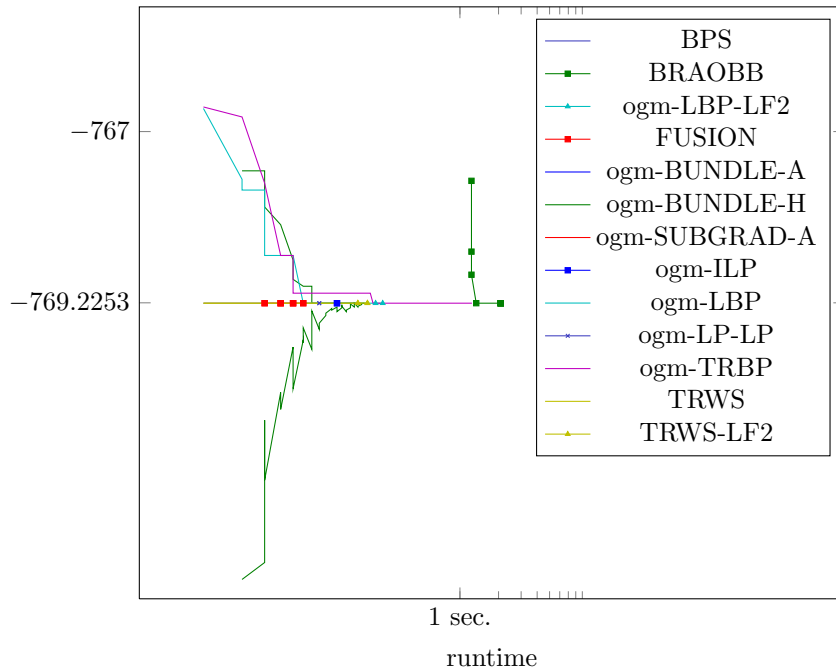


Figure 541: Runtime results for the instance *6000107* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

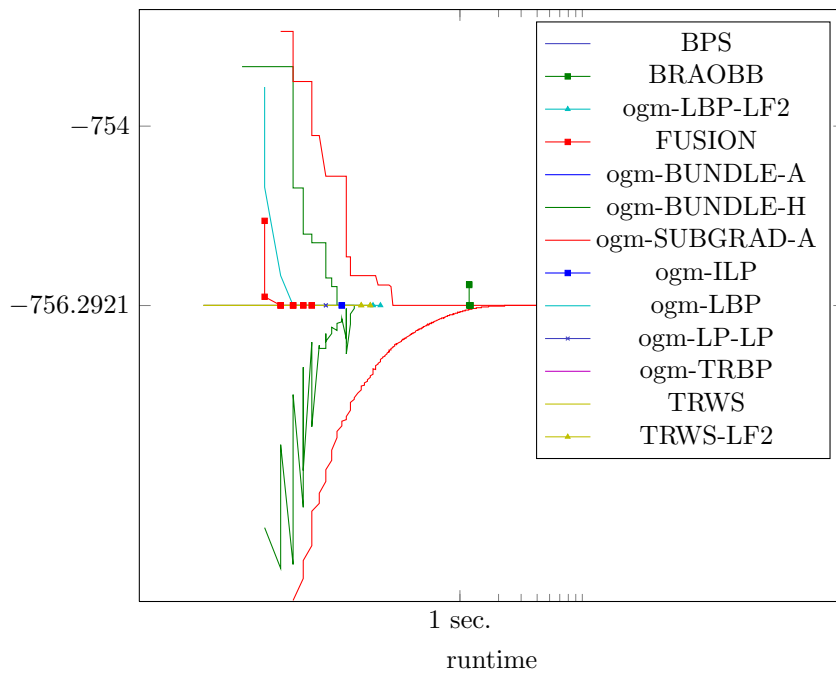


Figure 542: Runtime results for the instance *6000108* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

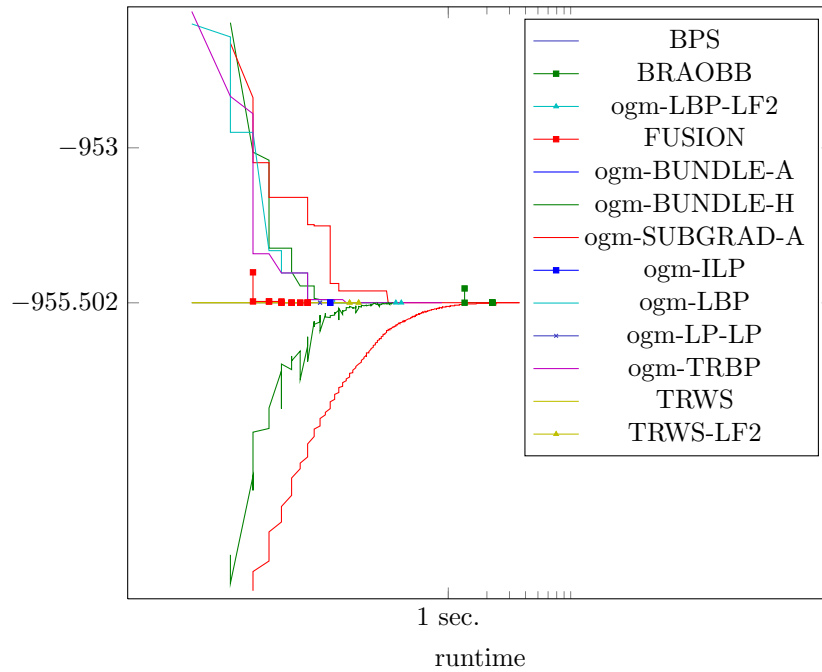


Figure 543: Runtime results for the instance 6000109 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

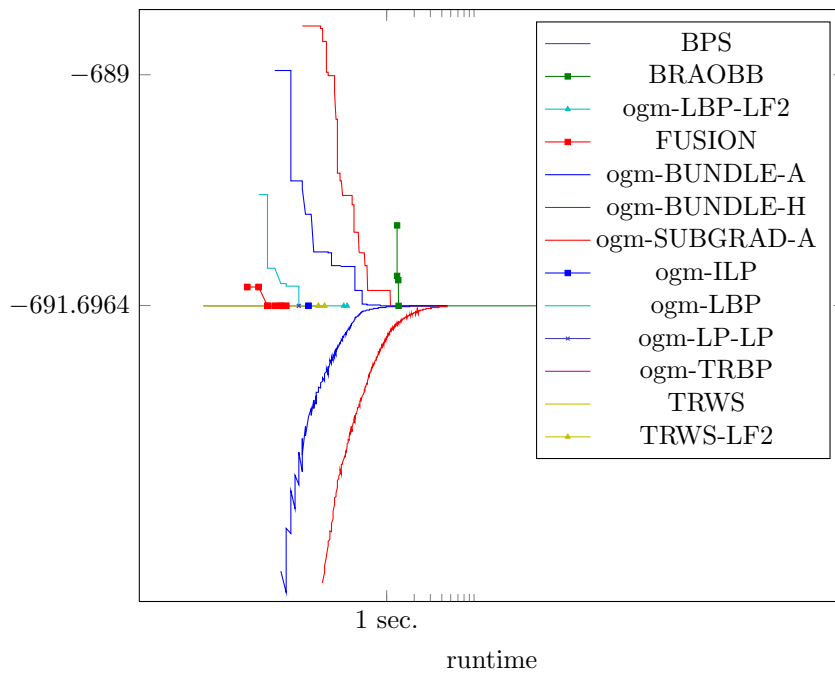


Figure 544: Runtime results for the instance 6000110 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

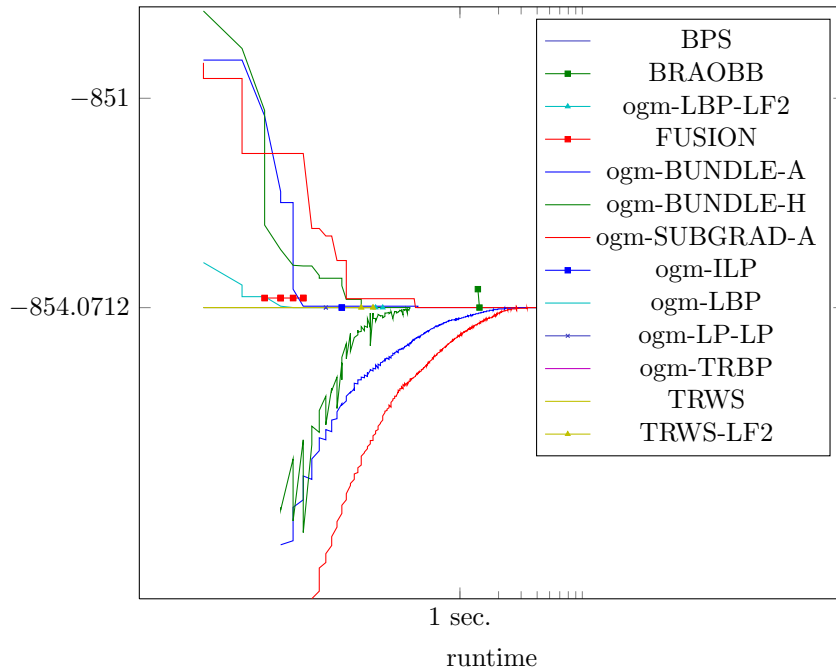


Figure 545: Runtime results for the instance 6000111 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

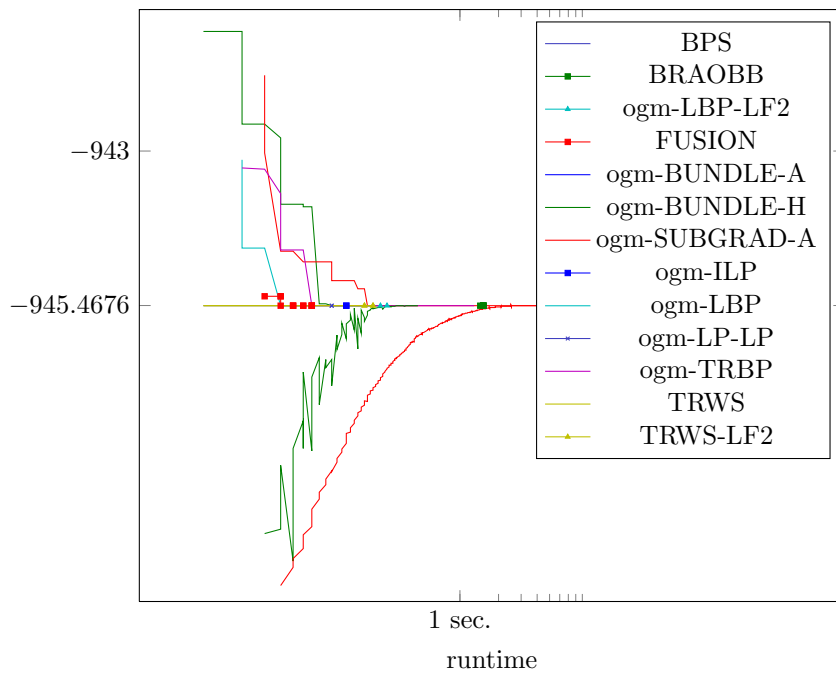


Figure 546: Runtime results for the instance 6000112 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

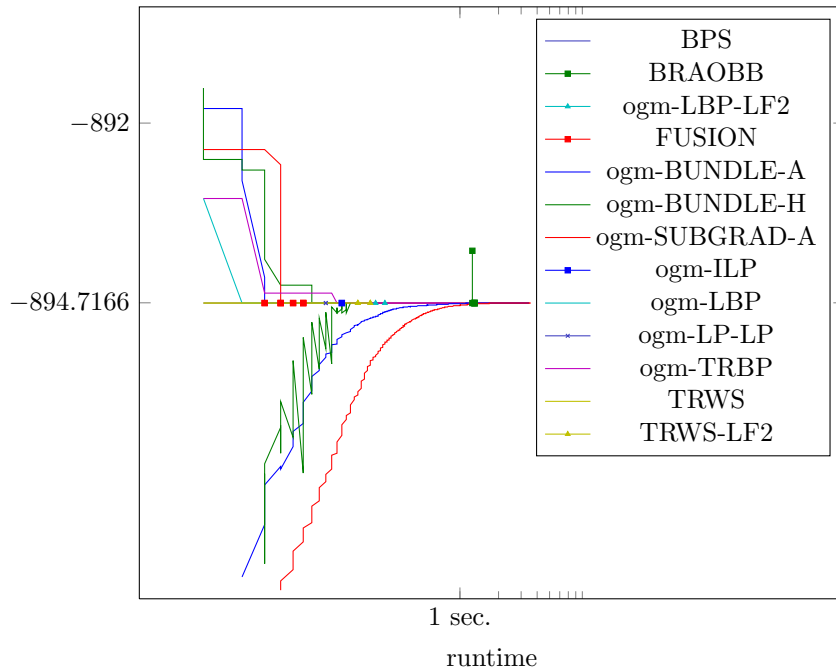


Figure 547: Runtime results for the instance 6000113 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

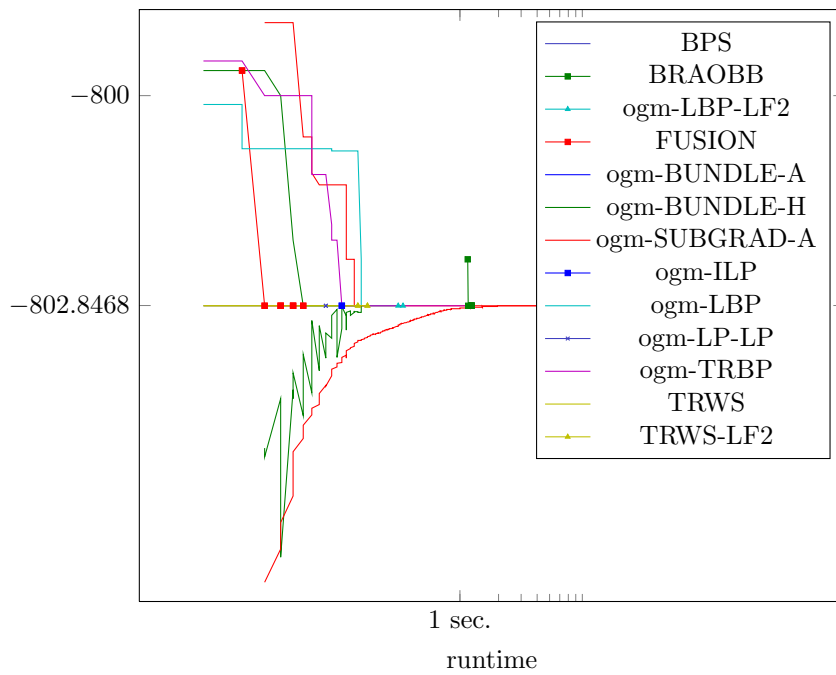


Figure 548: Runtime results for the instance 6000114 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

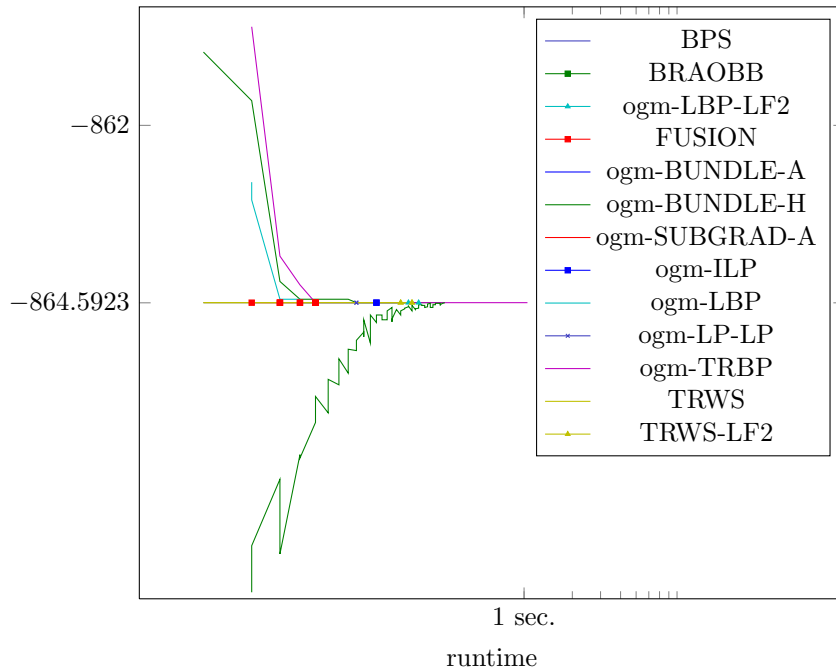


Figure 549: Runtime results for the instance 6000115 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

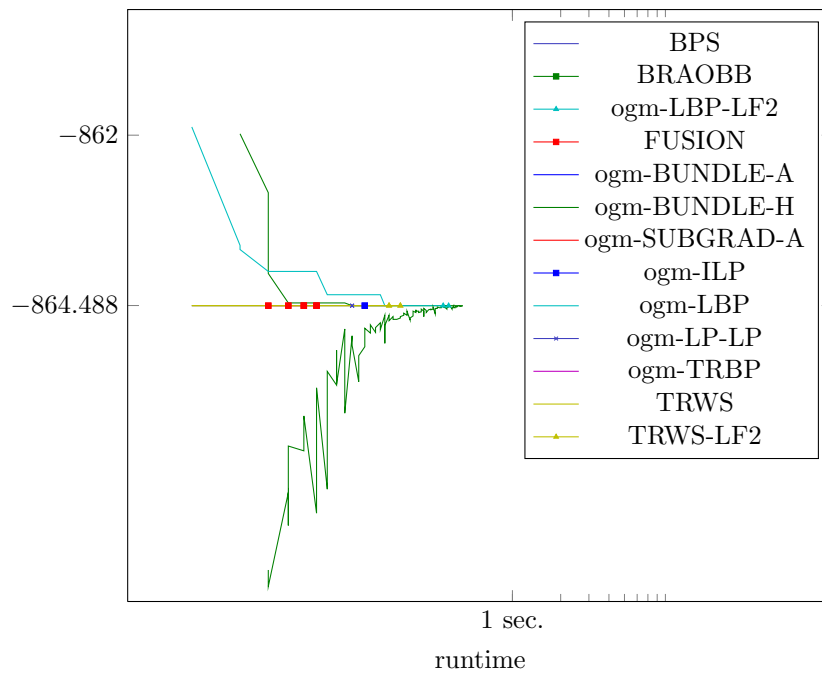


Figure 550: Runtime results for the instance 6000116 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

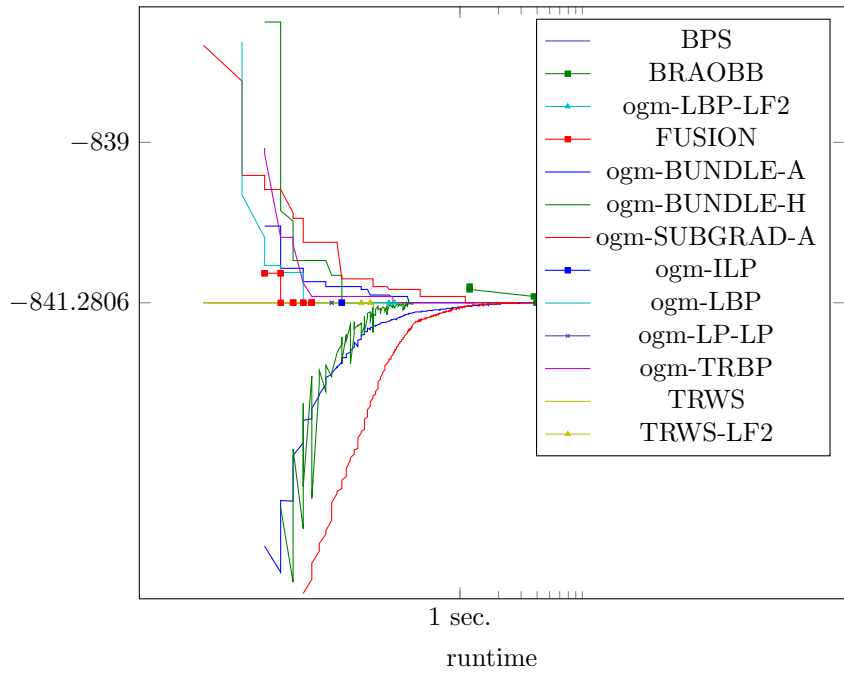


Figure 551: Runtime results for the instance 6000117 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

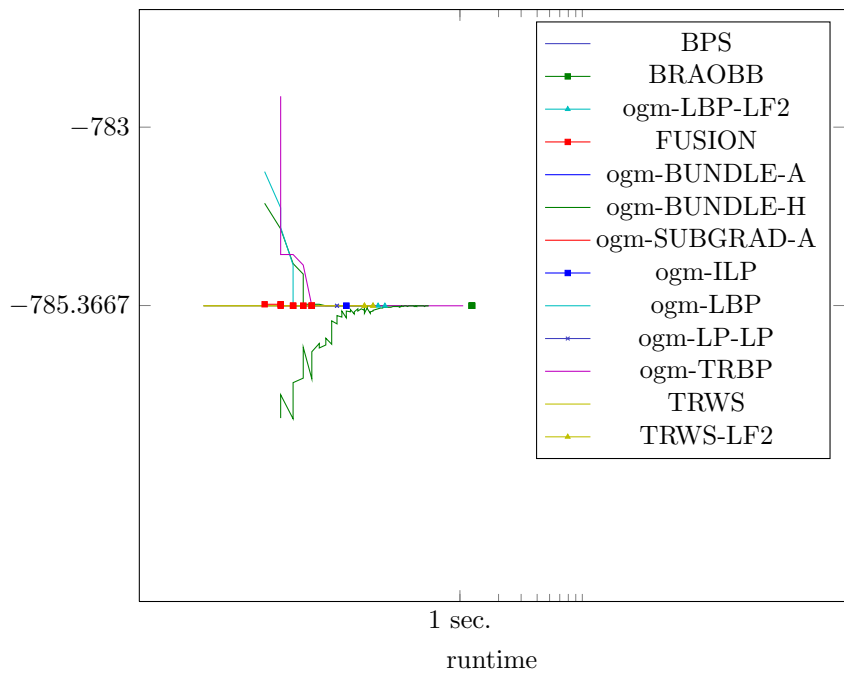


Figure 552: Runtime results for the instance 6000118 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

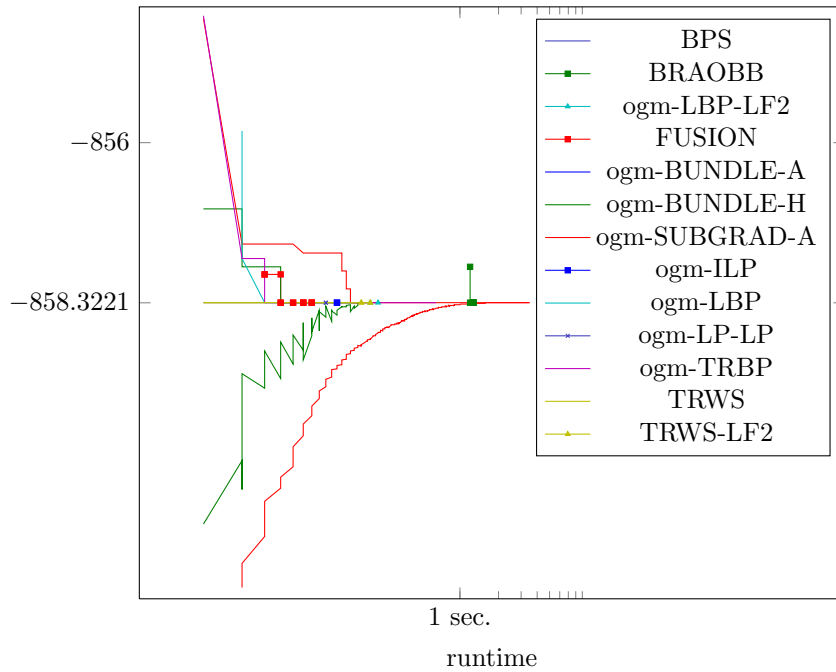


Figure 553: Runtime results for the instance 6000119 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

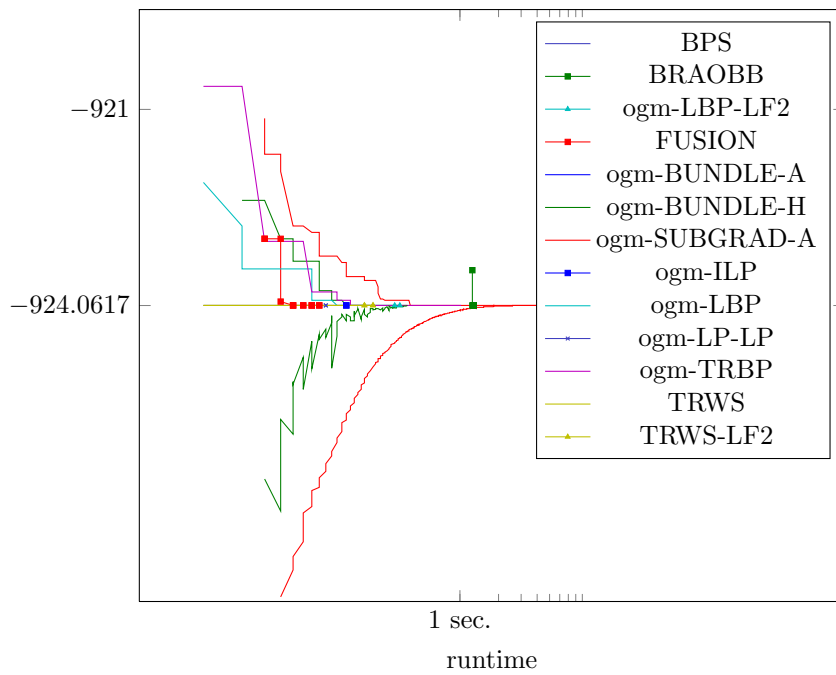


Figure 554: Runtime results for the instance 6000120 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

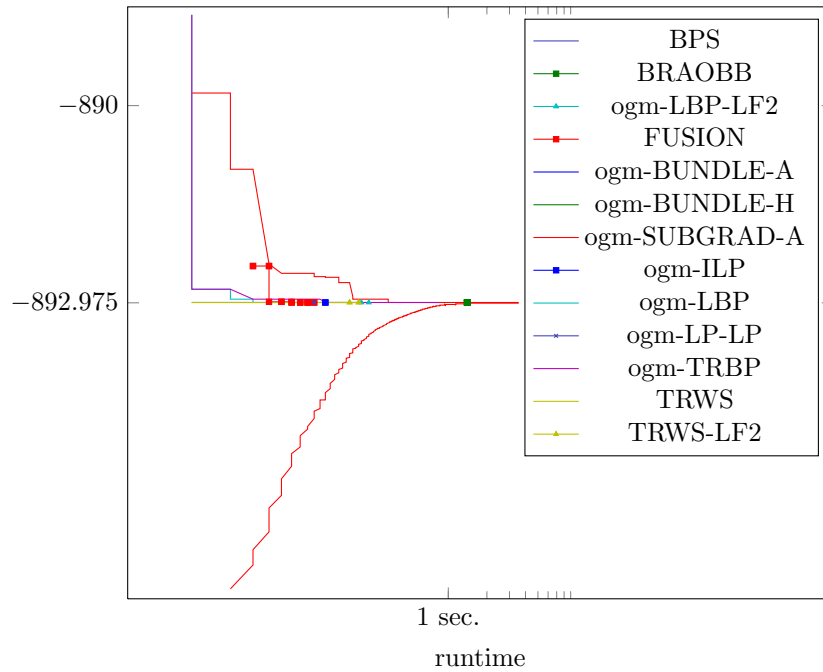


Figure 555: Runtime results for the instance 6000121 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

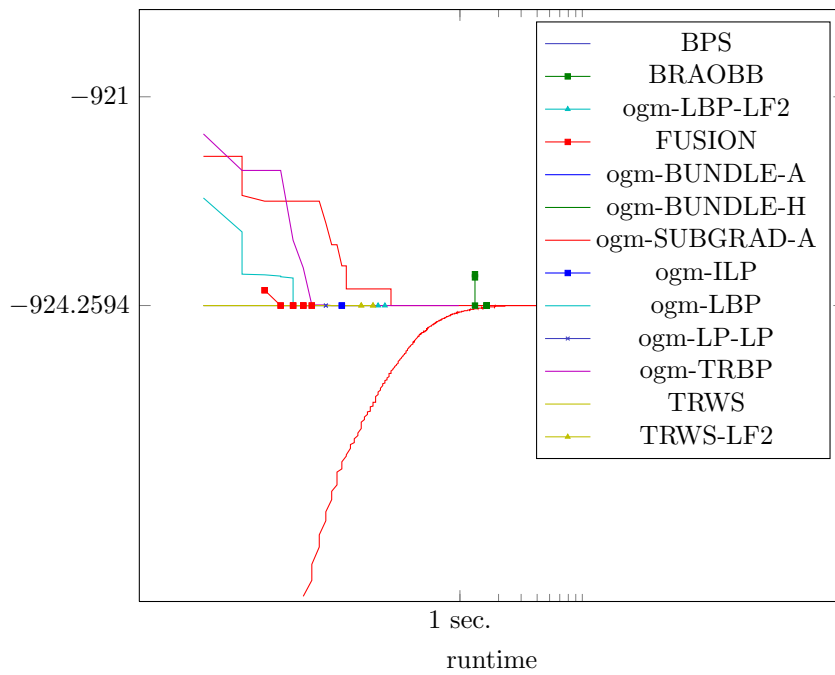


Figure 556: Runtime results for the instance 6000122 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

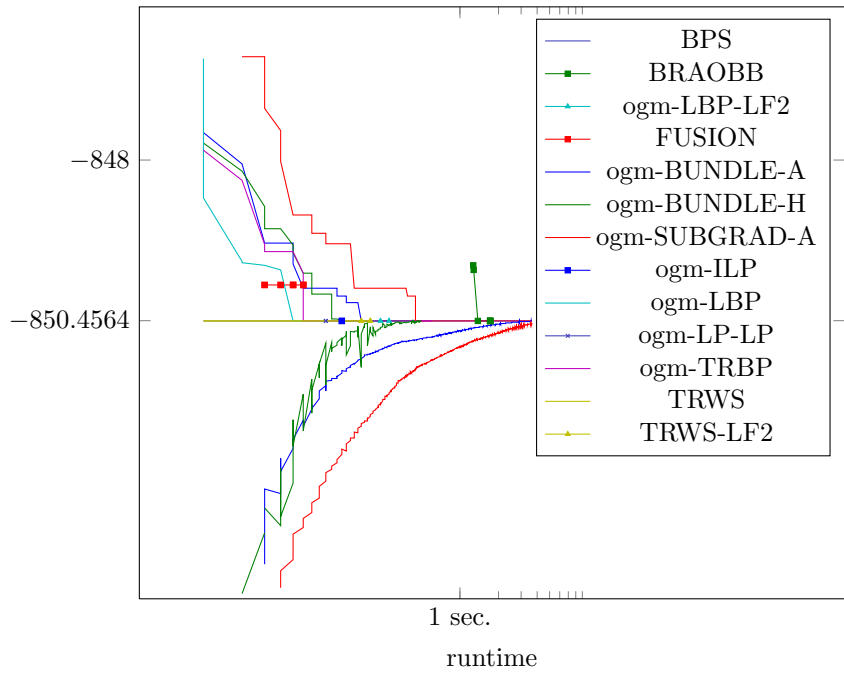


Figure 557: Runtime results for the instance 6000123 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

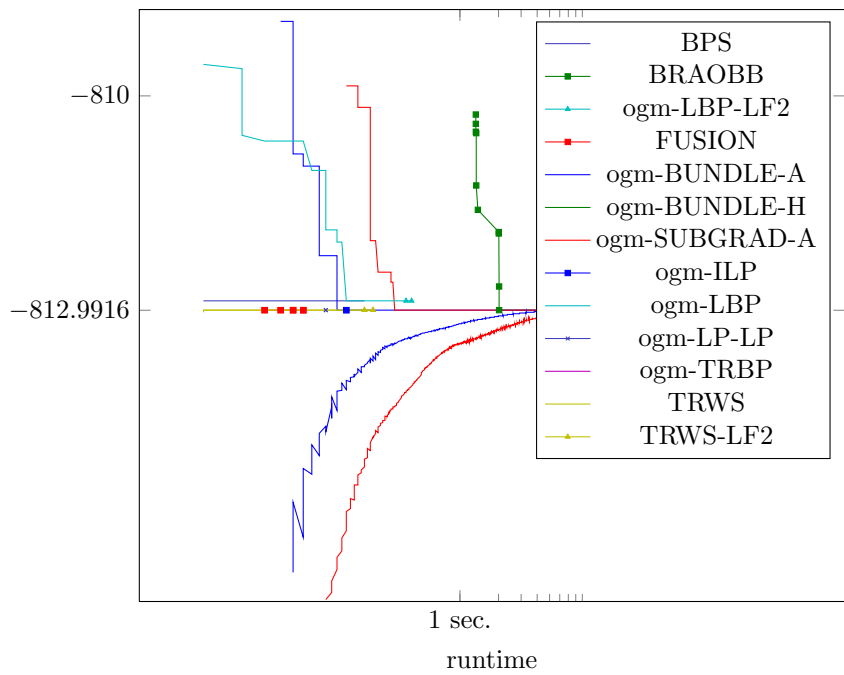


Figure 558: Runtime results for the instance 6000124 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

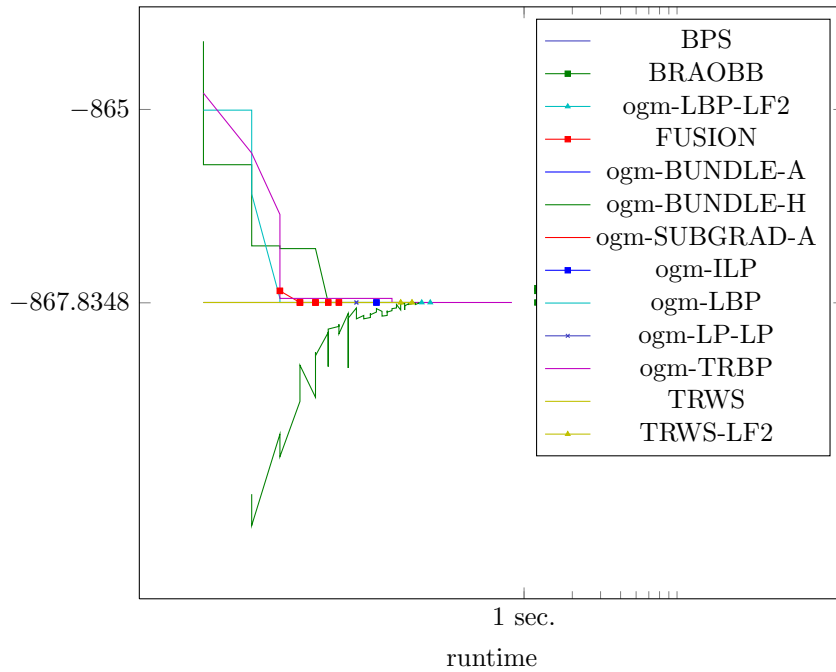


Figure 559: Runtime results for the instance 6000125 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

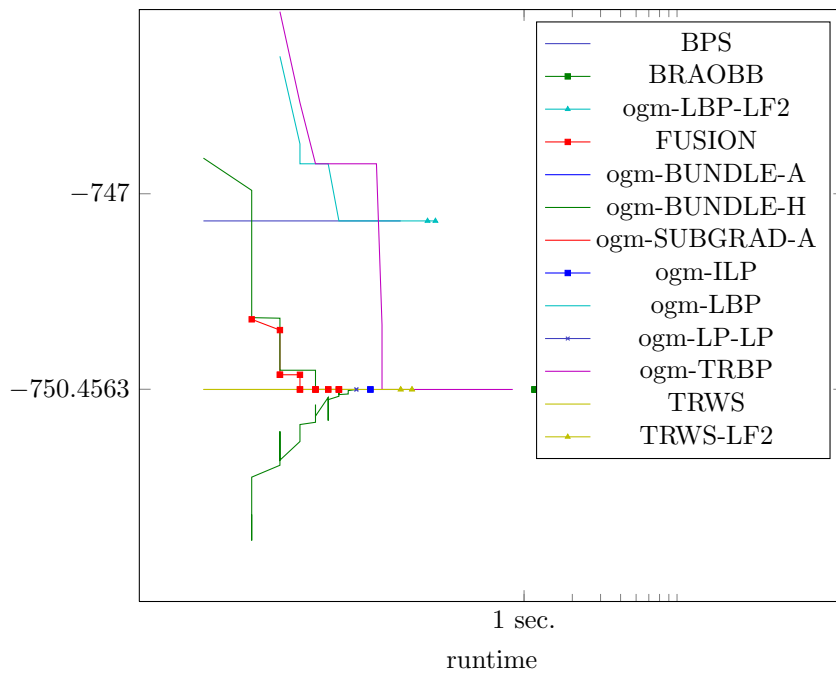


Figure 560: Runtime results for the instance 6000126 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

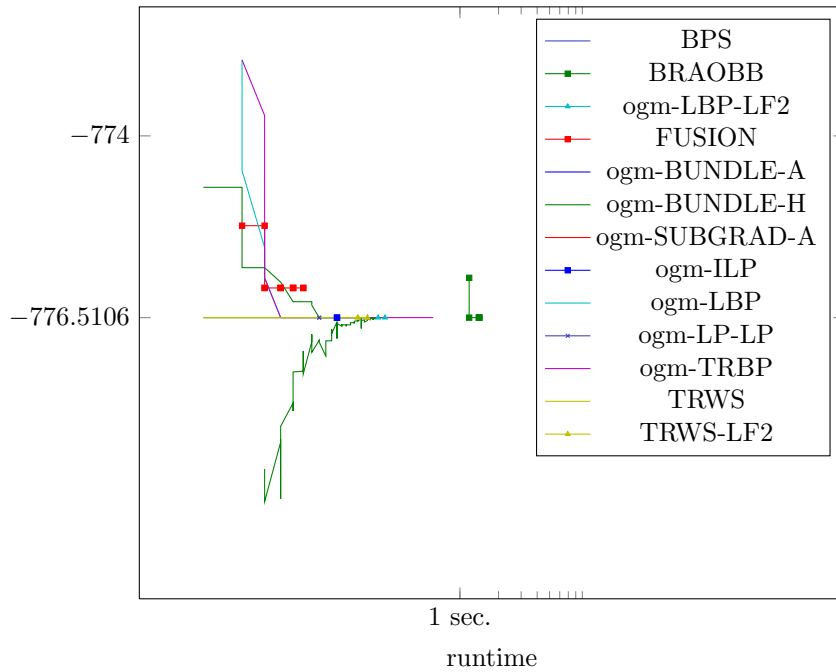


Figure 561: Runtime results for the instance 6000127 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

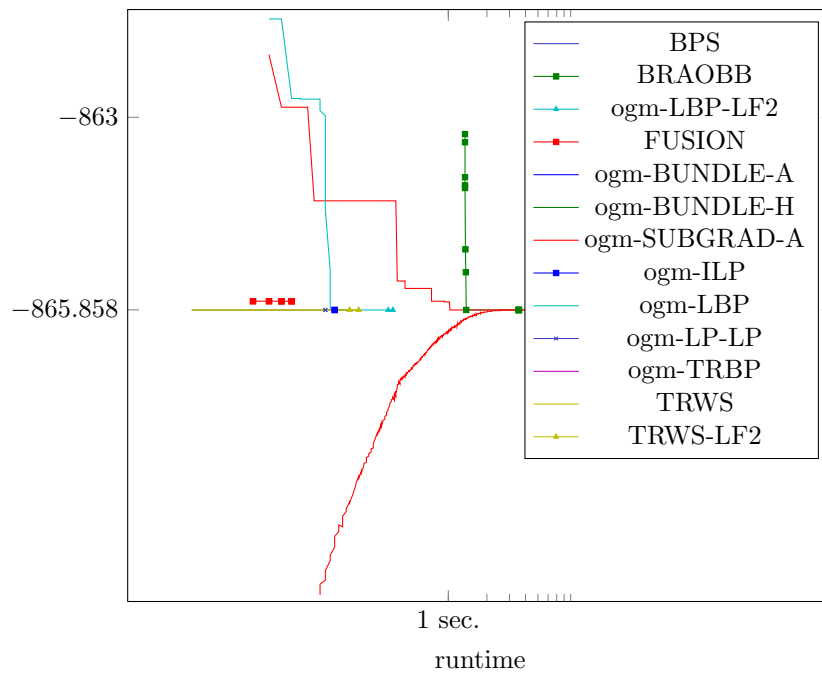


Figure 562: Runtime results for the instance 6000128 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

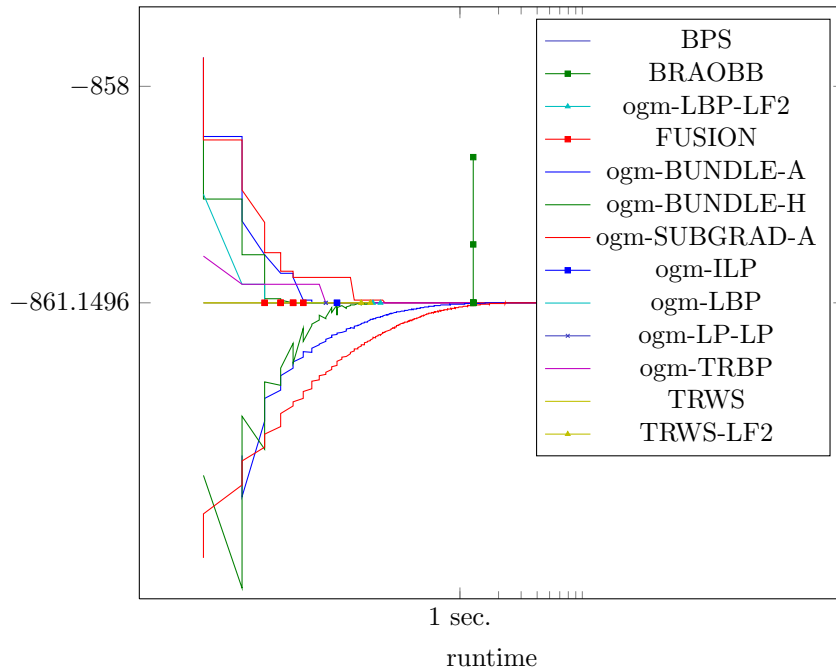


Figure 563: Runtime results for the instance 6000129 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

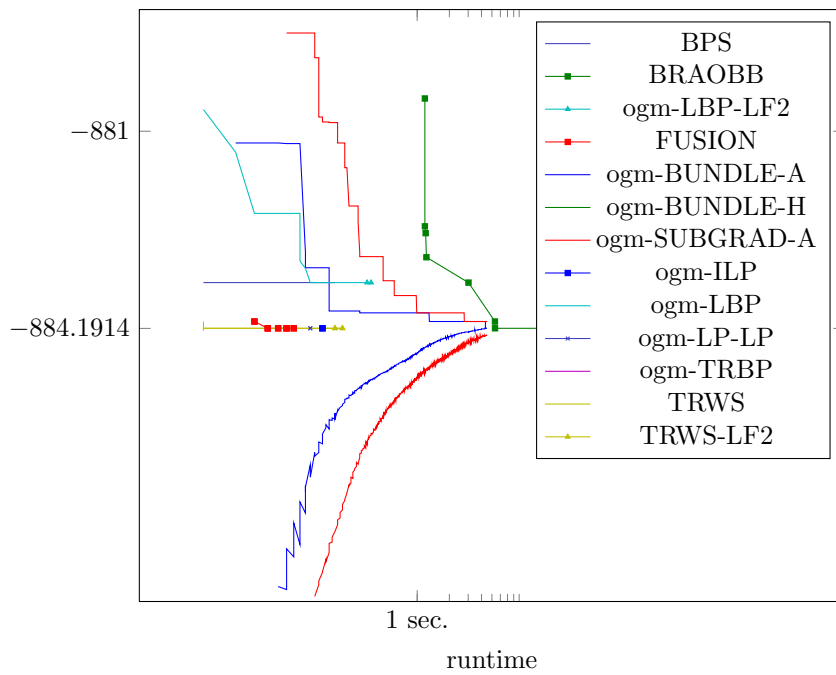


Figure 564: Runtime results for the instance 6000130 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

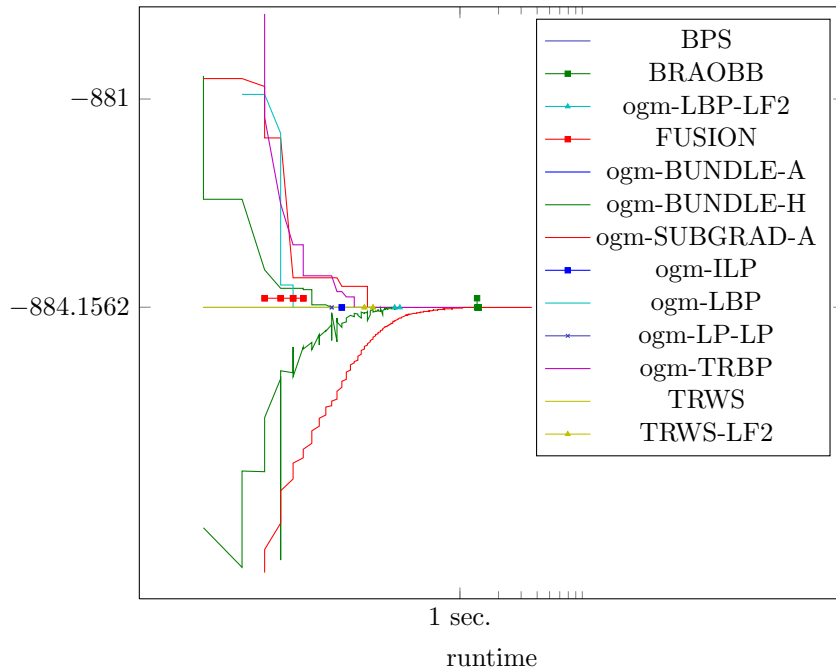


Figure 565: Runtime results for the instance 6000131 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

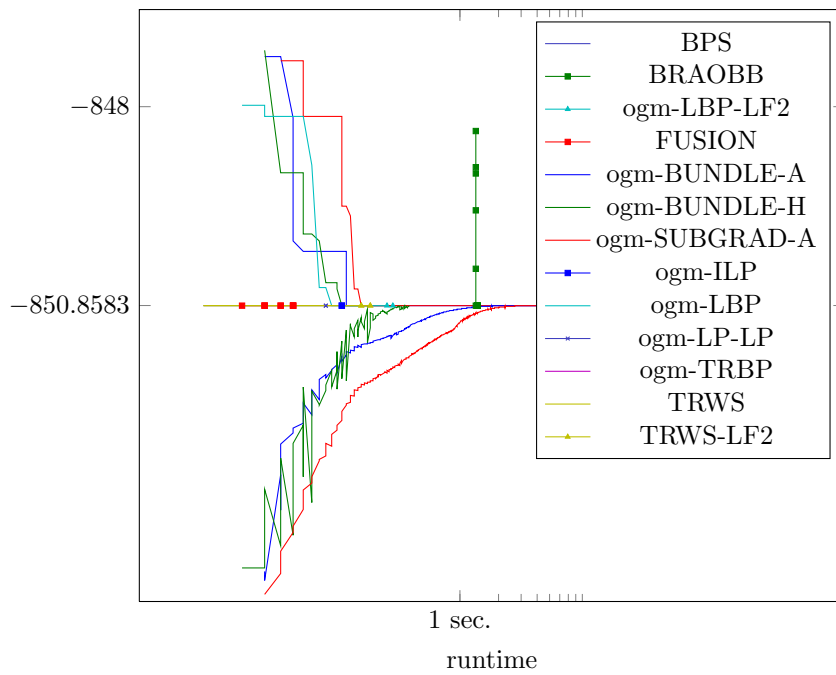


Figure 566: Runtime results for the instance 6000132 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

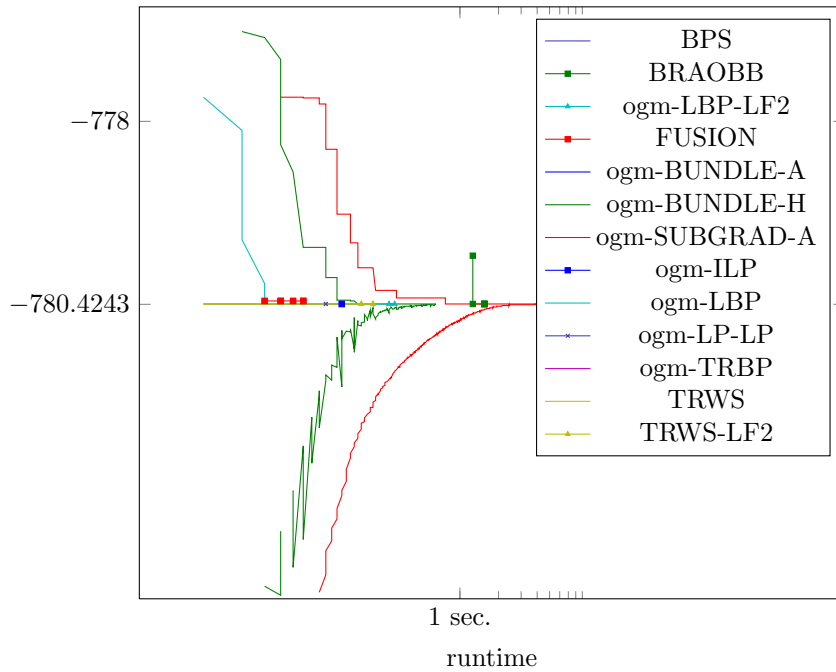


Figure 567: Runtime results for the instance 6000133 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

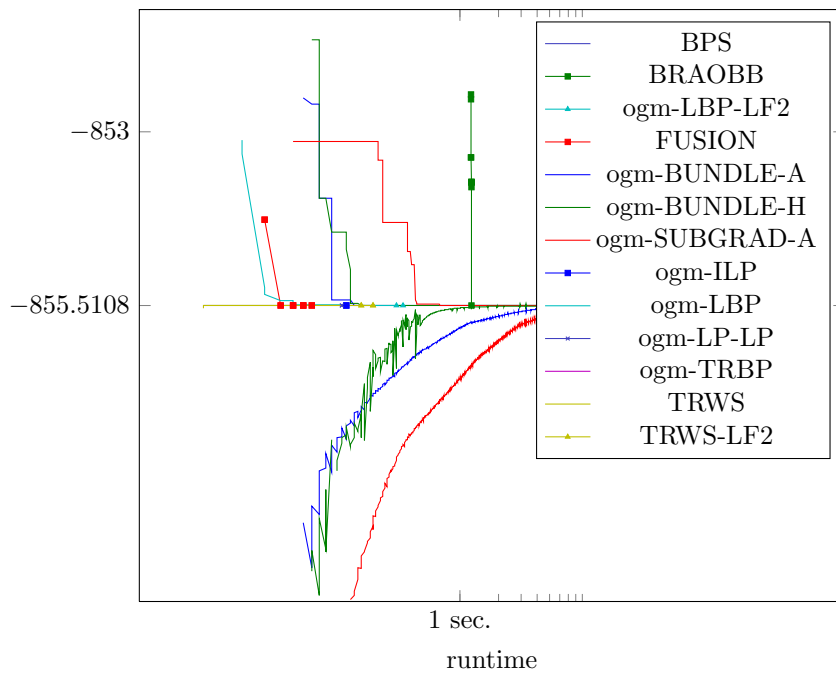


Figure 568: Runtime results for the instance 6000134 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

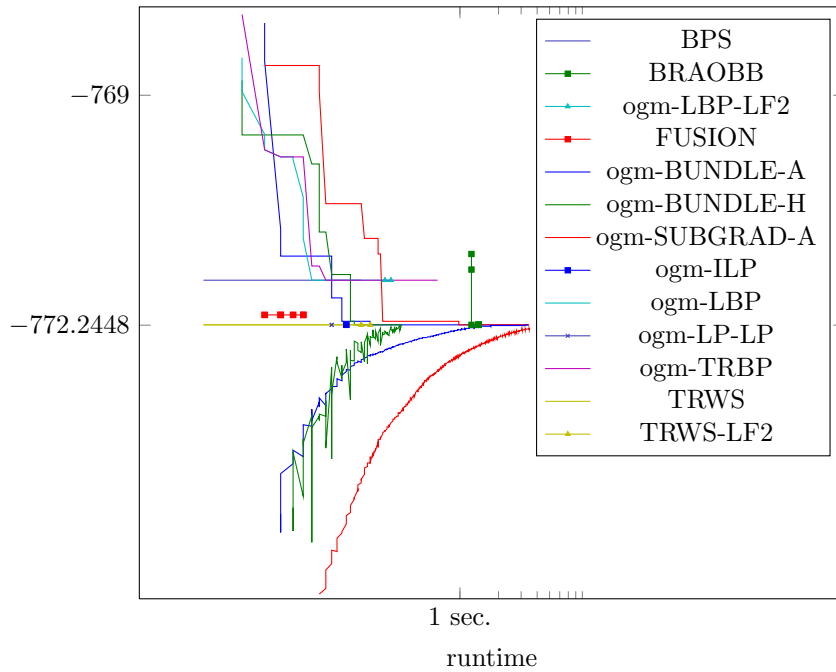


Figure 569: Runtime results for the instance 6000135 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

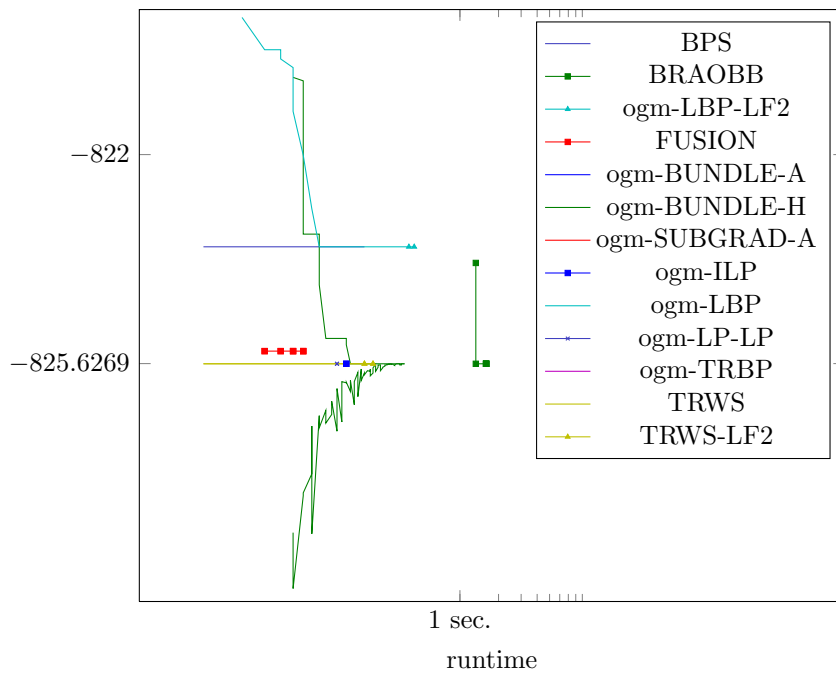


Figure 570: Runtime results for the instance 6000136 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

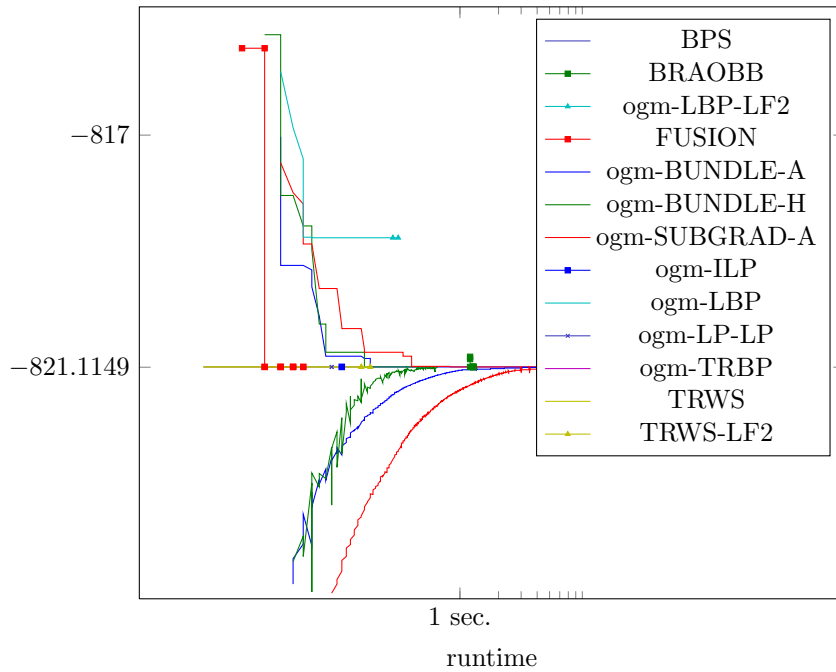


Figure 571: Runtime results for the instance 6000137 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

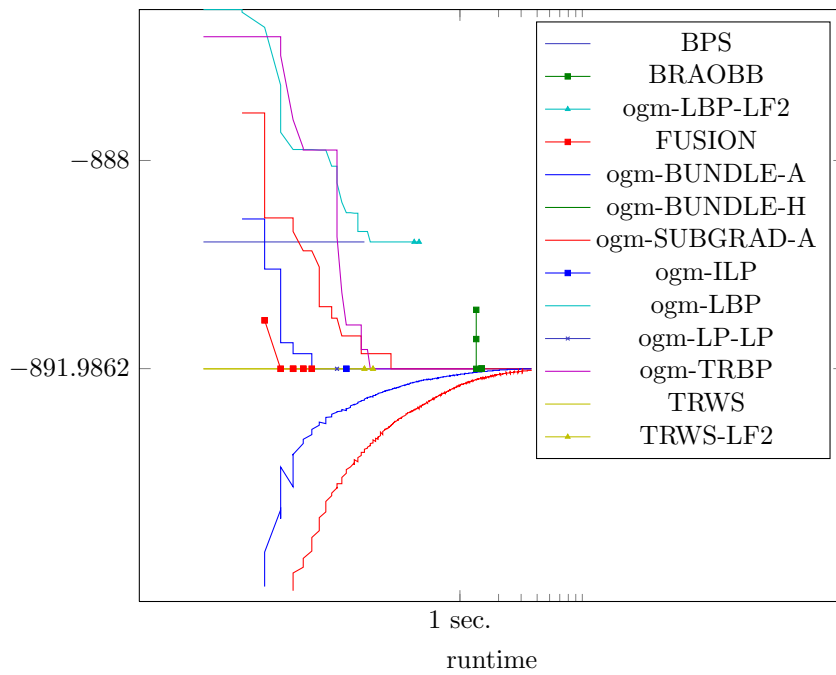


Figure 572: Runtime results for the instance 6000138 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

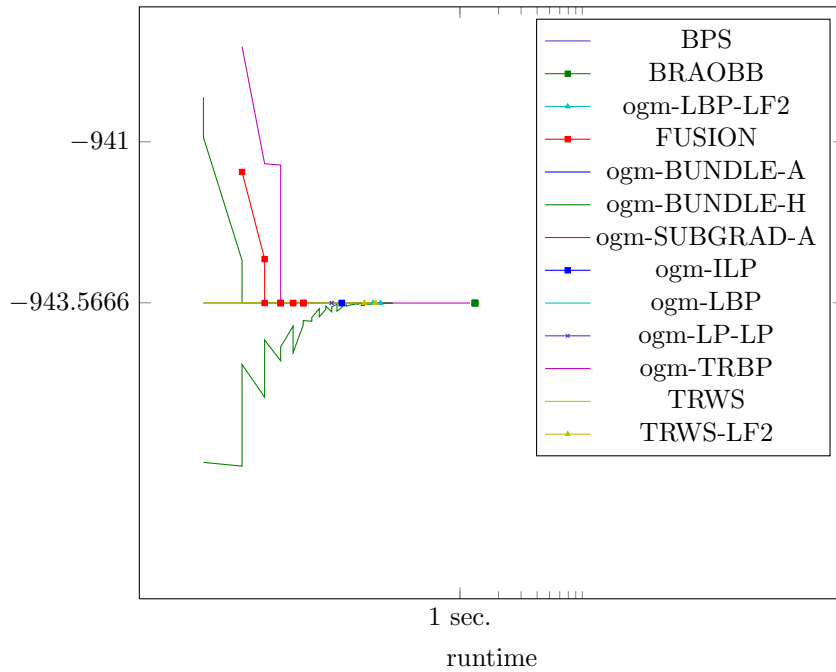


Figure 573: Runtime results for the instance 6000139 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

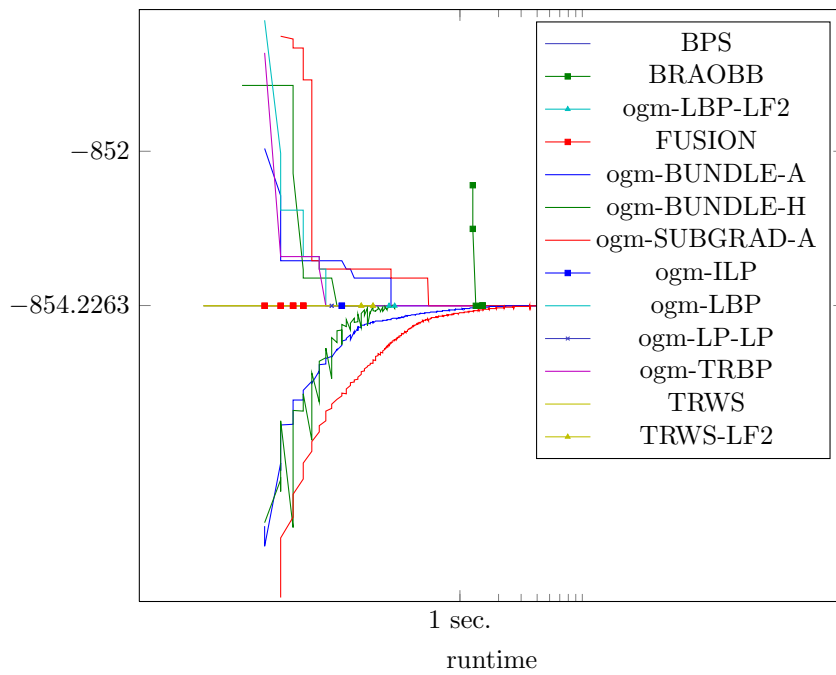


Figure 574: Runtime results for the instance 6000140 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

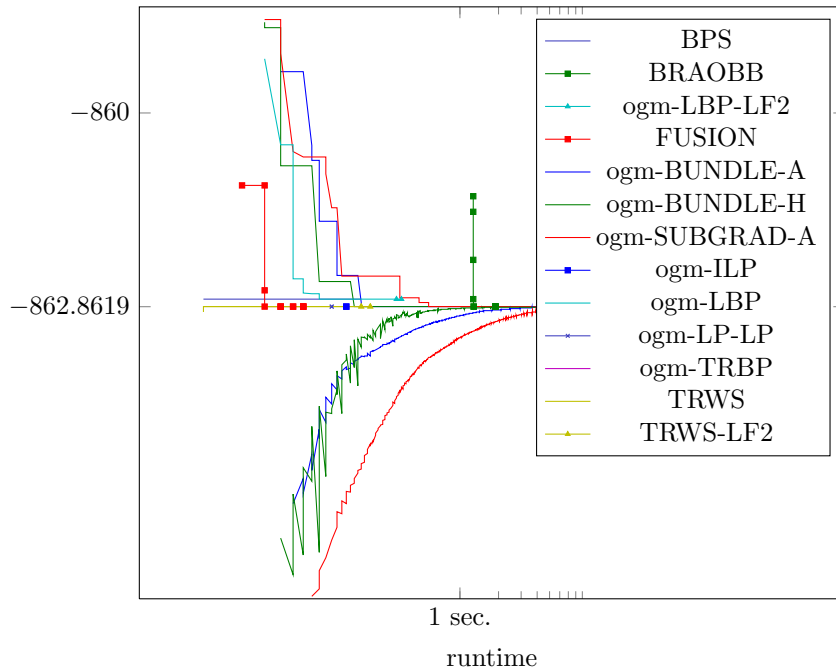


Figure 575: Runtime results for the instance 6000141 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

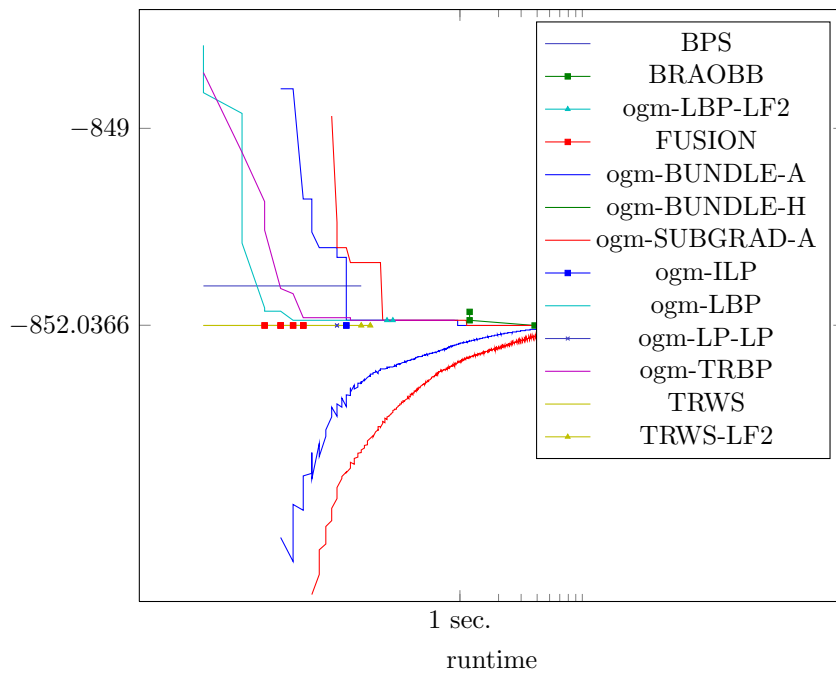


Figure 576: Runtime results for the instance 6000142 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

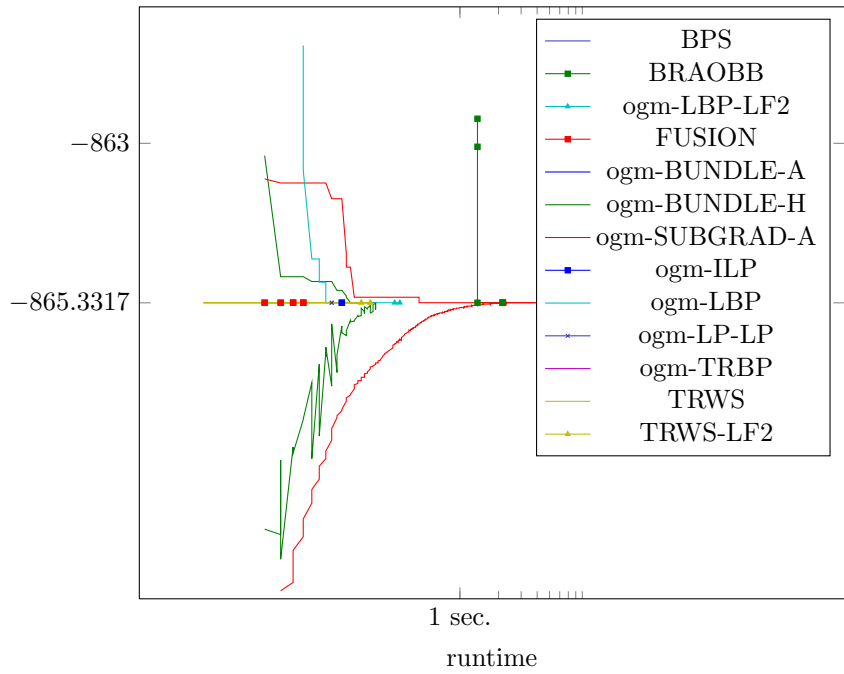


Figure 577: Runtime results for the instance 6000143 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

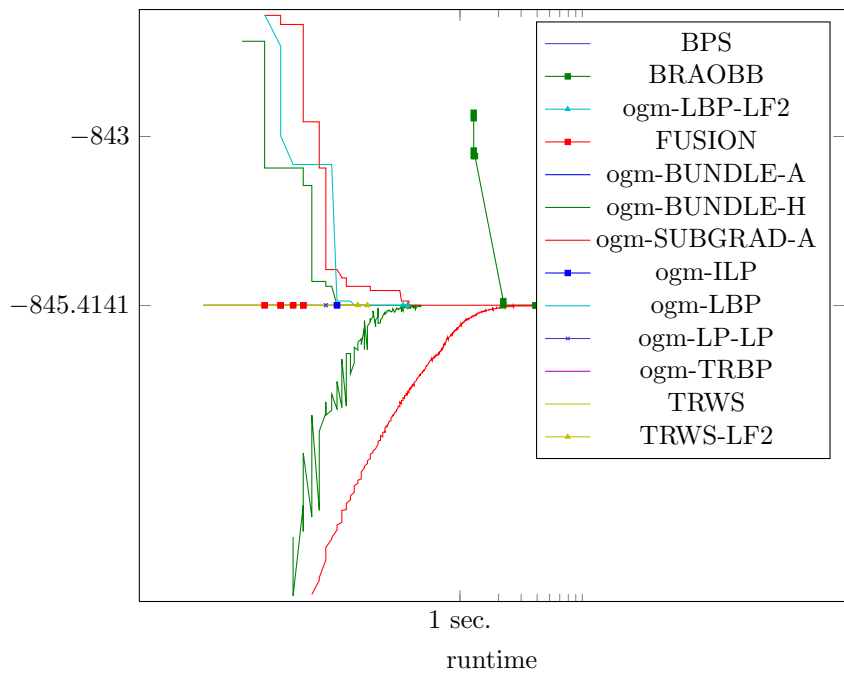


Figure 578: Runtime results for the instance 6000144 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

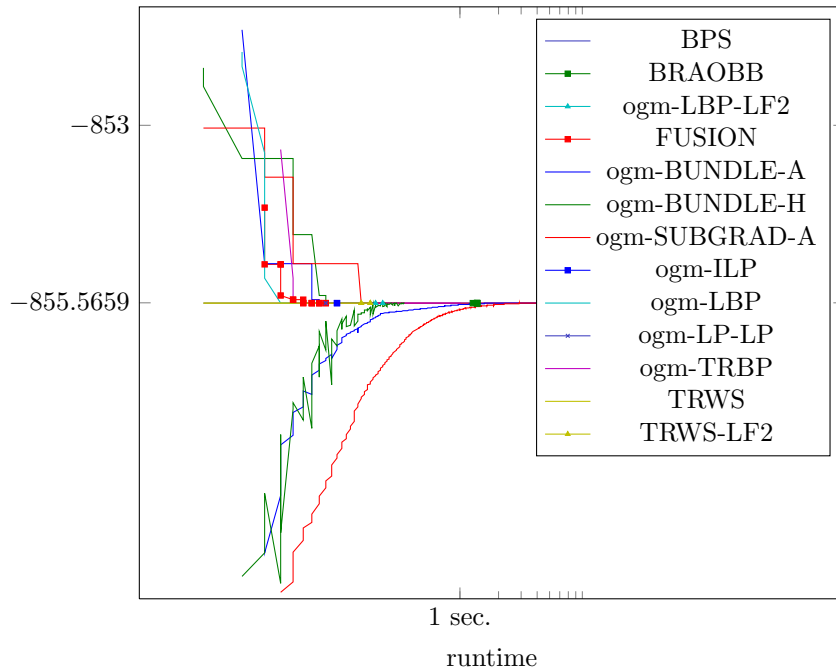


Figure 579: Runtime results for the instance 6000145 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

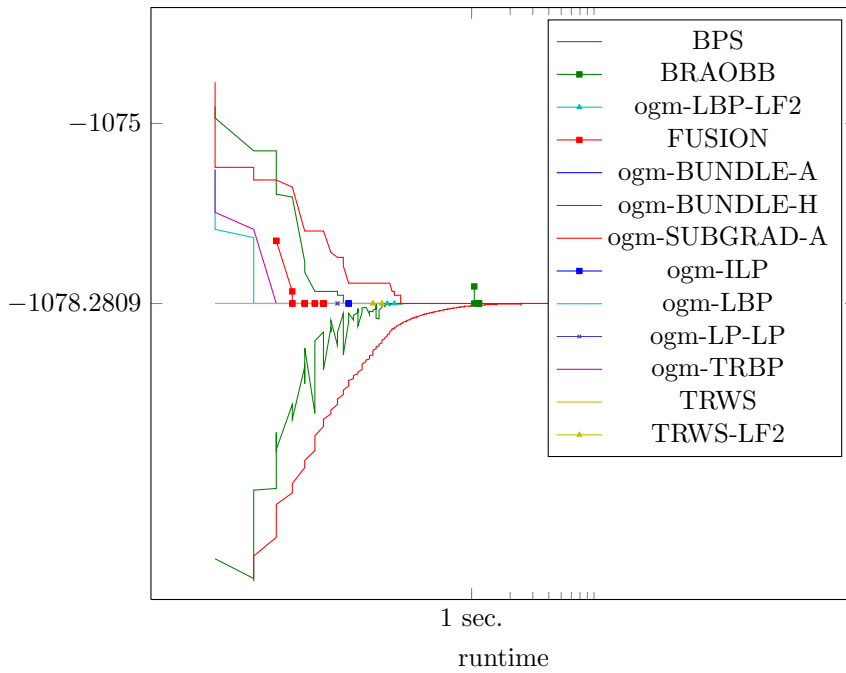


Figure 580: Runtime results for the instance 6000146 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

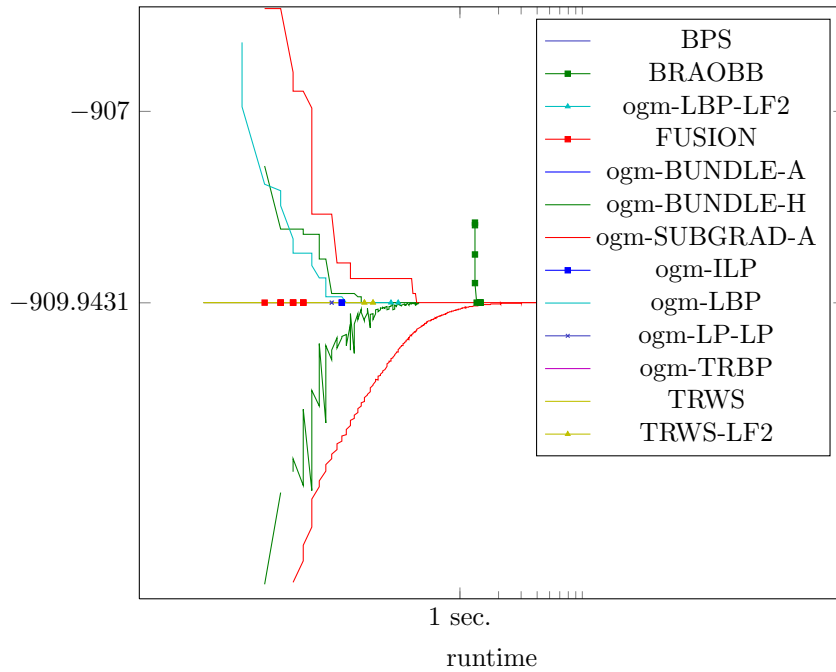


Figure 581: Runtime results for the instance 6000147 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

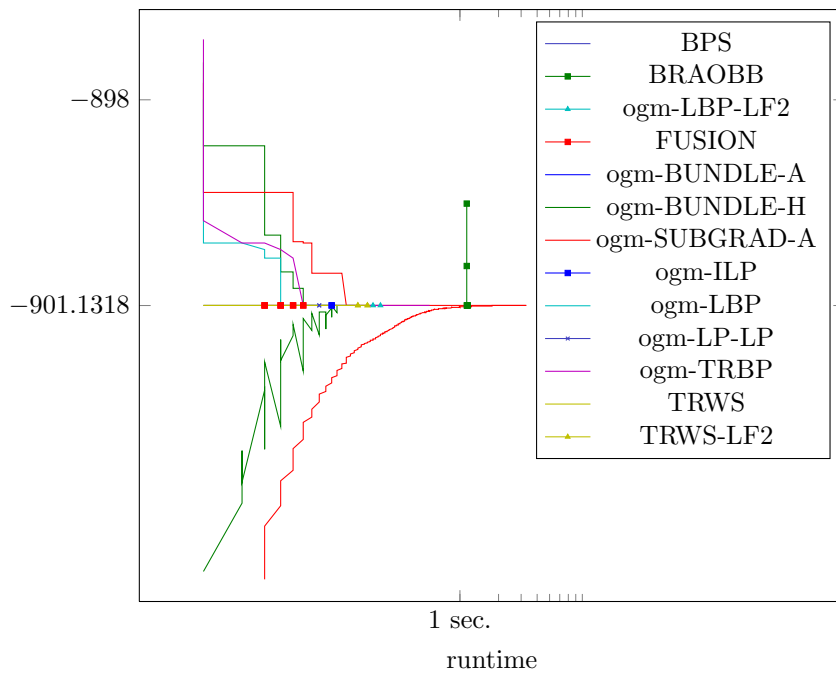


Figure 582: Runtime results for the instance 6000148 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

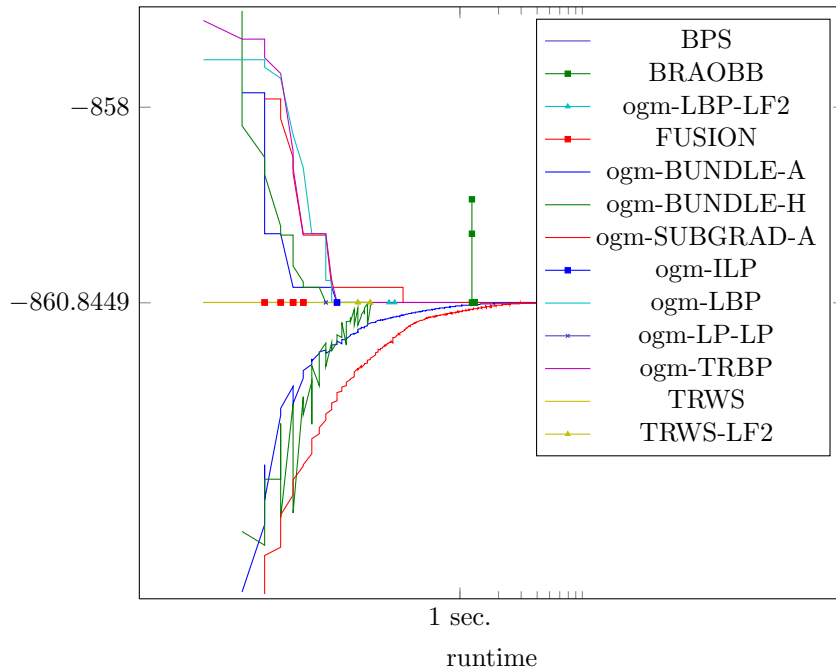


Figure 583: Runtime results for the instance 6000149 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

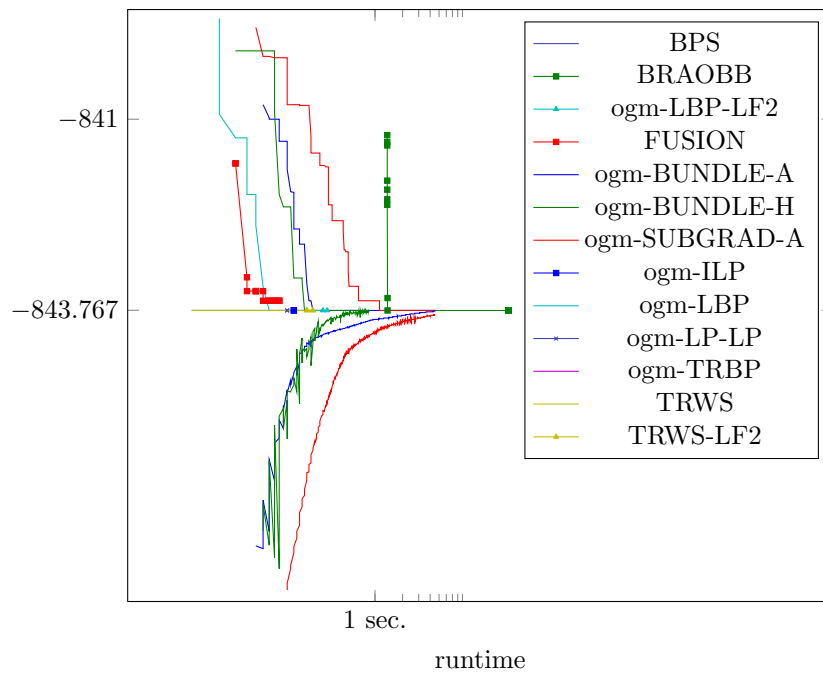


Figure 584: Runtime results for the instance 6000150 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

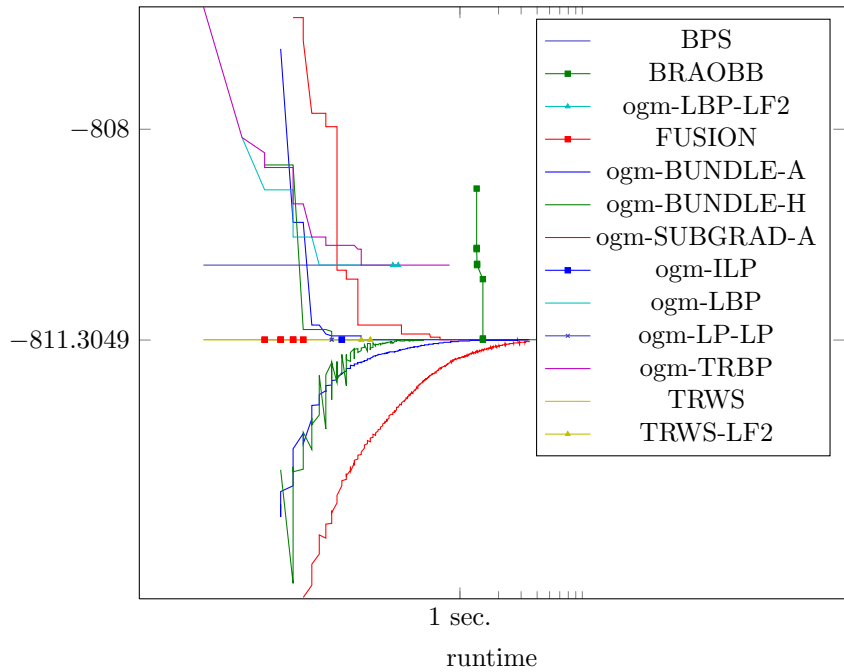


Figure 585: Runtime results for the instance 6000151 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

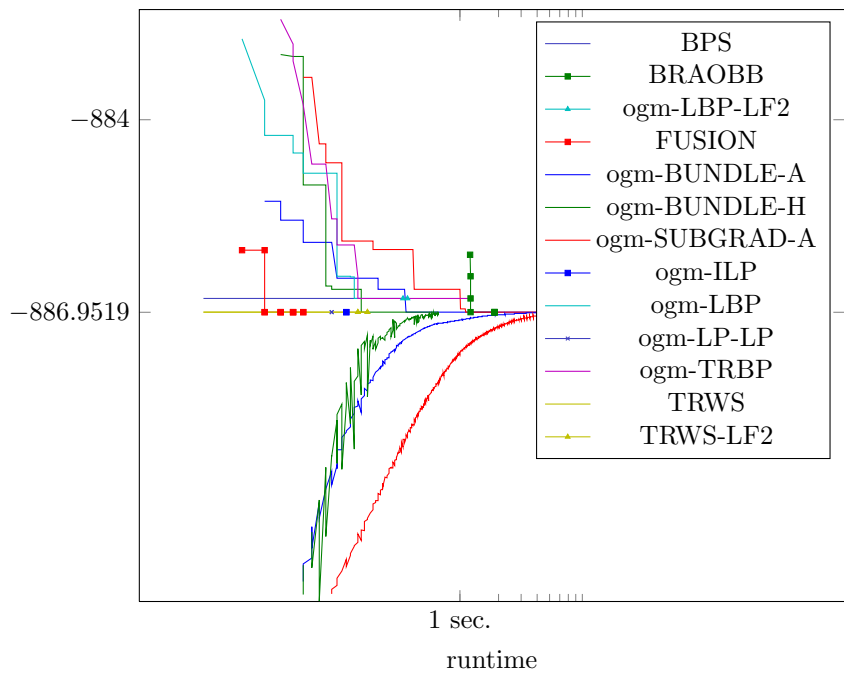


Figure 586: Runtime results for the instance 6000152 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

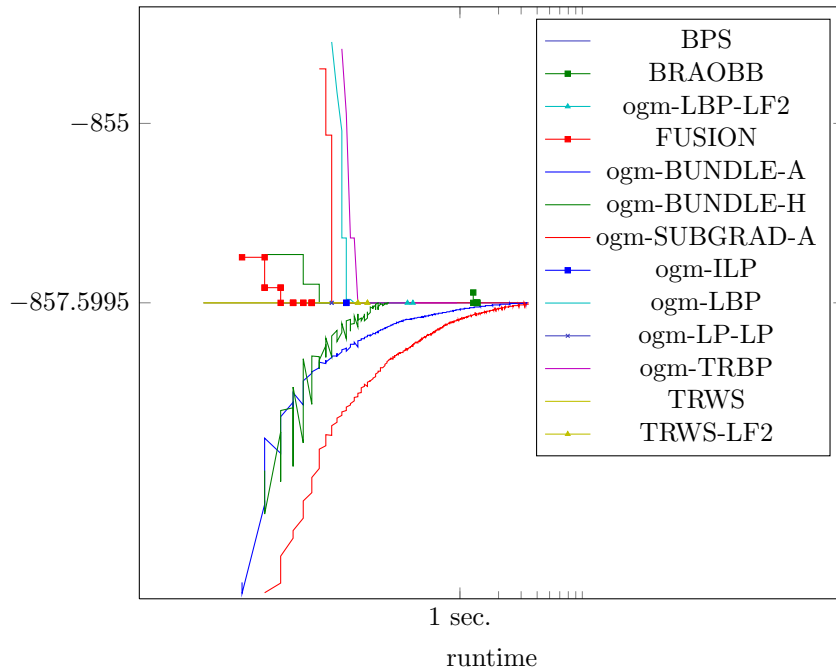


Figure 587: Runtime results for the instance 6000153 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

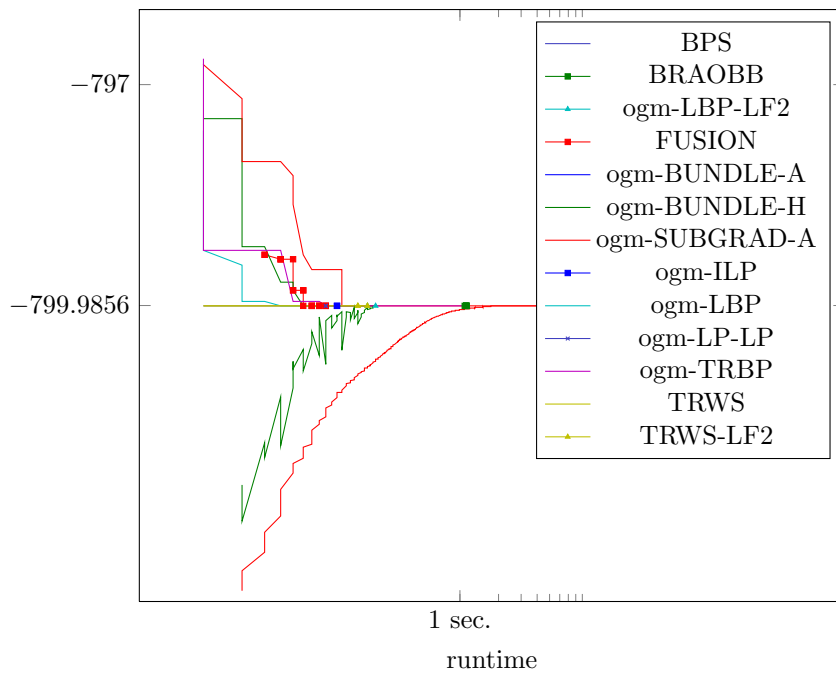


Figure 588: Runtime results for the instance 6000154 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

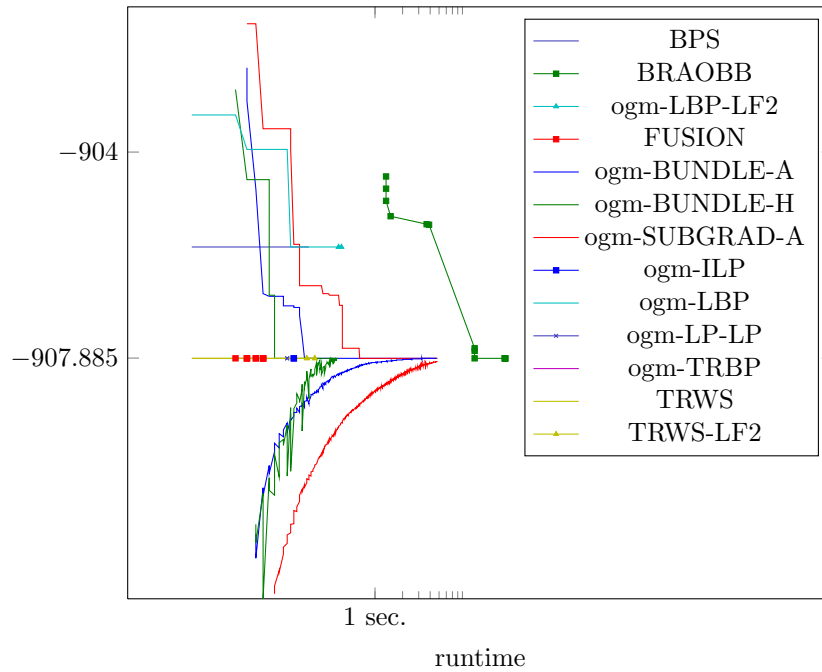


Figure 589: Runtime results for the instance 6000155 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

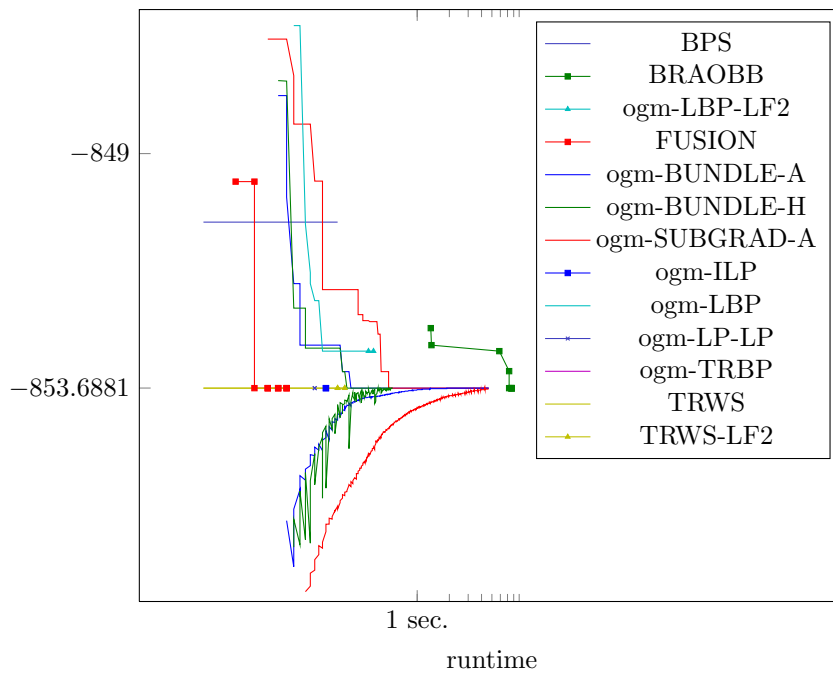


Figure 590: Runtime results for the instance 6000156 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

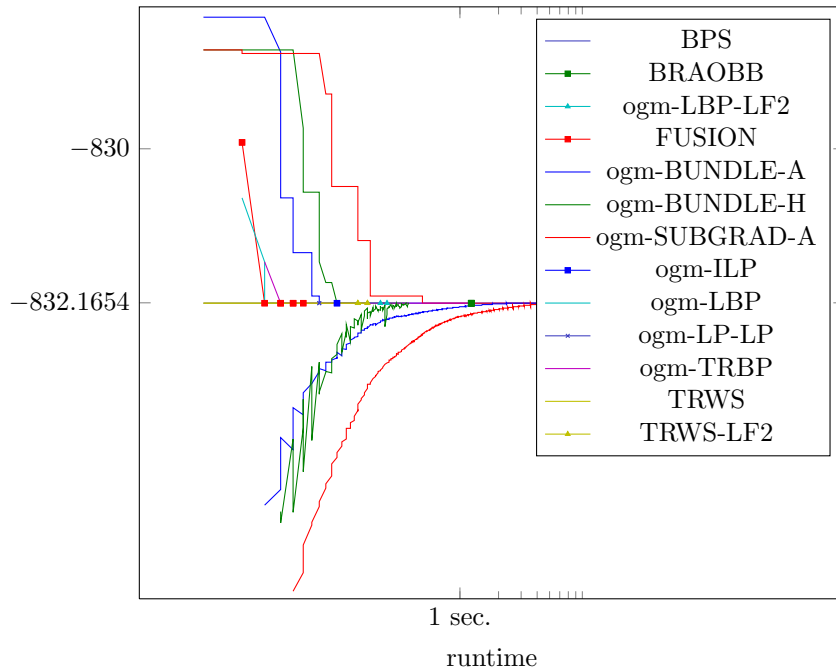


Figure 591: Runtime results for the instance 6000157 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

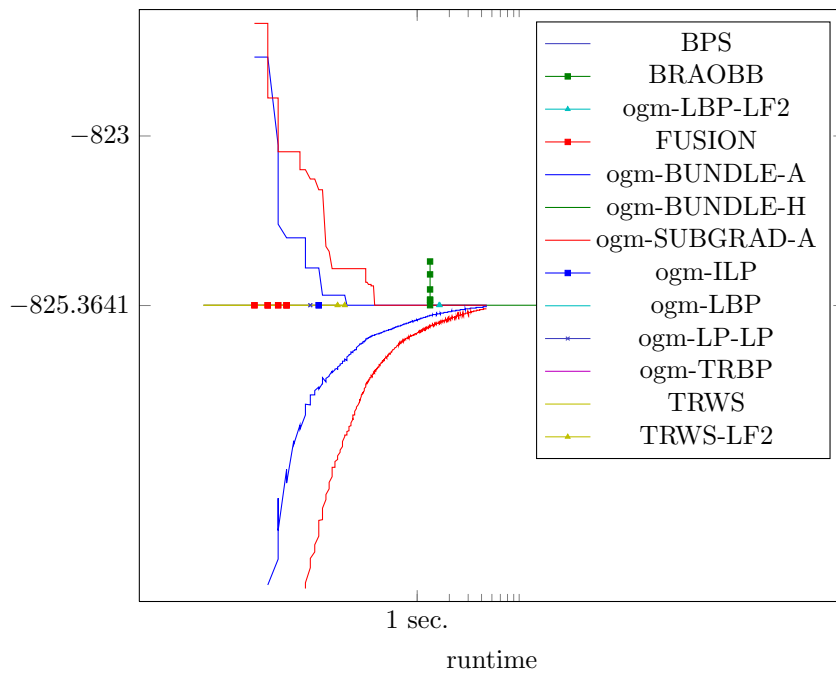


Figure 592: Runtime results for the instance 6000158 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

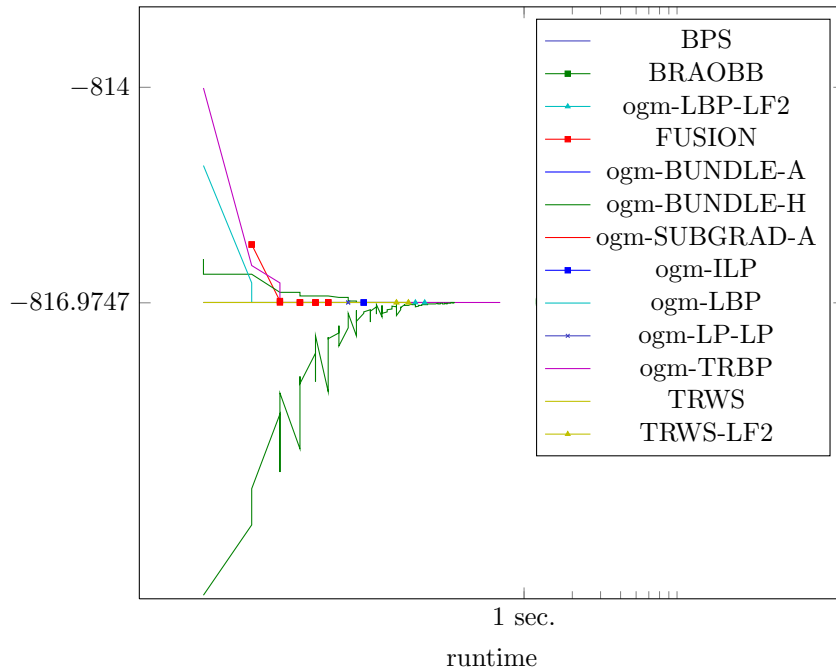


Figure 593: Runtime results for the instance 6000159 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

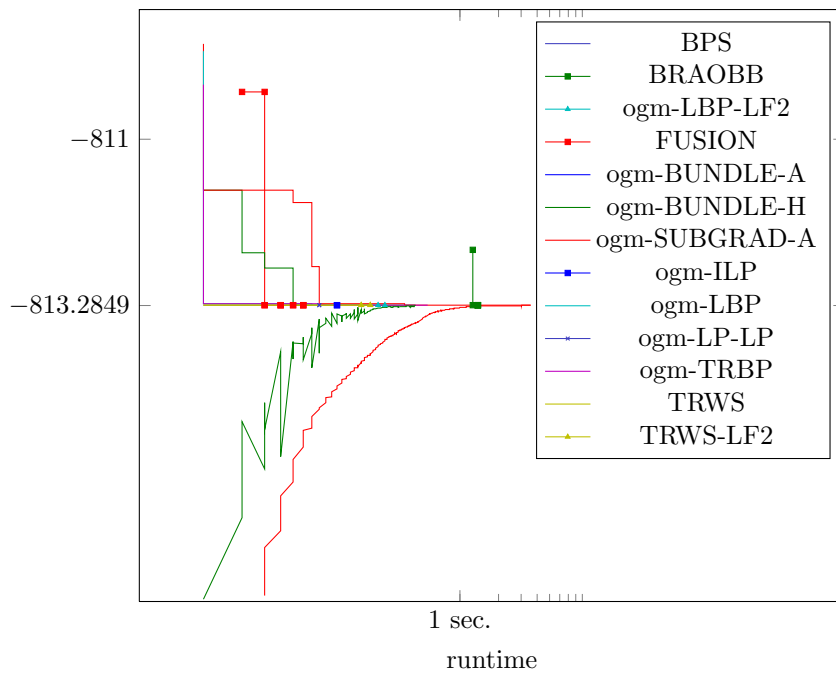


Figure 594: Runtime results for the instance 6000160 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

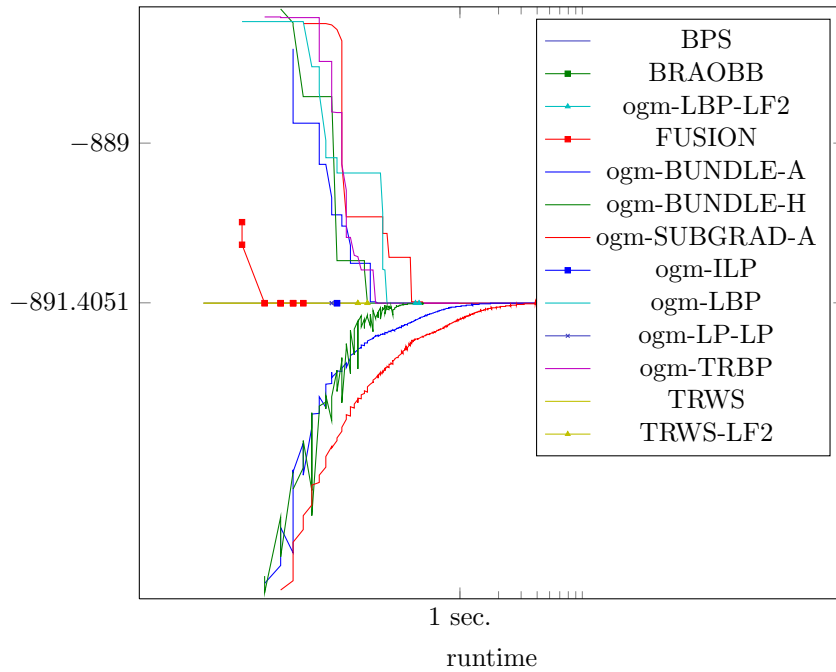


Figure 595: Runtime results for the instance 6000161 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

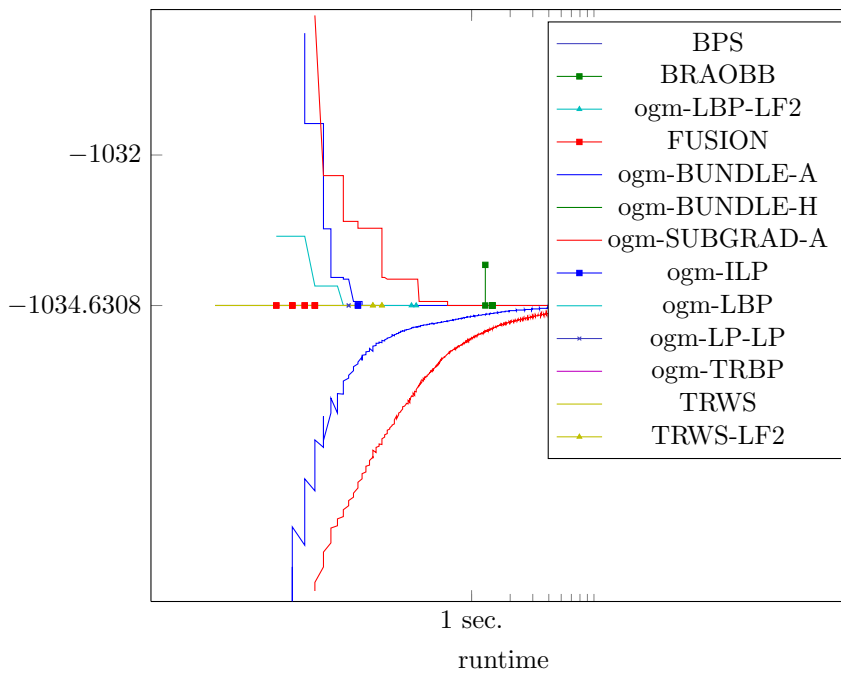


Figure 596: Runtime results for the instance 6000162 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

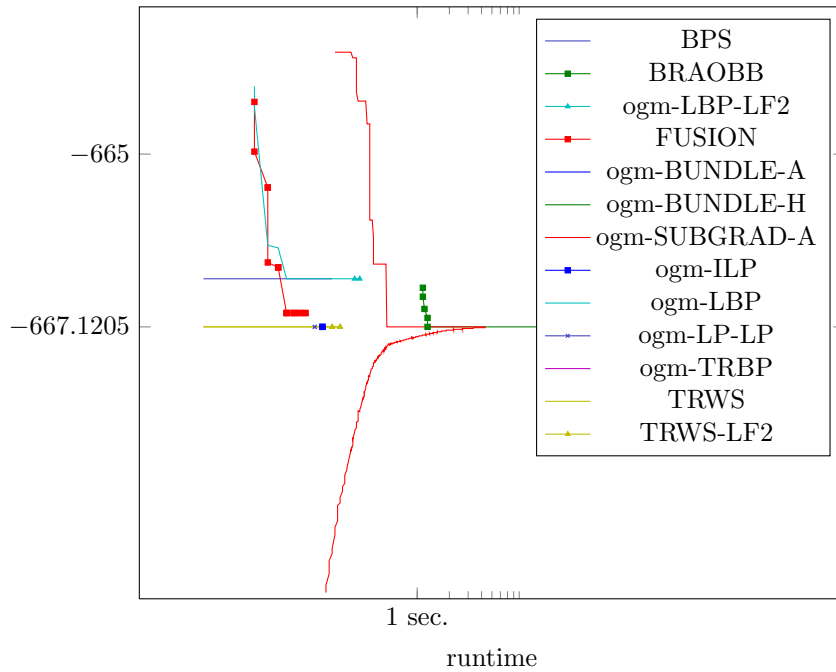


Figure 597: Runtime results for the instance 6000163 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

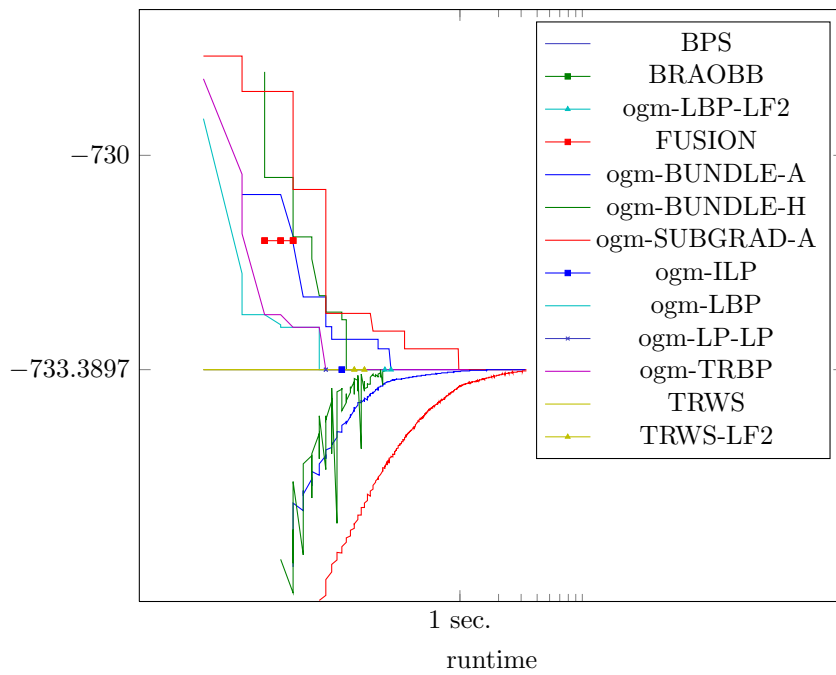


Figure 598: Runtime results for the instance 6000164 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

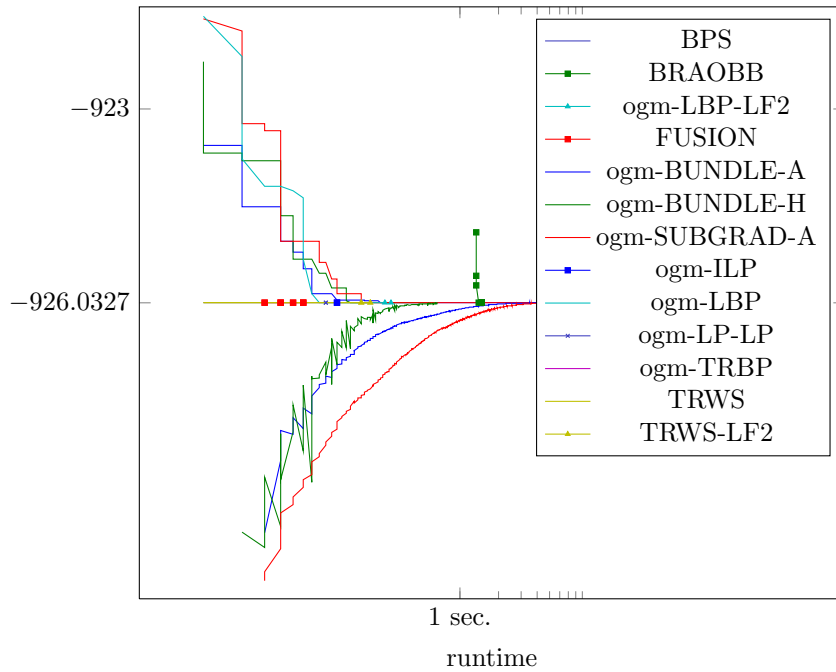


Figure 599: Runtime results for the instance 6000165 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

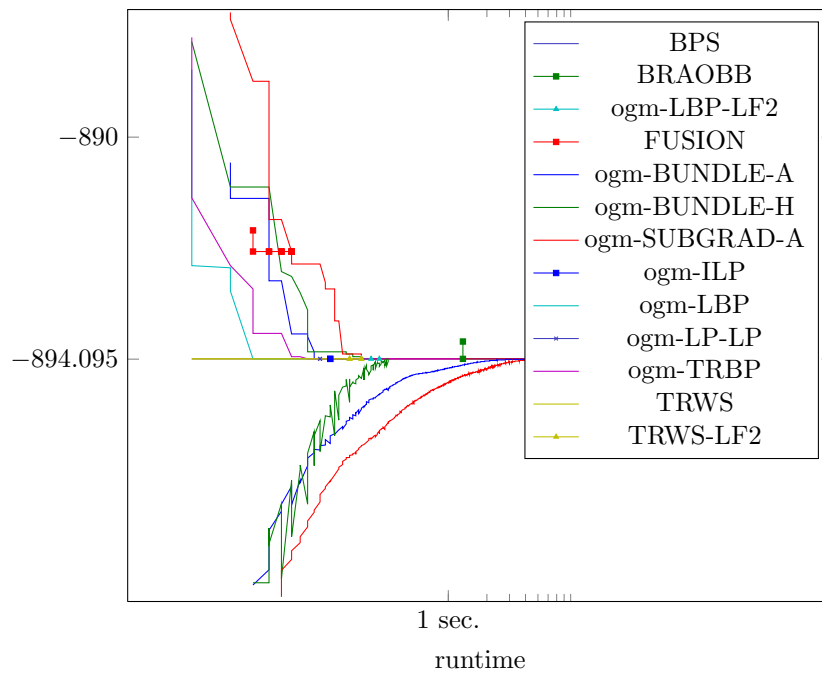


Figure 600: Runtime results for the instance 6000166 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

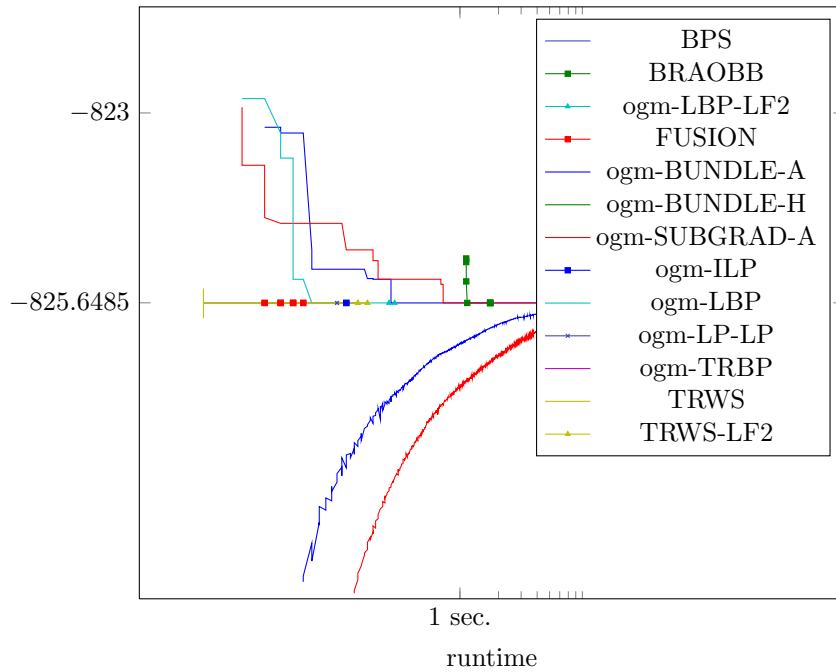


Figure 601: Runtime results for the instance 6000167 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

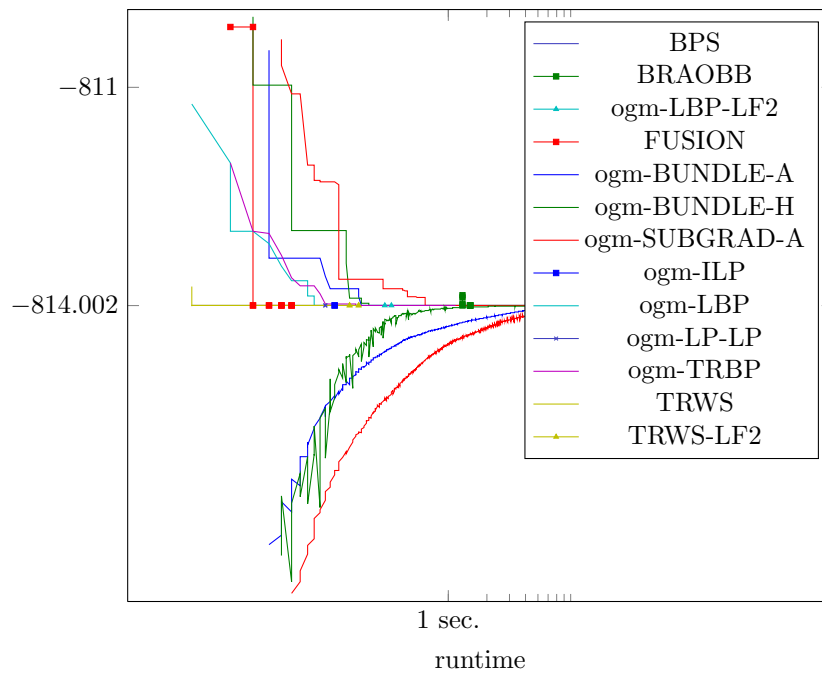


Figure 602: Runtime results for the instance 6000168 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

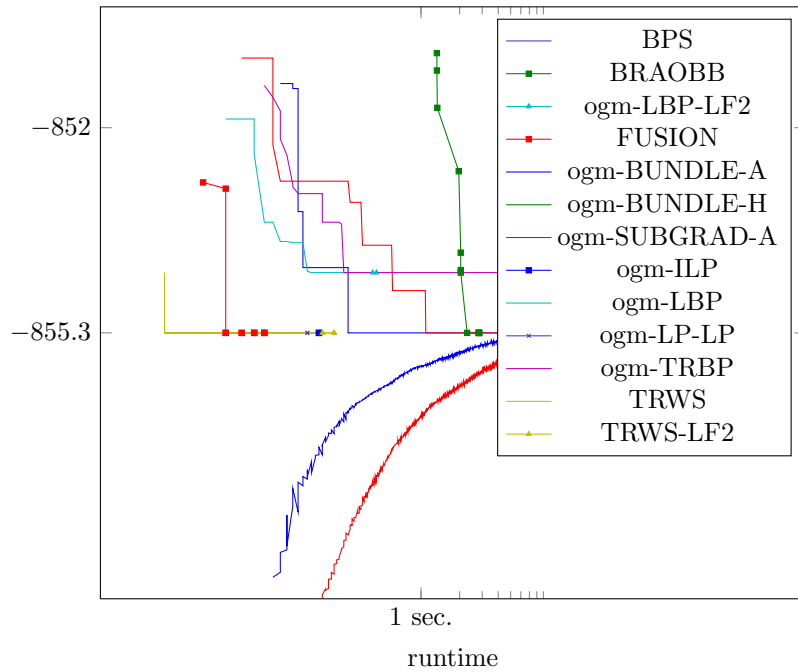


Figure 603: Runtime results for the instance 6000169 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

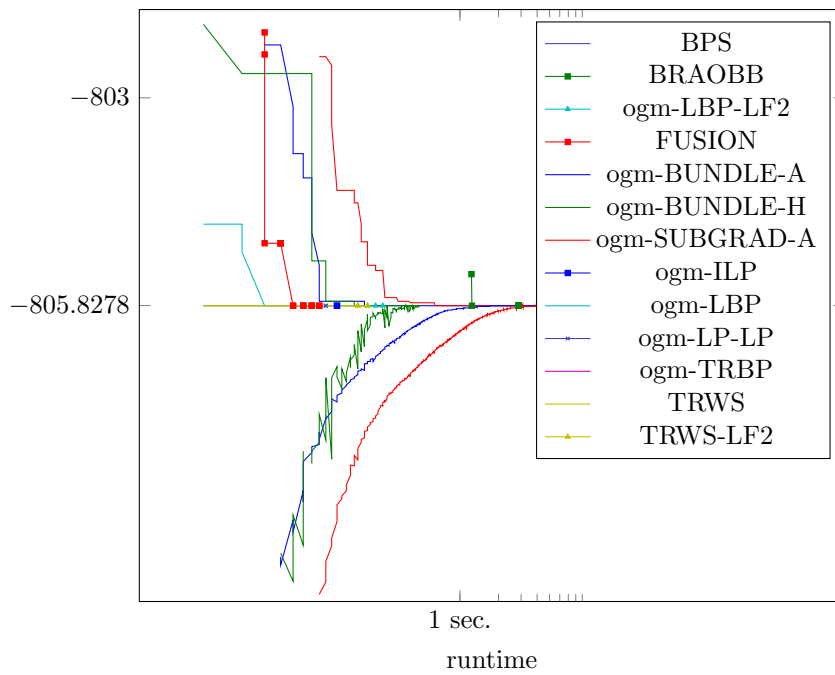


Figure 604: Runtime results for the instance 6000170 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

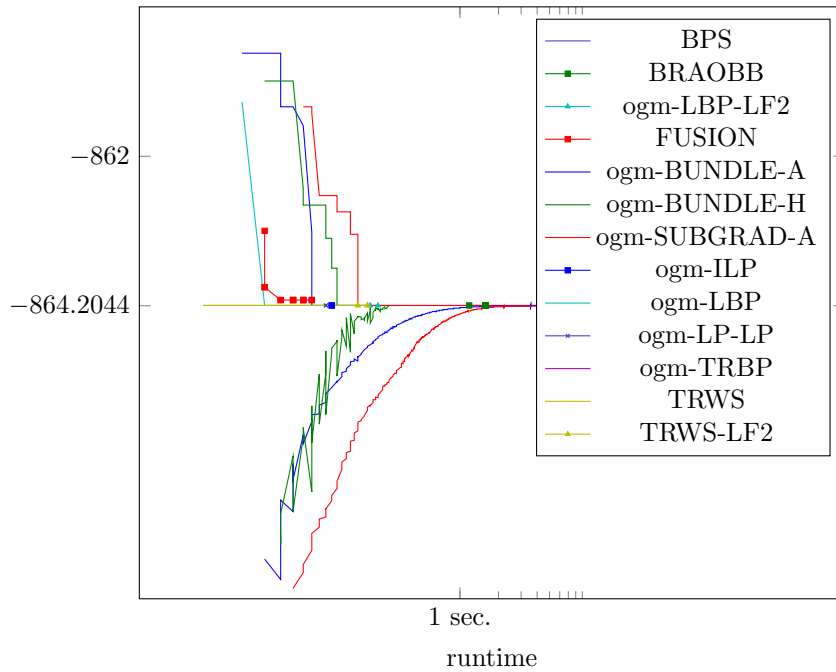


Figure 605: Runtime results for the instance 6000171 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

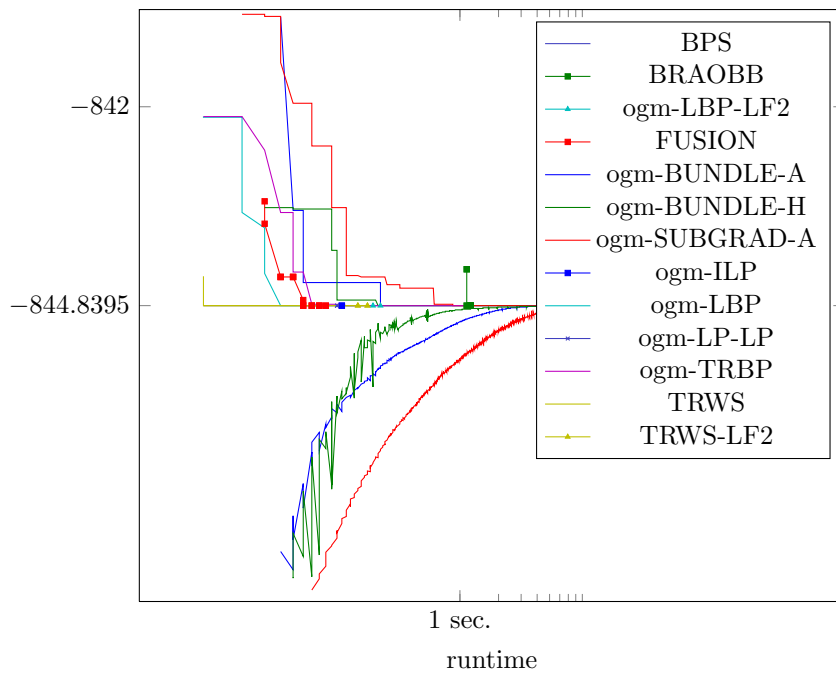


Figure 606: Runtime results for the instance 6000172 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

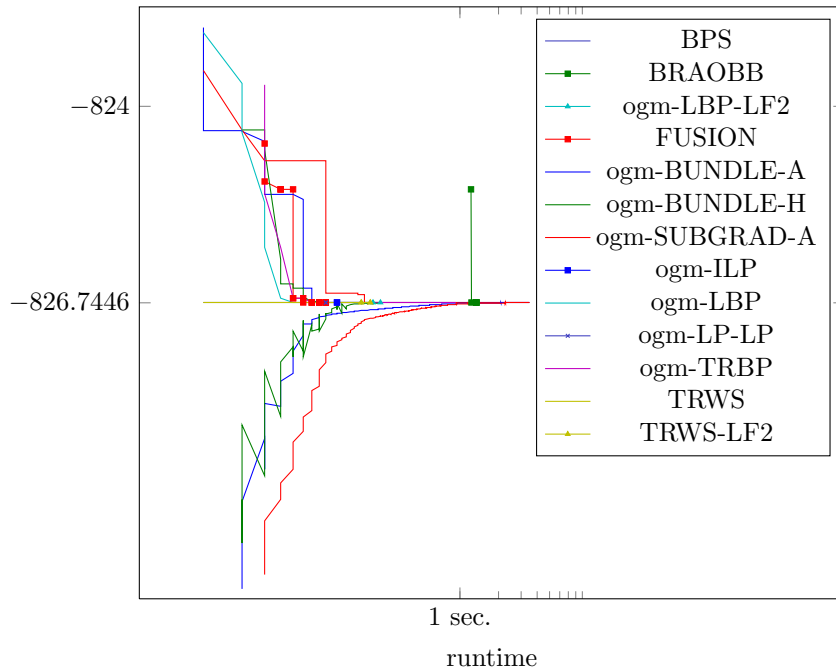


Figure 607: Runtime results for the instance 6000173 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

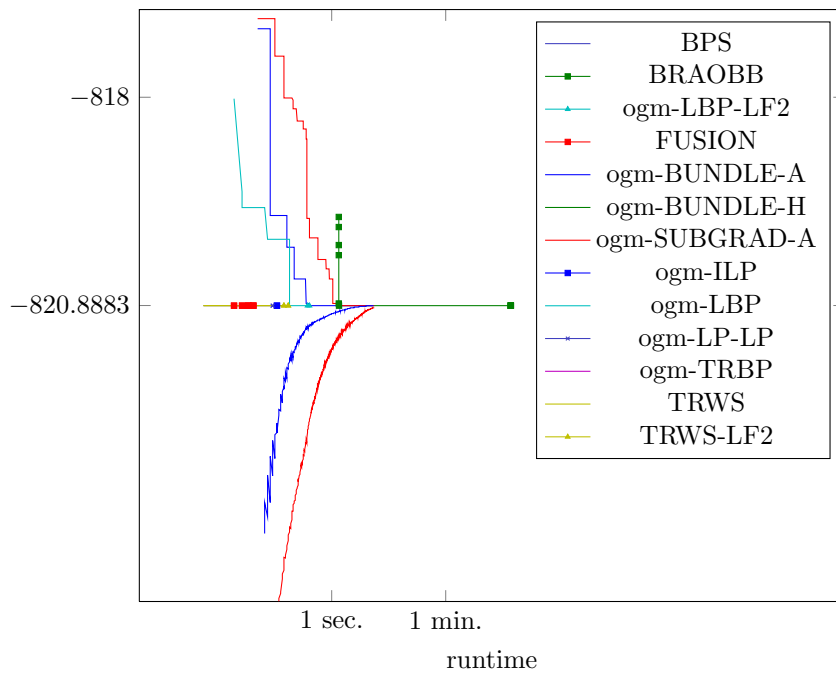


Figure 608: Runtime results for the instance 6000174 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

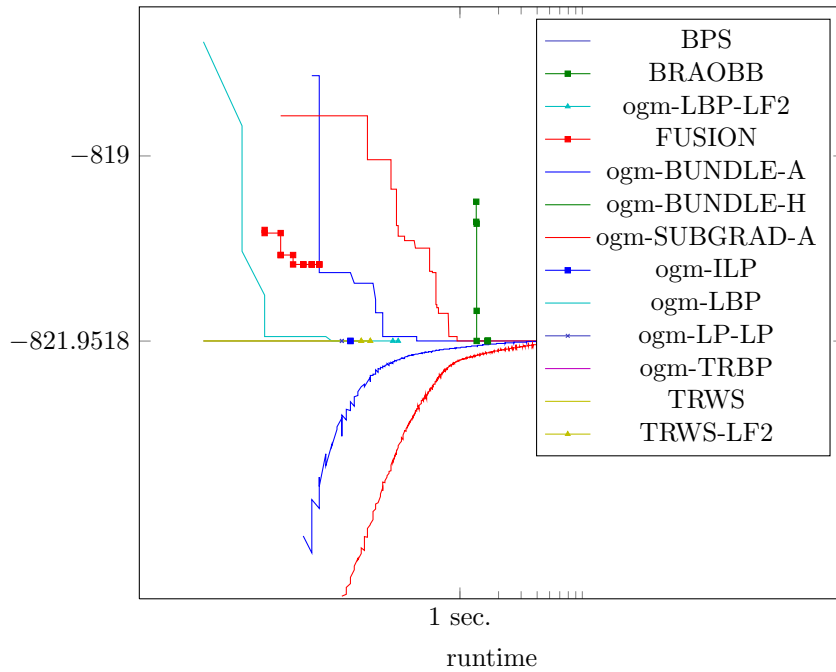


Figure 609: Runtime results for the instance 6000175 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

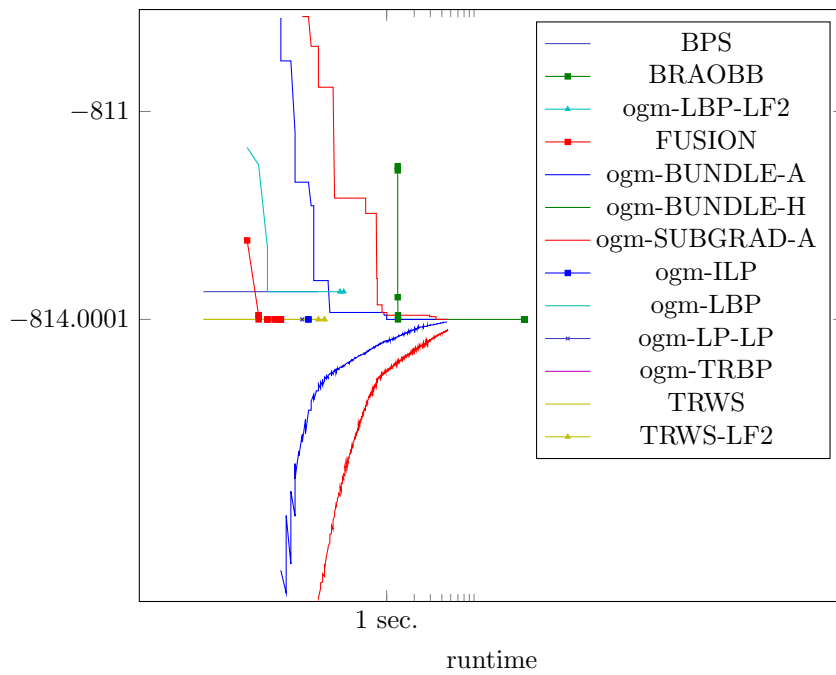


Figure 610: Runtime results for the instance 6000176 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

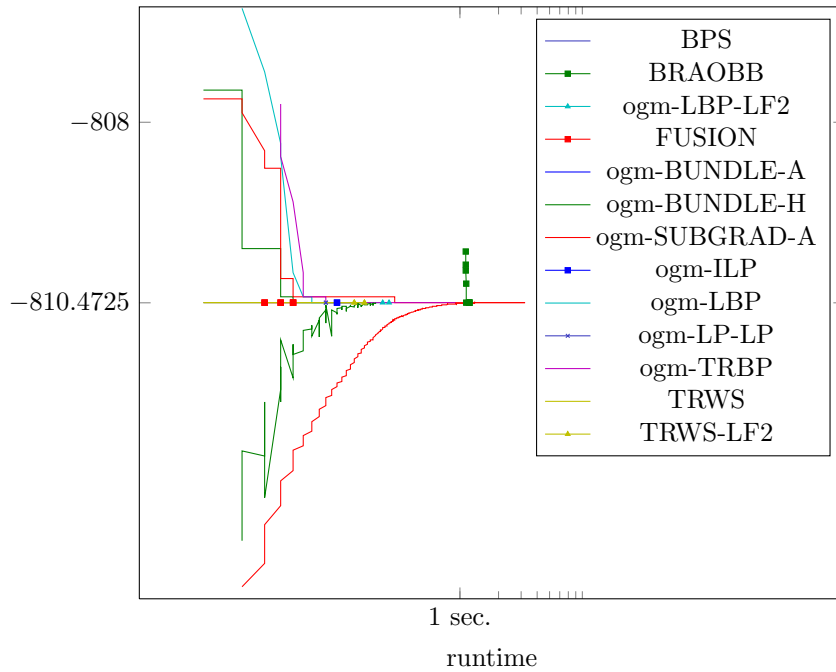


Figure 611: Runtime results for the instance 6000177 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

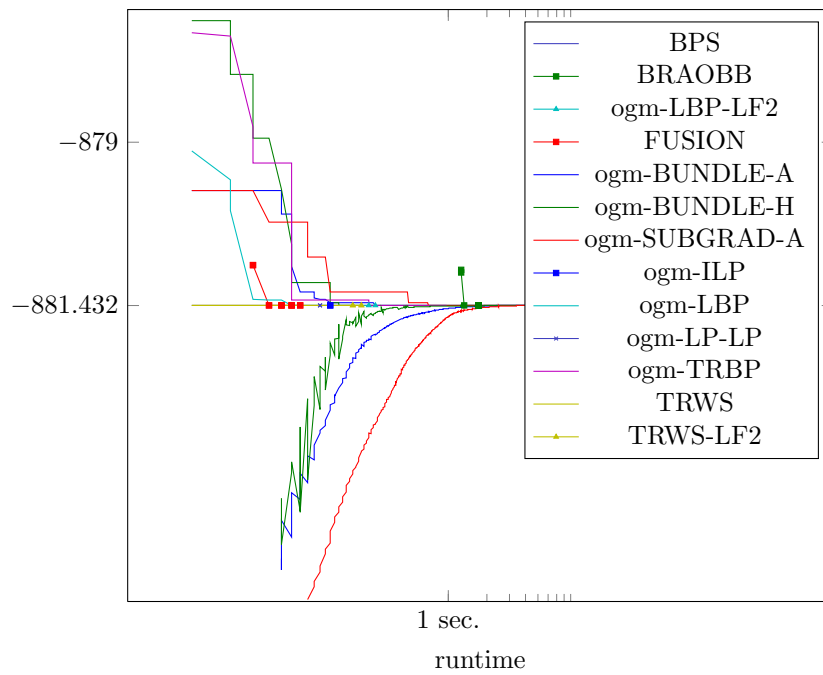


Figure 612: Runtime results for the instance 6000178 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

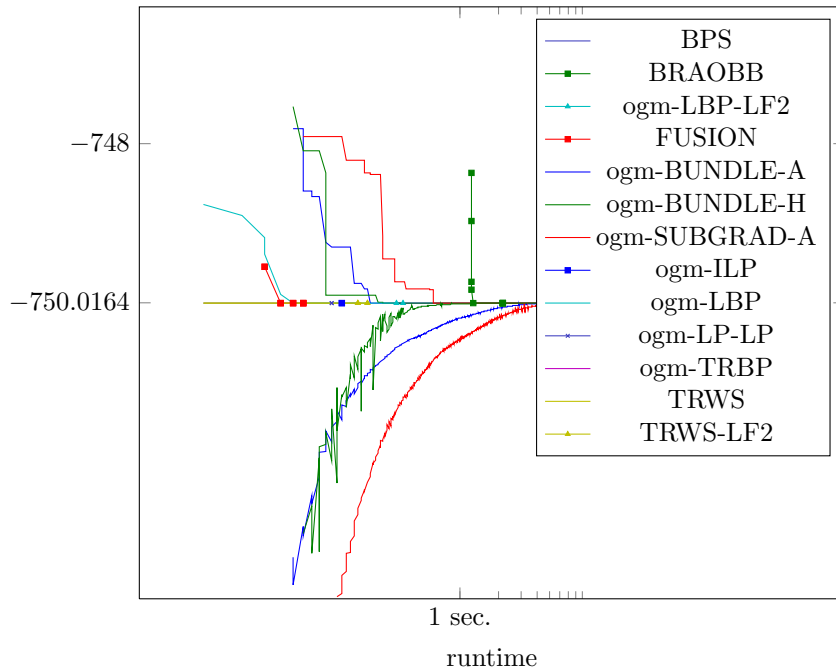


Figure 613: Runtime results for the instance 6000179 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

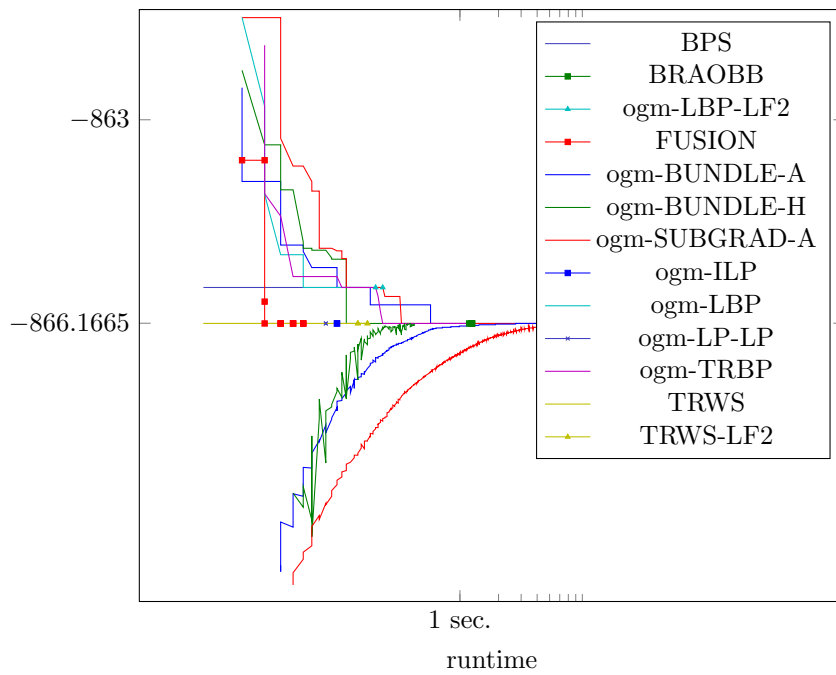


Figure 614: Runtime results for the instance 6000180 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

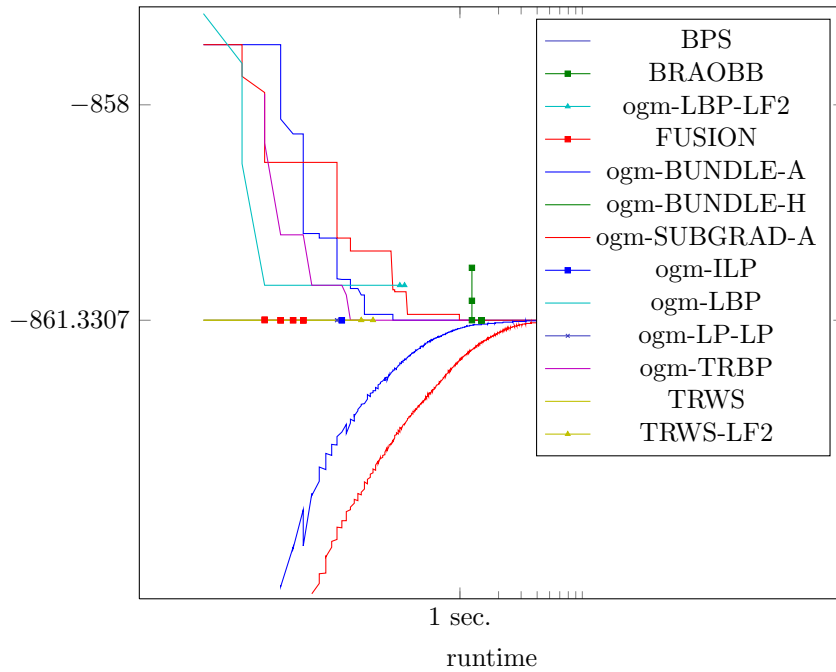


Figure 615: Runtime results for the instance *6000181* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

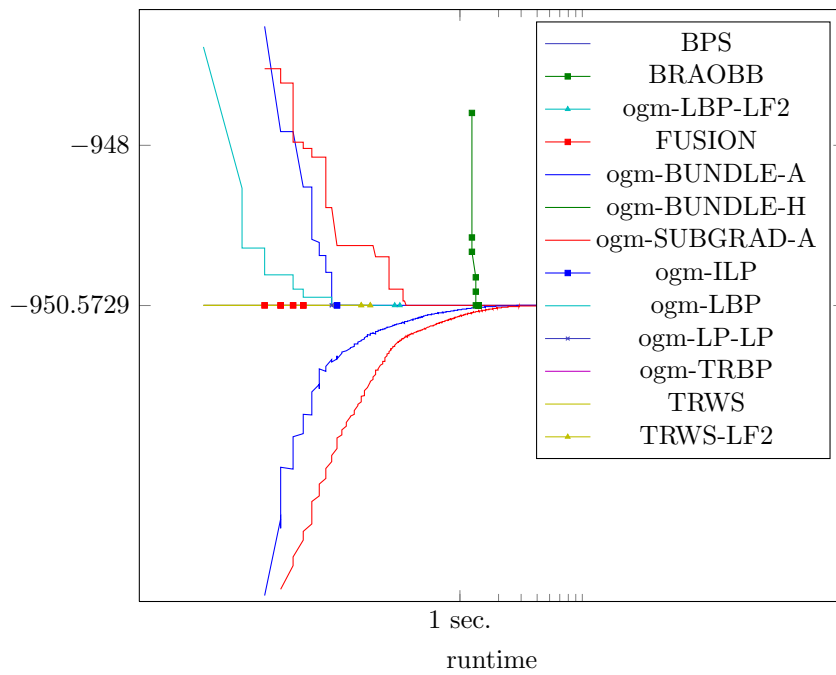


Figure 616: Runtime results for the instance *6000182* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

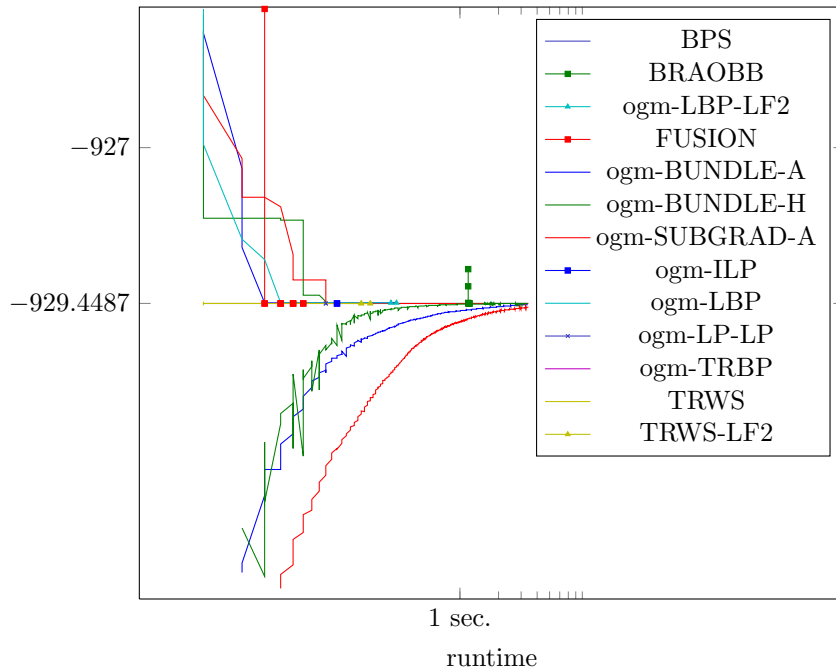


Figure 617: Runtime results for the instance 6000183 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

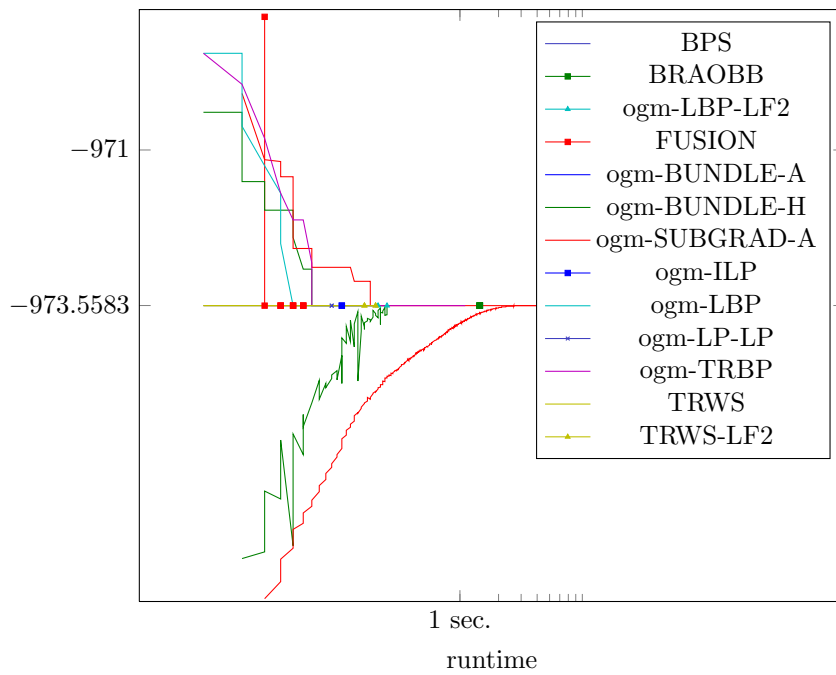


Figure 618: Runtime results for the instance 6000184 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

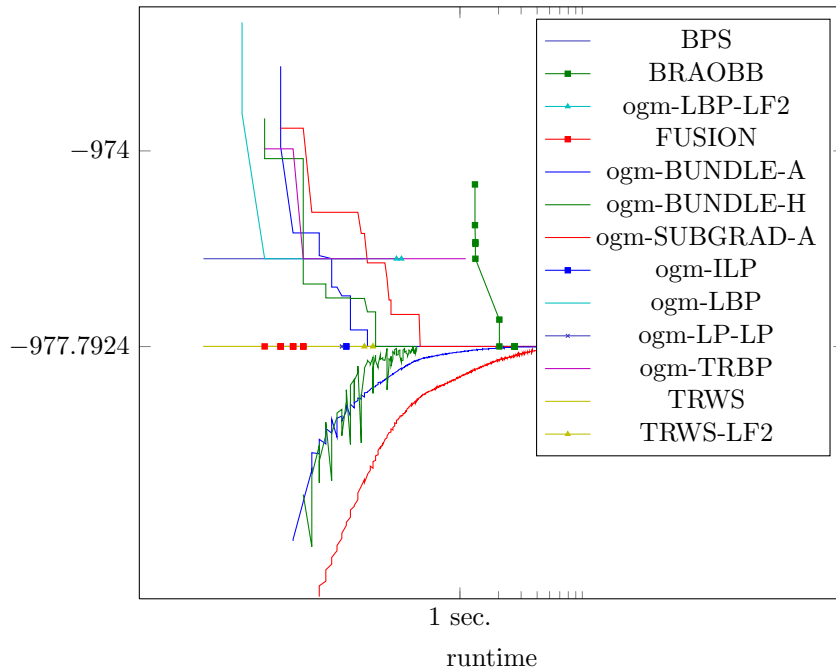


Figure 619: Runtime results for the instance 6000185 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

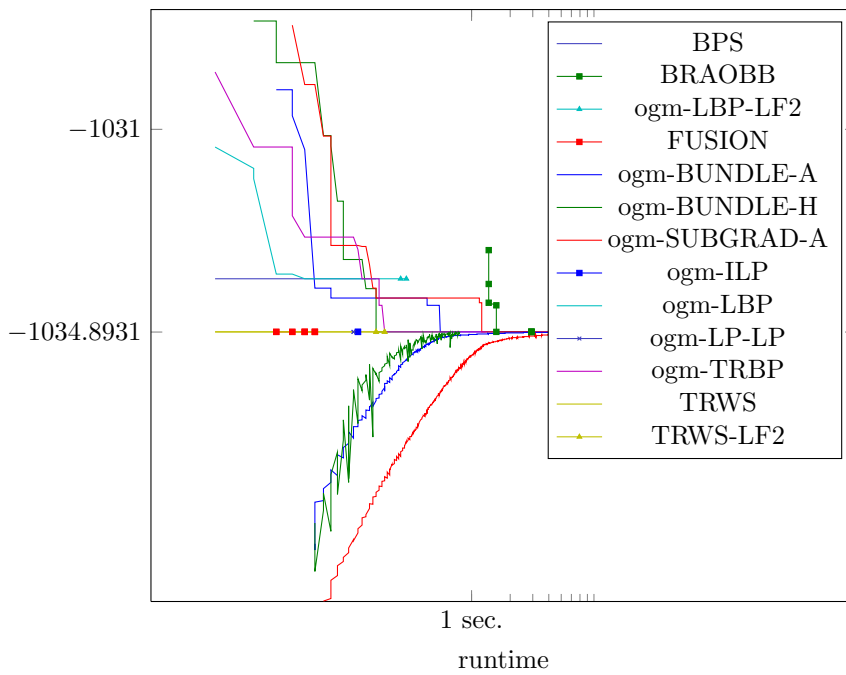


Figure 620: Runtime results for the instance 6000186 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

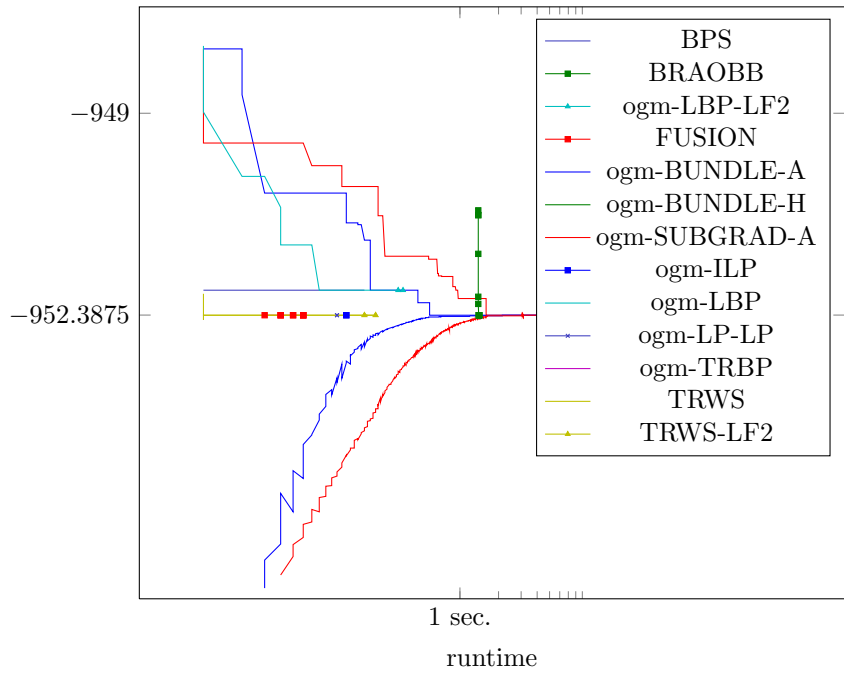


Figure 621: Runtime results for the instance 6000187 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

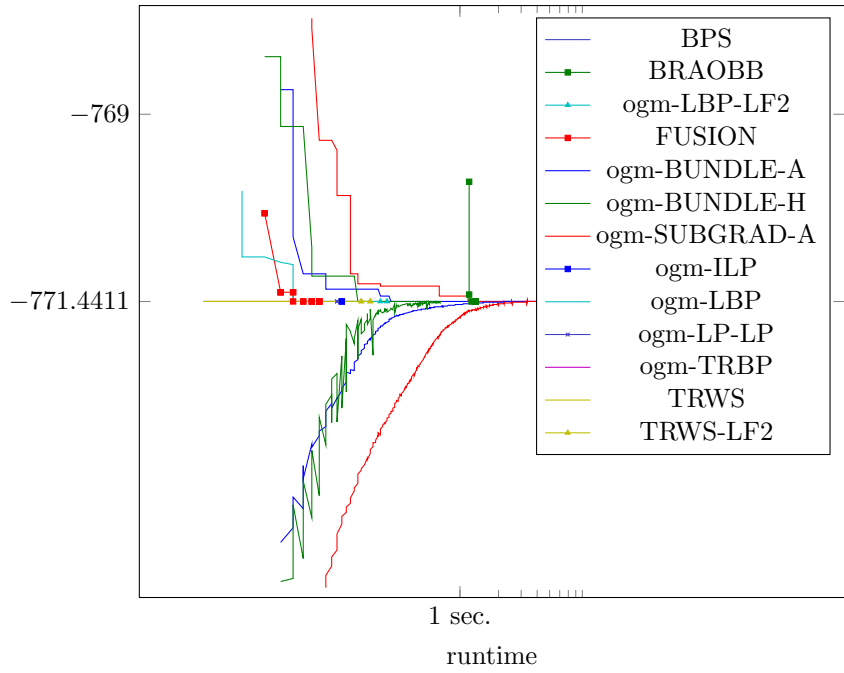


Figure 622: Runtime results for the instance 6000188 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

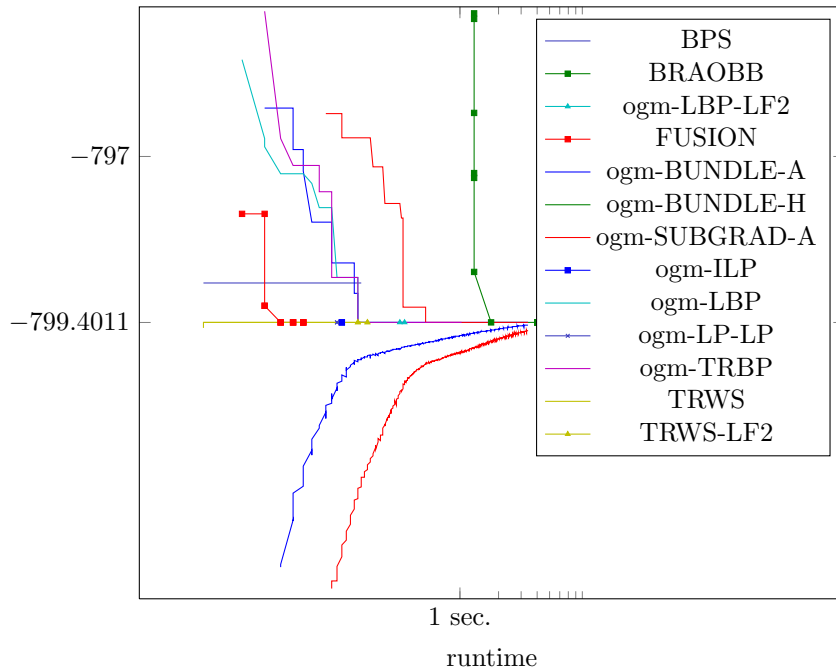


Figure 623: Runtime results for the instance 6000189 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

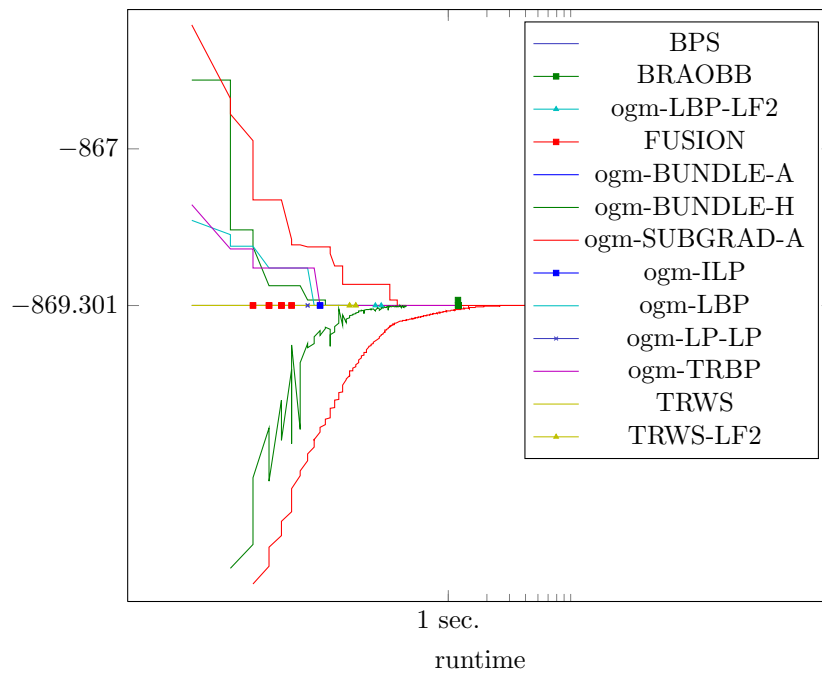


Figure 624: Runtime results for the instance 6000190 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

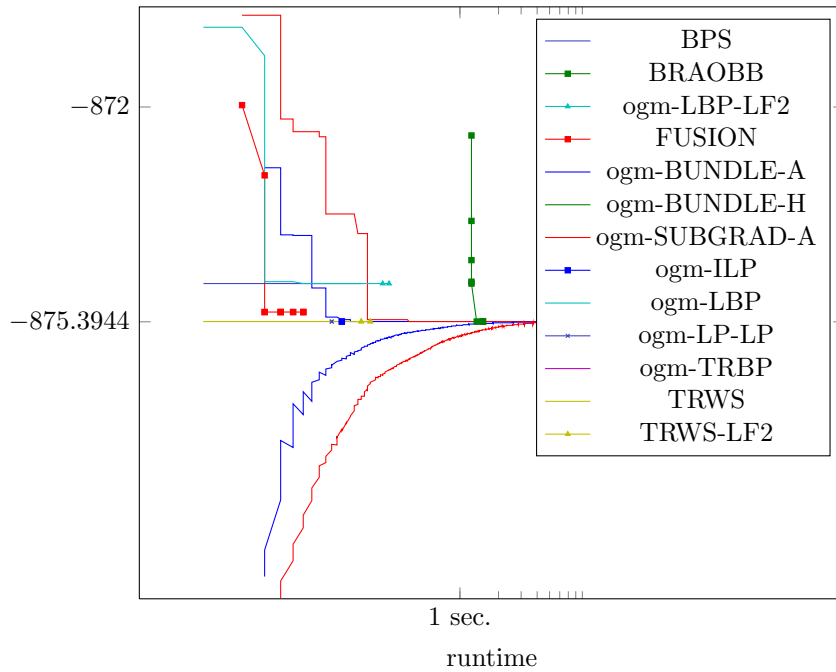


Figure 625: Runtime results for the instance 6000191 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

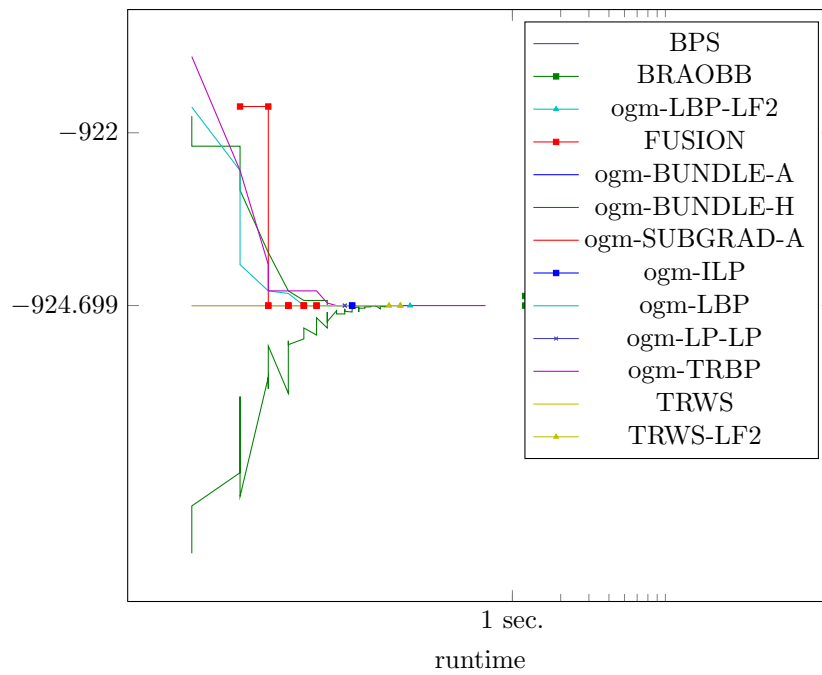


Figure 626: Runtime results for the instance 6000192 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

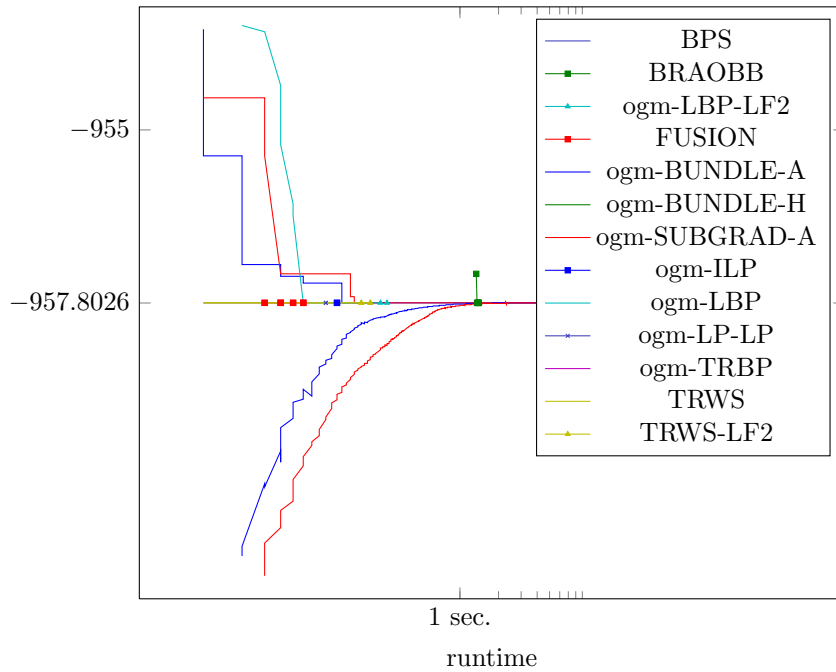


Figure 627: Runtime results for the instance 6000193 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

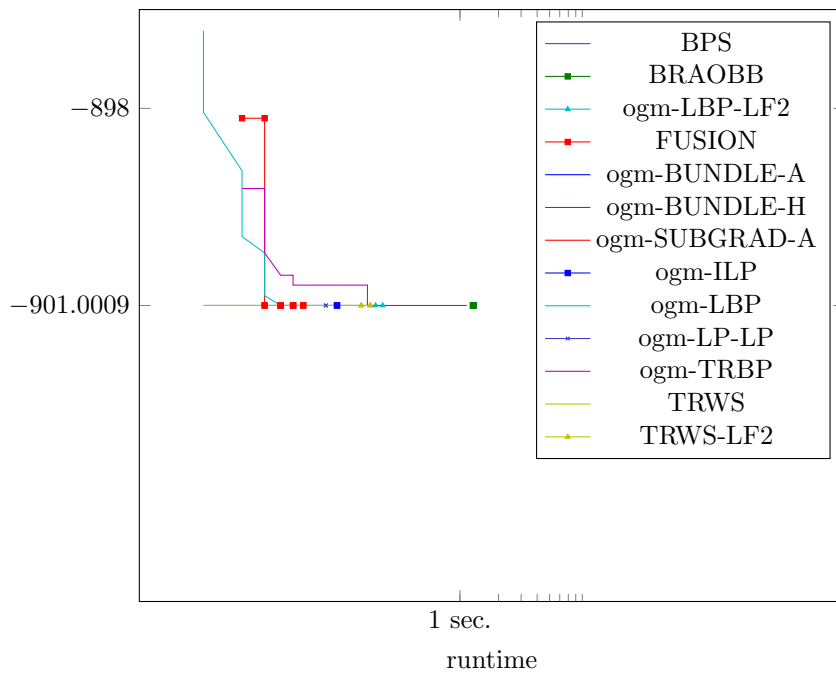


Figure 628: Runtime results for the instance 6000194 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

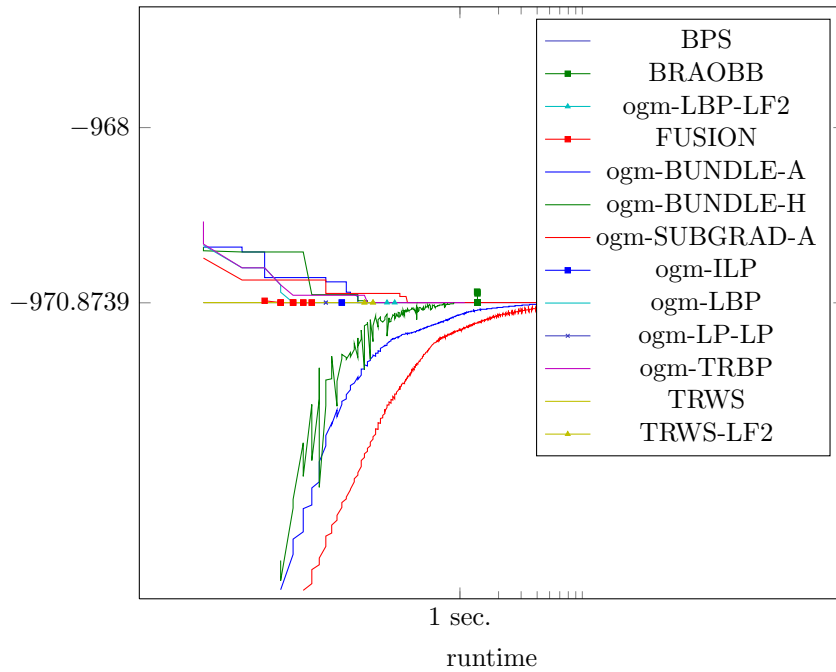


Figure 629: Runtime results for the instance 6000195 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

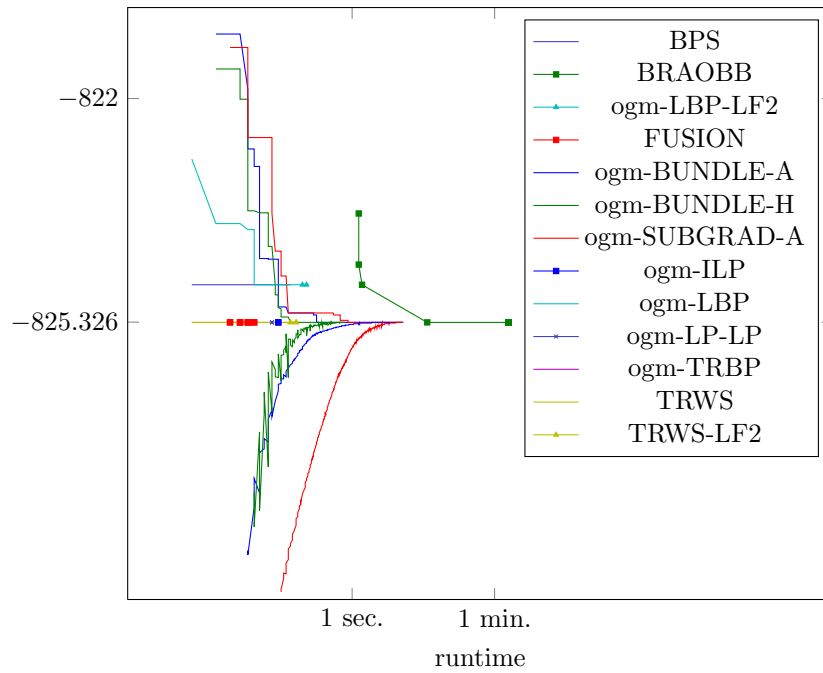


Figure 630: Runtime results for the instance 6000196 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

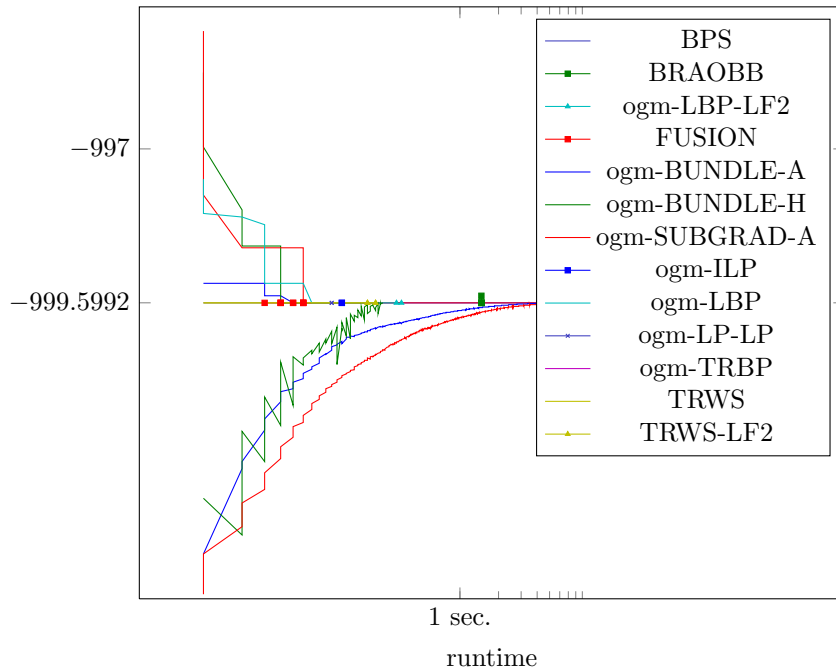


Figure 631: Runtime results for the instance 6000197 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

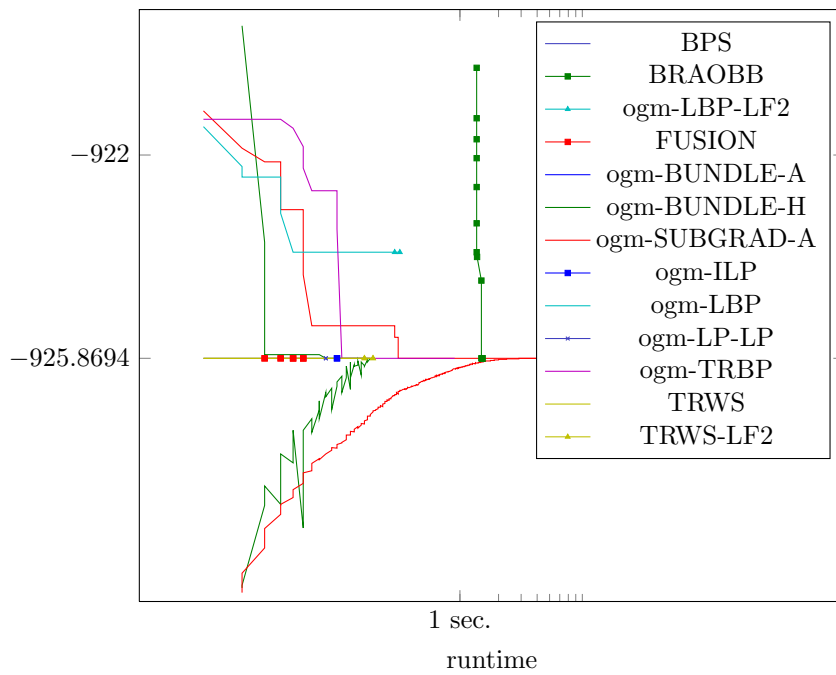


Figure 632: Runtime results for the instance 6000198 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

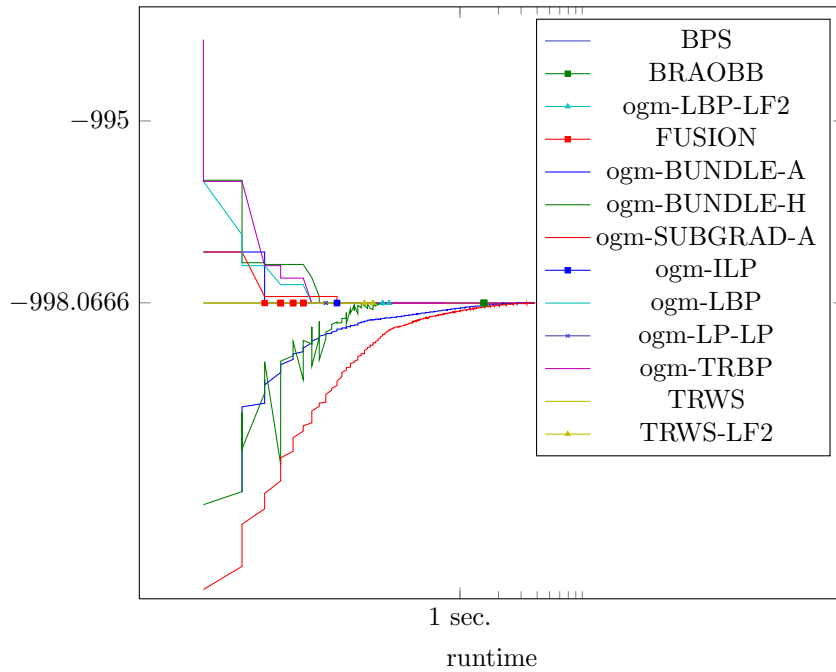


Figure 633: Runtime results for the instance 6000199 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

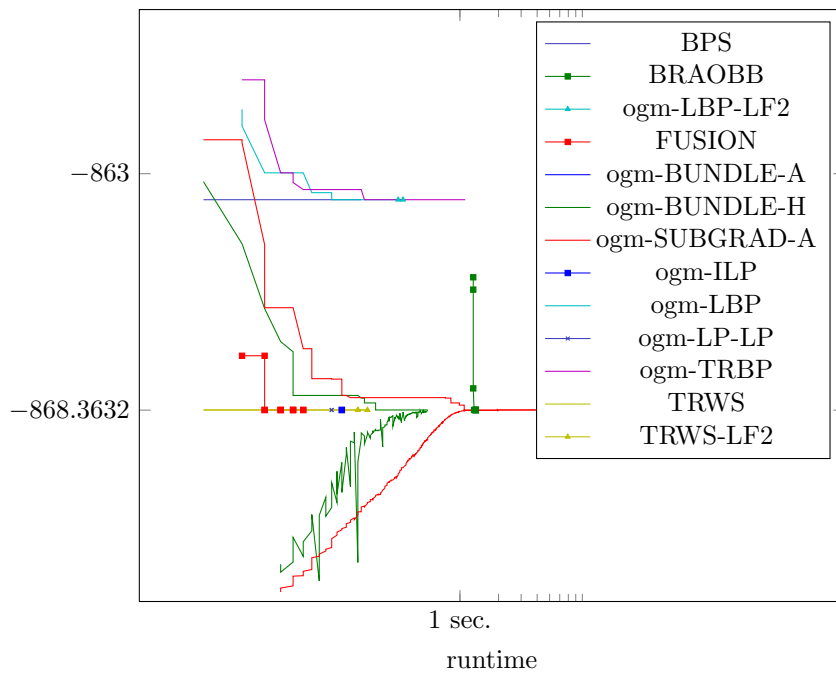


Figure 634: Runtime results for the instance 6000200 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

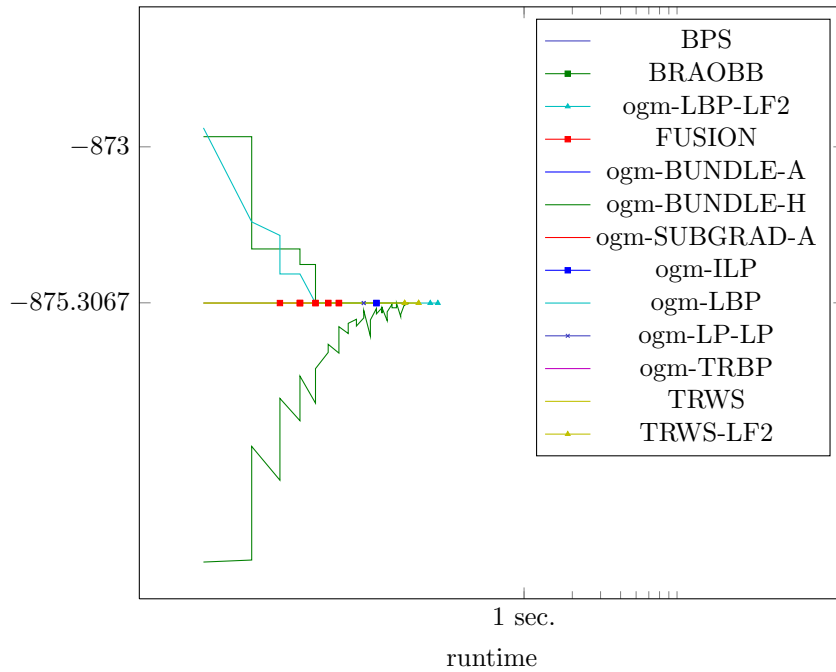


Figure 635: Runtime results for the instance 6000201 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

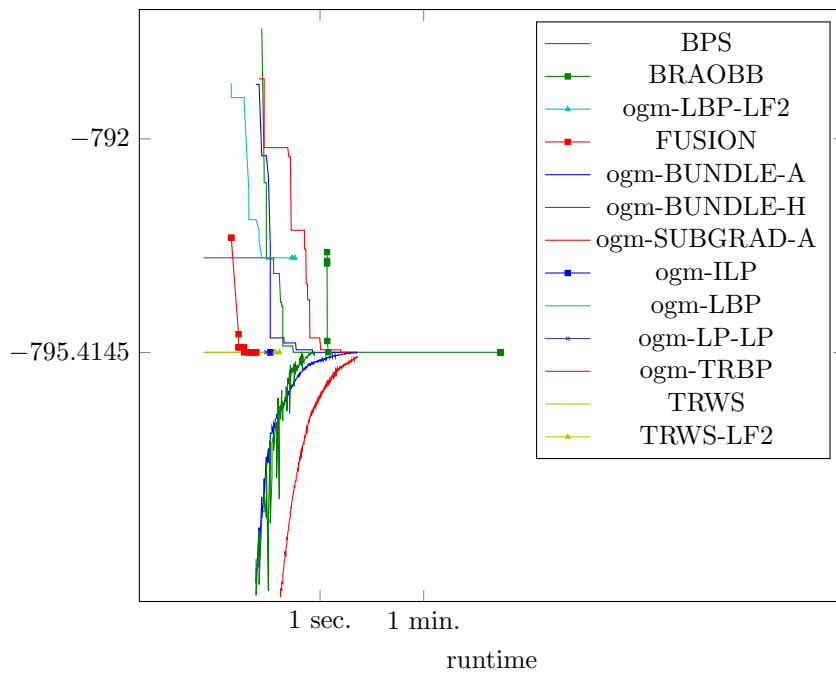


Figure 636: Runtime results for the instance 6000202 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

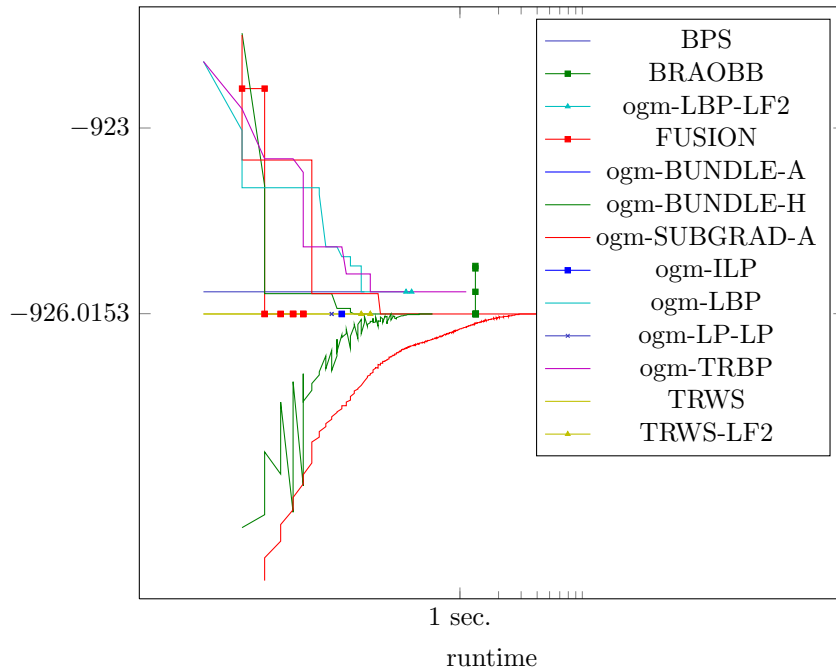


Figure 637: Runtime results for the instance 6000203 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

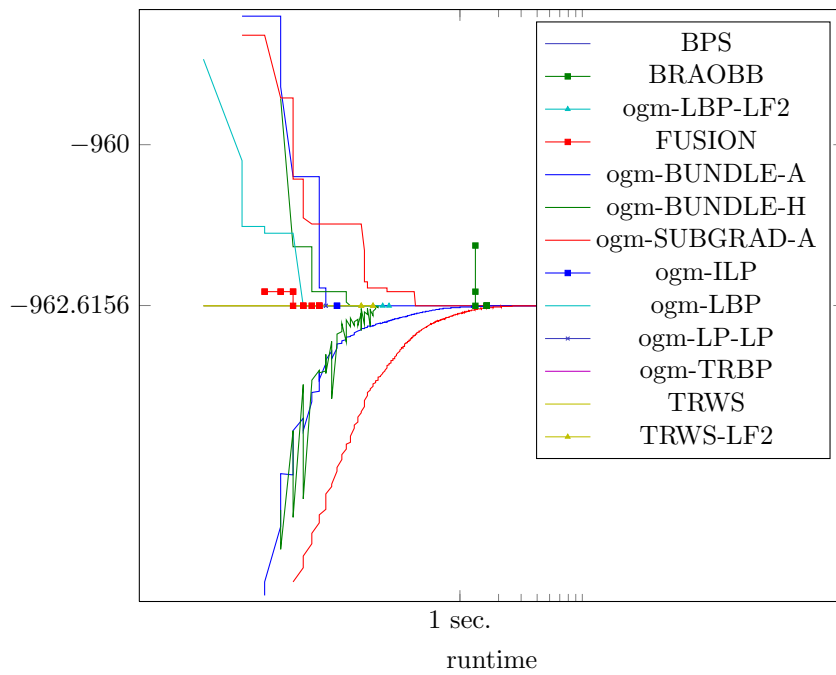


Figure 638: Runtime results for the instance 6000204 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

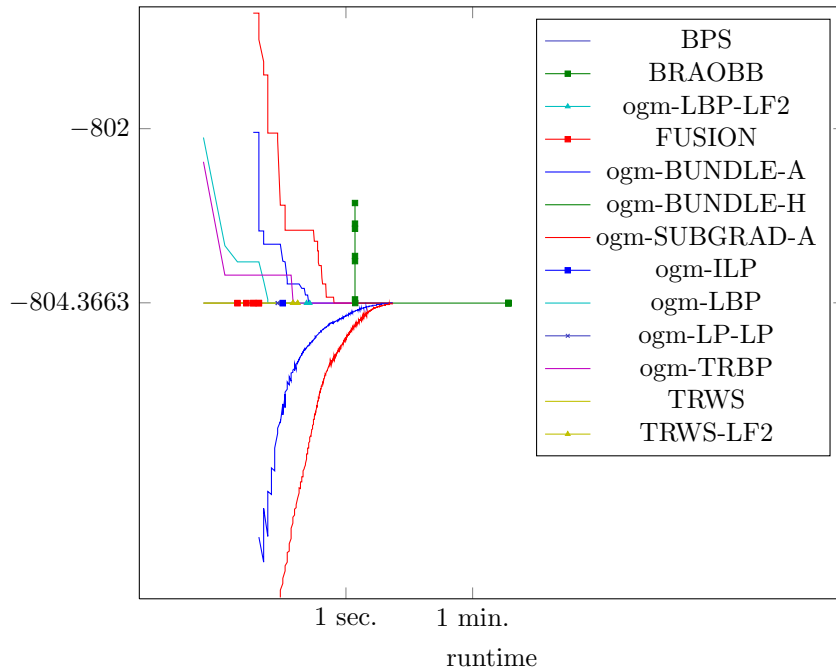


Figure 639: Runtime results for the instance 6000205 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

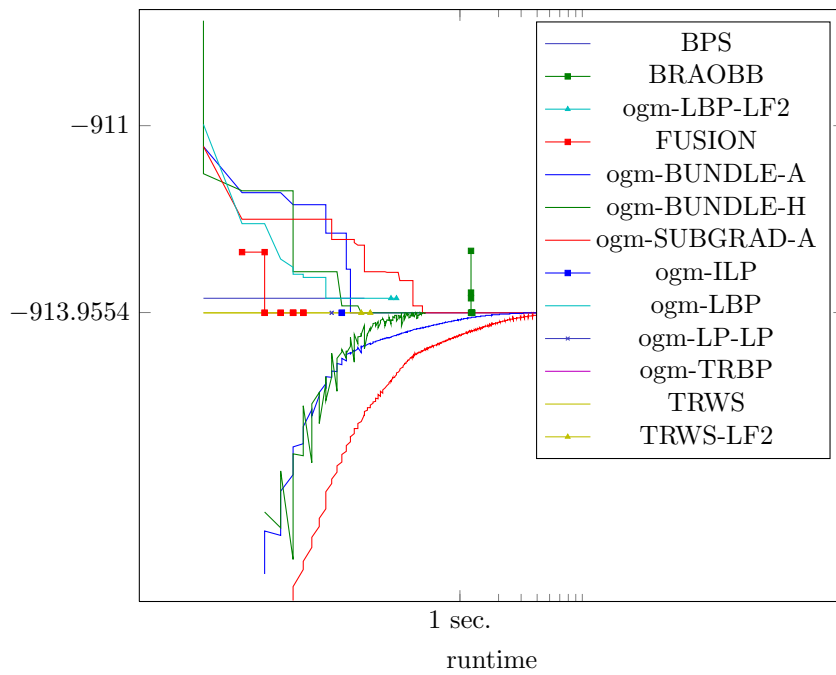


Figure 640: Runtime results for the instance 6000206 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

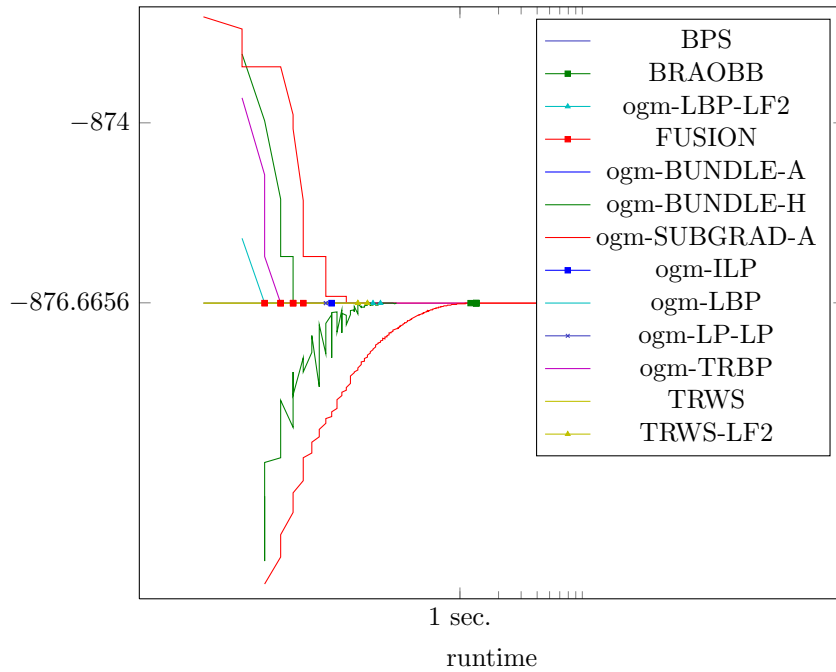


Figure 641: Runtime results for the instance 6000207 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

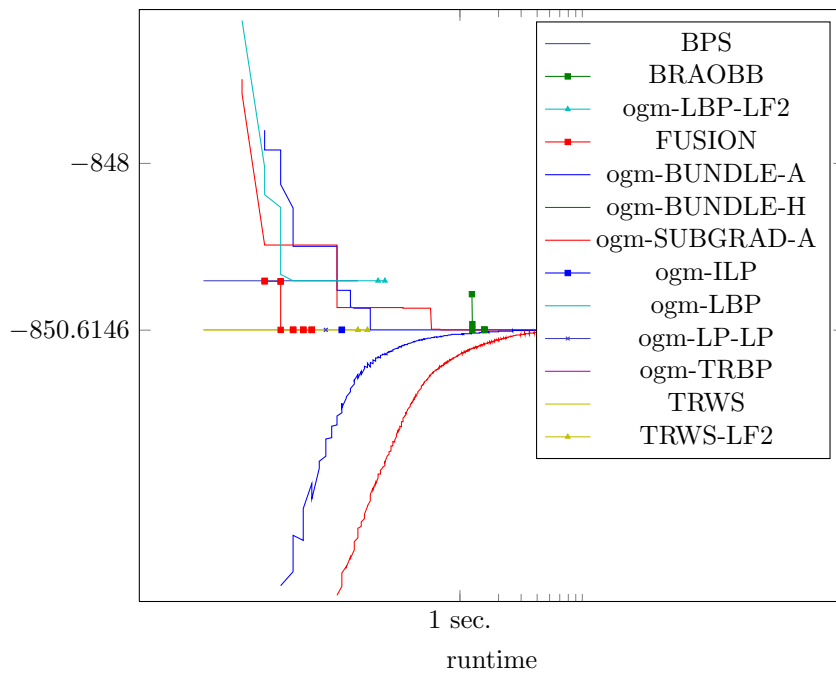


Figure 642: Runtime results for the instance 6000208 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

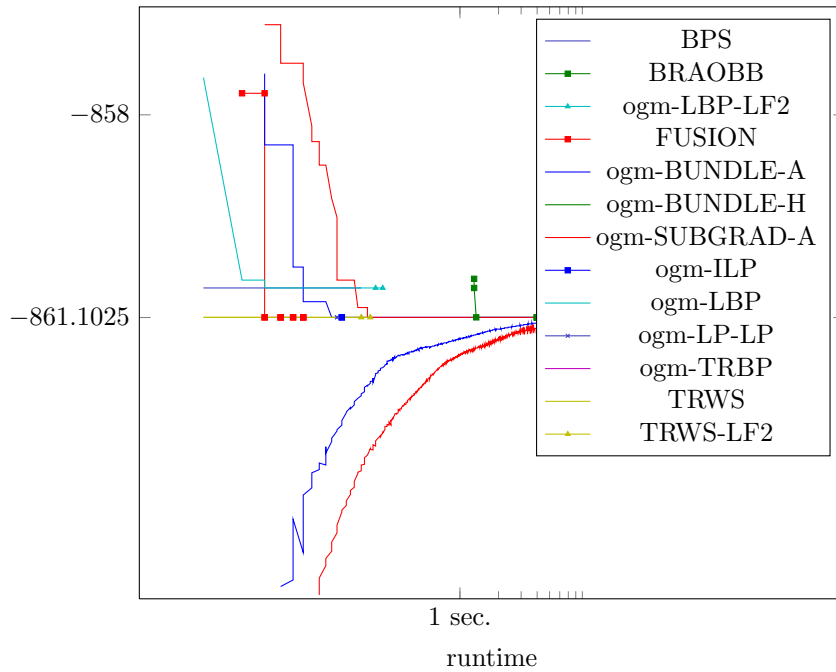


Figure 643: Runtime results for the instance 6000209 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

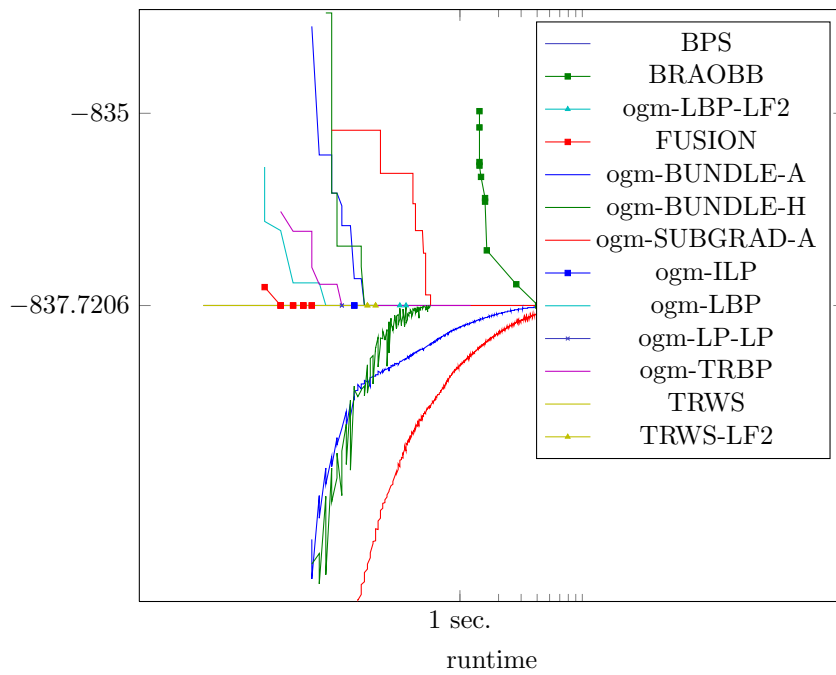


Figure 644: Runtime results for the instance 6000210 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

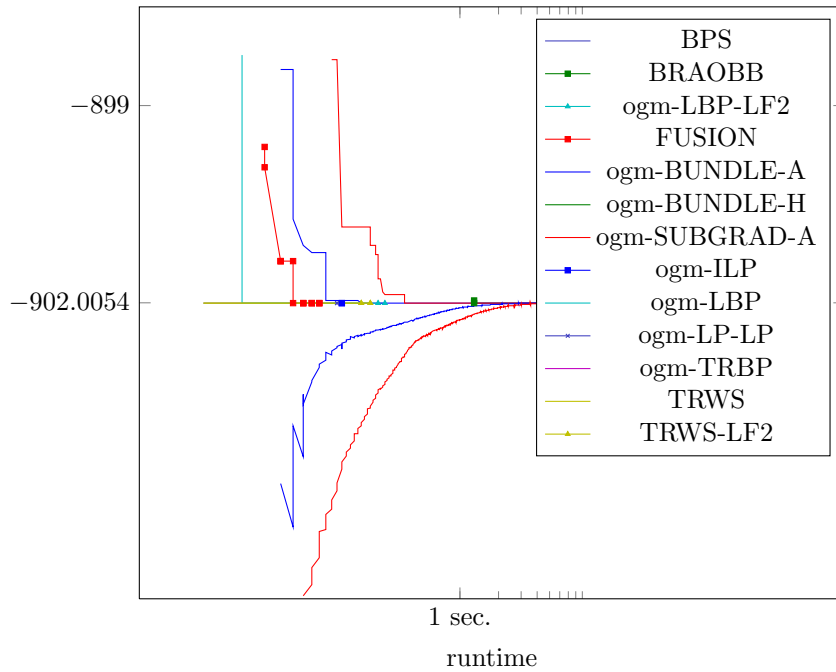


Figure 645: Runtime results for the instance 6000211 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

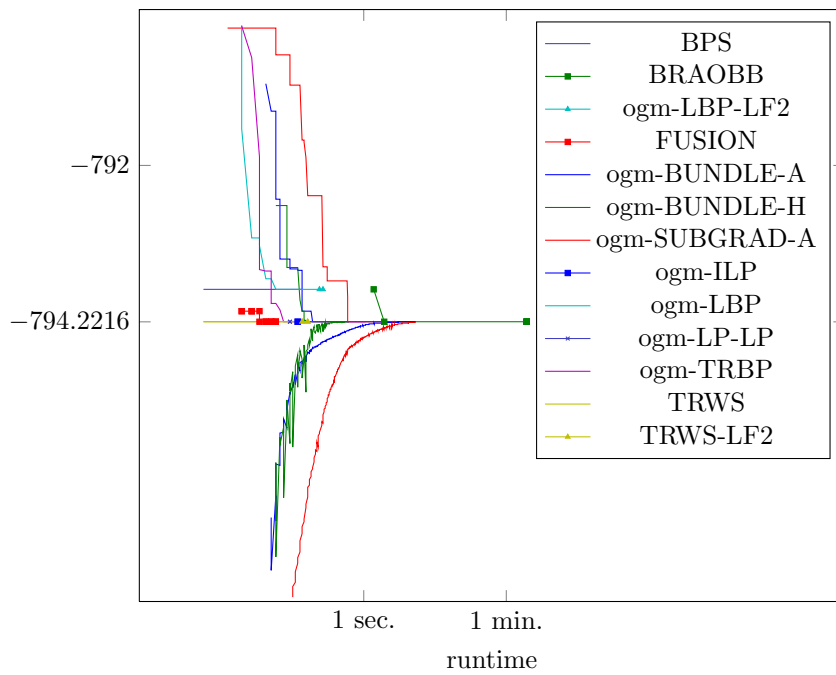


Figure 646: Runtime results for the instance 6000212 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

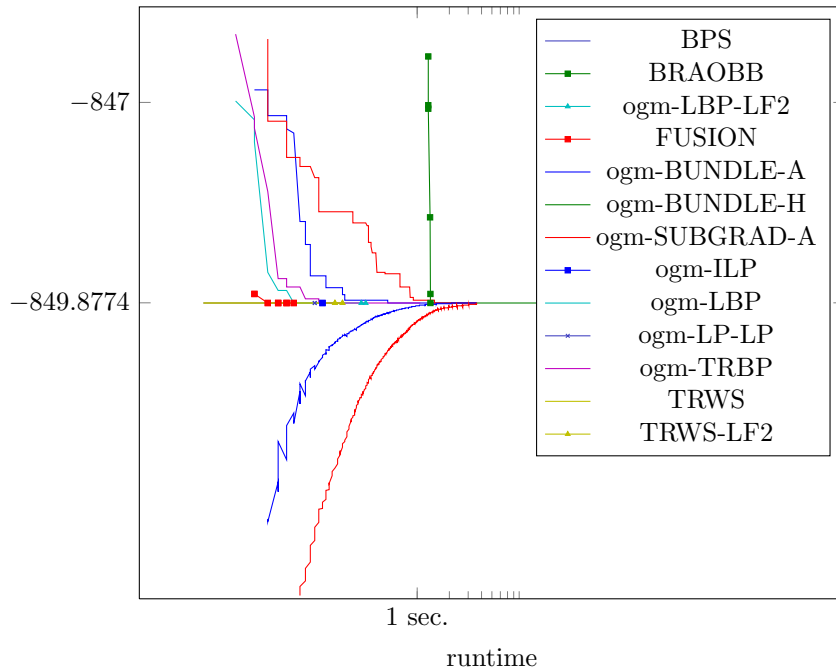


Figure 647: Runtime results for the instance 6000213 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

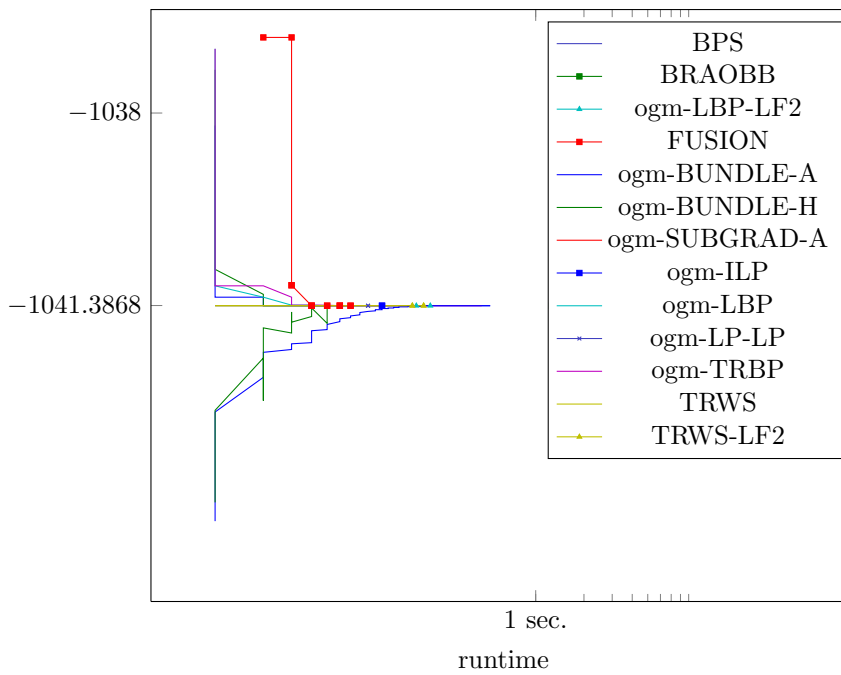


Figure 648: Runtime results for the instance 6000214 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

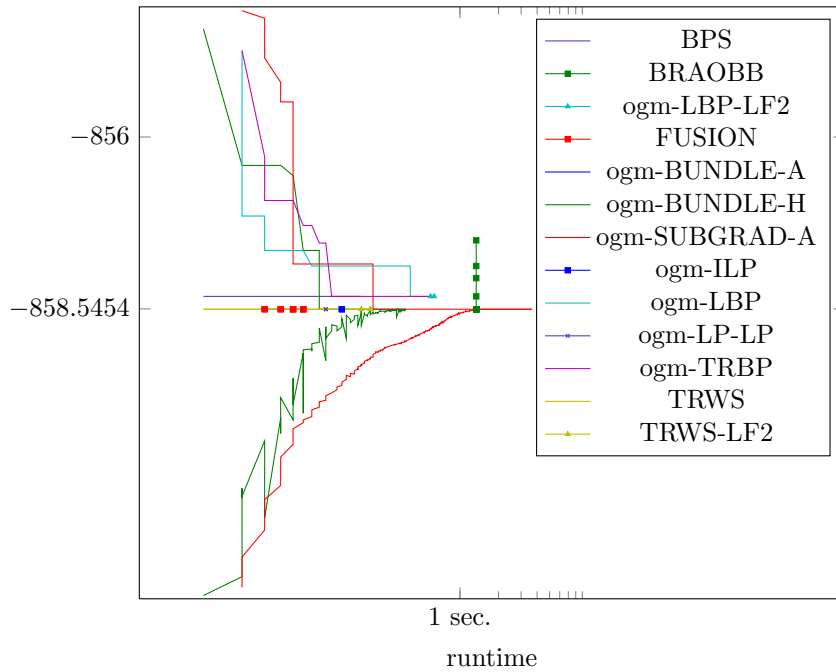


Figure 649: Runtime results for the instance 6000215 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

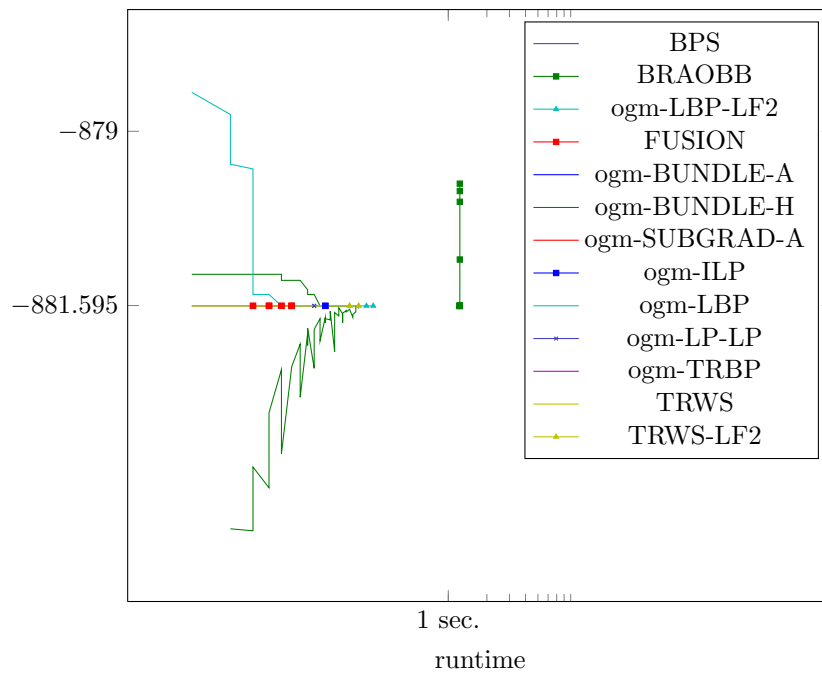


Figure 650: Runtime results for the instance 6000216 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

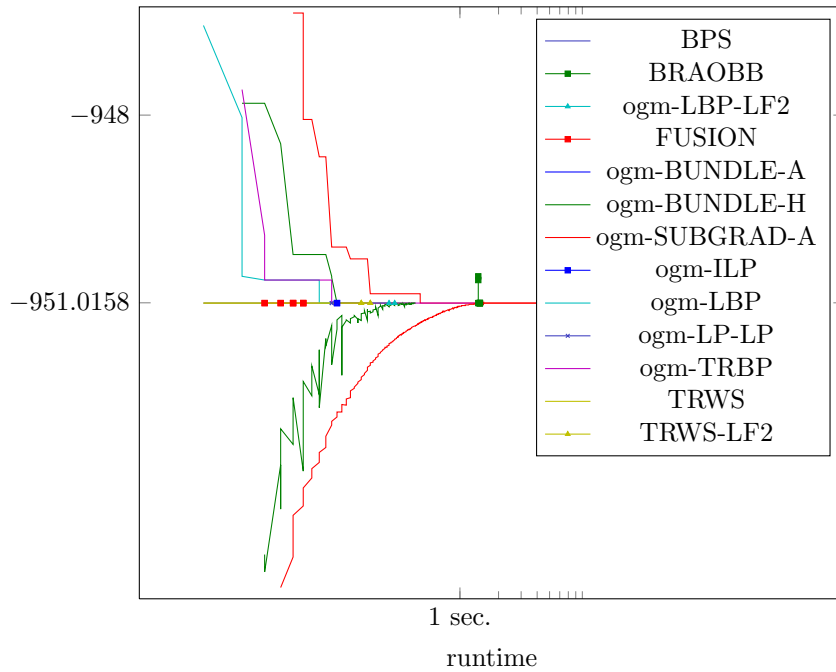


Figure 651: Runtime results for the instance 6000217 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

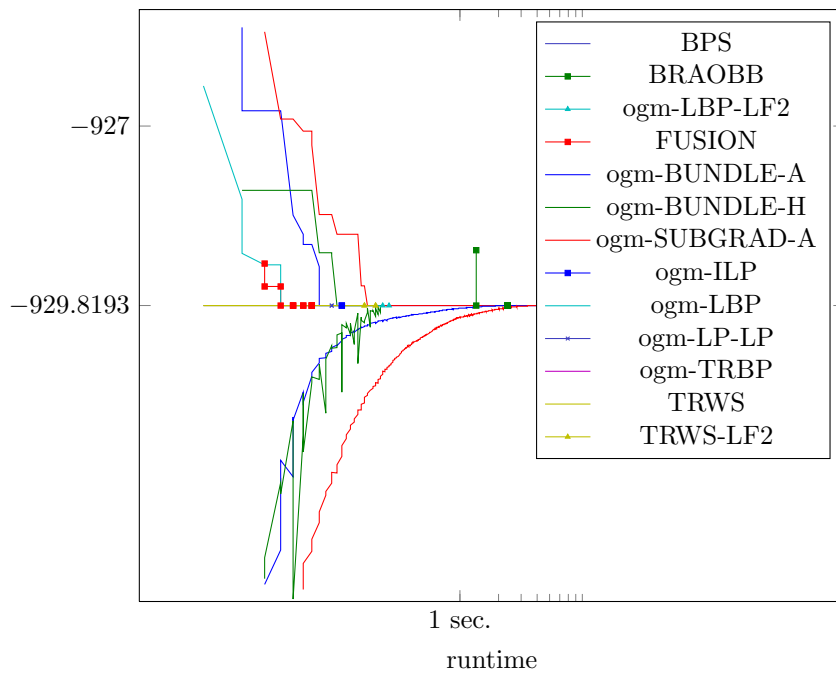


Figure 652: Runtime results for the instance 6000218 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

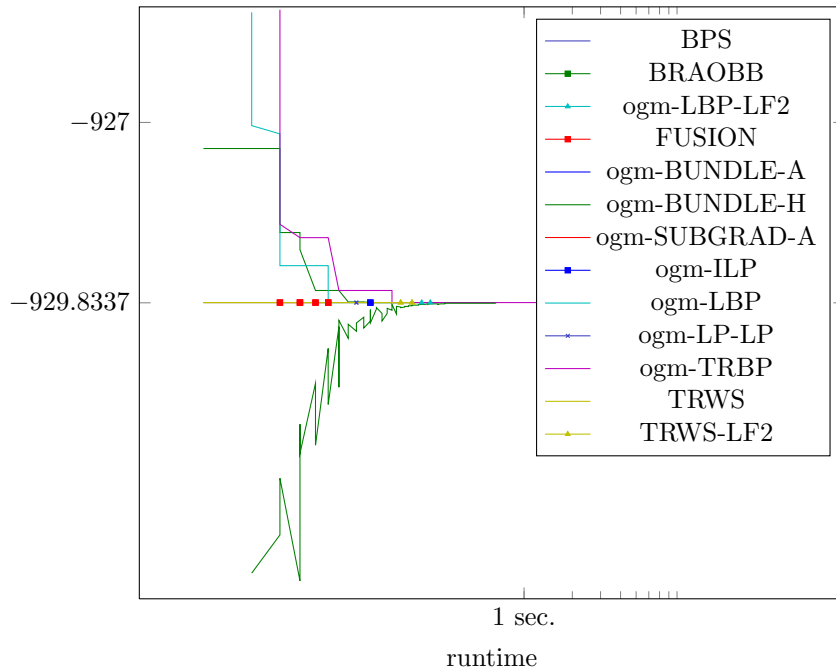


Figure 653: Runtime results for the instance 6000219 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

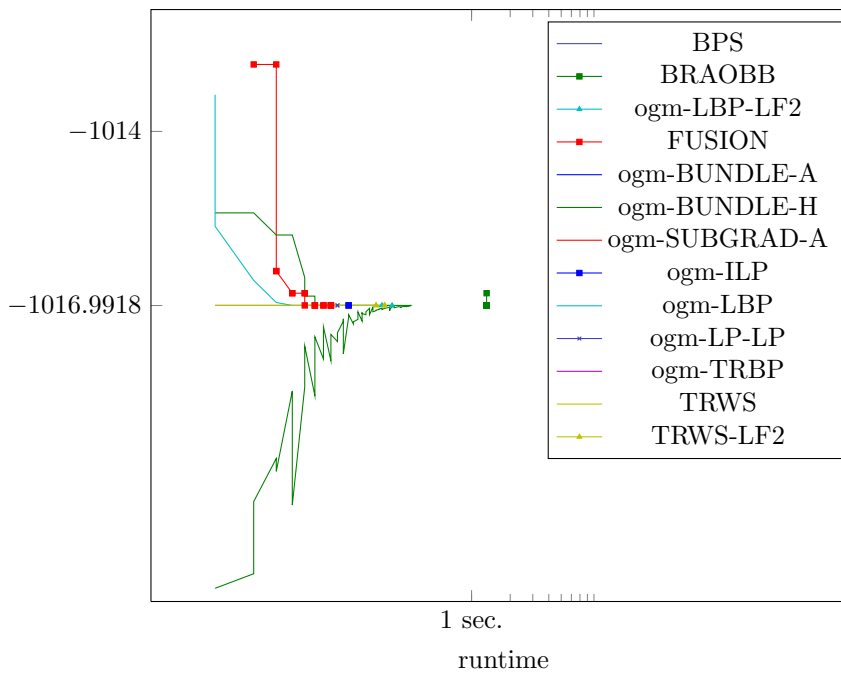


Figure 654: Runtime results for the instance 6000220 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

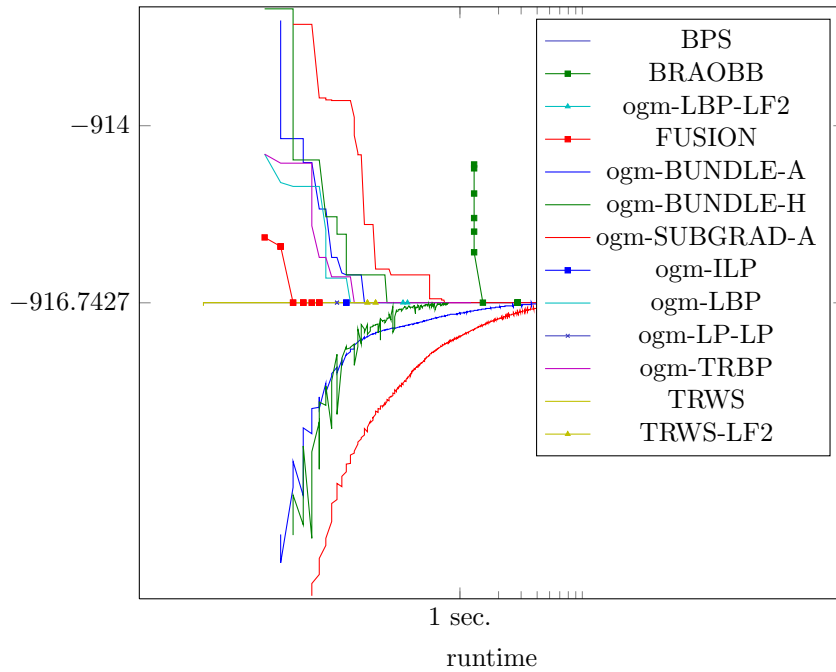


Figure 655: Runtime results for the instance 6000221 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

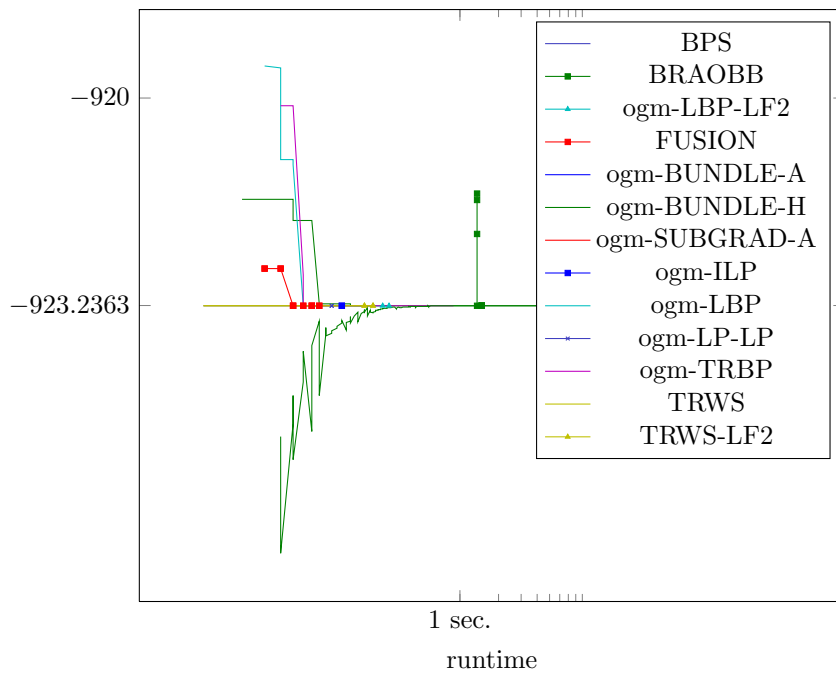


Figure 656: Runtime results for the instance 6000222 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

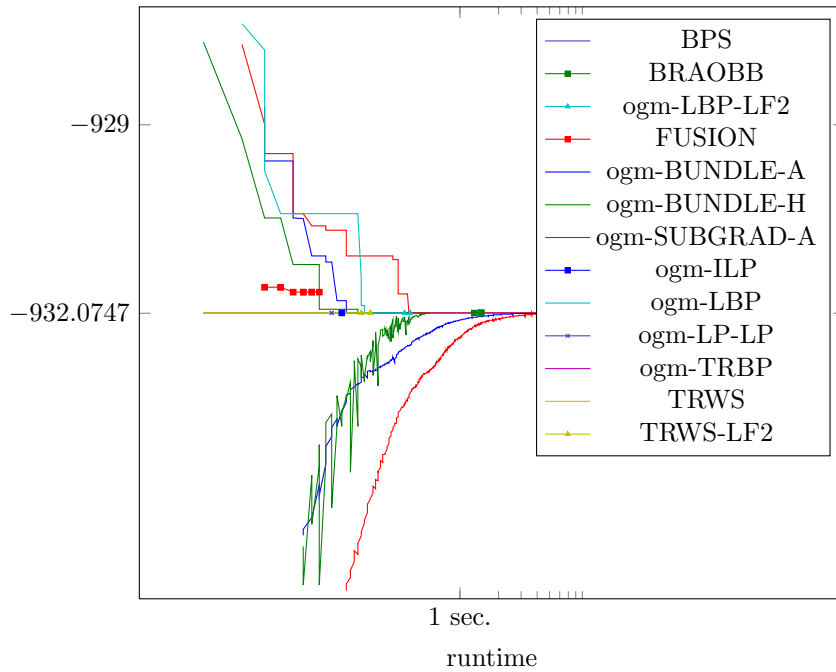


Figure 657: Runtime results for the instance 6000223 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

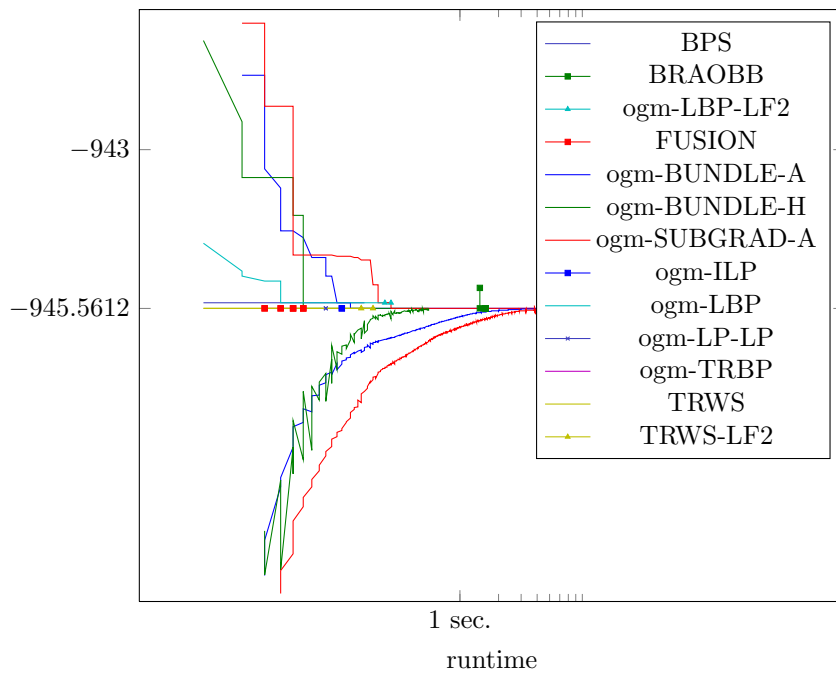


Figure 658: Runtime results for the instance 6000224 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

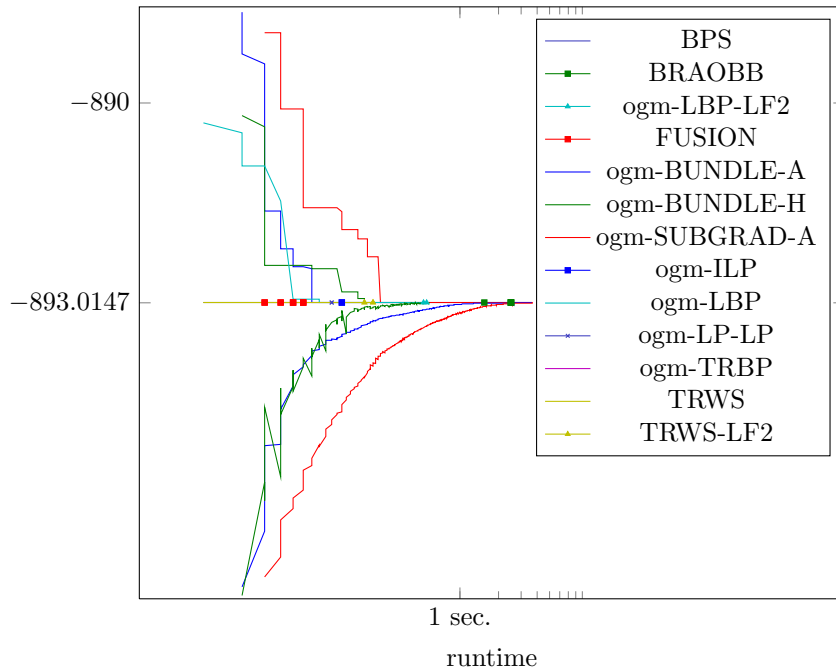


Figure 659: Runtime results for the instance 6000225 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

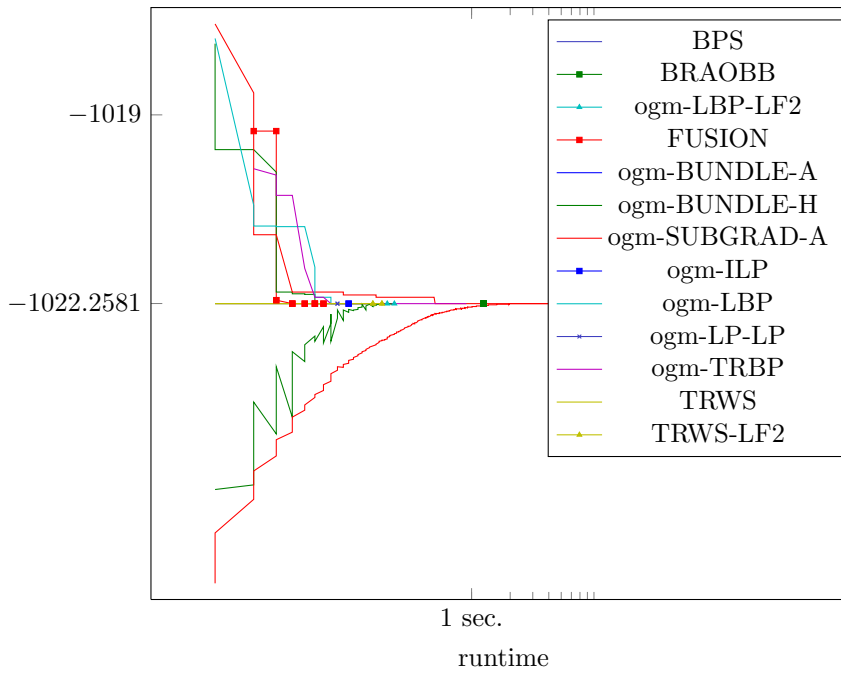


Figure 660: Runtime results for the instance 6000226 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

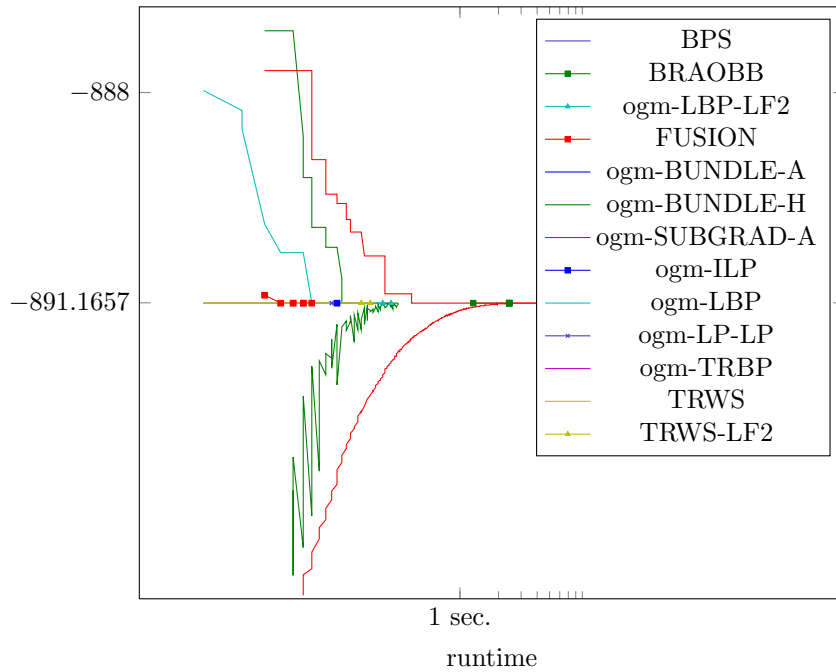


Figure 661: Runtime results for the instance 6000227 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

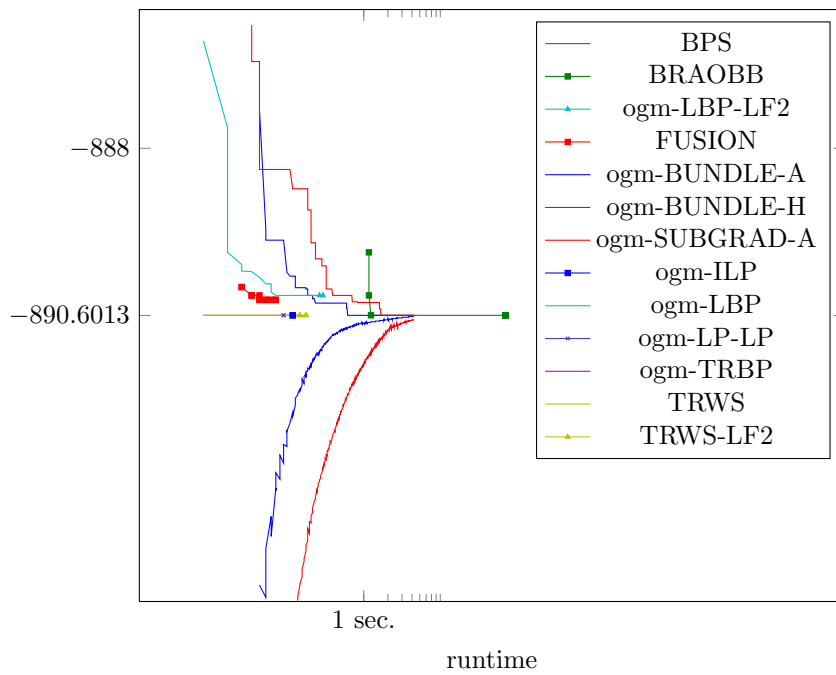


Figure 662: Runtime results for the instance 6000228 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

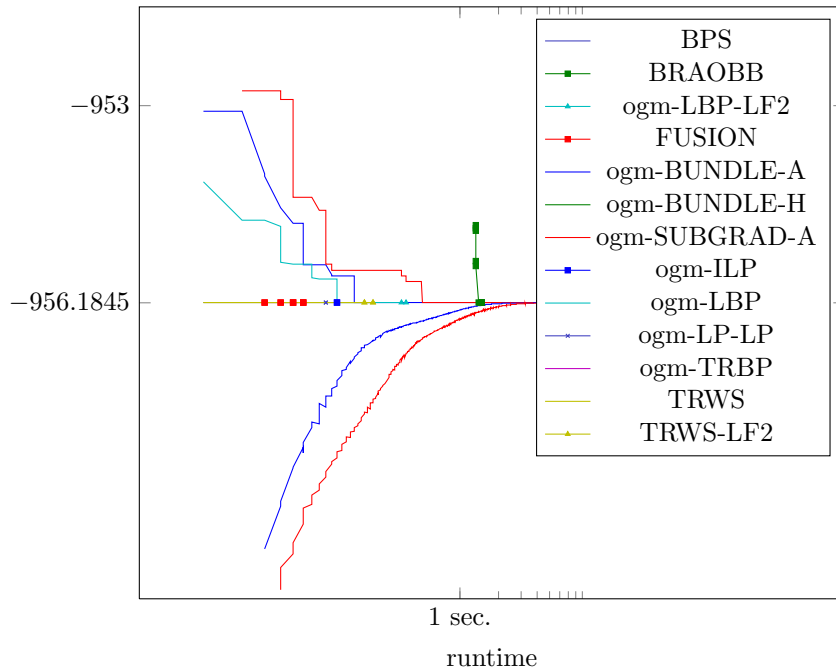


Figure 663: Runtime results for the instance 6000229 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

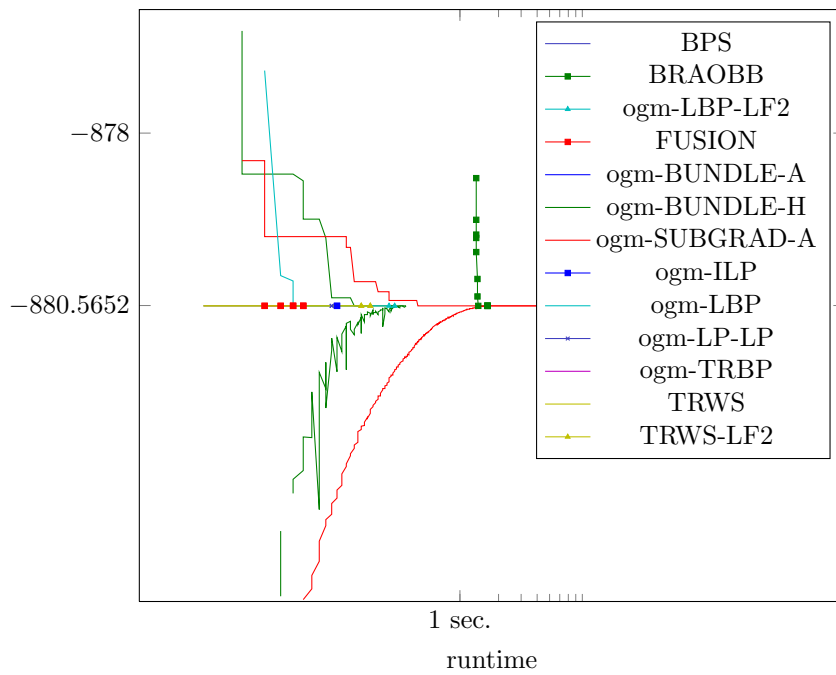


Figure 664: Runtime results for the instance 6000230 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

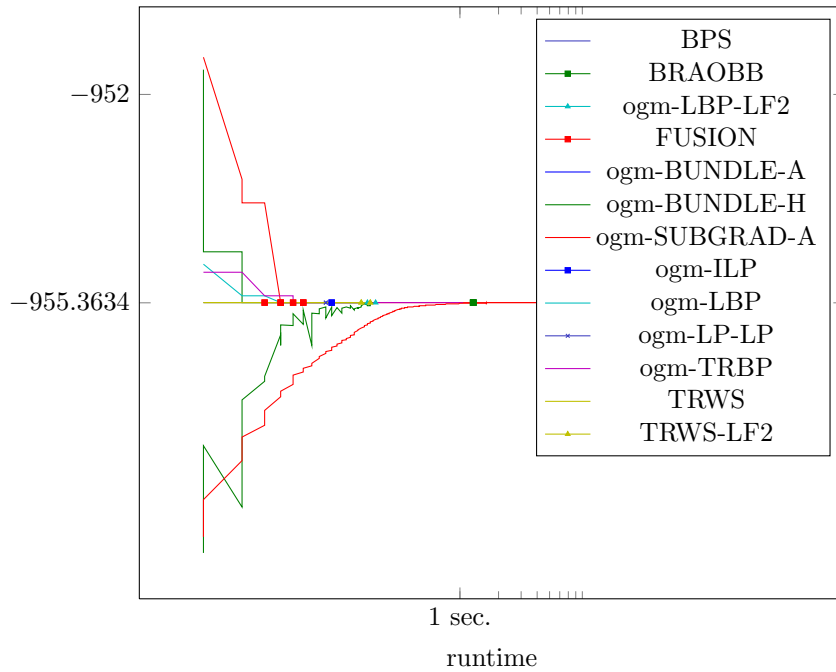


Figure 665: Runtime results for the instance 6000231 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

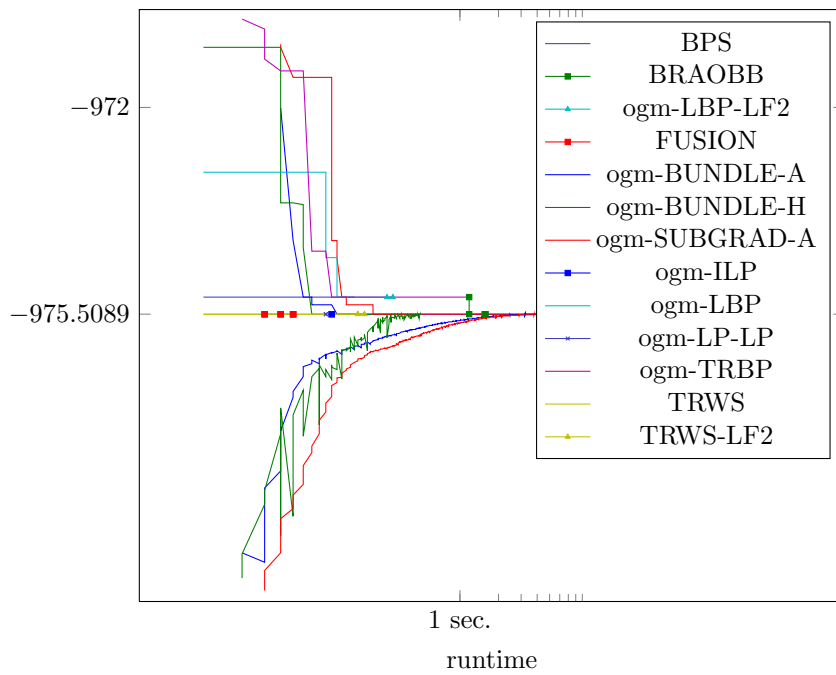


Figure 666: Runtime results for the instance 6000232 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

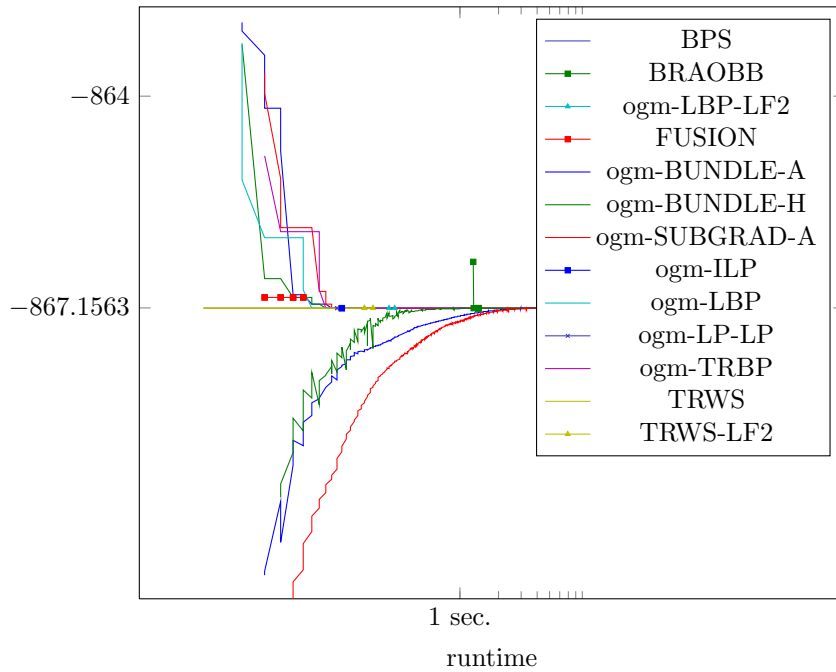


Figure 667: Runtime results for the instance 6000233 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

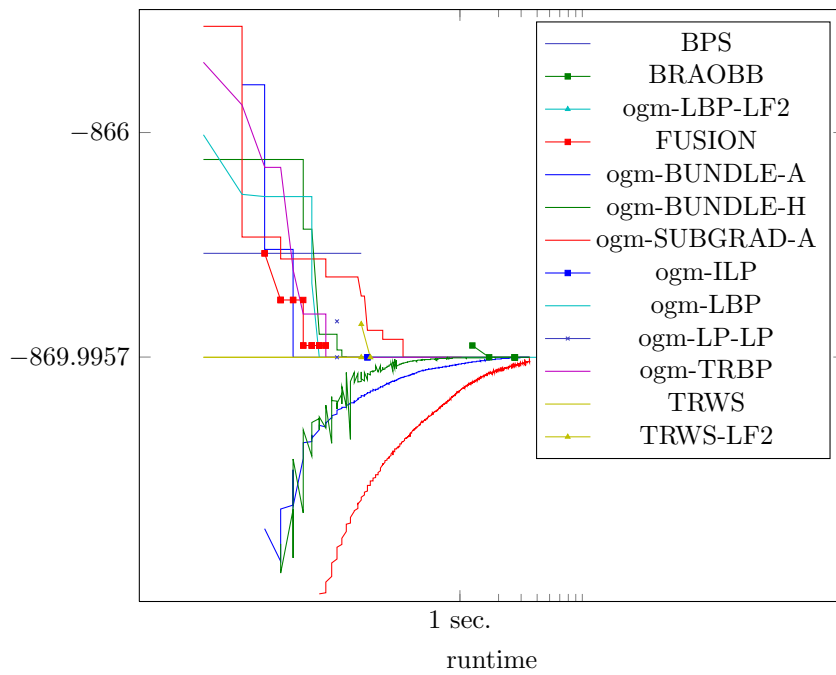


Figure 668: Runtime results for the instance 6000234 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

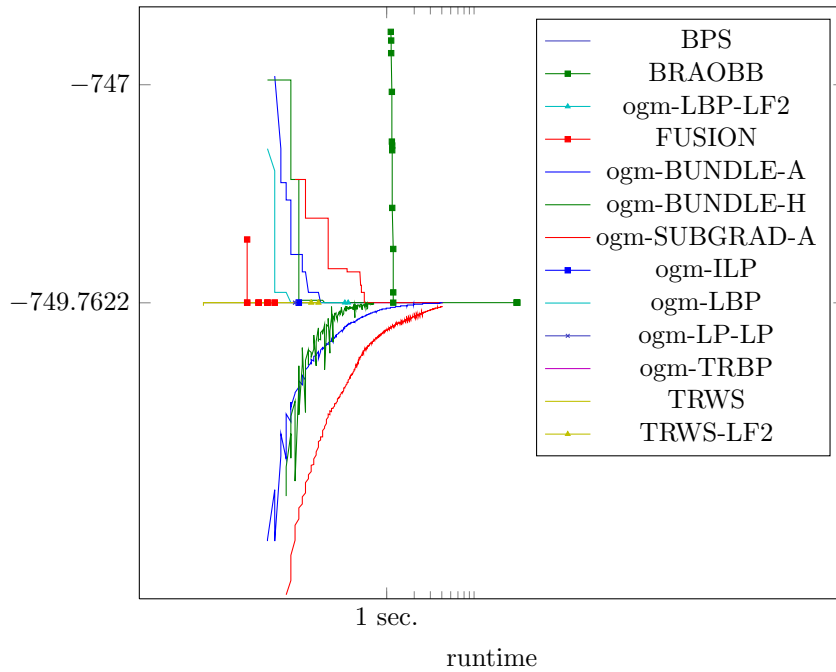


Figure 669: Runtime results for the instance 6000235 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

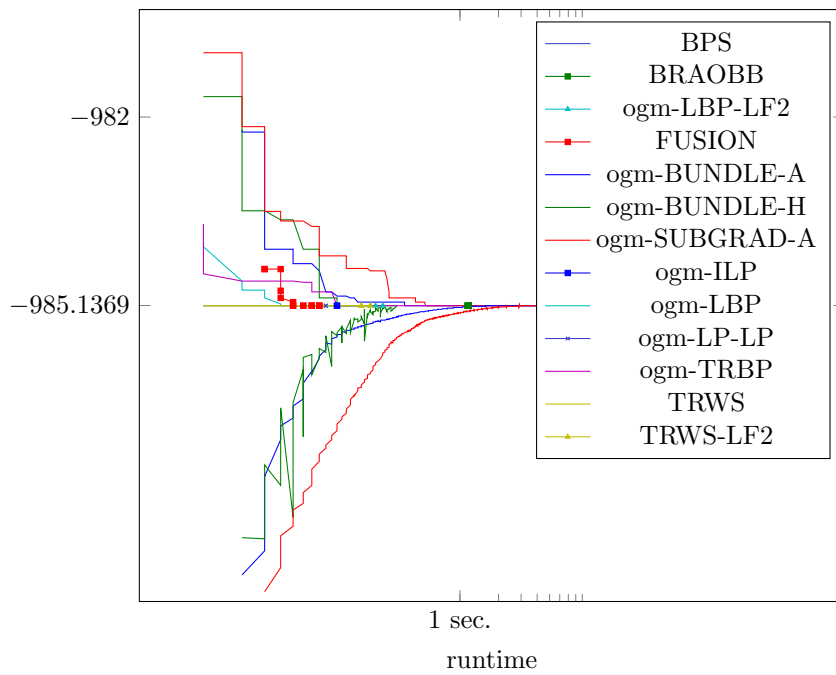


Figure 670: Runtime results for the instance 6000236 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

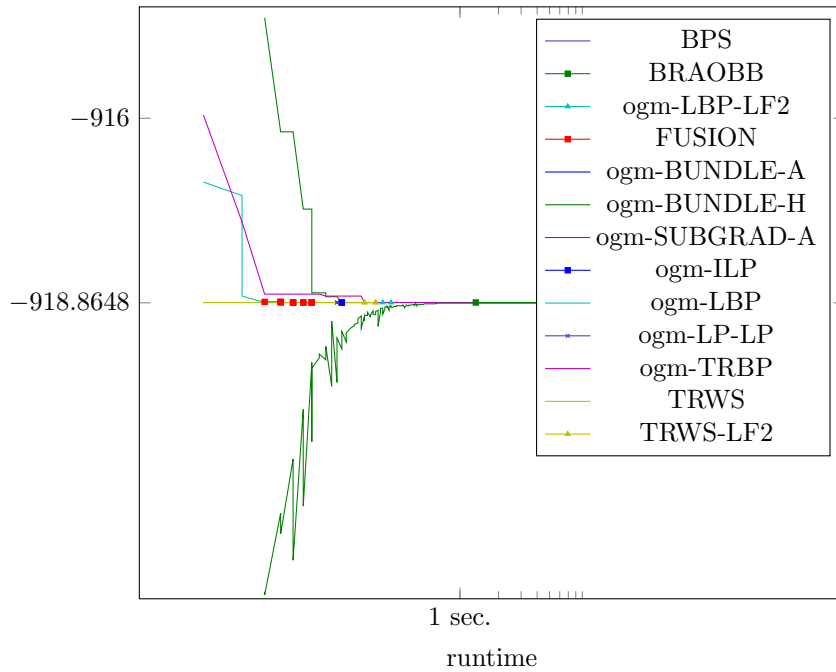


Figure 671: Runtime results for the instance 6000237 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

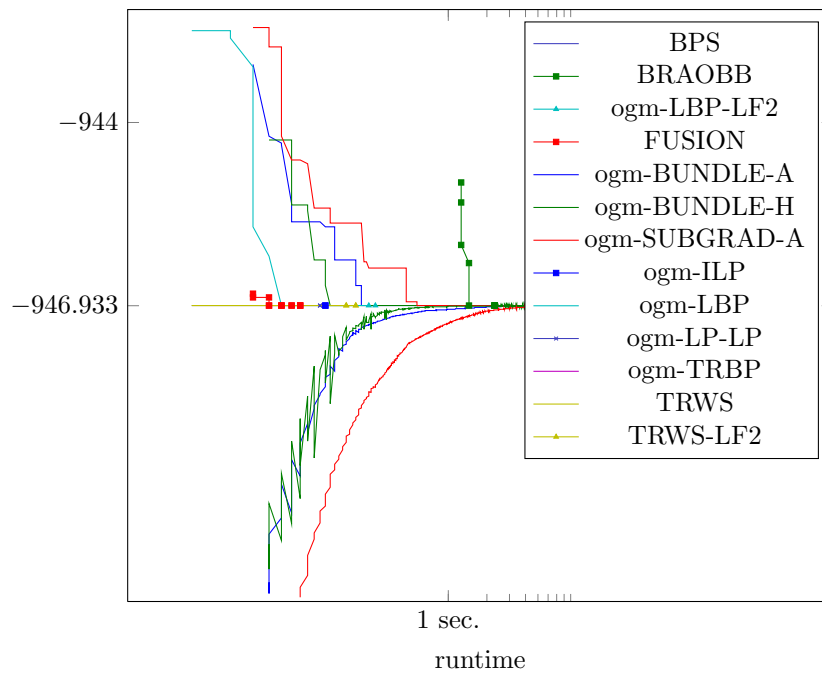


Figure 672: Runtime results for the instance 6000238 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

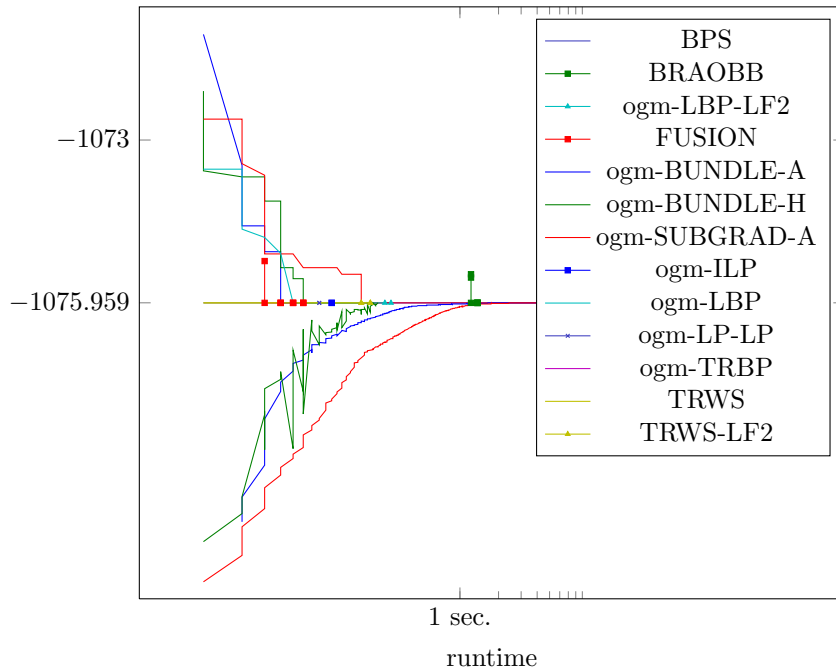


Figure 673: Runtime results for the instance 6000239 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

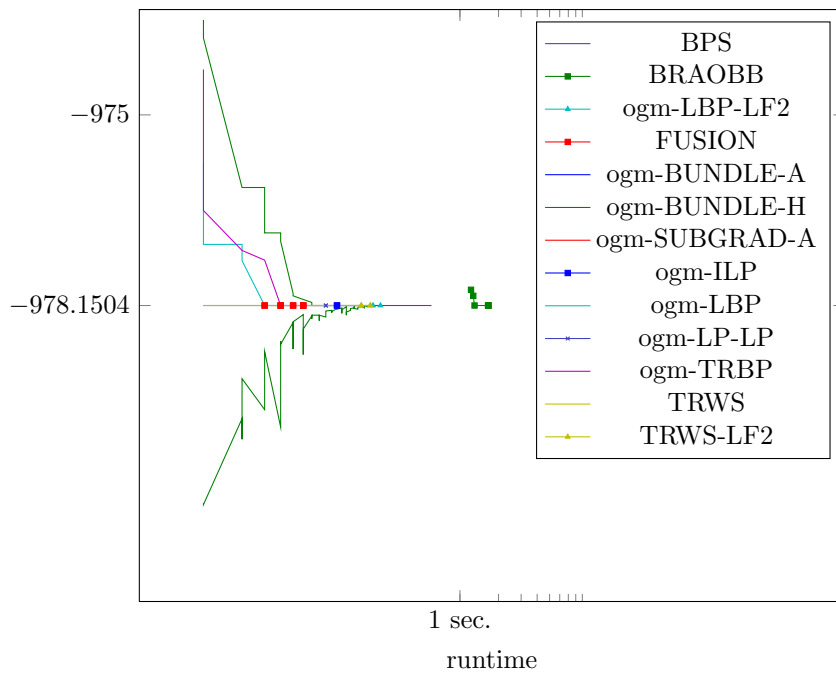


Figure 674: Runtime results for the instance 6000240 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

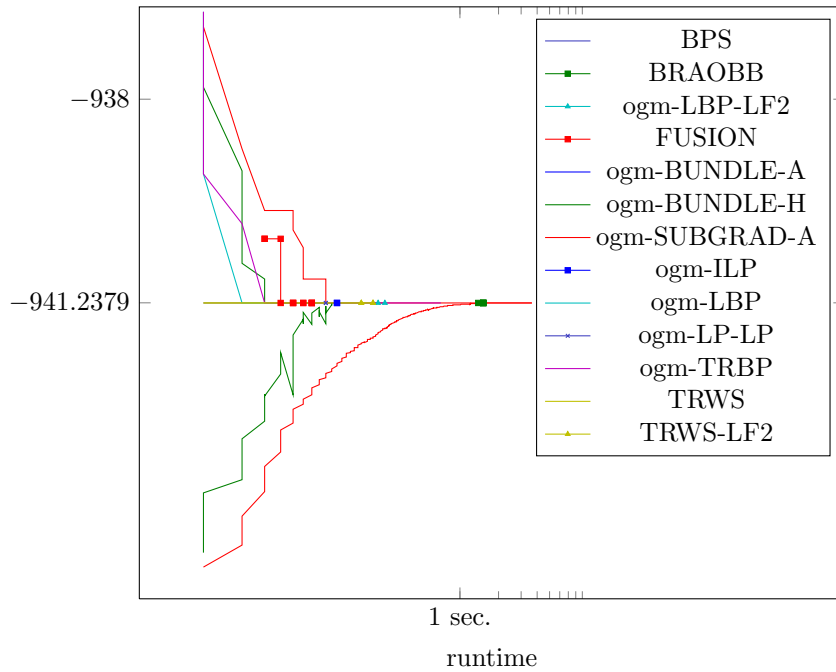


Figure 675: Runtime results for the instance 6000241 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

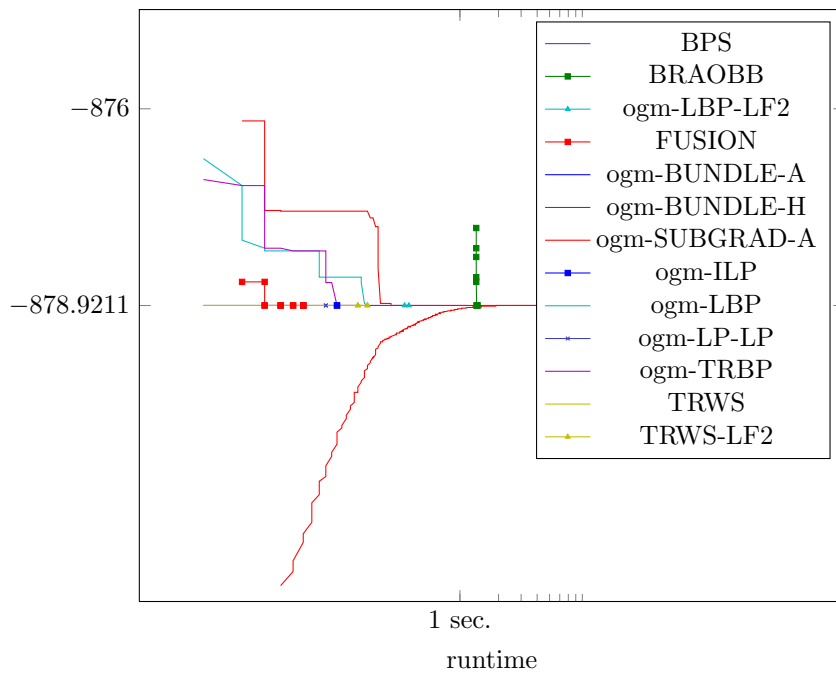


Figure 676: Runtime results for the instance 6000242 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

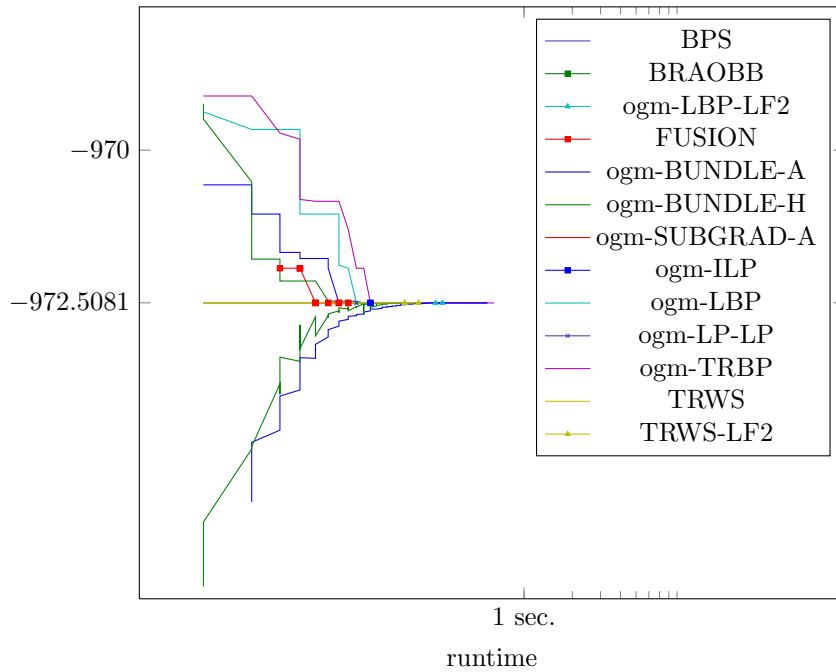


Figure 677: Runtime results for the instance 6000243 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

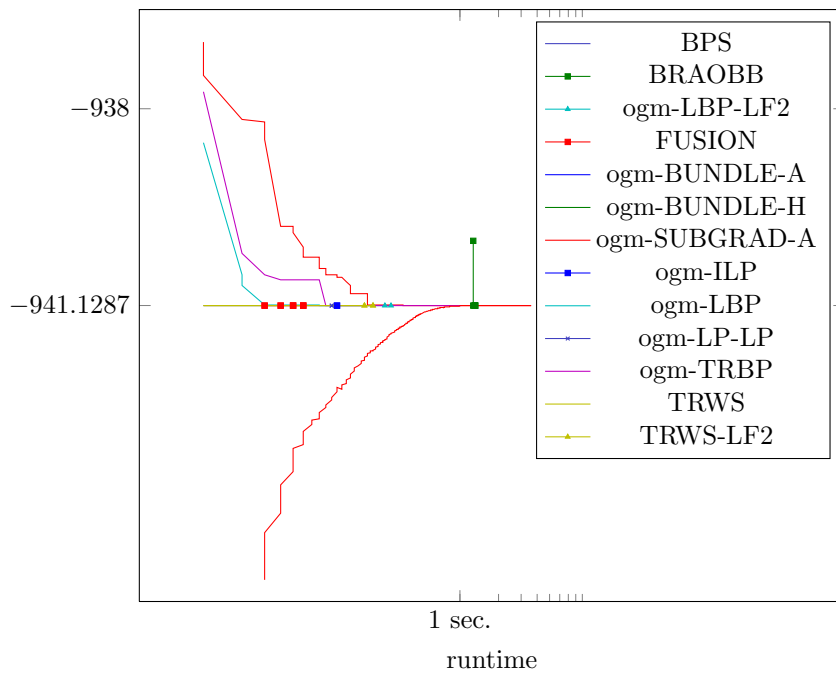


Figure 678: Runtime results for the instance 6000244 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

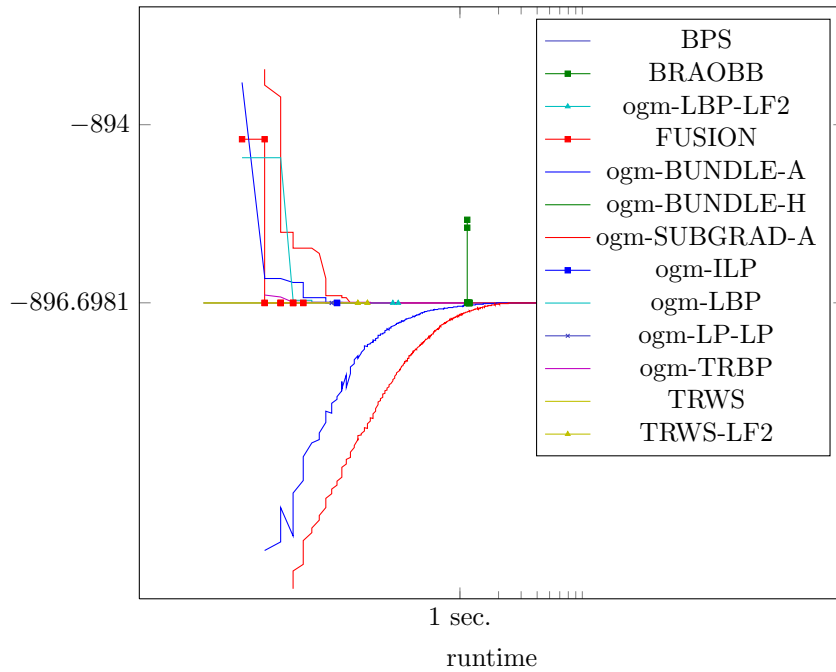


Figure 679: Runtime results for the instance 6000245 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

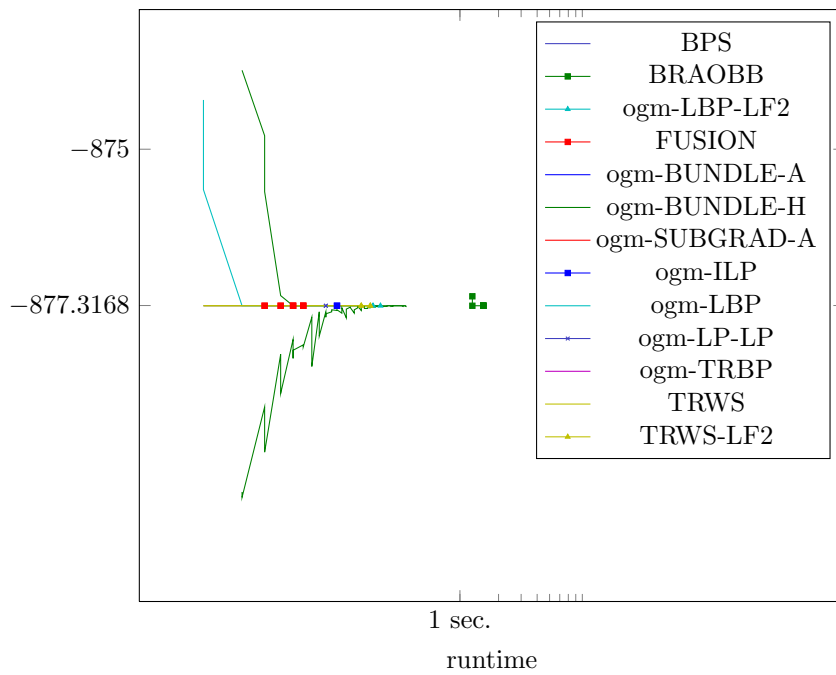


Figure 680: Runtime results for the instance 6000246 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

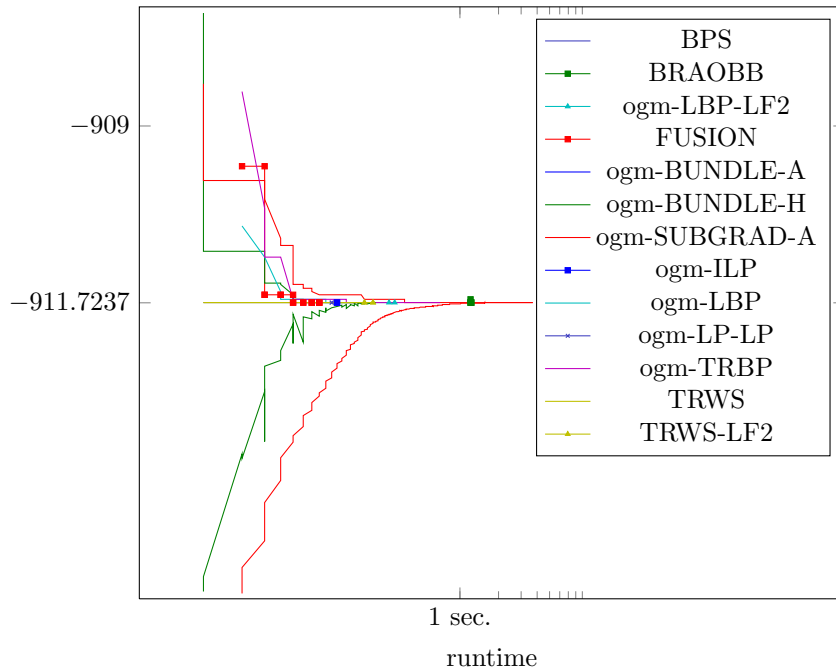


Figure 681: Runtime results for the instance 6000247 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

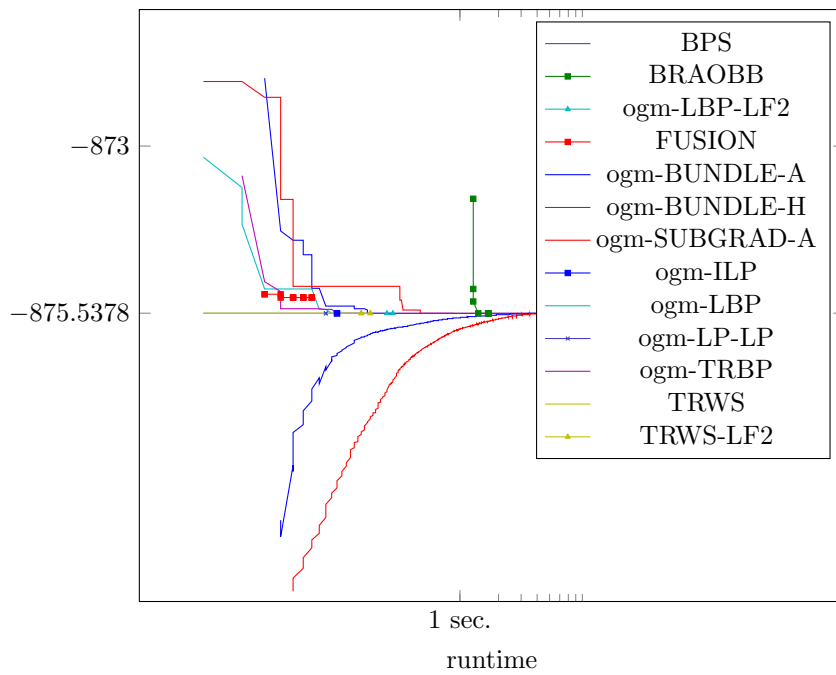


Figure 682: Runtime results for the instance 6000248 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

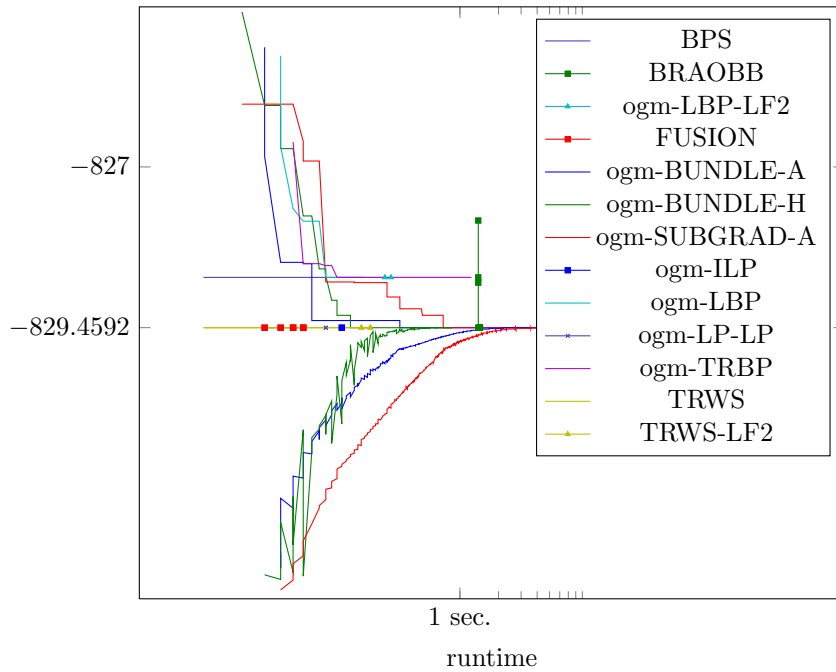


Figure 683: Runtime results for the instance 6000249 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

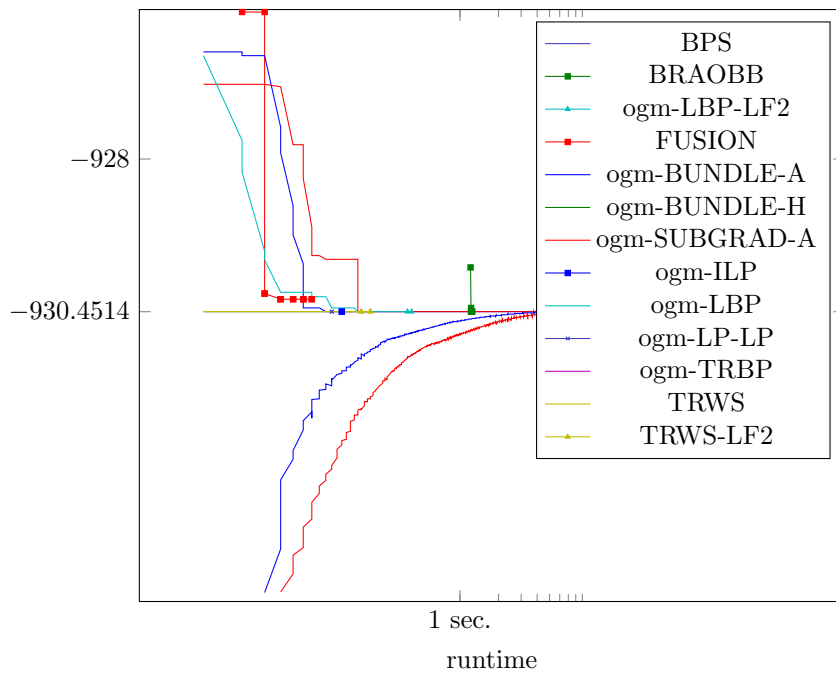


Figure 684: Runtime results for the instance 6000250 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

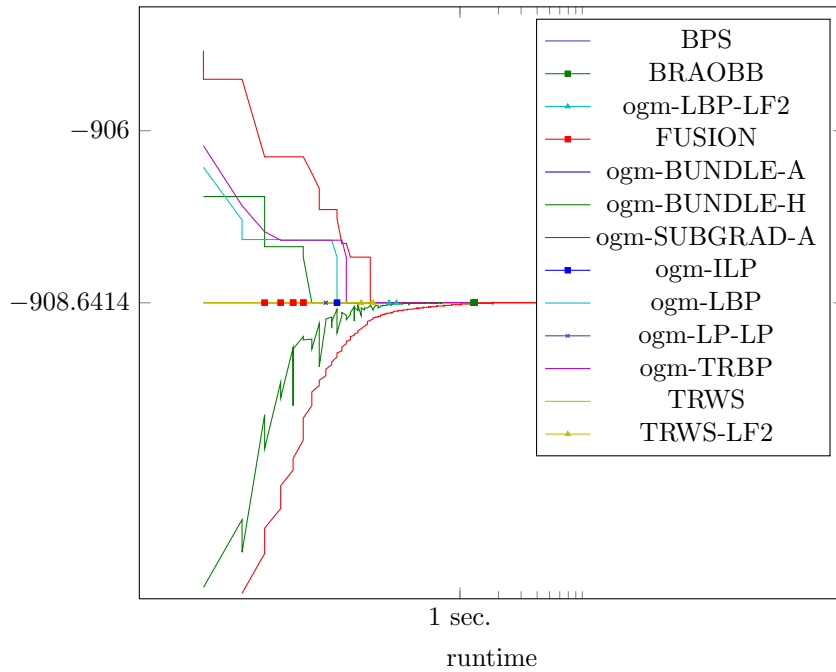


Figure 685: Runtime results for the instance 6000251 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

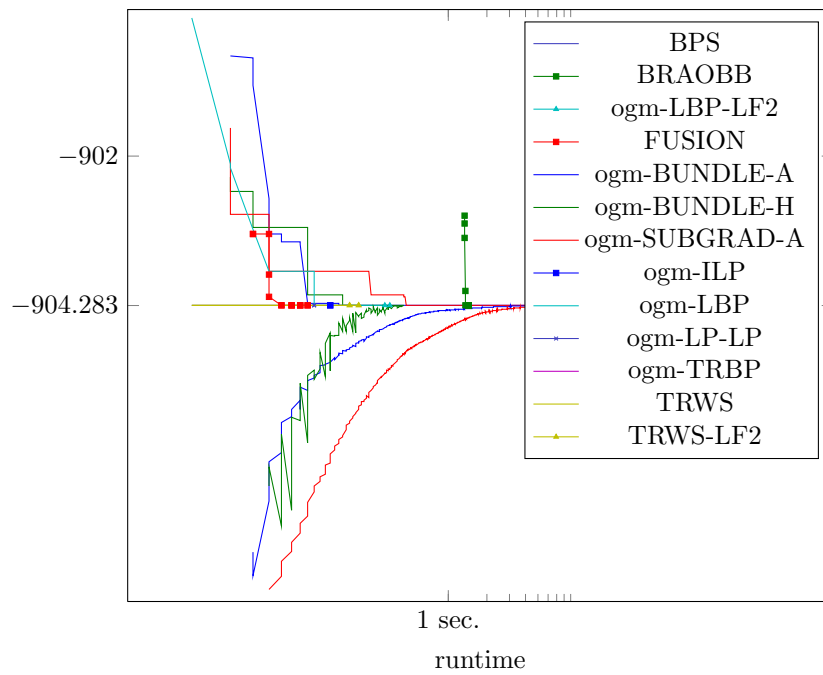


Figure 686: Runtime results for the instance 6000252 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

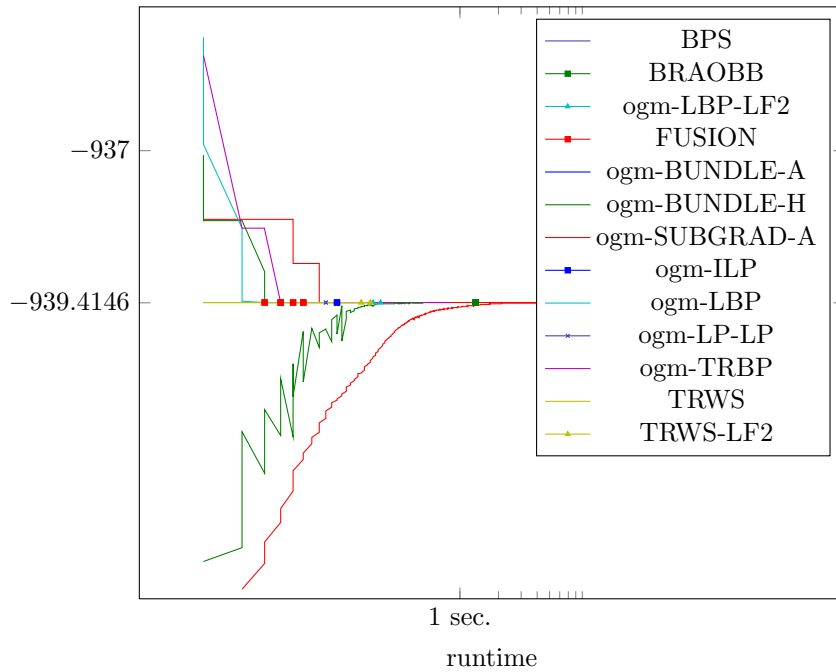


Figure 687: Runtime results for the instance 6000253 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

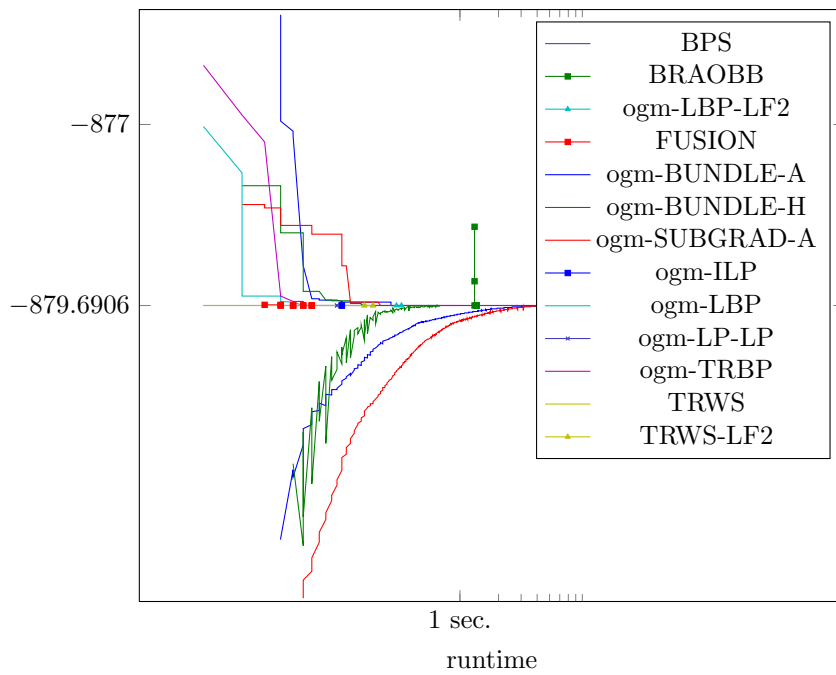


Figure 688: Runtime results for the instance 6000254 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

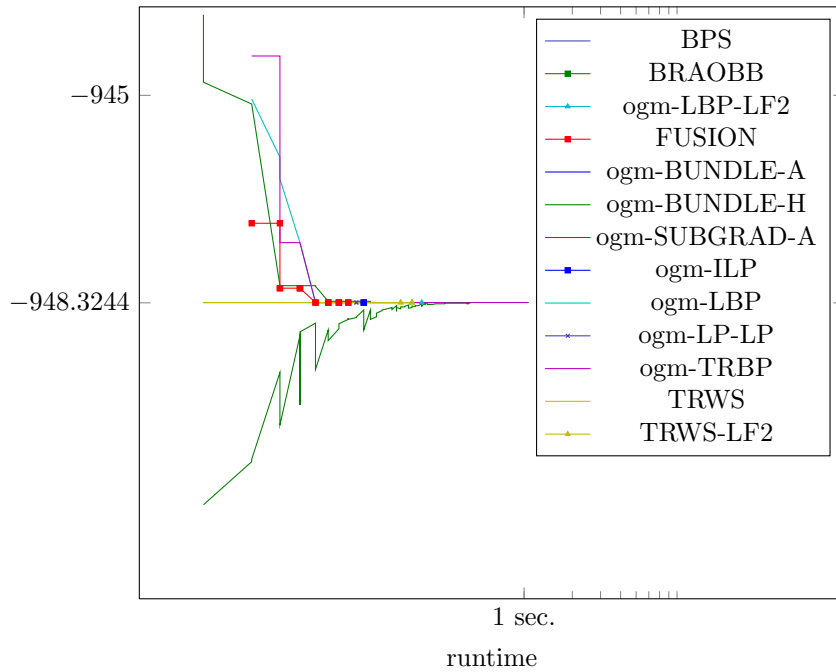


Figure 689: Runtime results for the instance 6000255 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

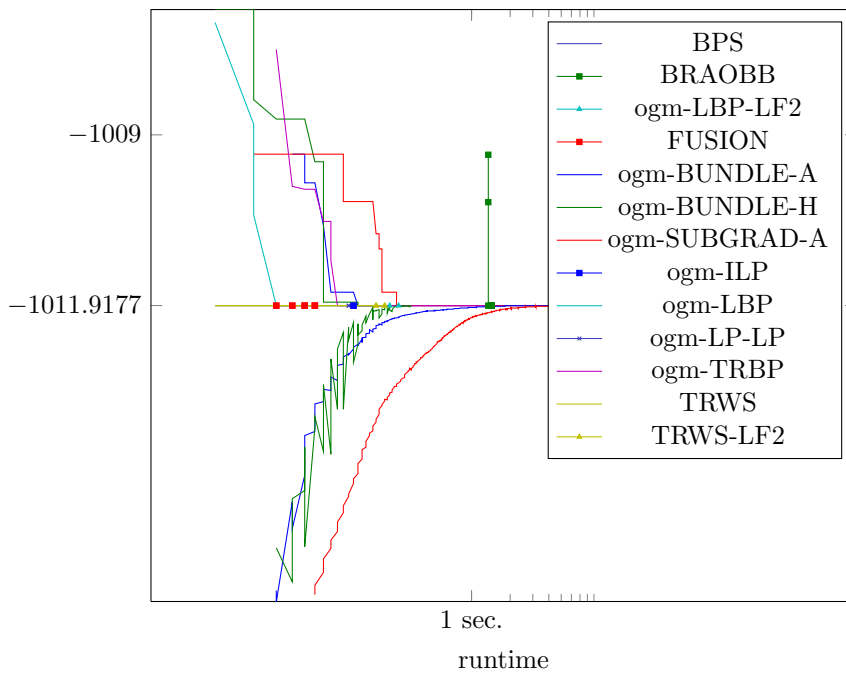


Figure 690: Runtime results for the instance 6000256 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

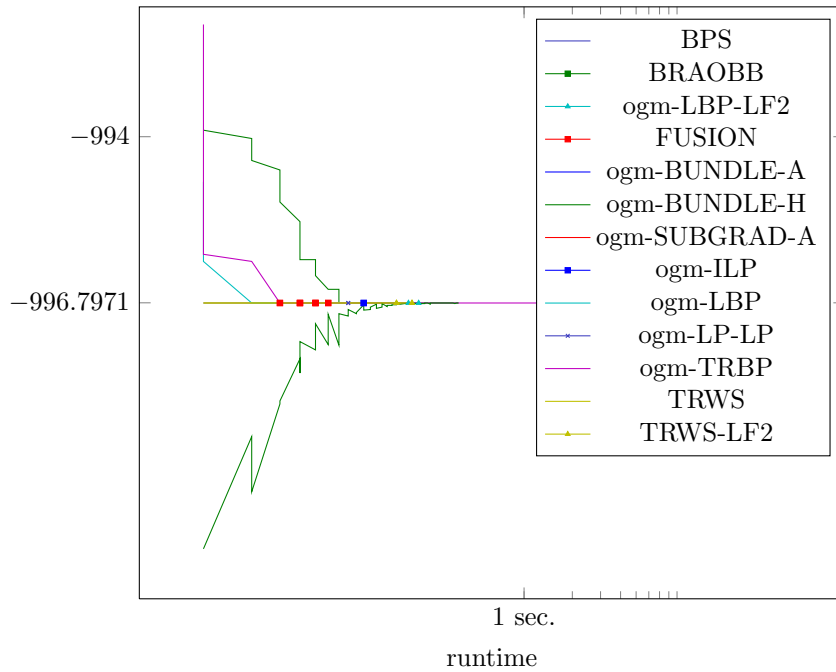


Figure 691: Runtime results for the instance 6000257 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

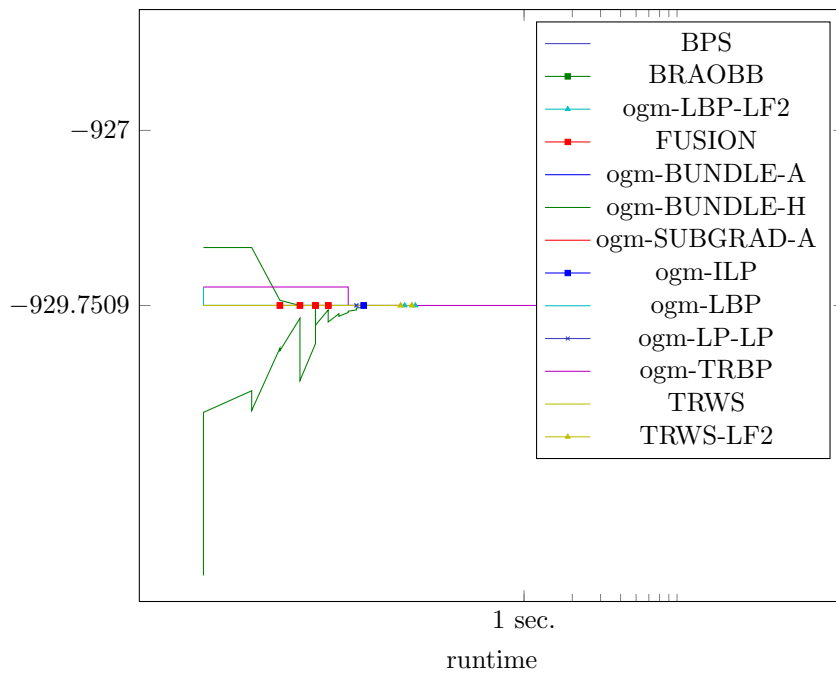


Figure 692: Runtime results for the instance 6000258 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

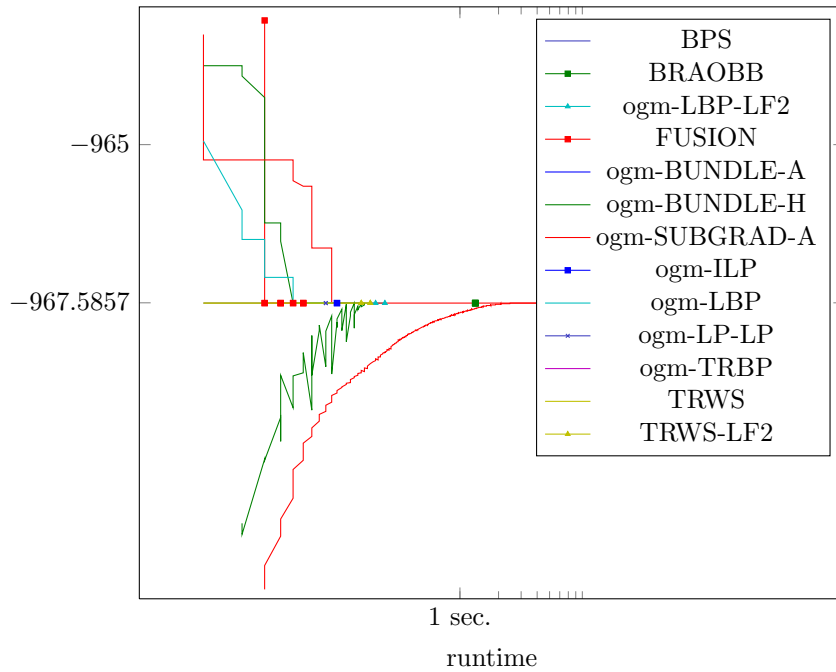


Figure 693: Runtime results for the instance 6000259 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

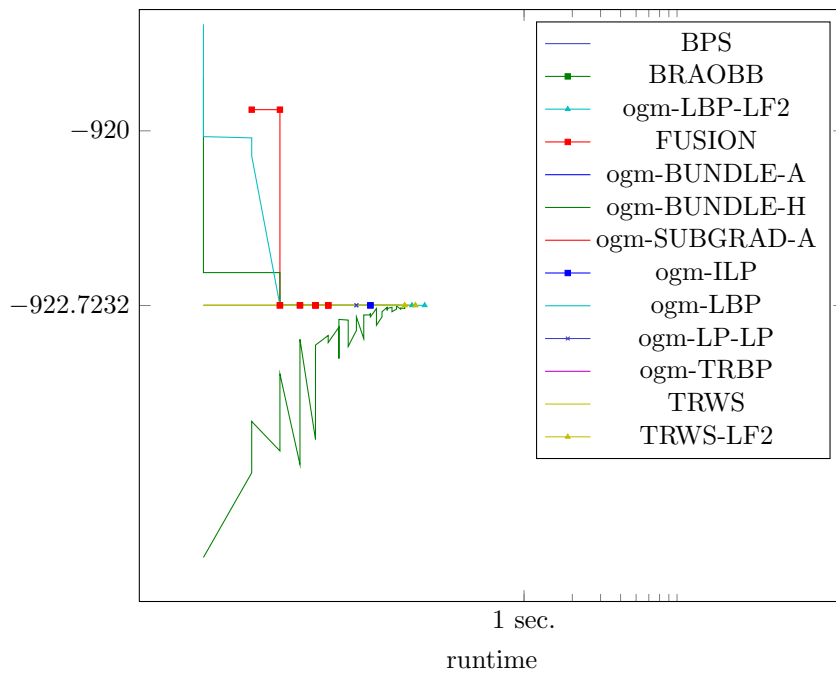


Figure 694: Runtime results for the instance 6000260 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

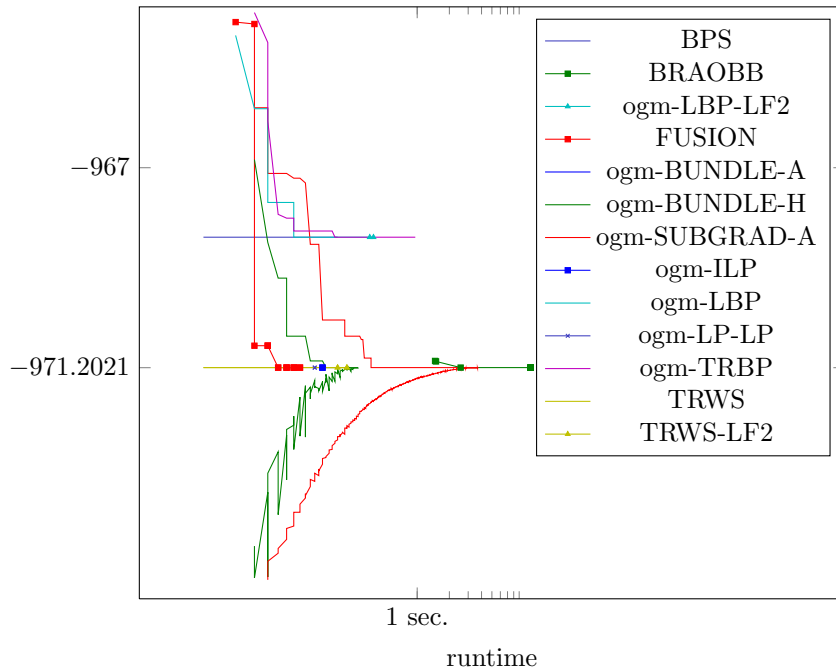


Figure 695: Runtime results for the instance 6000261 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

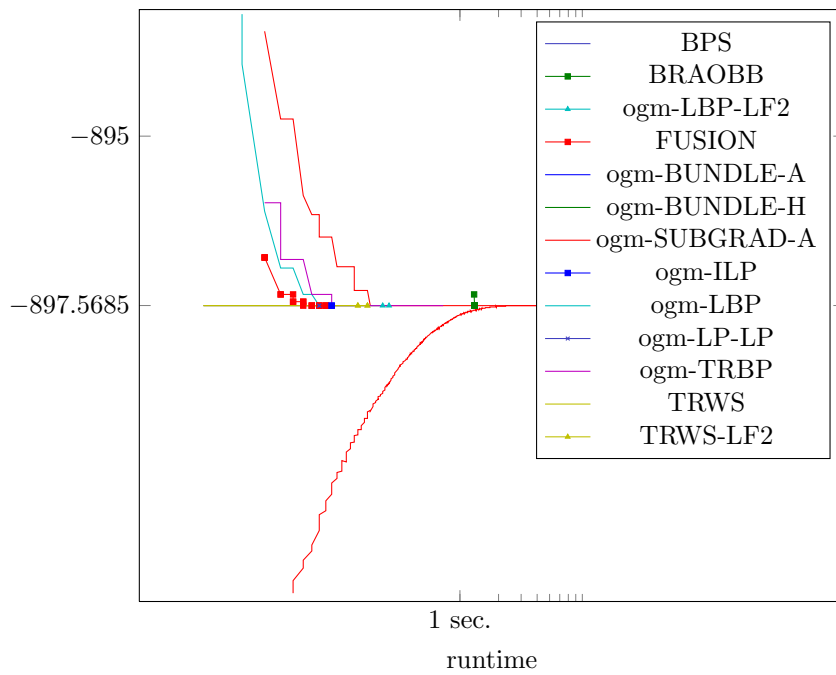


Figure 696: Runtime results for the instance 6000262 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

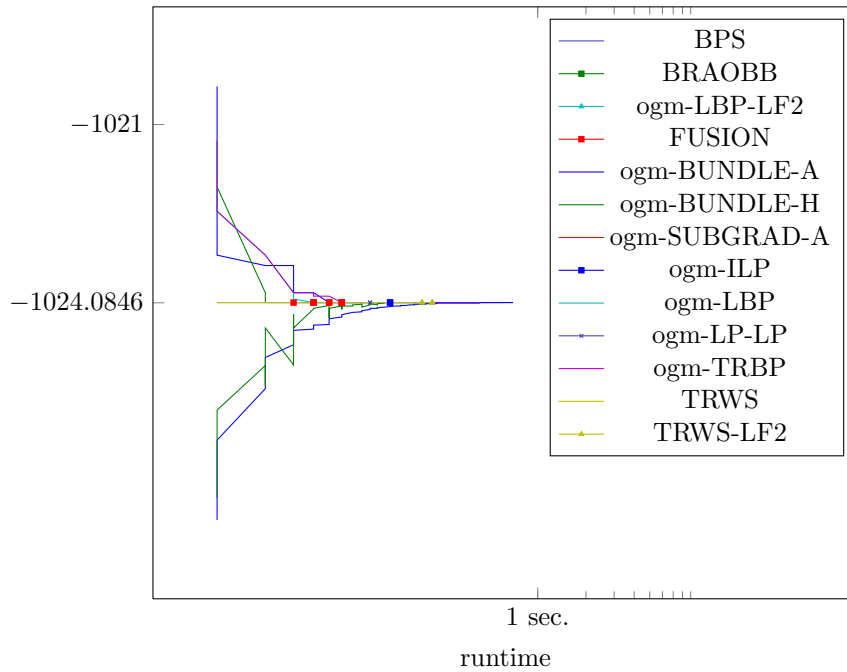


Figure 697: Runtime results for the instance 6000263 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

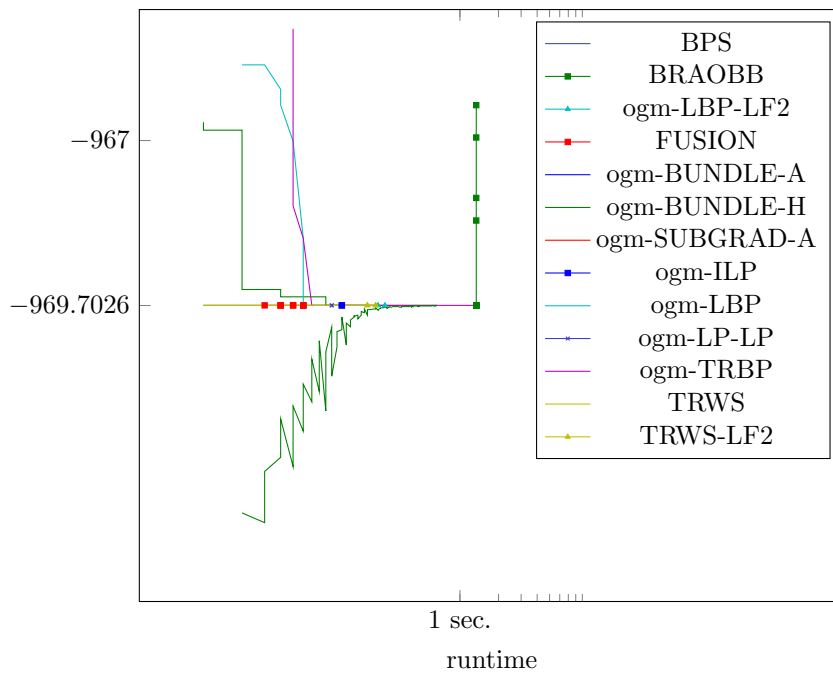


Figure 698: Runtime results for the instance 6000264 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

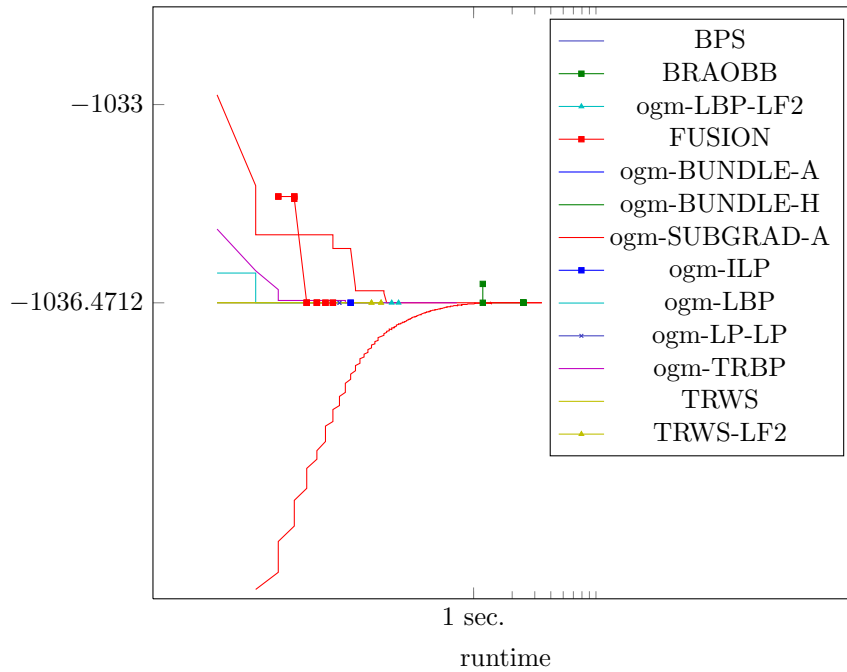


Figure 699: Runtime results for the instance 6000265 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

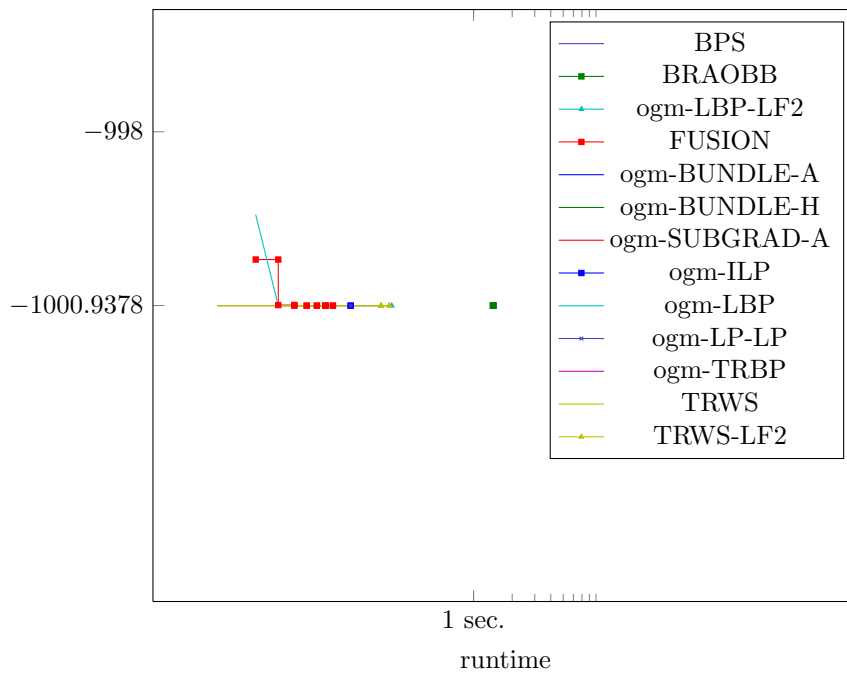


Figure 700: Runtime results for the instance 6000266 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

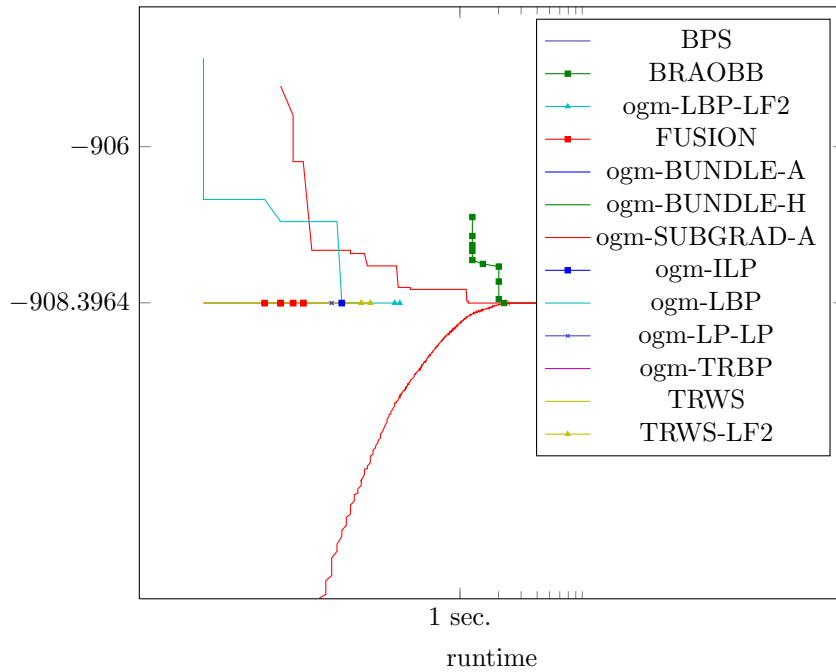


Figure 701: Runtime results for the instance 6000267 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

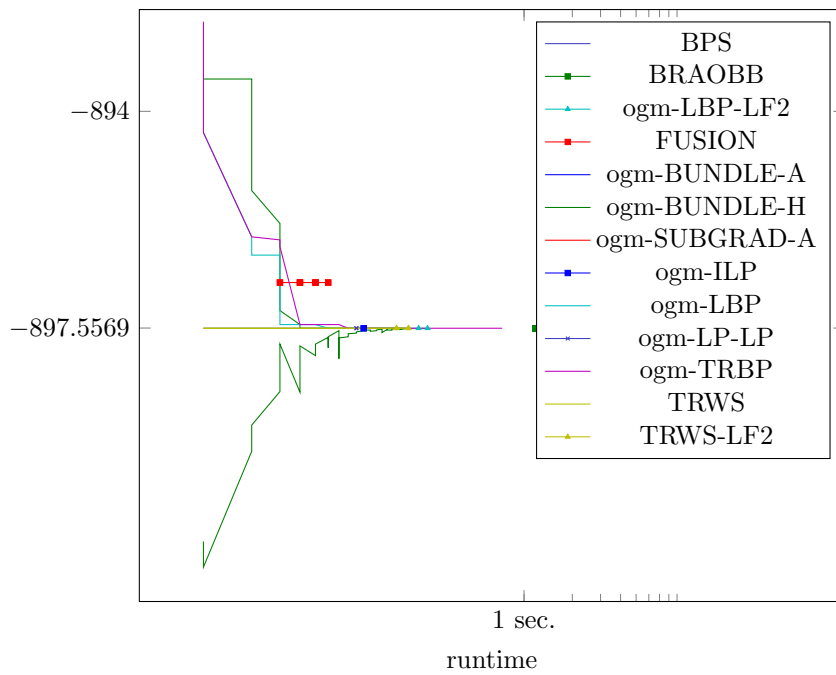


Figure 702: Runtime results for the instance 6000268 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

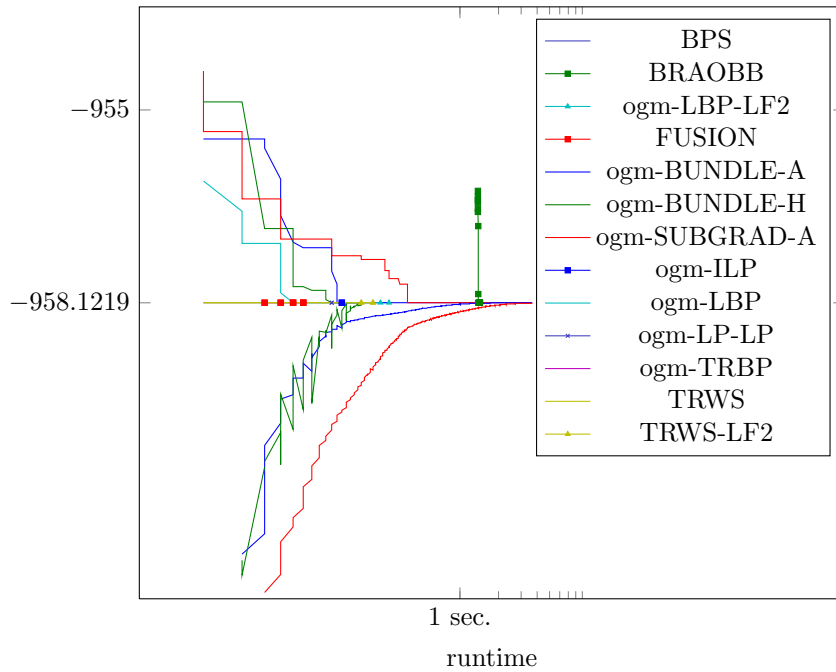


Figure 703: Runtime results for the instance 6000269 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

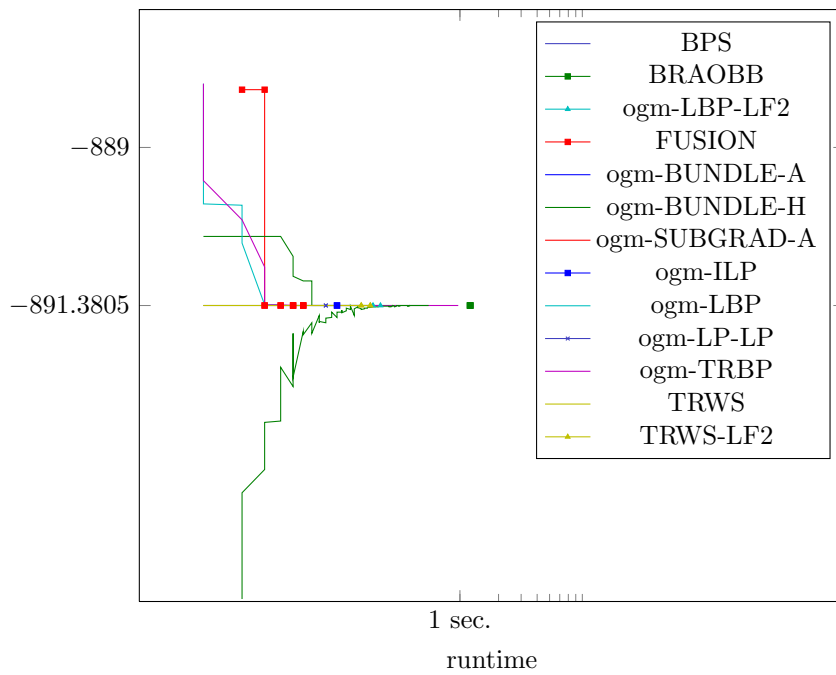


Figure 704: Runtime results for the instance 6000270 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

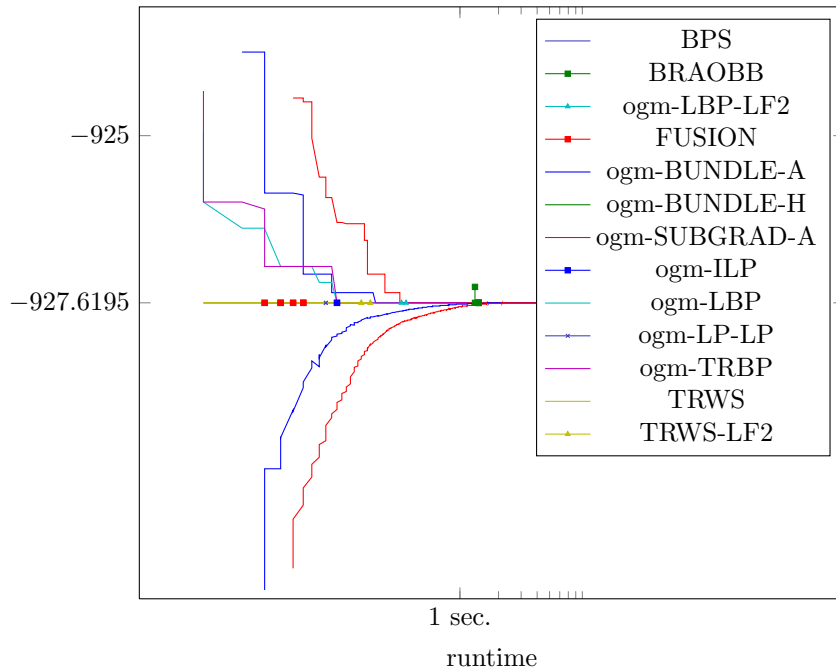


Figure 705: Runtime results for the instance 6000271 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

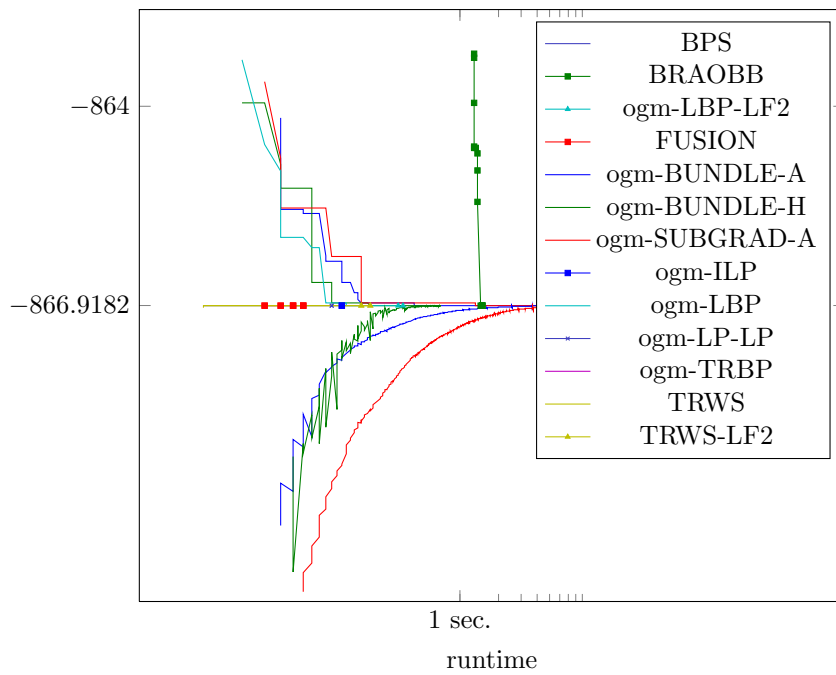


Figure 706: Runtime results for the instance 6000272 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

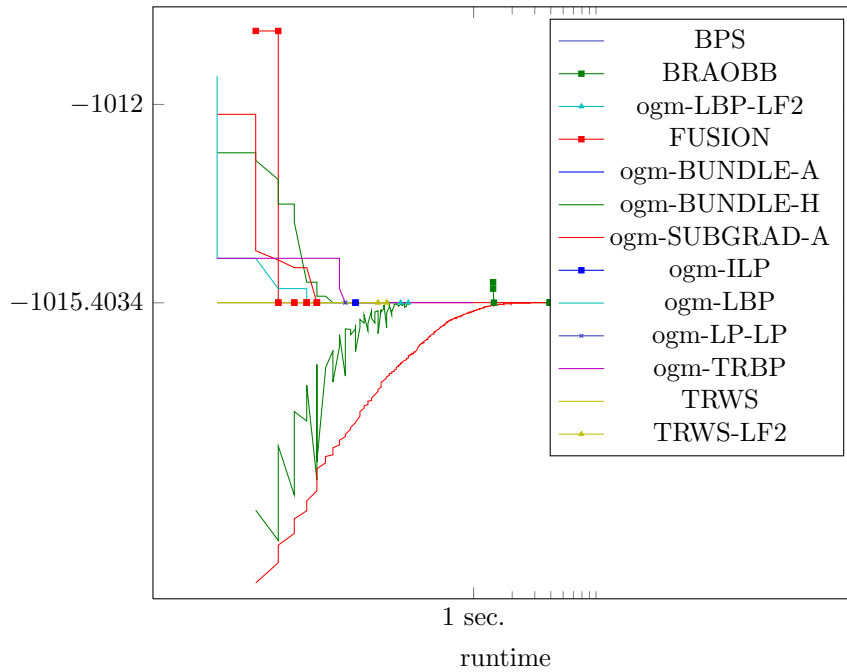


Figure 707: Runtime results for the instance 6000273 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

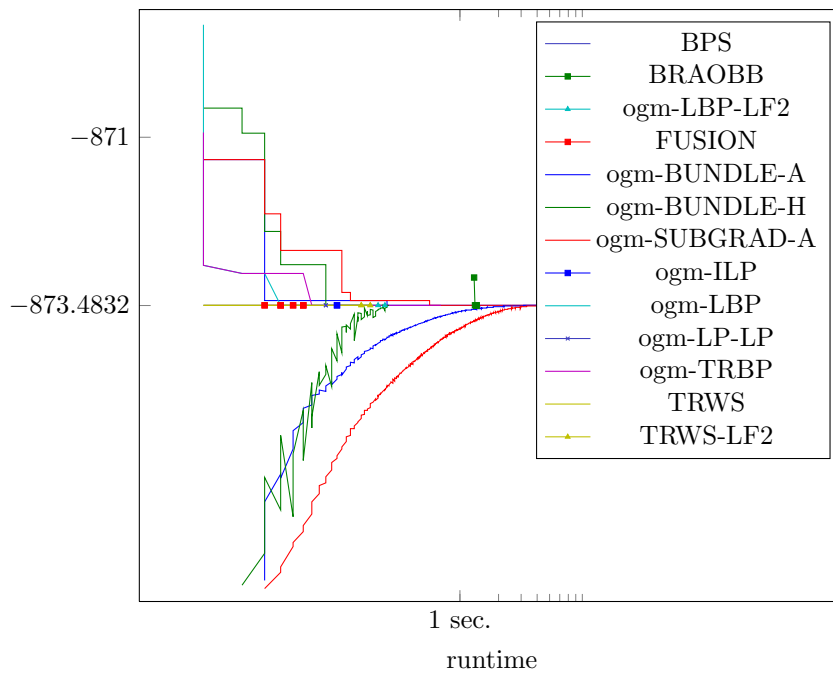


Figure 708: Runtime results for the instance 6000274 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

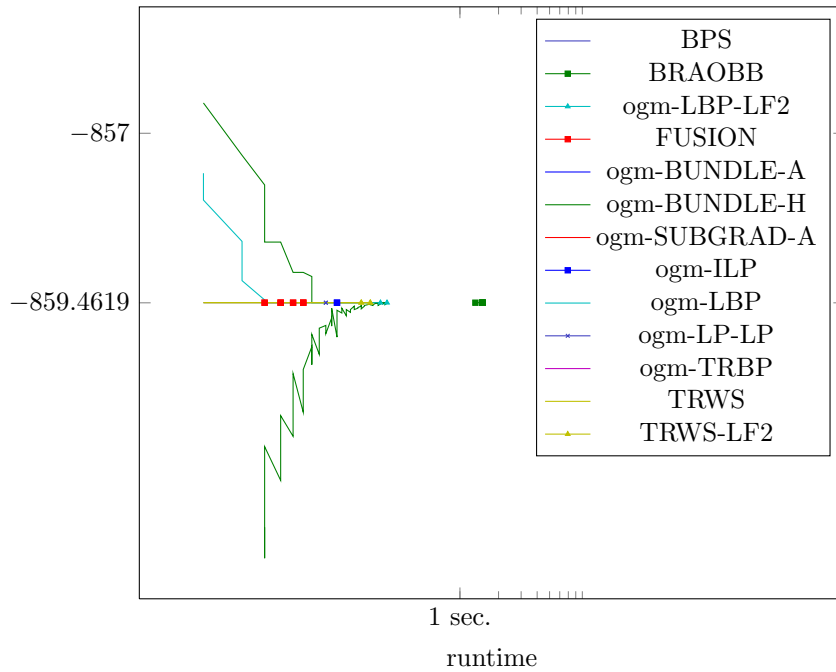


Figure 709: Runtime results for the instance 6000275 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

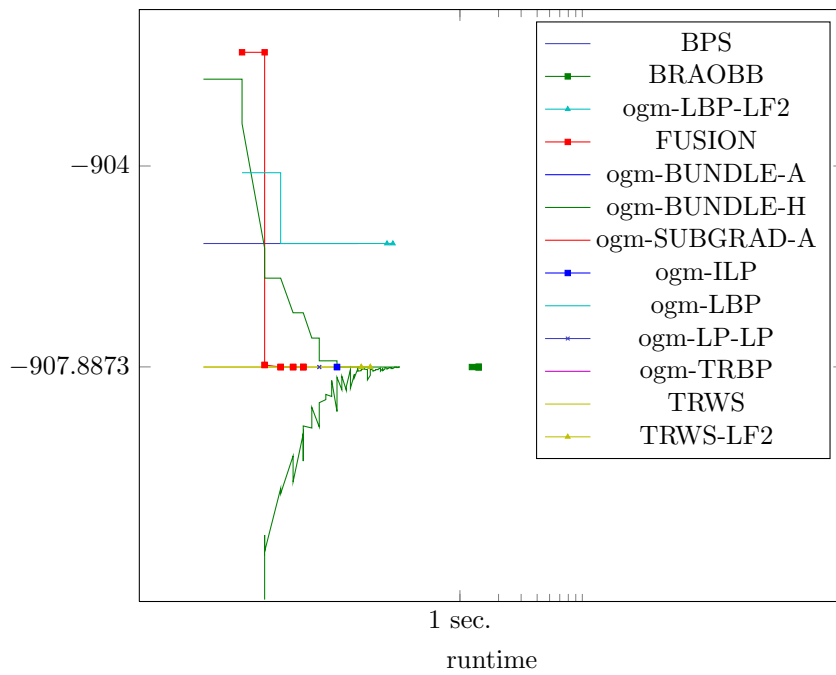


Figure 710: Runtime results for the instance 6000276 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

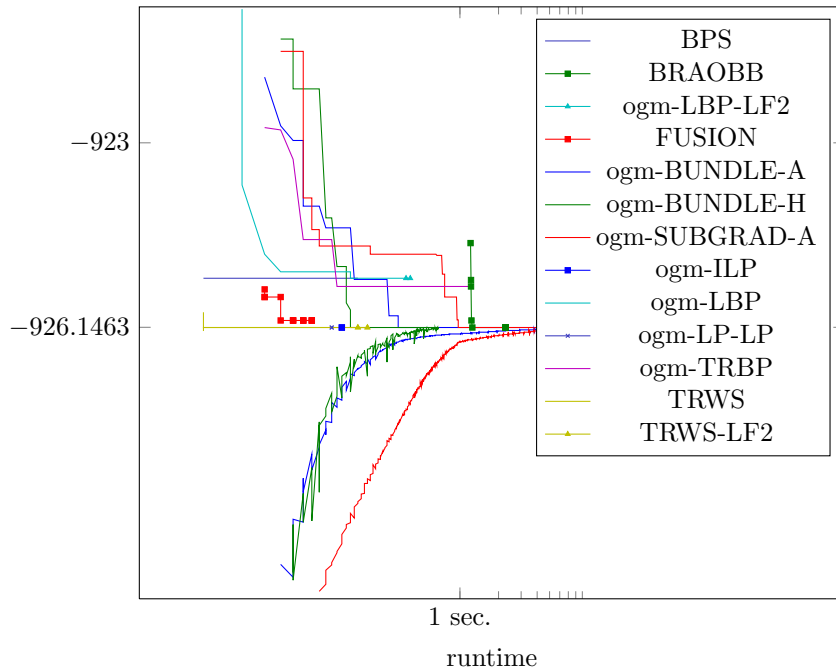


Figure 711: Runtime results for the instance 6000277 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

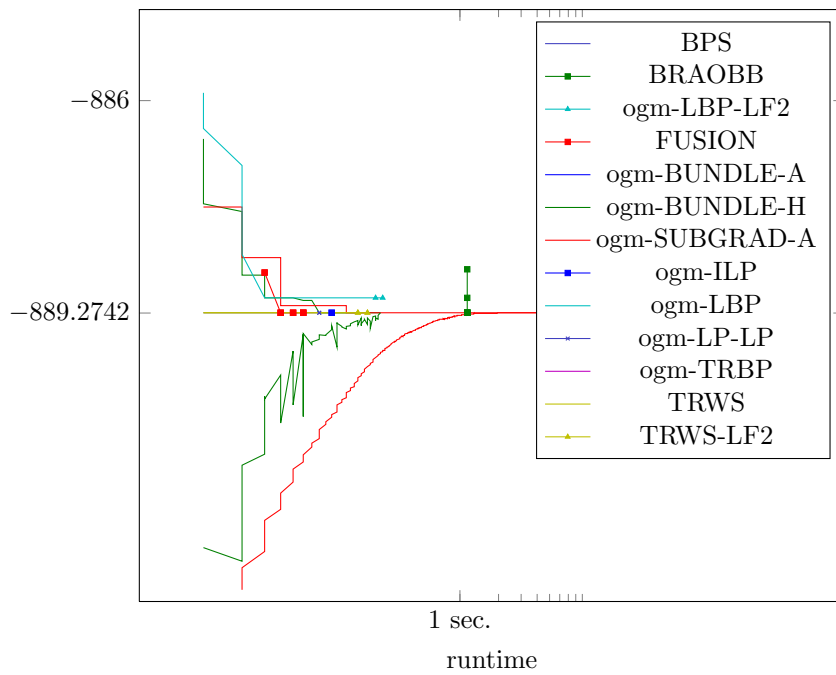


Figure 712: Runtime results for the instance 6000278 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

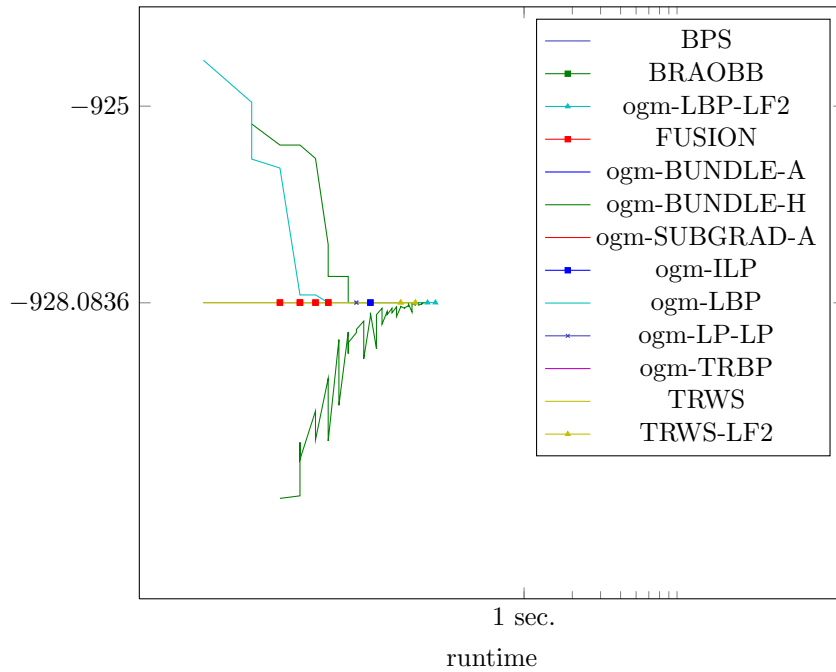


Figure 713: Runtime results for the instance 6000279 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

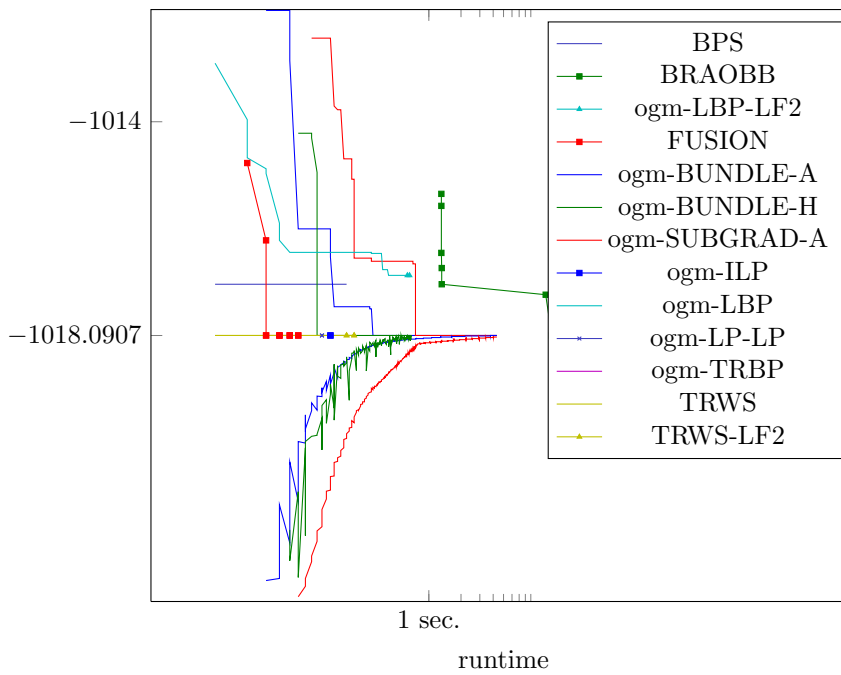


Figure 714: Runtime results for the instance 6000280 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

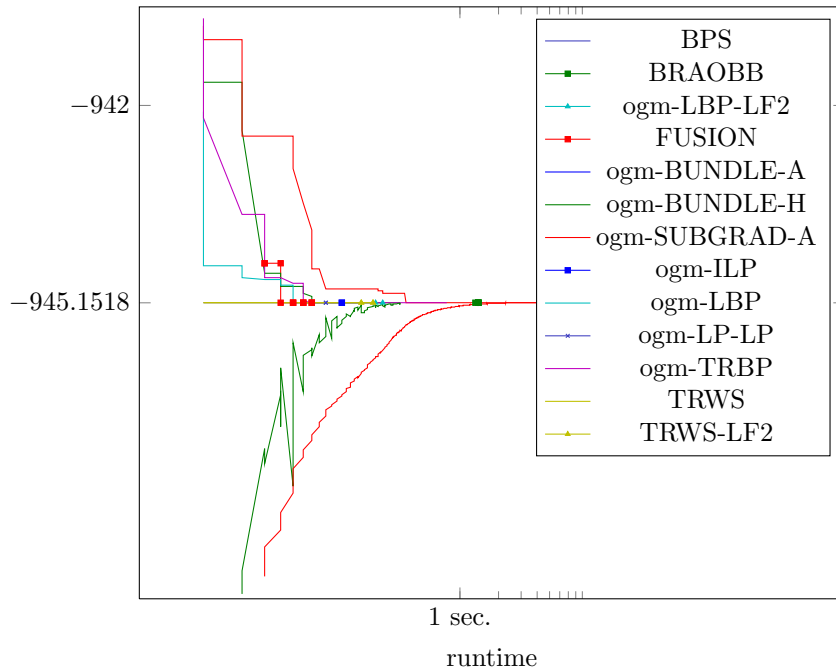


Figure 715: Runtime results for the instance 6000281 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

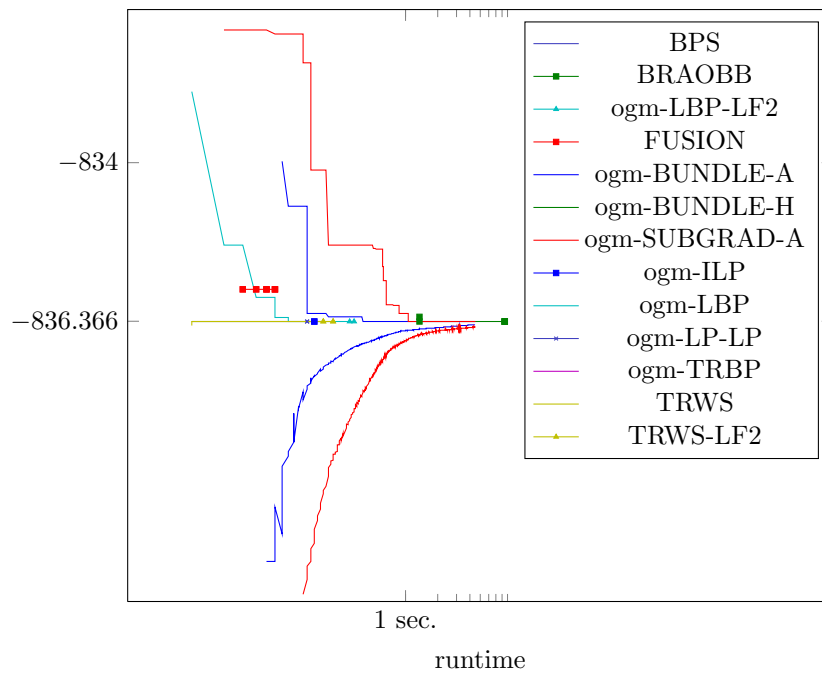


Figure 716: Runtime results for the instance 6000282 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

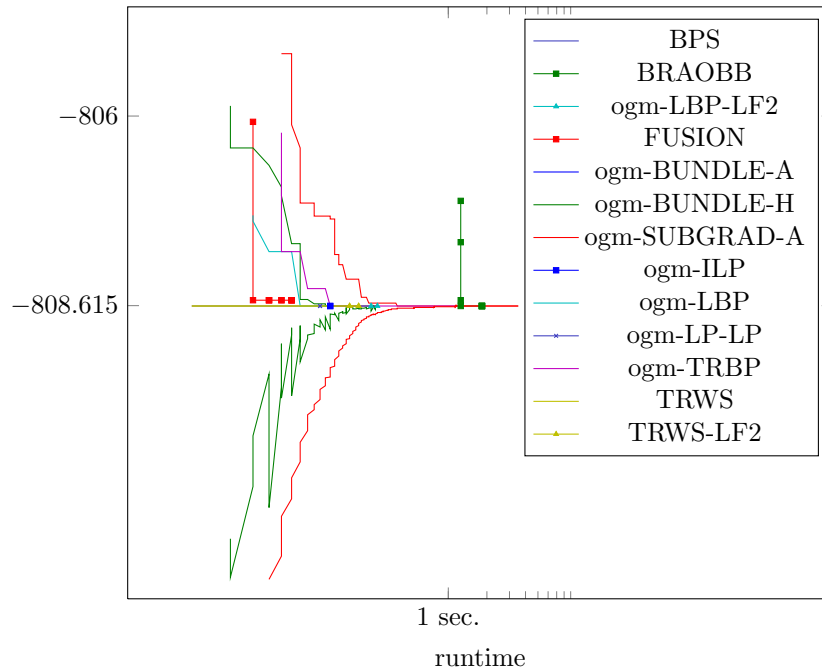


Figure 717: Runtime results for the instance 6000283 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

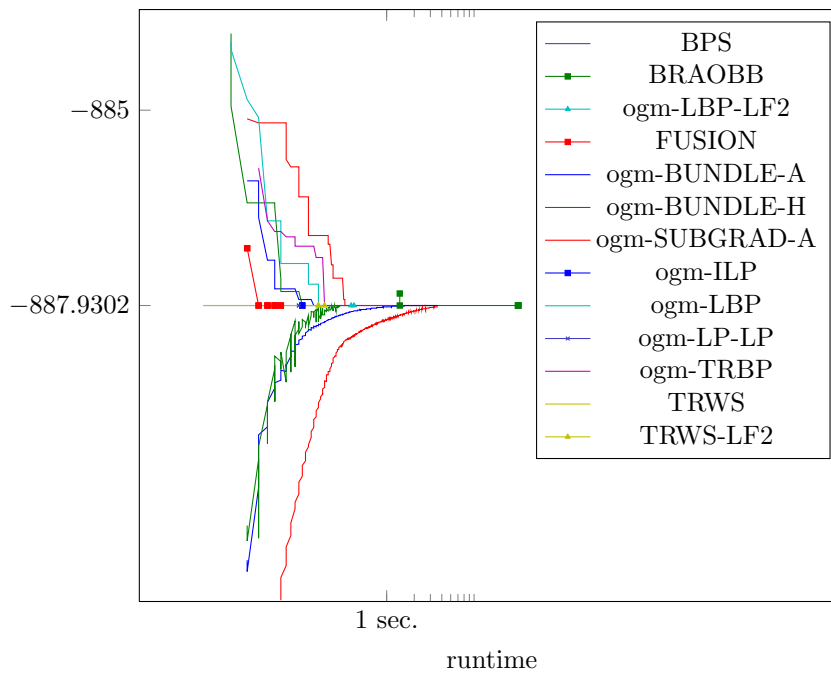


Figure 718: Runtime results for the instance 6000284 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

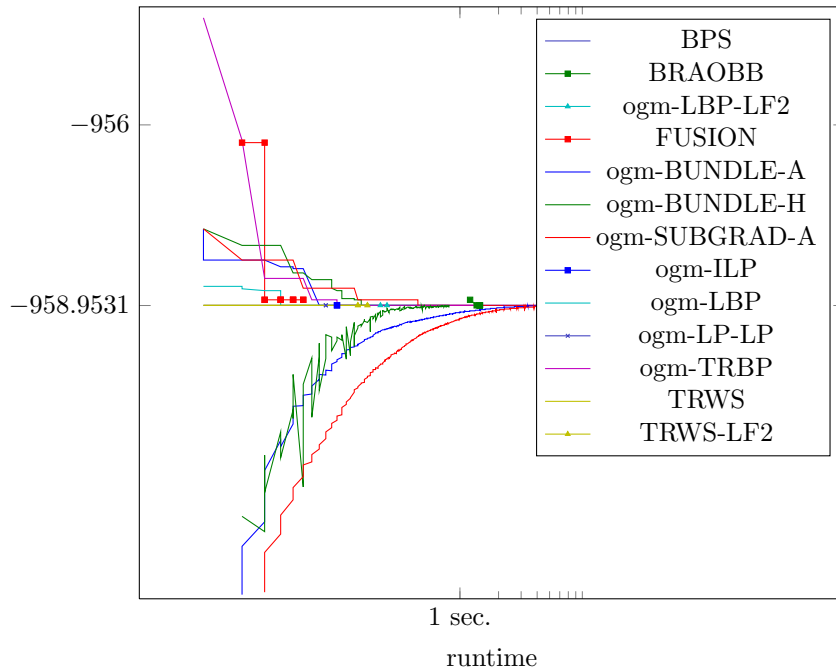


Figure 719: Runtime results for the instance 6000285 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

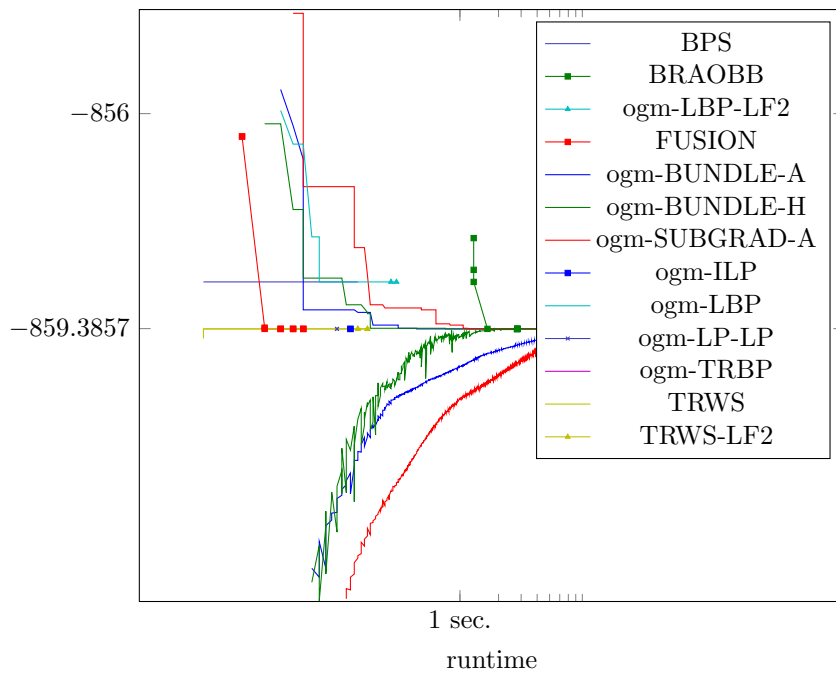


Figure 720: Runtime results for the instance 6000286 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

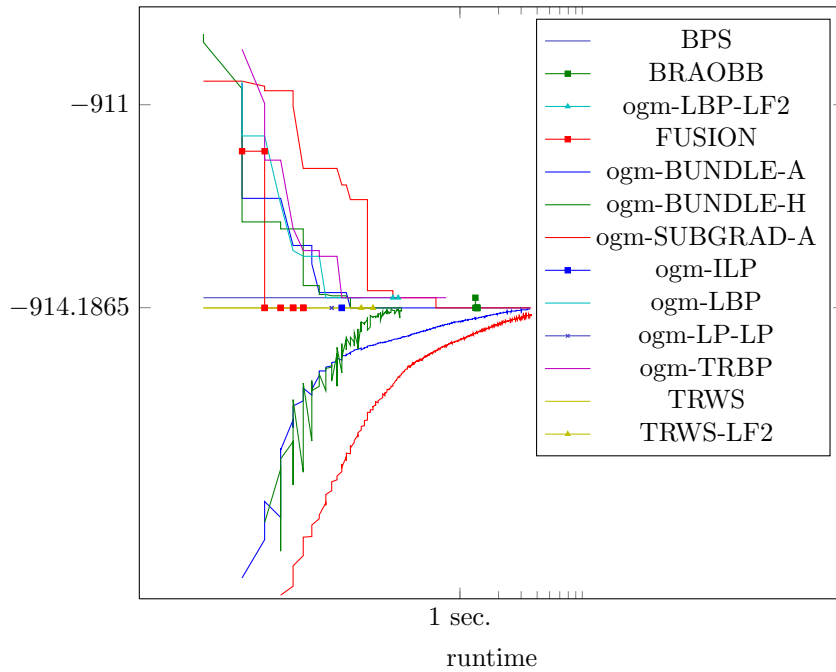


Figure 721: Runtime results for the instance 6000287 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

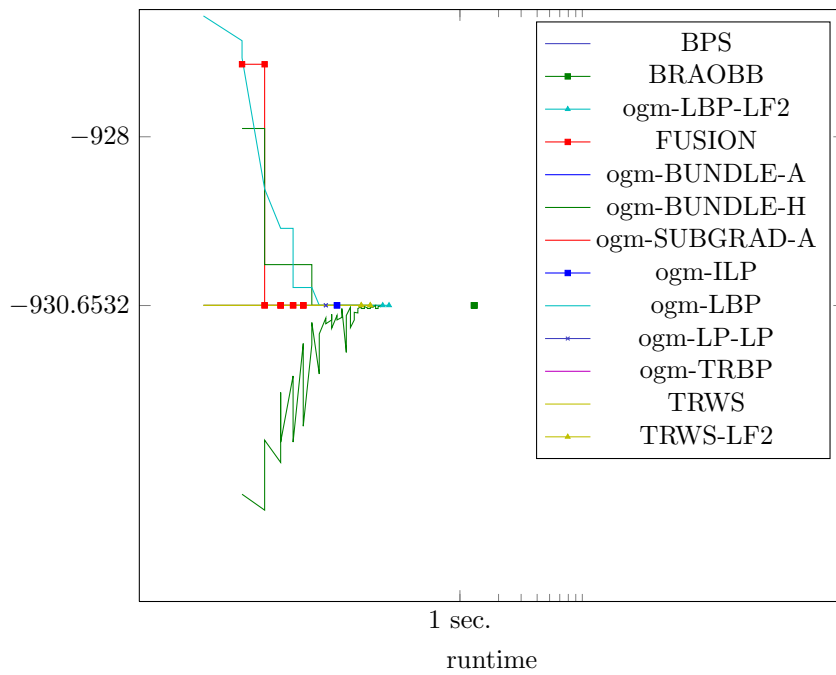


Figure 722: Runtime results for the instance 6000288 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

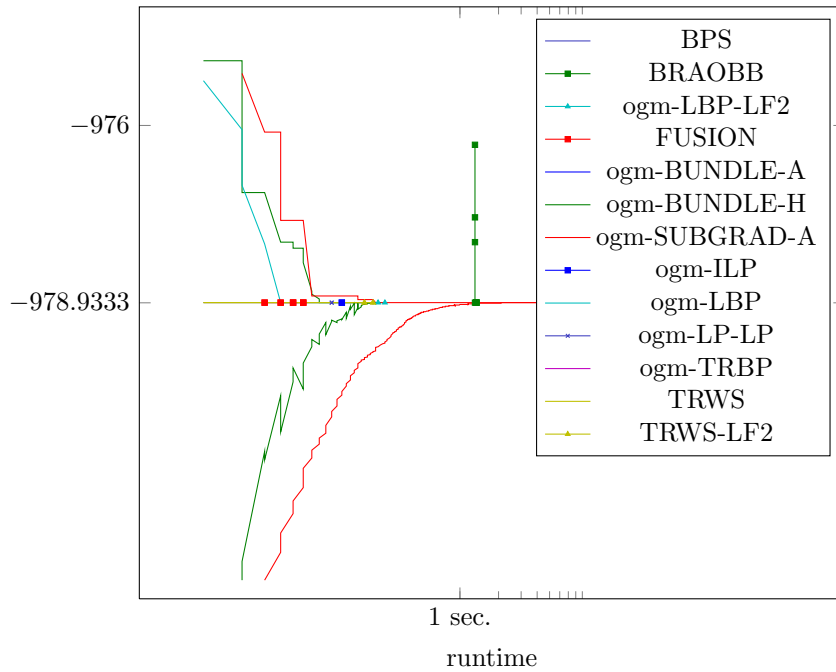


Figure 723: Runtime results for the instance 6000289 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

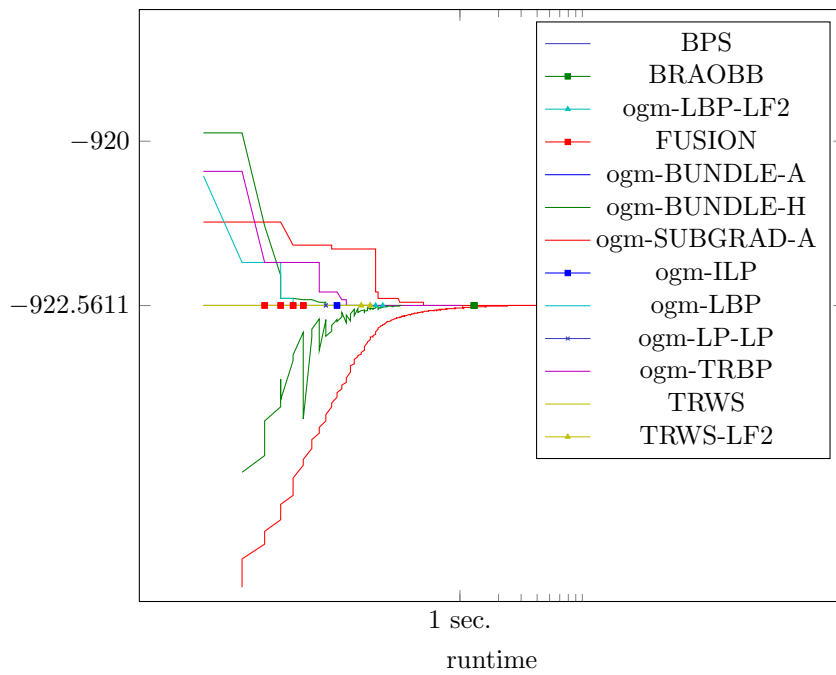


Figure 724: Runtime results for the instance 6000290 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

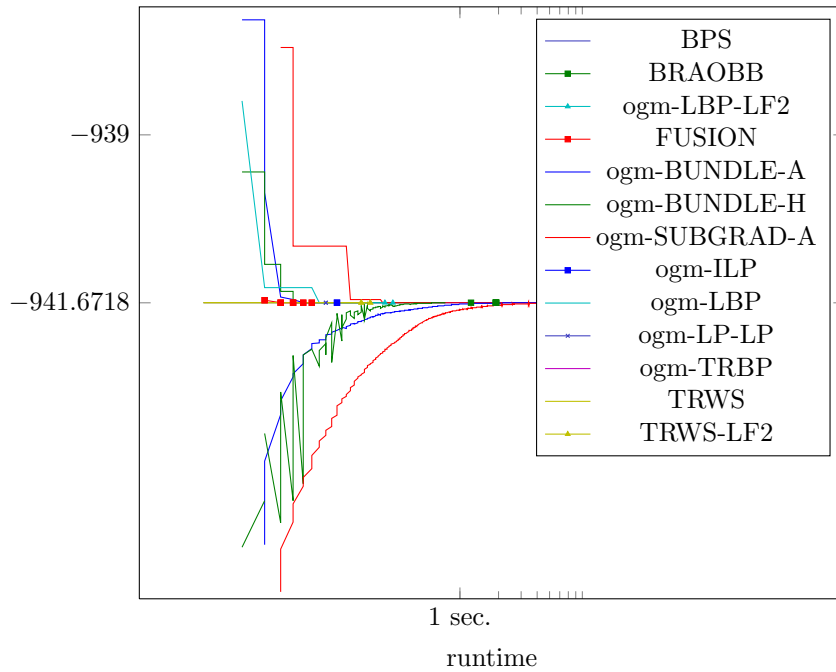


Figure 725: Runtime results for the instance 6000291 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

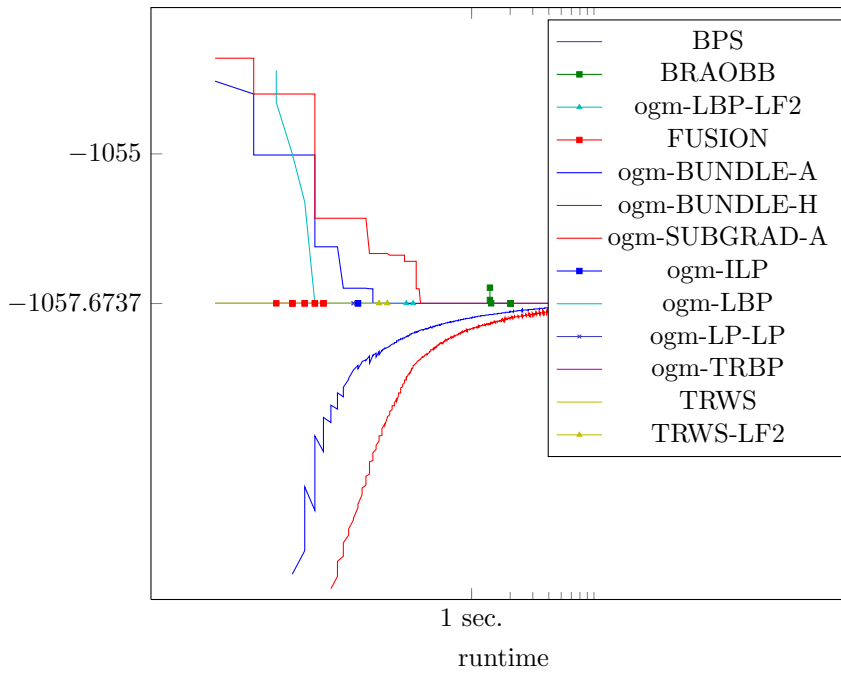


Figure 726: Runtime results for the instance 6000292 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

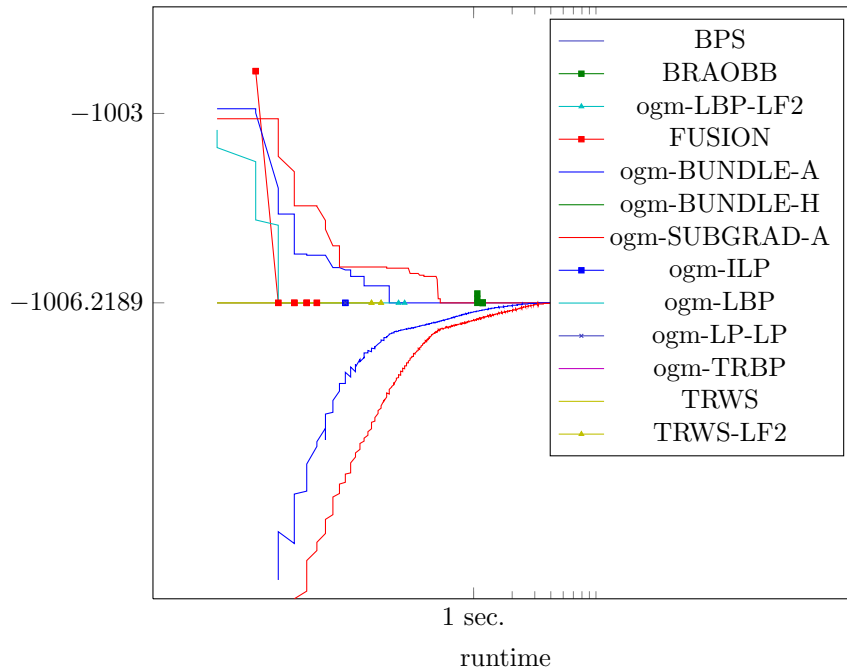


Figure 727: Runtime results for the instance 6000293 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

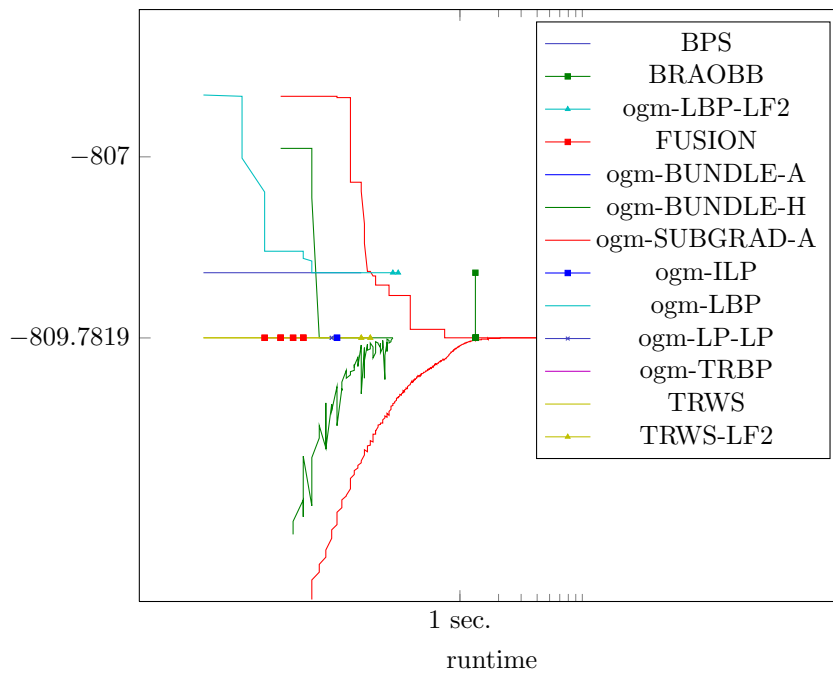


Figure 728: Runtime results for the instance 6000294 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

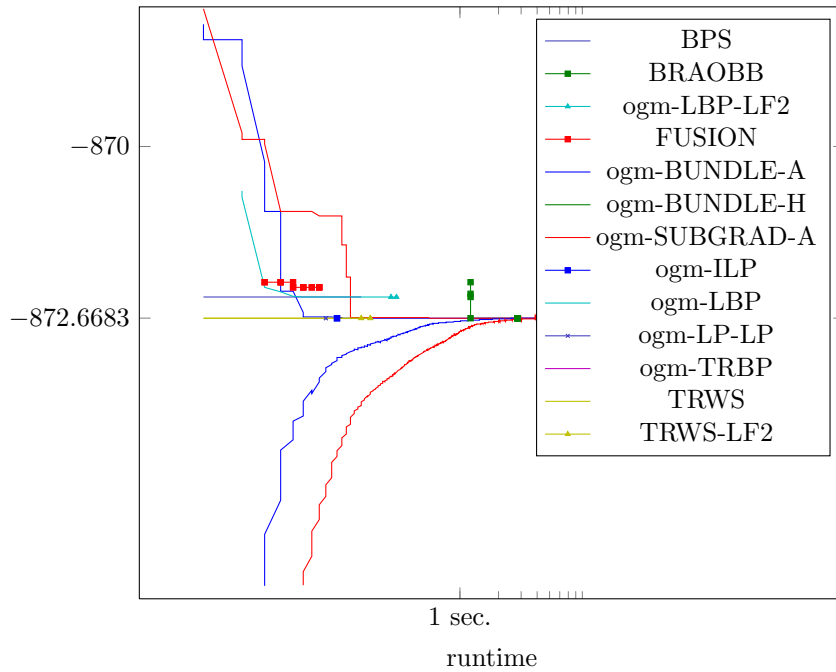


Figure 729: Runtime results for the instance 6000295 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

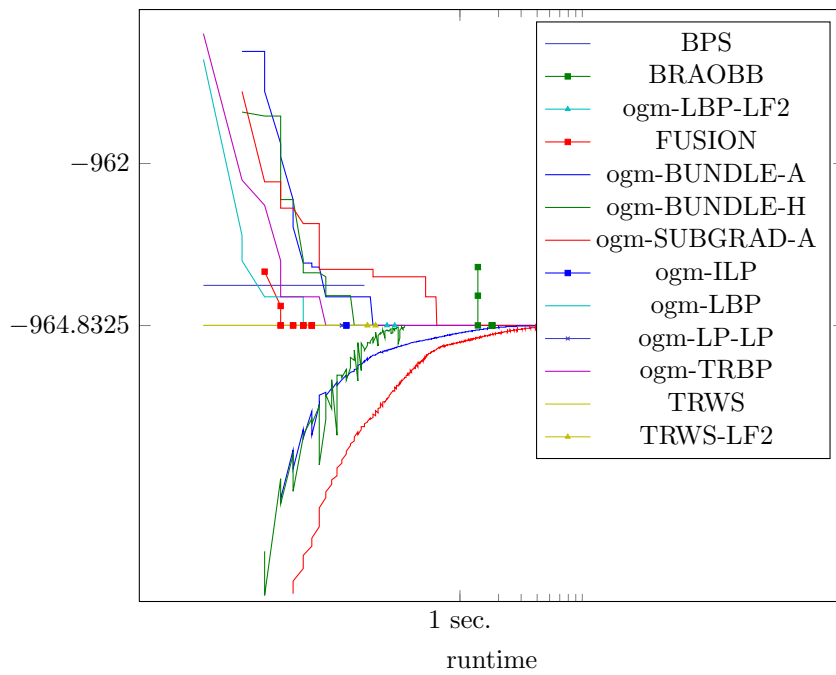


Figure 730: Runtime results for the instance 6000296 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

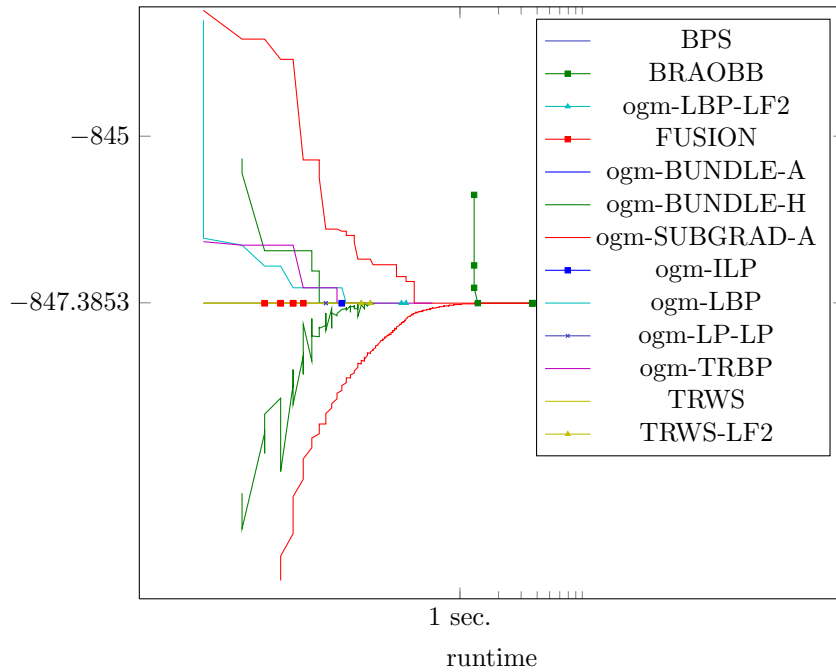


Figure 731: Runtime results for the instance 6000297 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

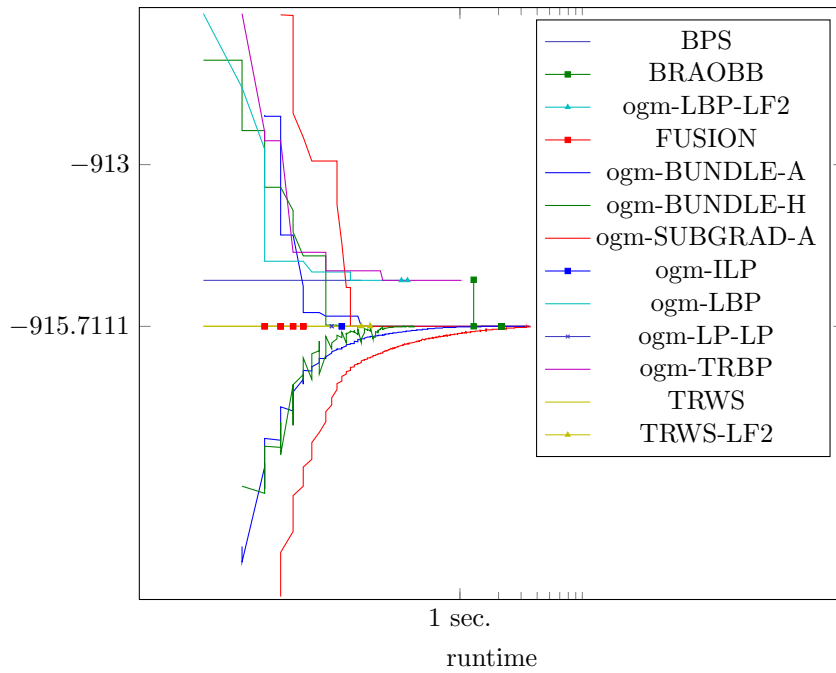


Figure 732: Runtime results for the instance 6000298 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

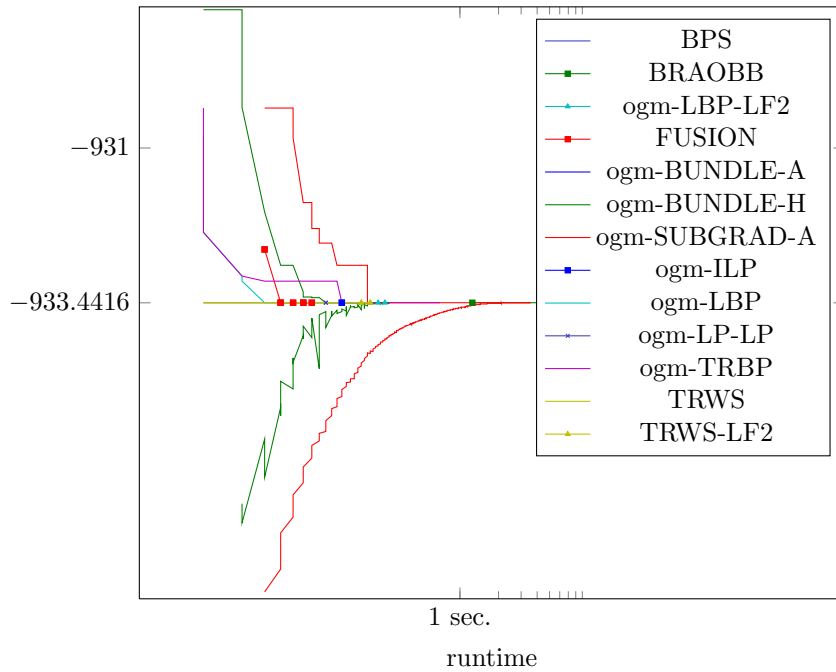


Figure 733: Runtime results for the instance 6000299 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

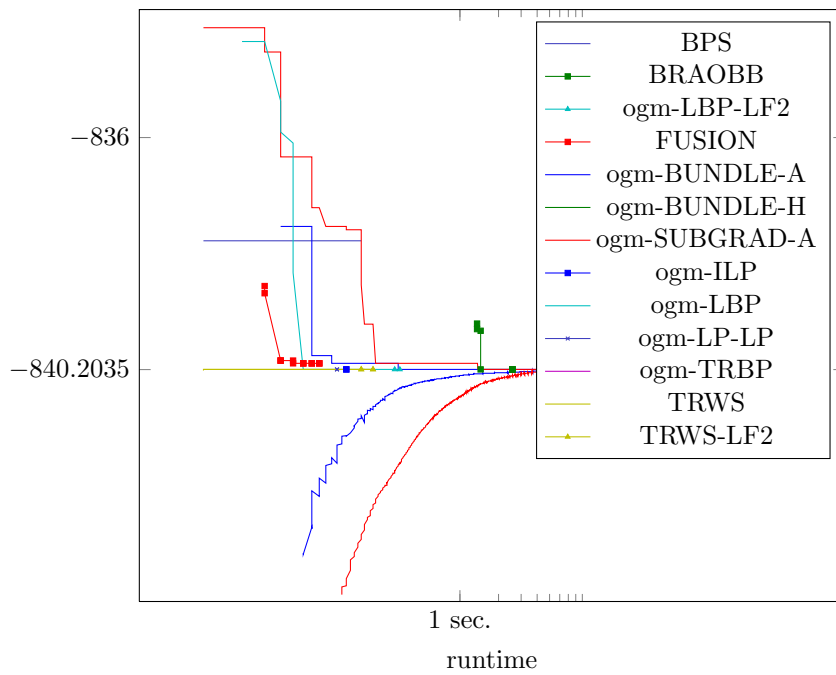


Figure 734: Runtime results for the instance 6000300 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

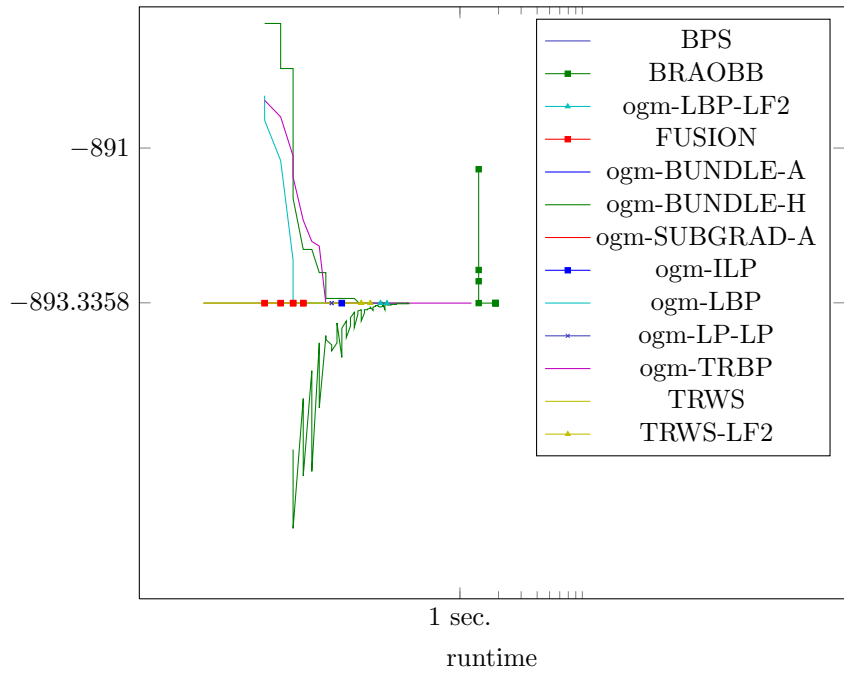


Figure 735: Runtime results for the instance 6000301 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

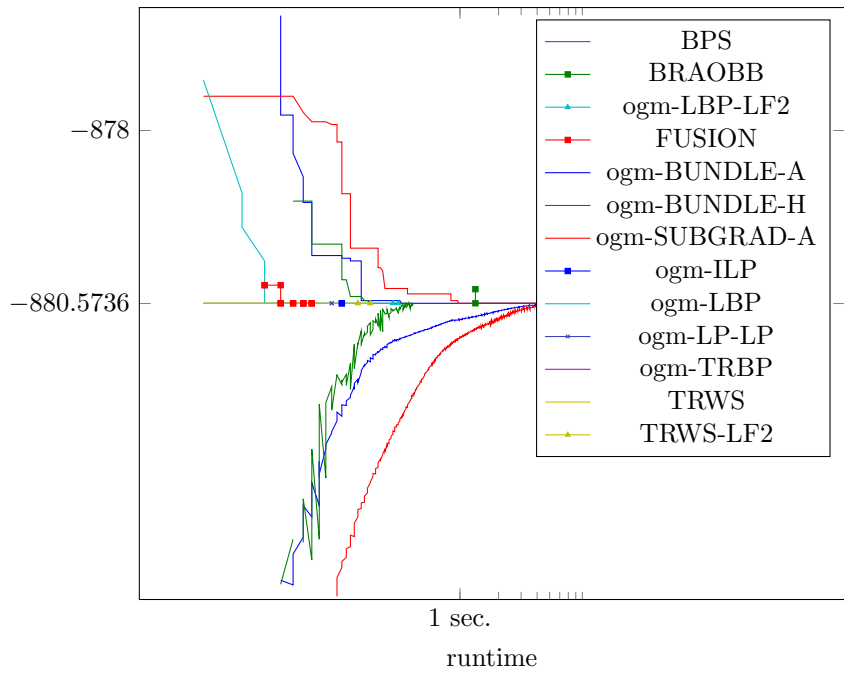


Figure 736: Runtime results for the instance 6000302 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

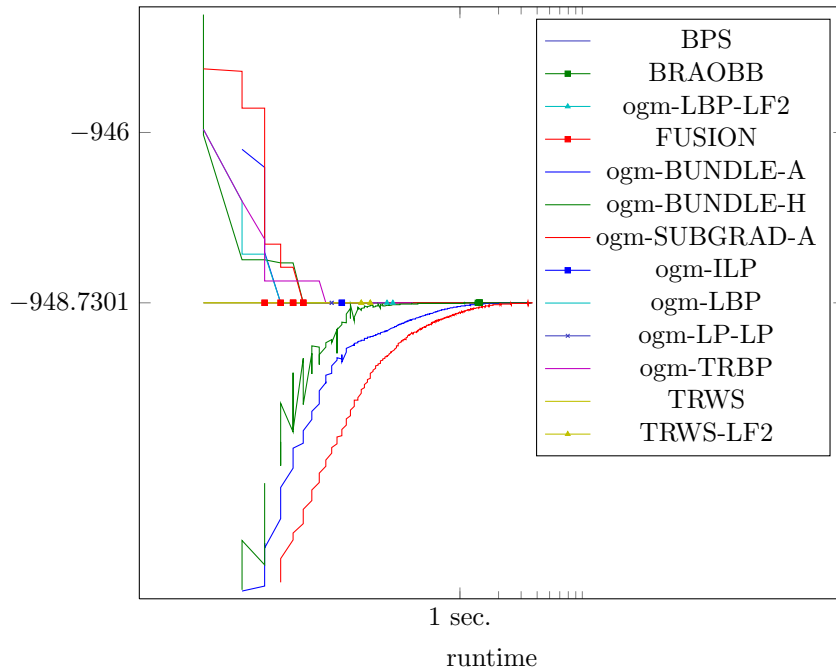


Figure 737: Runtime results for the instance 6000303 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

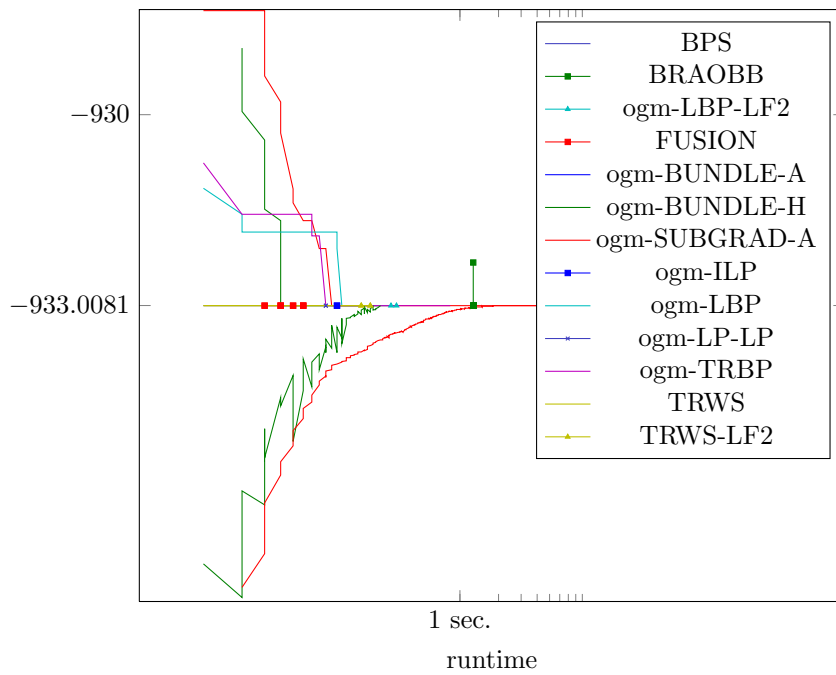


Figure 738: Runtime results for the instance 6000304 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

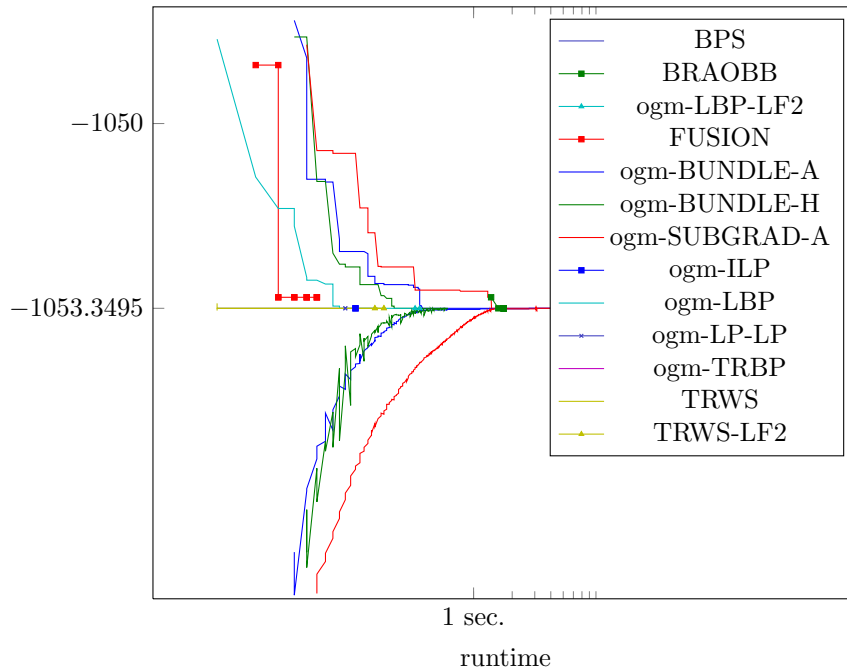


Figure 739: Runtime results for the instance 6000305 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

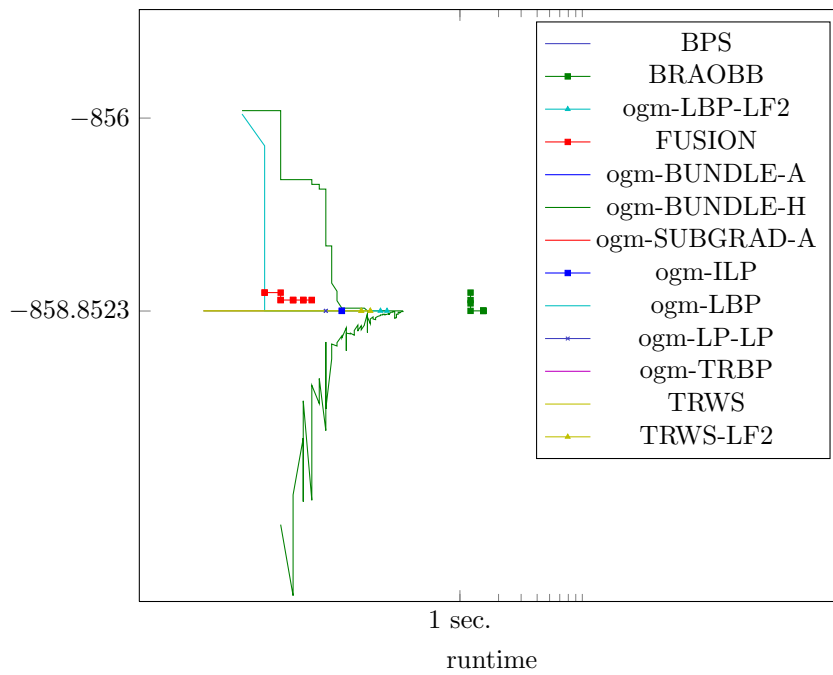


Figure 740: Runtime results for the instance 6000306 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

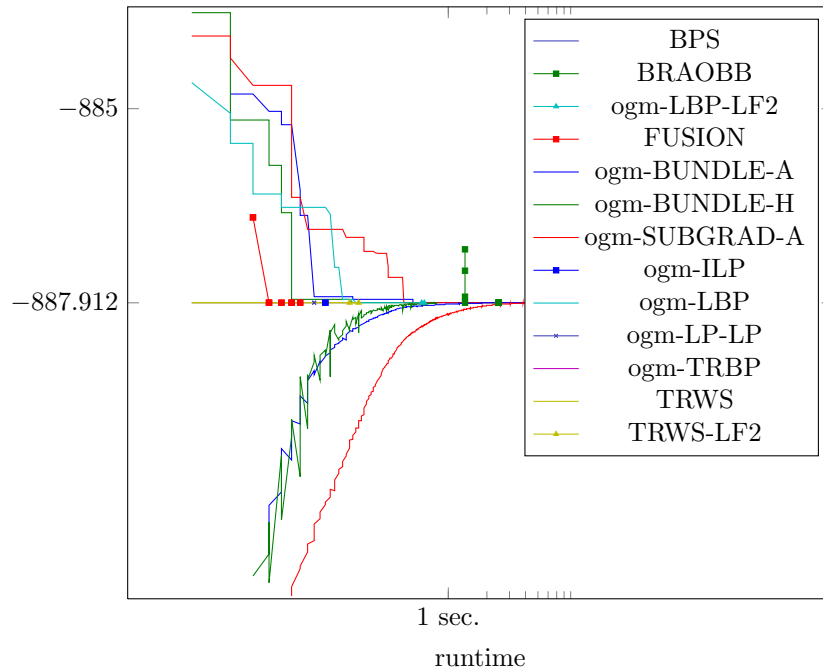


Figure 741: Runtime results for the instance 6000307 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

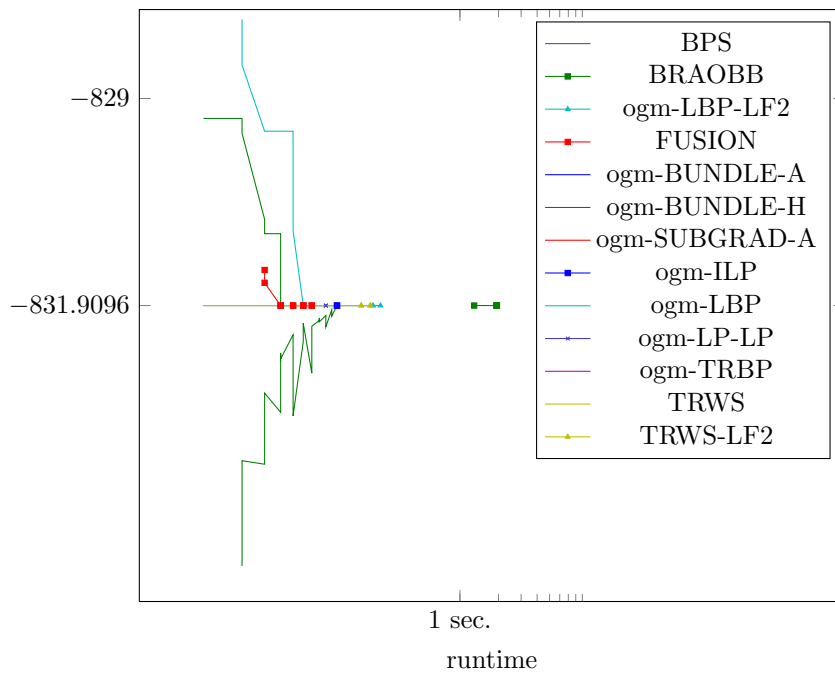


Figure 742: Runtime results for the instance 6000308 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

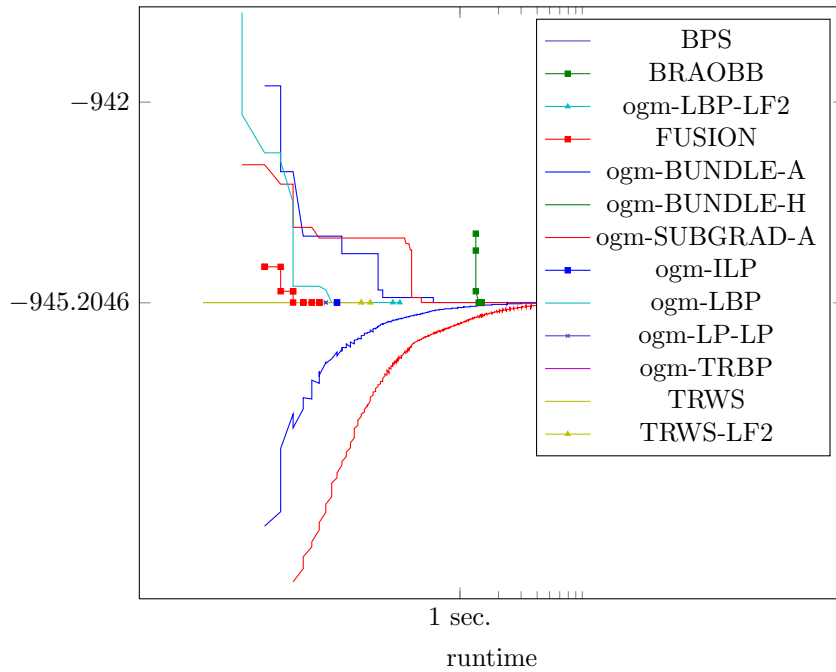


Figure 743: Runtime results for the instance 6000309 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

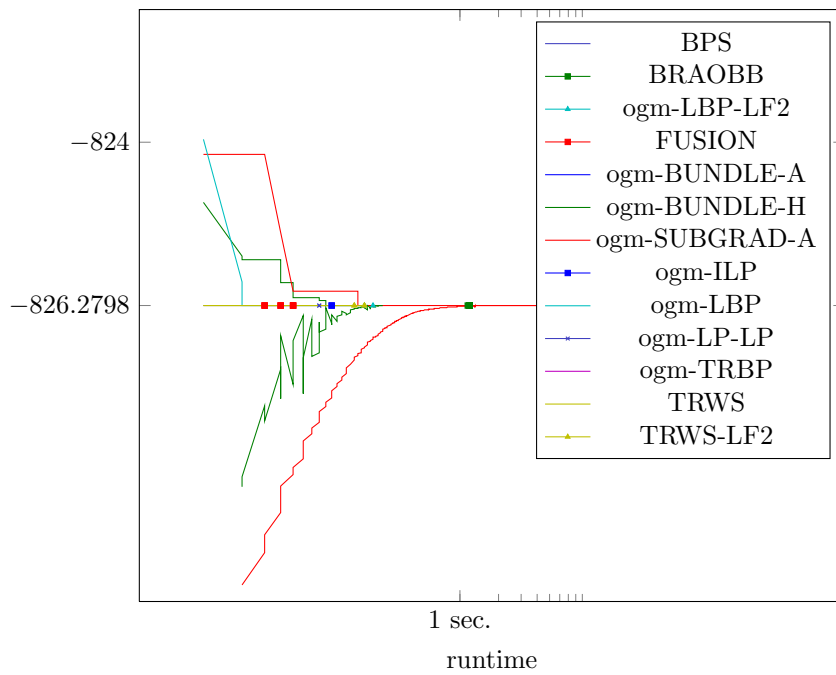


Figure 744: Runtime results for the instance 6000310 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

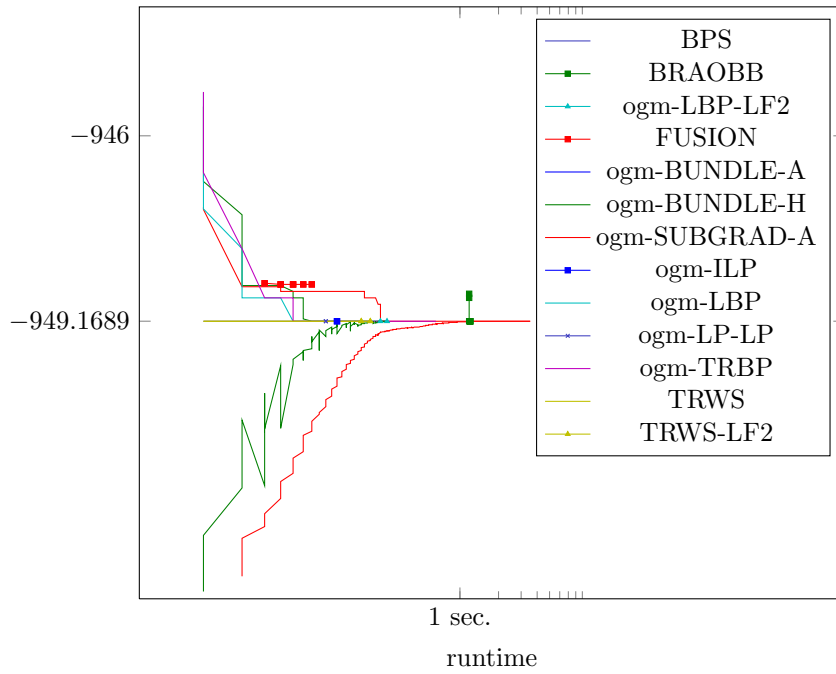


Figure 745: Runtime results for the instance 6000311 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

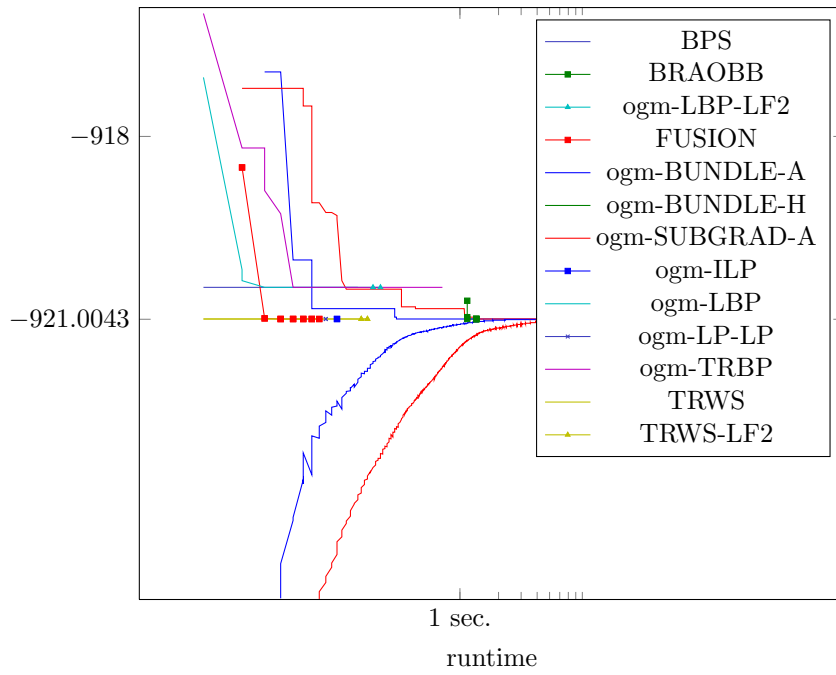


Figure 746: Runtime results for the instance 6000312 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

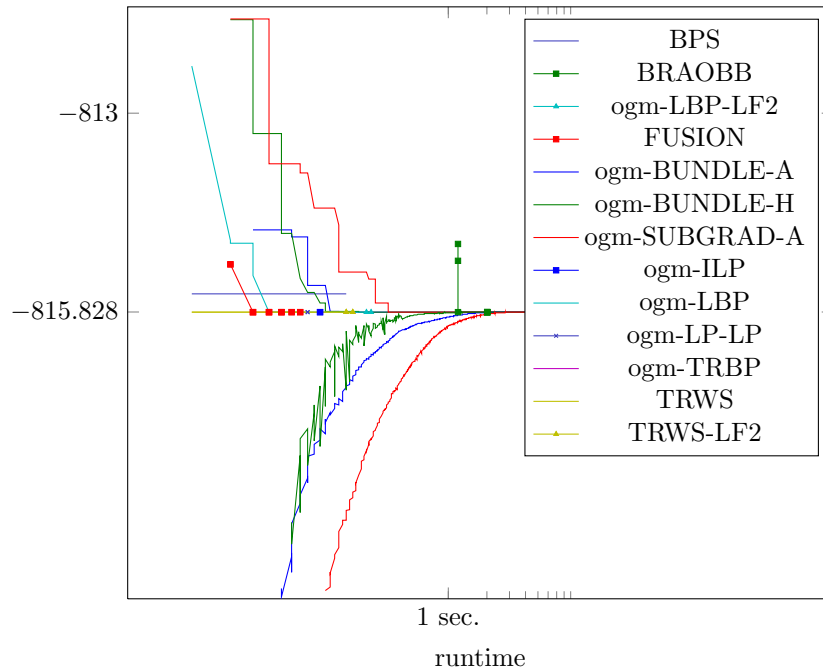


Figure 747: Runtime results for the instance 6000313 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

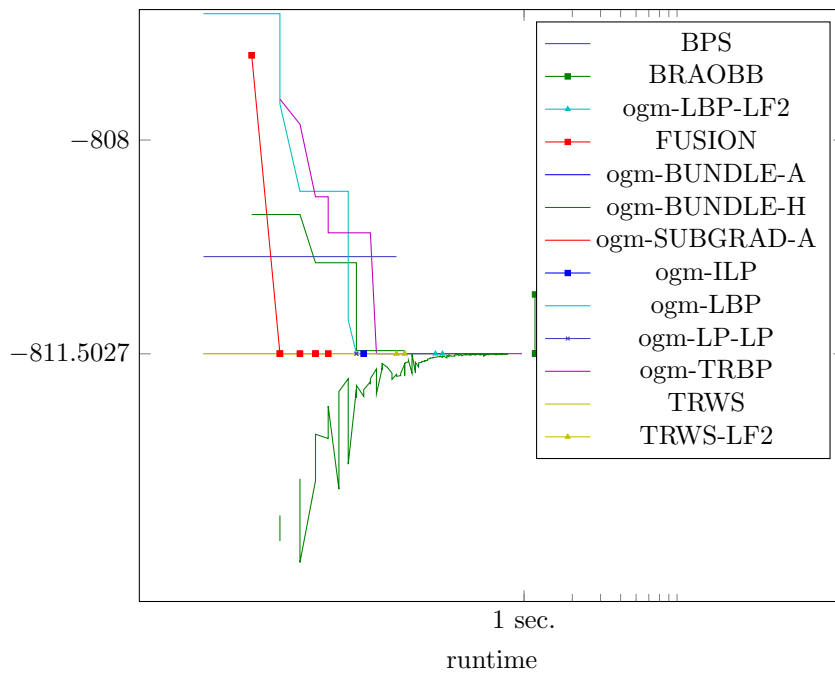


Figure 748: Runtime results for the instance 6000314 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

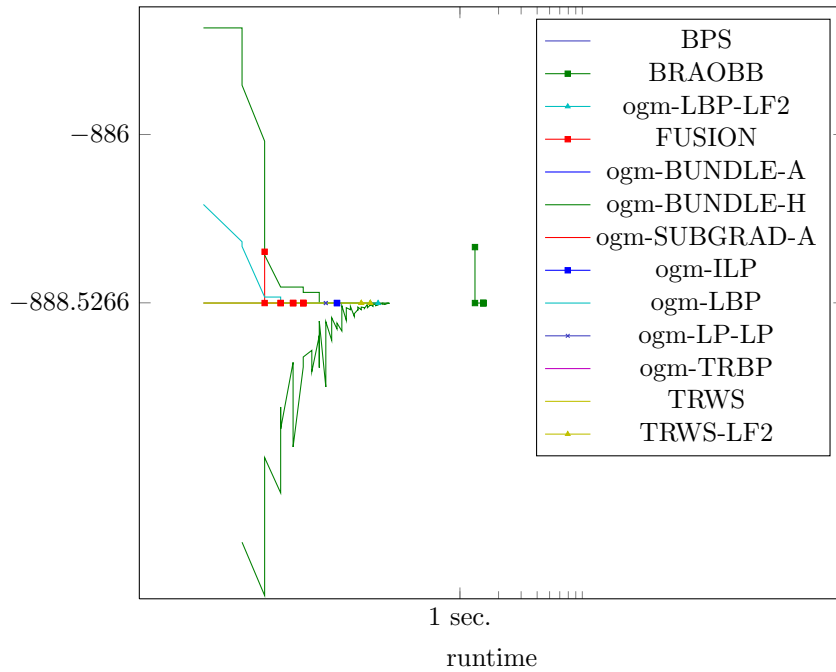


Figure 749: Runtime results for the instance 6000315 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

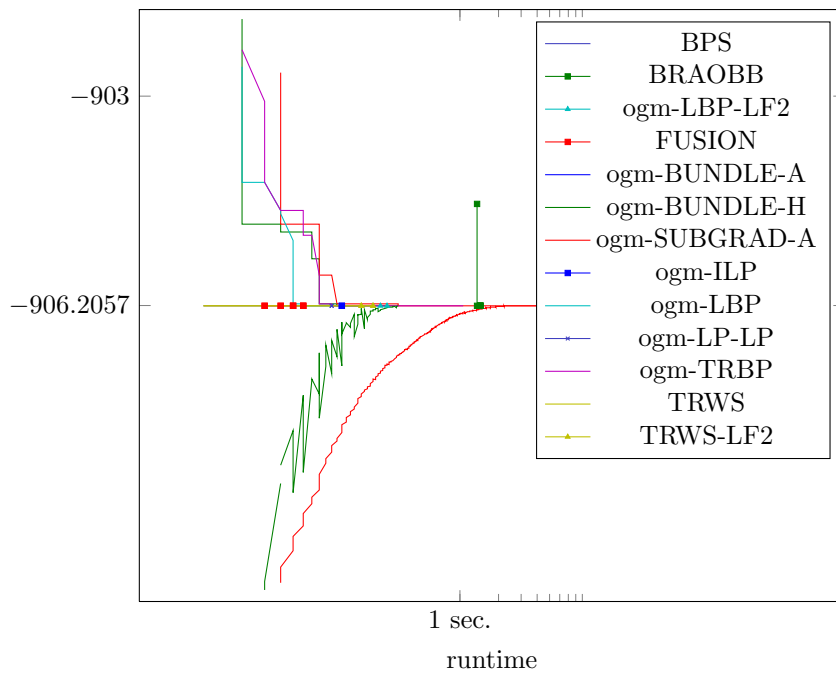


Figure 750: Runtime results for the instance 6000316 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

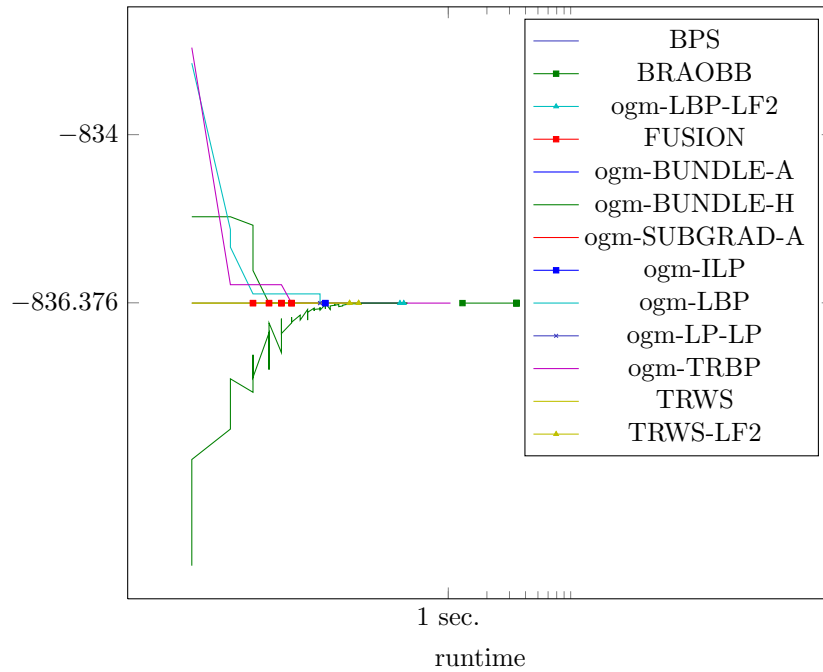


Figure 751: Runtime results for the instance 6000317 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

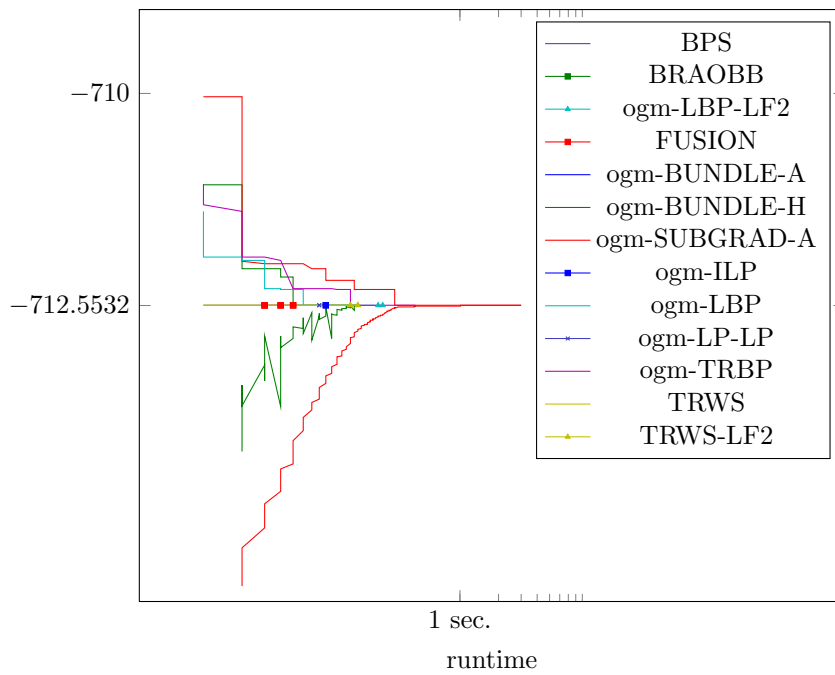


Figure 752: Runtime results for the instance 6000318 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

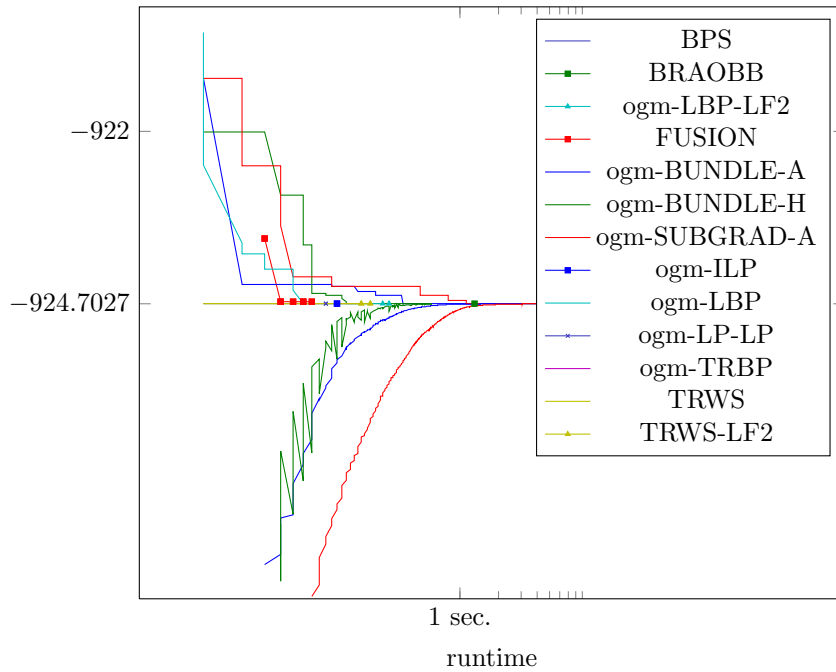


Figure 753: Runtime results for the instance 6000319 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

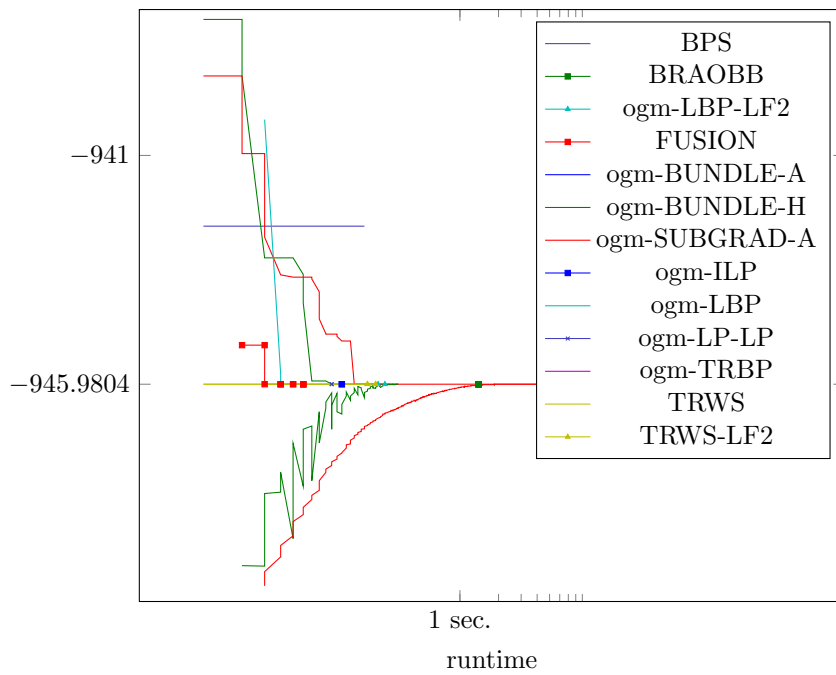


Figure 754: Runtime results for the instance 6000320 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

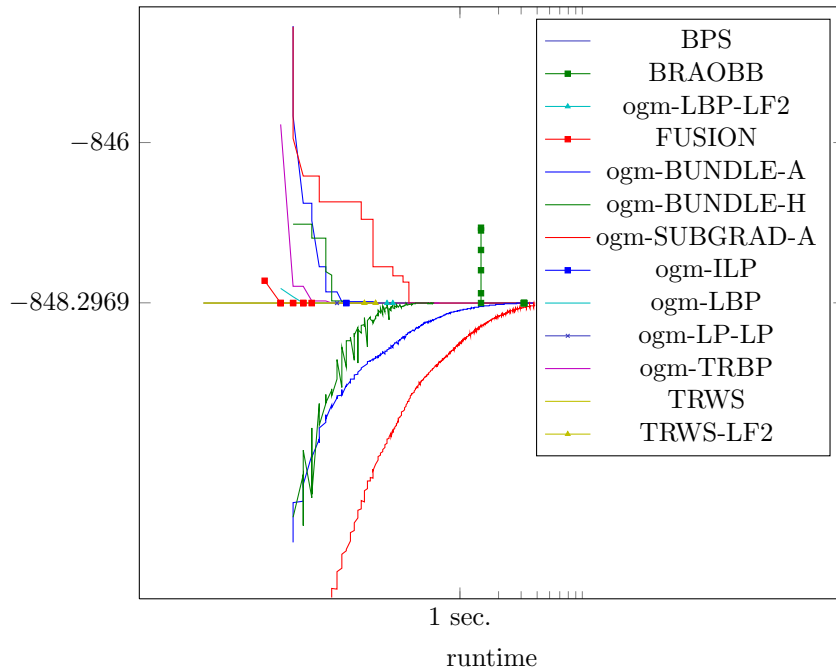


Figure 755: Runtime results for the instance 6000321 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

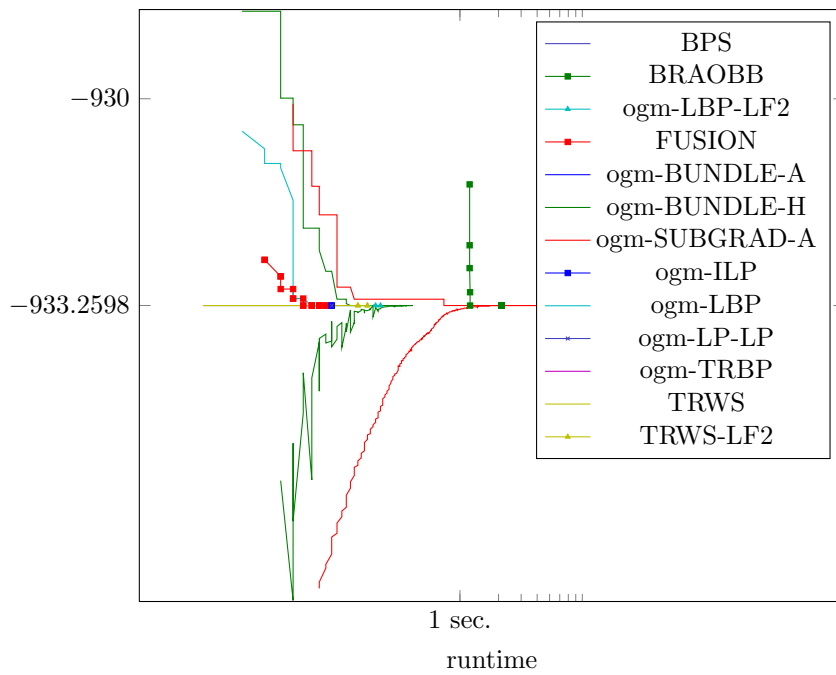


Figure 756: Runtime results for the instance 6000322 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

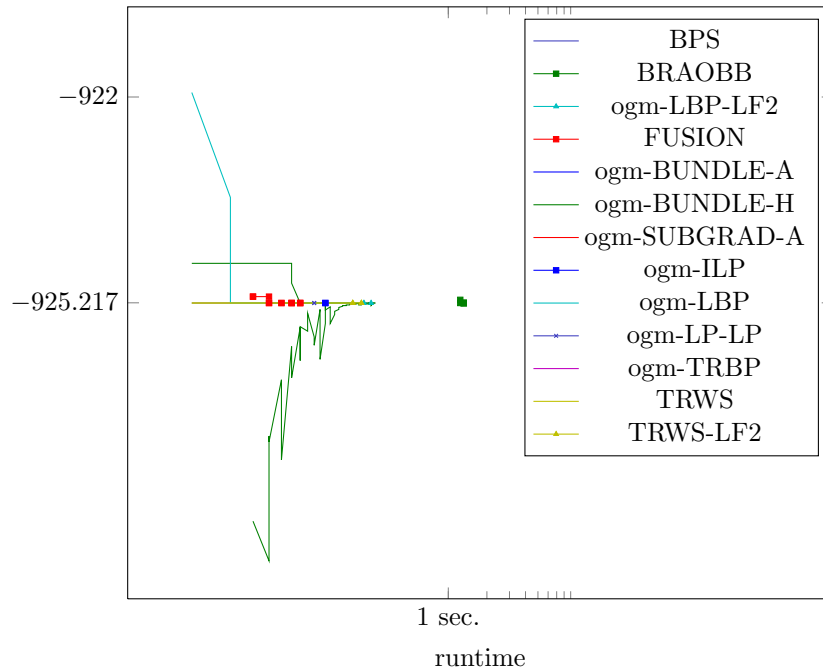


Figure 757: Runtime results for the instance 6000323 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

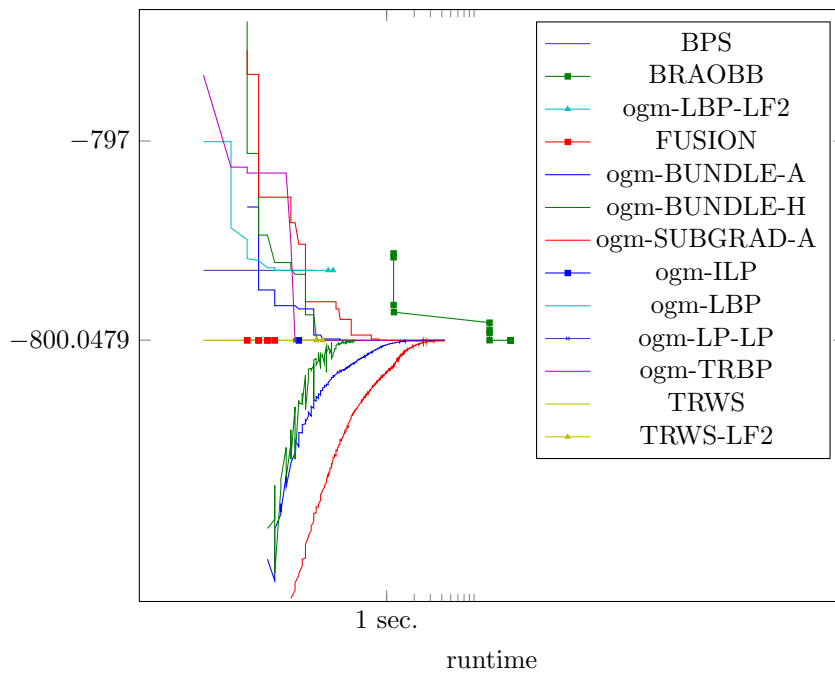


Figure 758: Runtime results for the instance 6000324 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

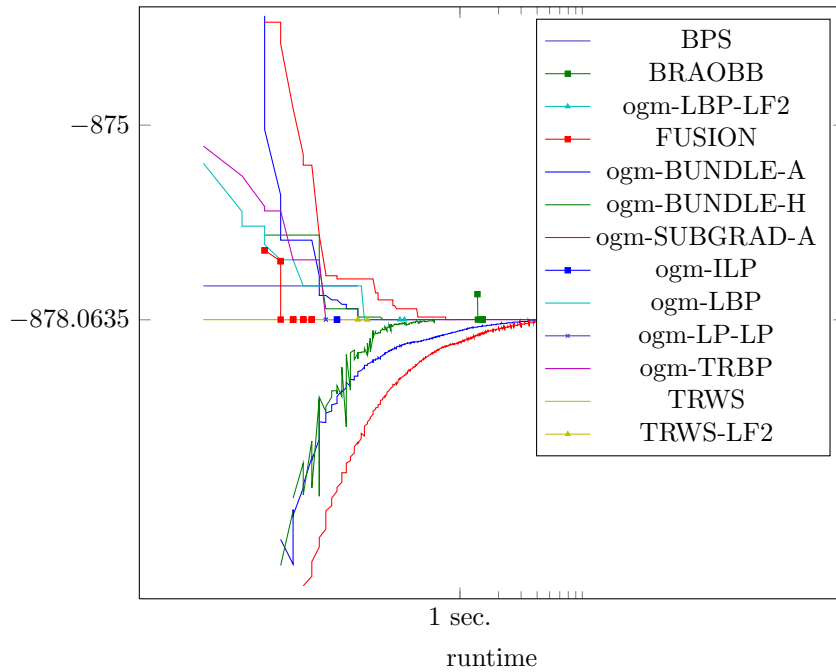


Figure 759: Runtime results for the instance 6000325 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

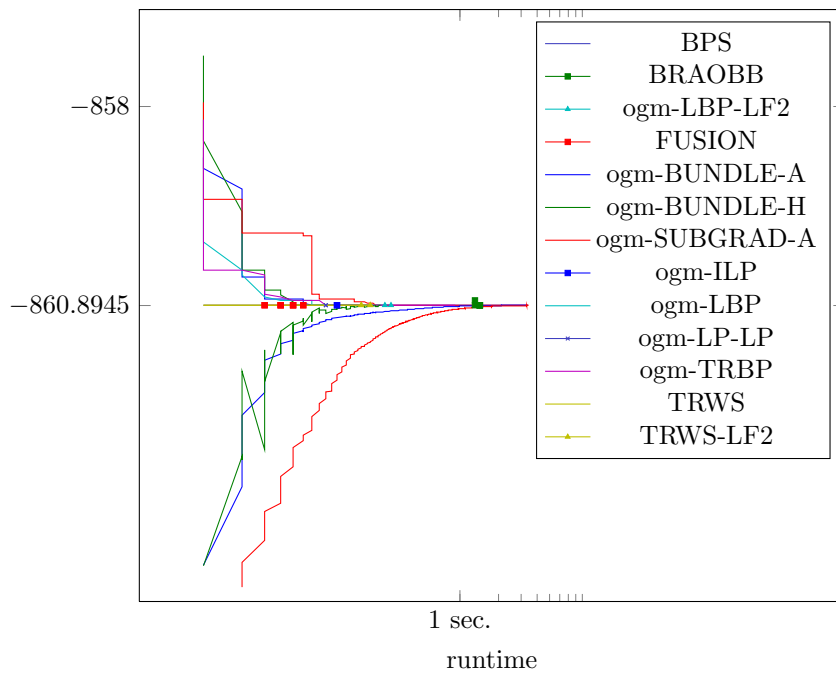


Figure 760: Runtime results for the instance 6000326 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

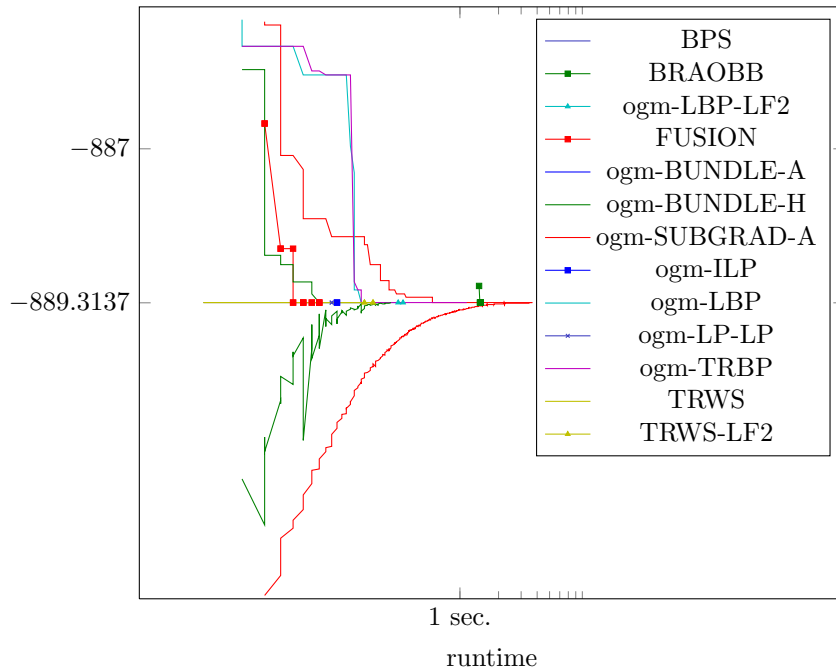


Figure 761: Runtime results for the instance 6000327 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

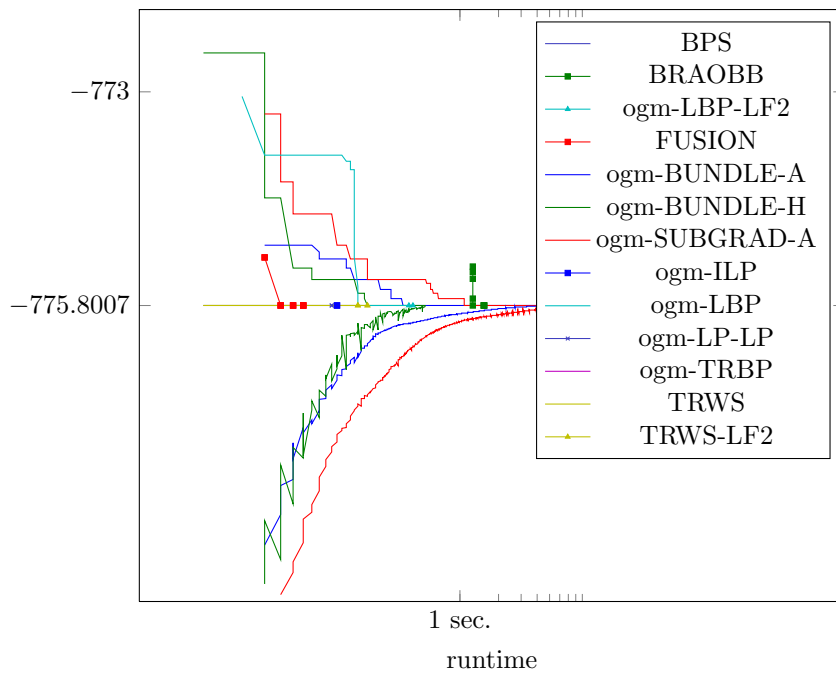


Figure 762: Runtime results for the instance 6000328 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

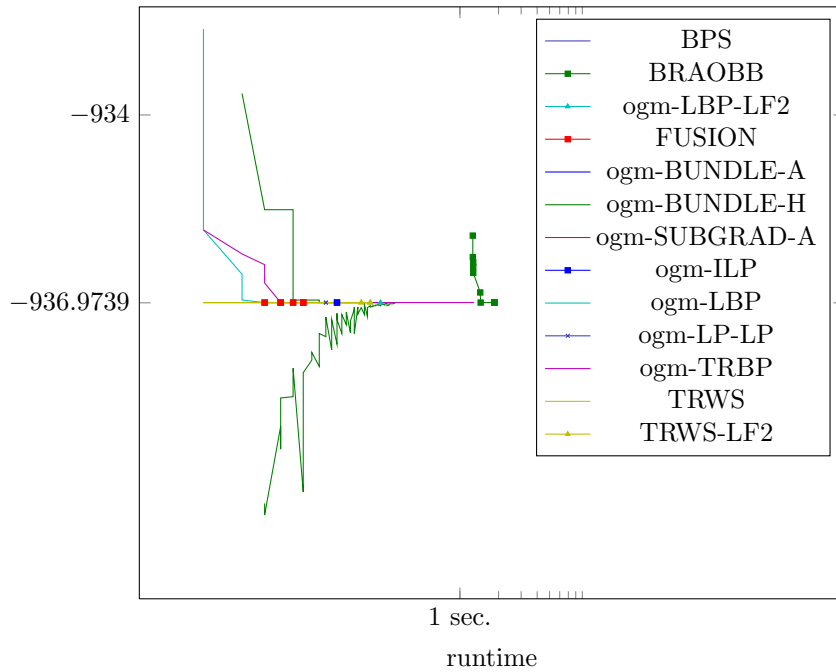


Figure 763: Runtime results for the instance 6000329 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

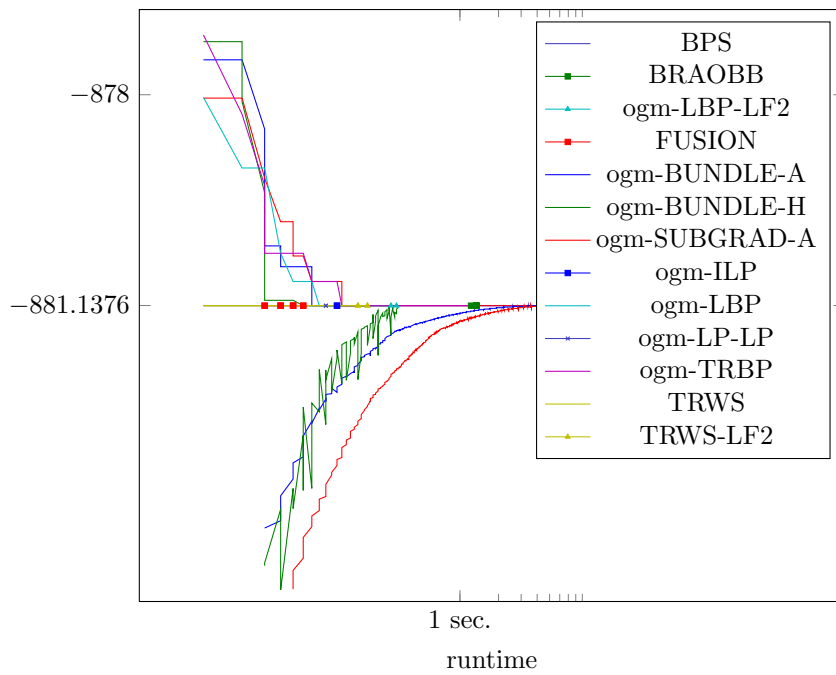


Figure 764: Runtime results for the instance 6000330 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

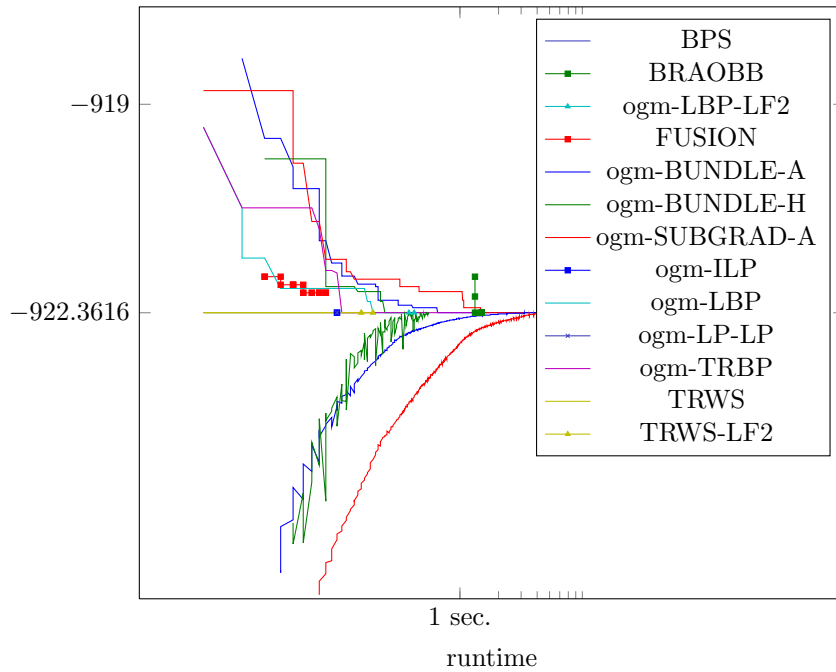


Figure 765: Runtime results for the instance 6000331 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

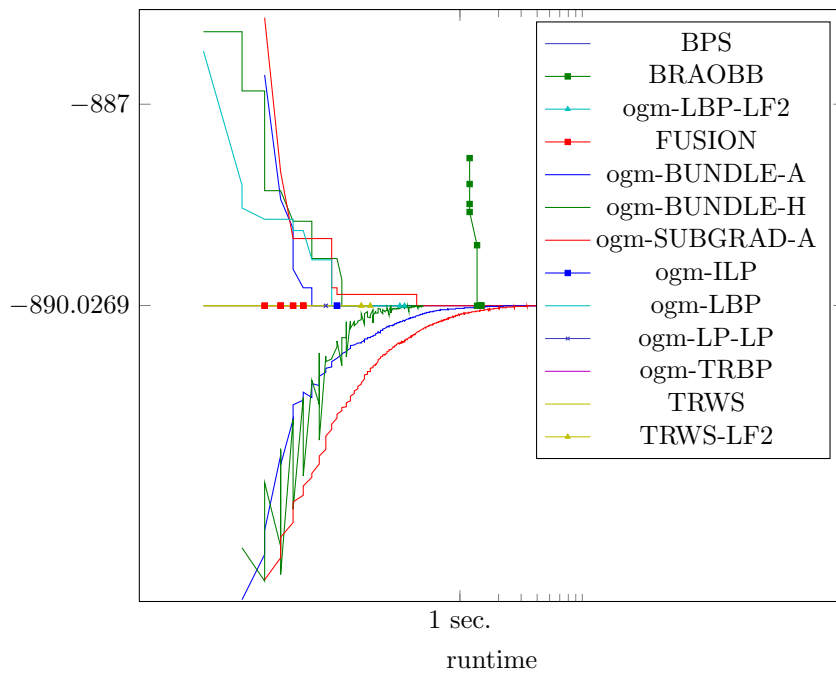


Figure 766: Runtime results for the instance 6000332 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

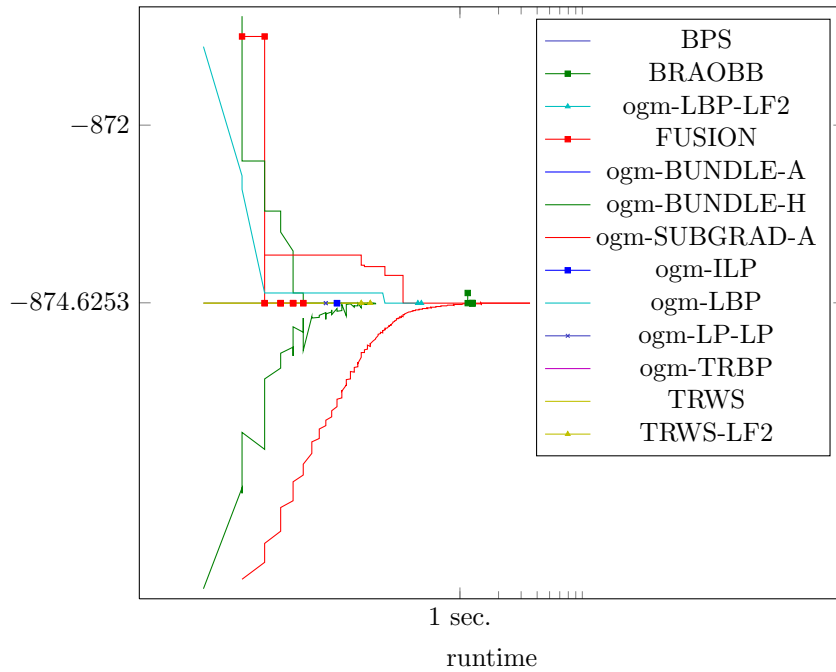


Figure 767: Runtime results for the instance 6000333 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

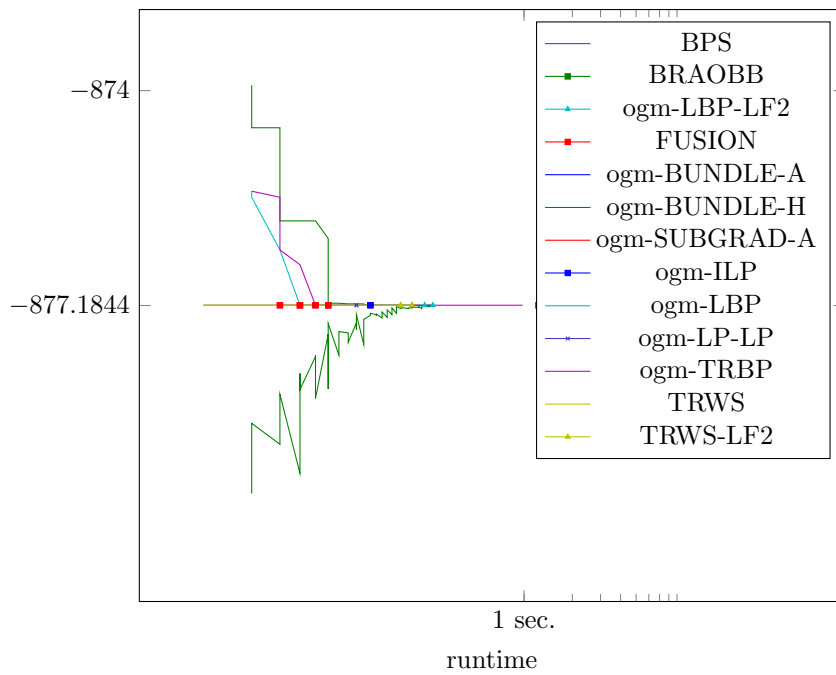


Figure 768: Runtime results for the instance 6000334 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

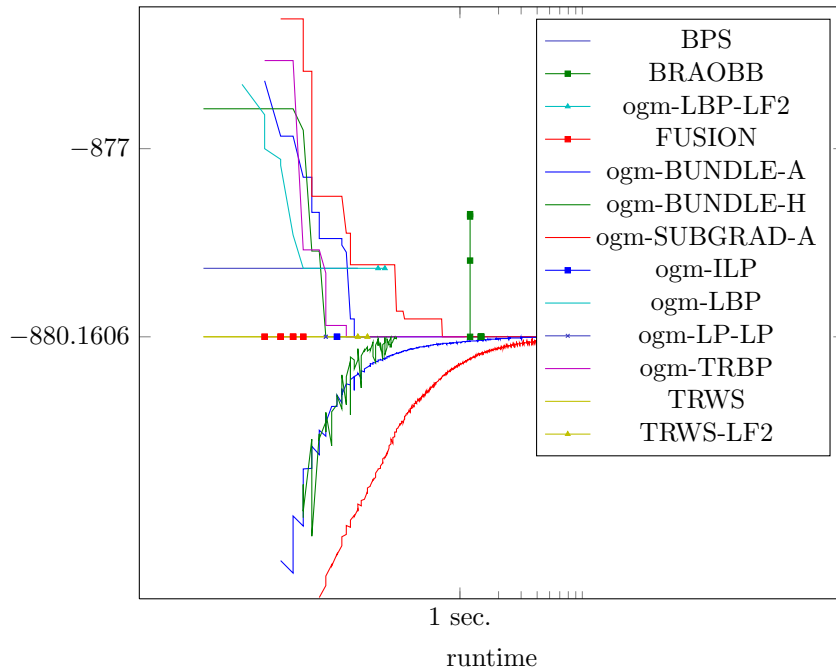


Figure 769: Runtime results for the instance 6000335 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

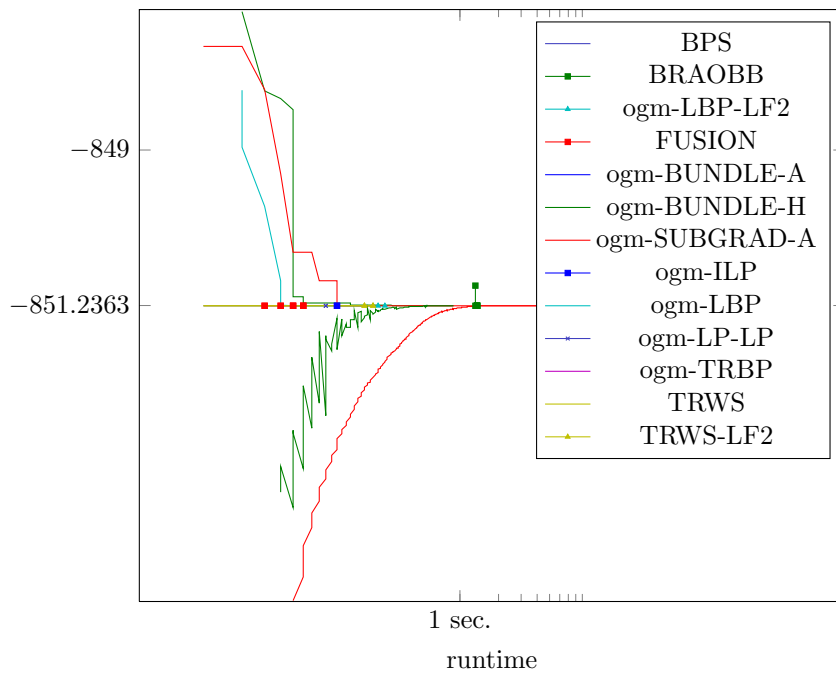


Figure 770: Runtime results for the instance 6000336 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

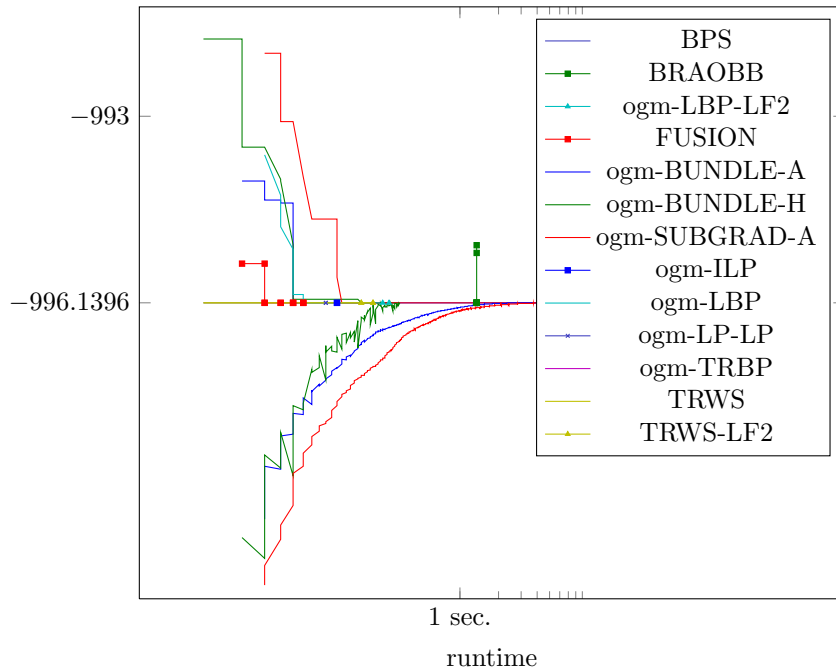


Figure 771: Runtime results for the instance 6000337 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

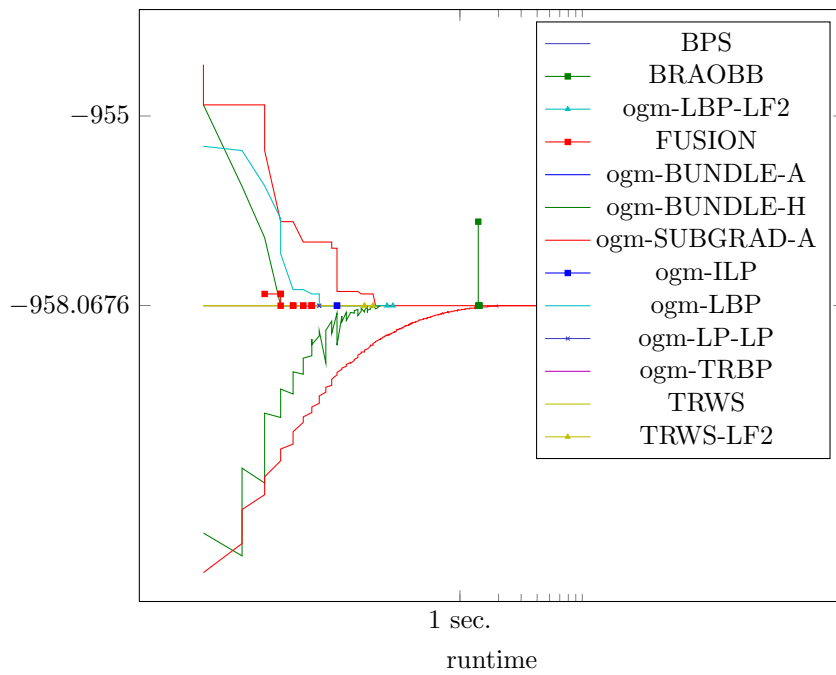


Figure 772: Runtime results for the instance 6000338 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

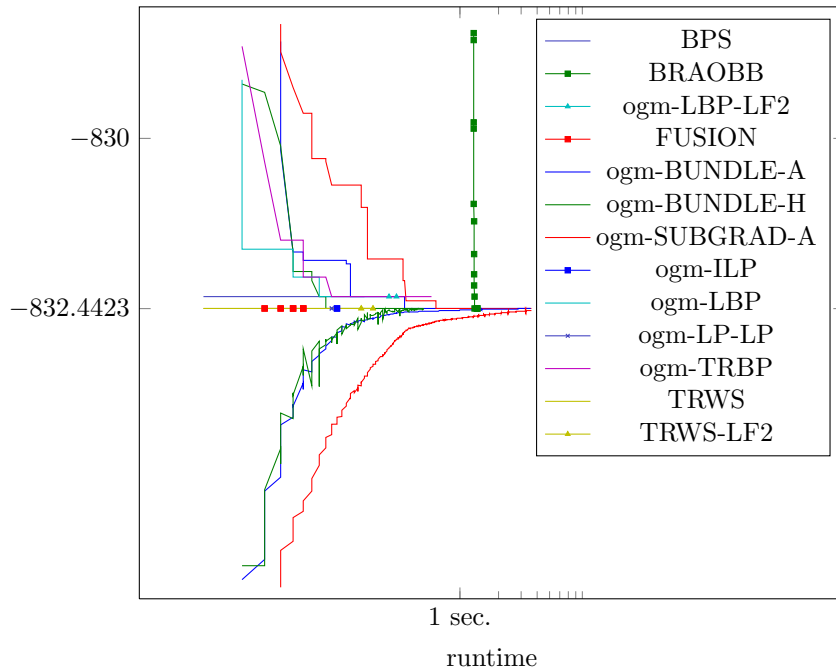


Figure 773: Runtime results for the instance 6000339 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

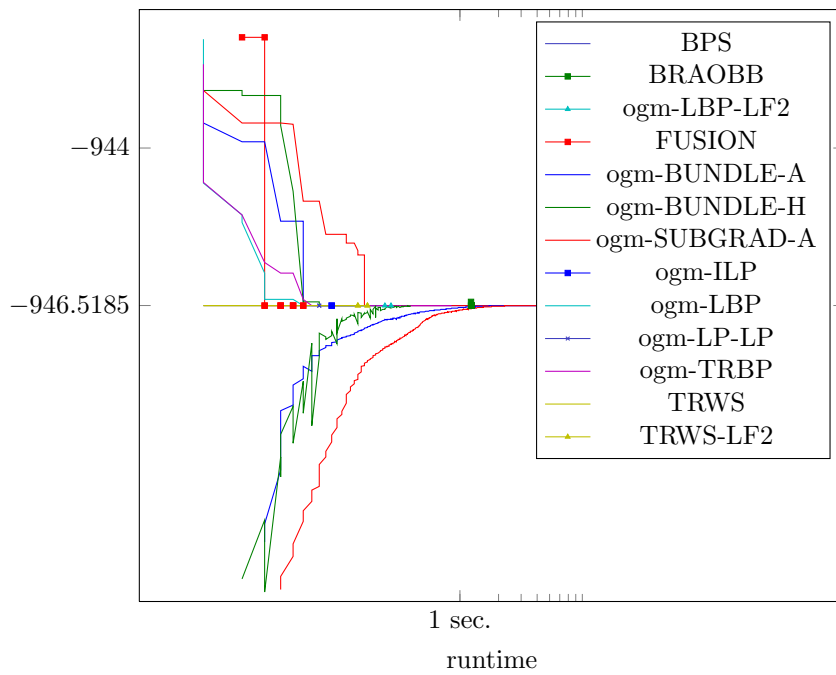


Figure 774: Runtime results for the instance 6000340 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

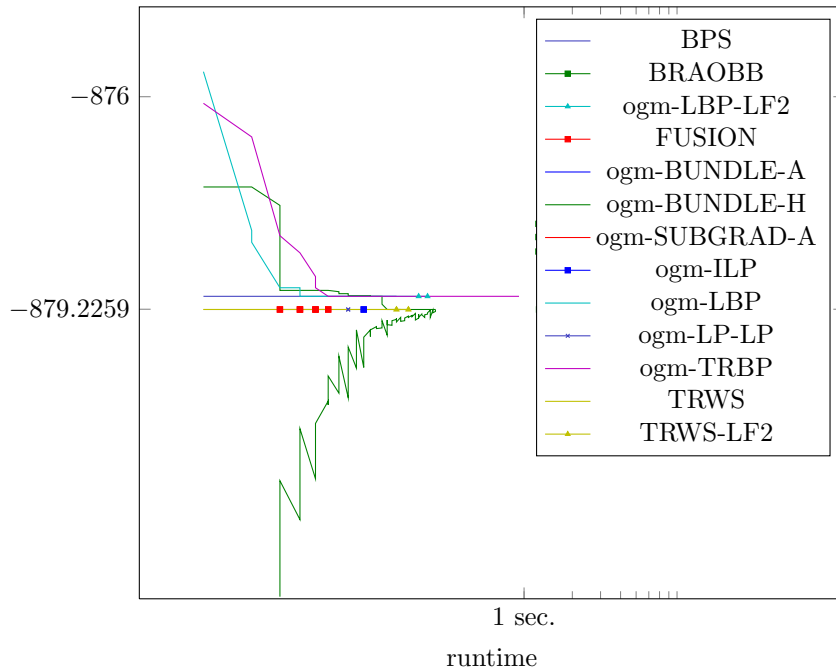


Figure 775: Runtime results for the instance 6000341 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

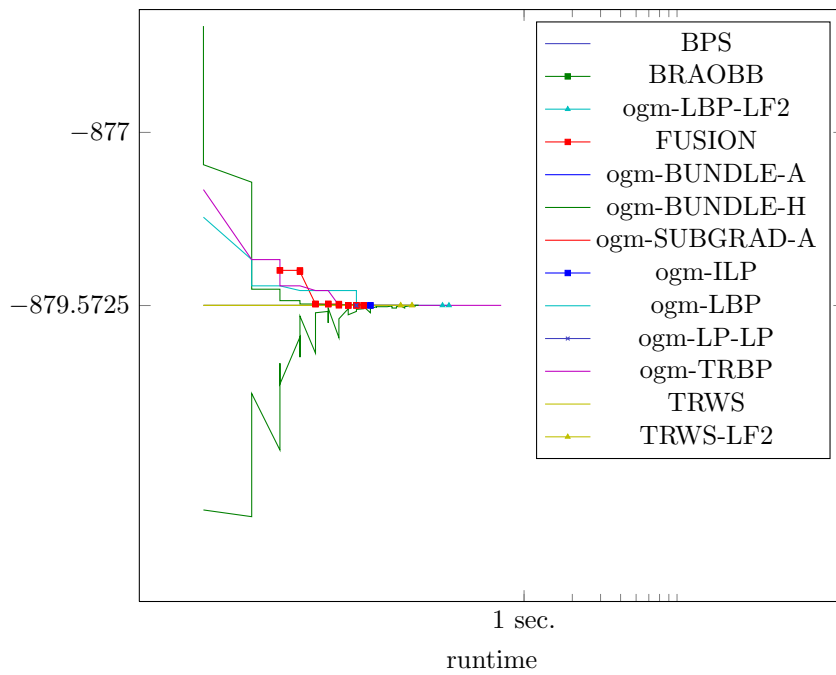


Figure 776: Runtime results for the instance 6000342 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

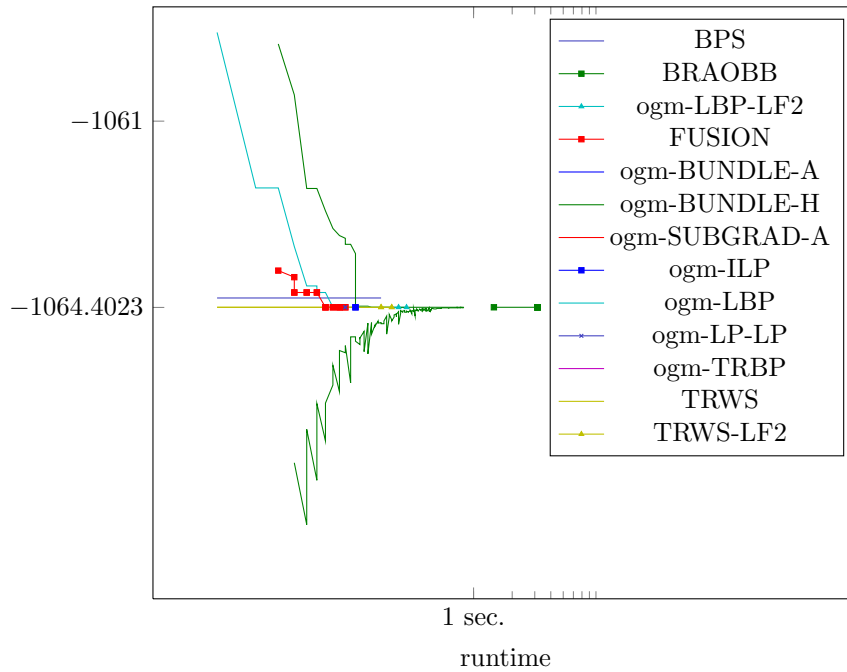


Figure 777: Runtime results for the instance 6000343 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

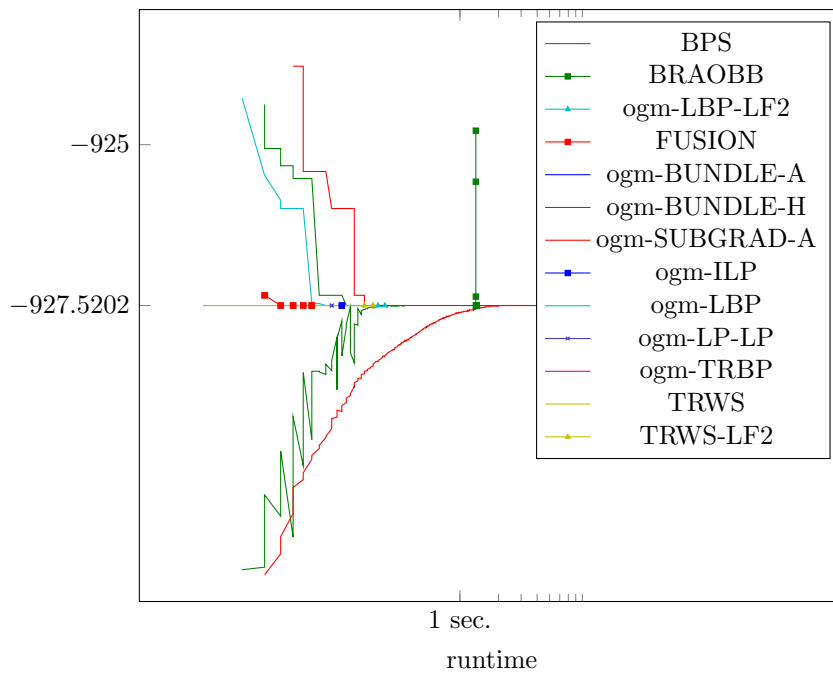


Figure 778: Runtime results for the instance 6000344 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

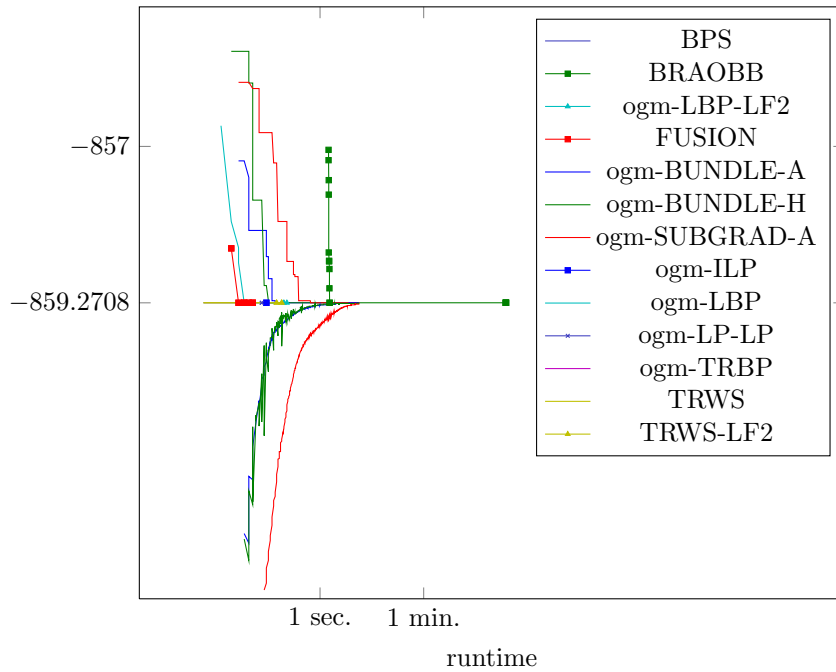


Figure 779: Runtime results for the instance 6000345 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

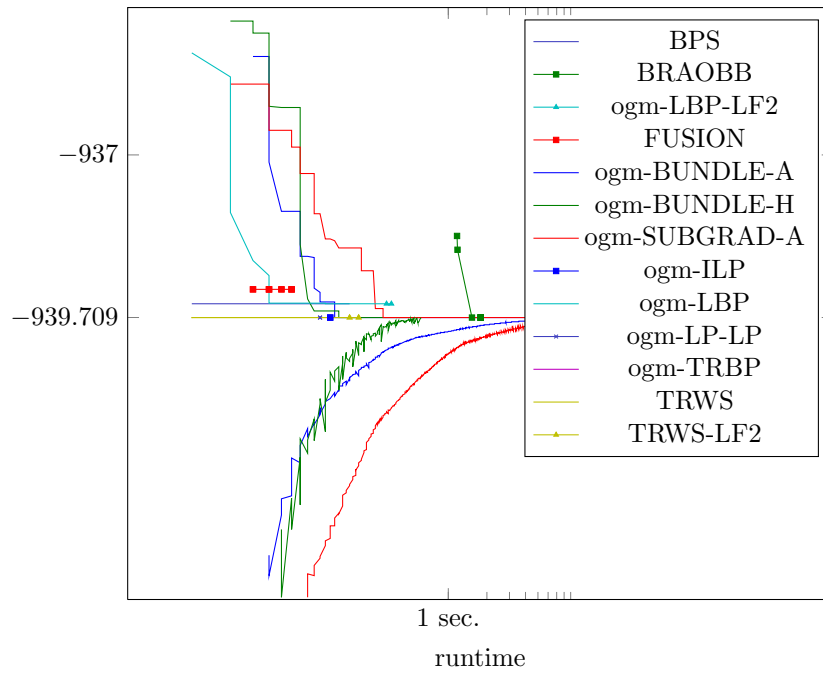


Figure 780: Runtime results for the instance 6000346 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

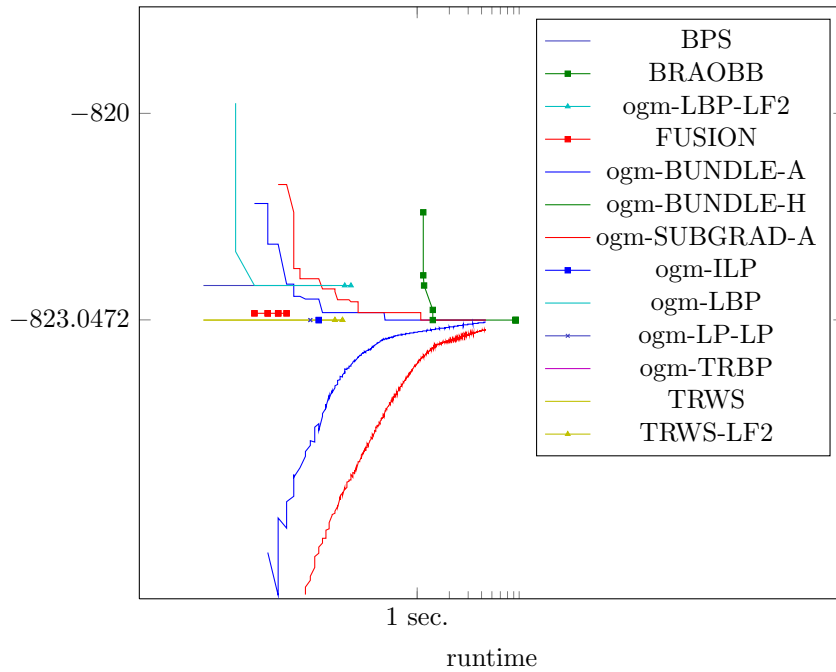


Figure 781: Runtime results for the instance 6000347 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

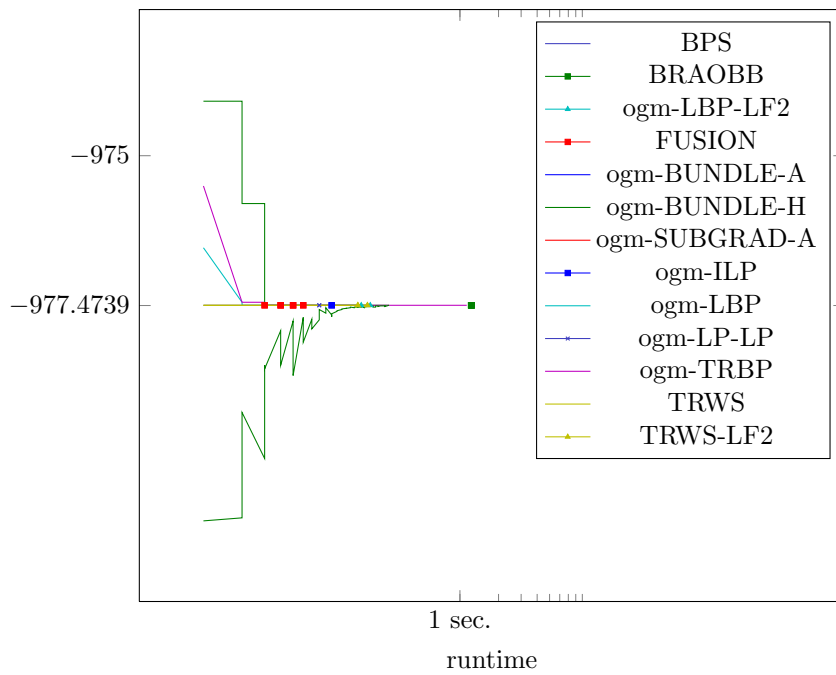


Figure 782: Runtime results for the instance 6000348 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

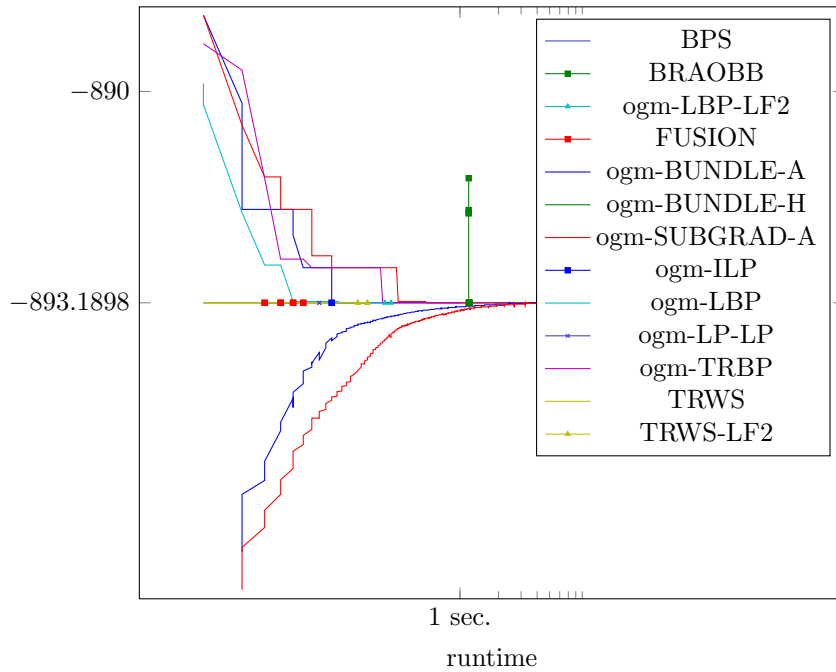


Figure 783: Runtime results for the instance 6000349 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

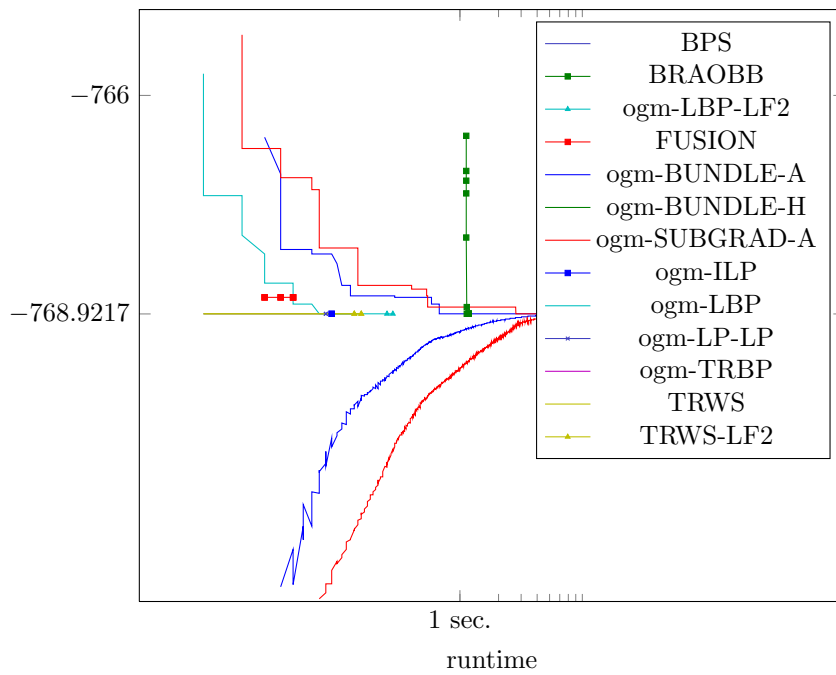


Figure 784: Runtime results for the instance 6000350 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

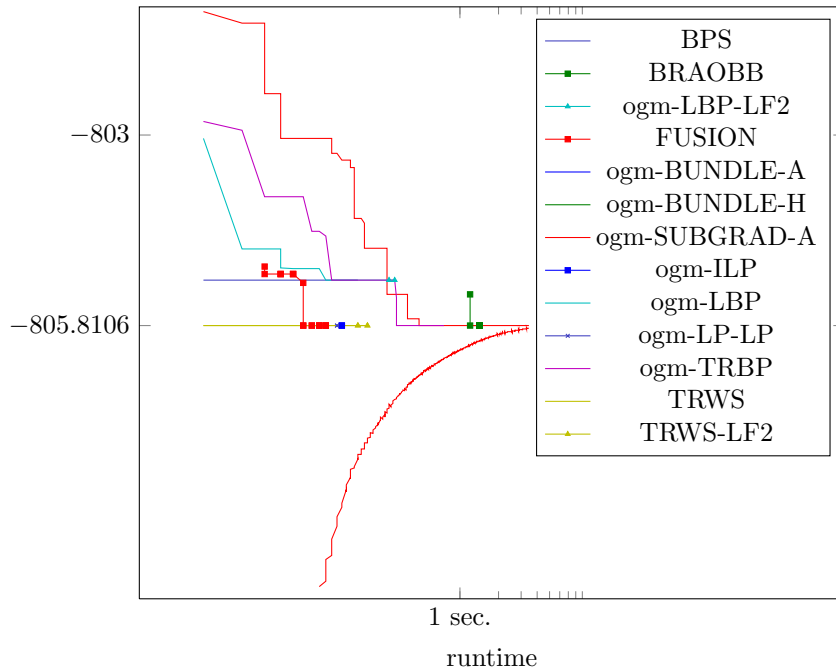


Figure 785: Runtime results for the instance 6000351 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

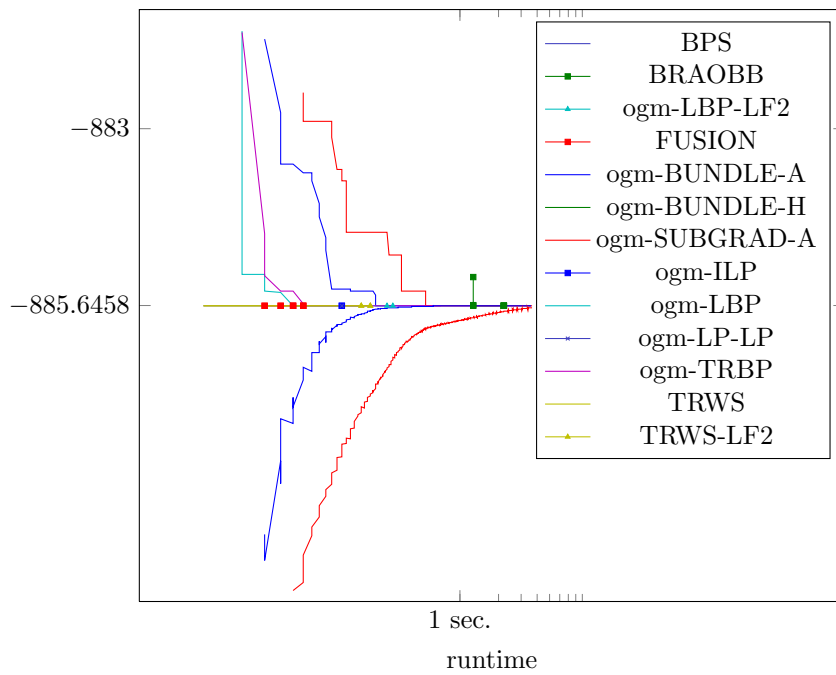


Figure 786: Runtime results for the instance 6000352 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

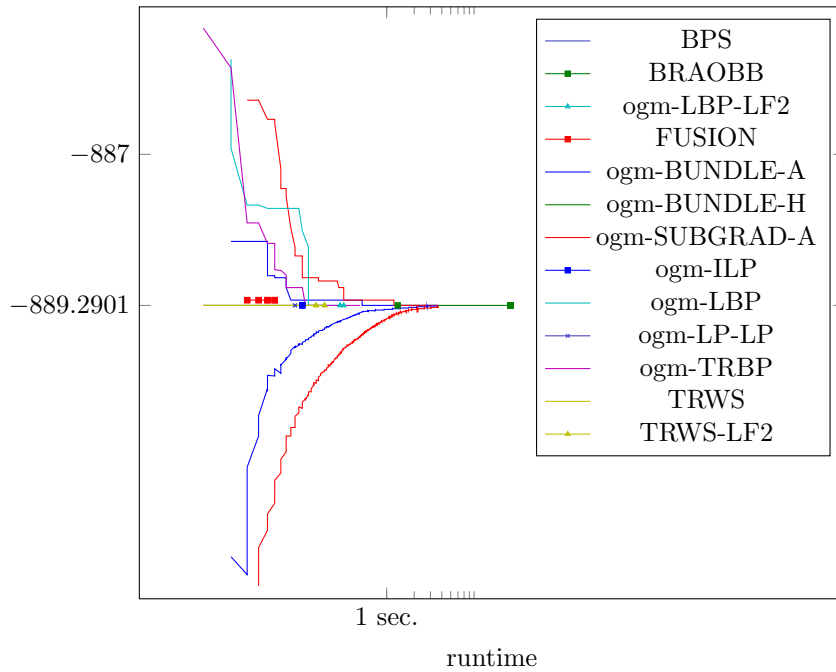


Figure 787: Runtime results for the instance 6000353 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

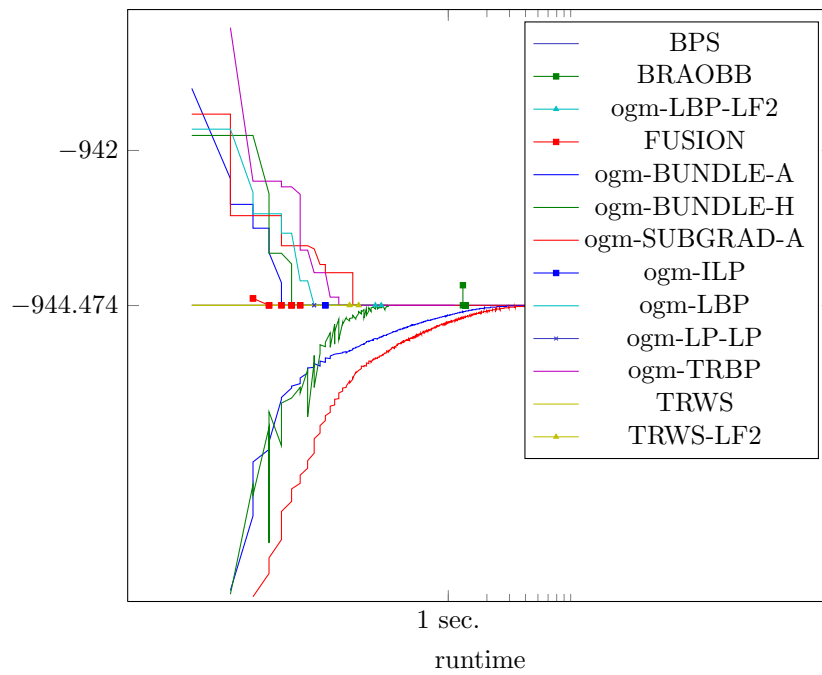


Figure 788: Runtime results for the instance 6000354 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

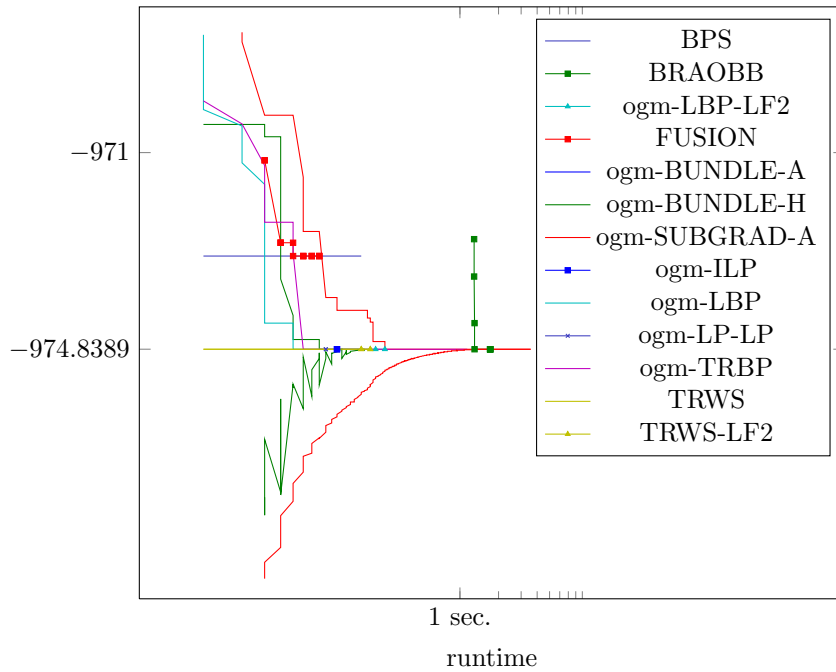


Figure 789: Runtime results for the instance 6000355 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

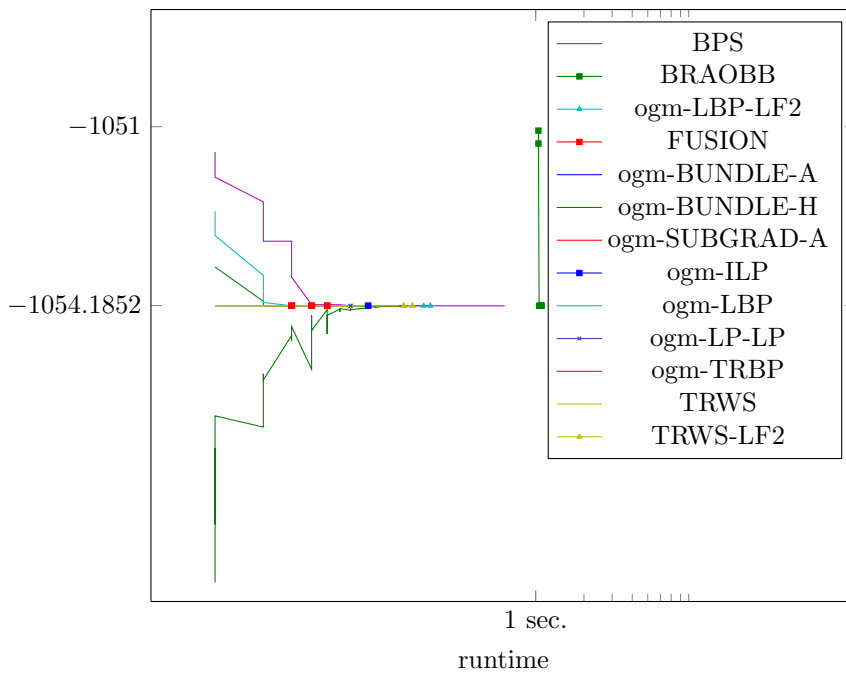


Figure 790: Runtime results for the instance 8000811 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

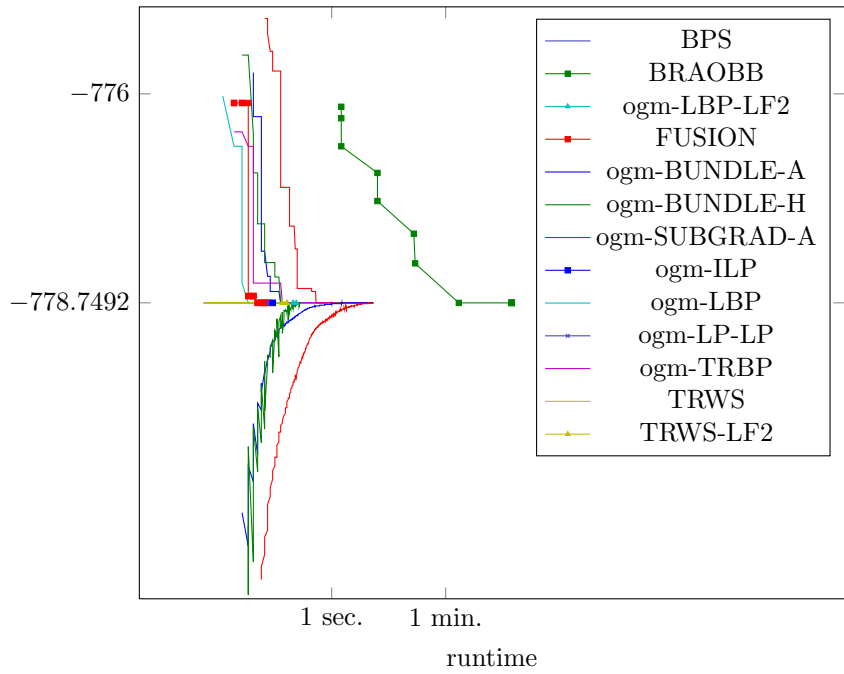


Figure 791: Runtime results for the instance 8001155 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

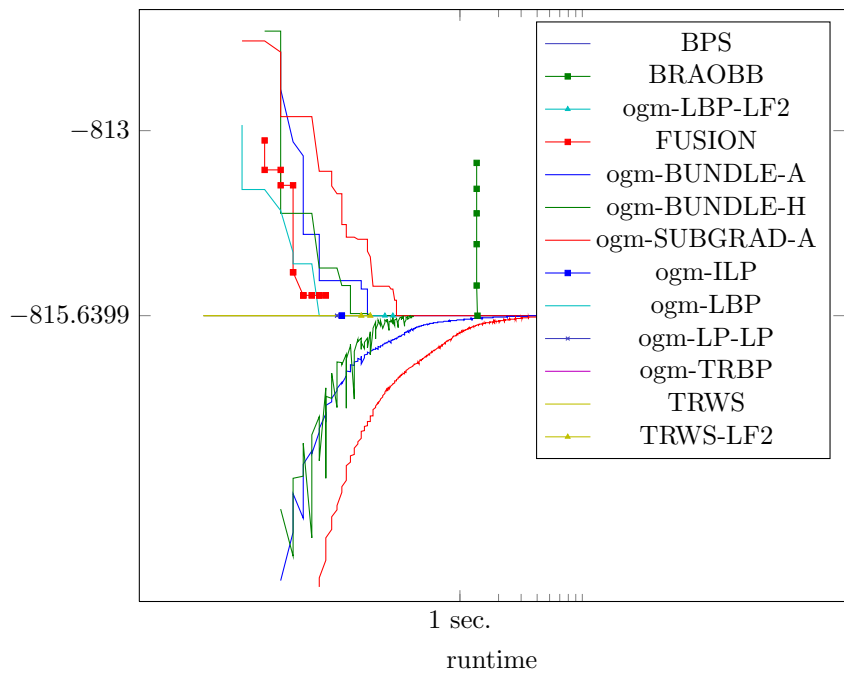


Figure 792: Runtime results for the instance 8001974 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

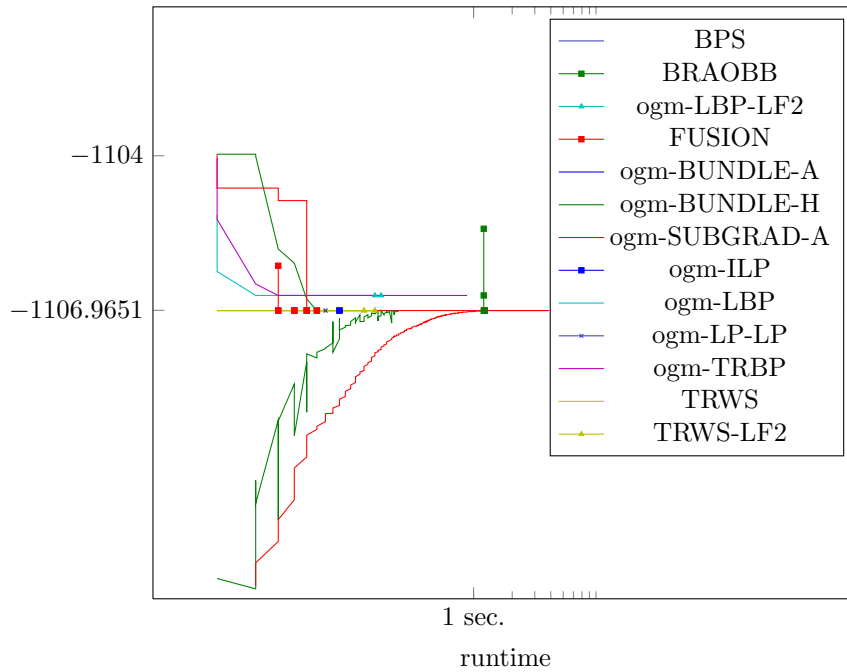


Figure 793: Runtime results for the instance 8002274 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

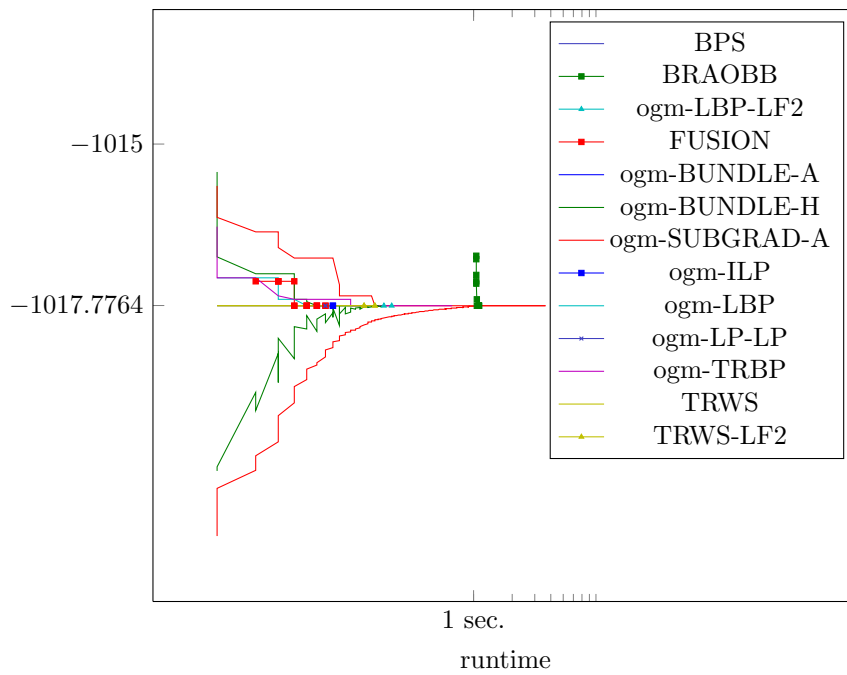


Figure 794: Runtime results for the instance 8002764 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

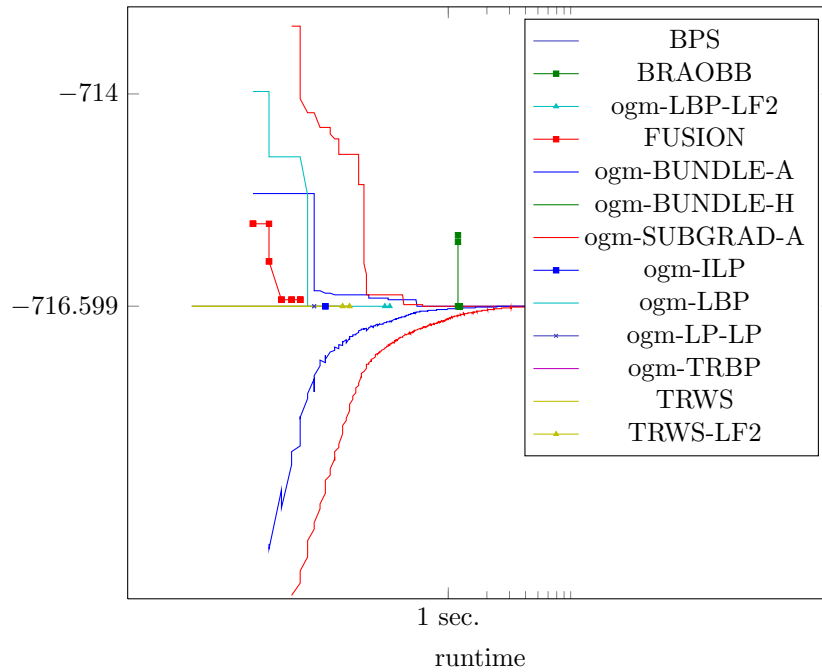


Figure 795: Runtime results for the instance 8003131 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

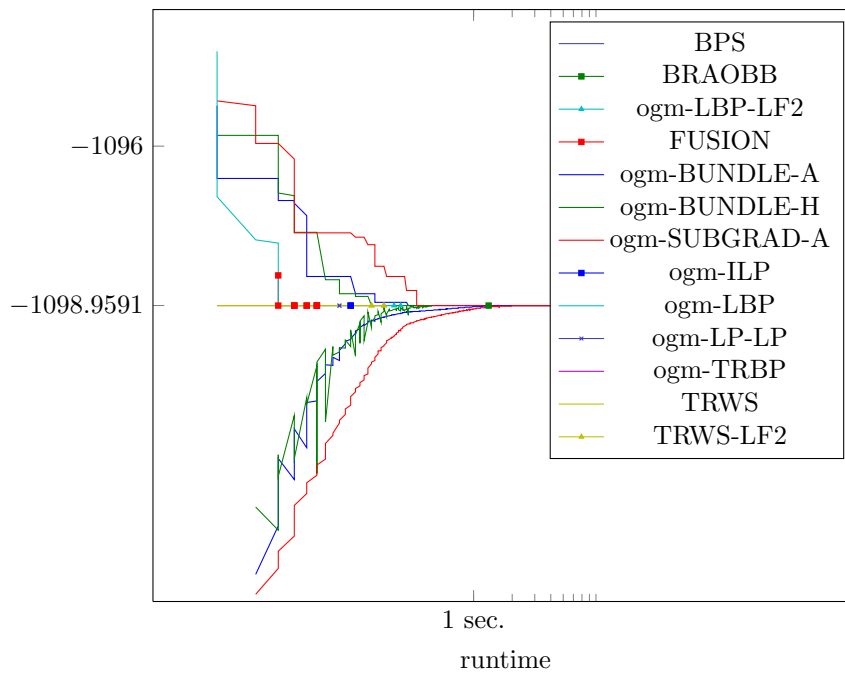


Figure 796: Runtime results for the instance 8003836 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

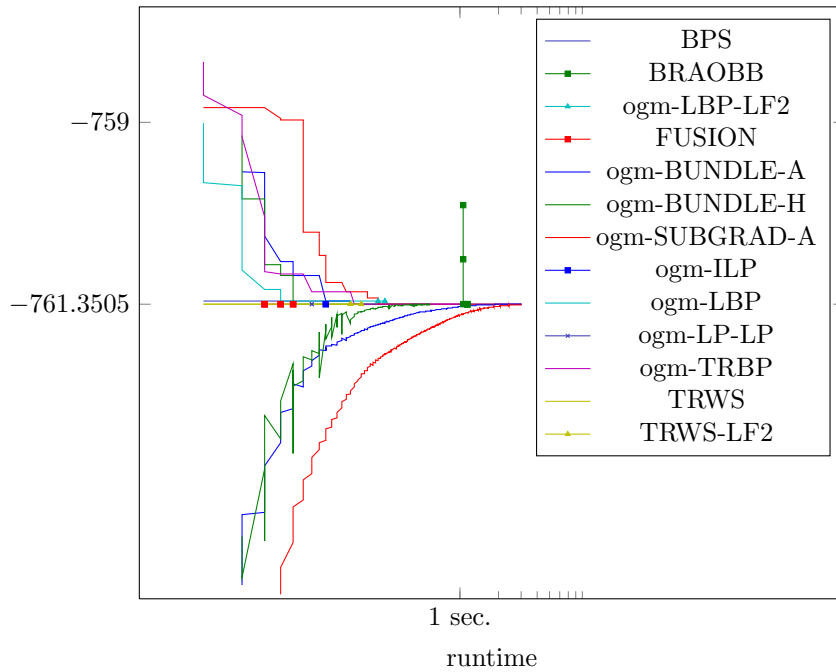


Figure 797: Runtime results for the instance 8003952 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

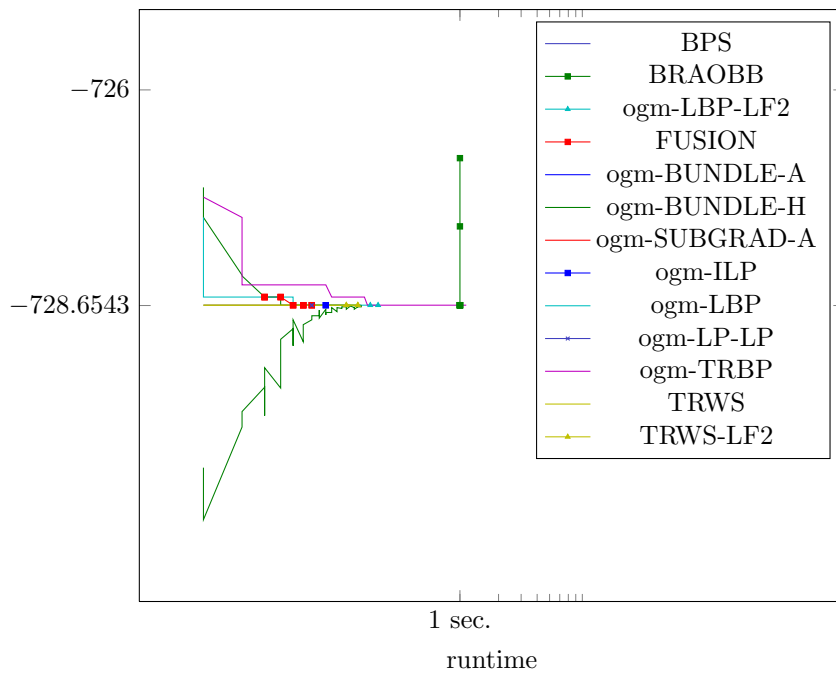


Figure 798: Runtime results for the instance 8004573 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

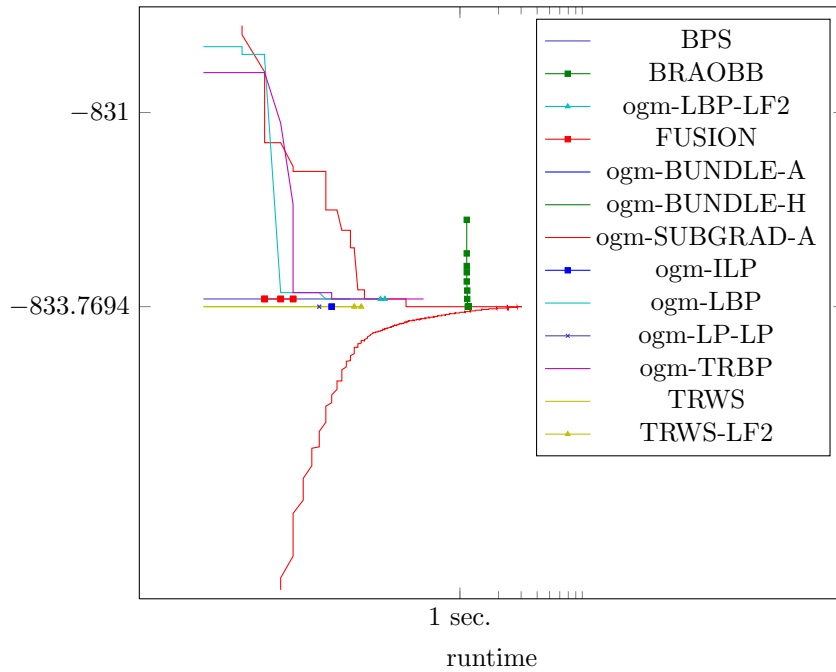


Figure 799: Runtime results for the instance 8005616 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

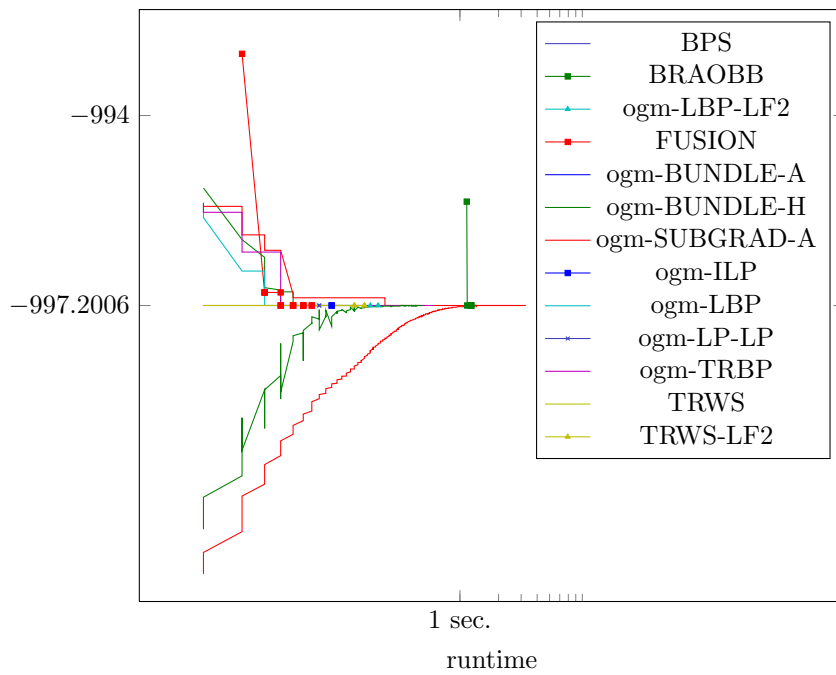


Figure 800: Runtime results for the instance 8006160 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

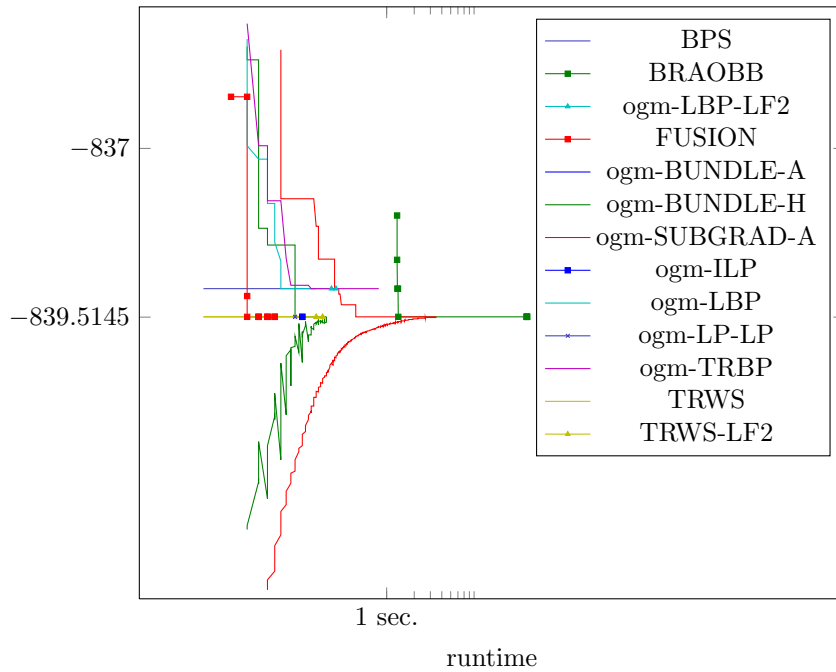


Figure 801: Runtime results for the instance 8006302 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

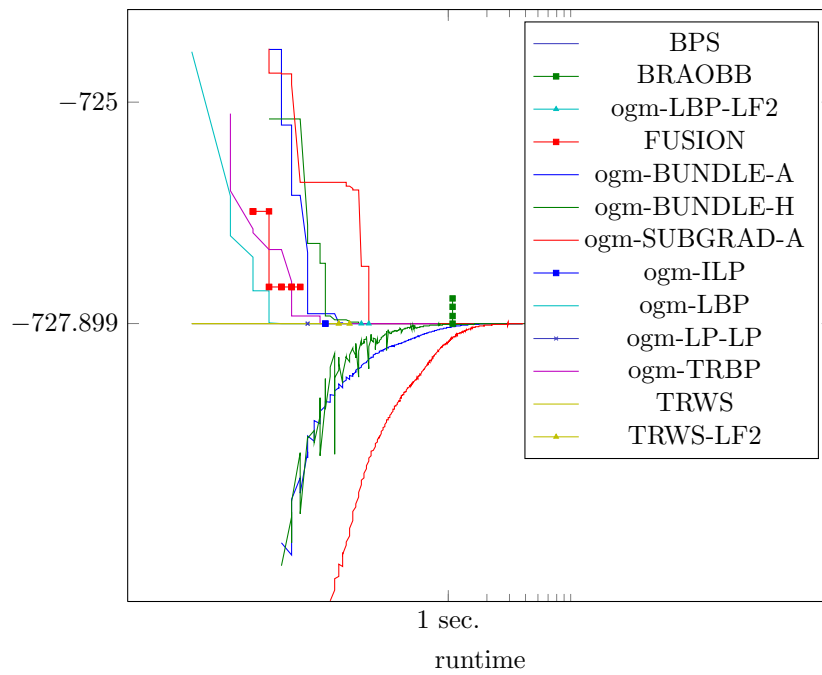


Figure 802: Runtime results for the instance 8008099 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

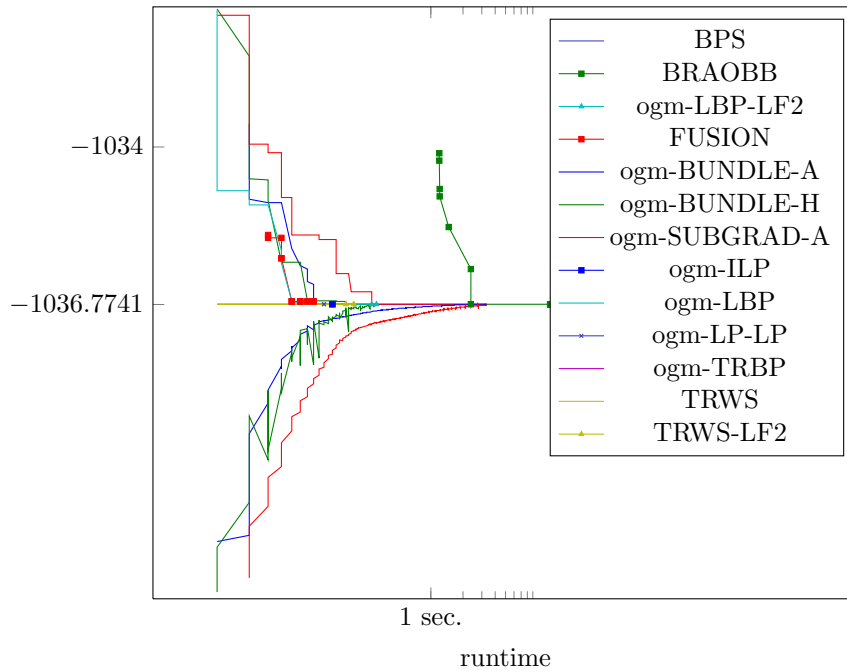


Figure 803: Runtime results for the instance 8008545 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

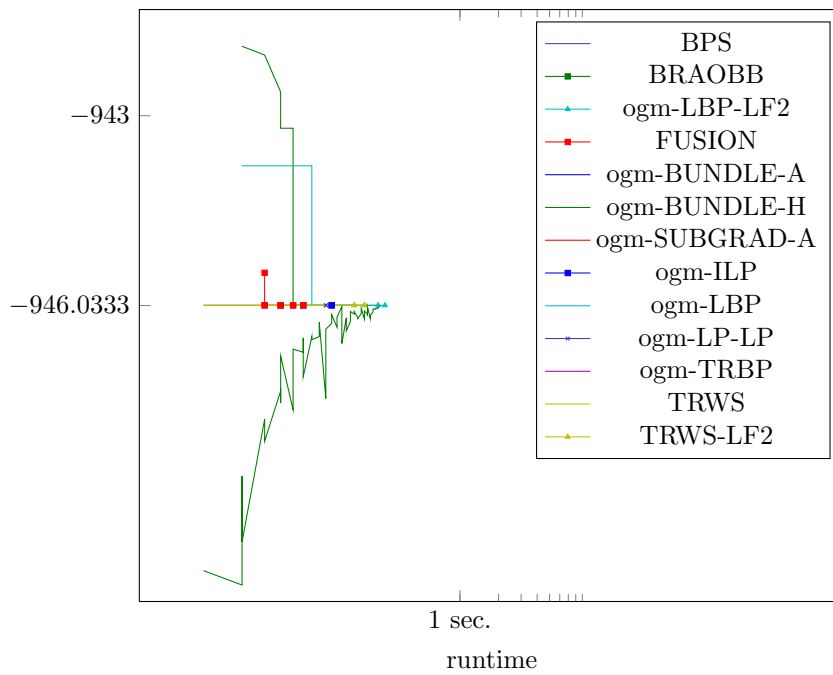


Figure 804: Runtime results for the instance 8008998 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

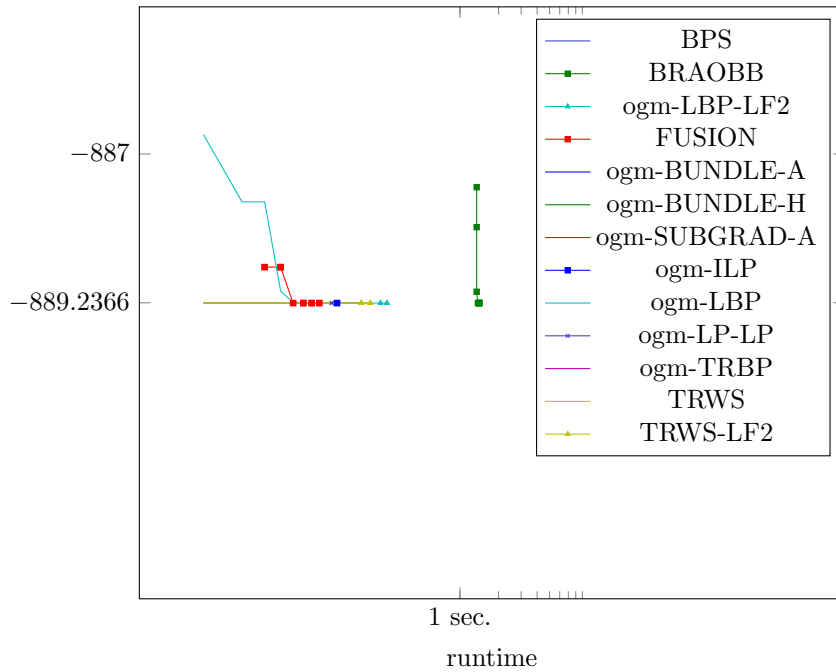


Figure 805: Runtime results for the instance *9000001* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

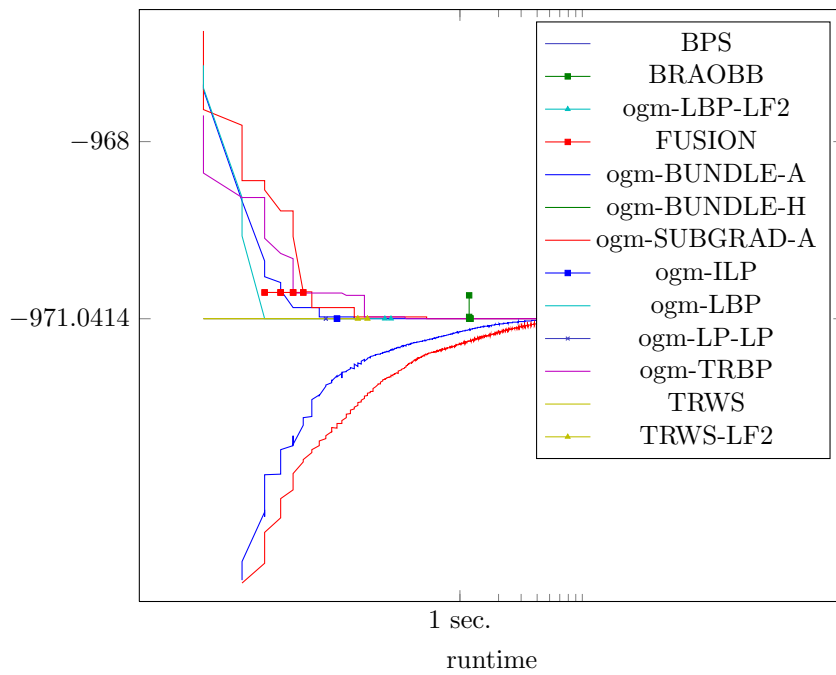


Figure 806: Runtime results for the instance *9000002* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

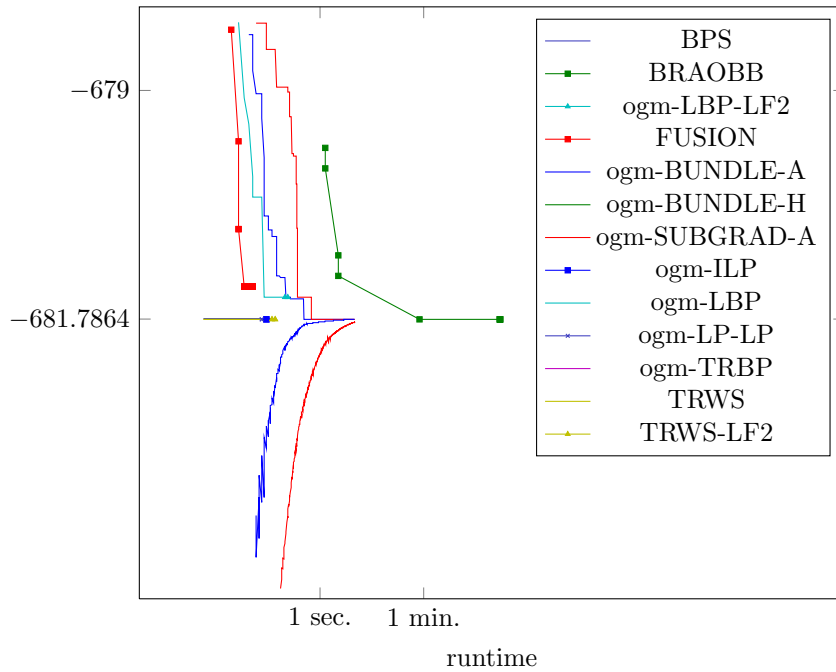


Figure 807: Runtime results for the instance 9000003 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

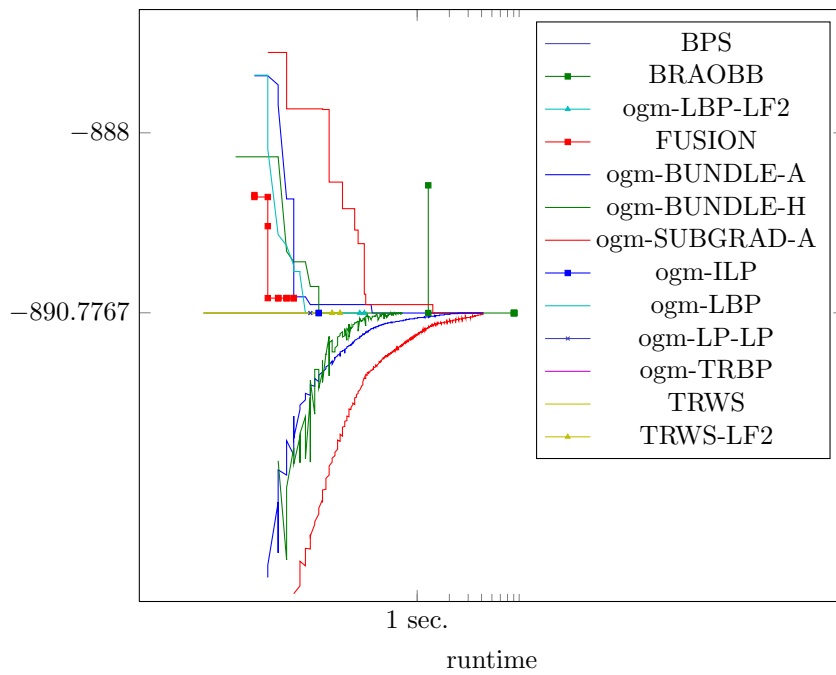


Figure 808: Runtime results for the instance 9000029 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

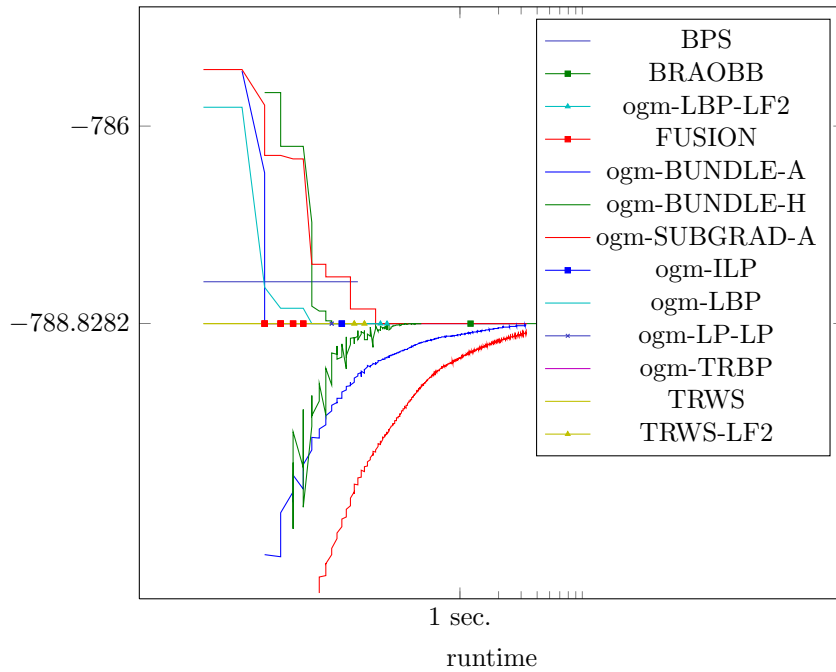


Figure 809: Runtime results for the instance *9000127* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

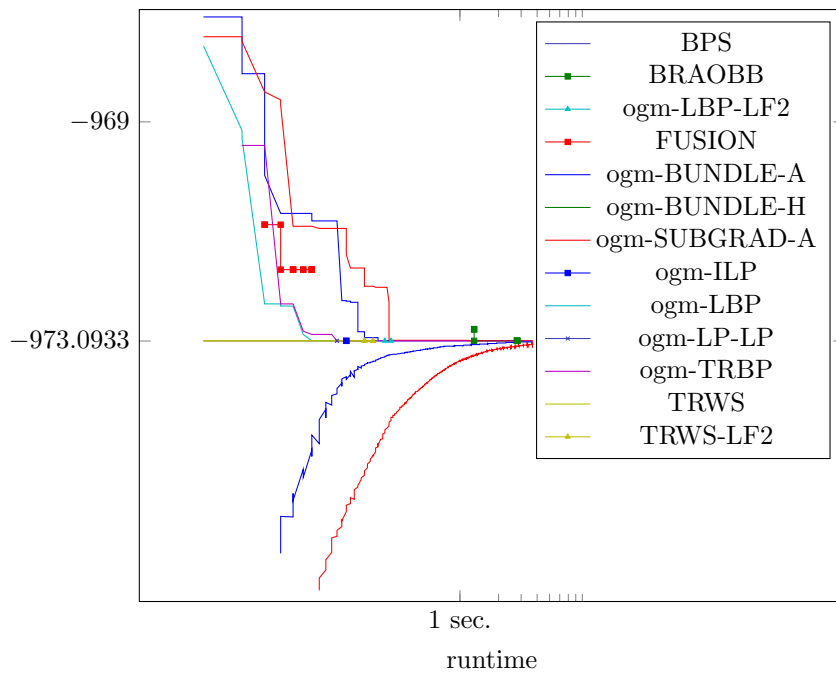


Figure 810: Runtime results for the instance *9000136* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

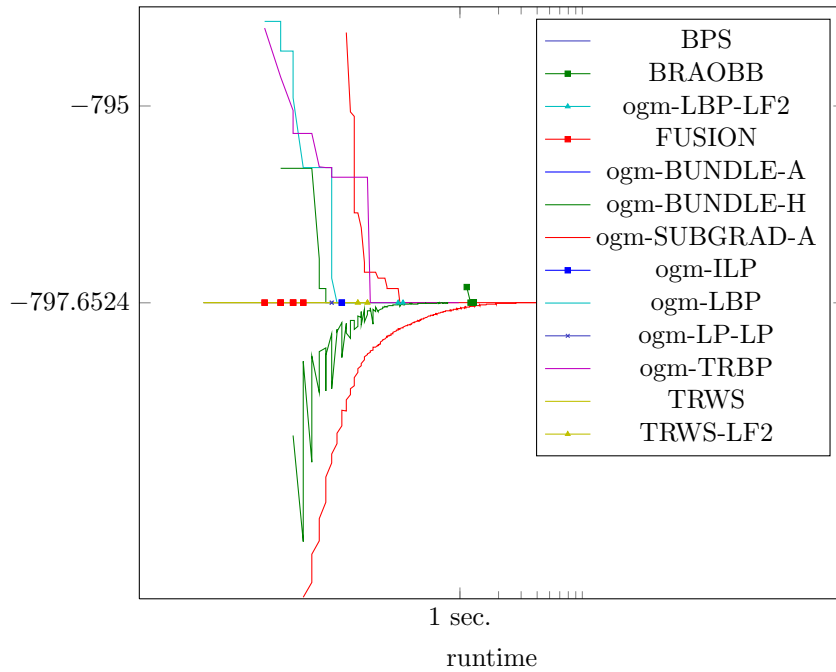


Figure 811: Runtime results for the instance 9000210 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

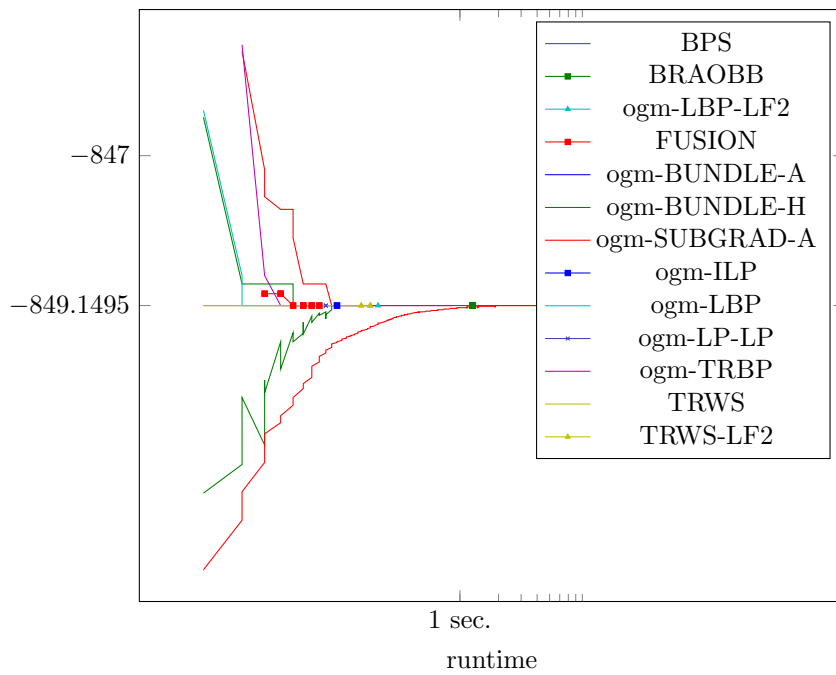


Figure 812: Runtime results for the instance 9000288 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

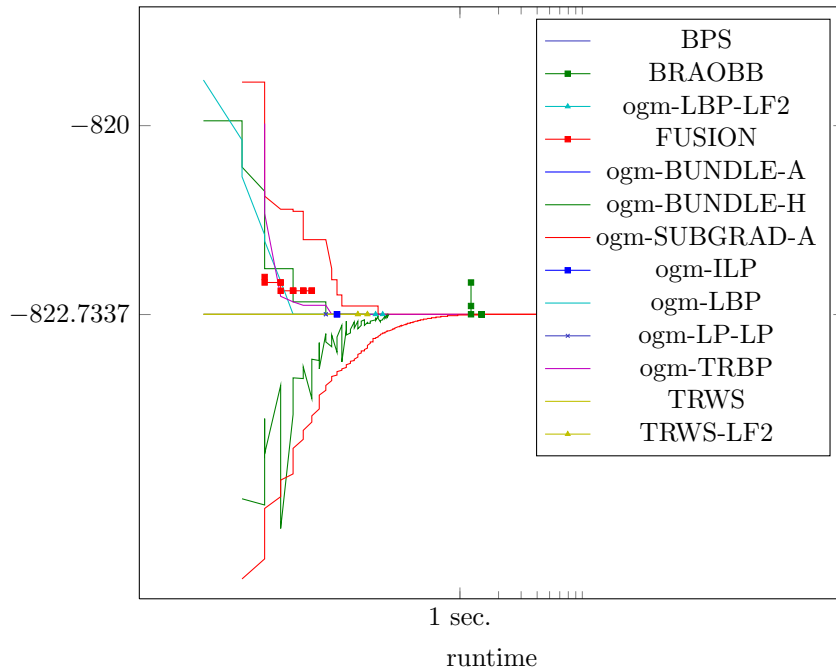


Figure 813: Runtime results for the instance 9000395 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

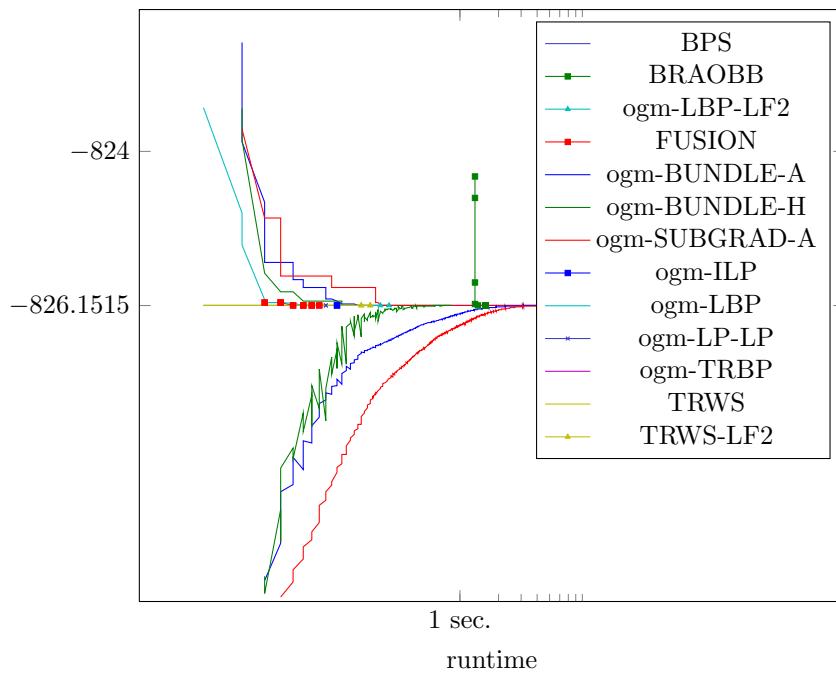


Figure 814: Runtime results for the instance 9000747 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

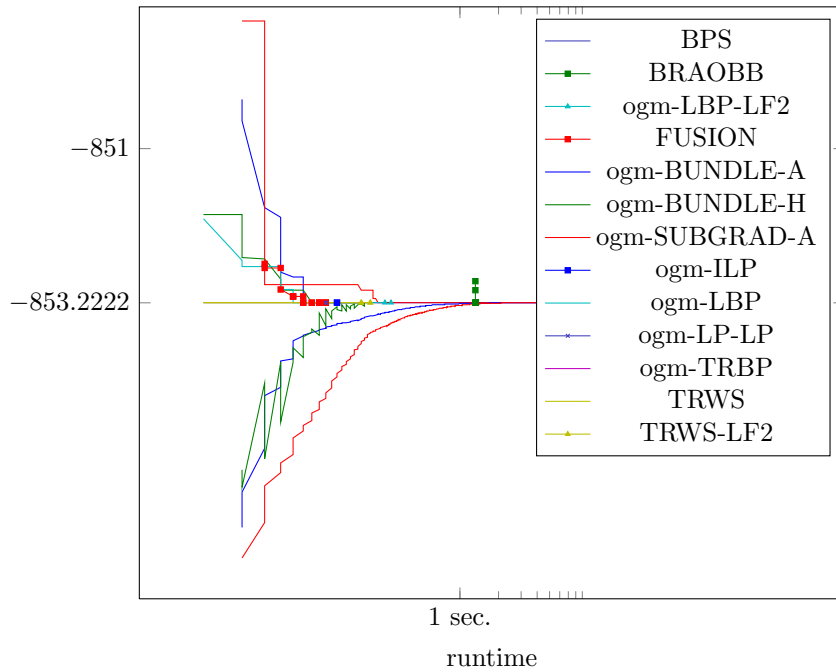


Figure 815: Runtime results for the instance 9000868 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

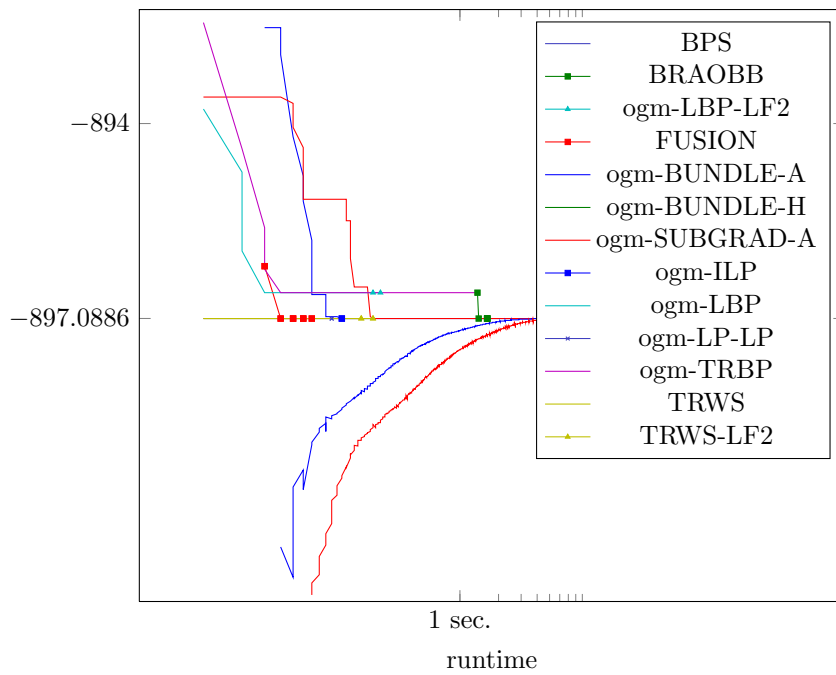


Figure 816: Runtime results for the instance 9000875 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

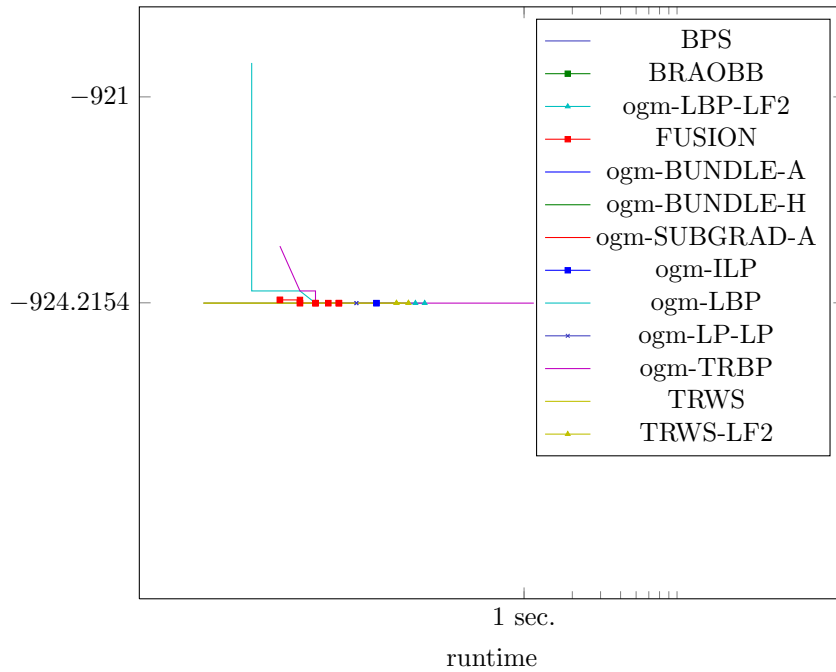


Figure 817: Runtime results for the instance 9000928 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

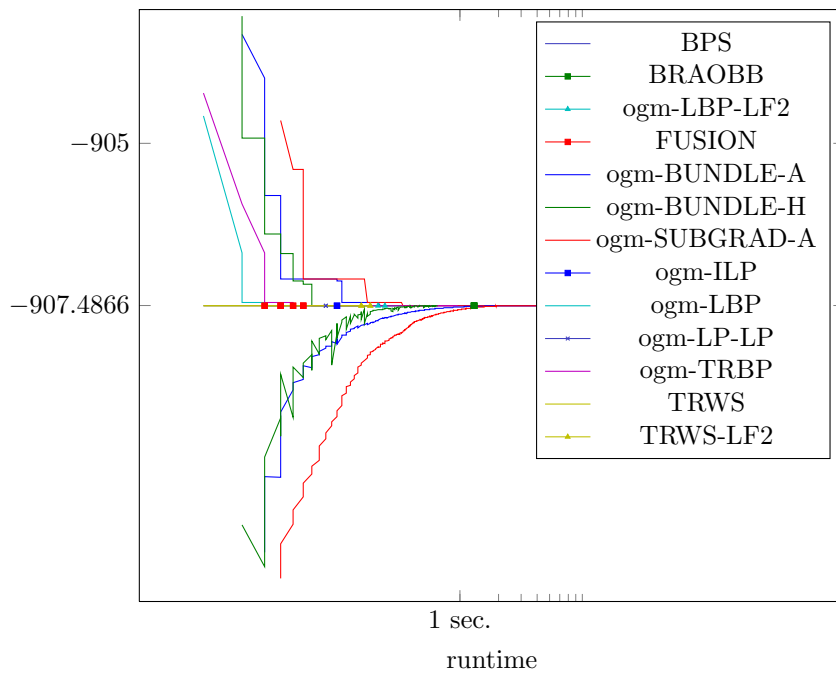


Figure 818: Runtime results for the instance 9000933 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

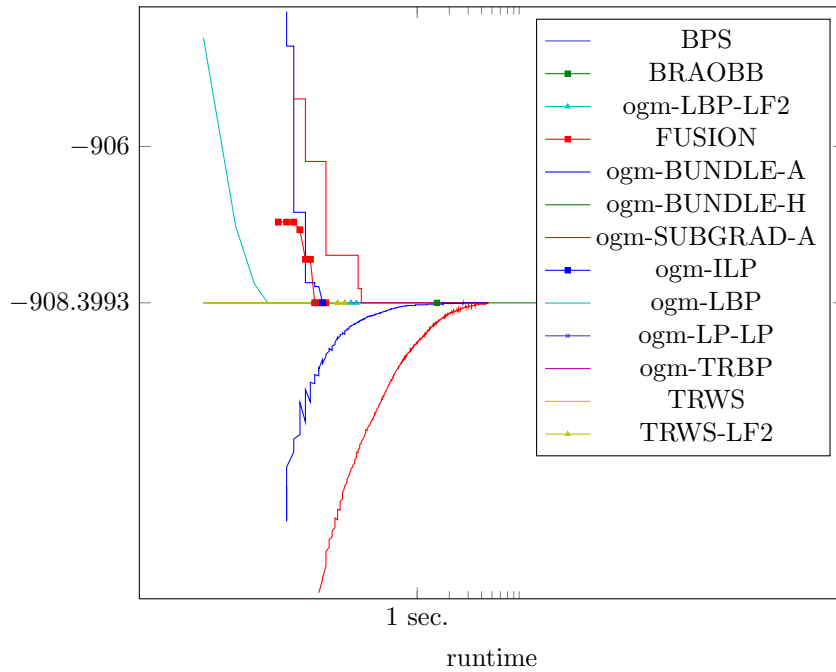


Figure 819: Runtime results for the instance 9000989 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

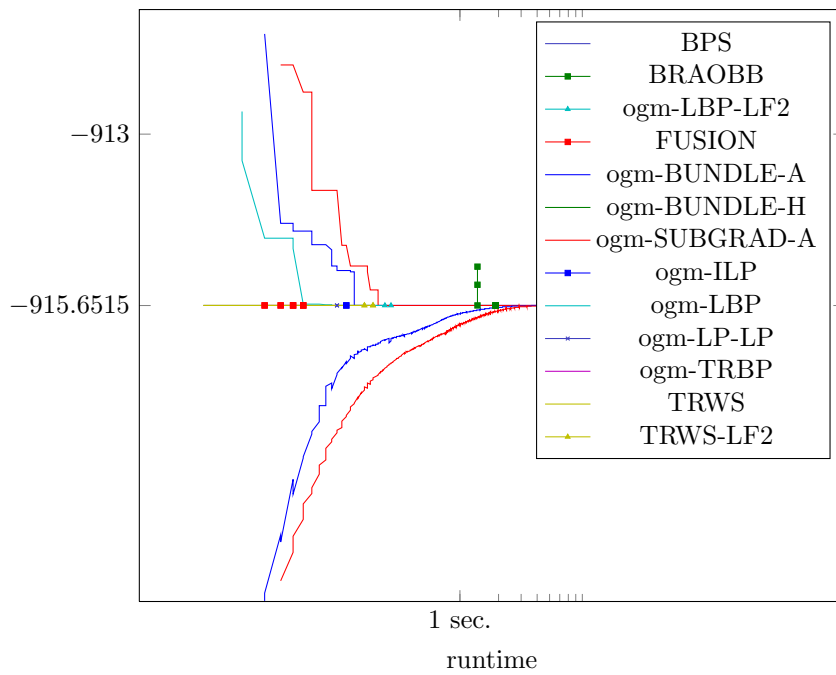


Figure 820: Runtime results for the instance 9001001 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

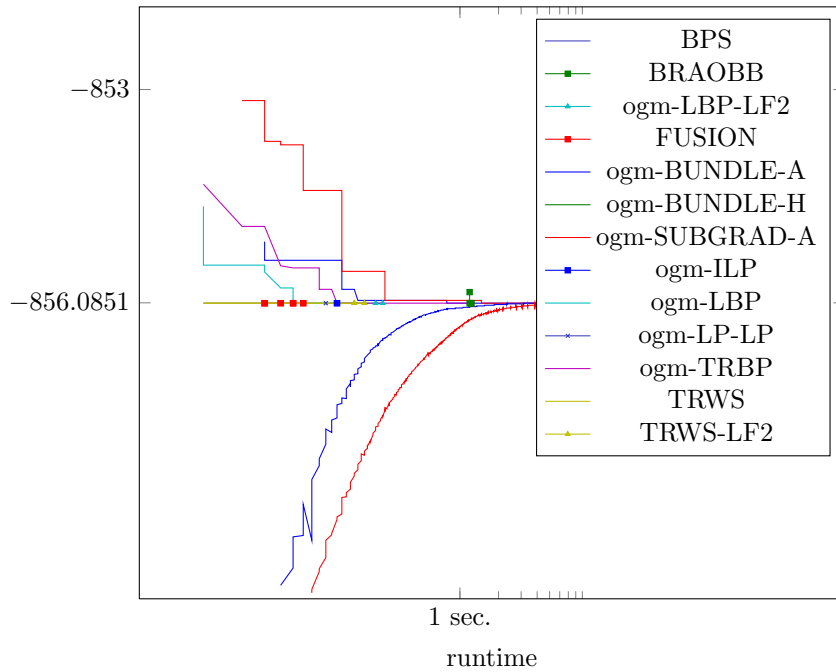


Figure 821: Runtime results for the instance *9001034* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

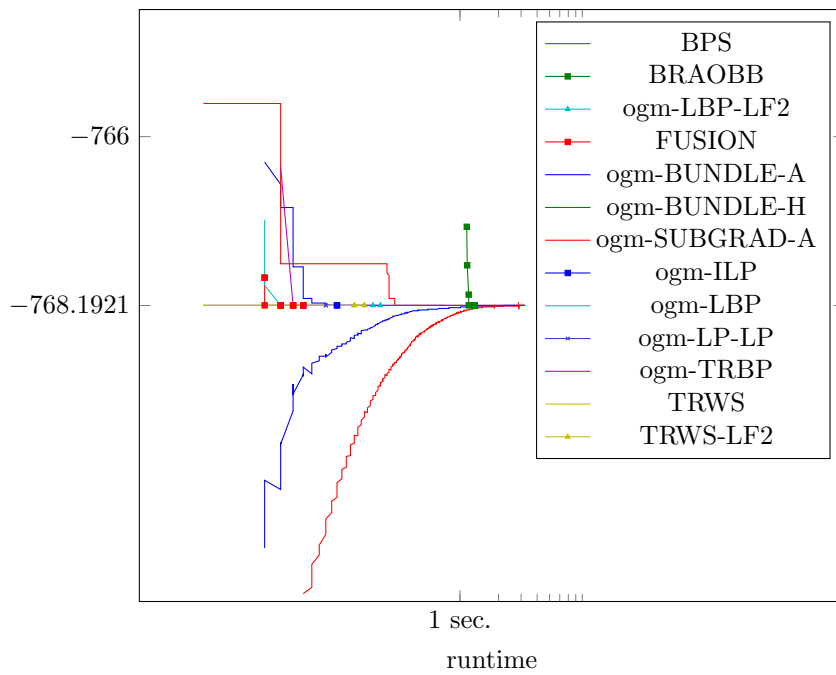


Figure 822: Runtime results for the instance *9001071* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

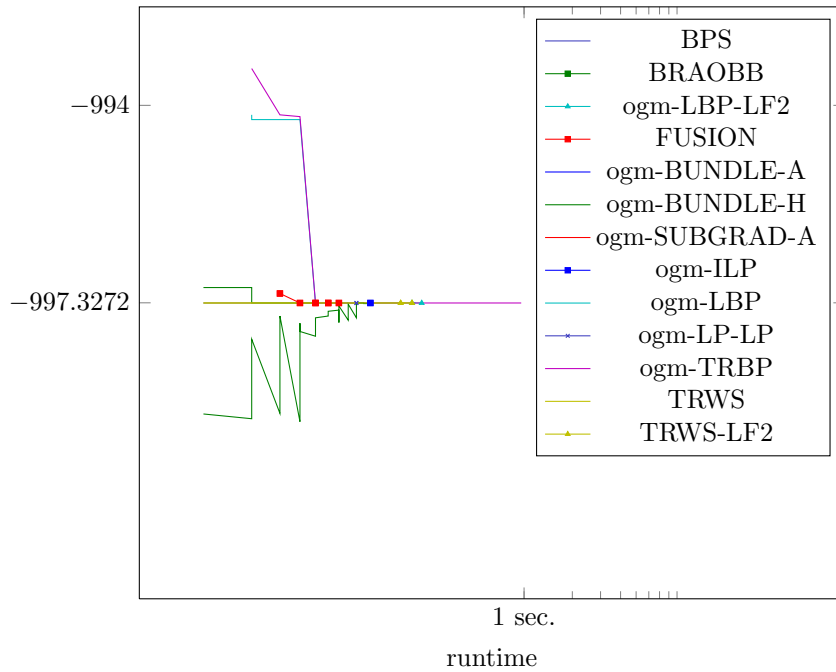


Figure 823: Runtime results for the instance *9001184* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

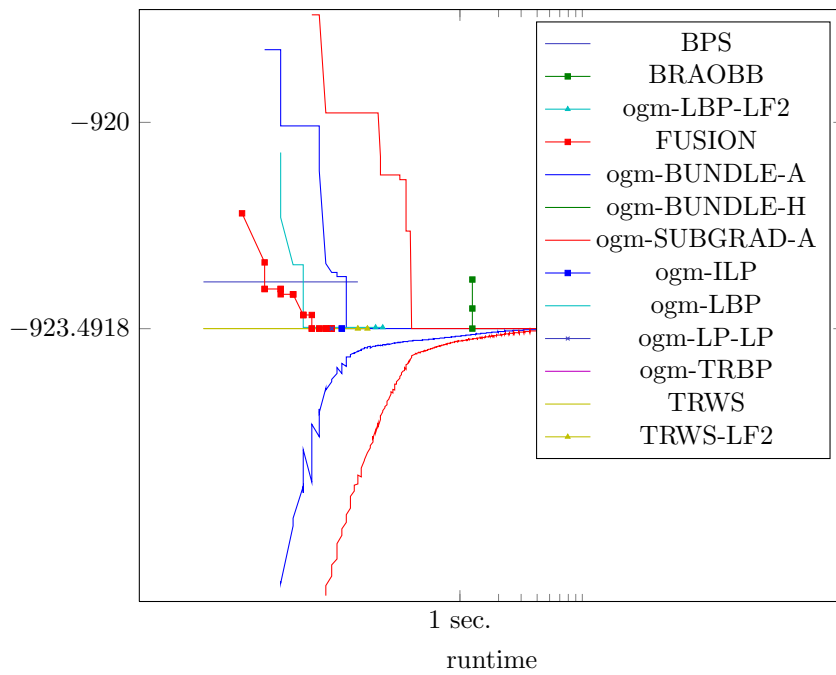


Figure 824: Runtime results for the instance *9001300* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

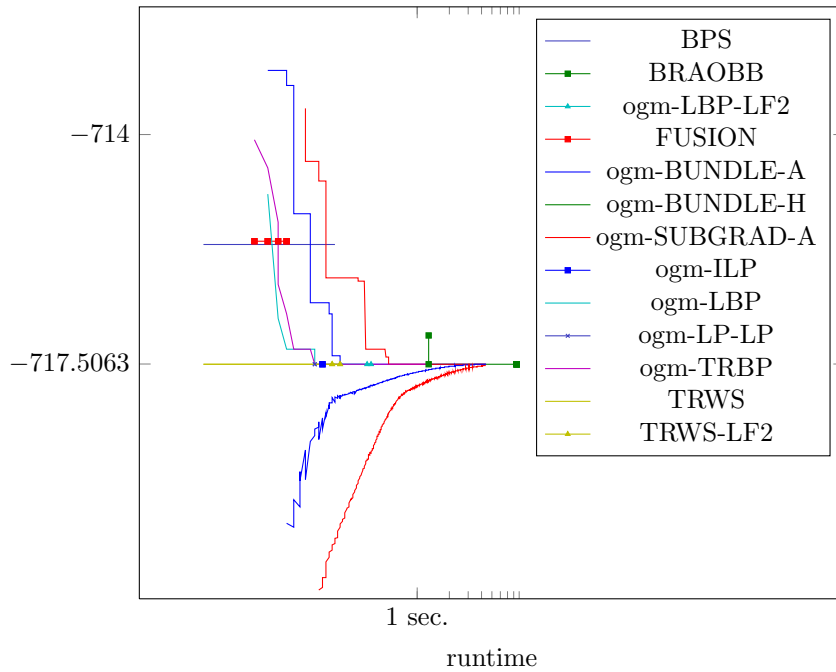


Figure 825: Runtime results for the instance 9001317 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

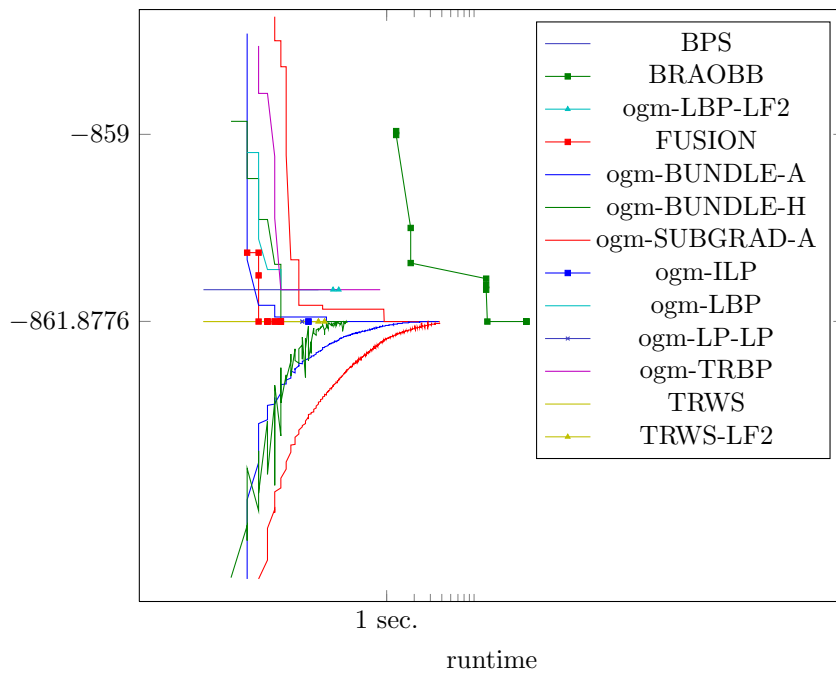


Figure 826: Runtime results for the instance 9001619 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

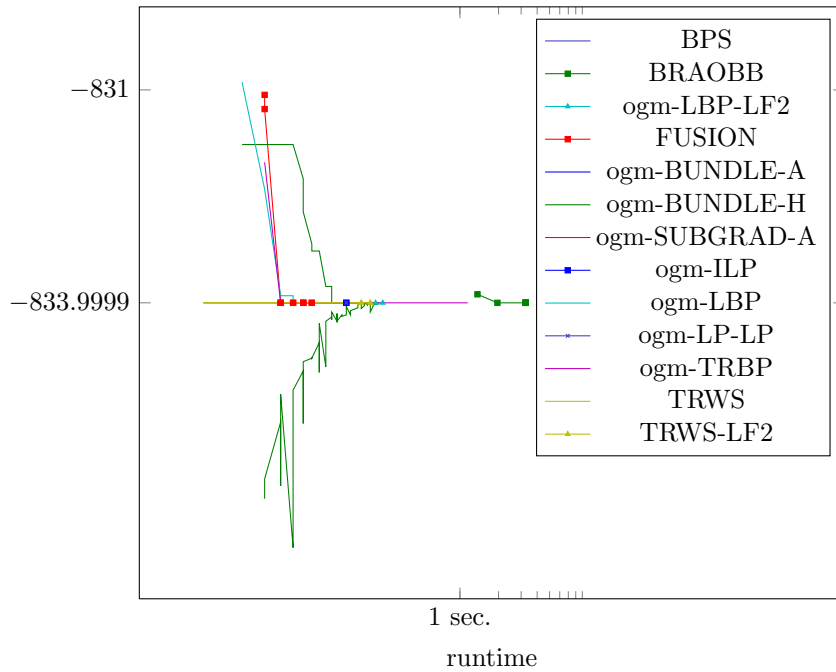


Figure 827: Runtime results for the instance 9001713 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

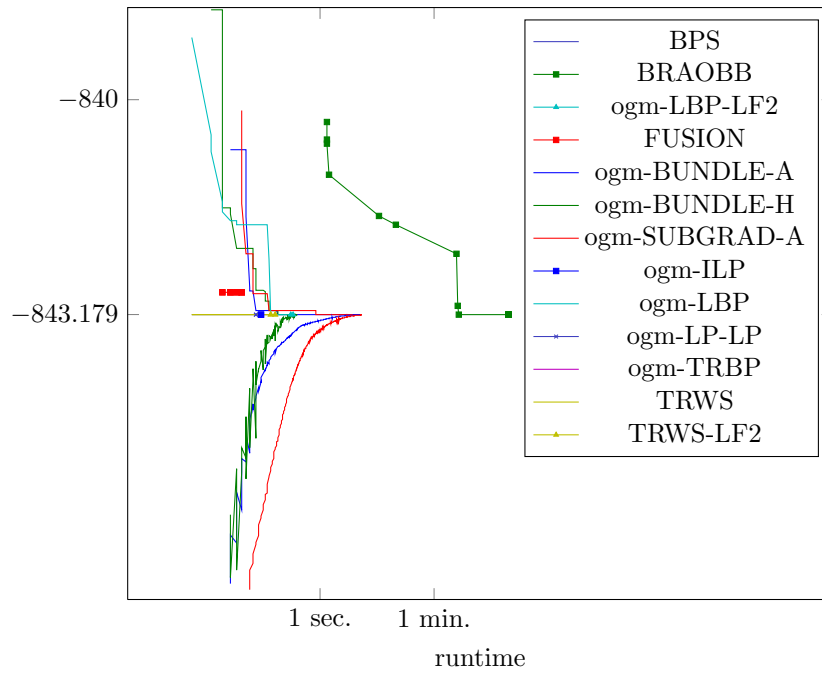


Figure 828: Runtime results for the instance 9001991 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

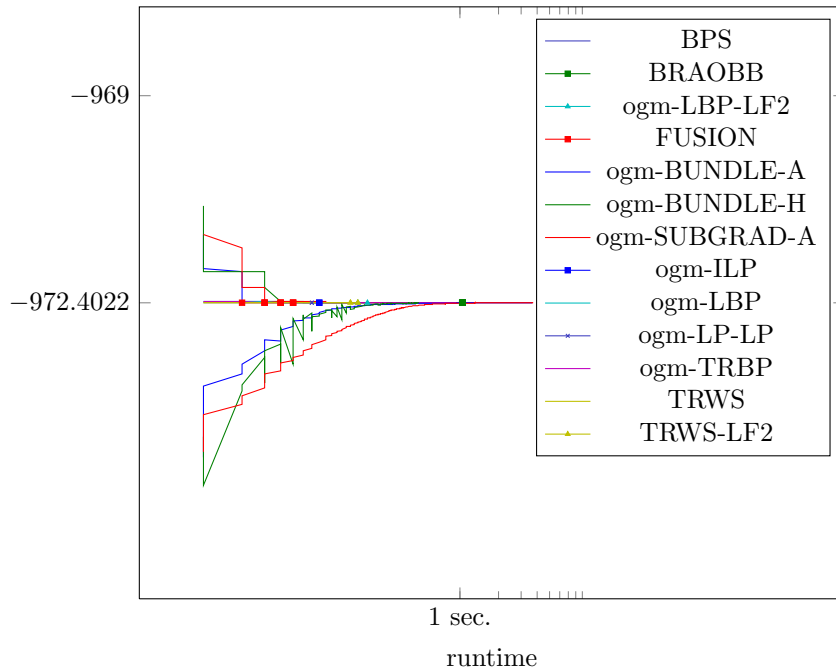


Figure 829: Runtime results for the instance 9002004 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

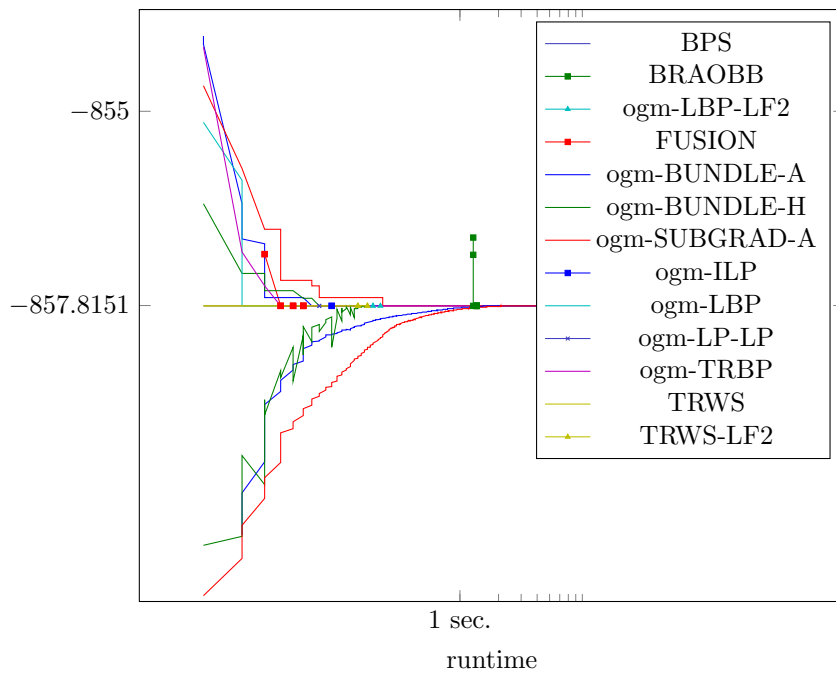


Figure 830: Runtime results for the instance 9002021 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

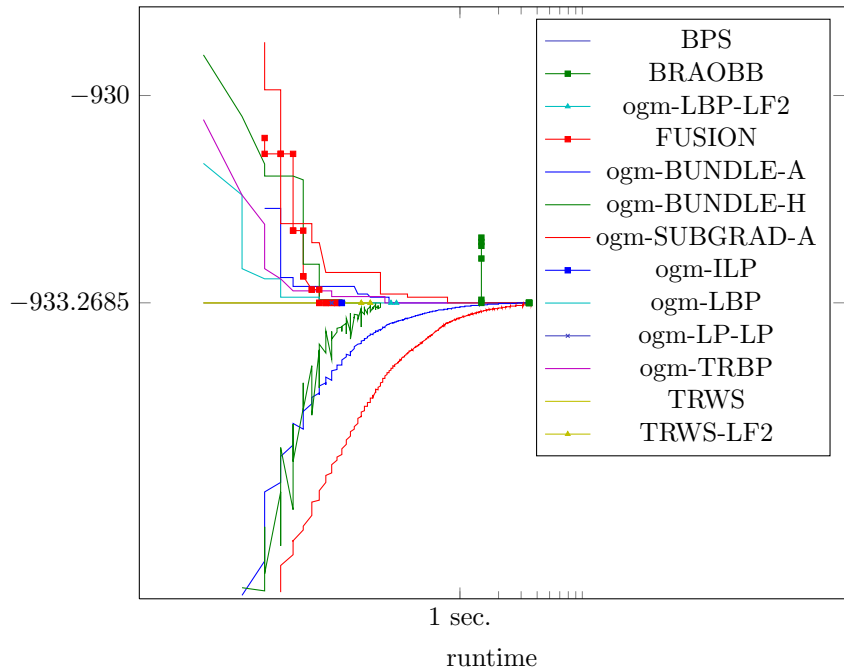


Figure 831: Runtime results for the instance 9002090 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

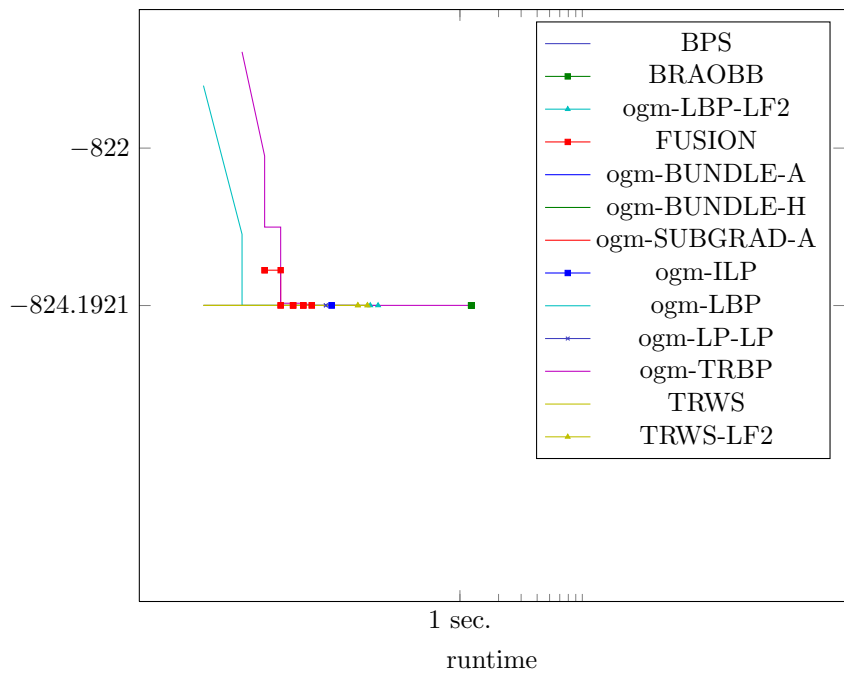


Figure 832: Runtime results for the instance 9002114 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

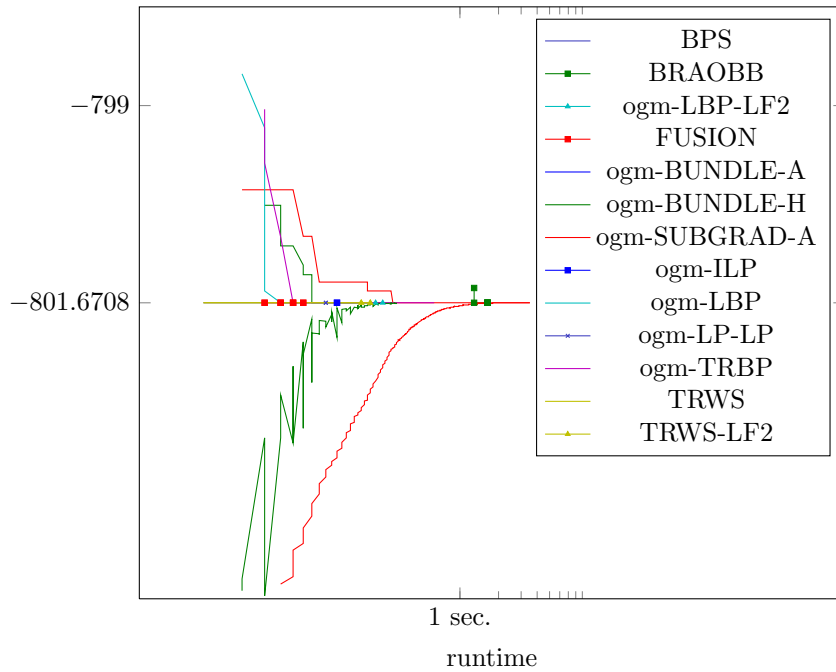


Figure 833: Runtime results for the instance 9002474 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

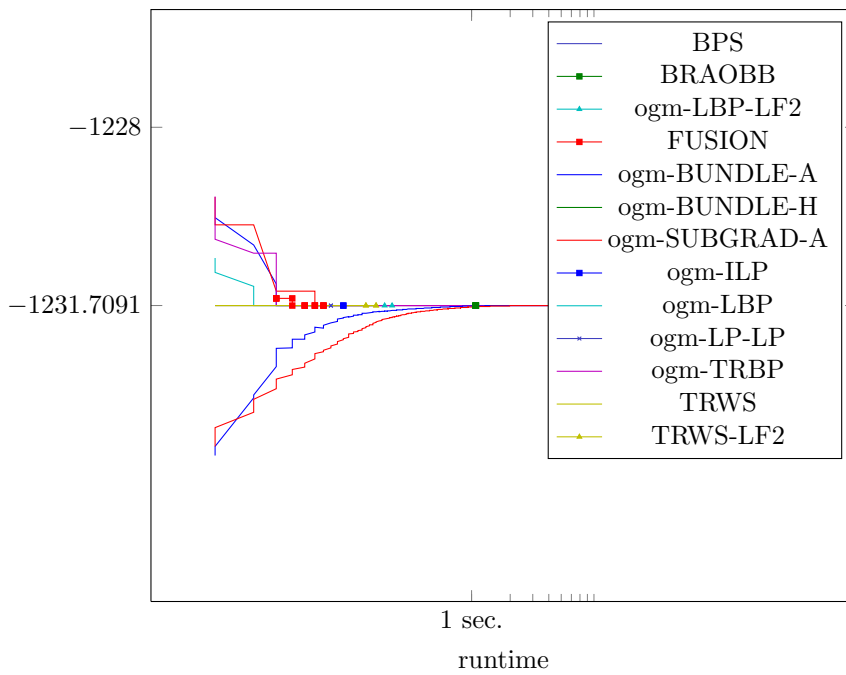


Figure 834: Runtime results for the instance 9002577 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

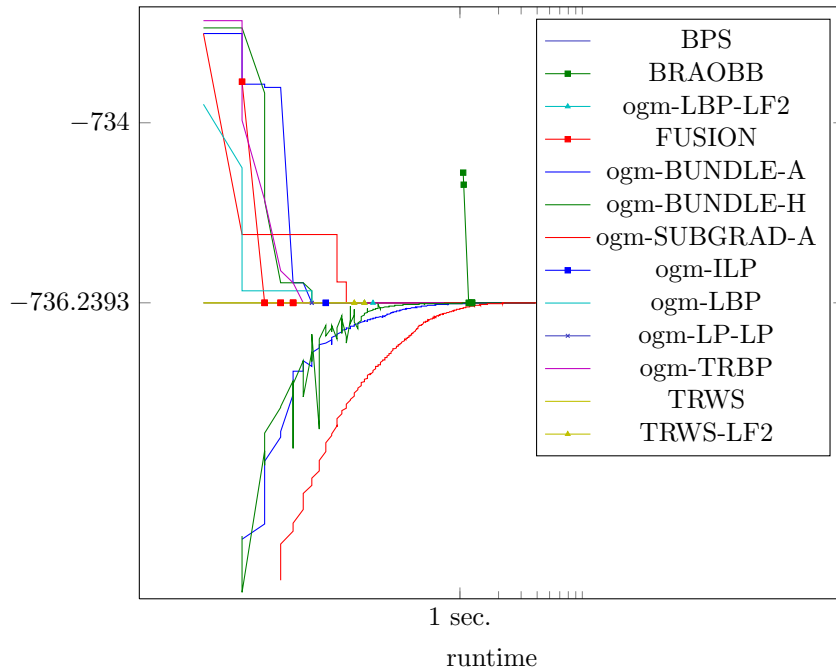


Figure 835: Runtime results for the instance 9002827 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

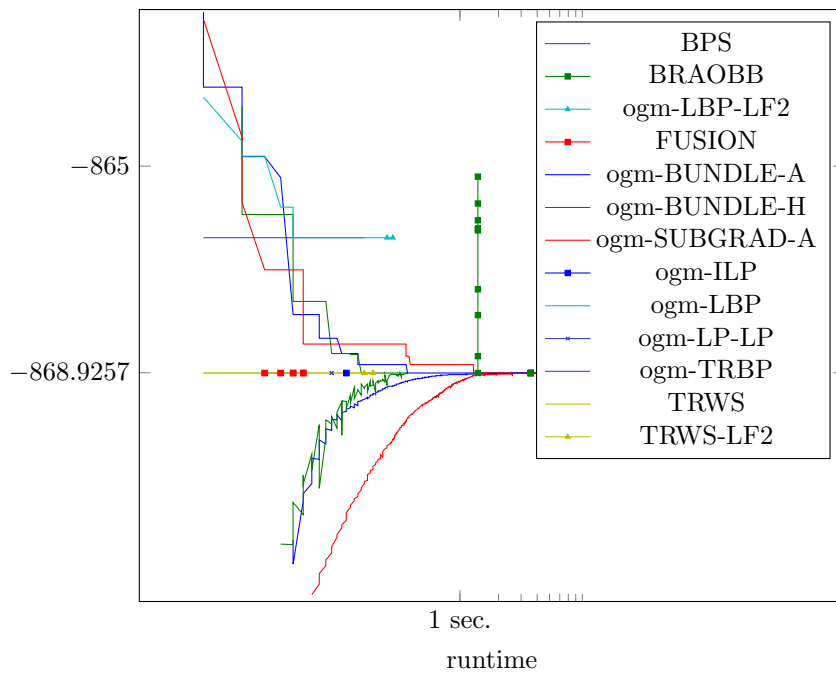


Figure 836: Runtime results for the instance 9002861 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

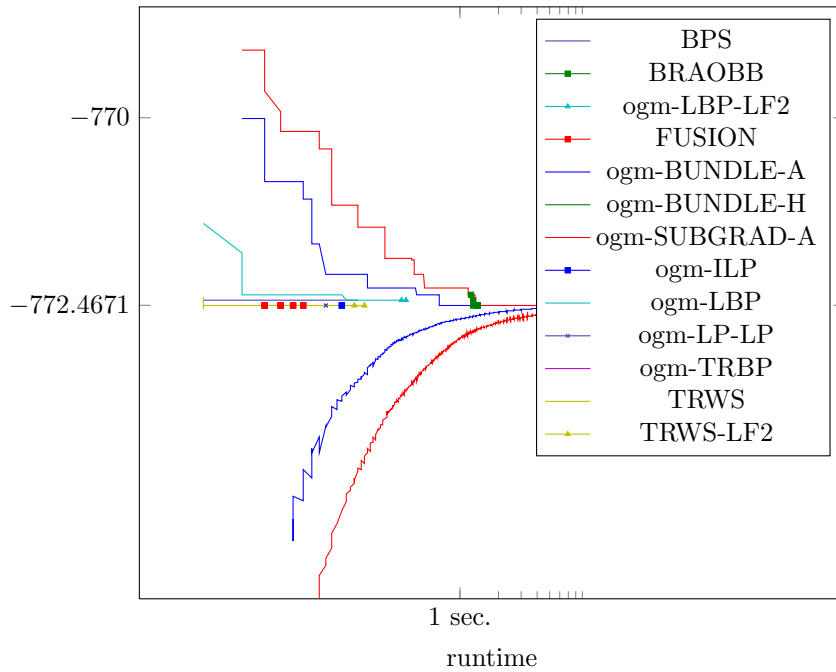


Figure 837: Runtime results for the instance 9002972 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

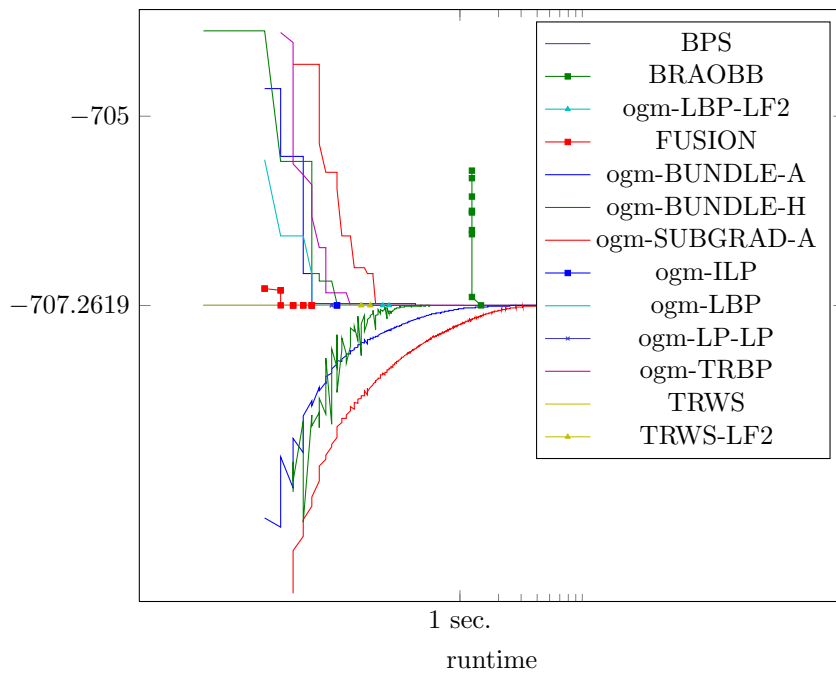


Figure 838: Runtime results for the instance 9003116 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

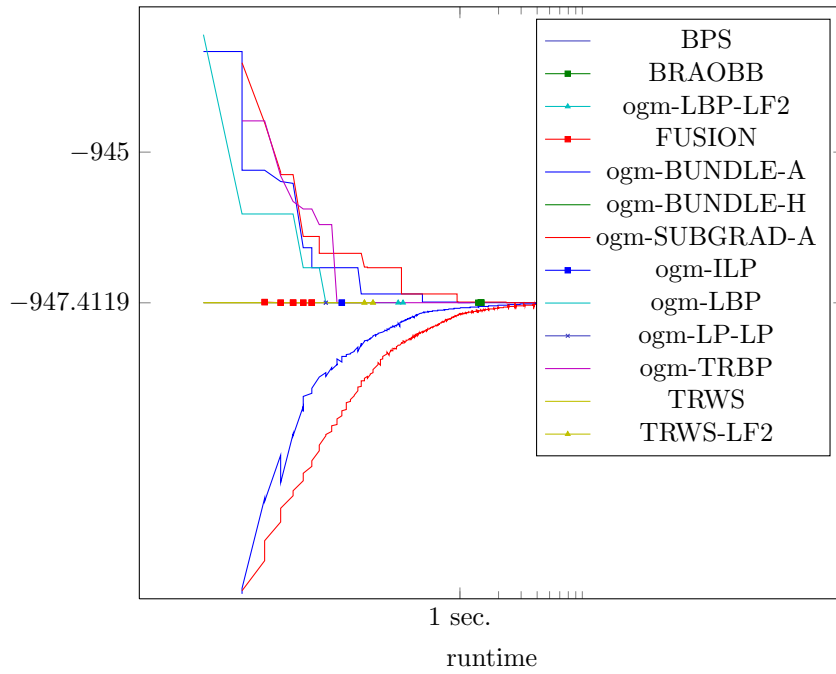


Figure 839: Runtime results for the instance 9003135 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

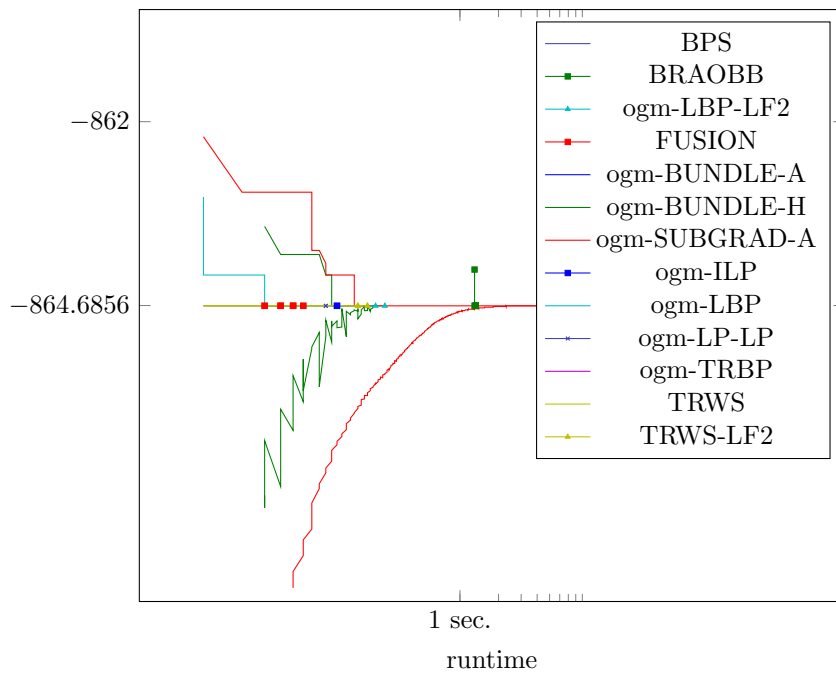


Figure 840: Runtime results for the instance 9003234 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

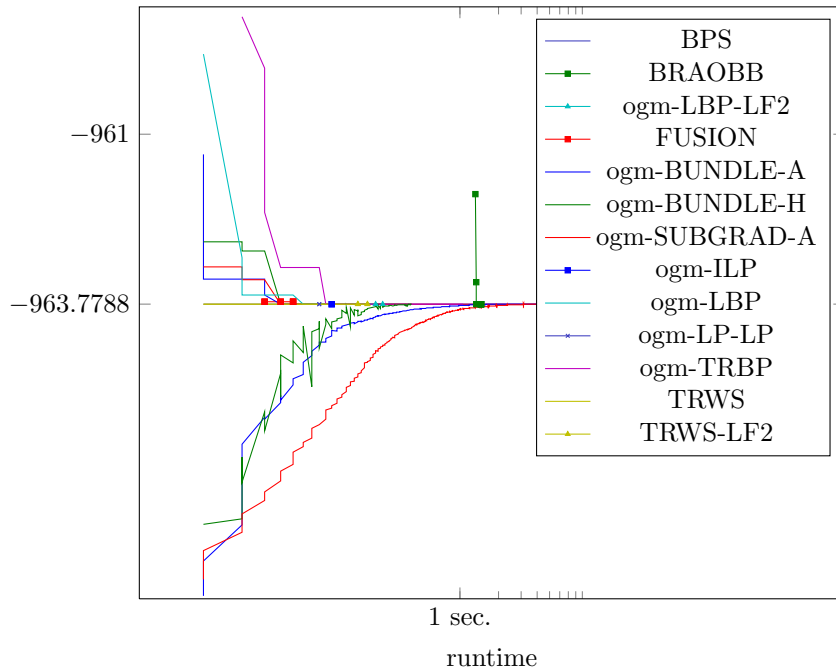


Figure 841: Runtime results for the instance 9003250 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

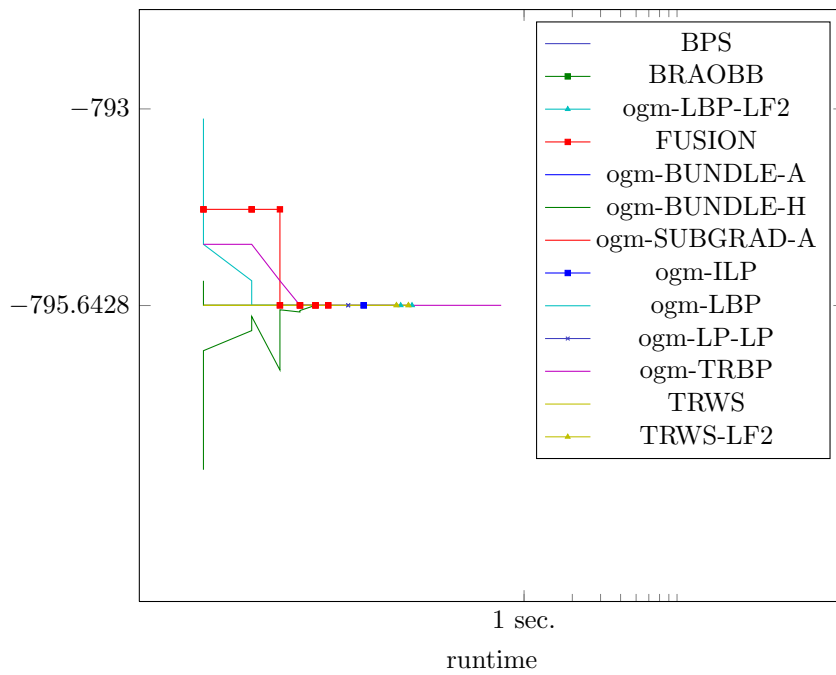


Figure 842: Runtime results for the instance 9003301 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

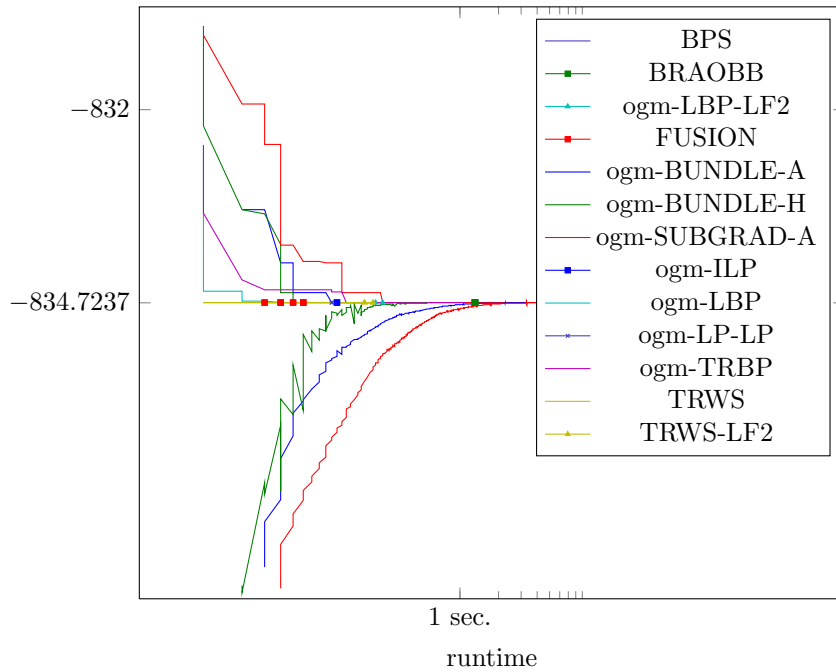


Figure 843: Runtime results for the instance 9003333 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

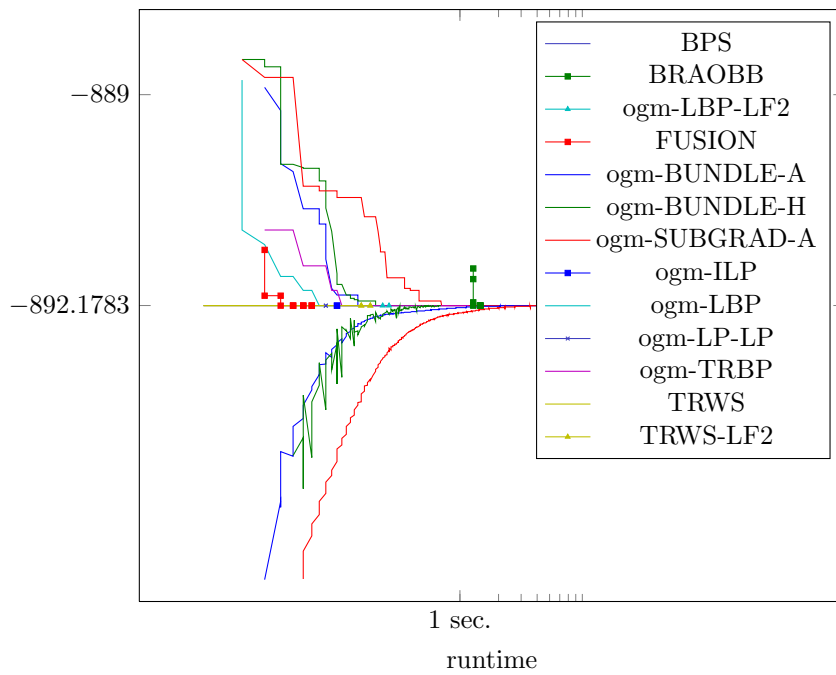


Figure 844: Runtime results for the instance 9003339 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

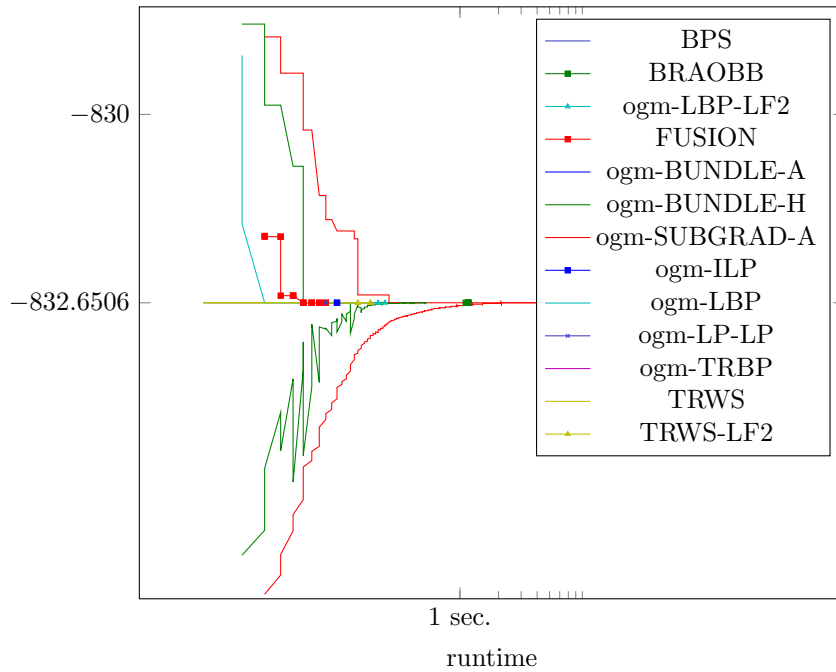


Figure 845: Runtime results for the instance 9003378 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

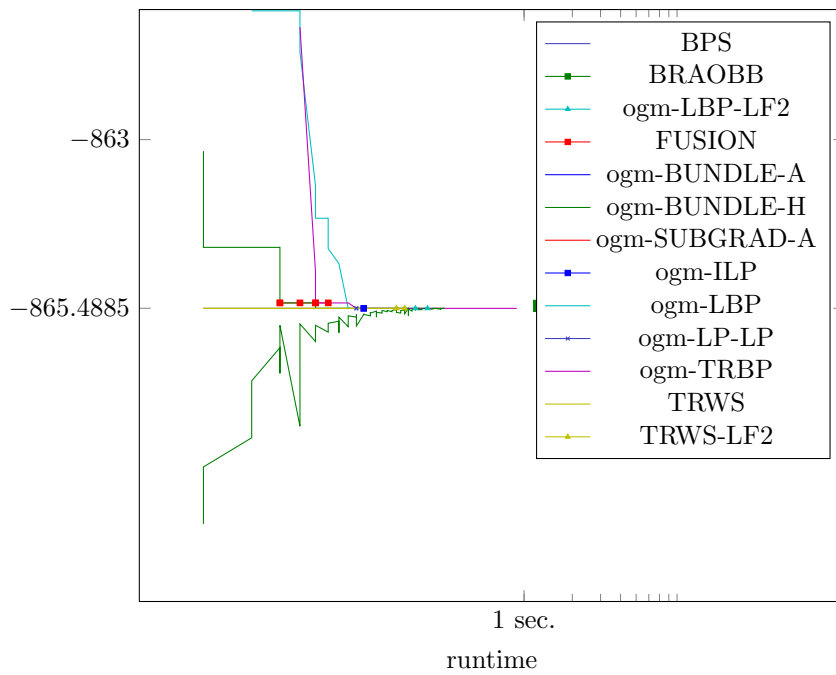


Figure 846: Runtime results for the instance 9003423 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

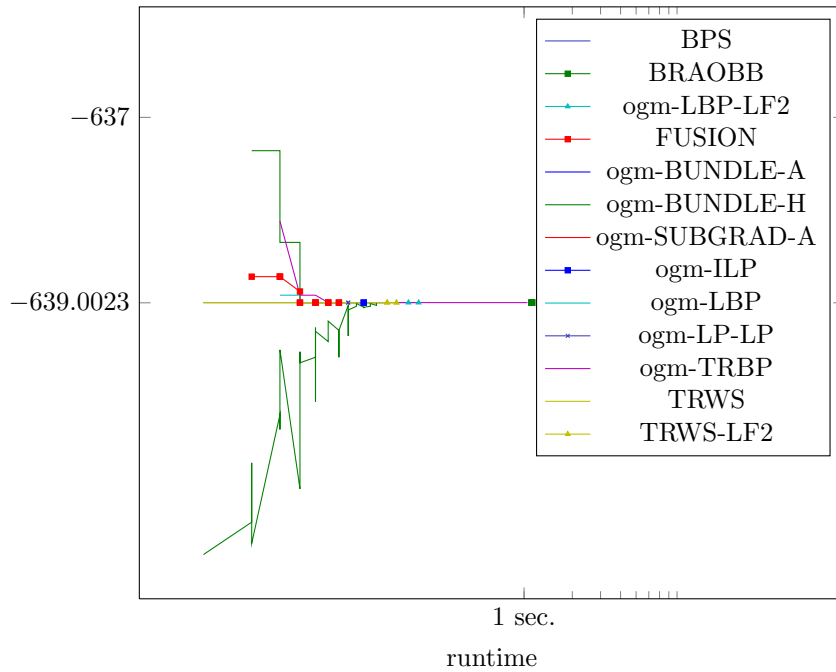


Figure 847: Runtime results for the instance 9003585 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

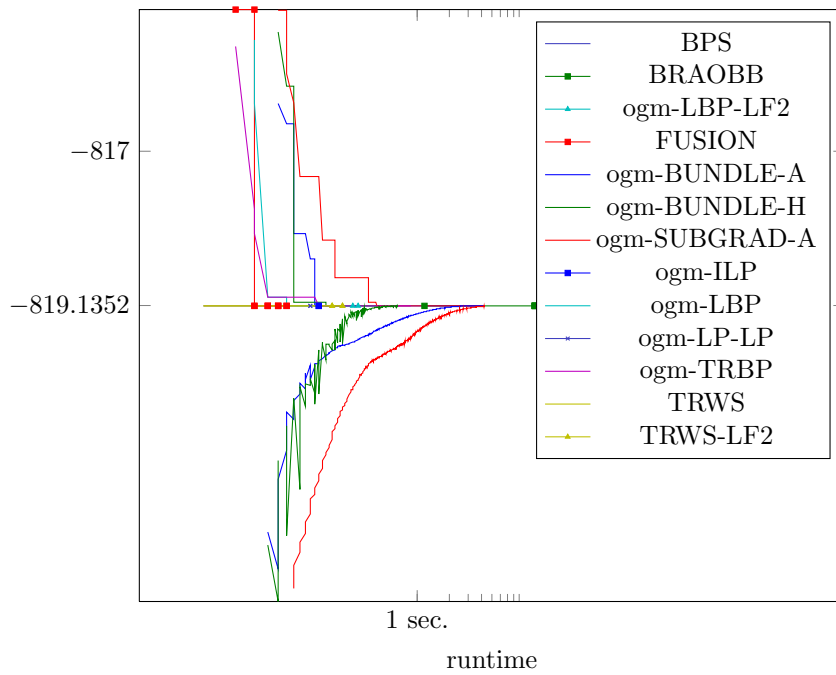


Figure 848: Runtime results for the instance 9003635 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

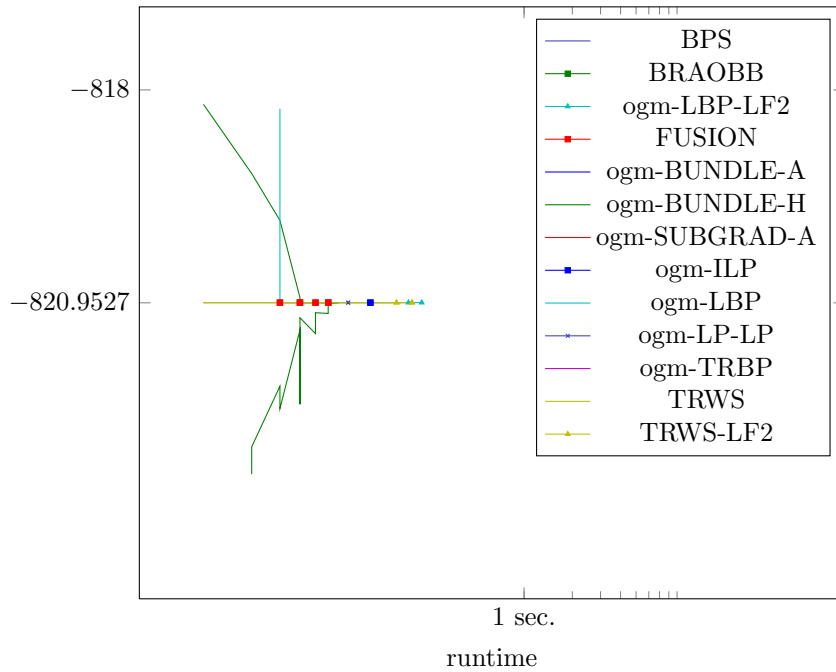


Figure 849: Runtime results for the instance 9003836 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

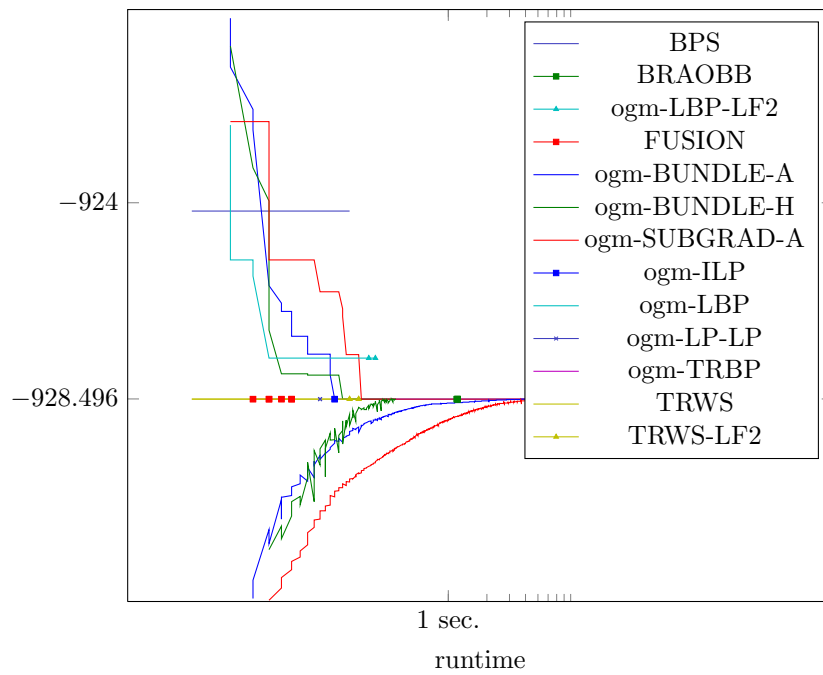


Figure 850: Runtime results for the instance 9004060 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

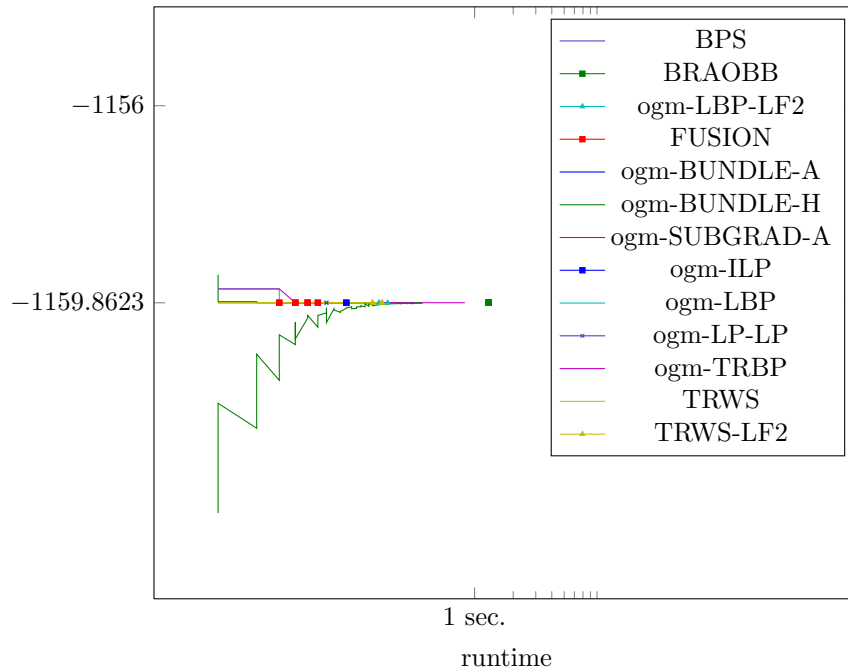


Figure 851: Runtime results for the instance 9004066 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

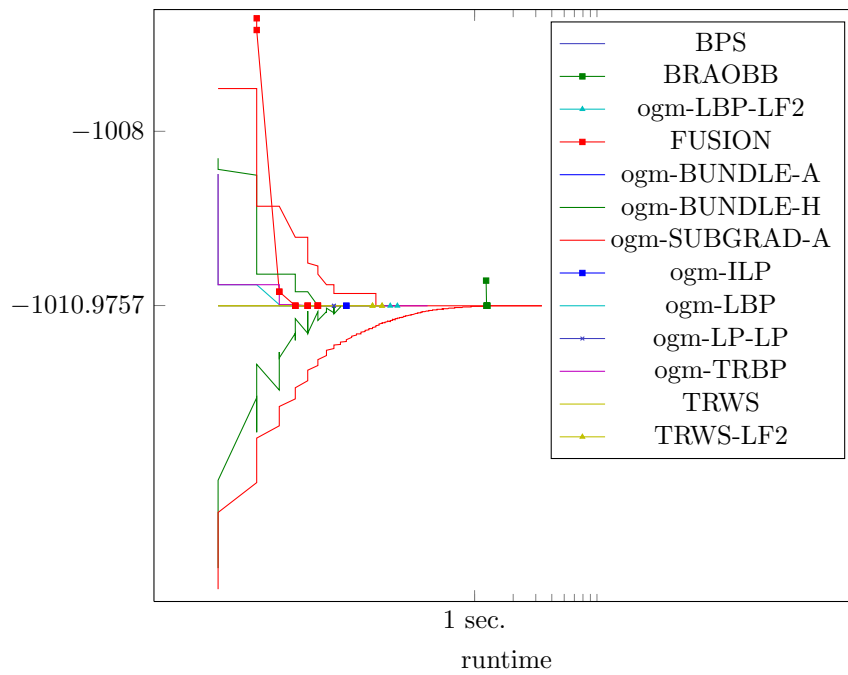


Figure 852: Runtime results for the instance 9004070 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

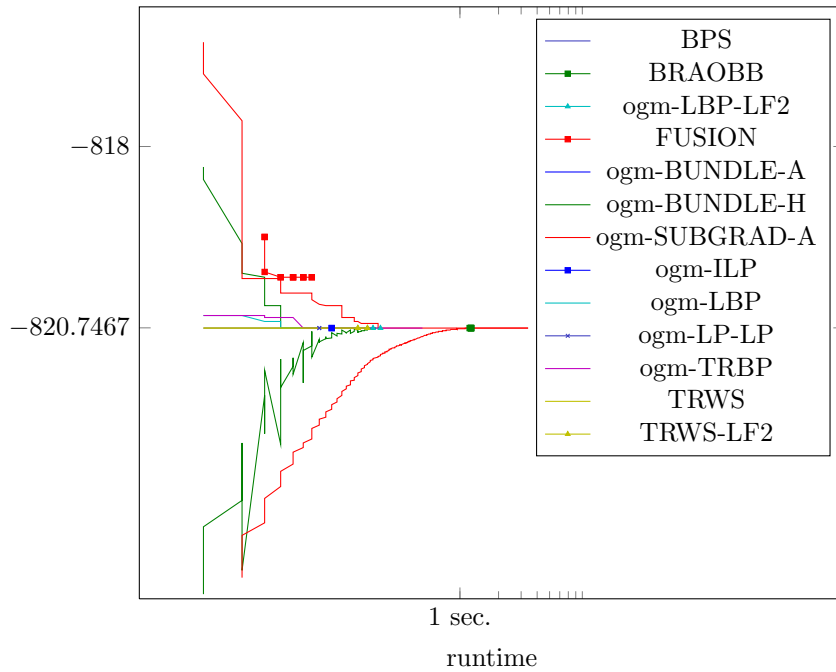


Figure 853: Runtime results for the instance 9004199 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

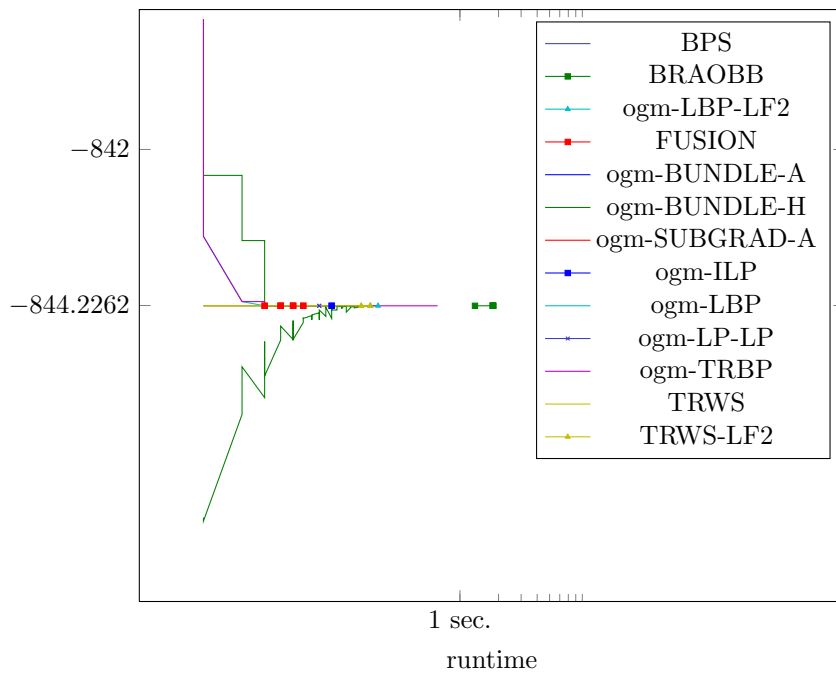


Figure 854: Runtime results for the instance 9004242 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

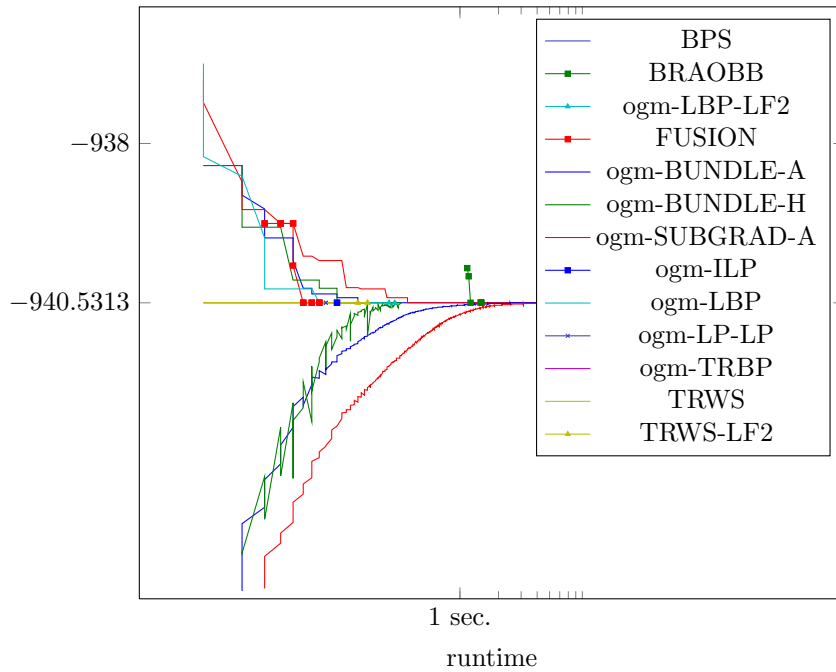


Figure 855: Runtime results for the instance *9004294* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

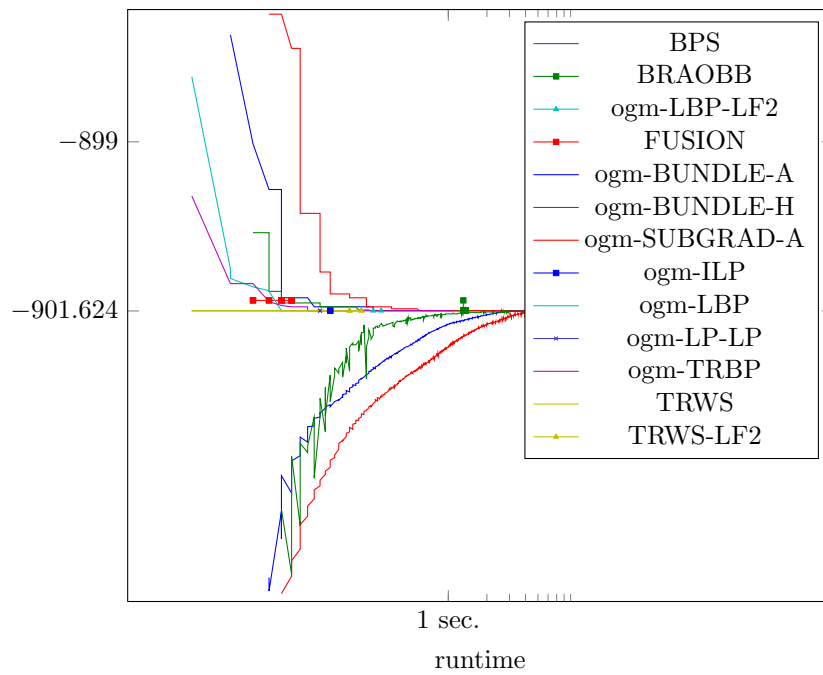


Figure 856: Runtime results for the instance *9004353* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

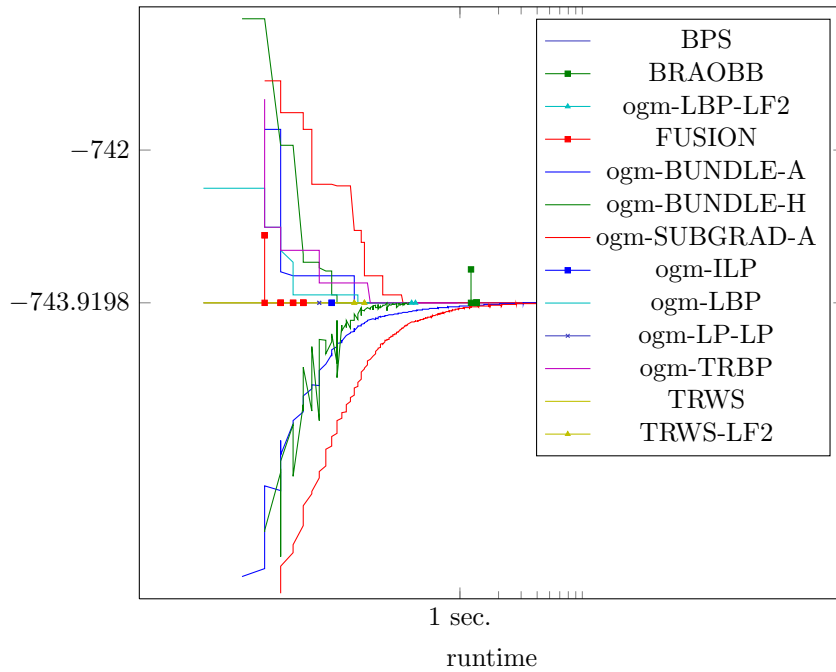


Figure 857: Runtime results for the instance 9004368 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

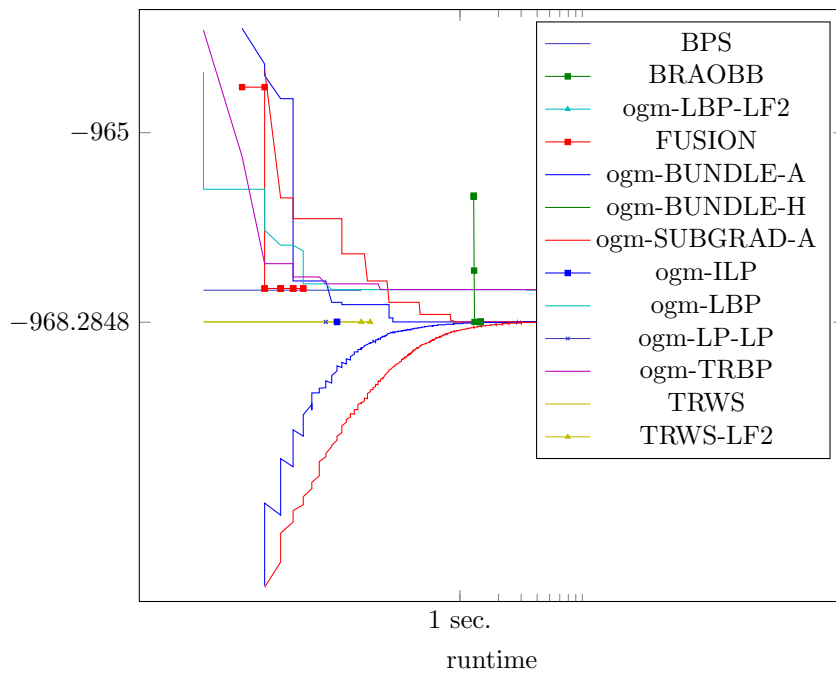


Figure 858: Runtime results for the instance 9004383 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

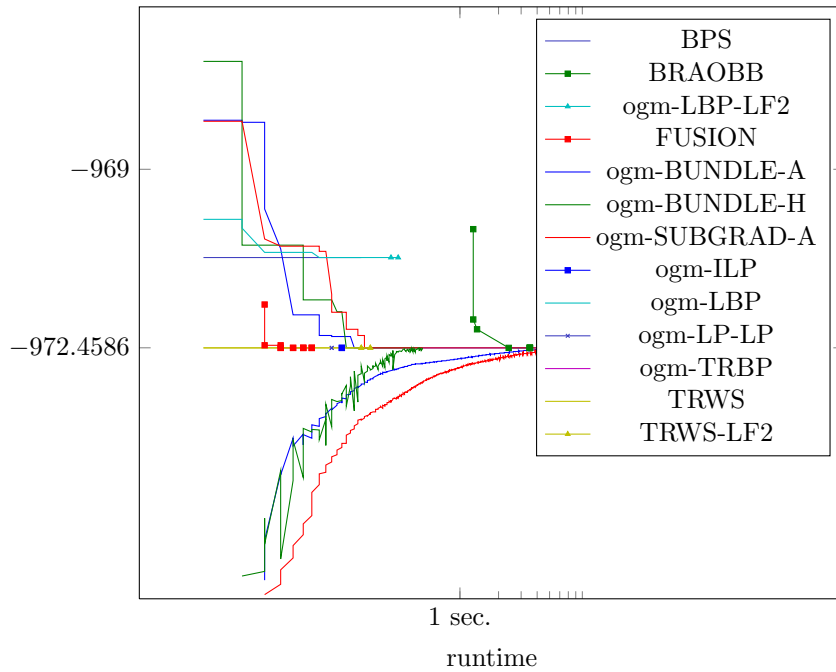


Figure 859: Runtime results for the instance 9004427 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

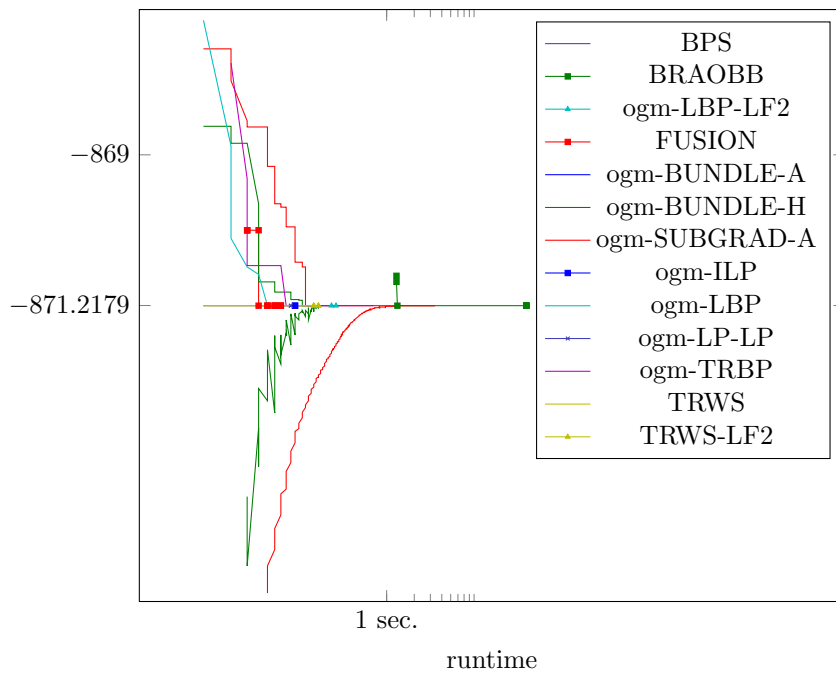


Figure 860: Runtime results for the instance 9004520 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

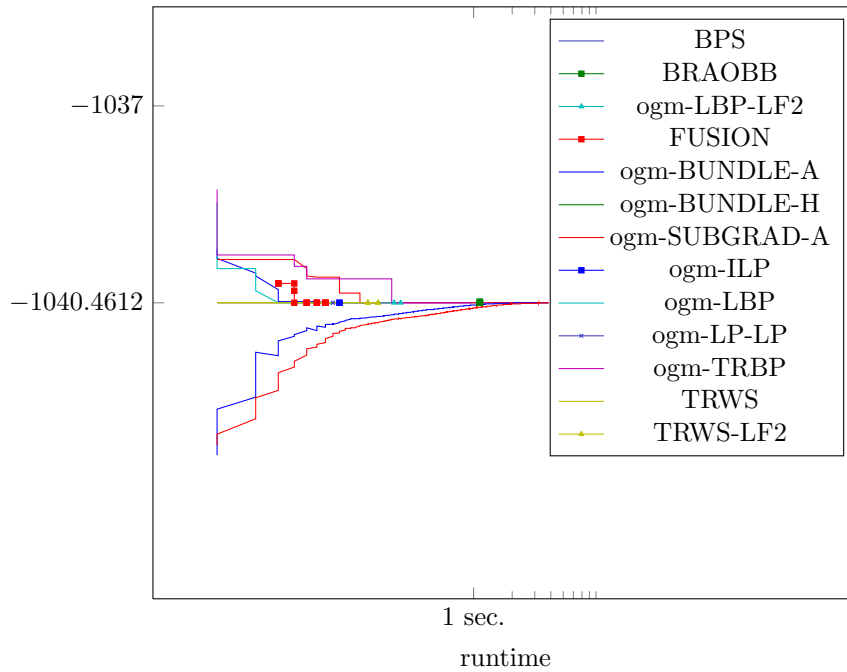


Figure 861: Runtime results for the instance 9004581 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

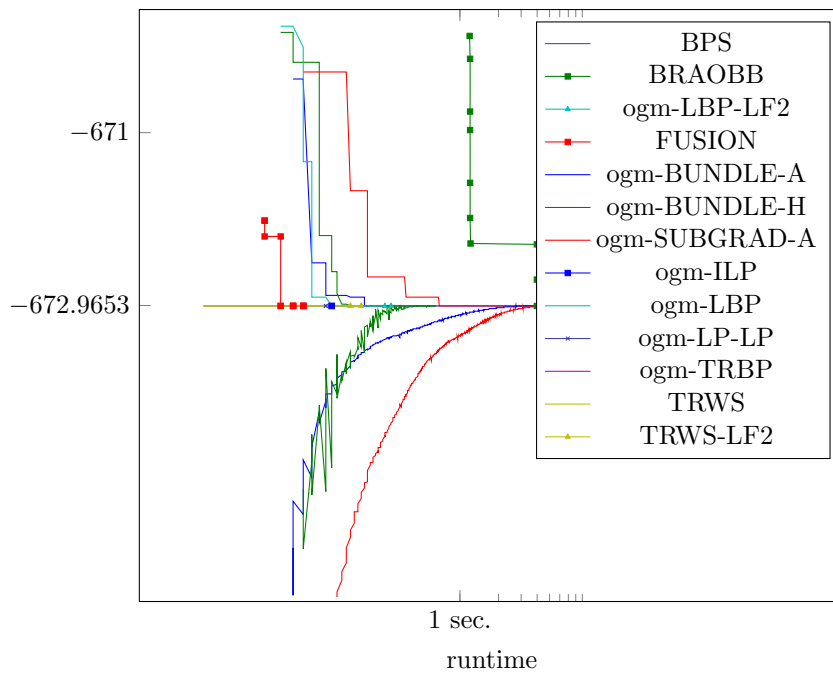


Figure 862: Runtime results for the instance 9004766 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

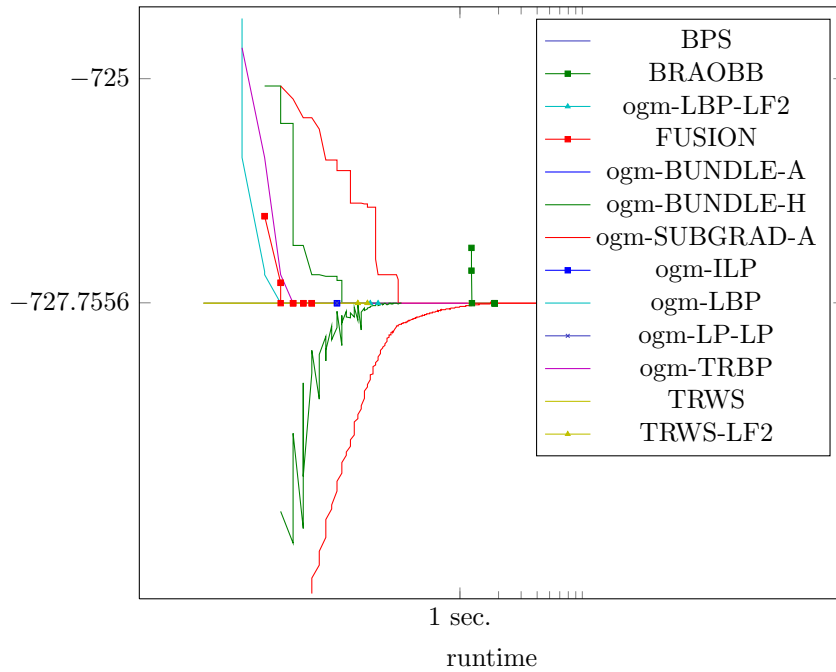


Figure 863: Runtime results for the instance 9004879 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

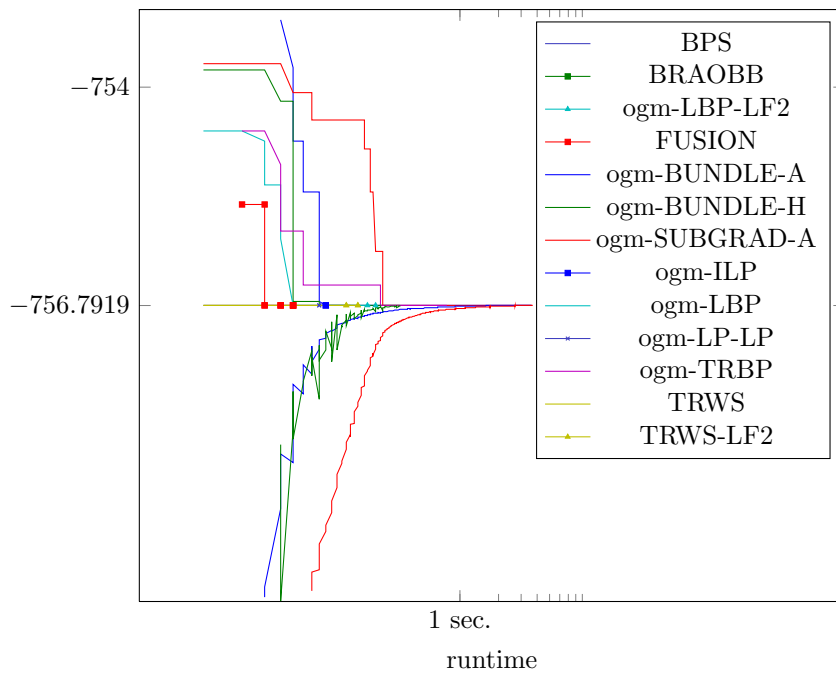


Figure 864: Runtime results for the instance 9004965 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

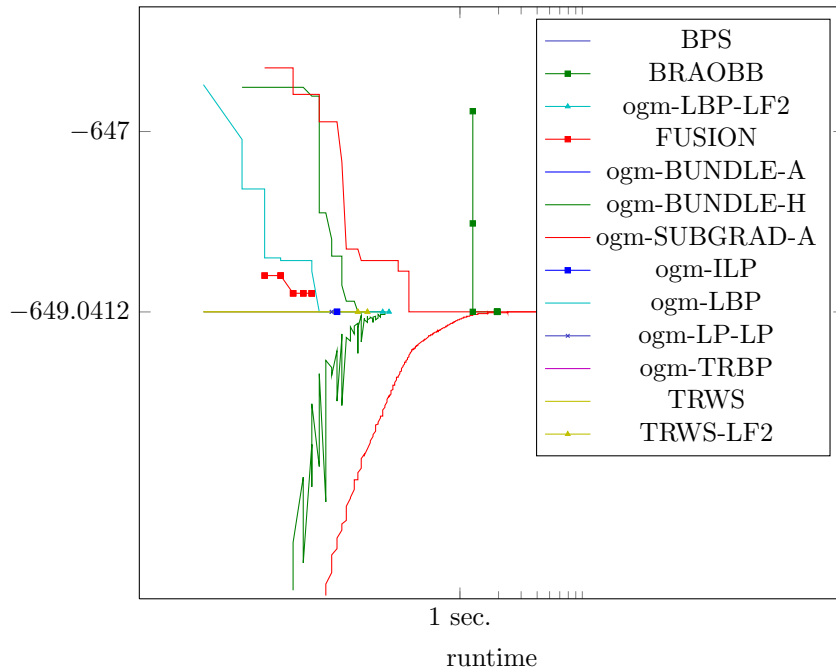


Figure 865: Runtime results for the instance *9004971* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

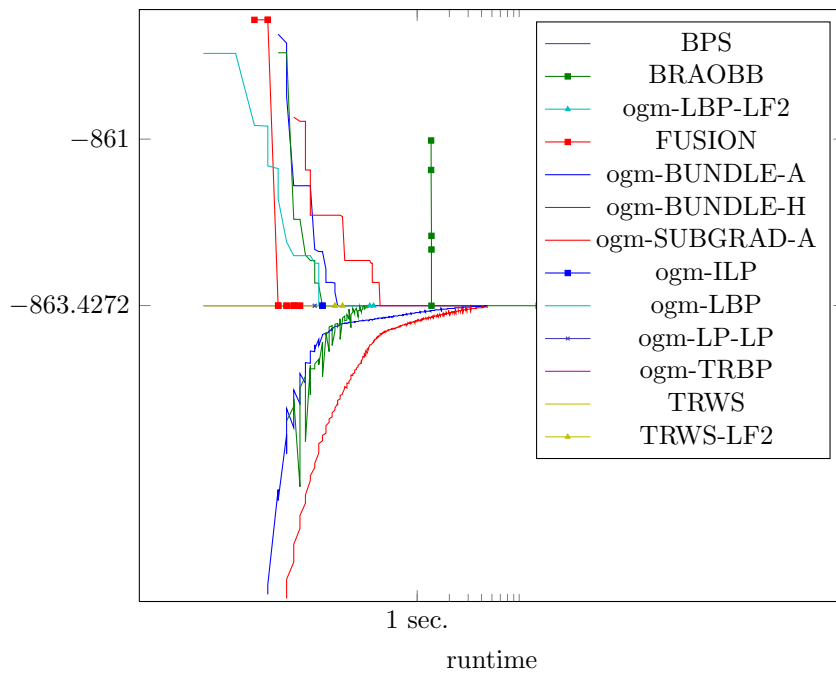


Figure 866: Runtime results for the instance *9005011* of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

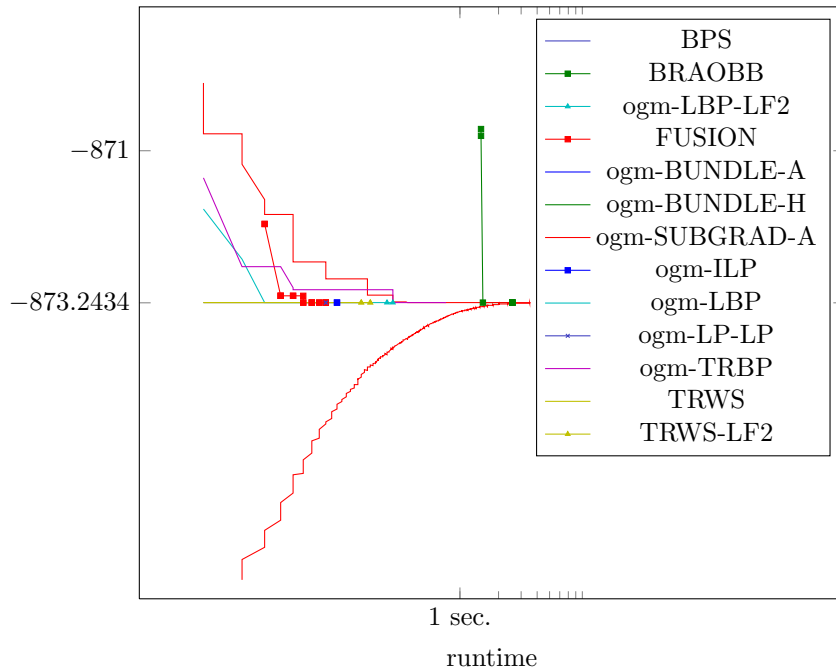


Figure 867: Runtime results for the instance 9005105 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

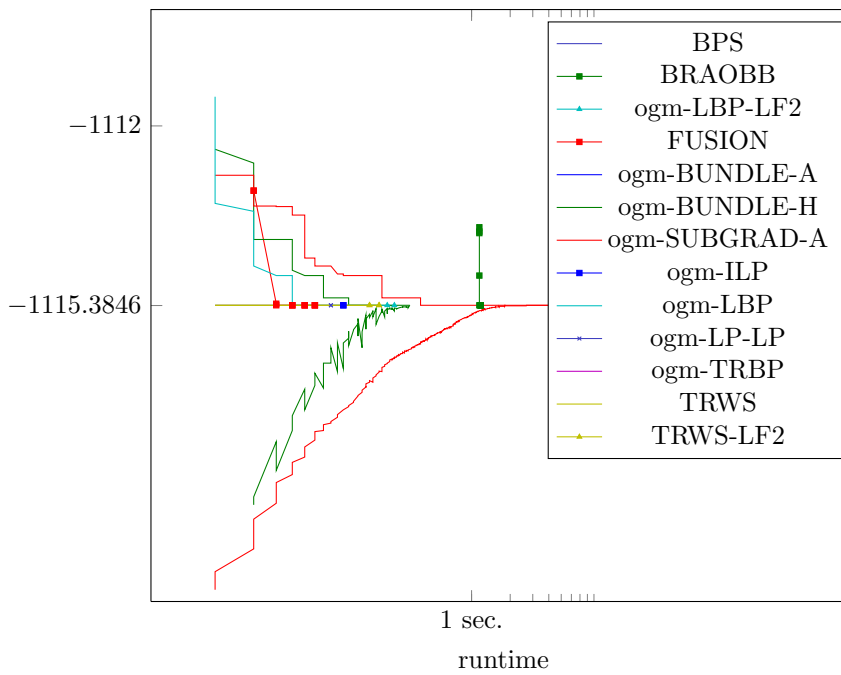


Figure 868: Runtime results for the instance 9005245 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

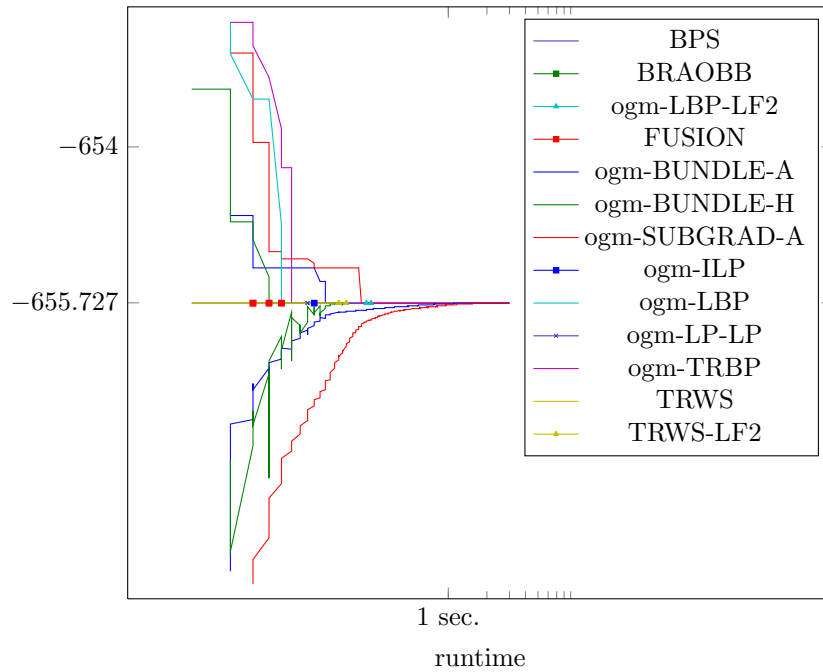


Figure 869: Runtime results for the instance 9005273 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

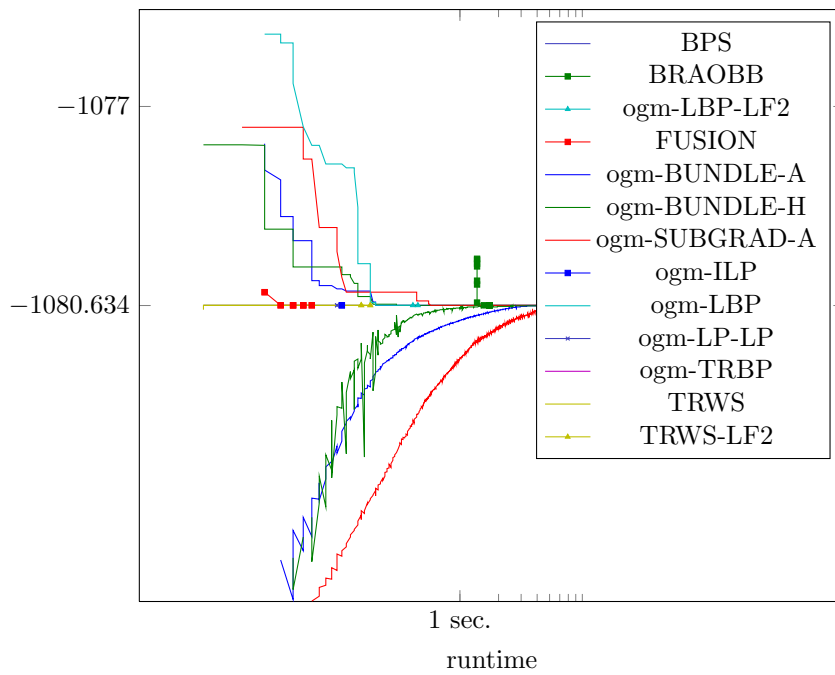


Figure 870: Runtime results for the instance 9005294 of the *scene-decomposition* models. Plots show best value of integer solution and (if provided) best lower bound.

5.13. Geometric Scene Labeling 3 (geo-surf-3)

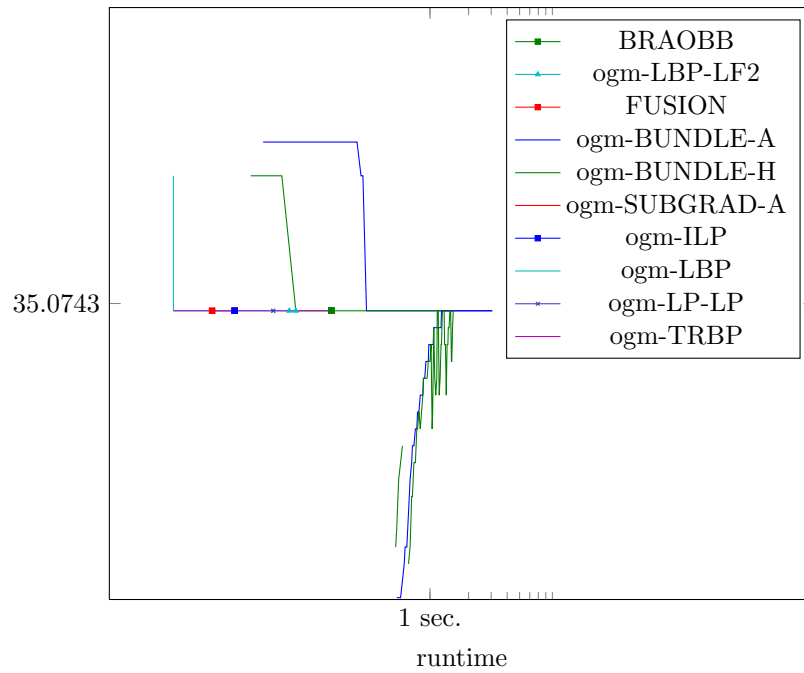


Figure 871: Runtime results for the instance *gm100* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

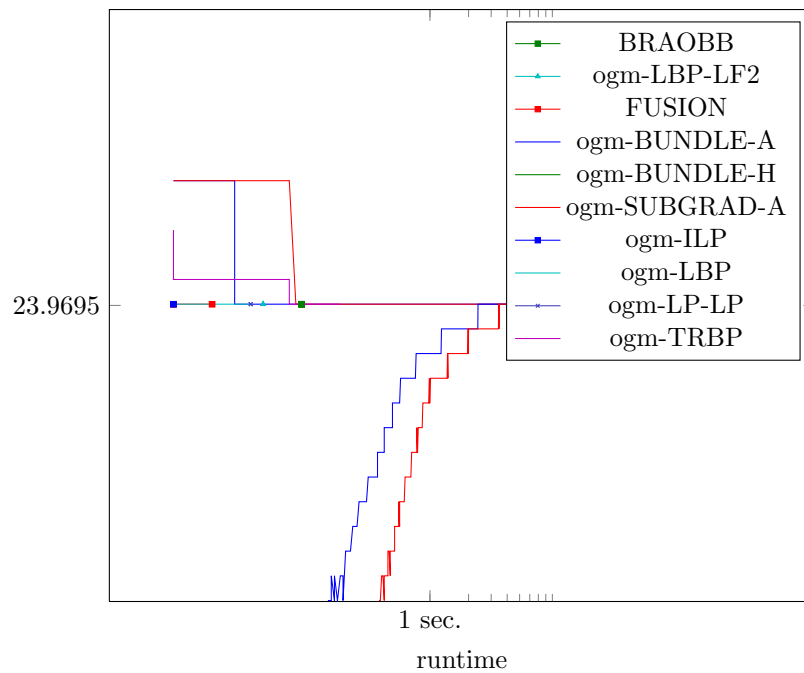


Figure 872: Runtime results for the instance *gm101* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

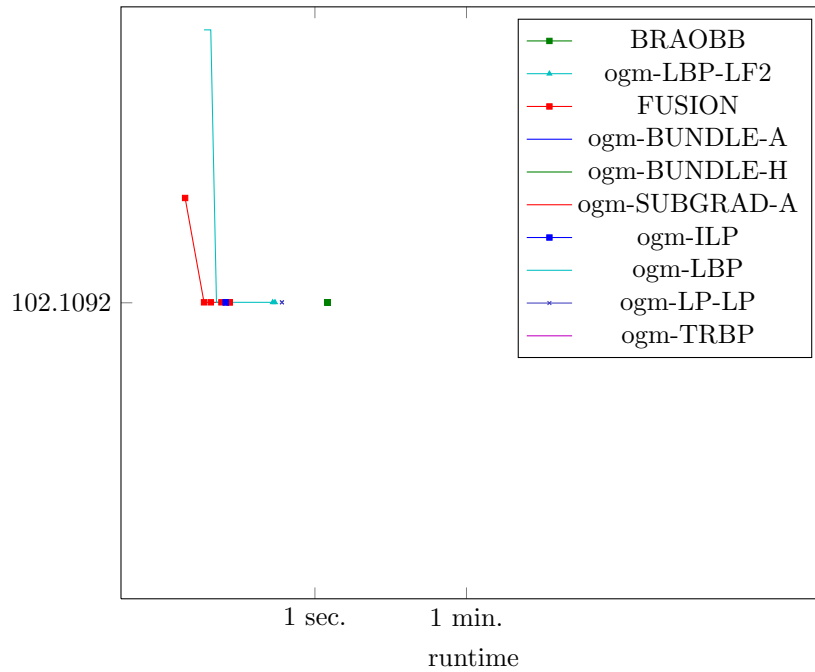


Figure 873: Runtime results for the instance *gm102* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

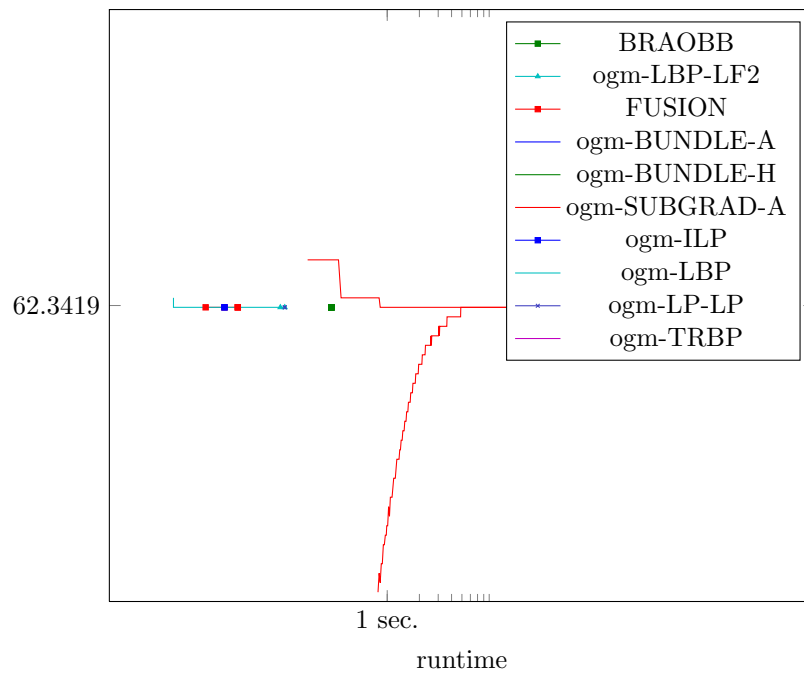


Figure 874: Runtime results for the instance *gm103* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

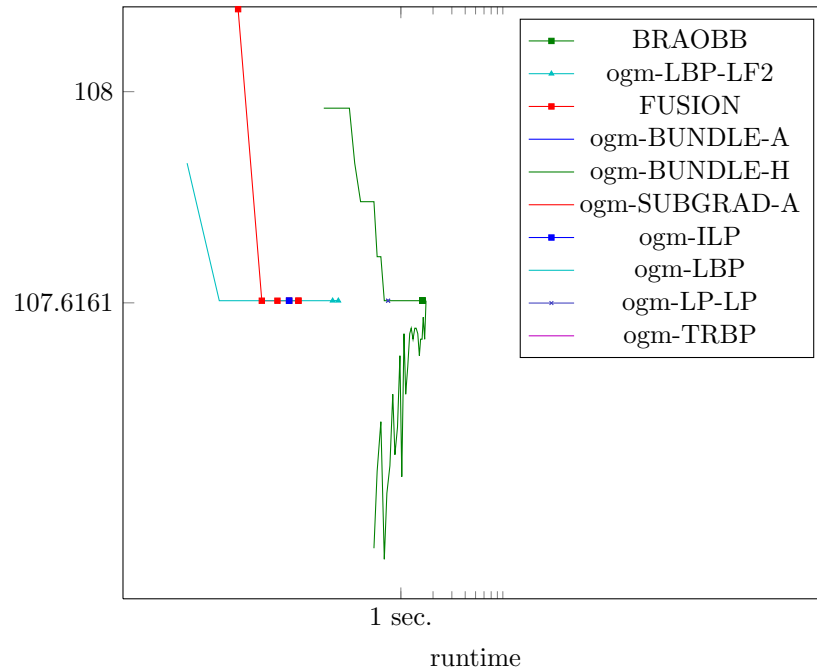


Figure 875: Runtime results for the instance *gm104* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

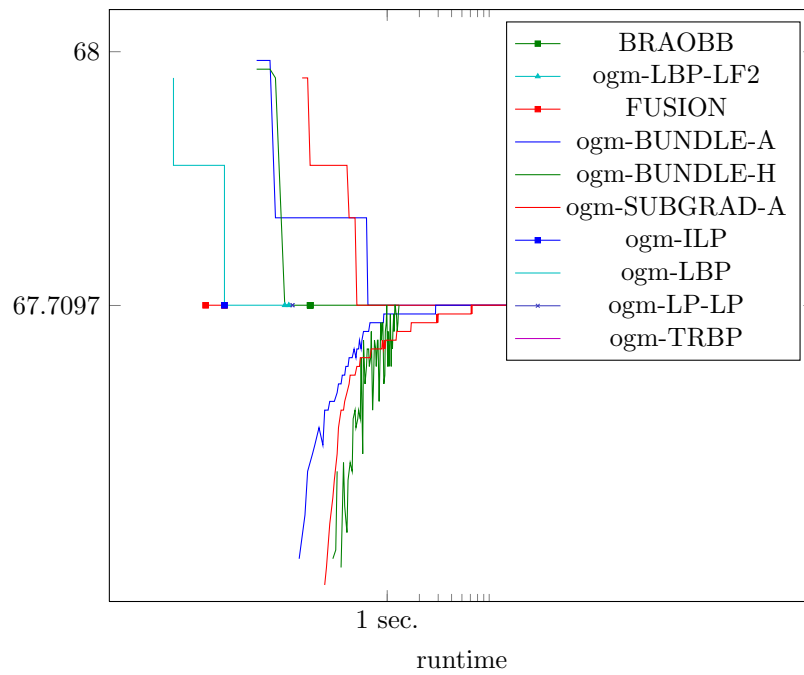


Figure 876: Runtime results for the instance *gm105* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

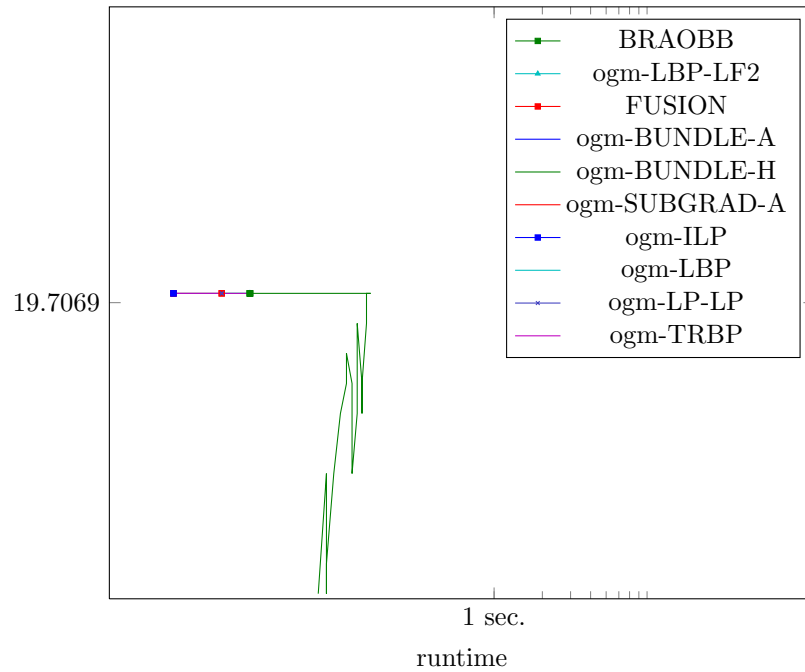


Figure 877: Runtime results for the instance *gm106* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

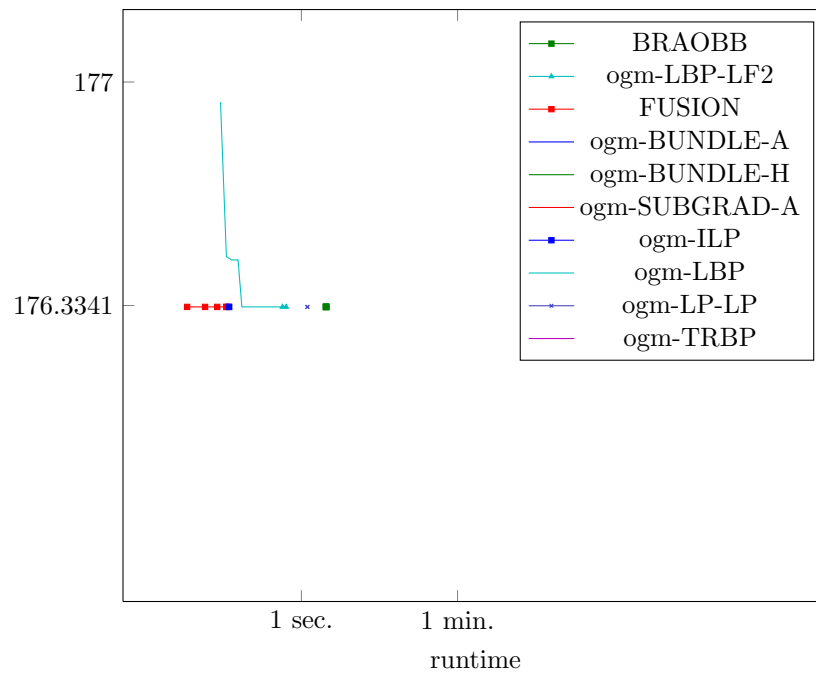


Figure 878: Runtime results for the instance *gm107* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

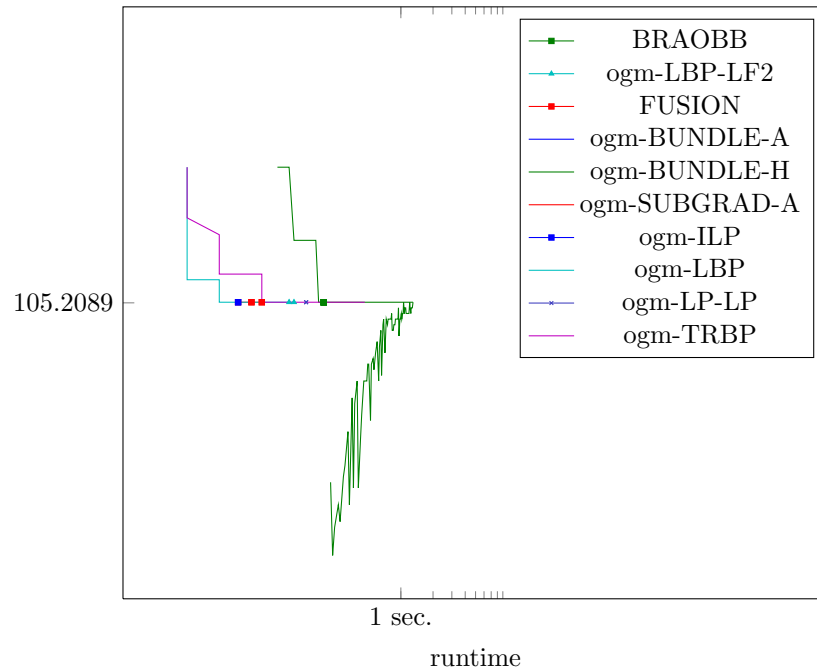


Figure 879: Runtime results for the instance *gm108* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

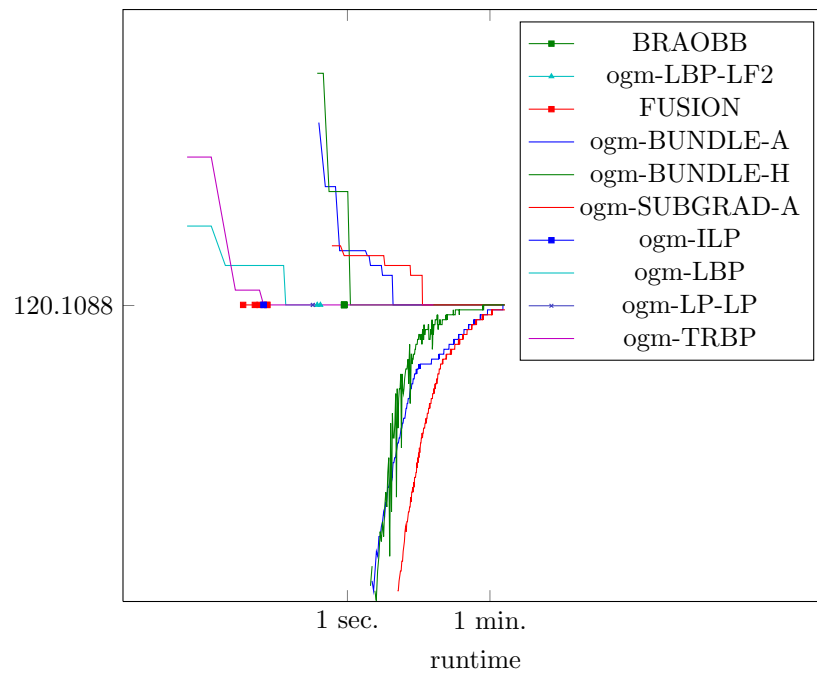


Figure 880: Runtime results for the instance *gm109* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

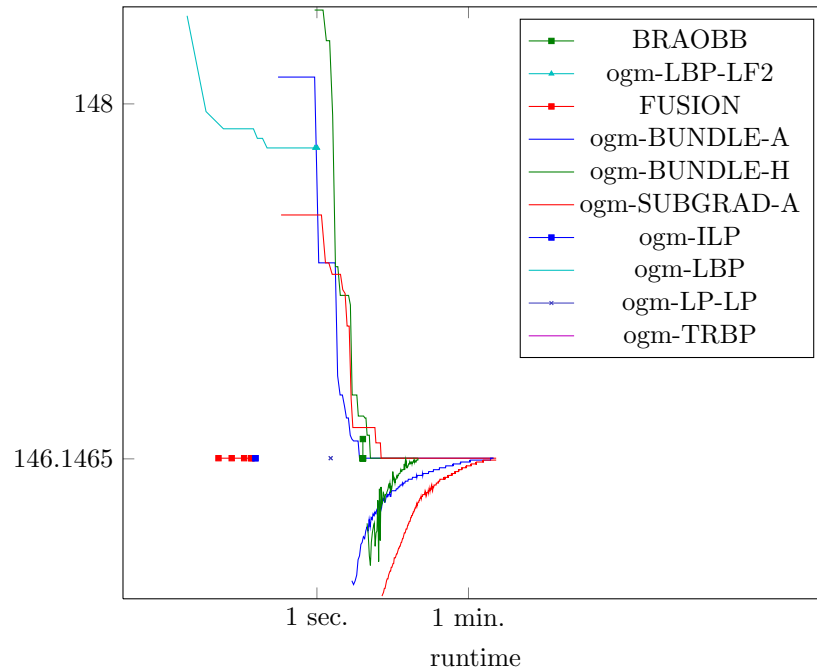


Figure 881: Runtime results for the instance *gm10* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

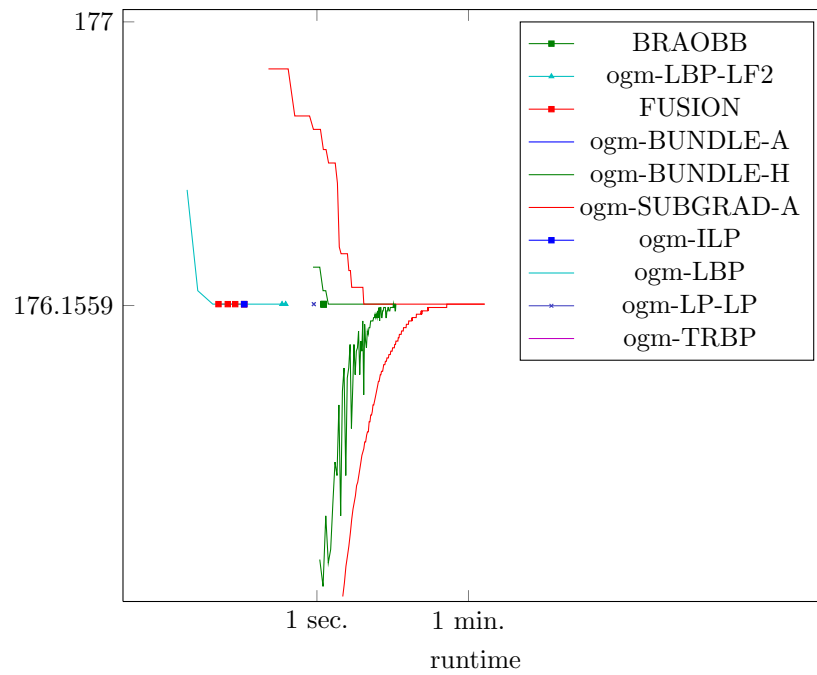


Figure 882: Runtime results for the instance *gm110* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

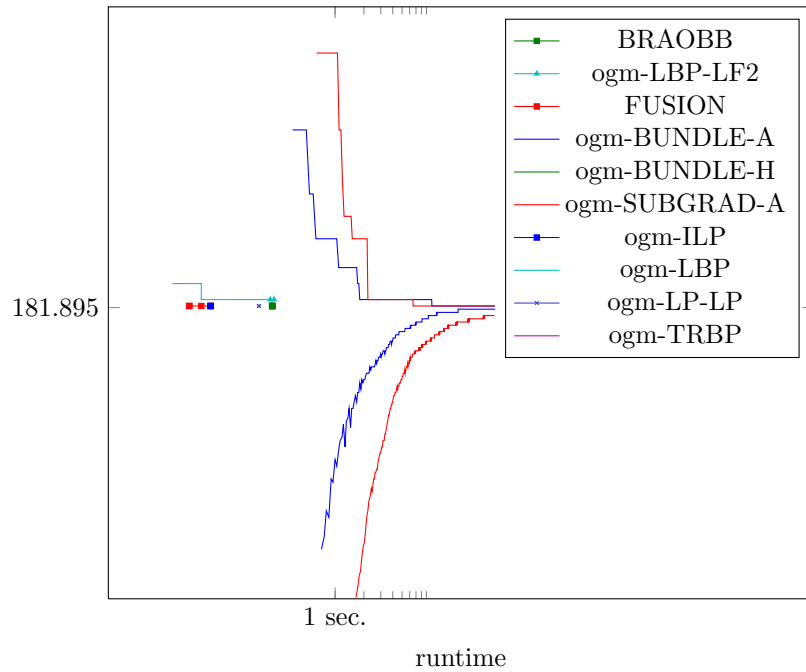


Figure 883: Runtime results for the instance *gm111* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

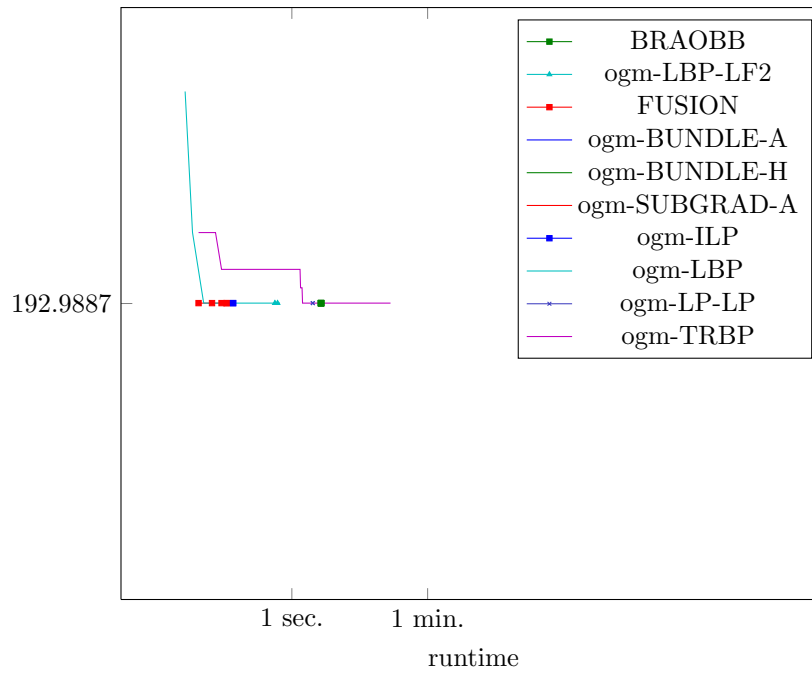


Figure 884: Runtime results for the instance *gm112* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

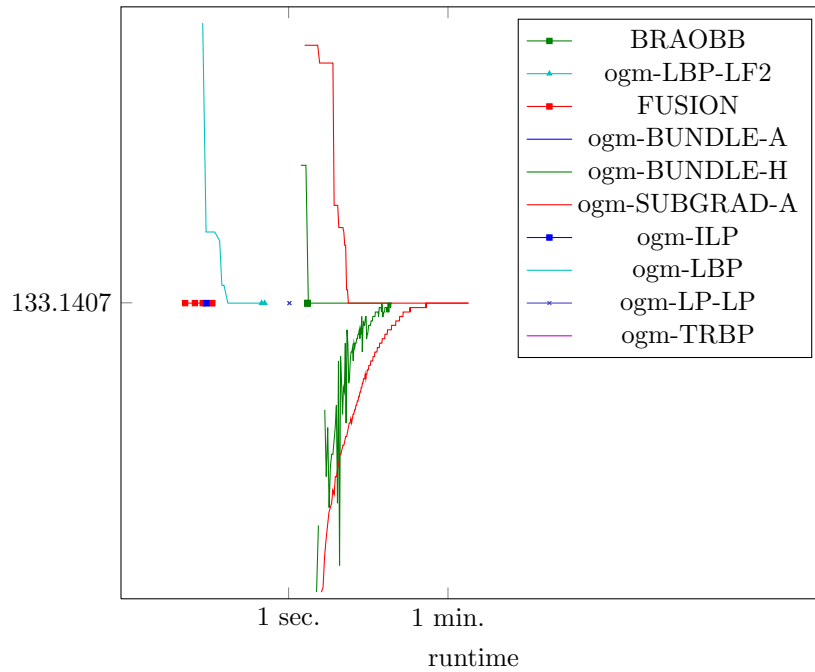


Figure 885: Runtime results for the instance *gm113* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

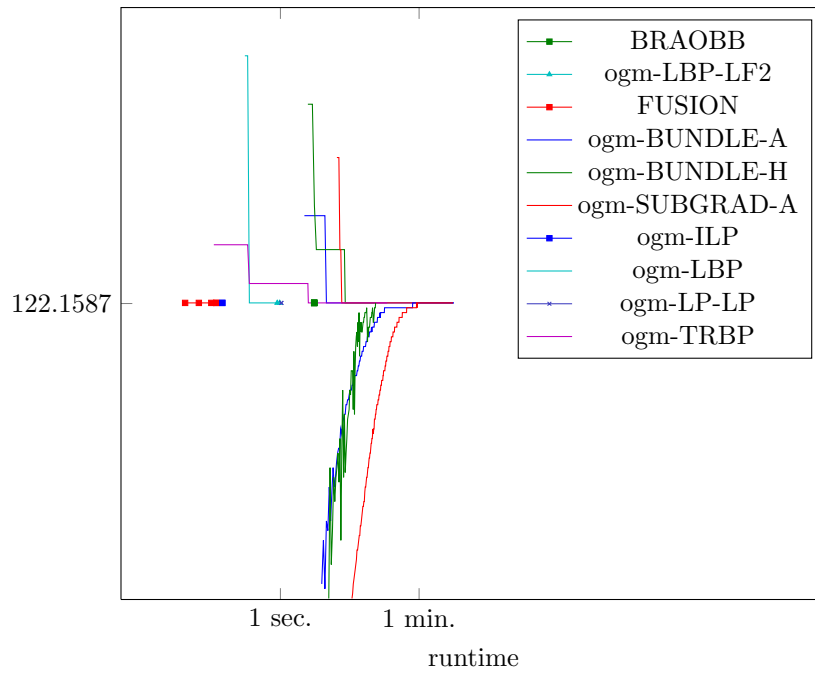


Figure 886: Runtime results for the instance *gm114* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

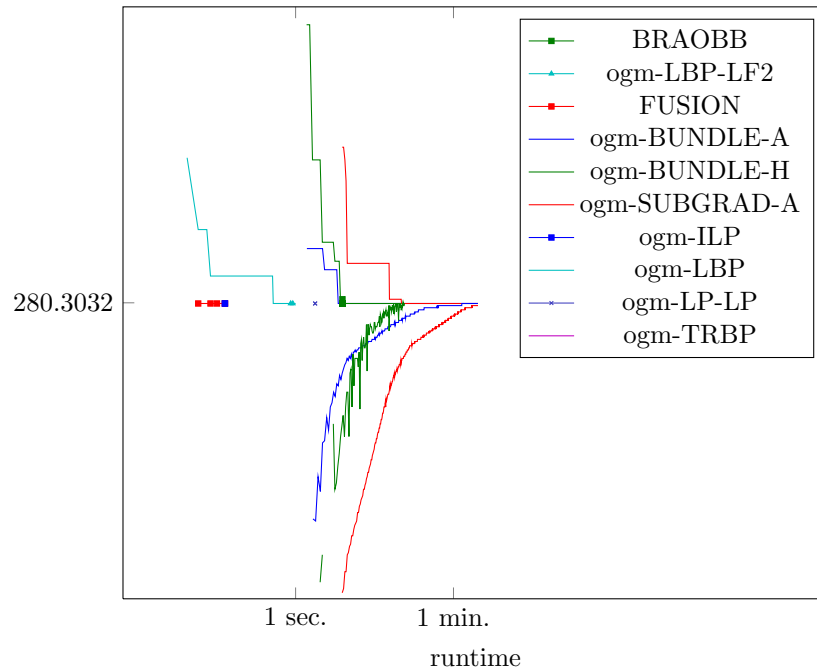


Figure 887: Runtime results for the instance *gm115* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

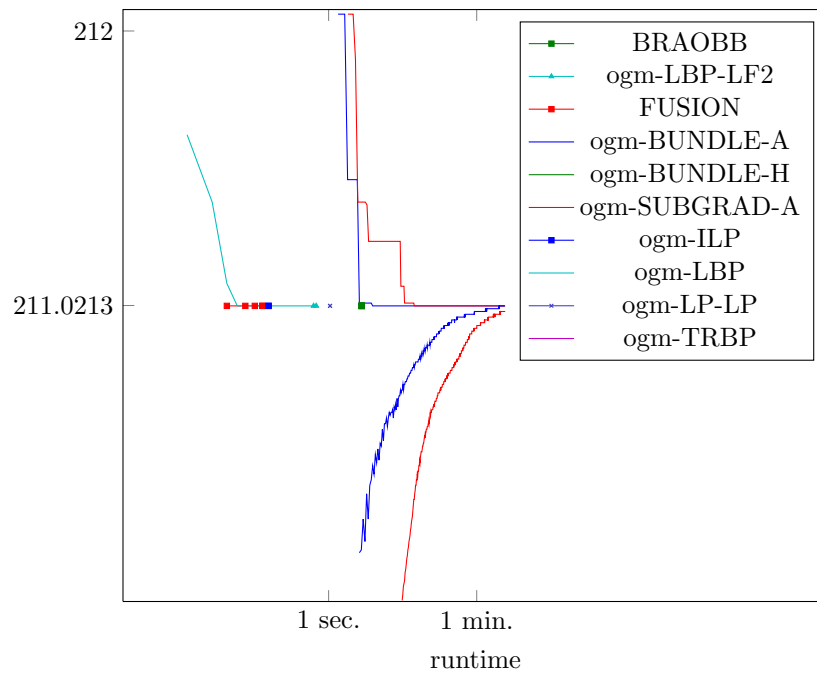


Figure 888: Runtime results for the instance *gm116* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

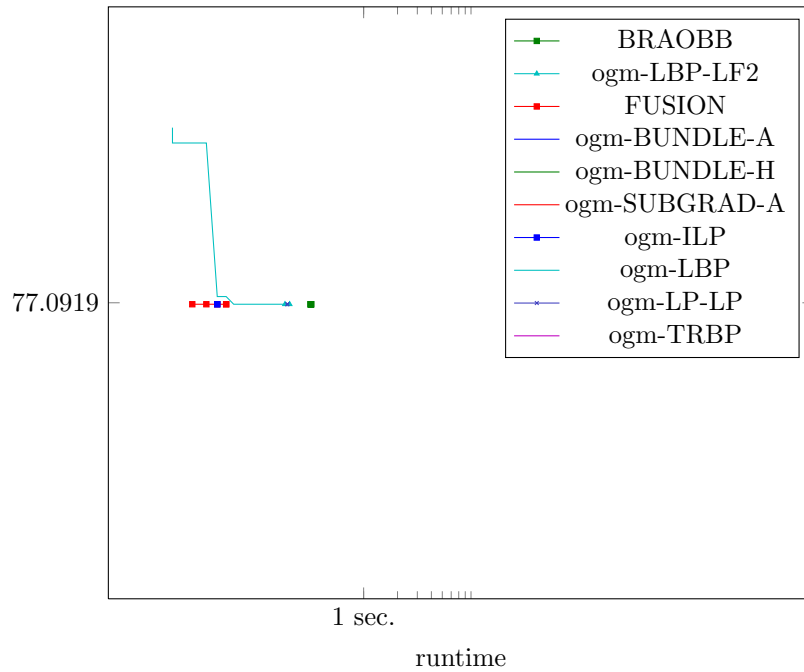


Figure 889: Runtime results for the instance *gm117* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

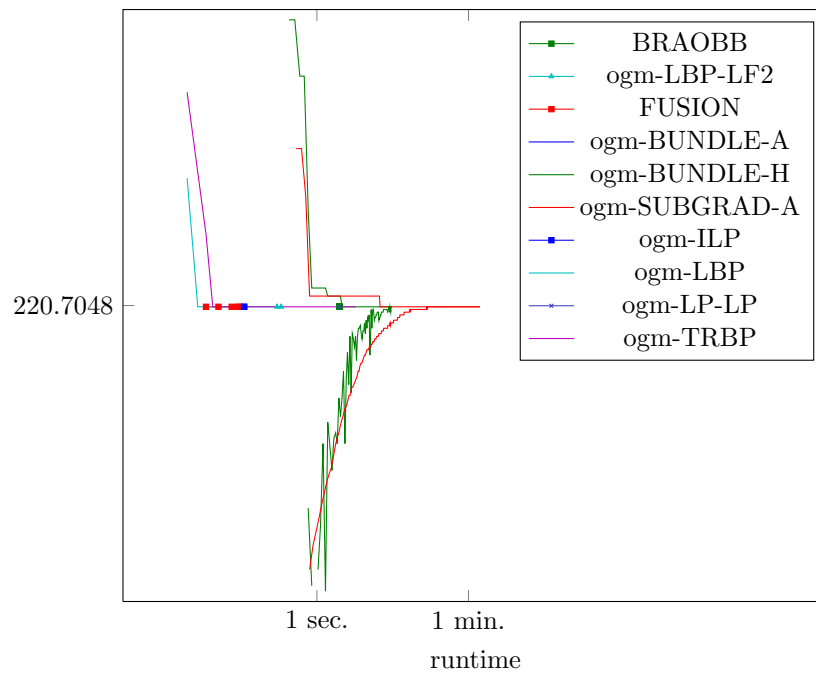


Figure 890: Runtime results for the instance *gm118* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

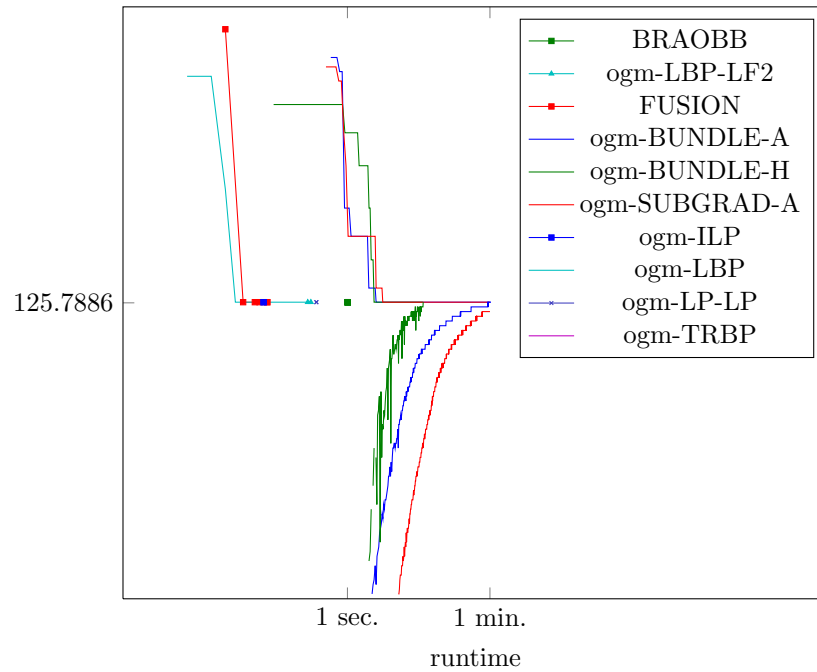


Figure 891: Runtime results for the instance *gm119* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

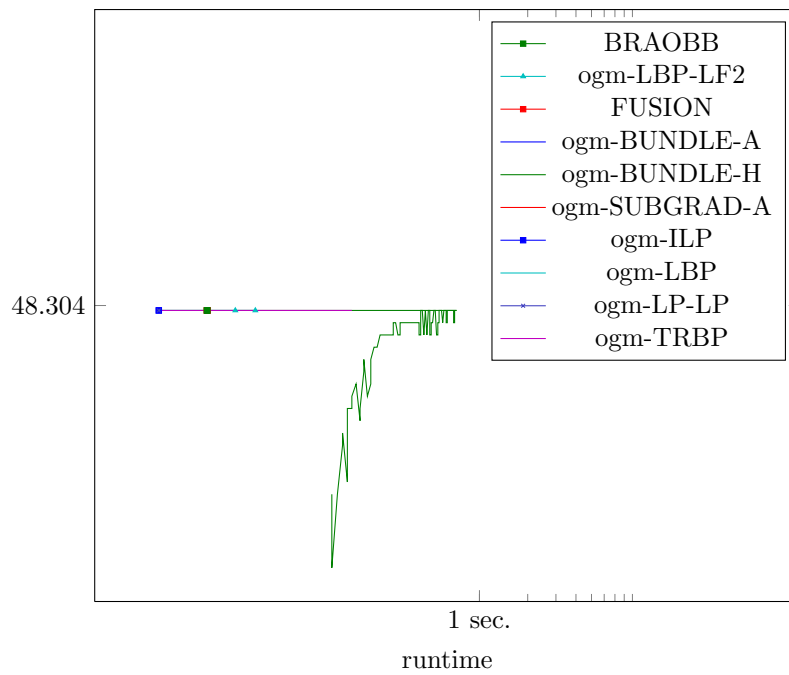


Figure 892: Runtime results for the instance *gm11* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

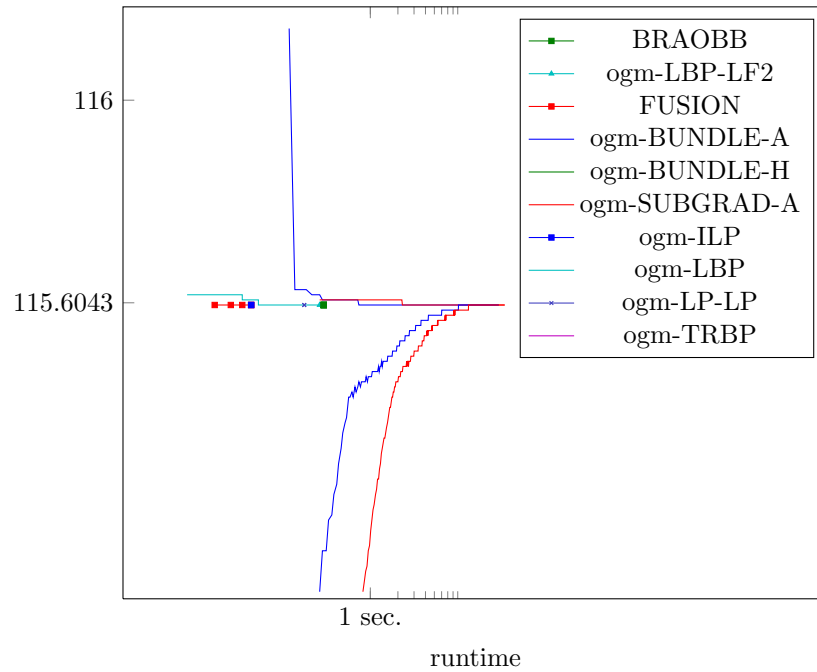


Figure 893: Runtime results for the instance *gm120* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

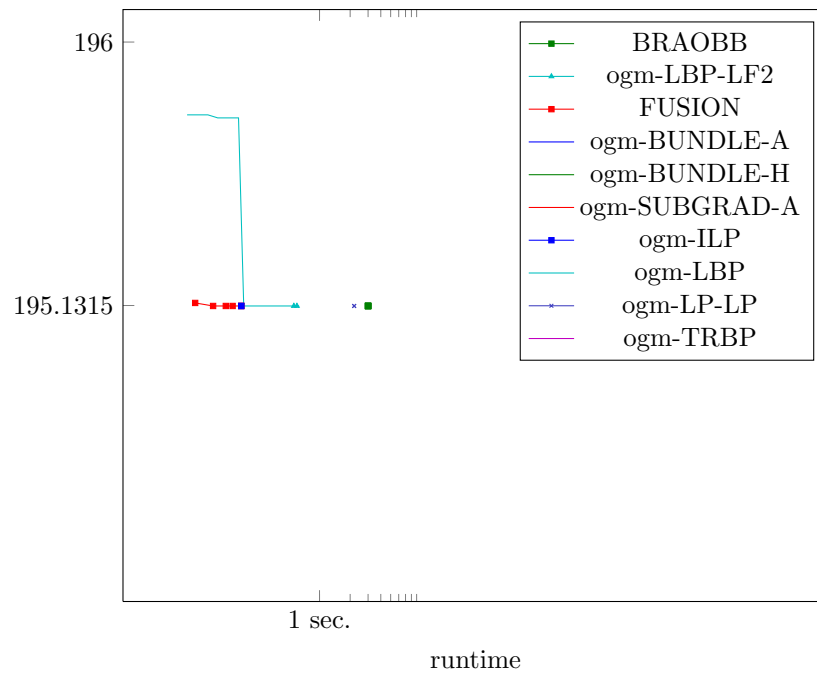


Figure 894: Runtime results for the instance *gm121* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

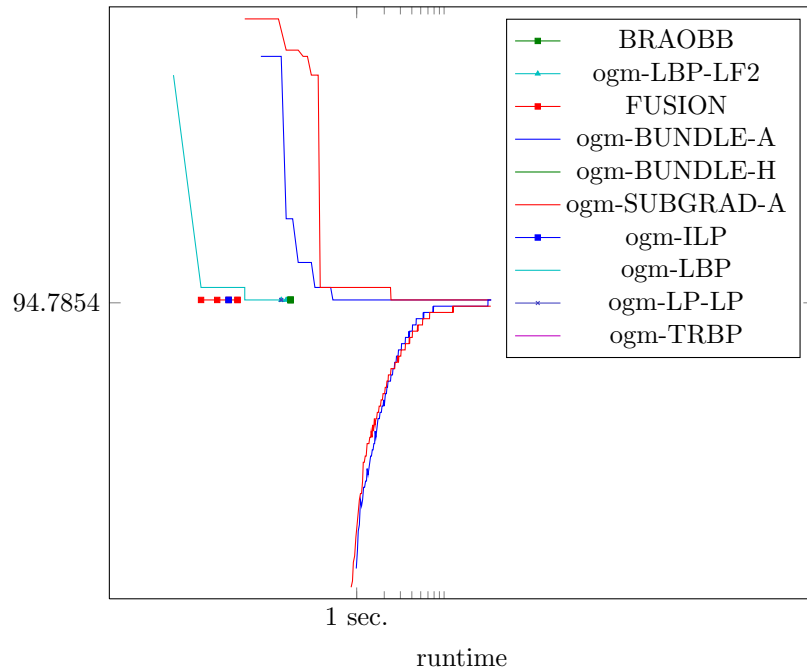


Figure 895: Runtime results for the instance *gm122* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

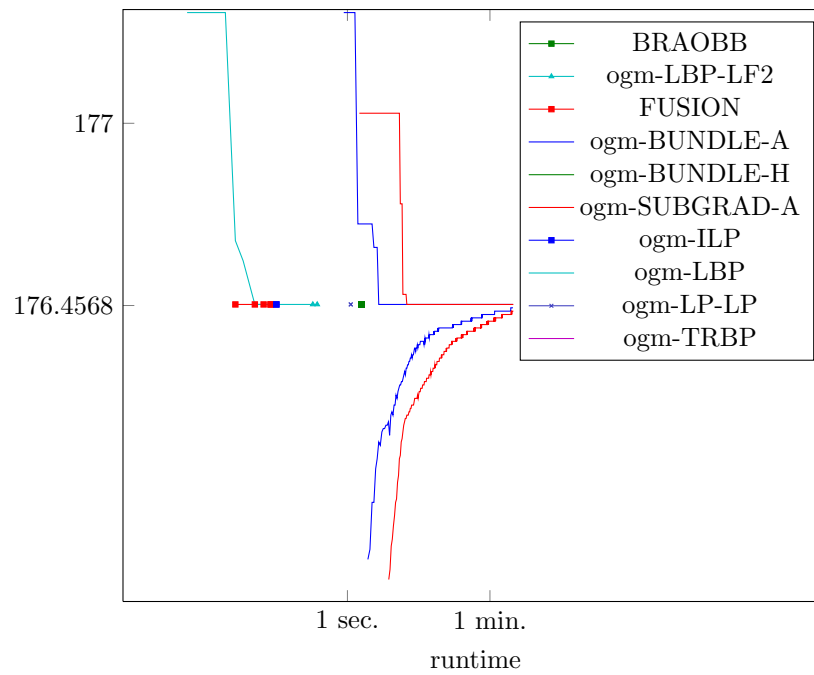


Figure 896: Runtime results for the instance *gm123* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

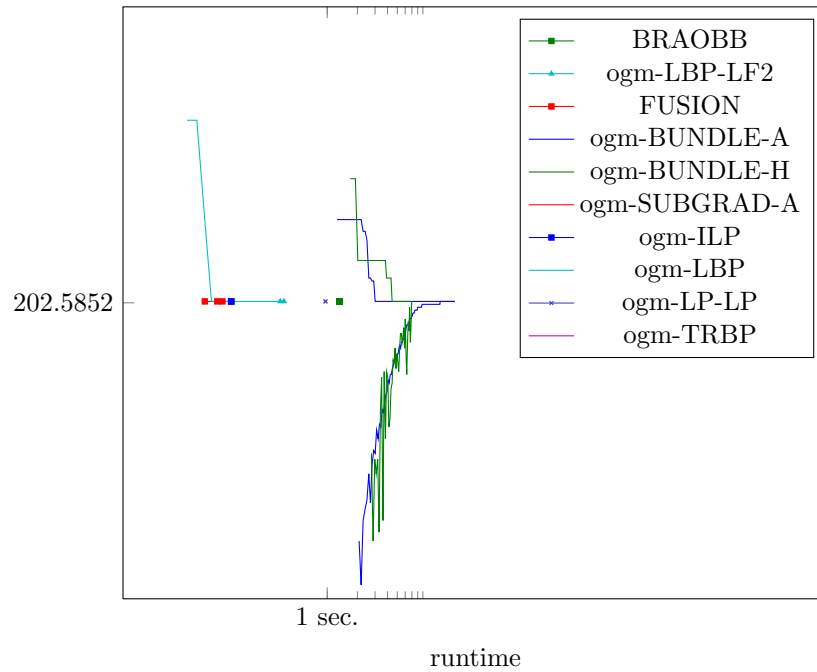


Figure 897: Runtime results for the instance *gm124* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

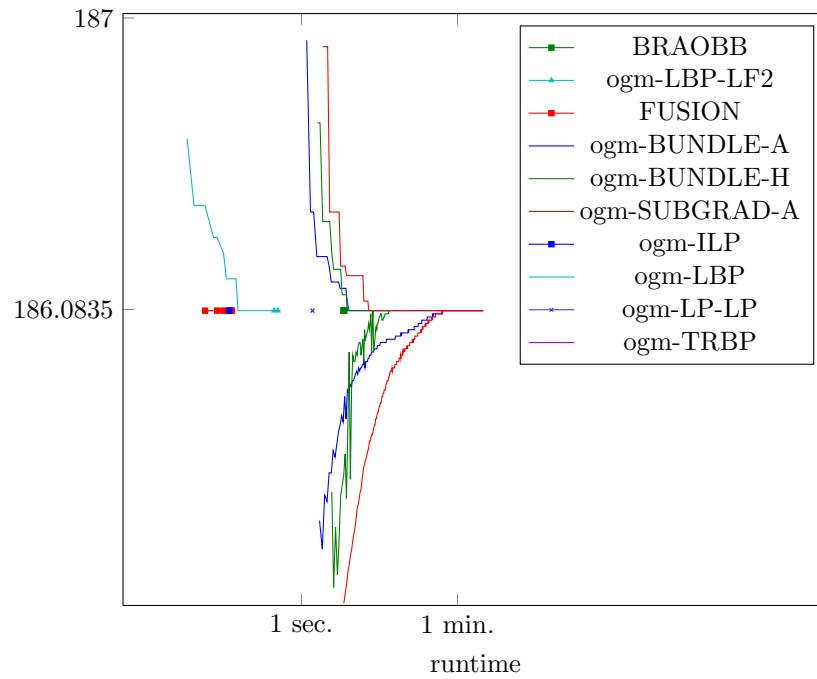


Figure 898: Runtime results for the instance *gm125* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

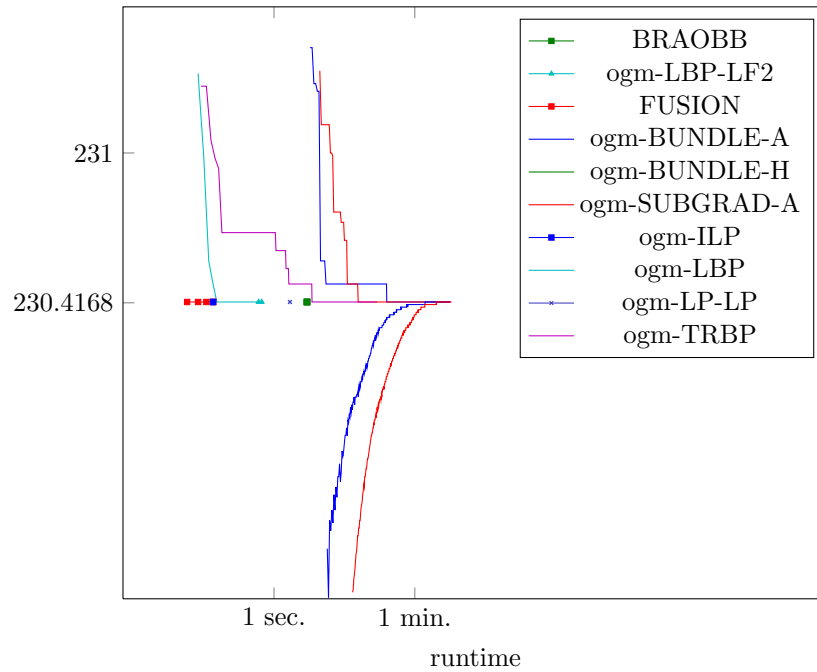


Figure 899: Runtime results for the instance *gm126* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

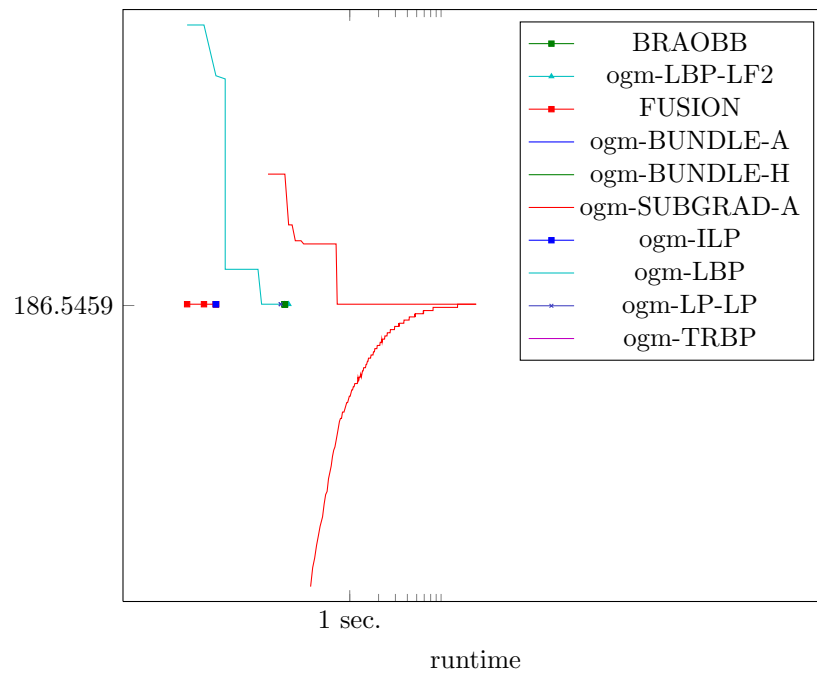


Figure 900: Runtime results for the instance *gm127* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

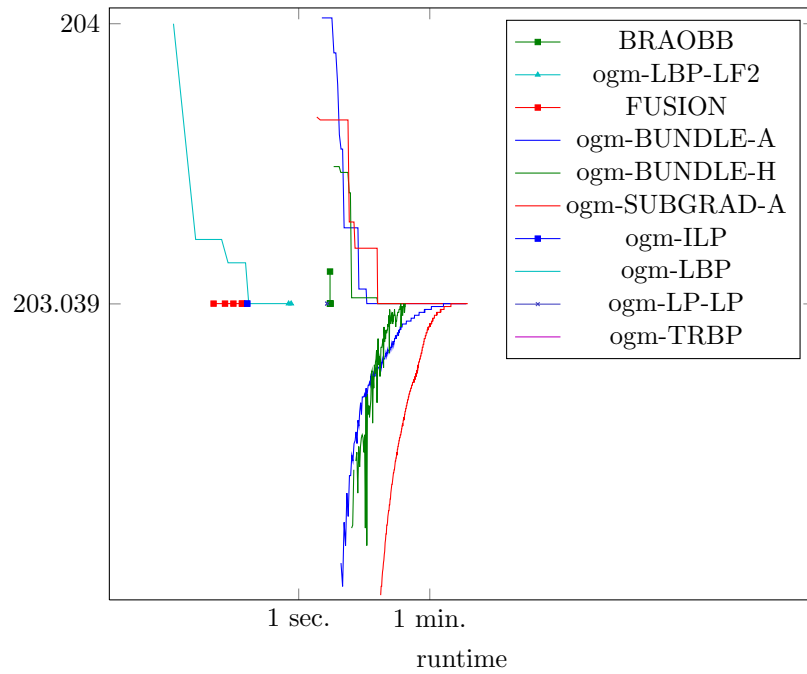


Figure 901: Runtime results for the instance *gm128* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

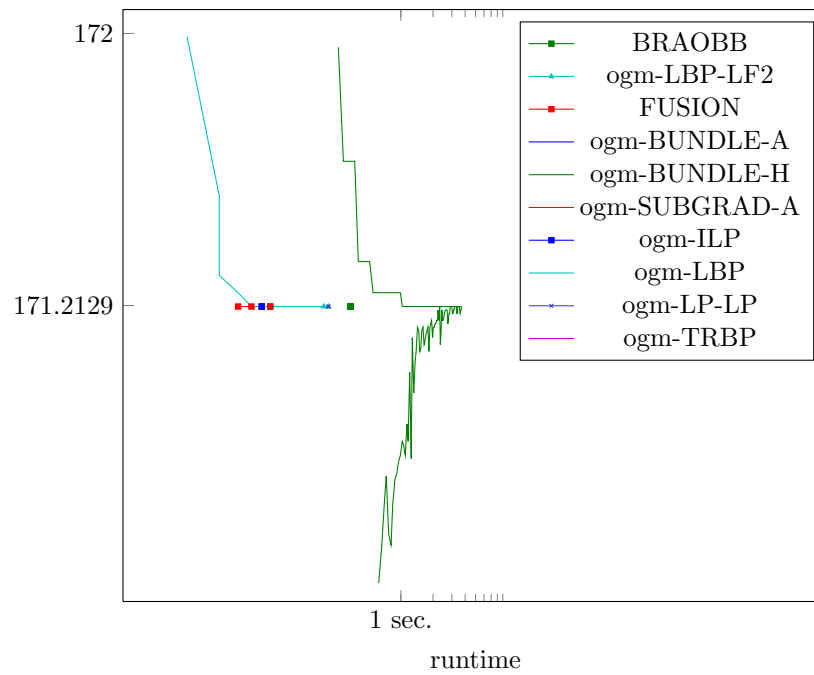


Figure 902: Runtime results for the instance *gm129* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

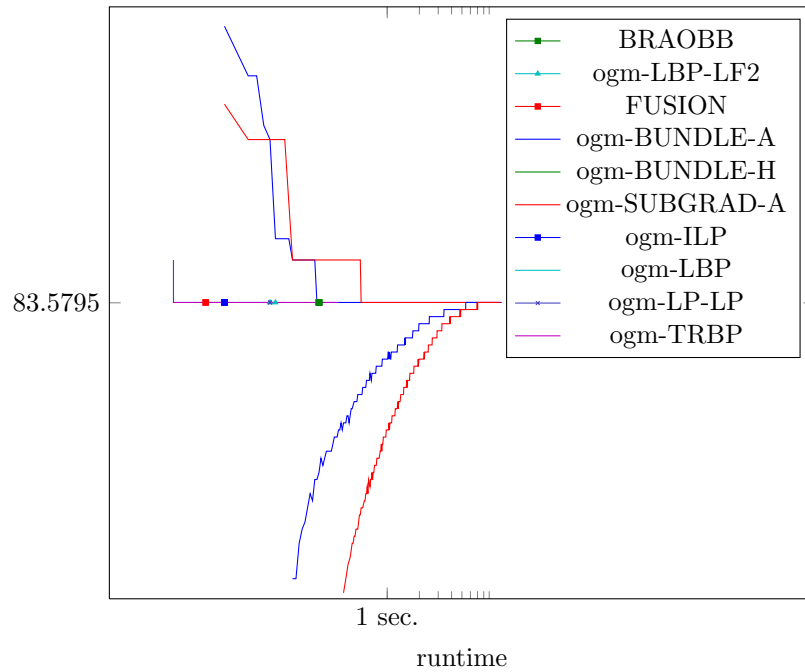


Figure 903: Runtime results for the instance *gm12* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

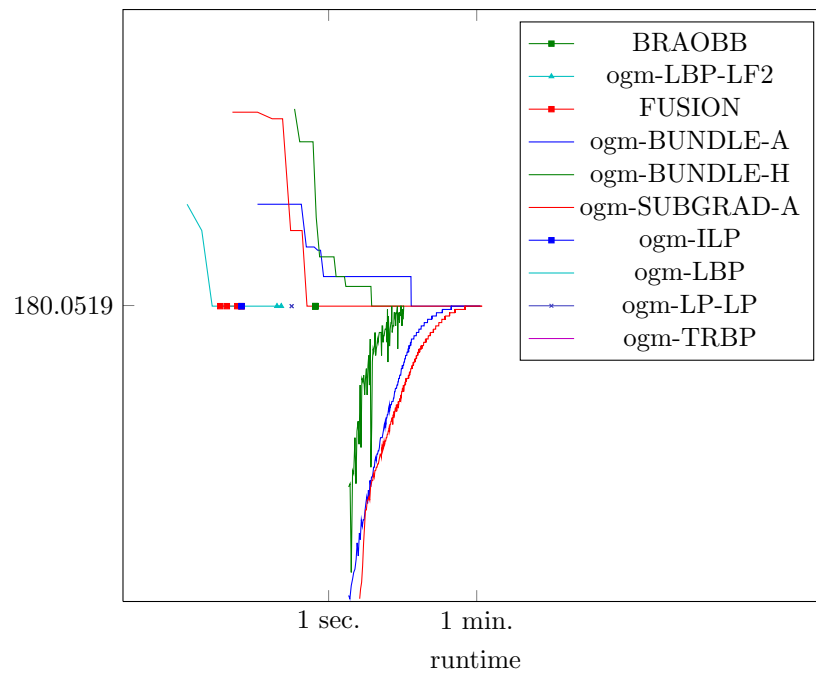


Figure 904: Runtime results for the instance *gm130* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

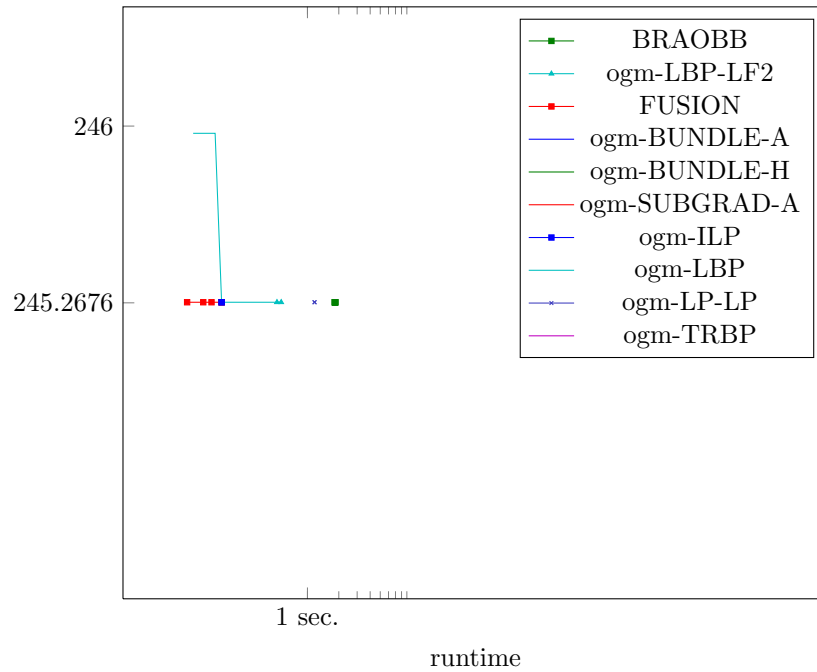


Figure 905: Runtime results for the instance *gm131* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

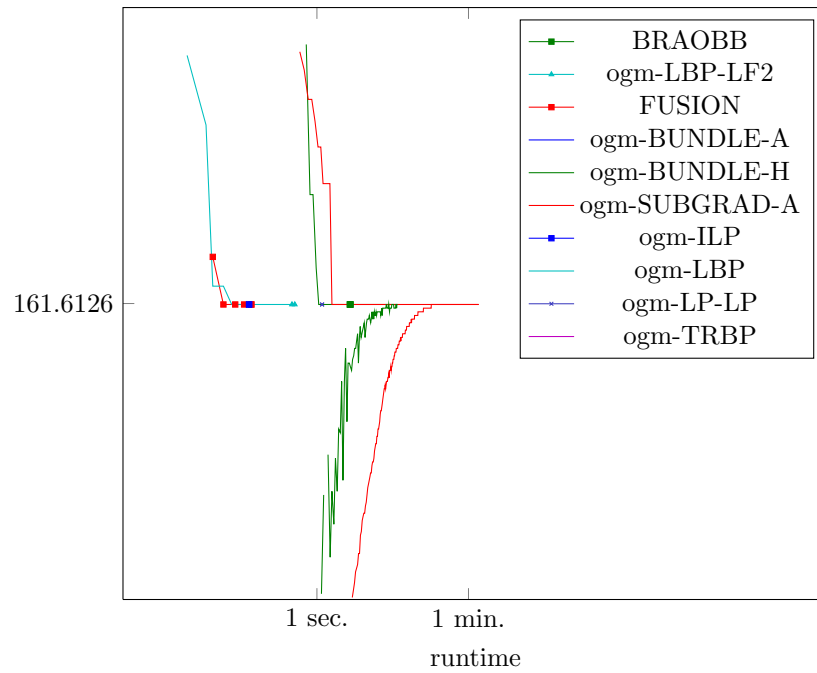


Figure 906: Runtime results for the instance *gm132* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

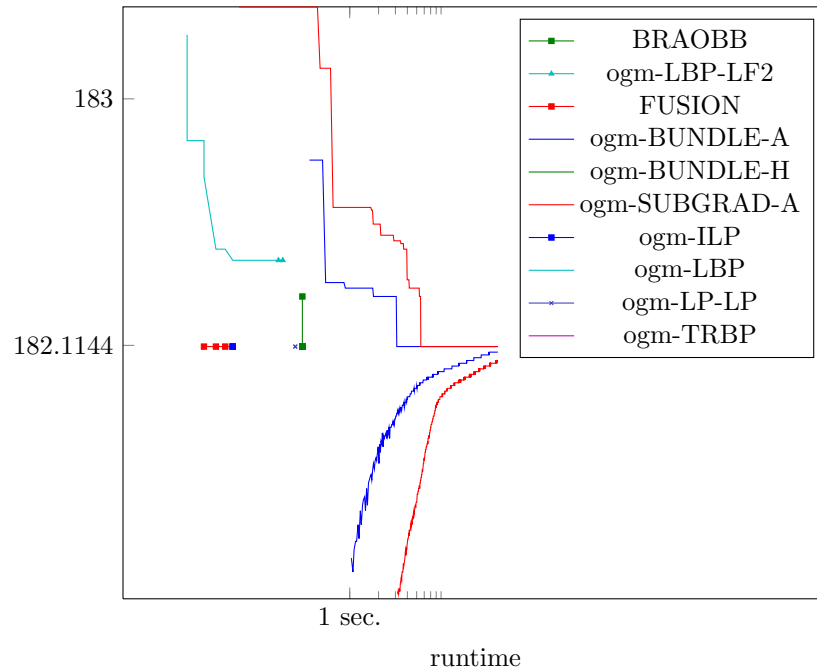


Figure 907: Runtime results for the instance *gm133* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

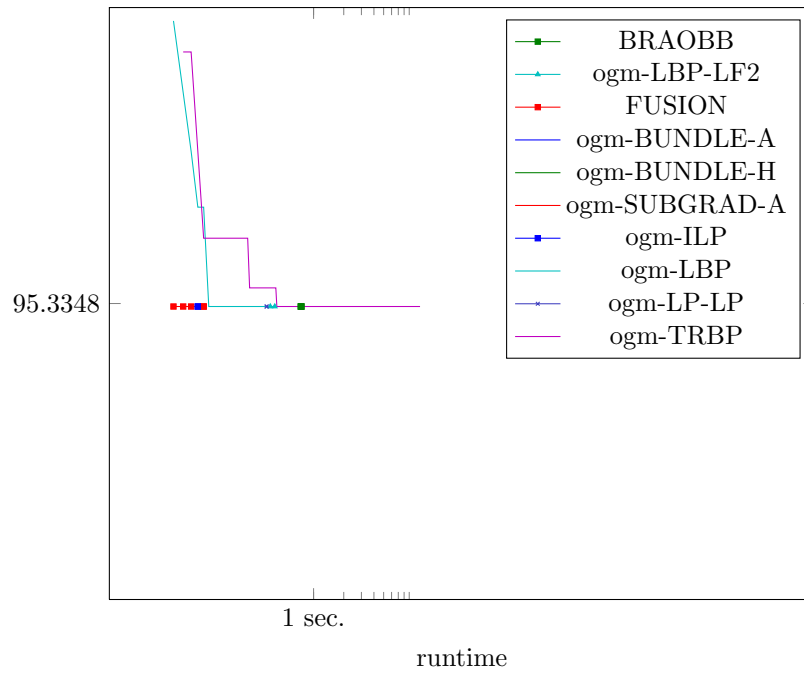


Figure 908: Runtime results for the instance *gm134* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

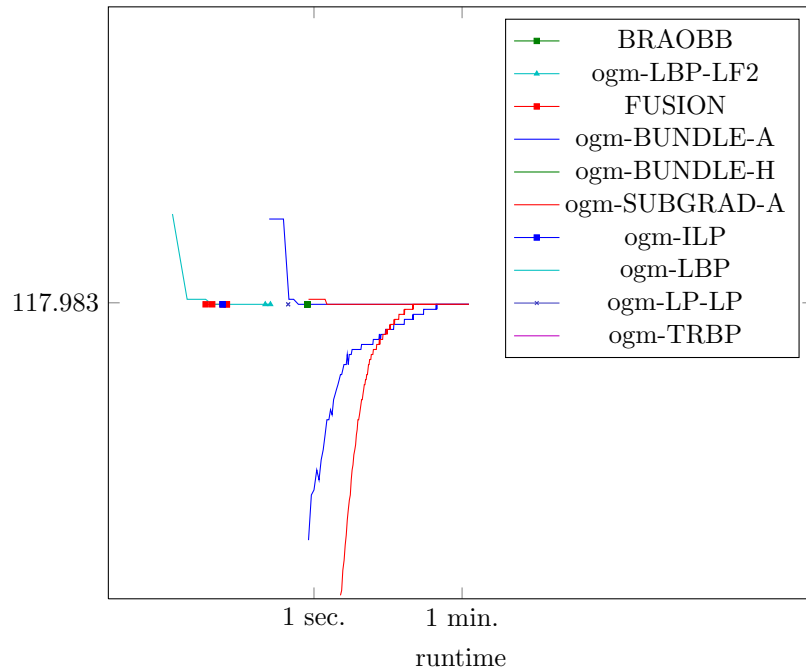


Figure 909: Runtime results for the instance *gm135* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

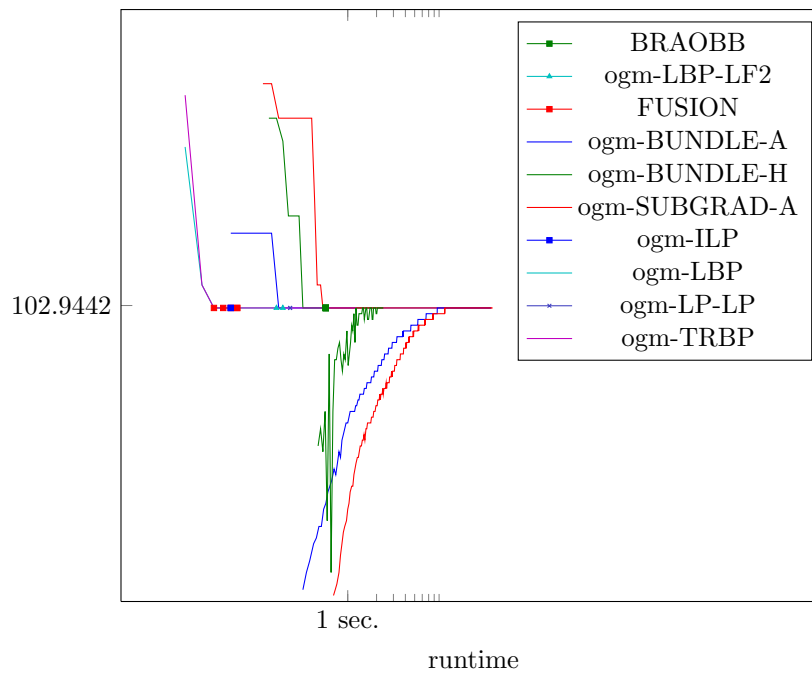


Figure 910: Runtime results for the instance *gm136* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

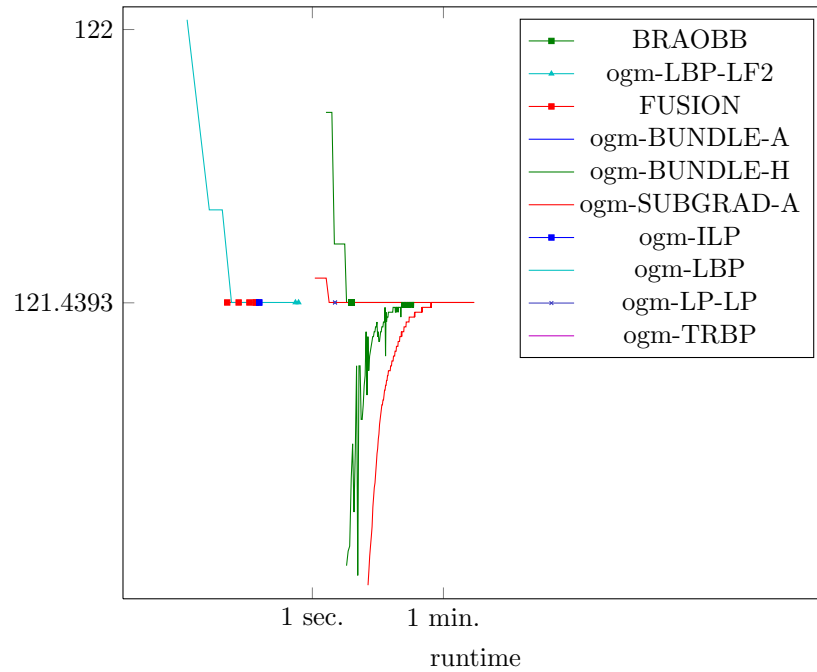


Figure 911: Runtime results for the instance *gm137* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

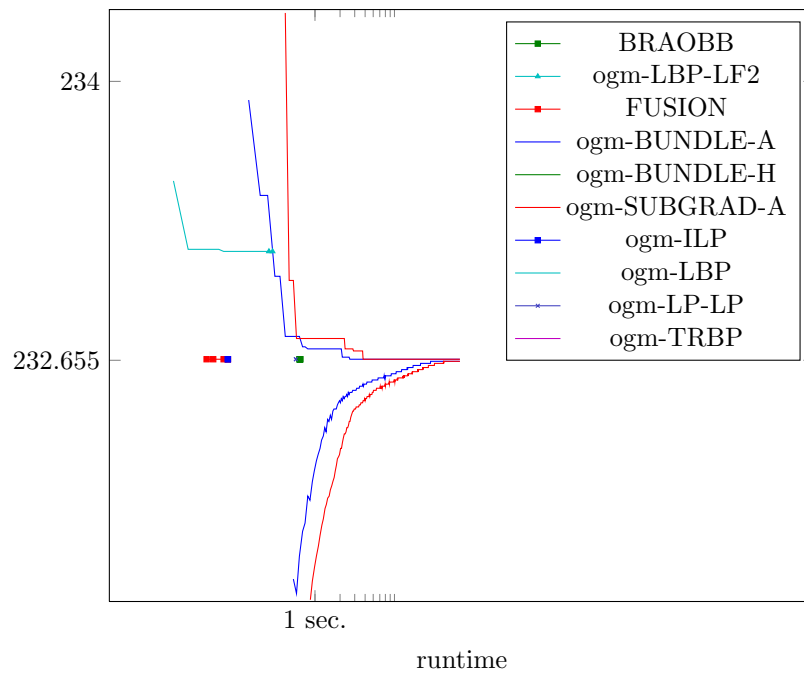


Figure 912: Runtime results for the instance *gm138* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

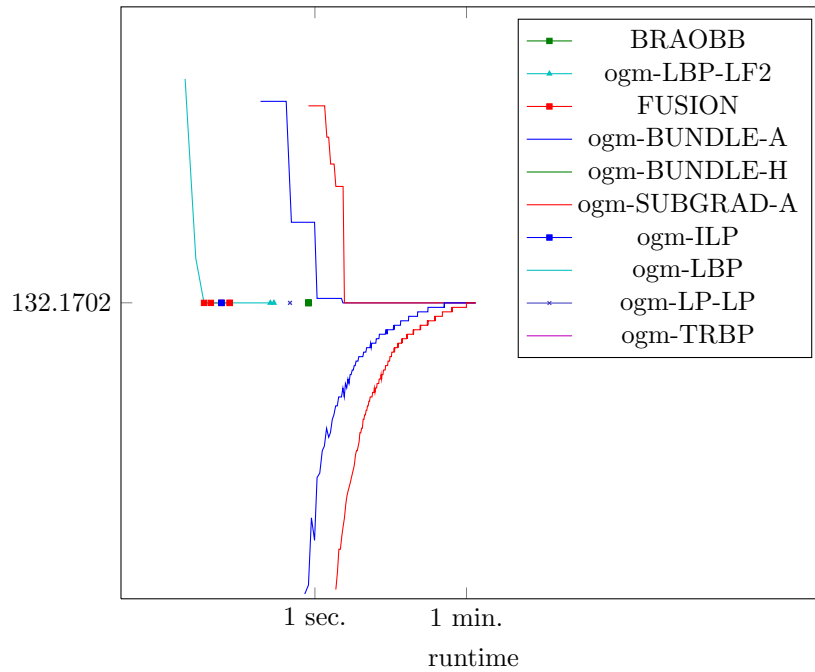


Figure 913: Runtime results for the instance *gm139* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

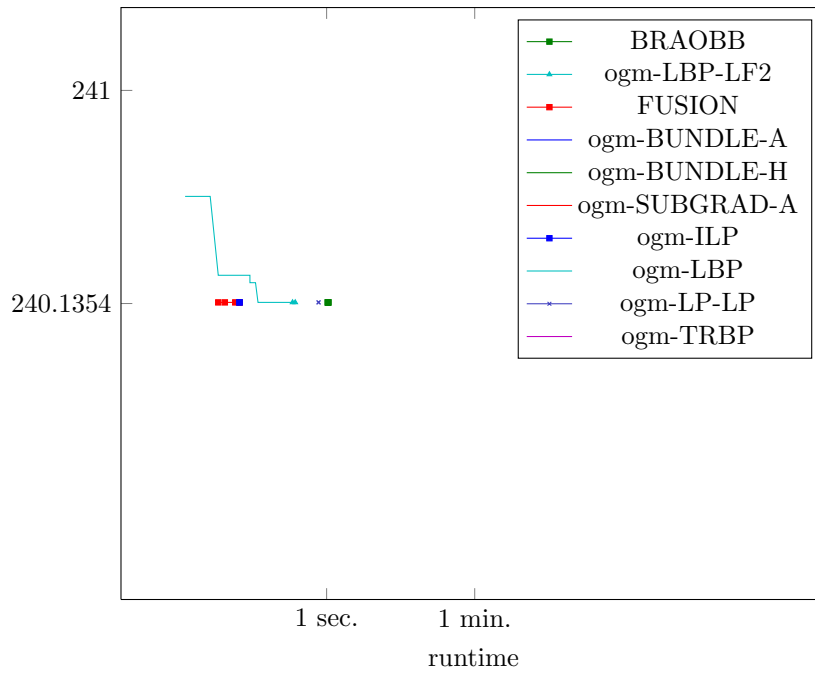


Figure 914: Runtime results for the instance *gm13* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

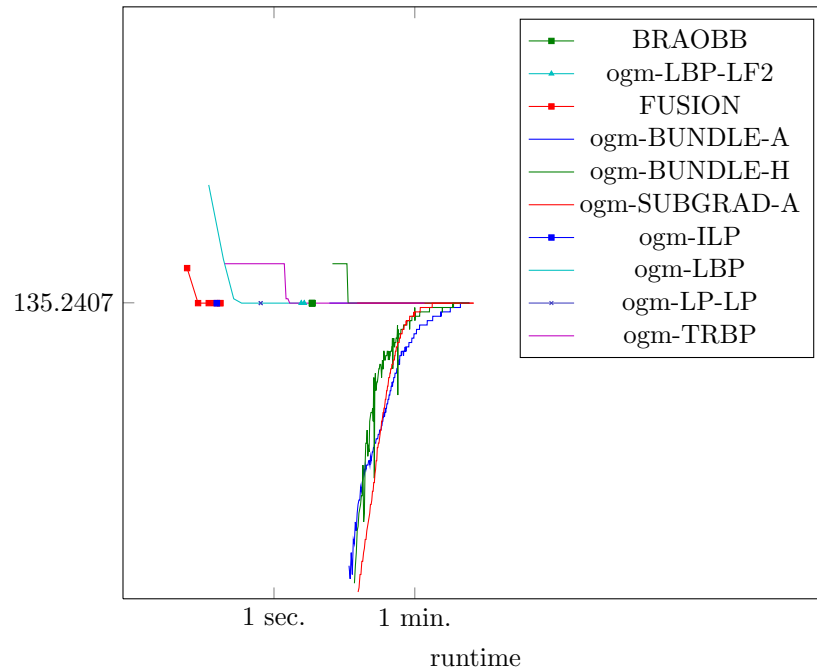


Figure 915: Runtime results for the instance *gm140* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

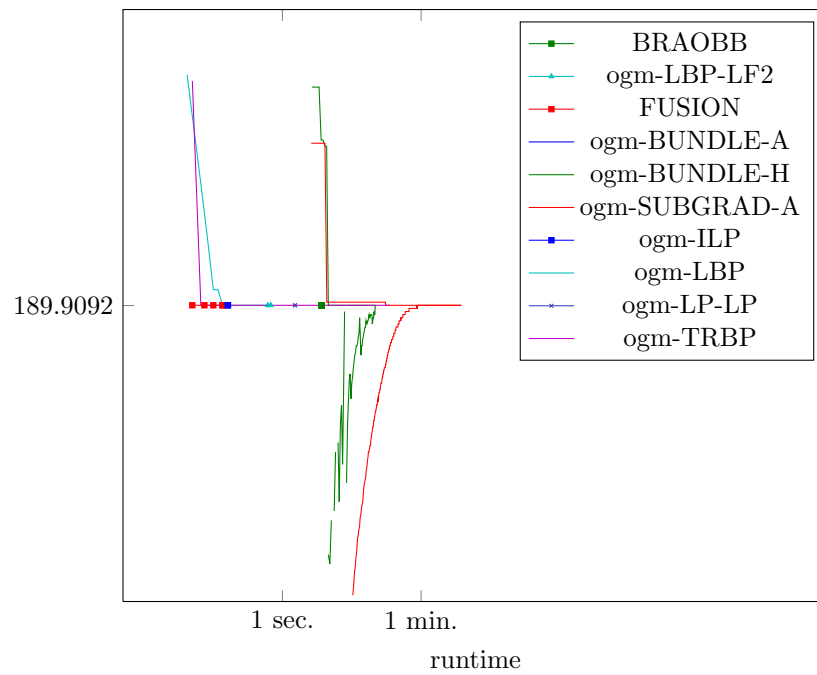


Figure 916: Runtime results for the instance *gm141* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

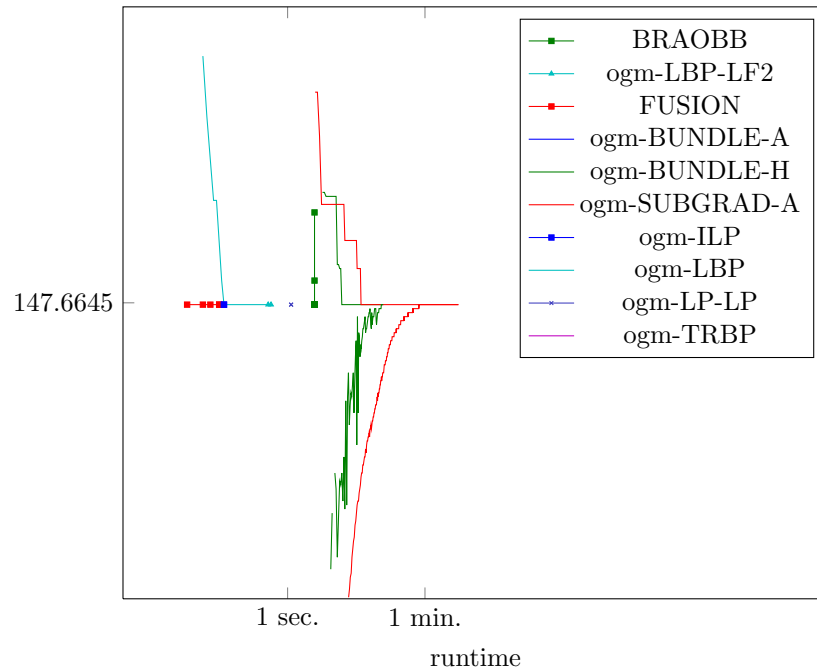


Figure 917: Runtime results for the instance *gm142* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

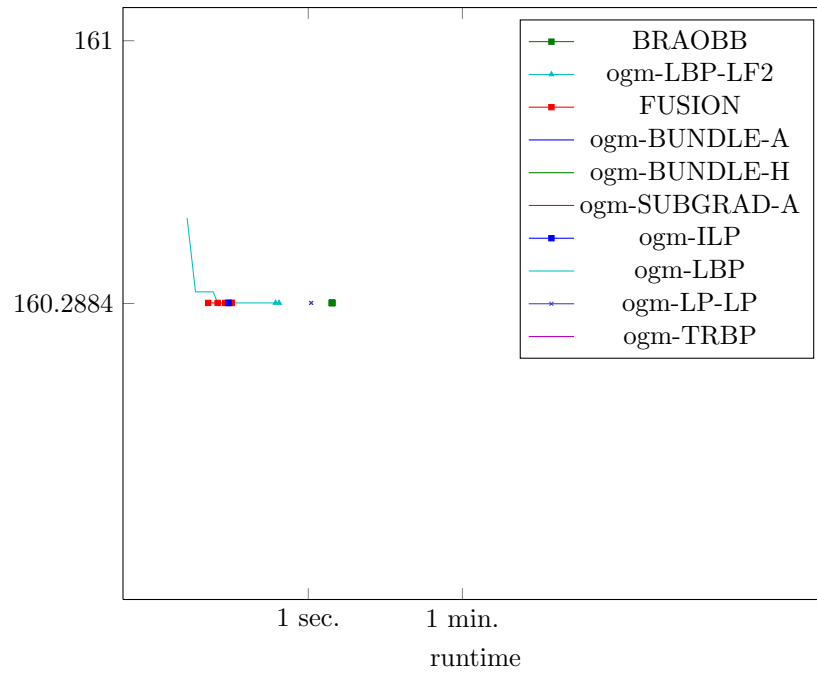


Figure 918: Runtime results for the instance *gm143* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

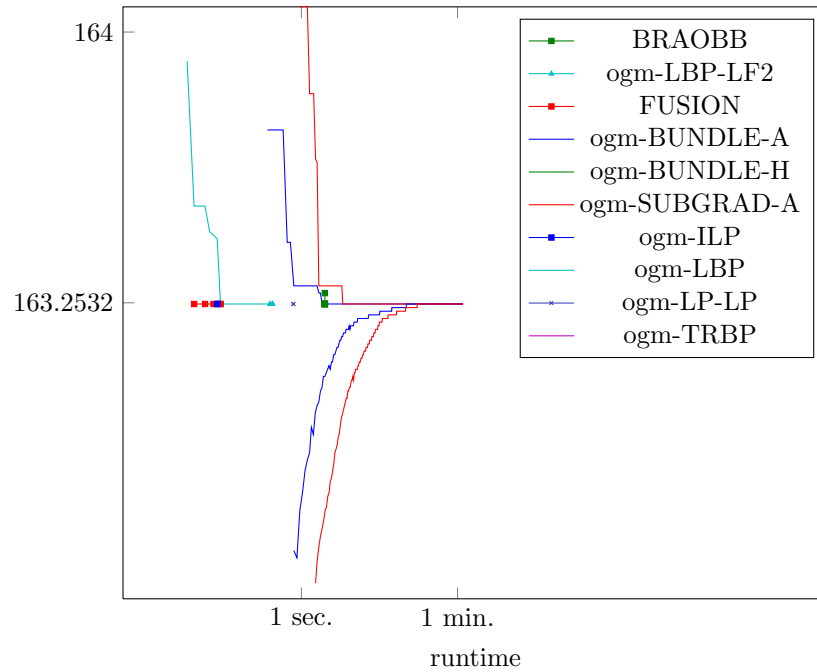


Figure 919: Runtime results for the instance *gm144* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

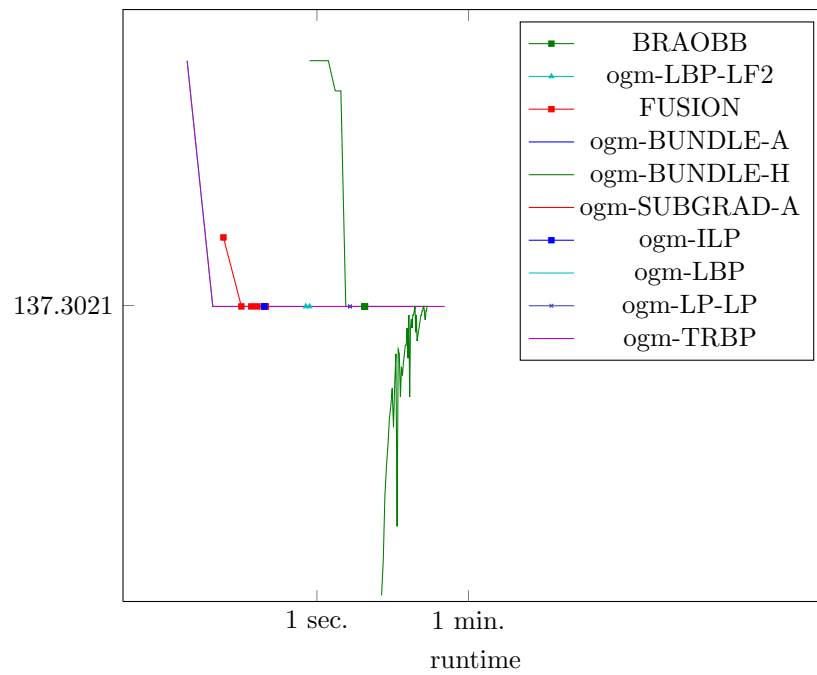


Figure 920: Runtime results for the instance *gm145* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

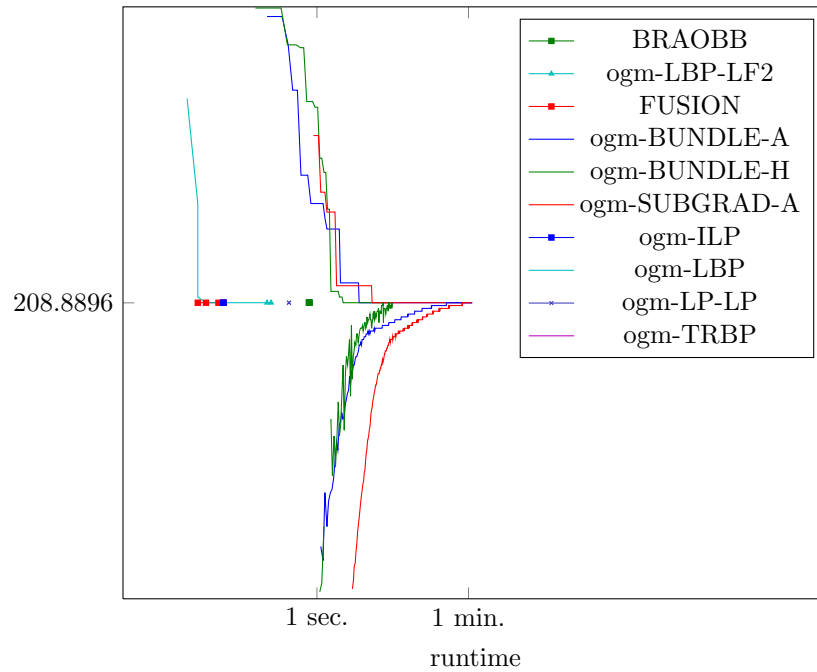


Figure 921: Runtime results for the instance *gm146* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

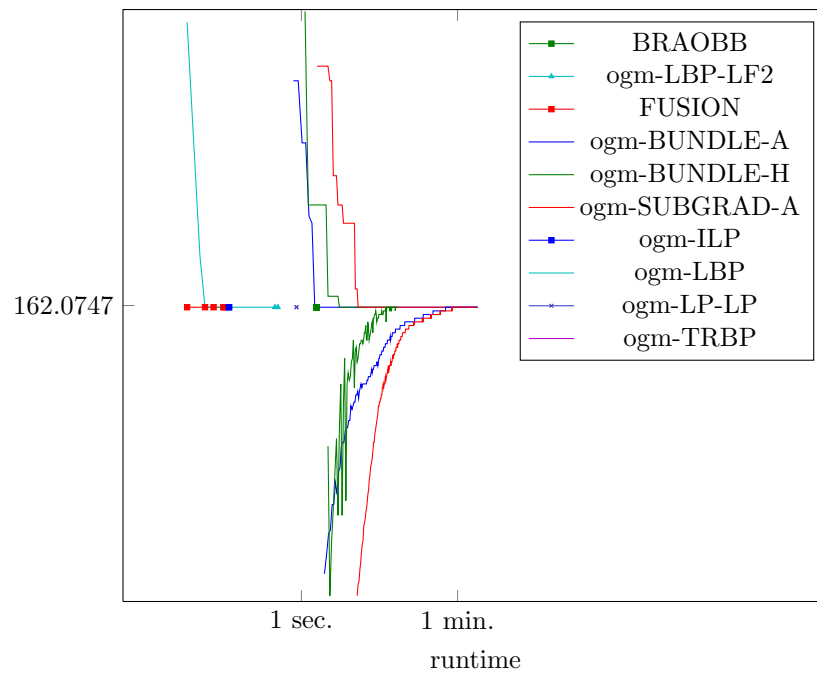


Figure 922: Runtime results for the instance *gm147* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

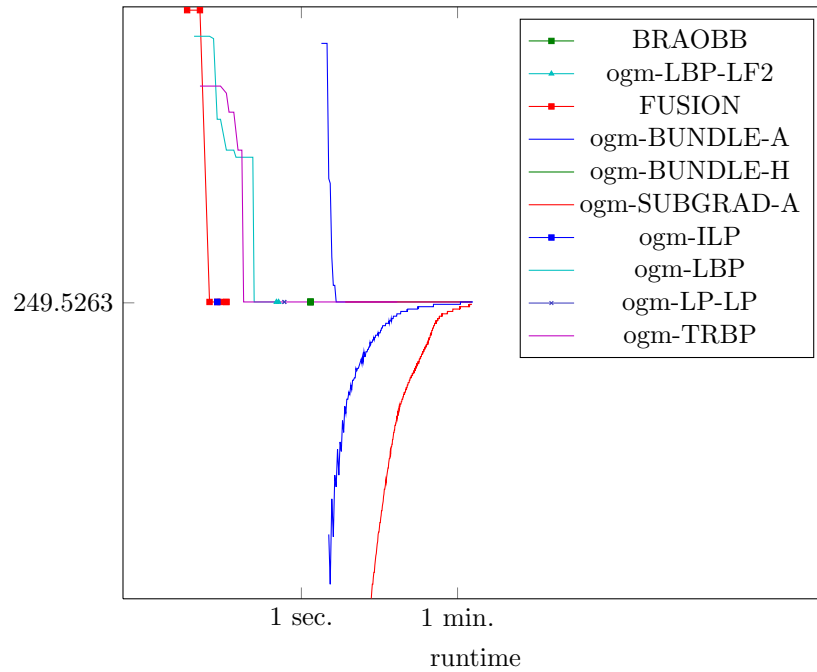


Figure 923: Runtime results for the instance *gm148* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

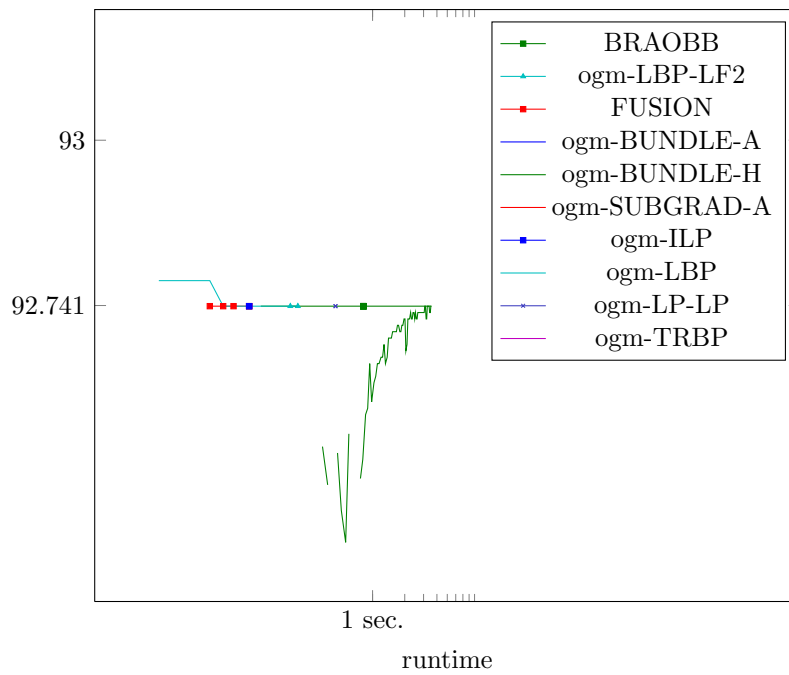


Figure 924: Runtime results for the instance *gm149* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

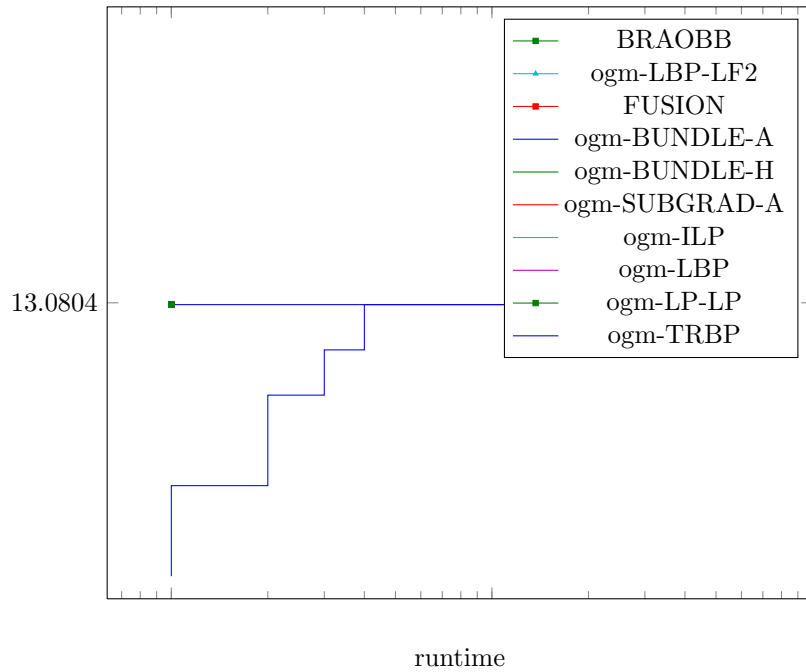


Figure 925: Runtime results for the instance *gm14* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

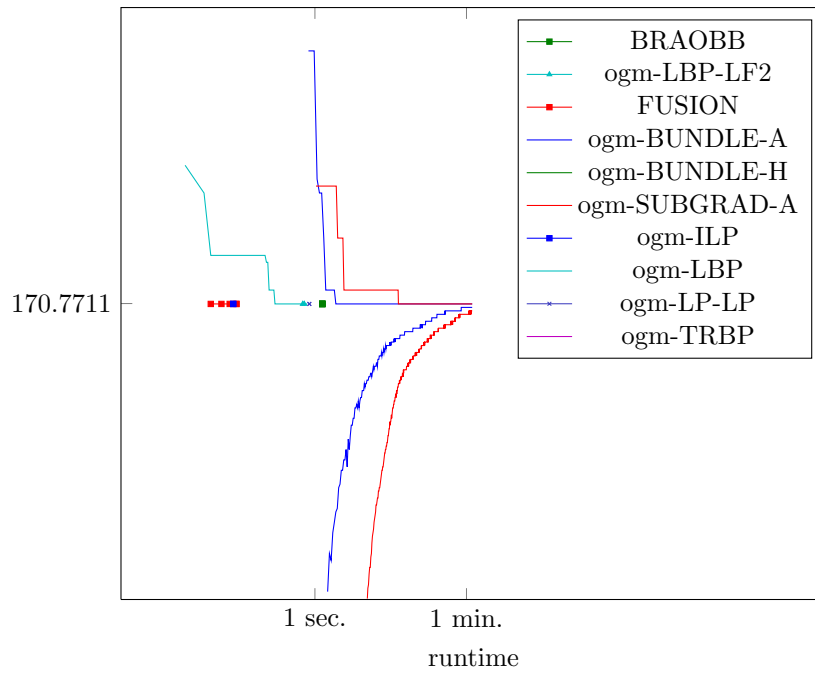


Figure 926: Runtime results for the instance *gm150* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

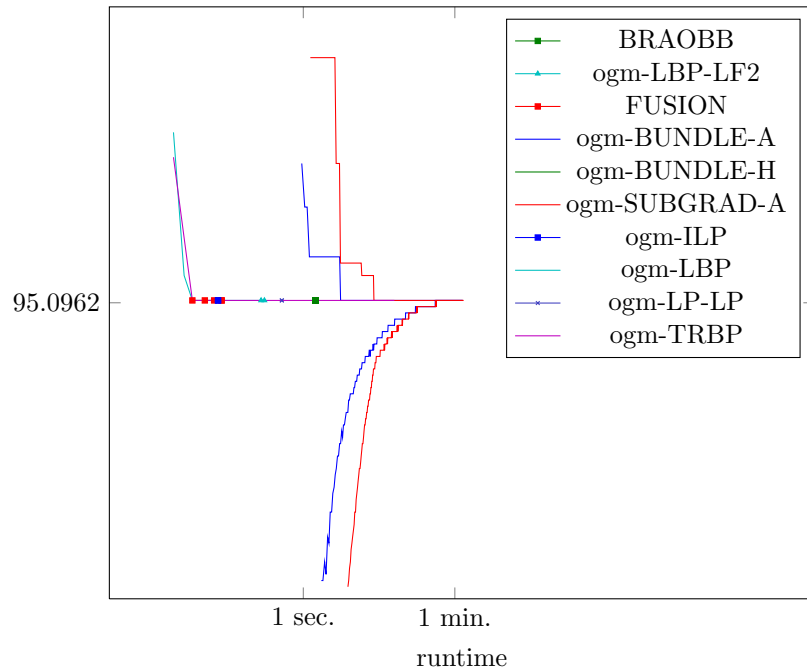


Figure 927: Runtime results for the instance *gm151* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

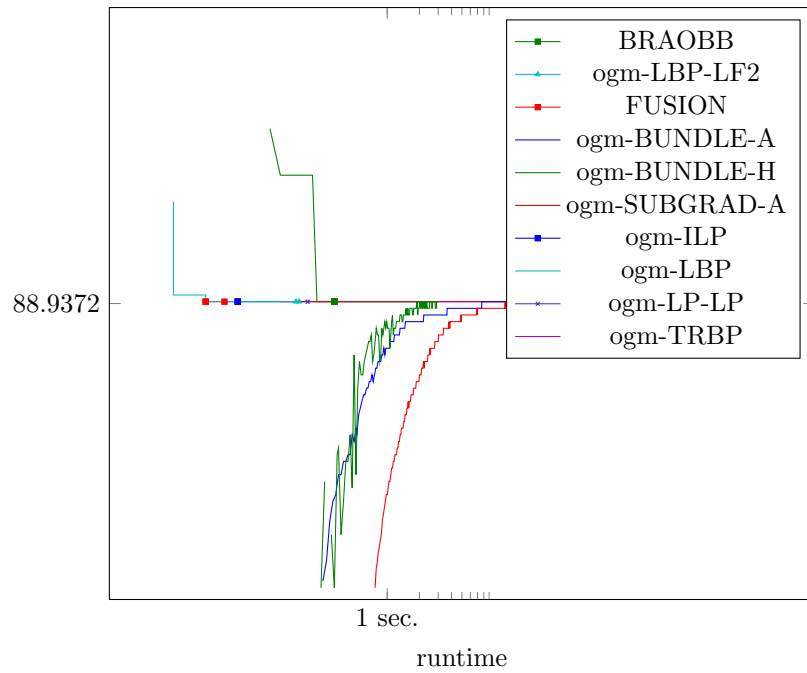


Figure 928: Runtime results for the instance *gm152* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

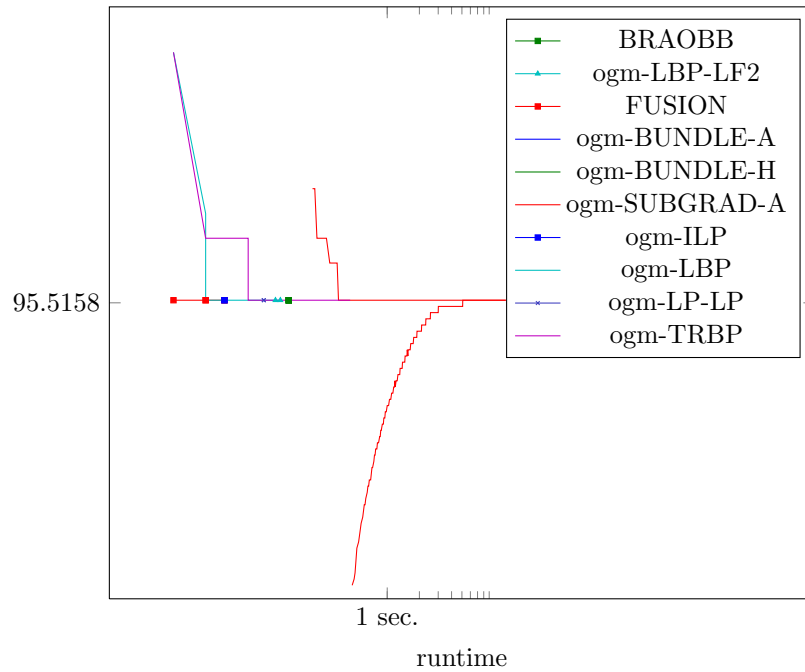


Figure 929: Runtime results for the instance *gm153* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

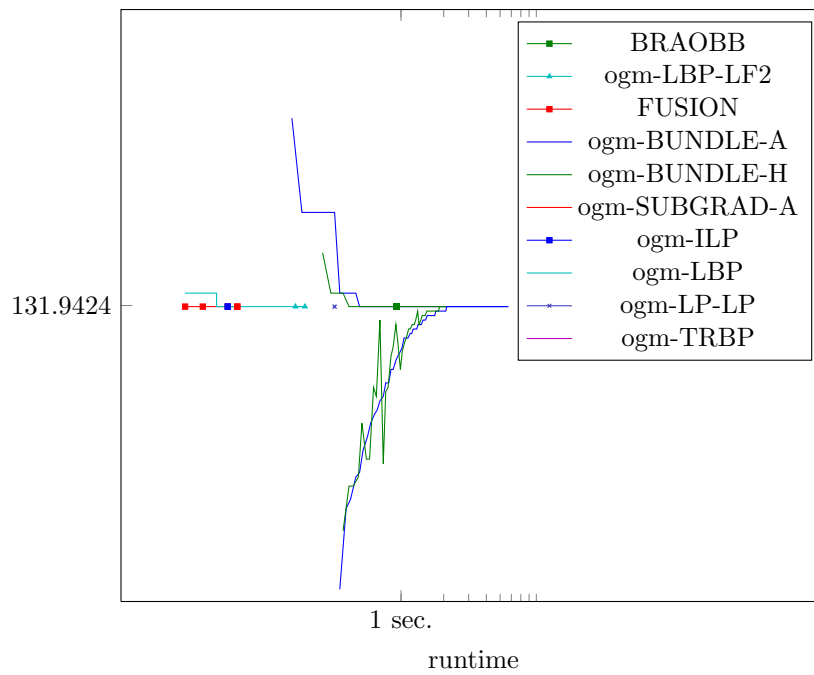


Figure 930: Runtime results for the instance *gm154* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

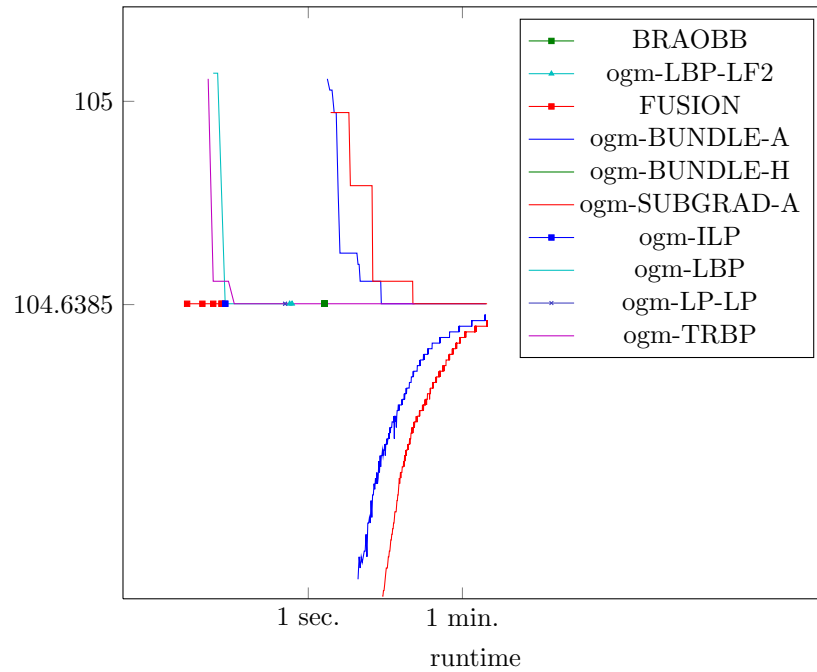


Figure 931: Runtime results for the instance *gm155* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

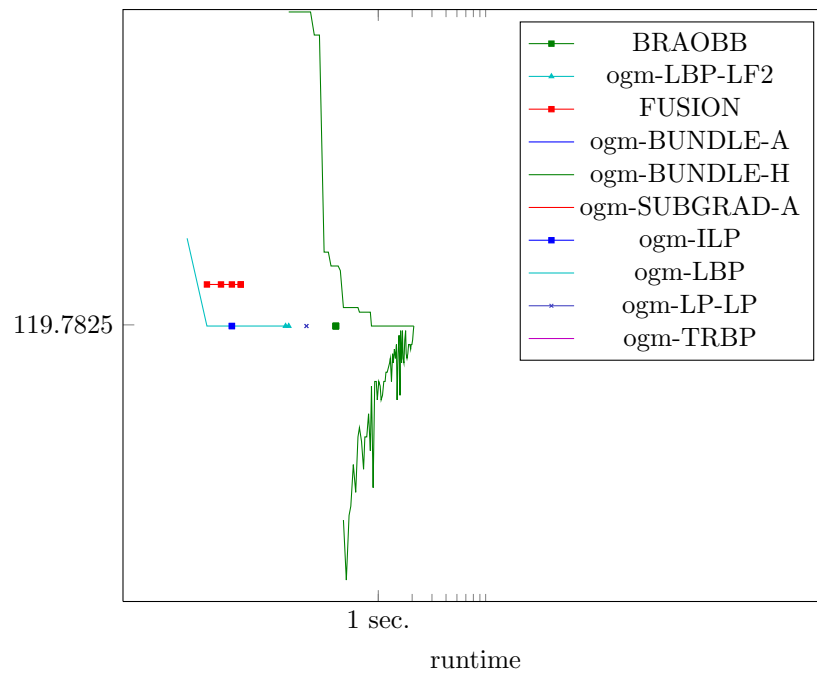


Figure 932: Runtime results for the instance *gm156* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

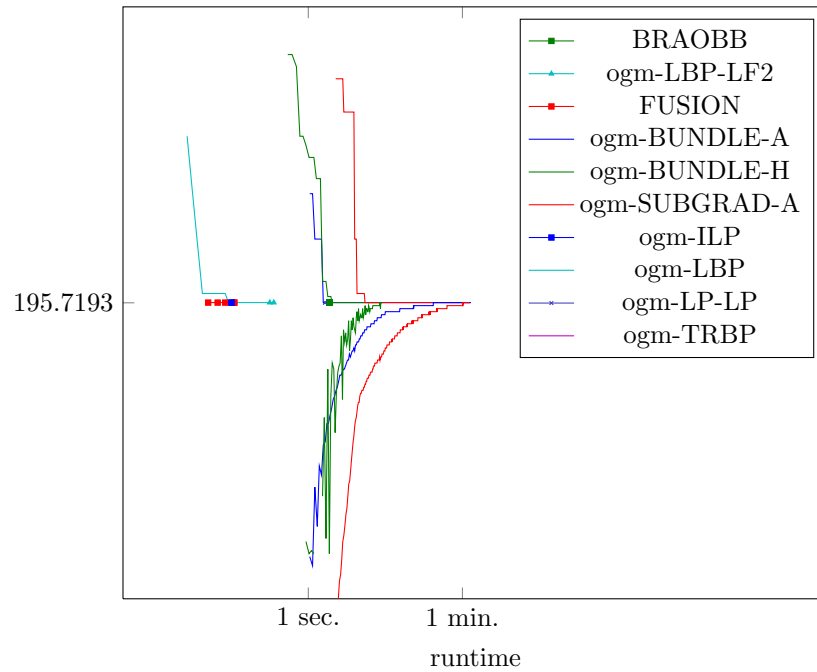


Figure 933: Runtime results for the instance *gm157* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

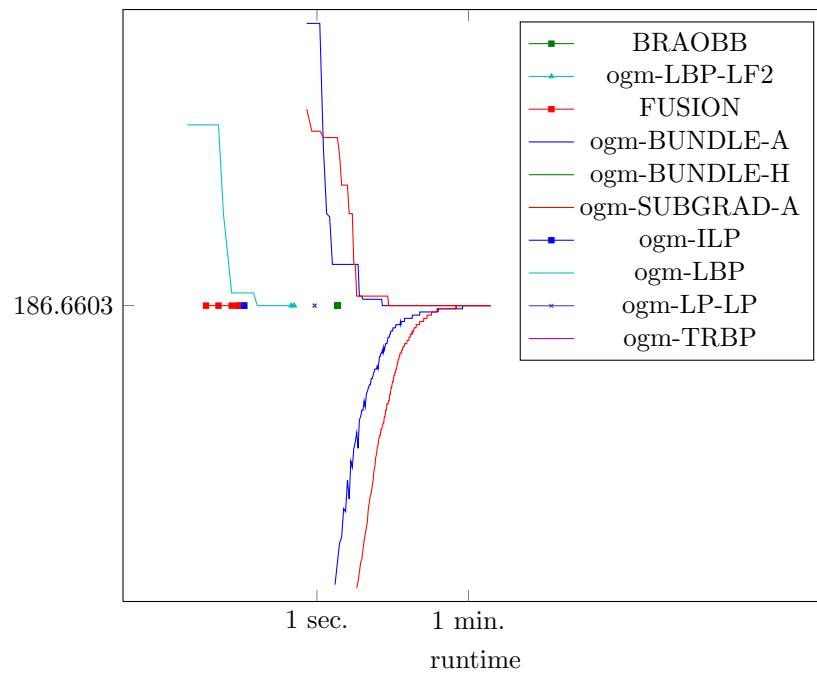


Figure 934: Runtime results for the instance *gm158* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

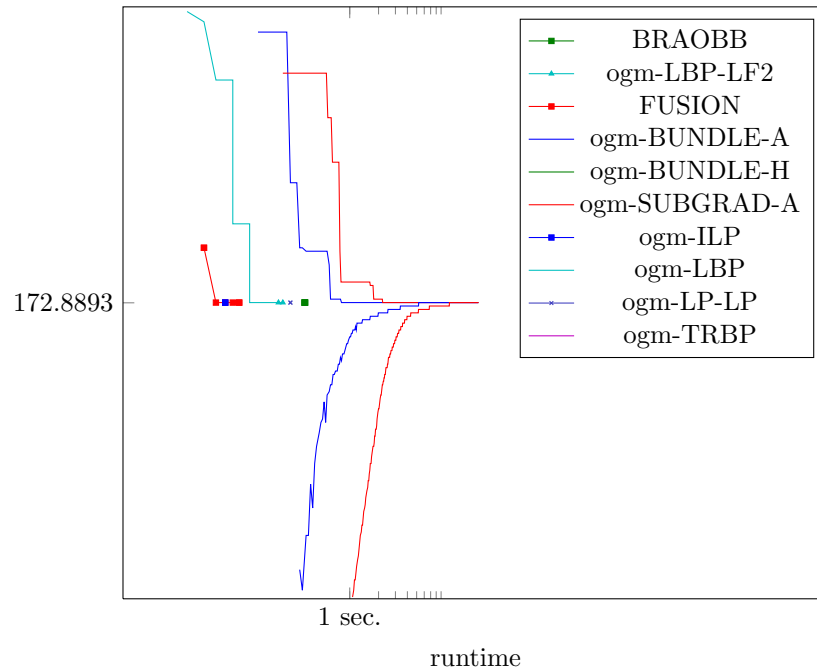


Figure 935: Runtime results for the instance *gm159* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

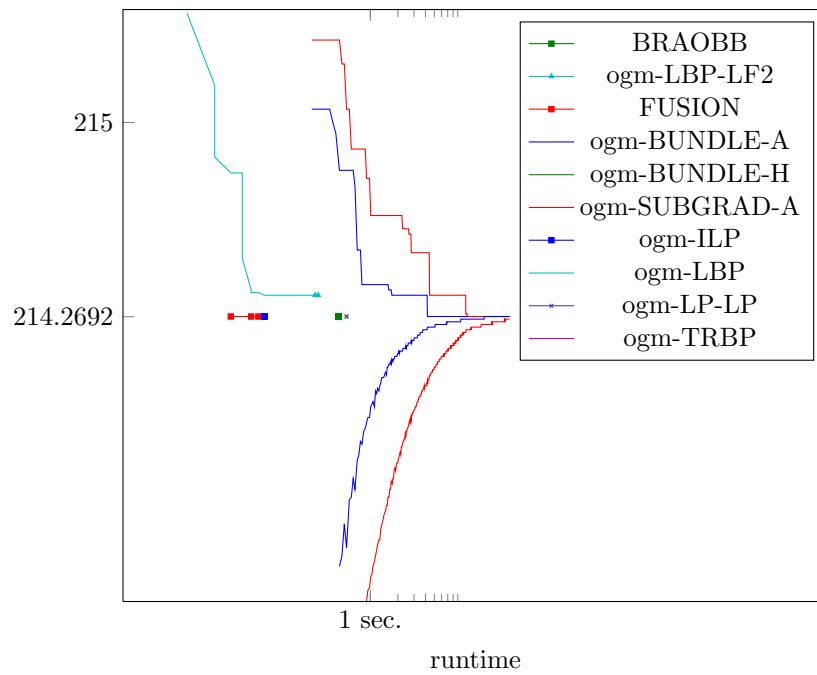


Figure 936: Runtime results for the instance *gm15* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

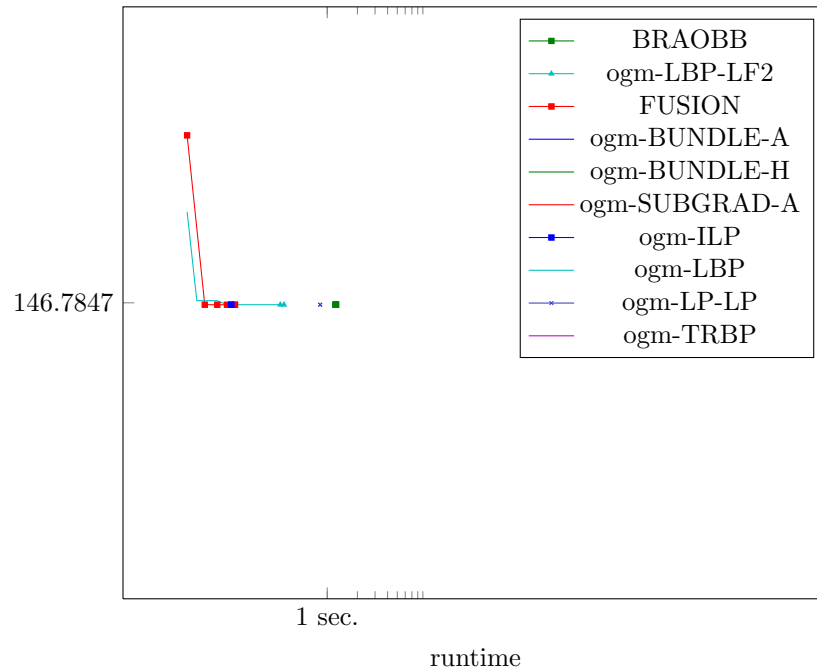


Figure 937: Runtime results for the instance *gm160* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

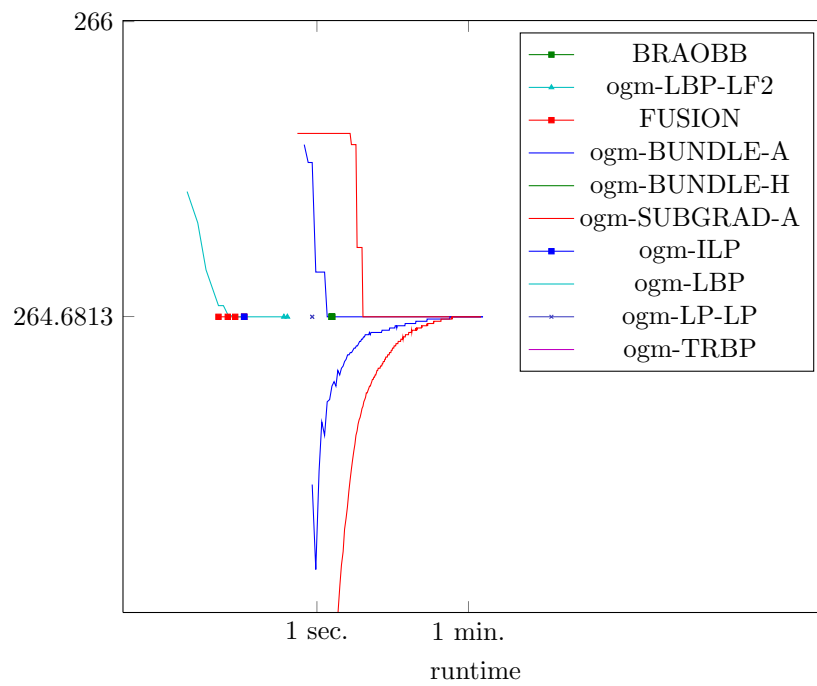


Figure 938: Runtime results for the instance *gm161* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

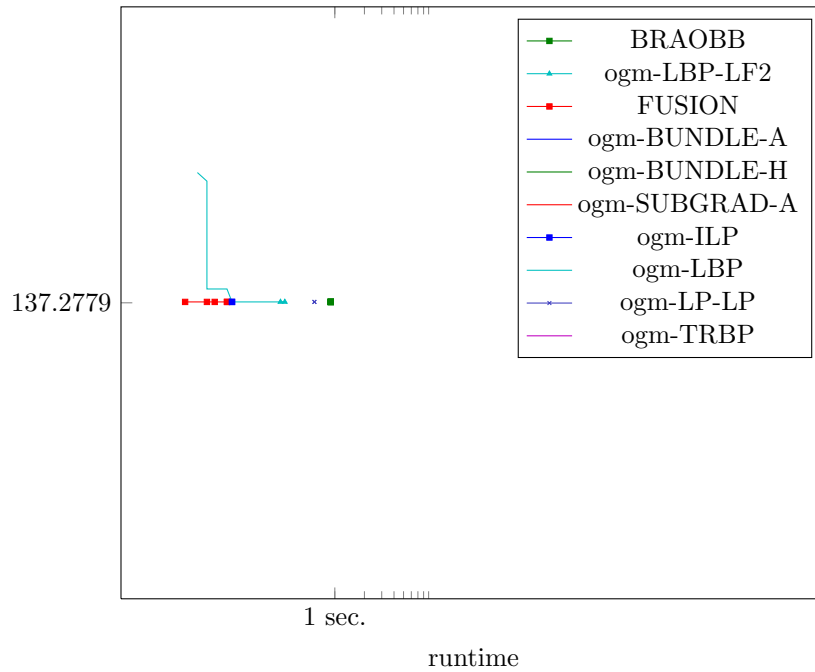


Figure 939: Runtime results for the instance *gm162* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

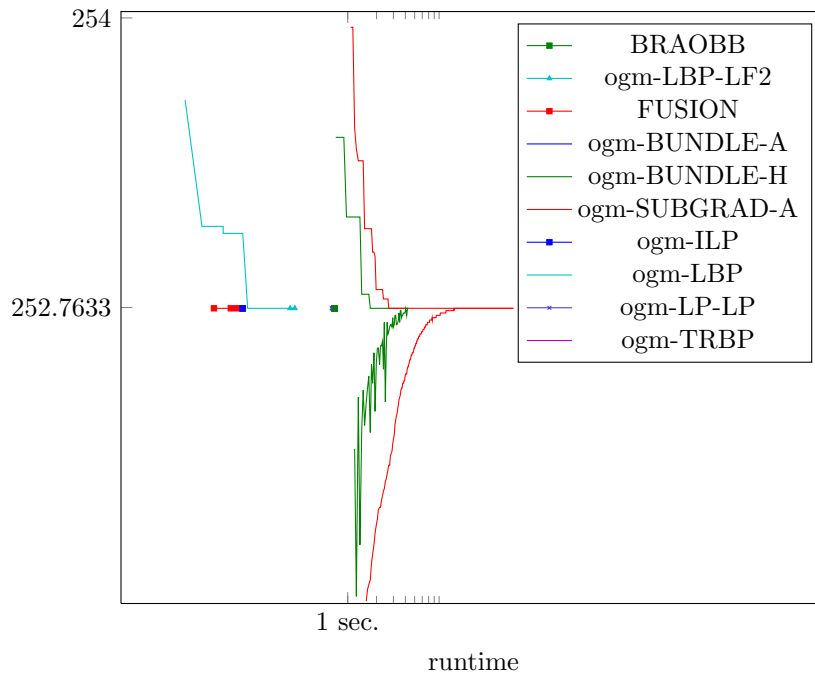


Figure 940: Runtime results for the instance *gm163* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

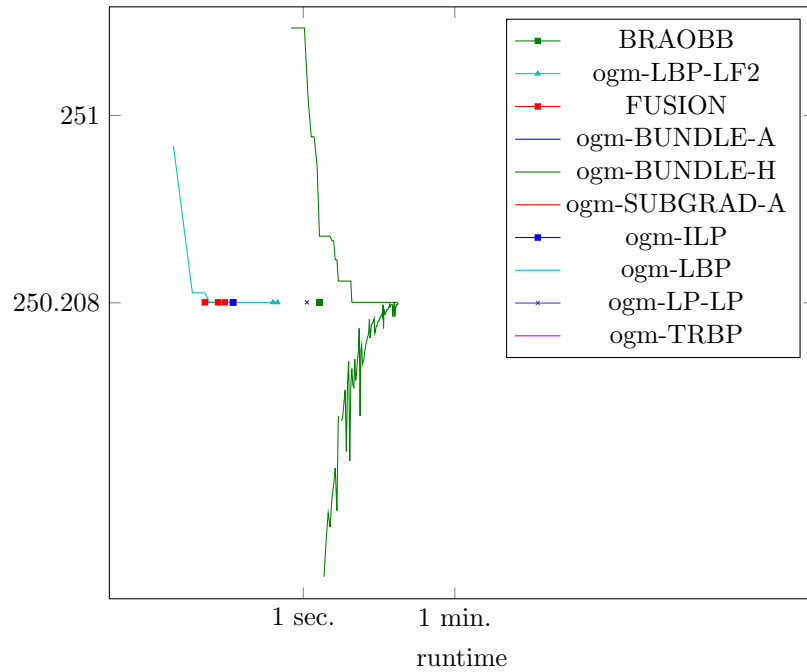


Figure 941: Runtime results for the instance *gm164* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

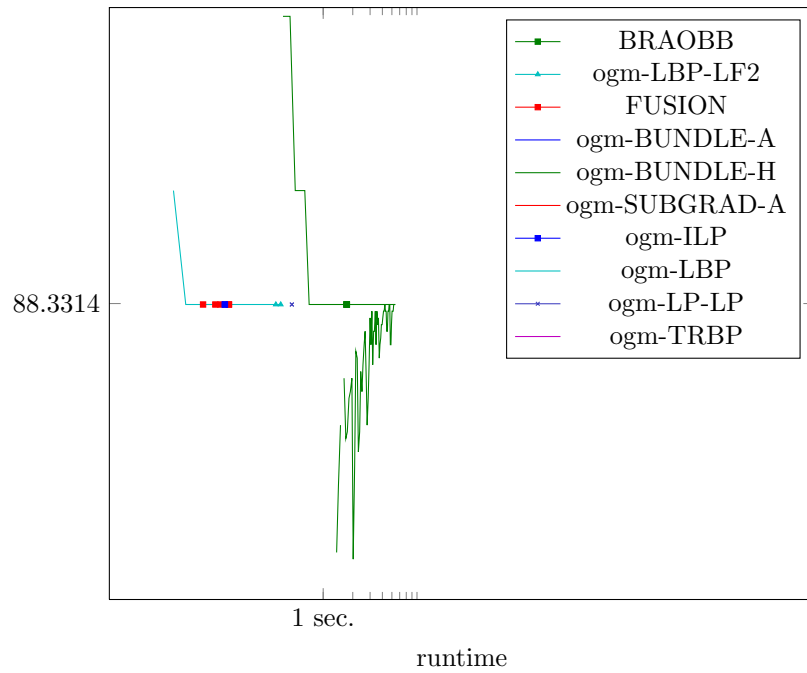


Figure 942: Runtime results for the instance *gm165* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

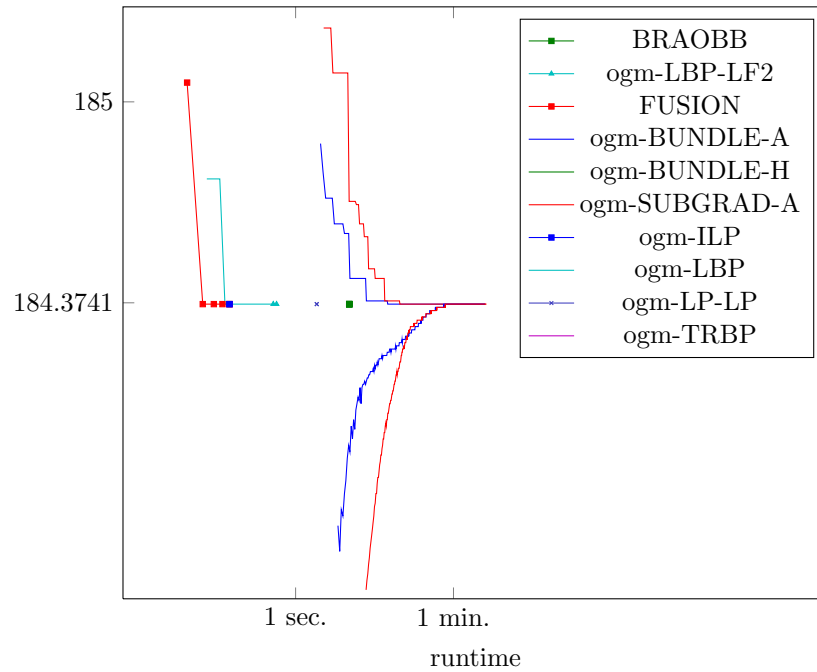


Figure 943: Runtime results for the instance *gm166* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

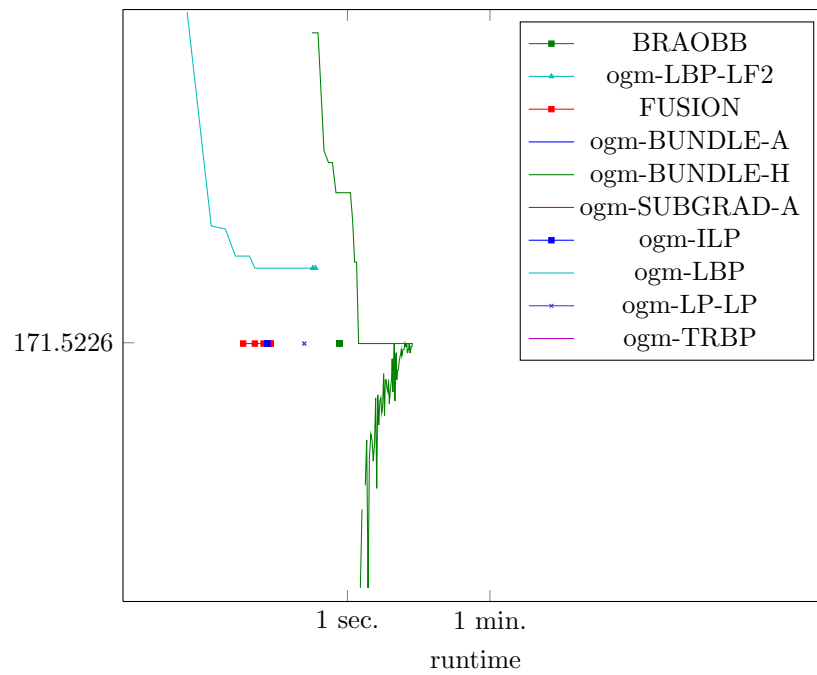


Figure 944: Runtime results for the instance *gm167* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

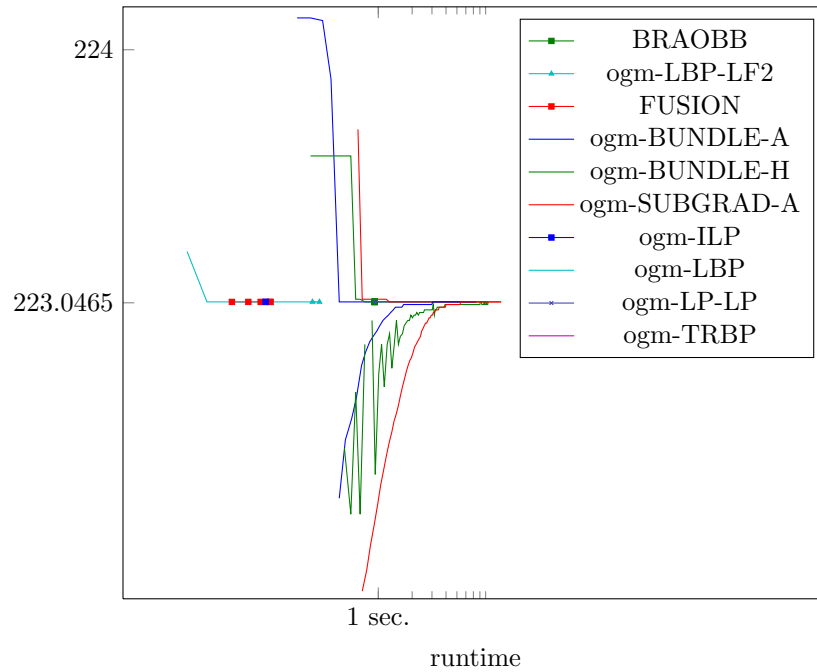


Figure 945: Runtime results for the instance *gm168* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

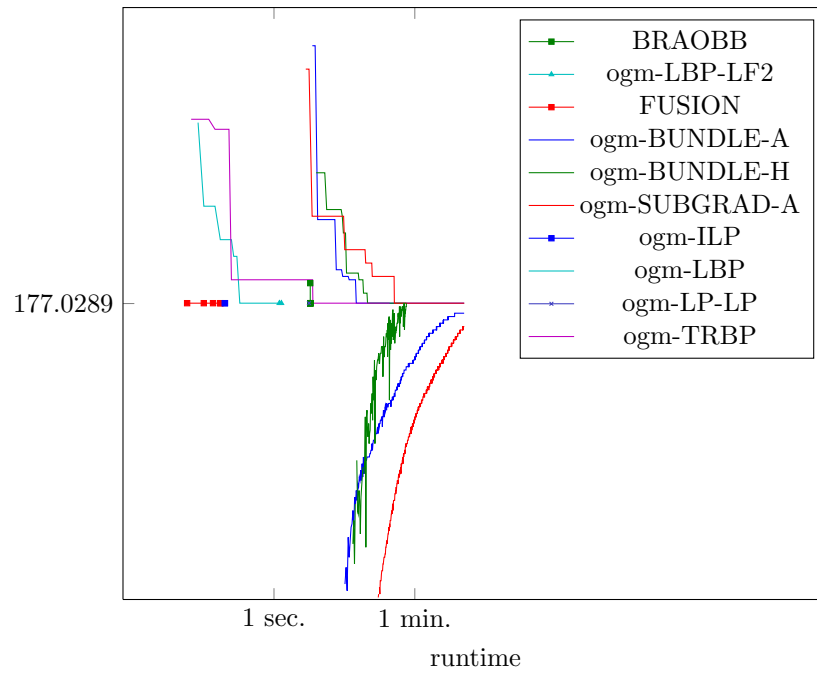


Figure 946: Runtime results for the instance *gm169* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

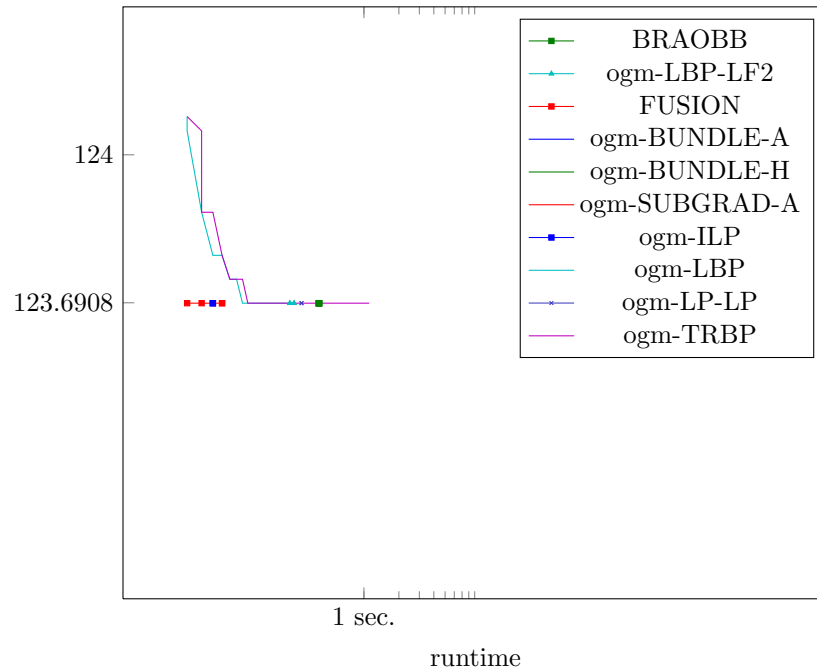


Figure 947: Runtime results for the instance *gm16* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

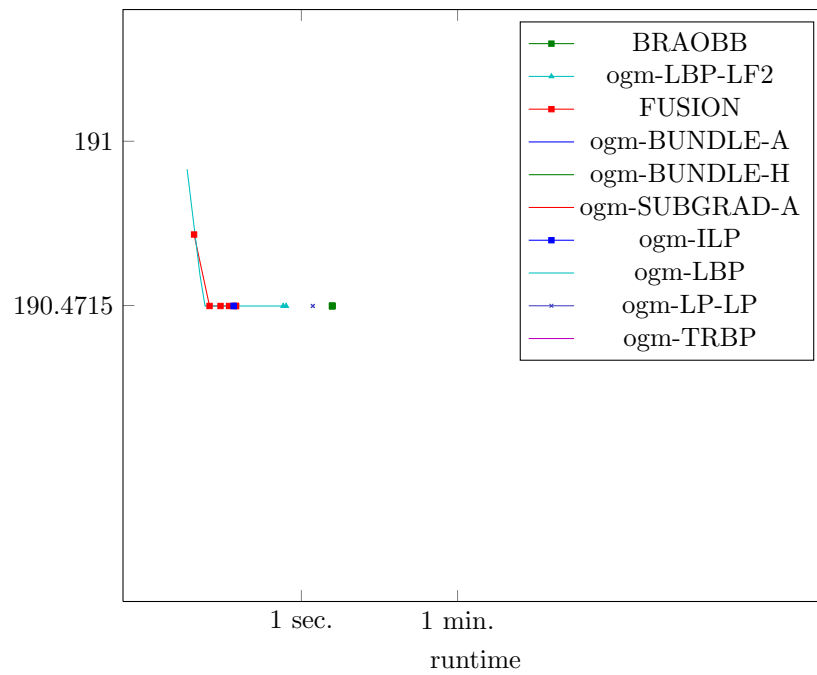


Figure 948: Runtime results for the instance *gm170* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

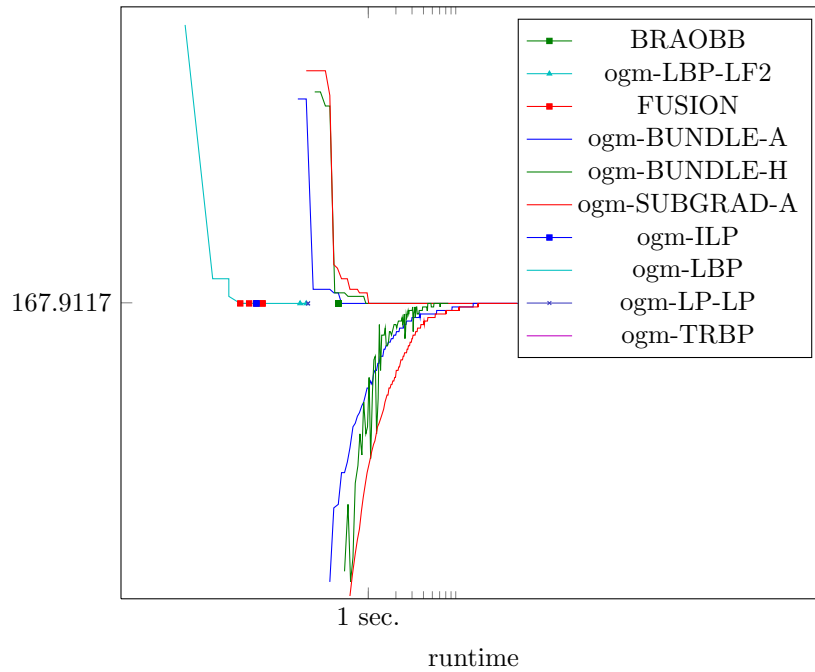


Figure 949: Runtime results for the instance *gm171* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

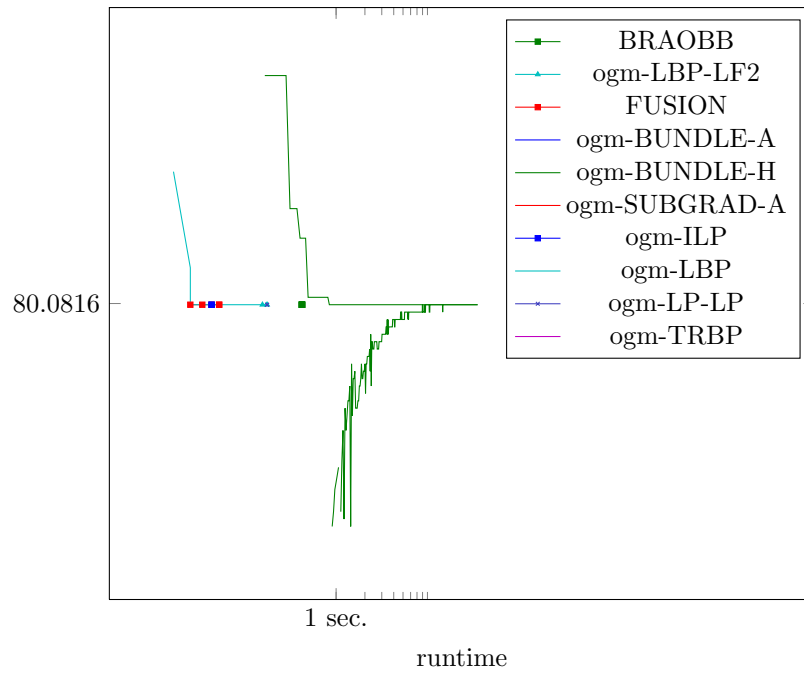


Figure 950: Runtime results for the instance *gm172* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

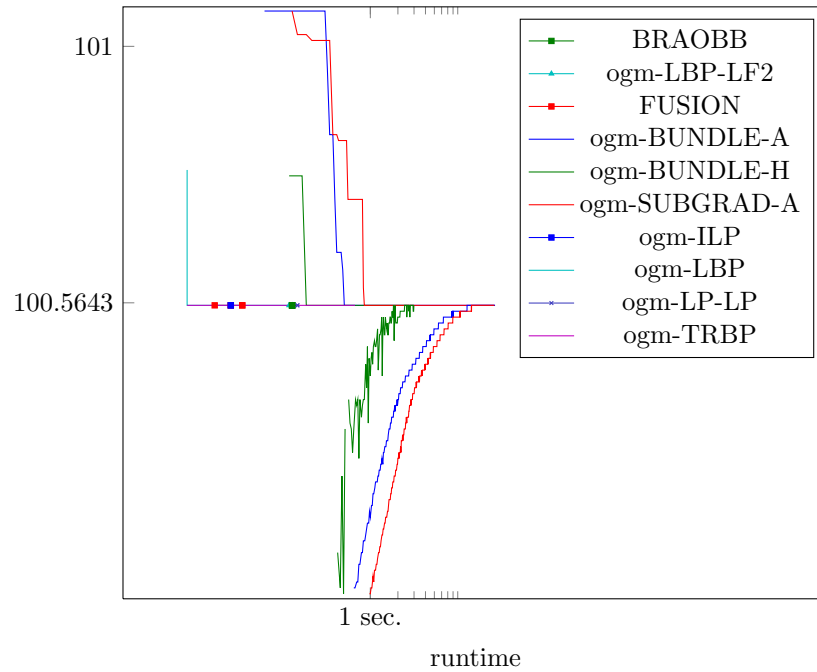


Figure 951: Runtime results for the instance *gm173* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

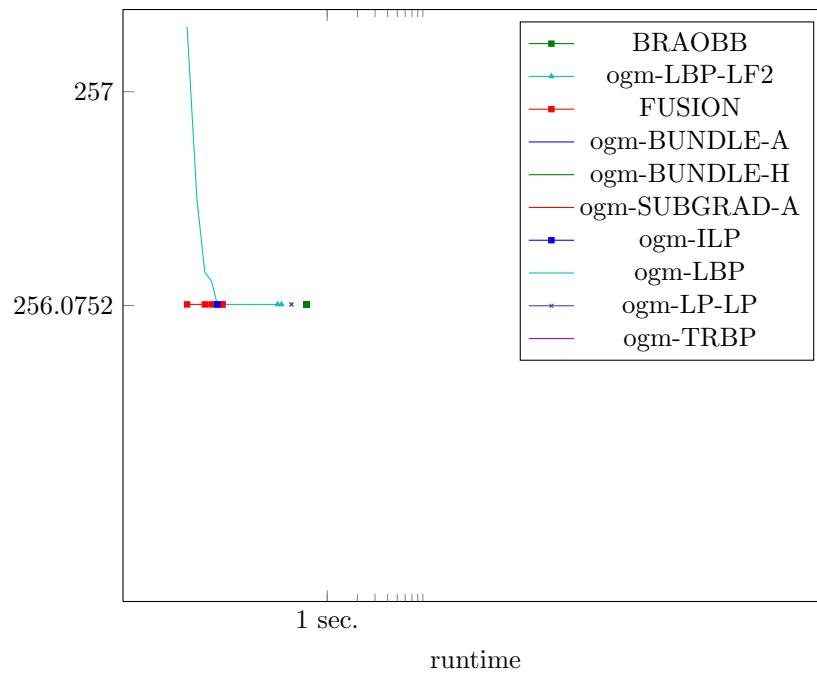


Figure 952: Runtime results for the instance *gm174* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

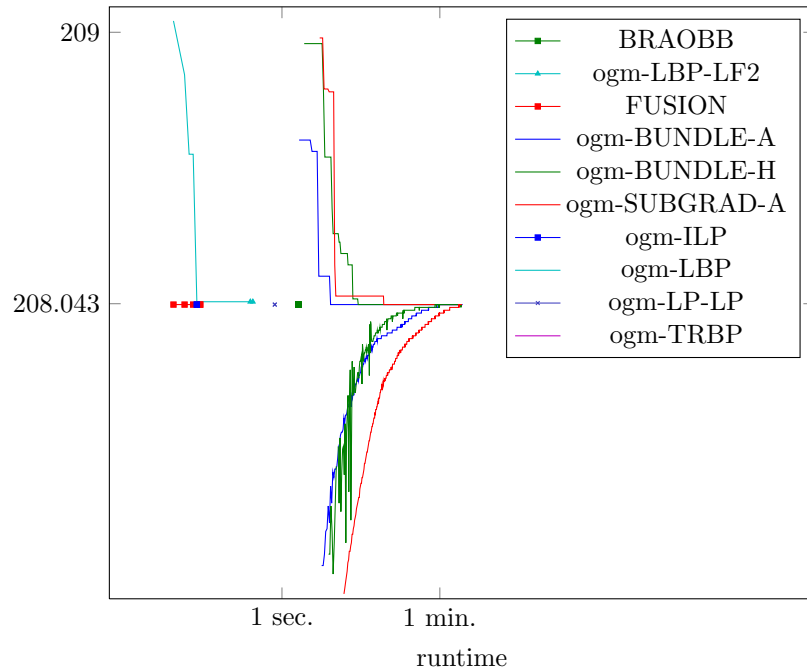


Figure 953: Runtime results for the instance *gm175* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

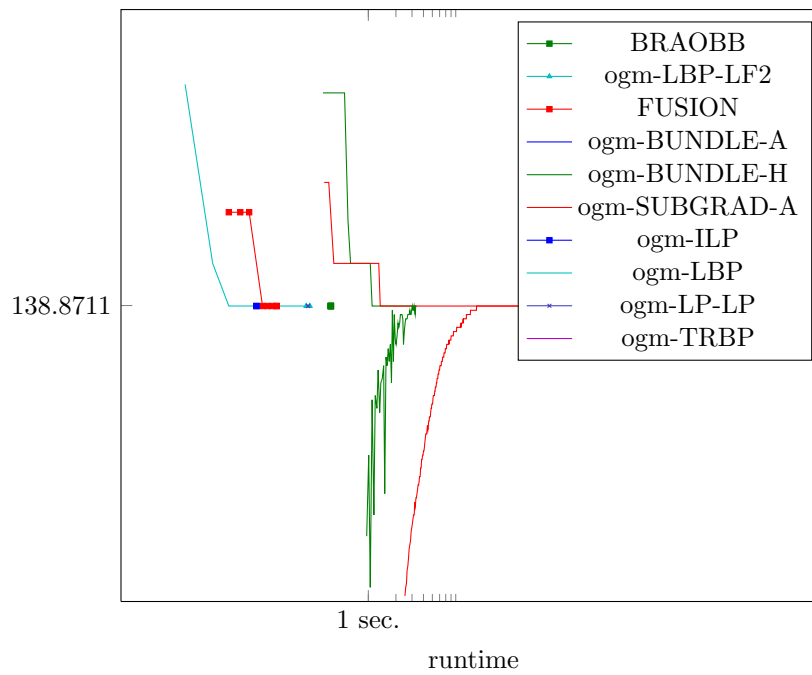


Figure 954: Runtime results for the instance *gm176* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

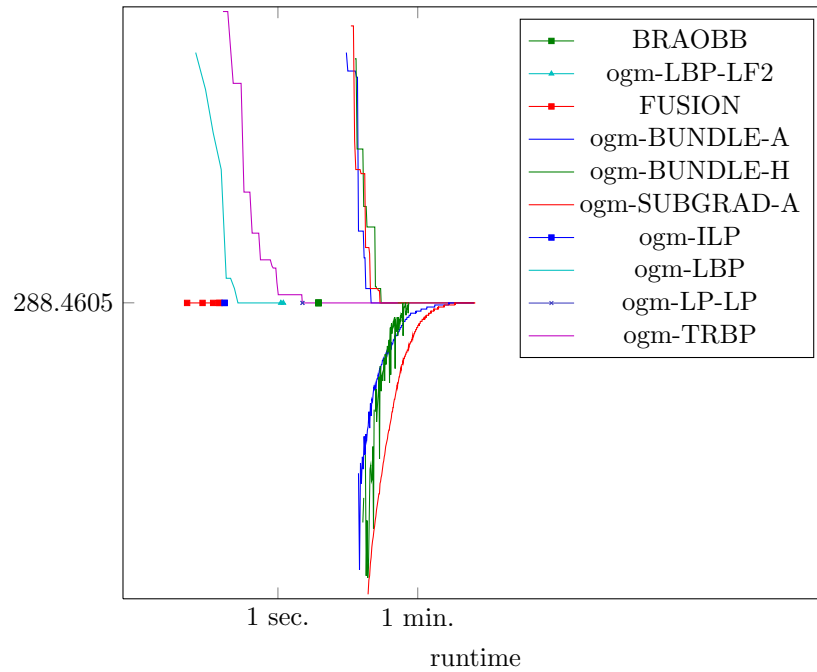


Figure 955: Runtime results for the instance *gm177* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

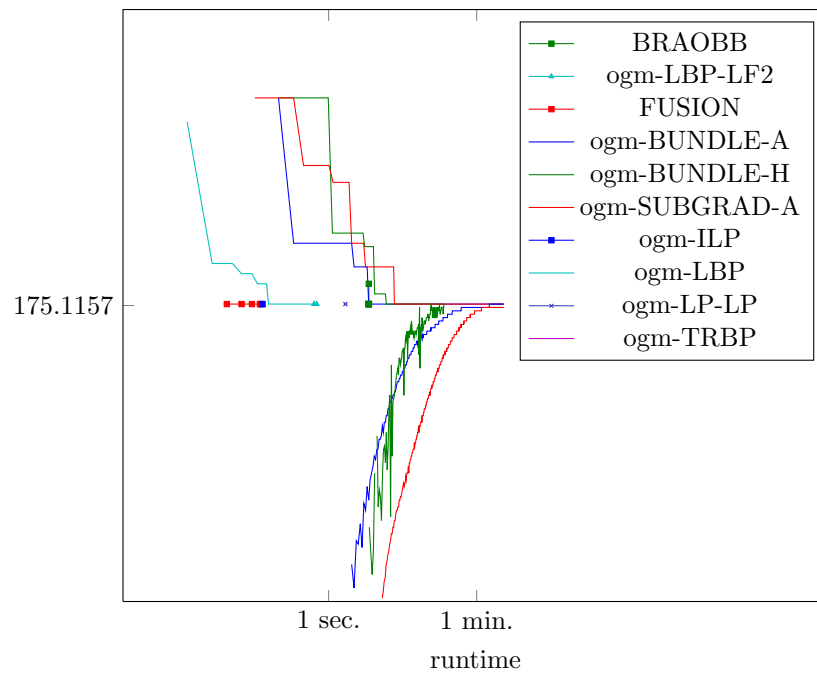


Figure 956: Runtime results for the instance *gm178* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

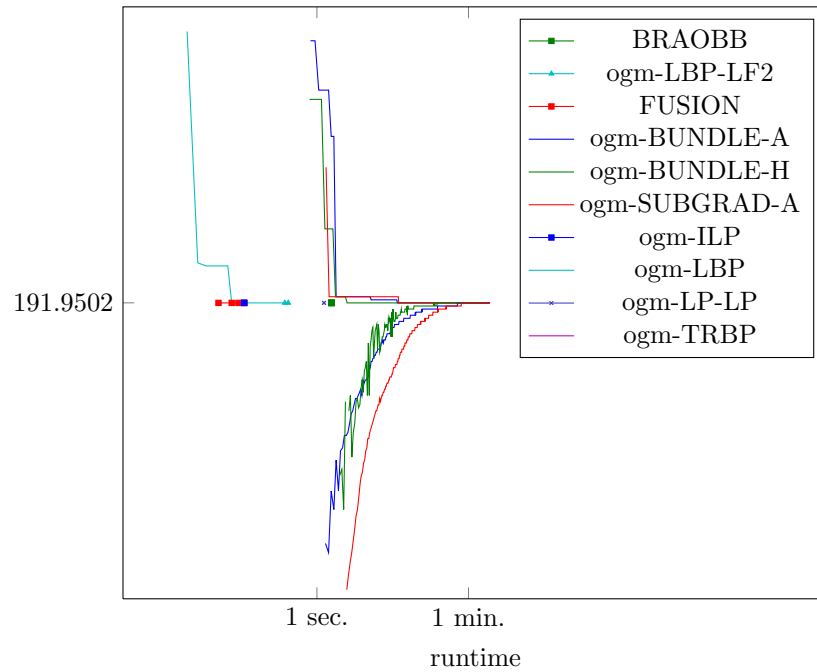


Figure 957: Runtime results for the instance *gm179* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

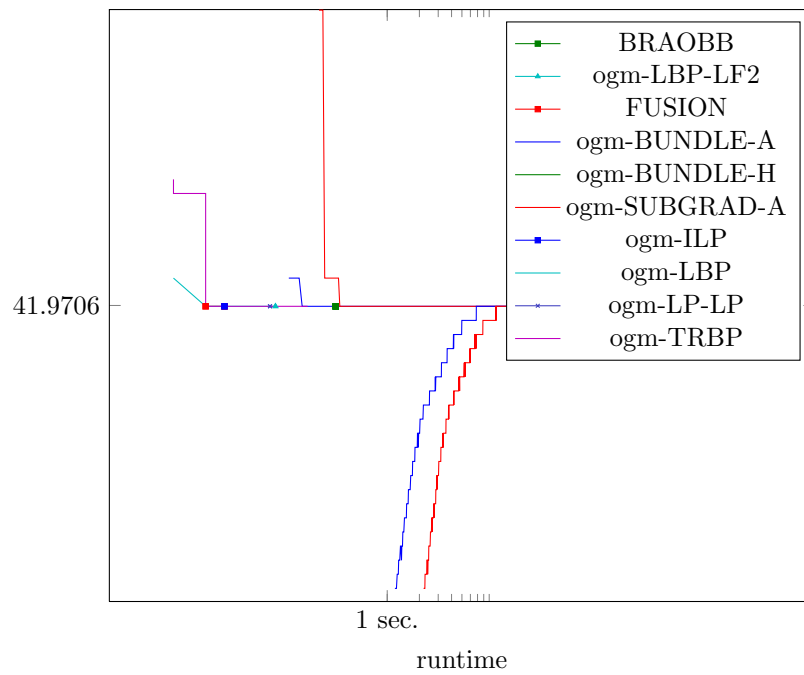


Figure 958: Runtime results for the instance *gm17* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

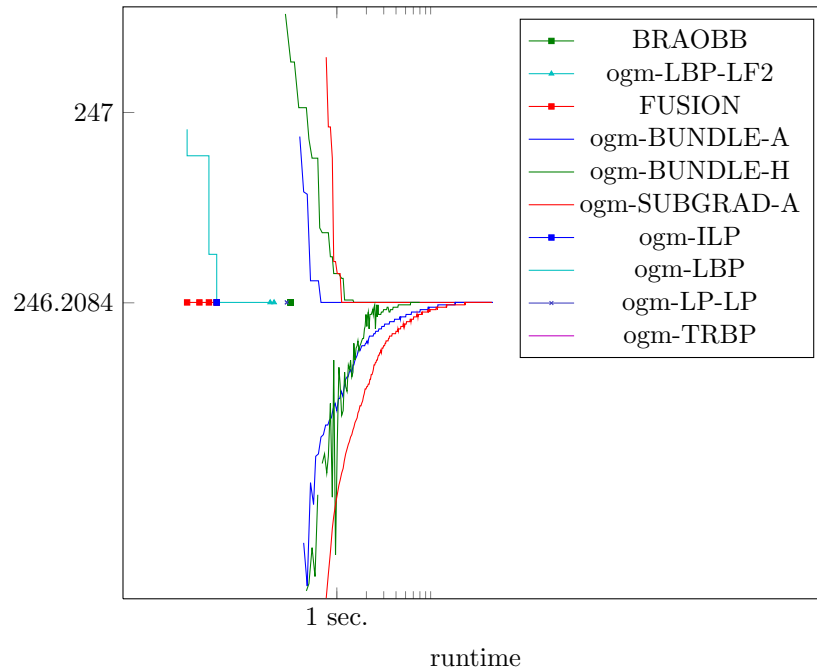


Figure 959: Runtime results for the instance *gm180* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

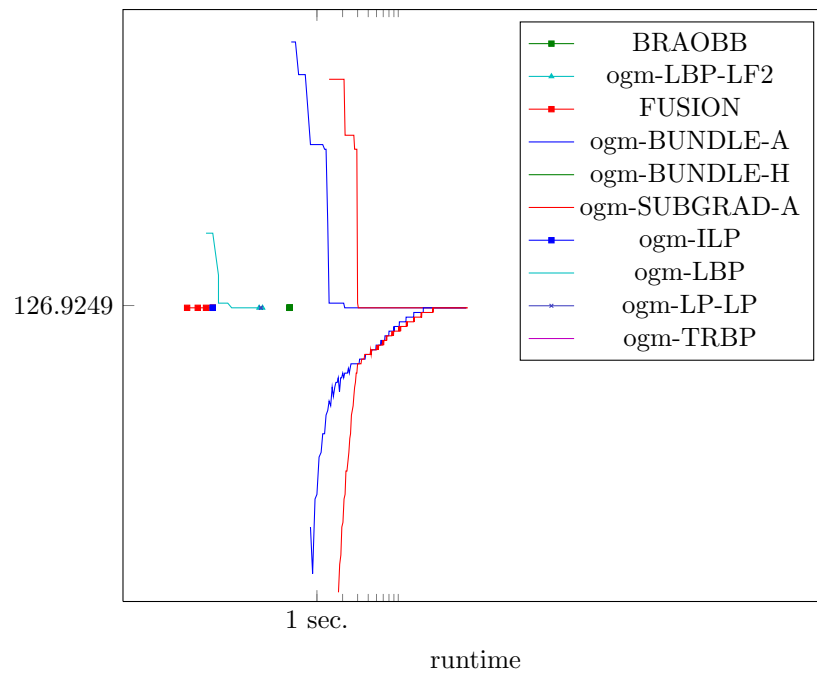


Figure 960: Runtime results for the instance *gm181* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

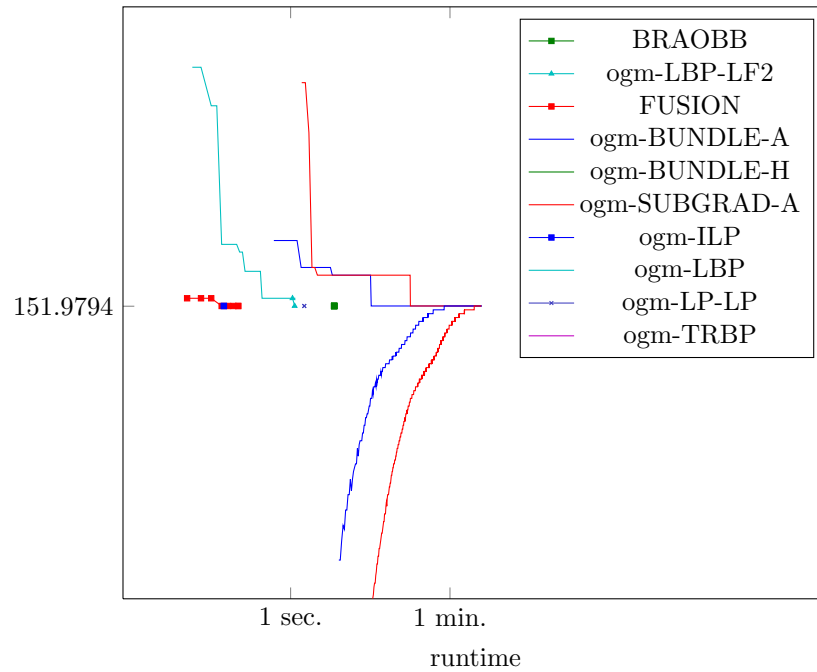


Figure 961: Runtime results for the instance *gm182* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

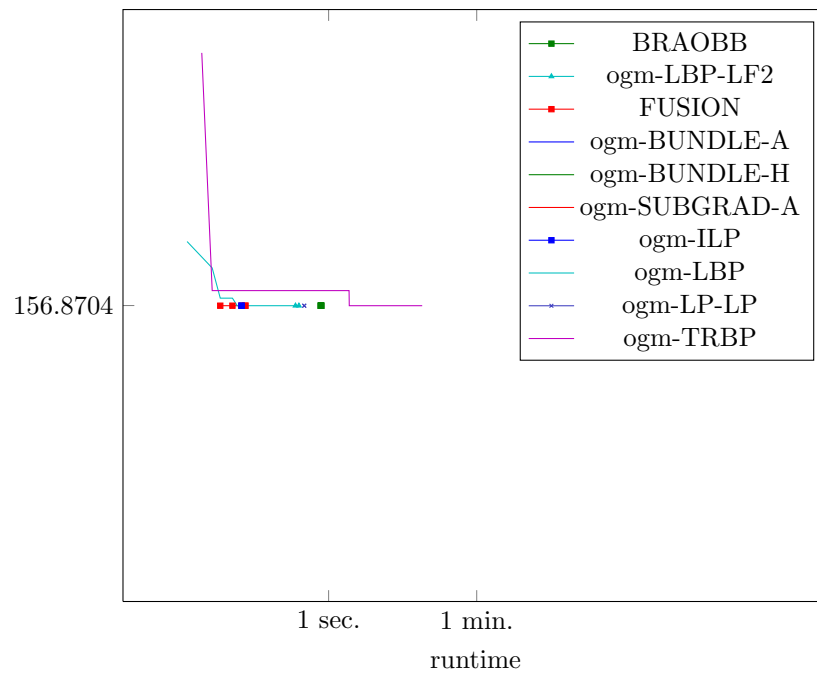


Figure 962: Runtime results for the instance *gm183* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

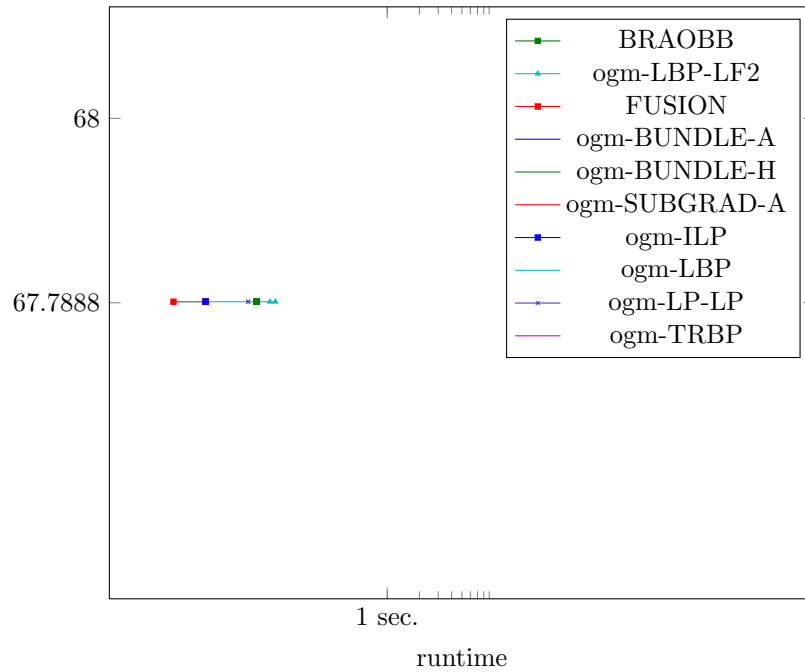


Figure 963: Runtime results for the instance *gm184* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

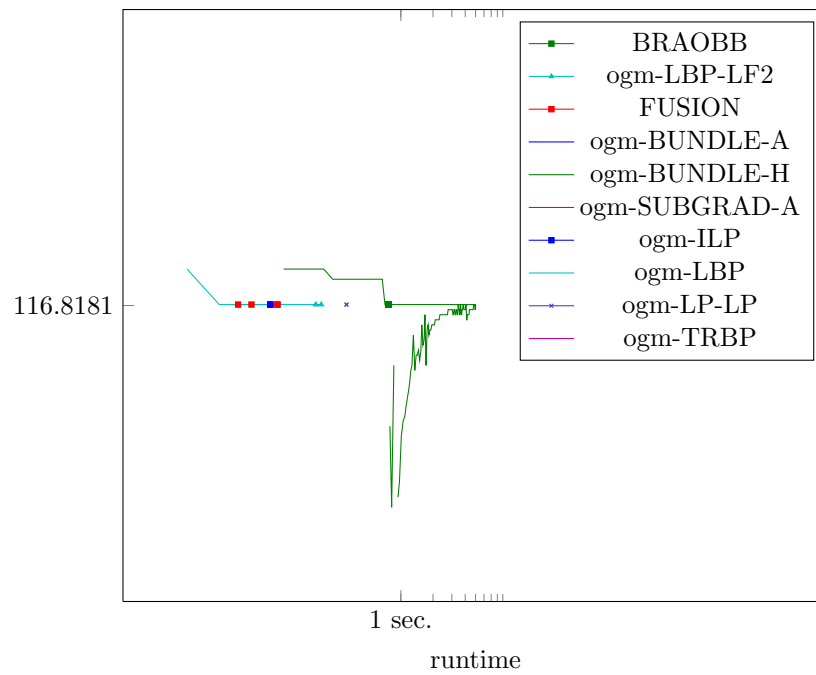


Figure 964: Runtime results for the instance *gm185* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

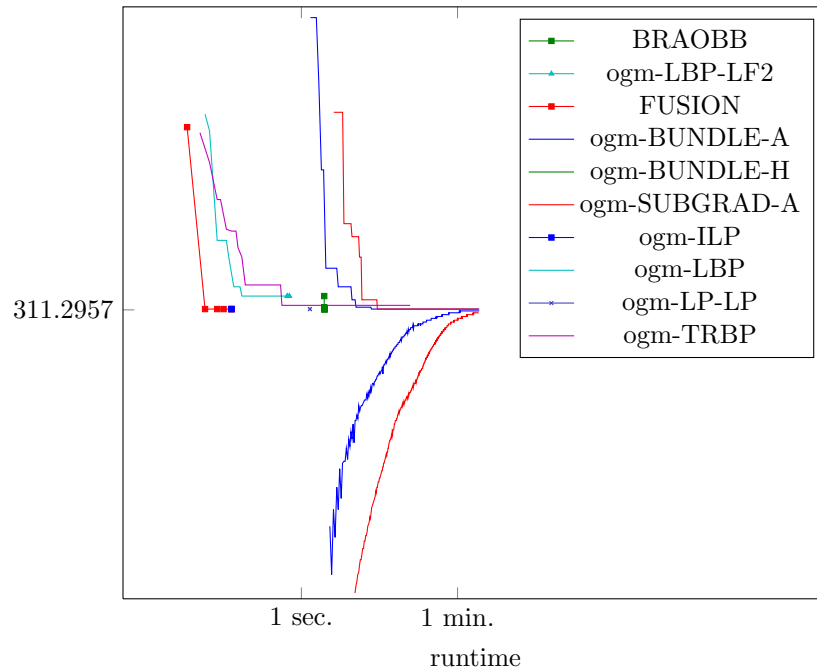


Figure 965: Runtime results for the instance *gm186* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

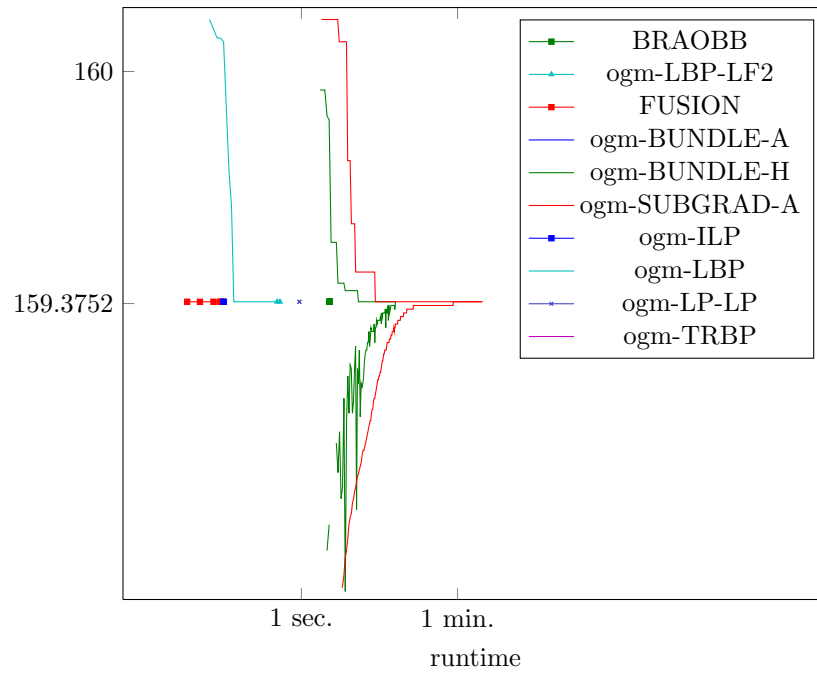


Figure 966: Runtime results for the instance *gm187* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

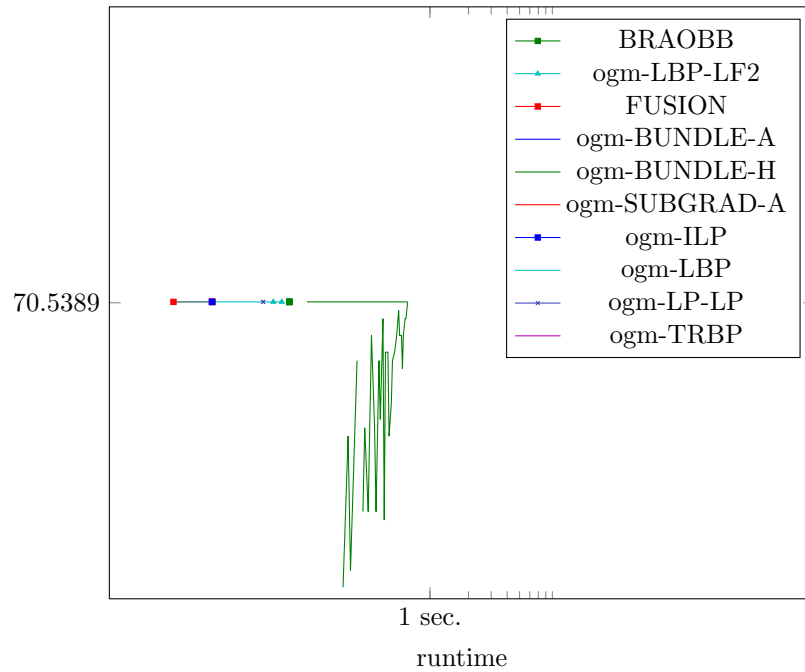


Figure 967: Runtime results for the instance *gm188* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

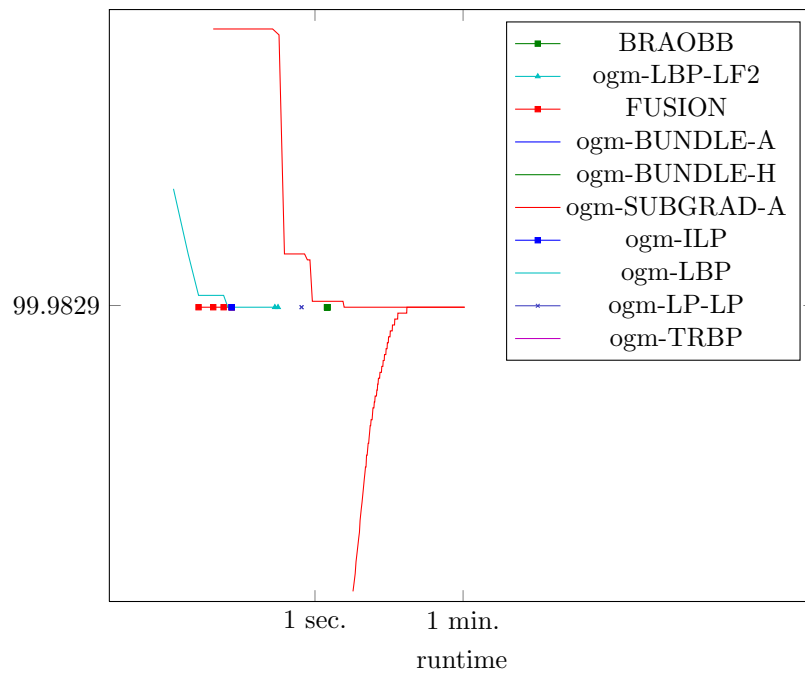


Figure 968: Runtime results for the instance *gm189* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

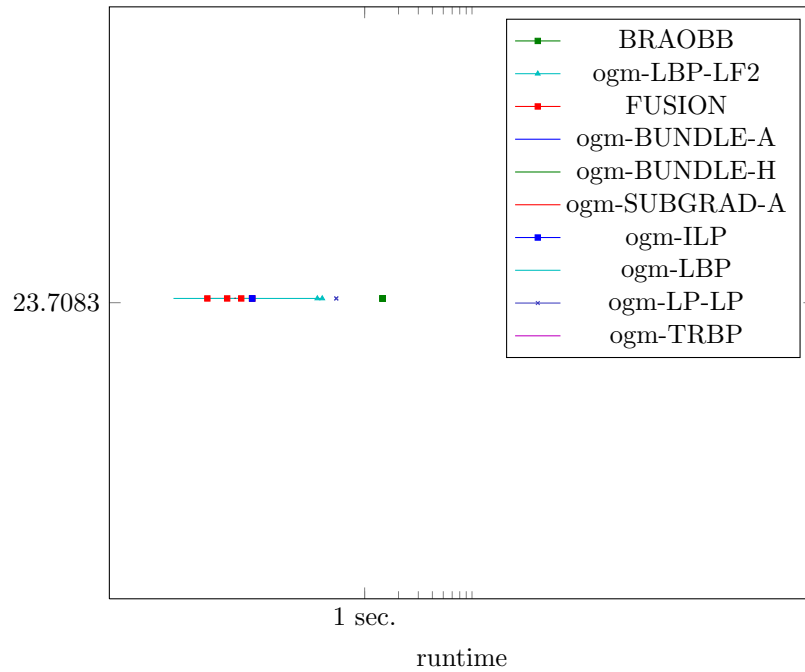


Figure 969: Runtime results for the instance *gm18* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

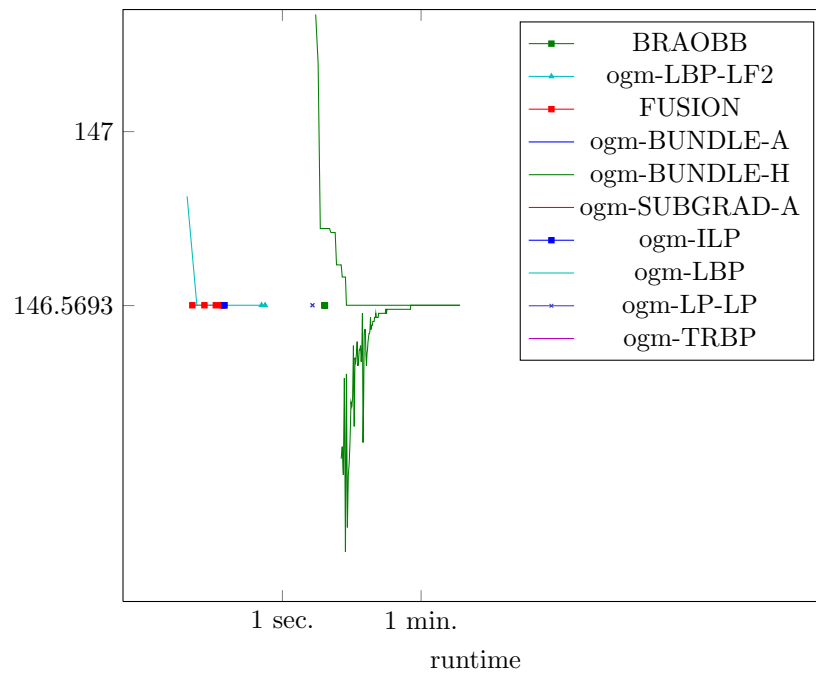


Figure 970: Runtime results for the instance *gm190* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

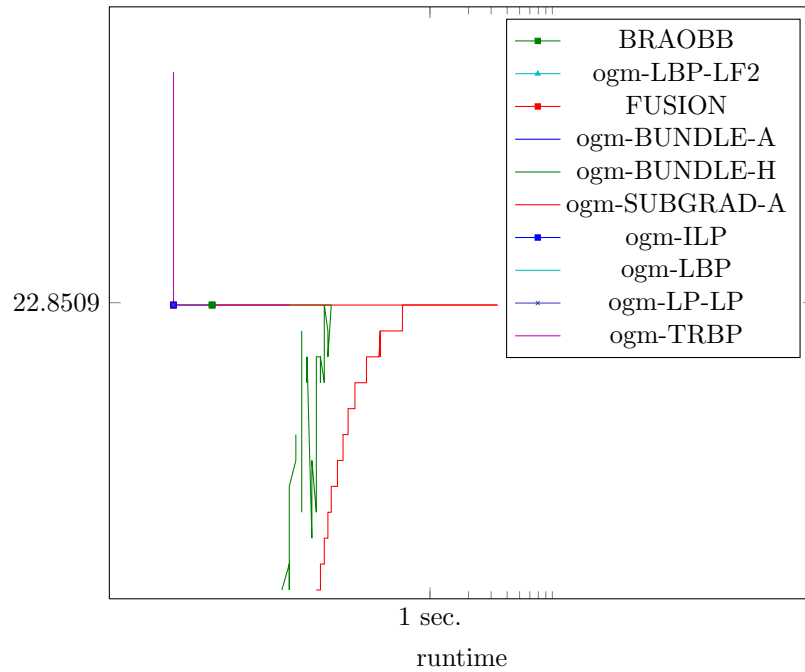


Figure 971: Runtime results for the instance *gm191* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

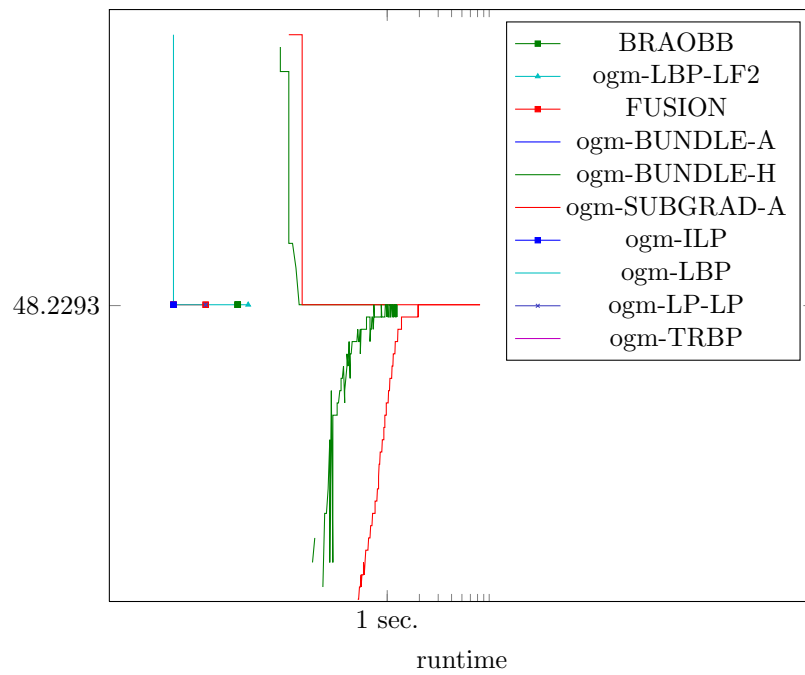


Figure 972: Runtime results for the instance *gm192* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

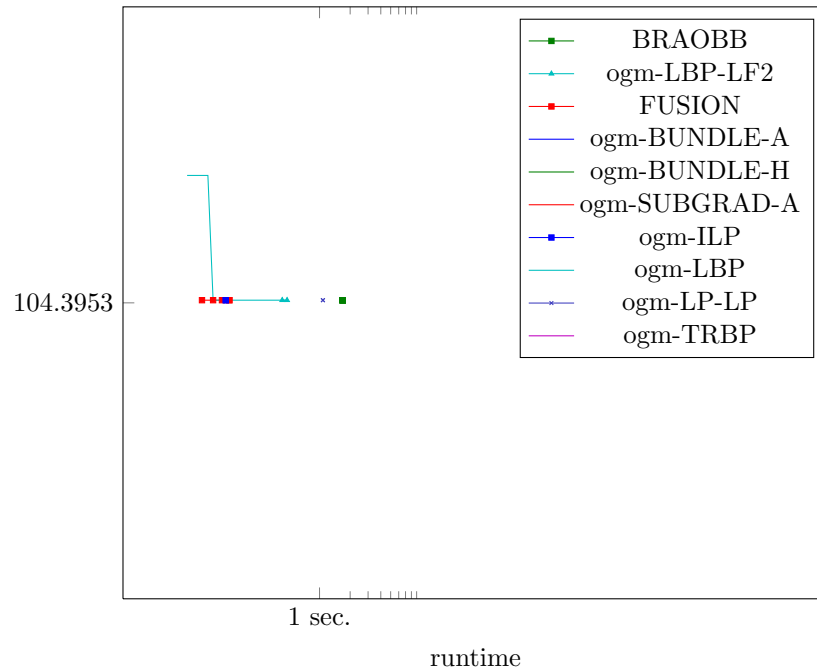


Figure 973: Runtime results for the instance *gm193* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

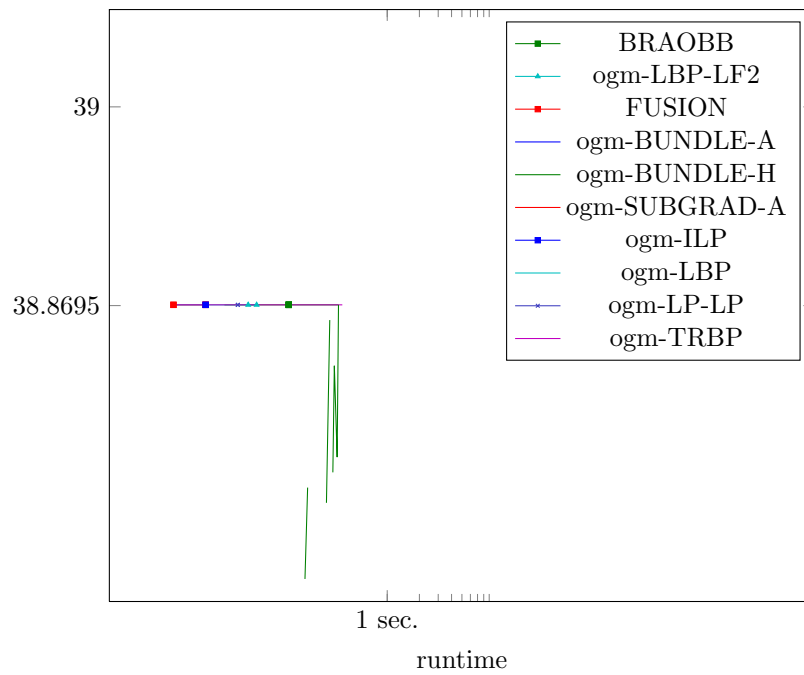


Figure 974: Runtime results for the instance *gm194* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

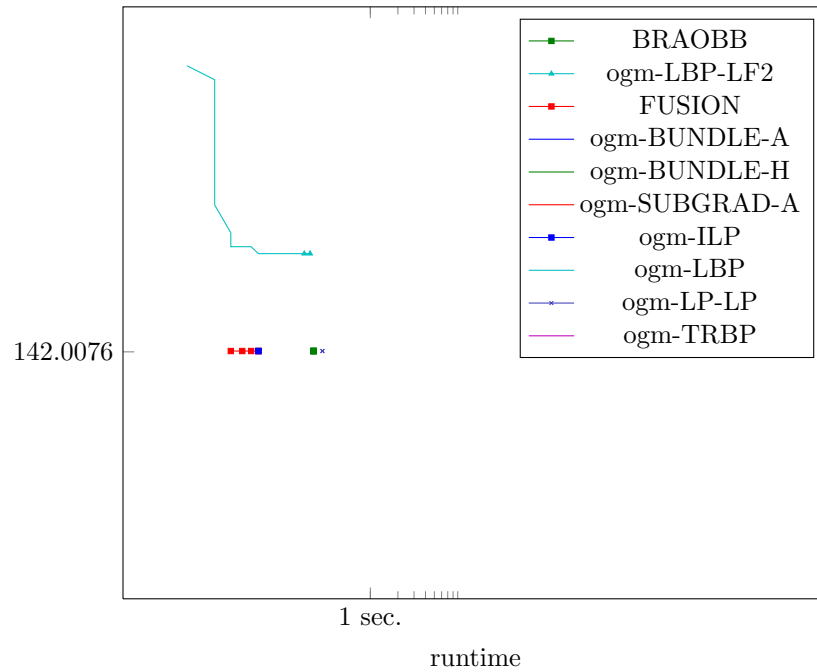


Figure 975: Runtime results for the instance *gm195* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

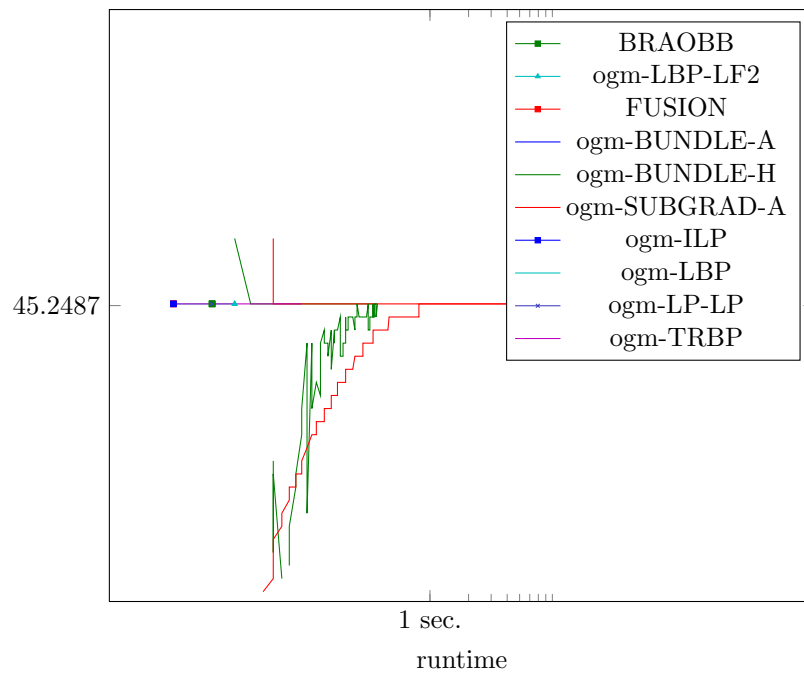


Figure 976: Runtime results for the instance *gm196* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

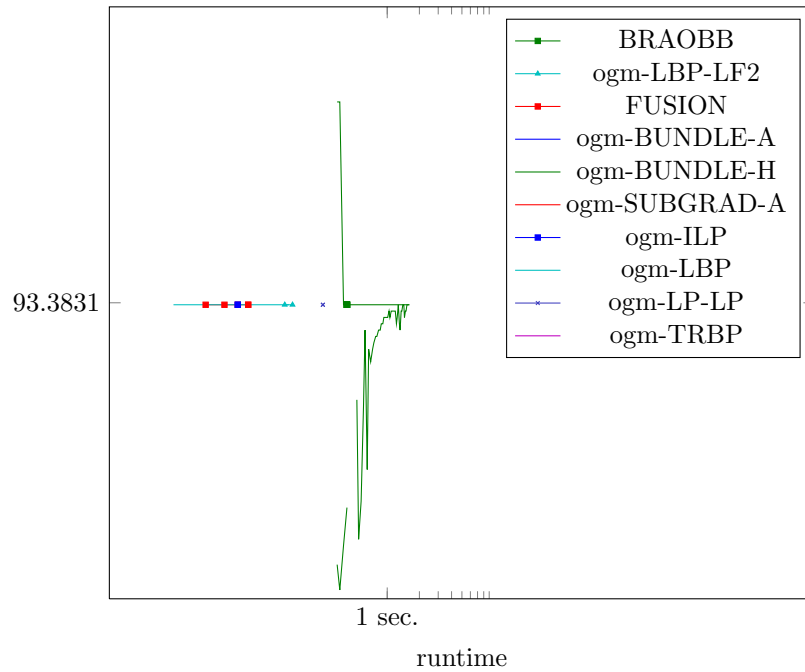


Figure 977: Runtime results for the instance *gm197* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

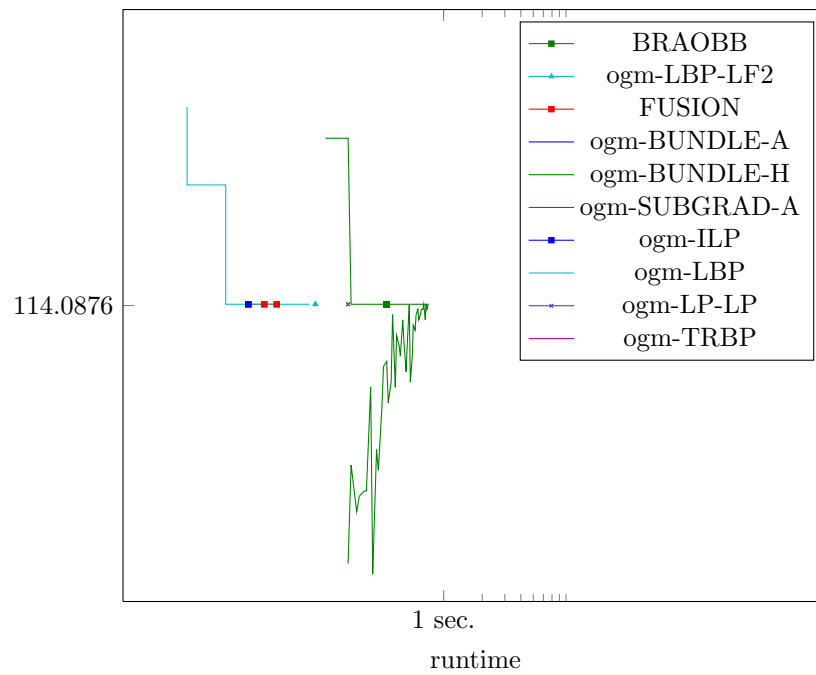


Figure 978: Runtime results for the instance *gm198* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

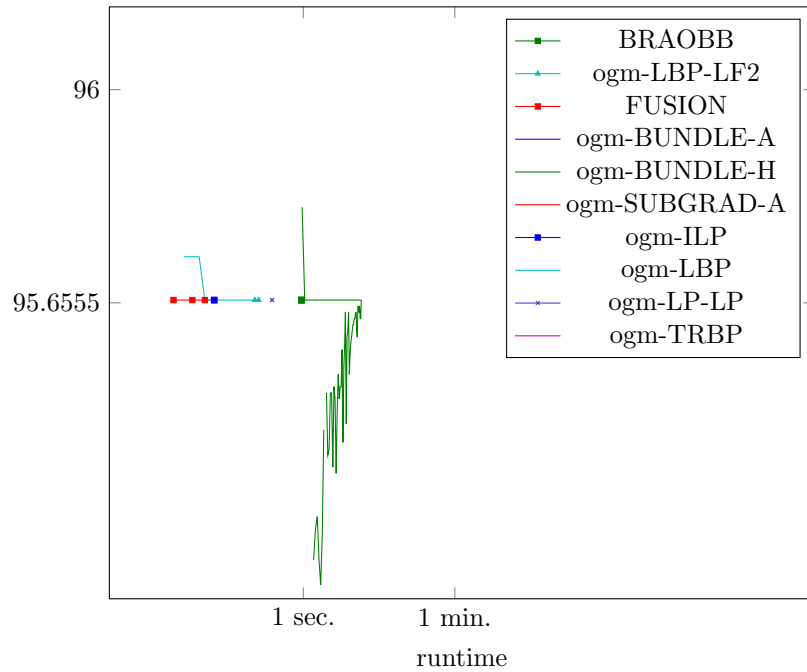


Figure 979: Runtime results for the instance *gm199* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

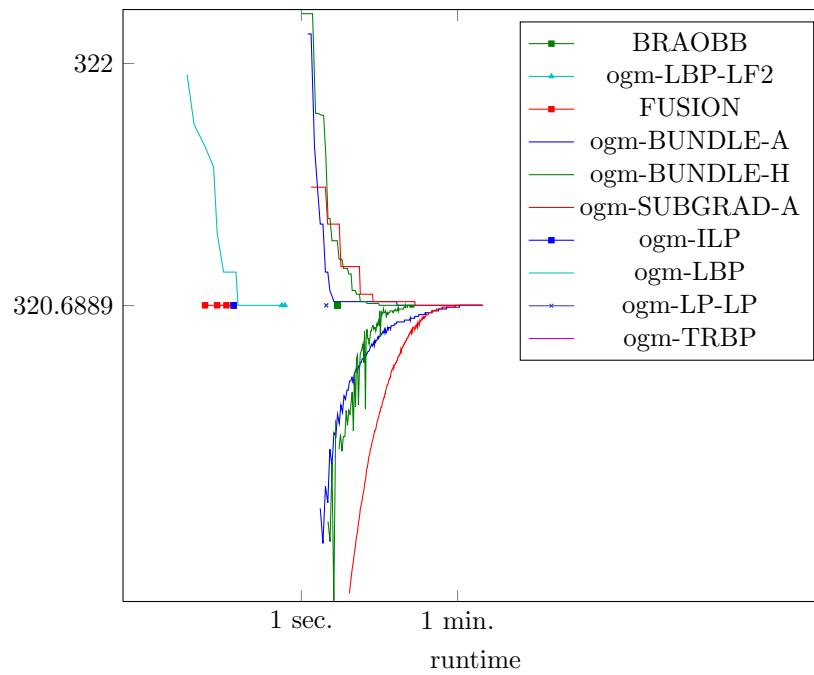


Figure 980: Runtime results for the instance *gm19* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

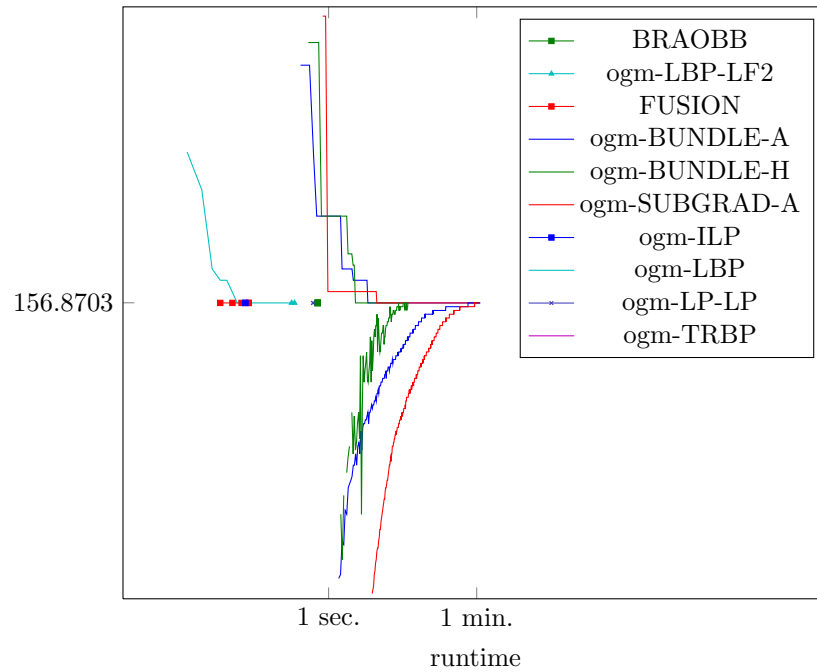


Figure 981: Runtime results for the instance *gm1* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

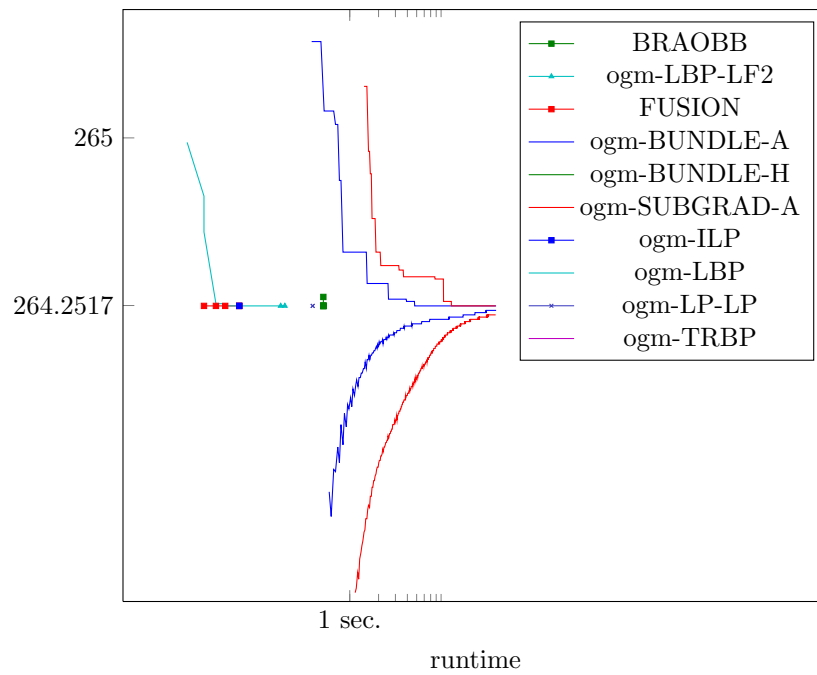


Figure 982: Runtime results for the instance *gm200* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

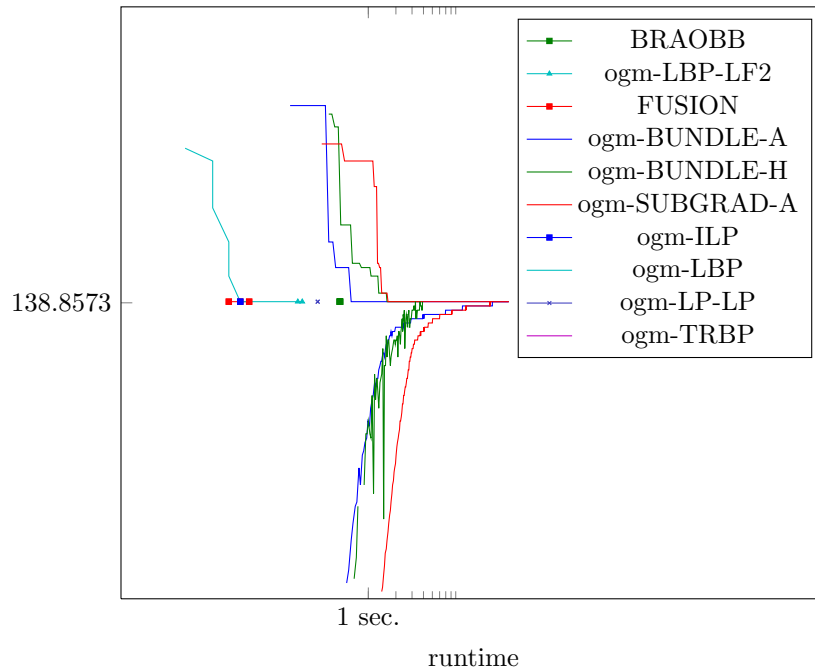


Figure 983: Runtime results for the instance *gm201* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

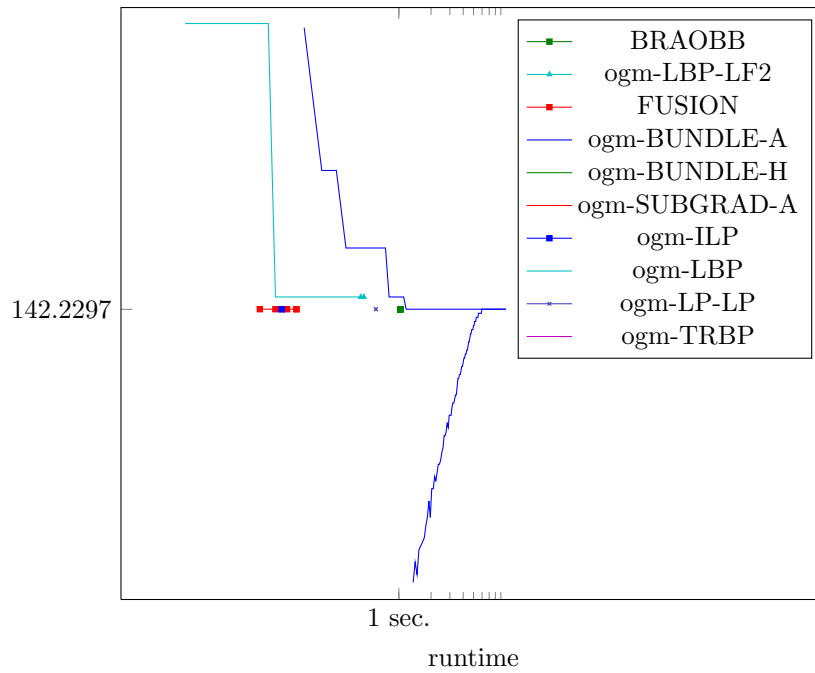


Figure 984: Runtime results for the instance *gm202* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

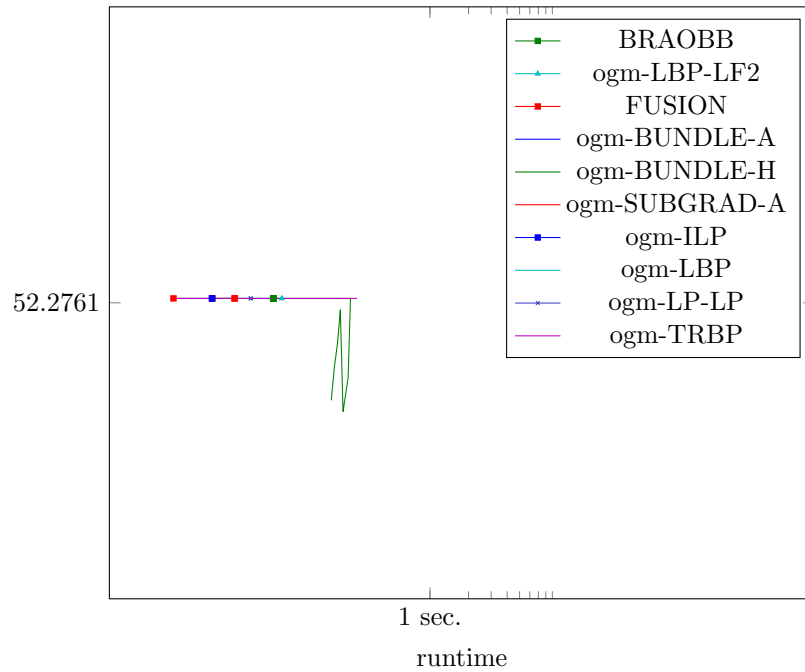


Figure 985: Runtime results for the instance *gm203* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

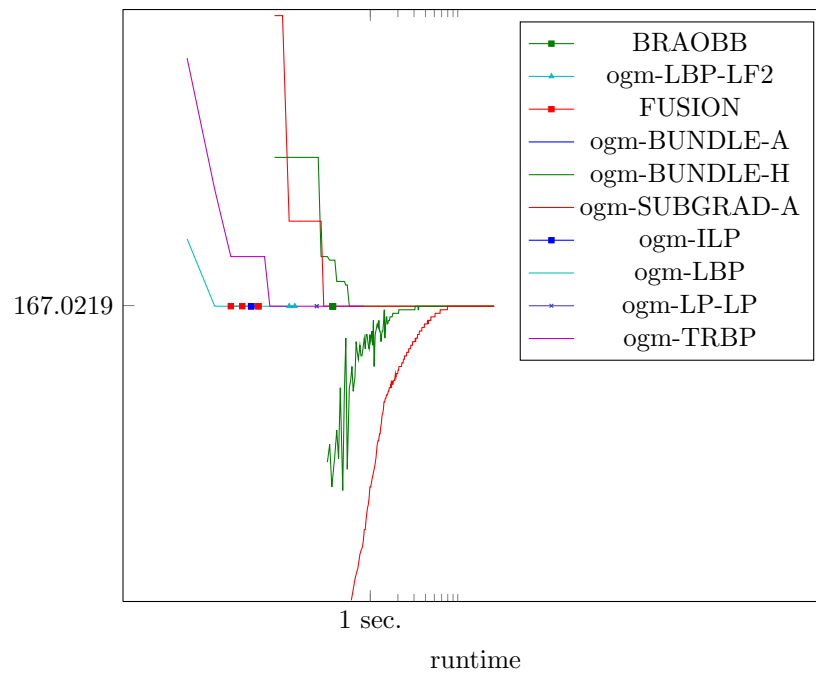


Figure 986: Runtime results for the instance *gm204* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

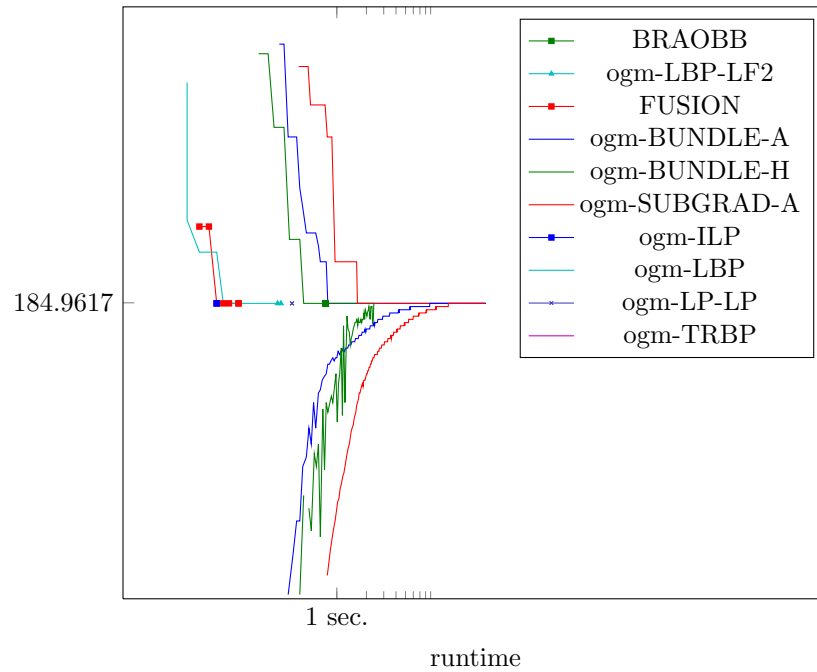


Figure 987: Runtime results for the instance *gm205* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

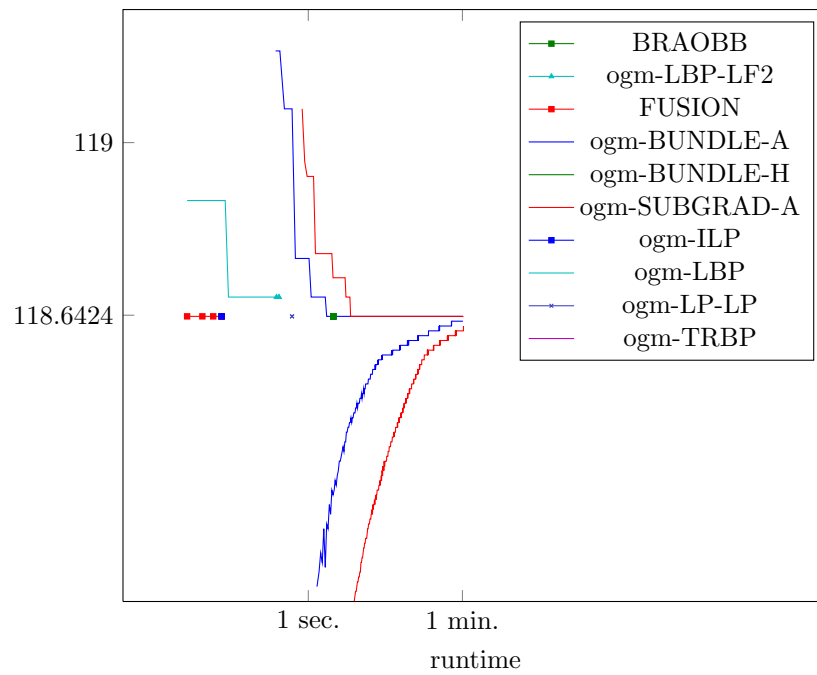


Figure 988: Runtime results for the instance *gm206* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

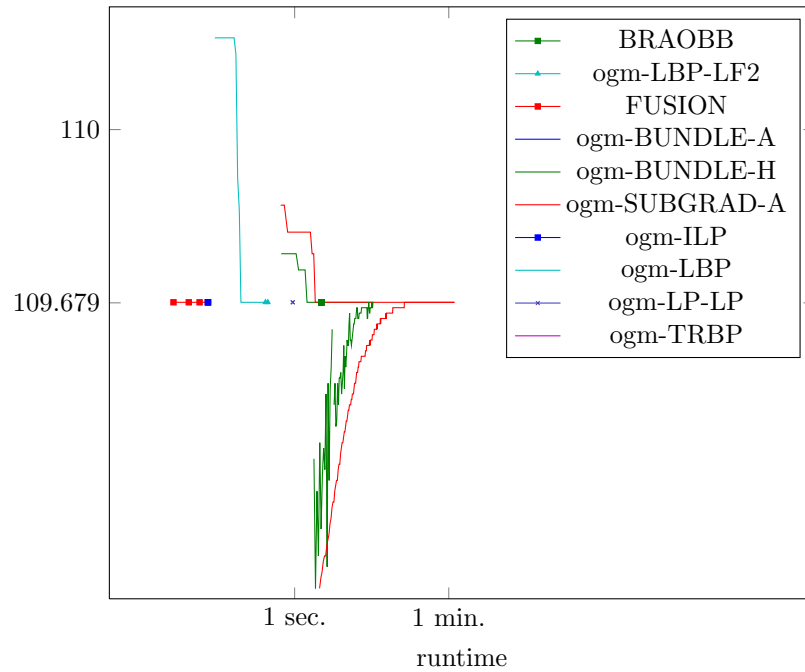


Figure 989: Runtime results for the instance *gm207* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

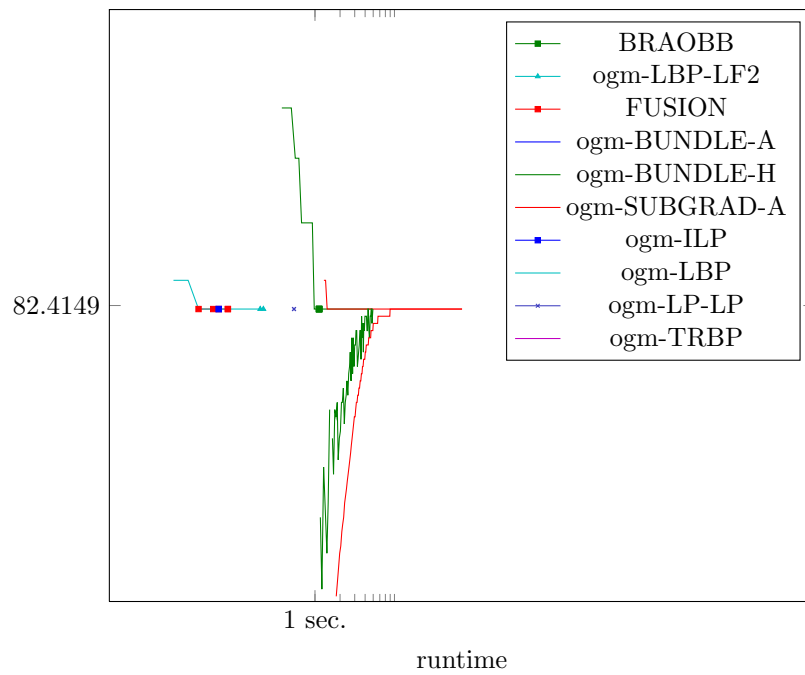


Figure 990: Runtime results for the instance *gm208* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

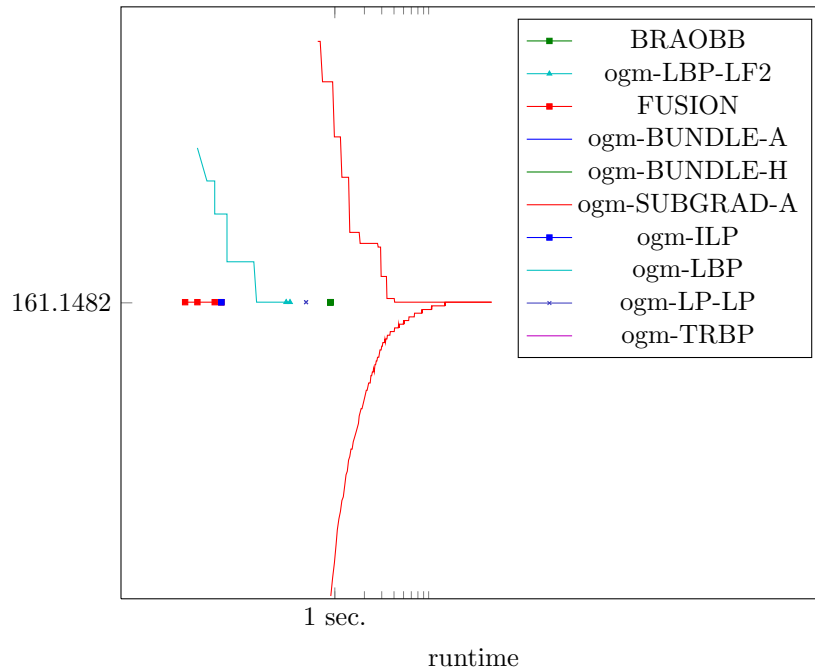


Figure 991: Runtime results for the instance *gm209* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

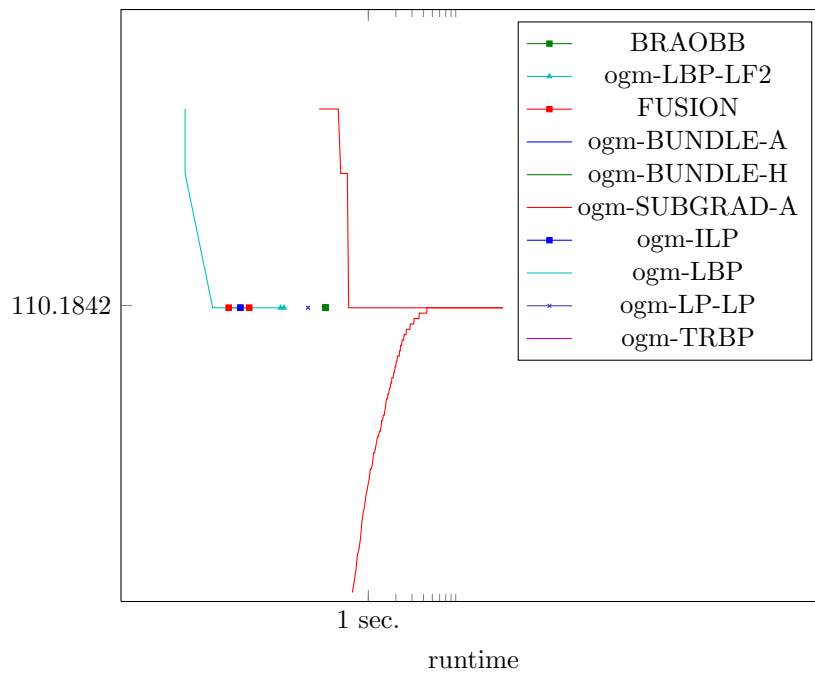


Figure 992: Runtime results for the instance *gm20* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

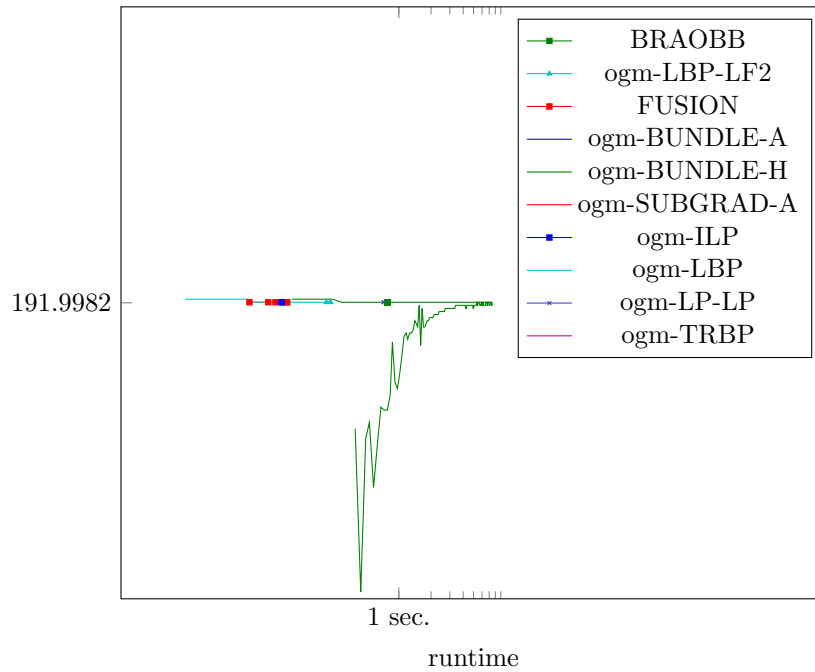


Figure 993: Runtime results for the instance *gm210* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

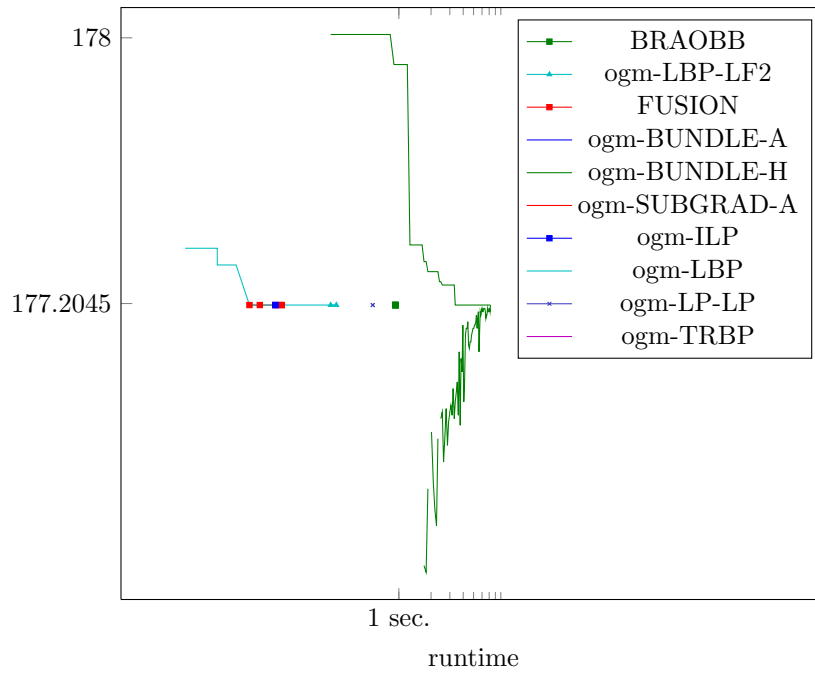


Figure 994: Runtime results for the instance *gm211* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

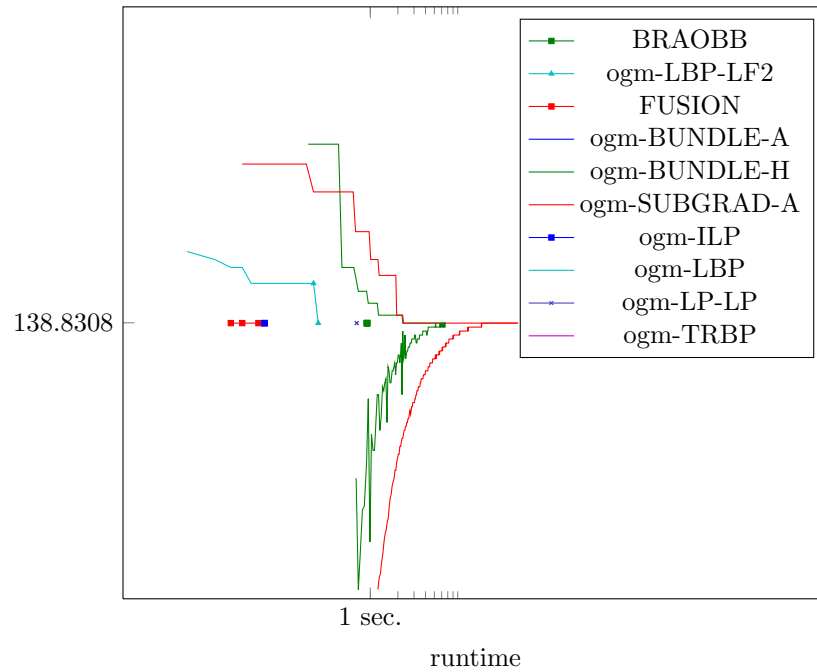


Figure 995: Runtime results for the instance *gm212* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

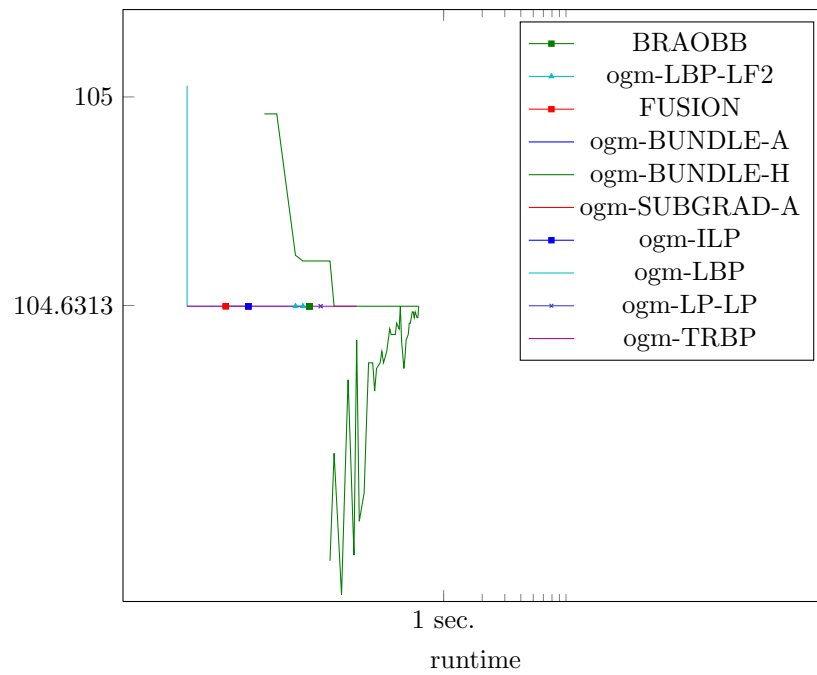


Figure 996: Runtime results for the instance *gm213* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

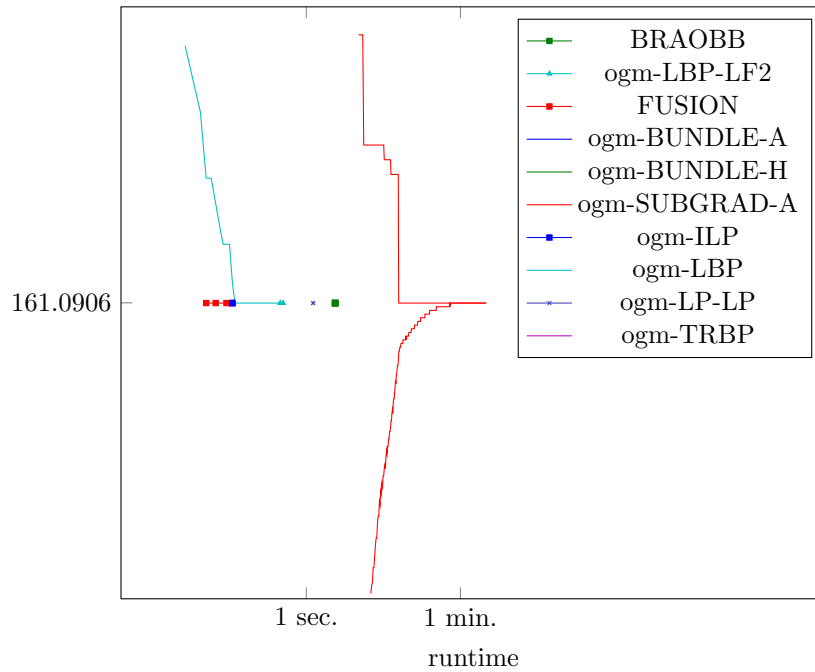


Figure 997: Runtime results for the instance *gm214* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

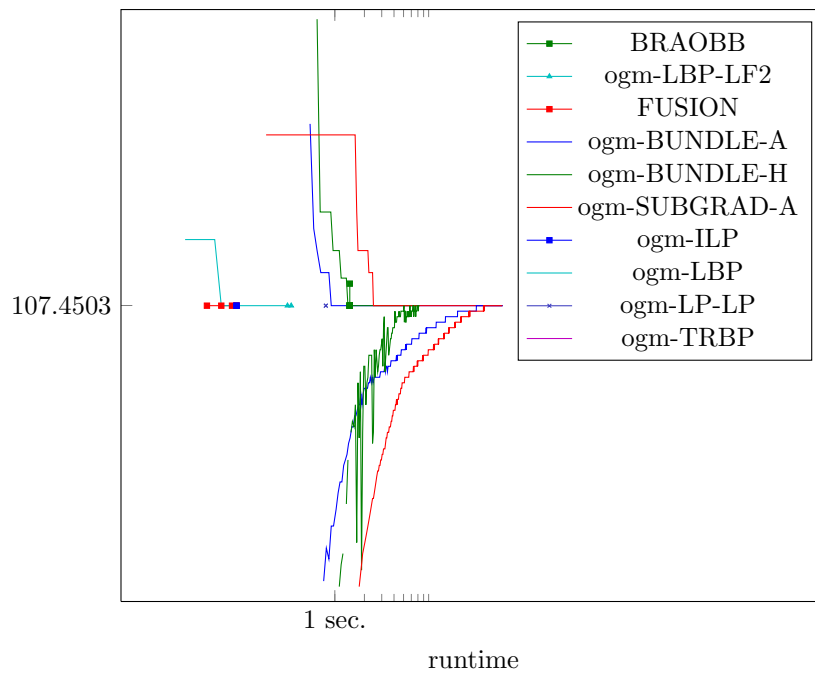


Figure 998: Runtime results for the instance *gm215* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

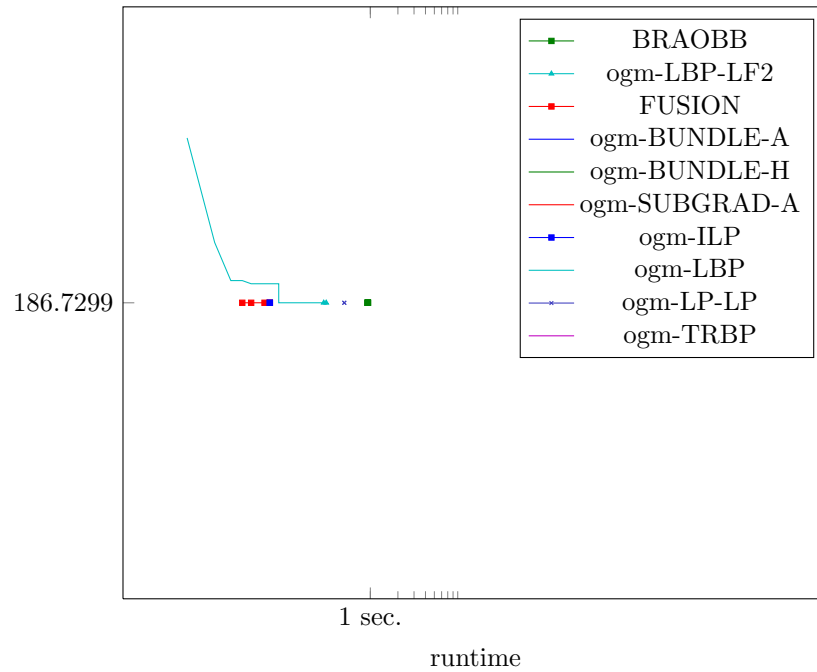


Figure 999: Runtime results for the instance *gm216* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

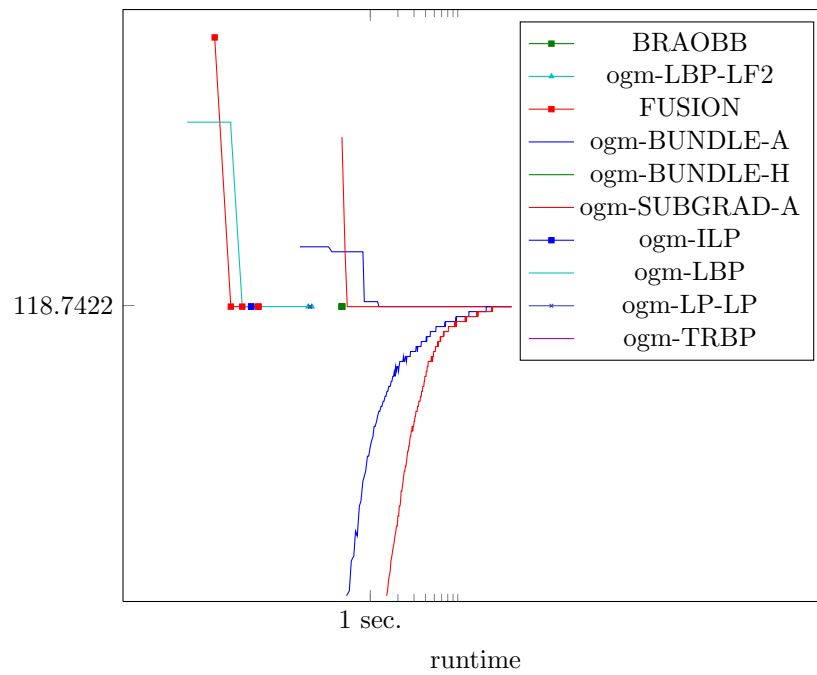


Figure 1000: Runtime results for the instance *gm217* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

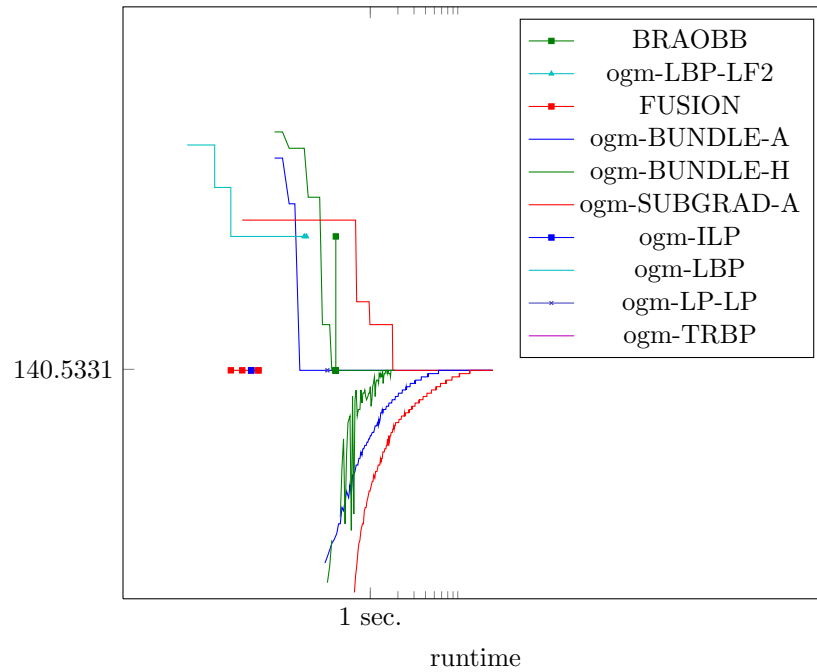


Figure 1001: Runtime results for the instance *gm218* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

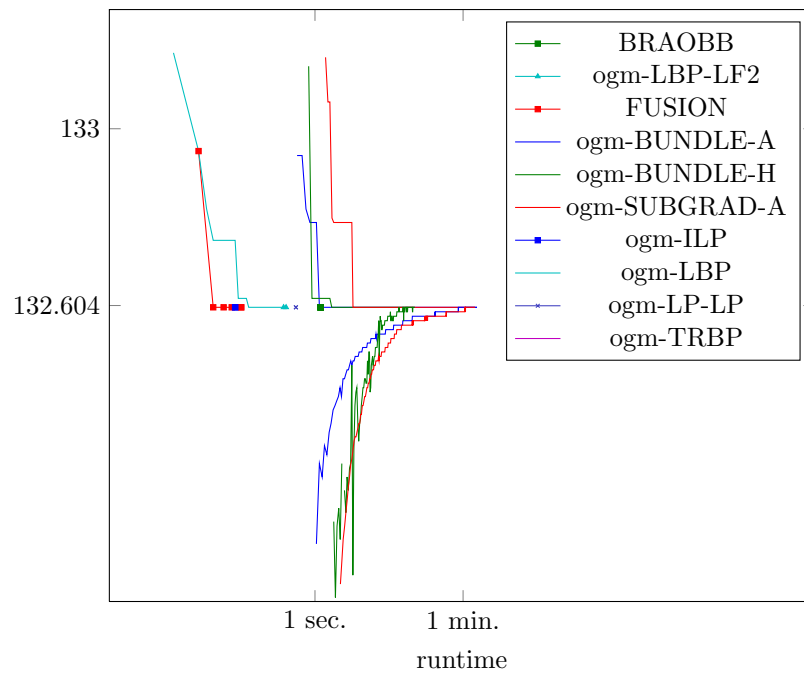


Figure 1002: Runtime results for the instance *gm219* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

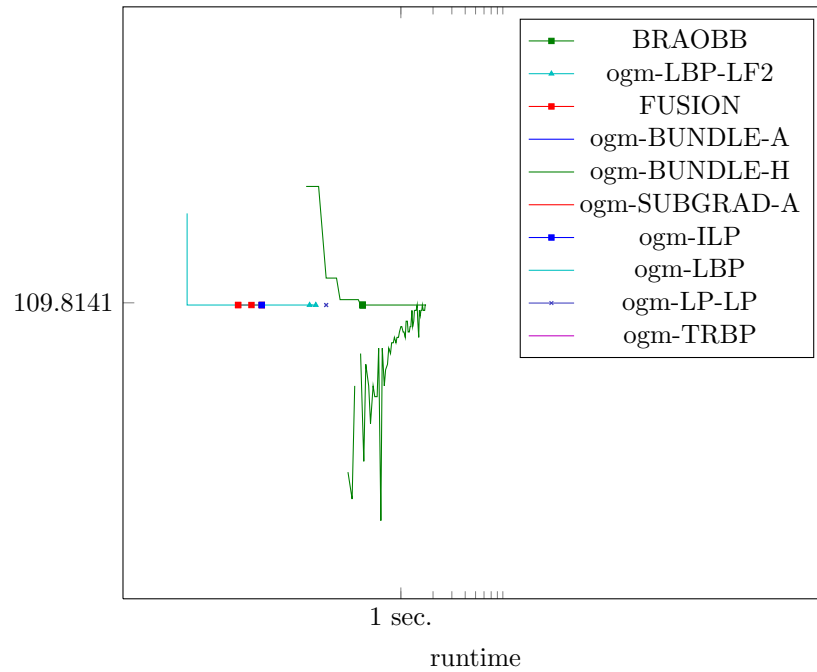


Figure 1003: Runtime results for the instance *gm21* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

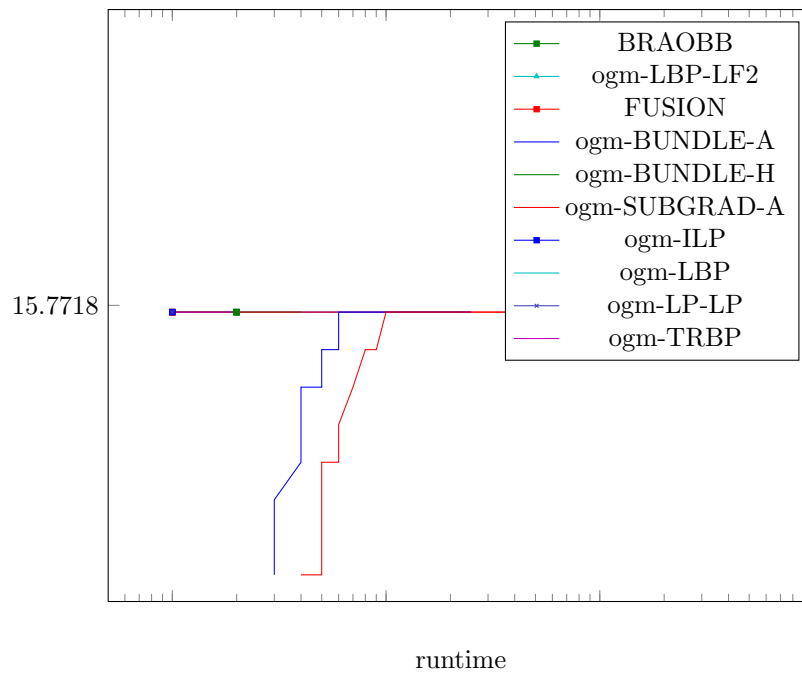


Figure 1004: Runtime results for the instance *gm220* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

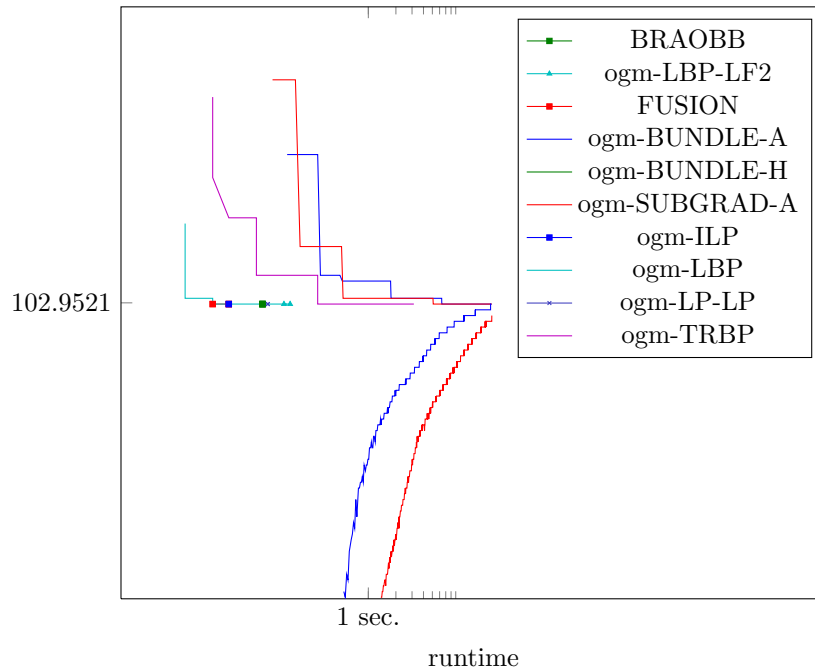


Figure 1005: Runtime results for the instance *gm221* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

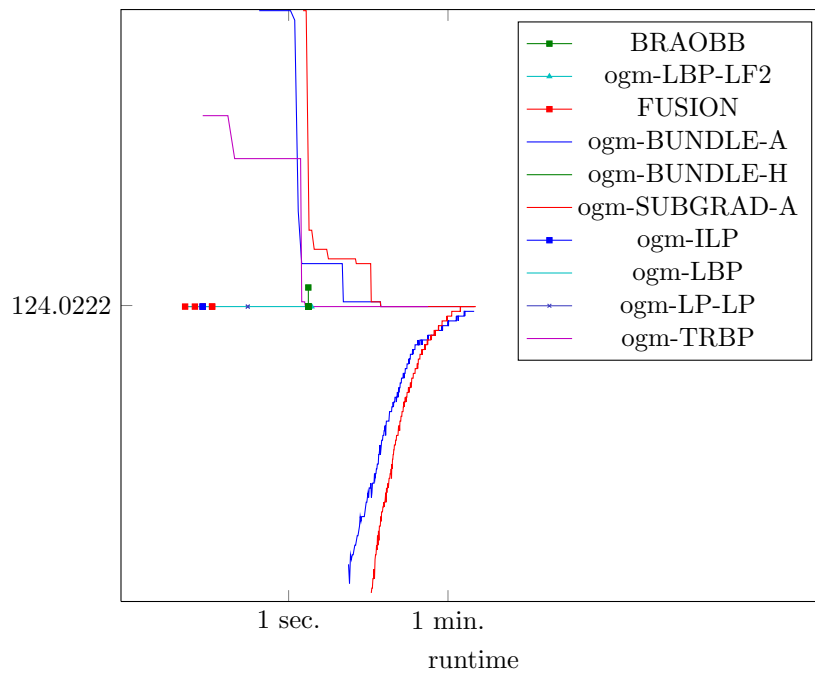


Figure 1006: Runtime results for the instance *gm222* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

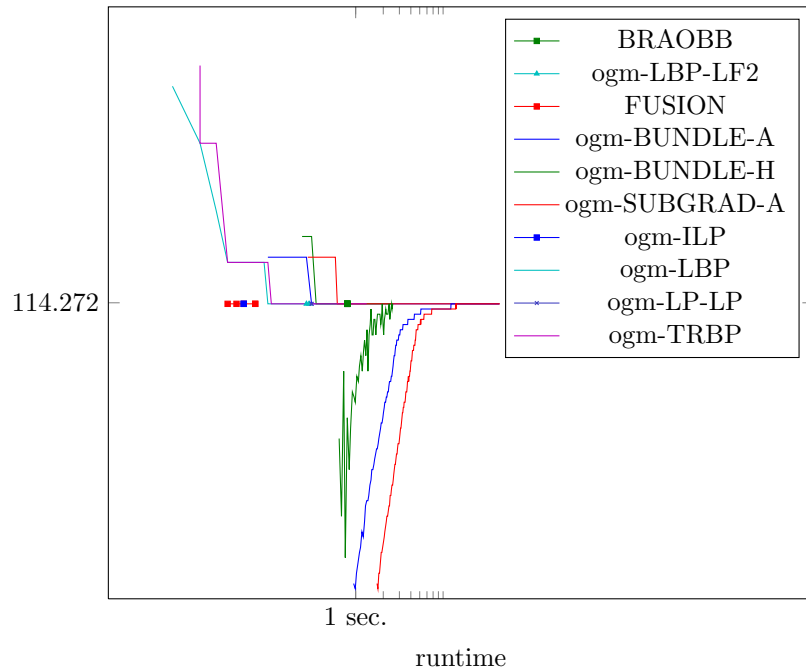


Figure 1007: Runtime results for the instance *gm223* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

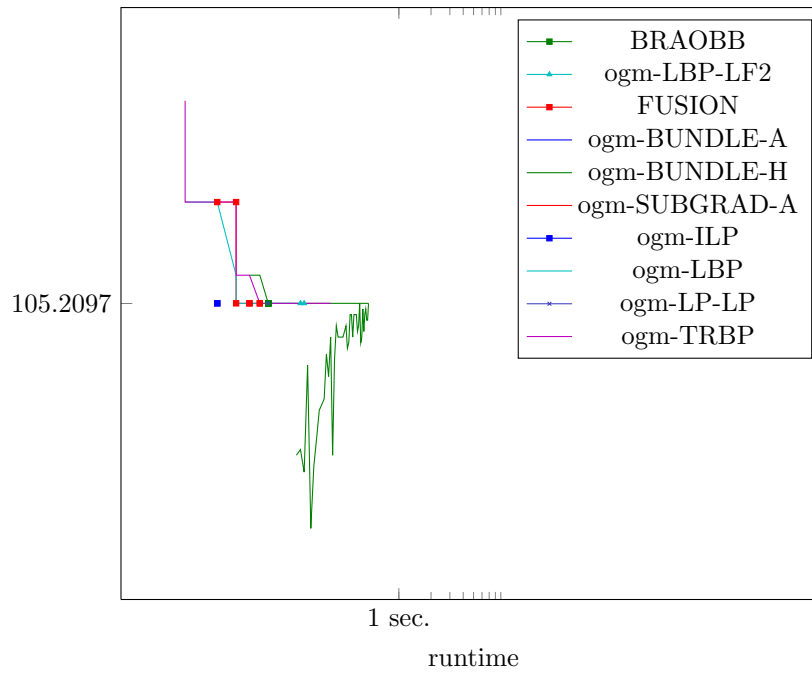


Figure 1008: Runtime results for the instance *gm224* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

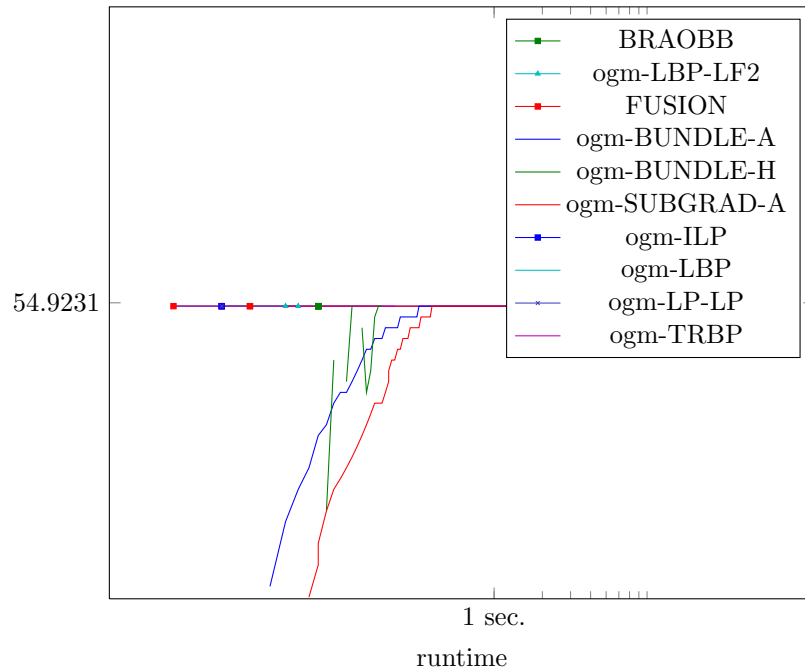


Figure 1009: Runtime results for the instance *gm225* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

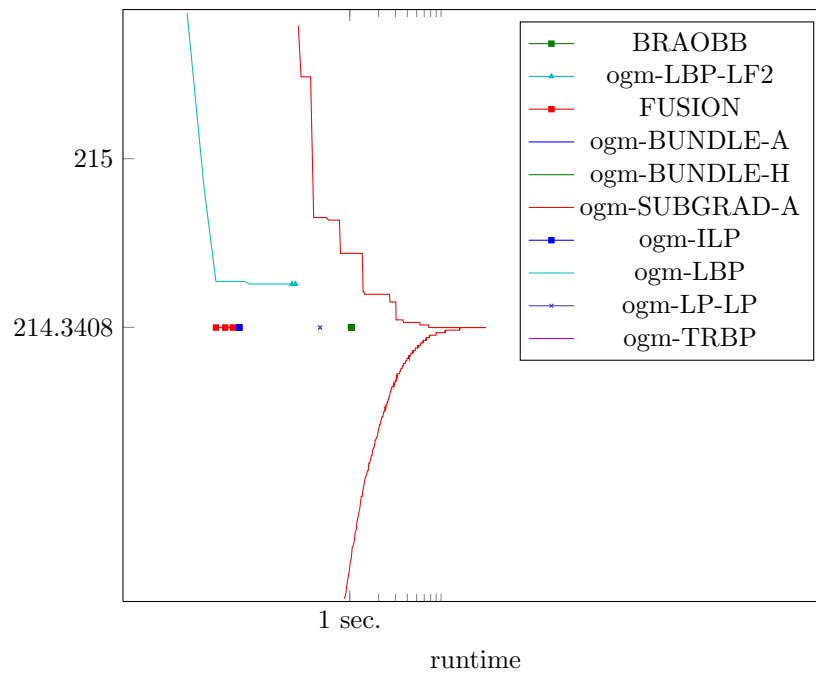


Figure 1010: Runtime results for the instance *gm226* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

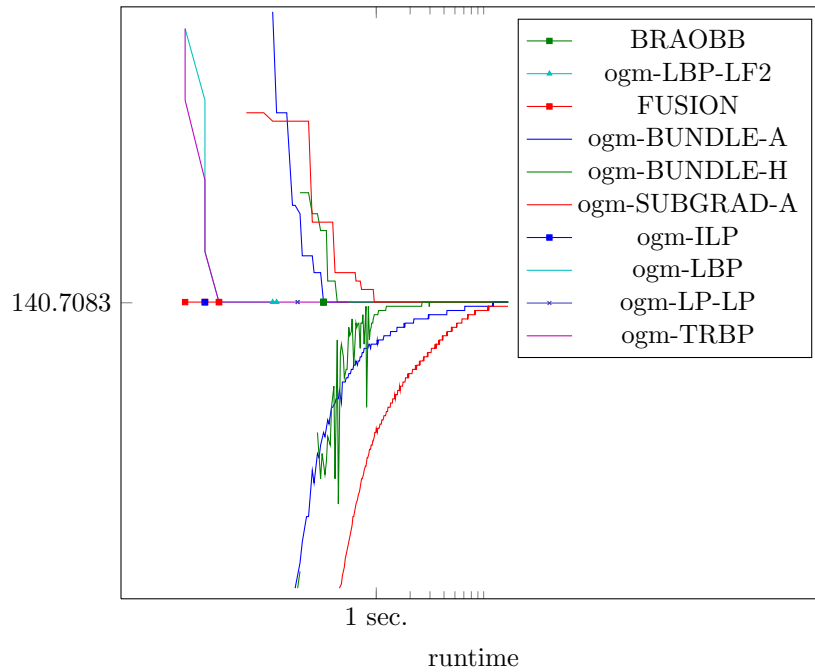


Figure 1011: Runtime results for the instance *gm227* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

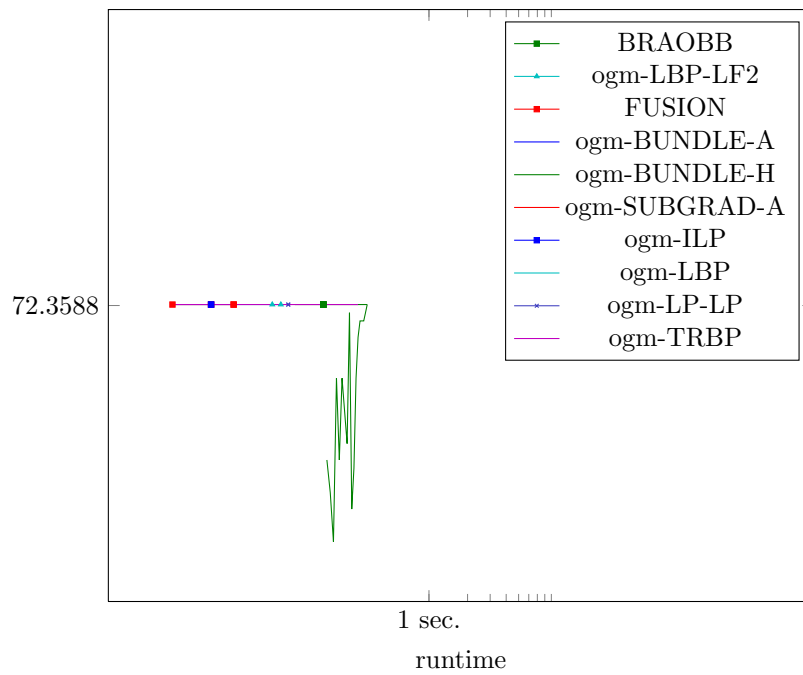


Figure 1012: Runtime results for the instance *gm228* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

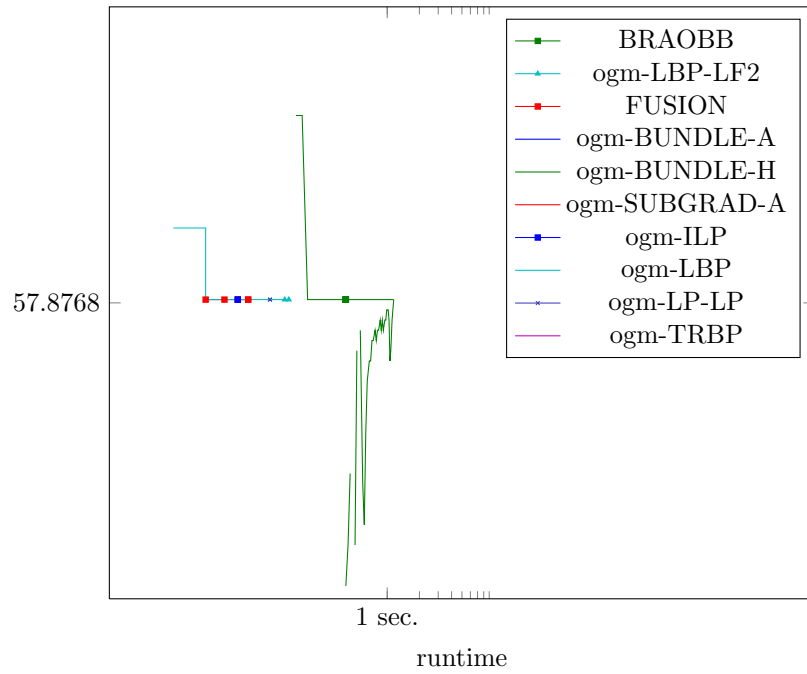


Figure 1013: Runtime results for the instance *gm229* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

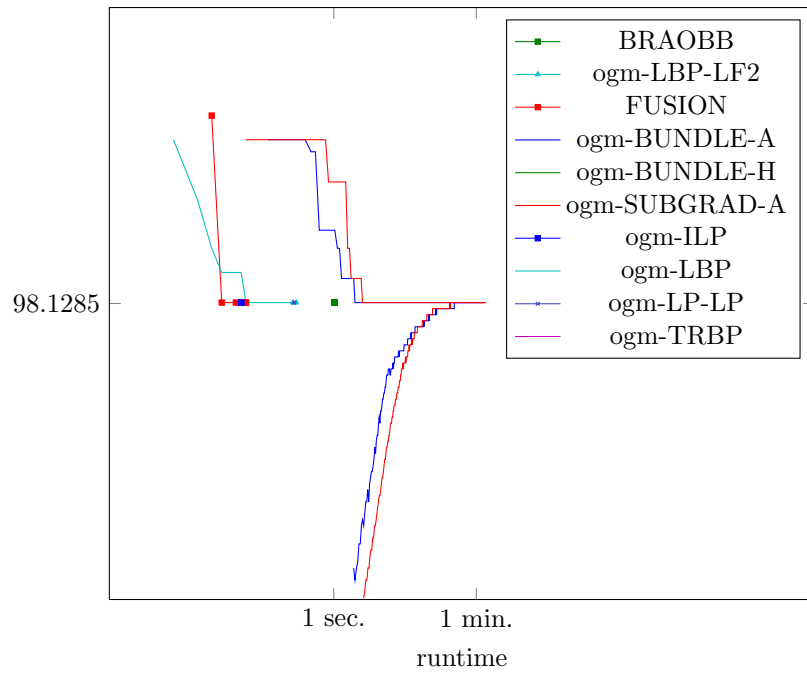


Figure 1014: Runtime results for the instance *gm22* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

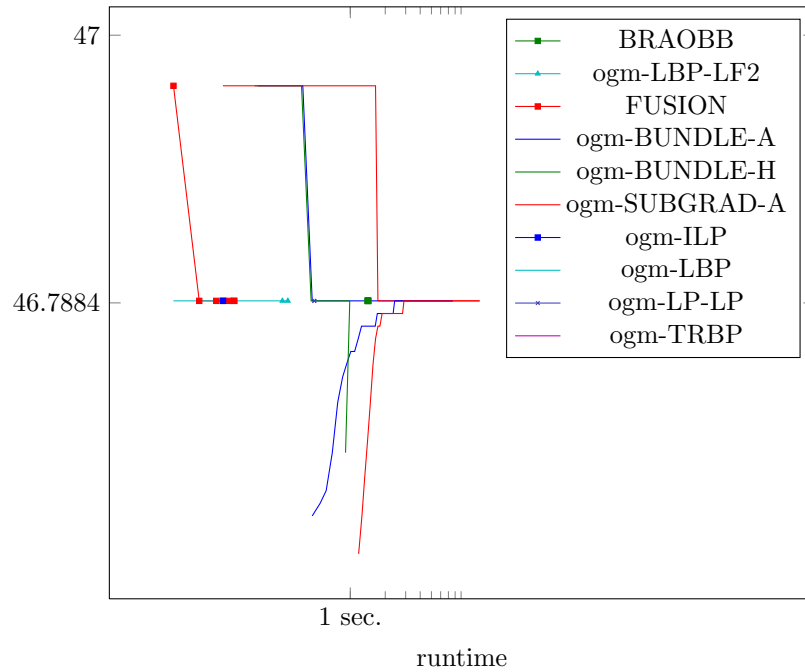


Figure 1015: Runtime results for the instance *gm230* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

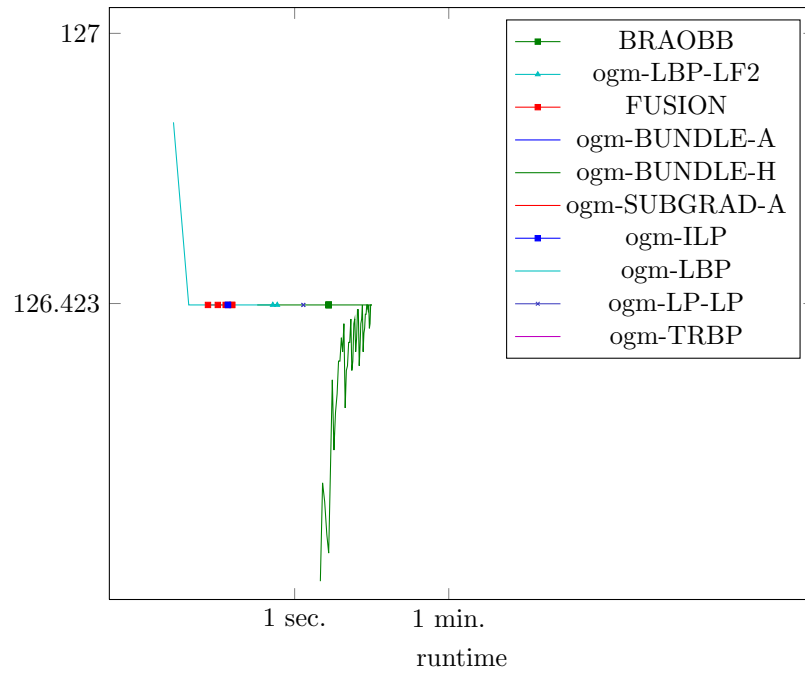


Figure 1016: Runtime results for the instance *gm231* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

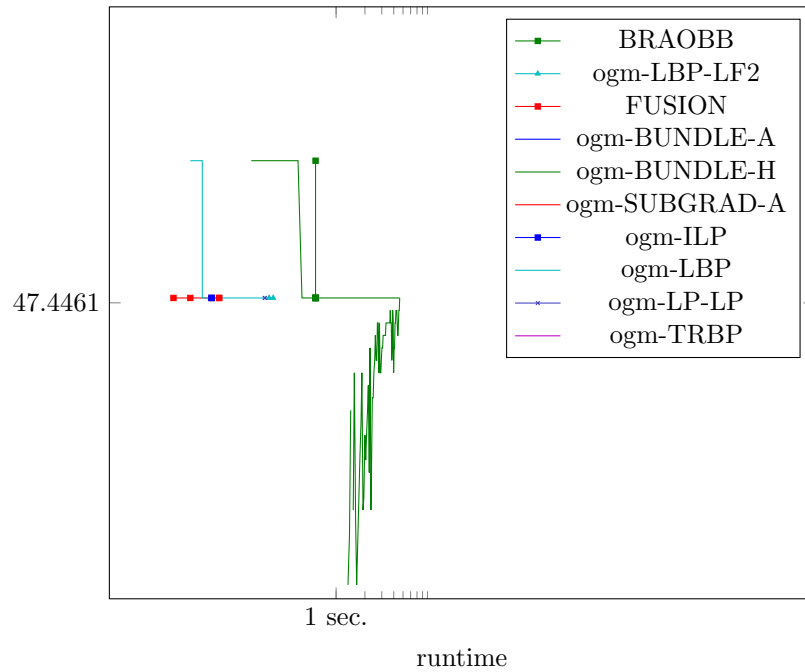


Figure 1017: Runtime results for the instance *gm232* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

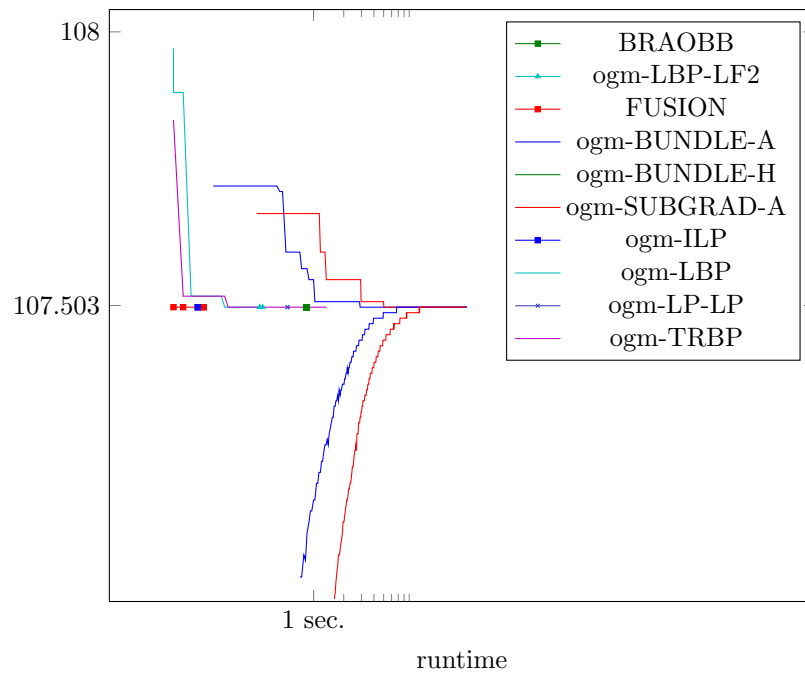


Figure 1018: Runtime results for the instance *gm233* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

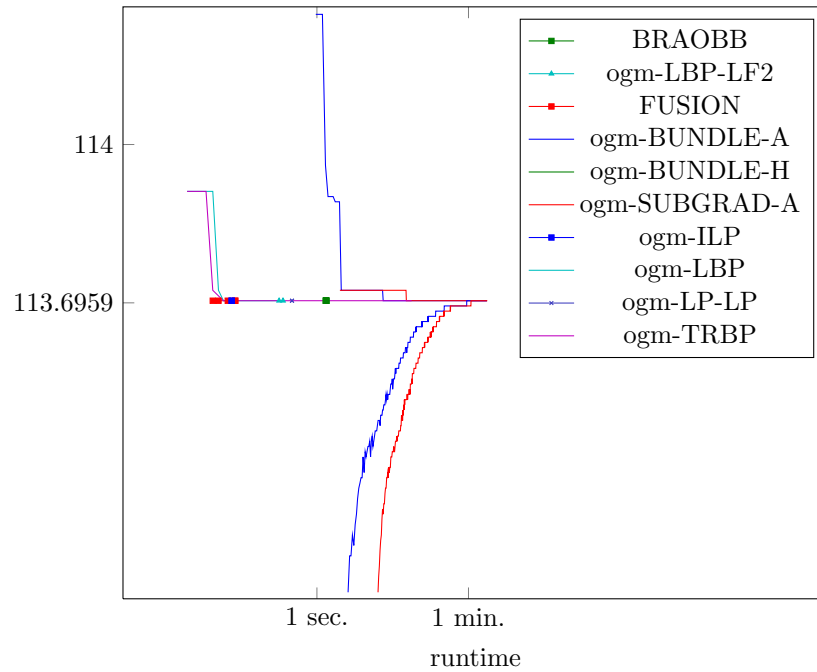


Figure 1019: Runtime results for the instance *gm234* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

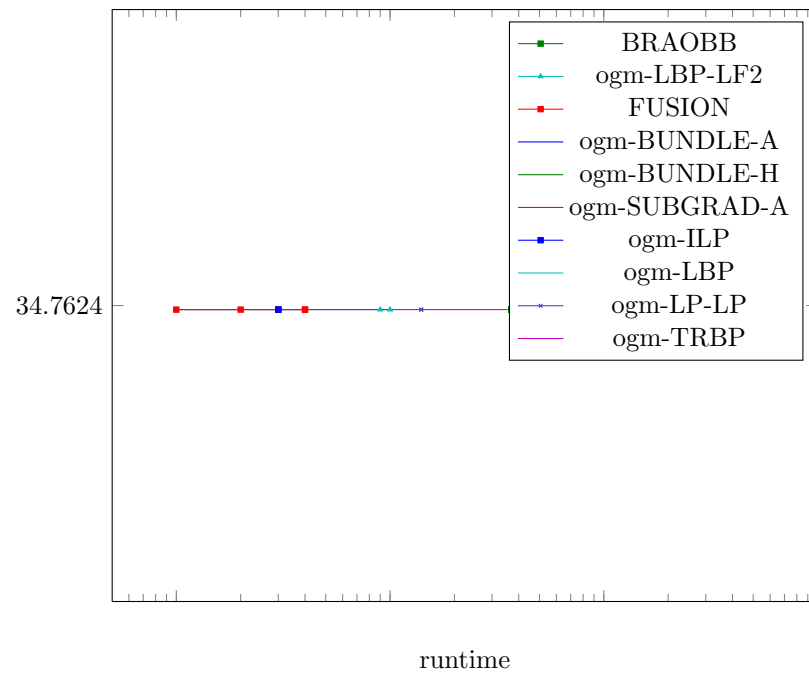


Figure 1020: Runtime results for the instance *gm235* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

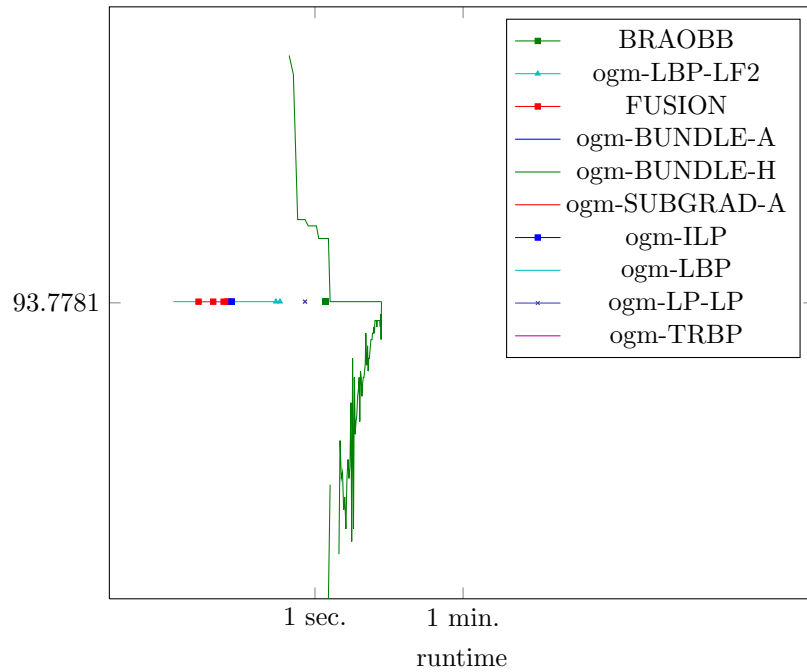


Figure 1021: Runtime results for the instance *gm236* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

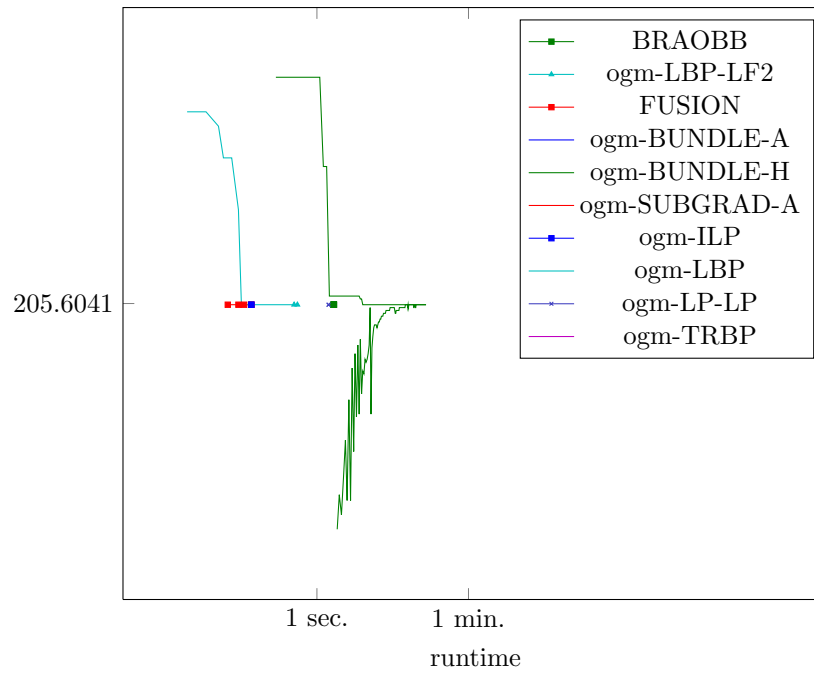


Figure 1022: Runtime results for the instance *gm237* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

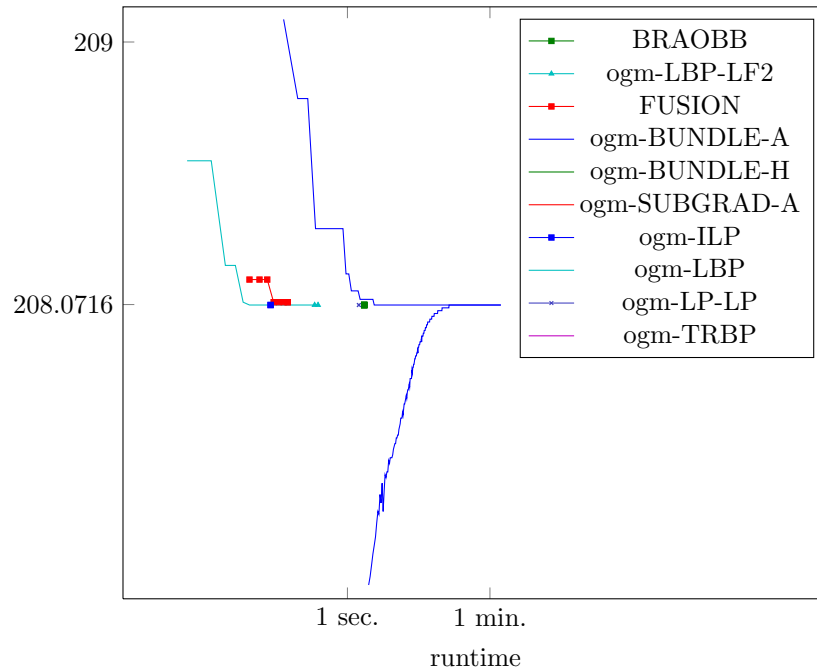


Figure 1023: Runtime results for the instance *gm238* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

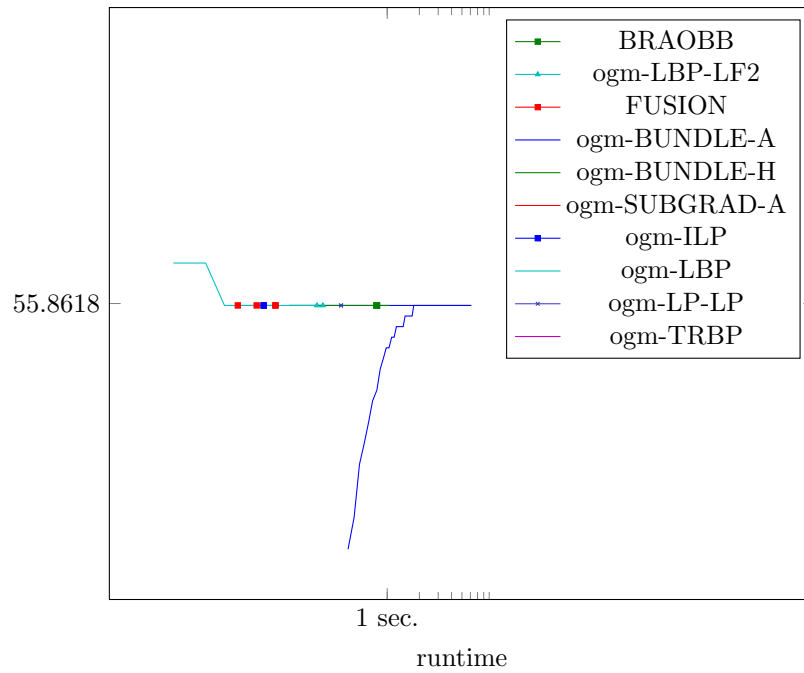


Figure 1024: Runtime results for the instance *gm239* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

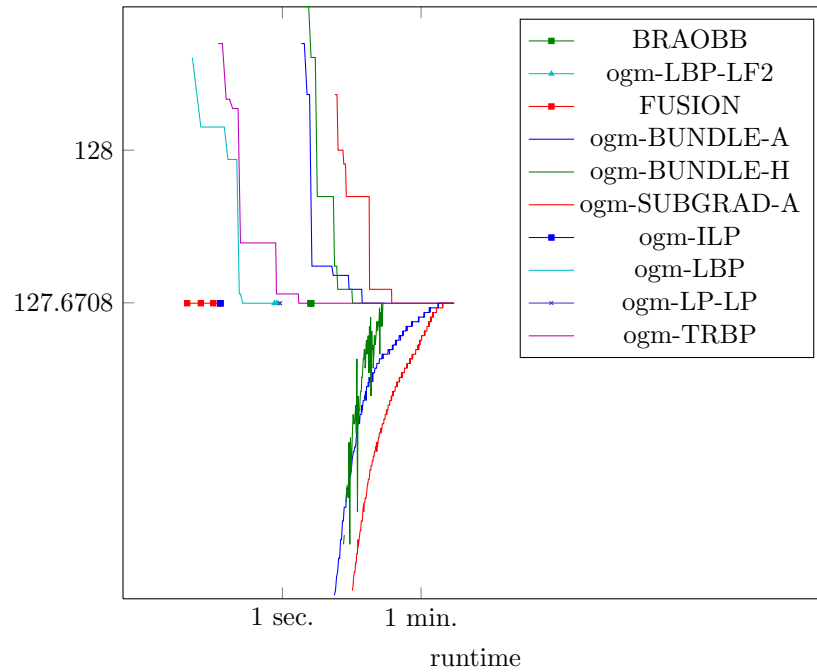


Figure 1025: Runtime results for the instance *gm23* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

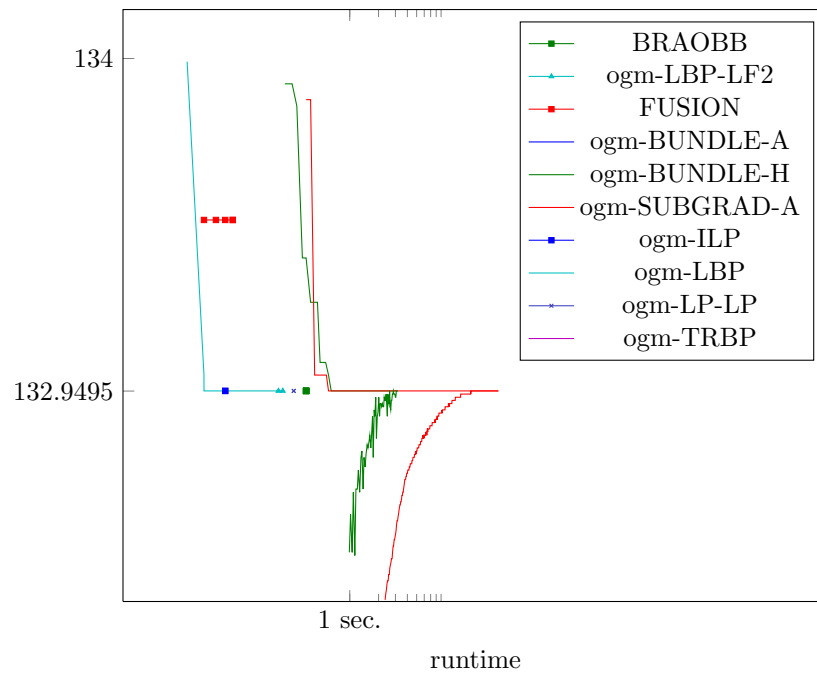


Figure 1026: Runtime results for the instance *gm240* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

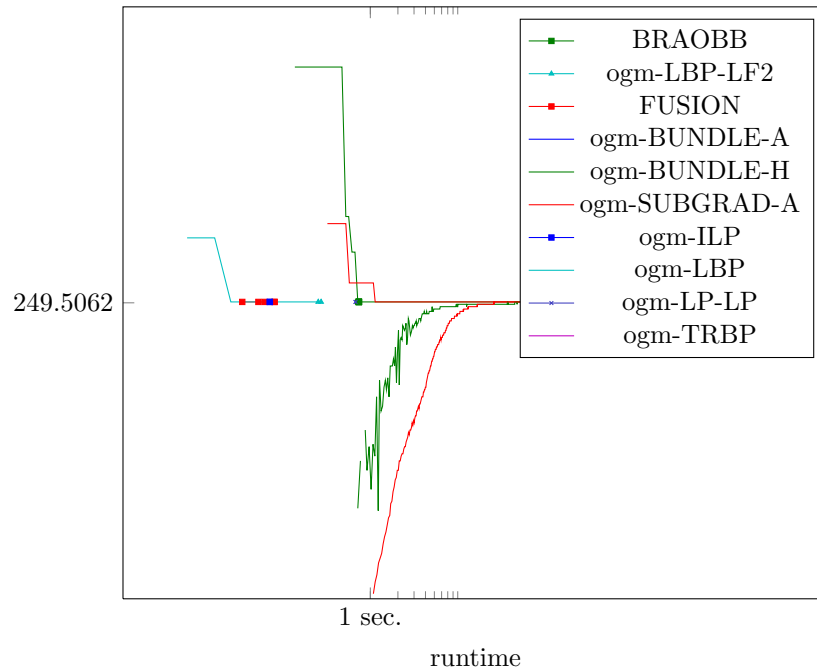


Figure 1027: Runtime results for the instance *gm241* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

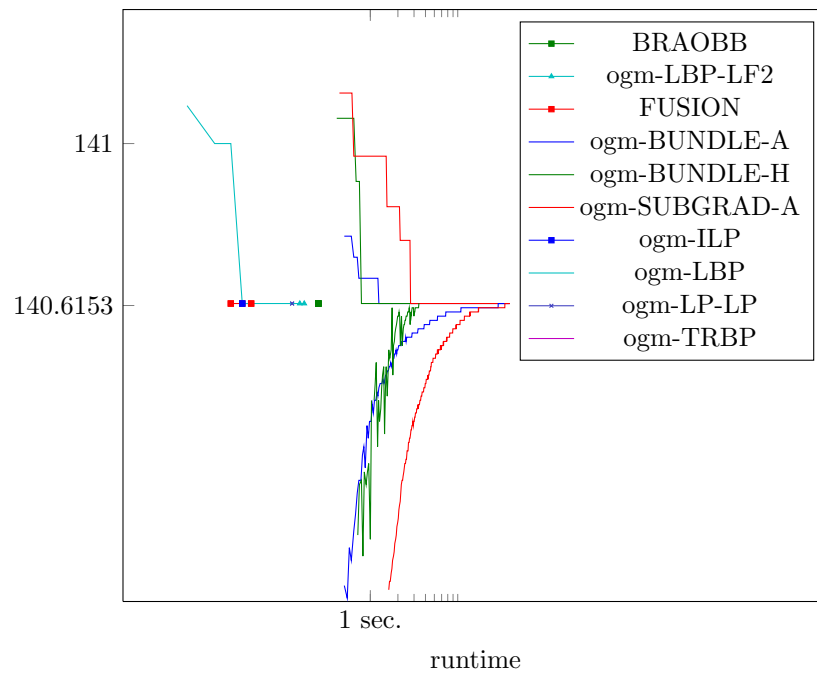


Figure 1028: Runtime results for the instance *gm242* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

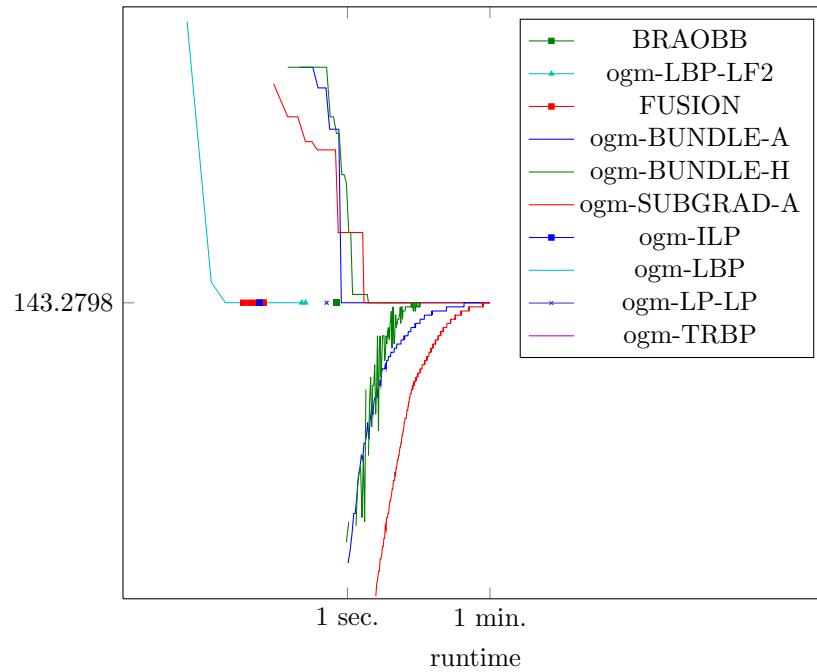


Figure 1029: Runtime results for the instance *gm243* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

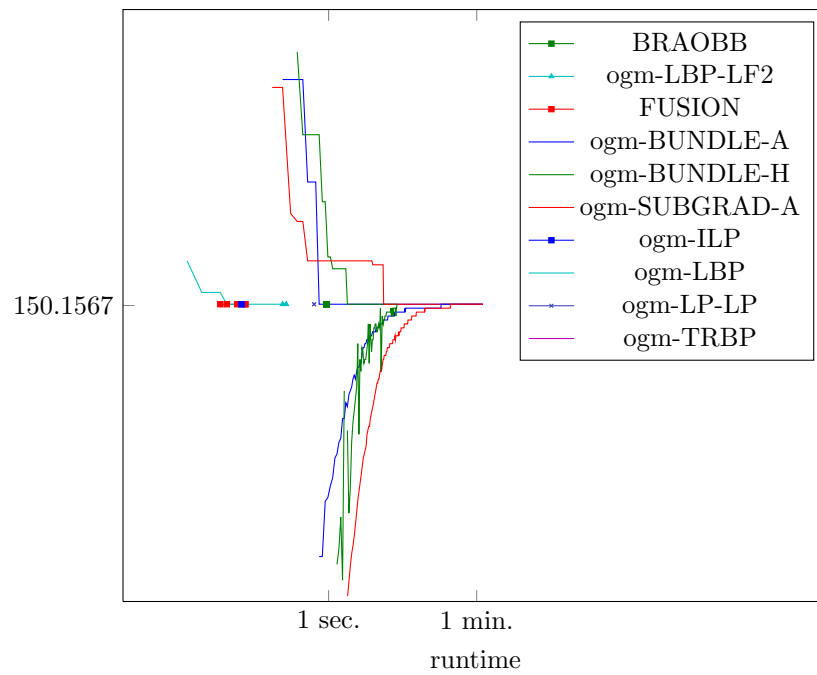


Figure 1030: Runtime results for the instance *gm244* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

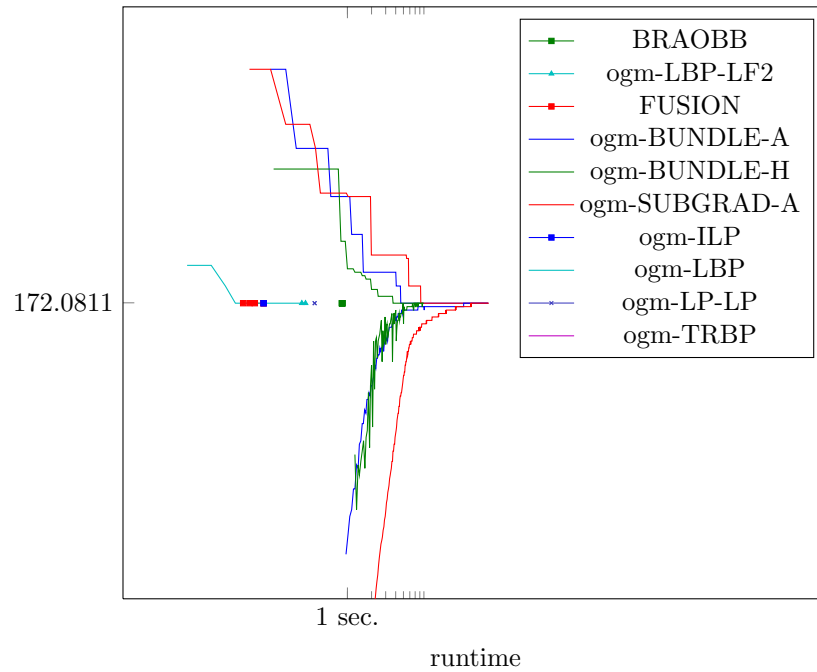


Figure 1031: Runtime results for the instance *gm245* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

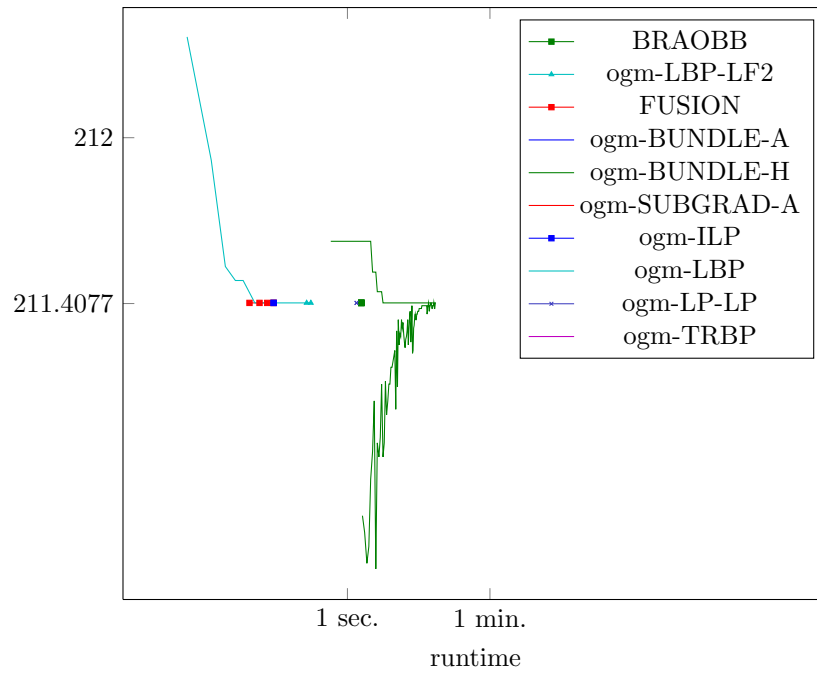


Figure 1032: Runtime results for the instance *gm246* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

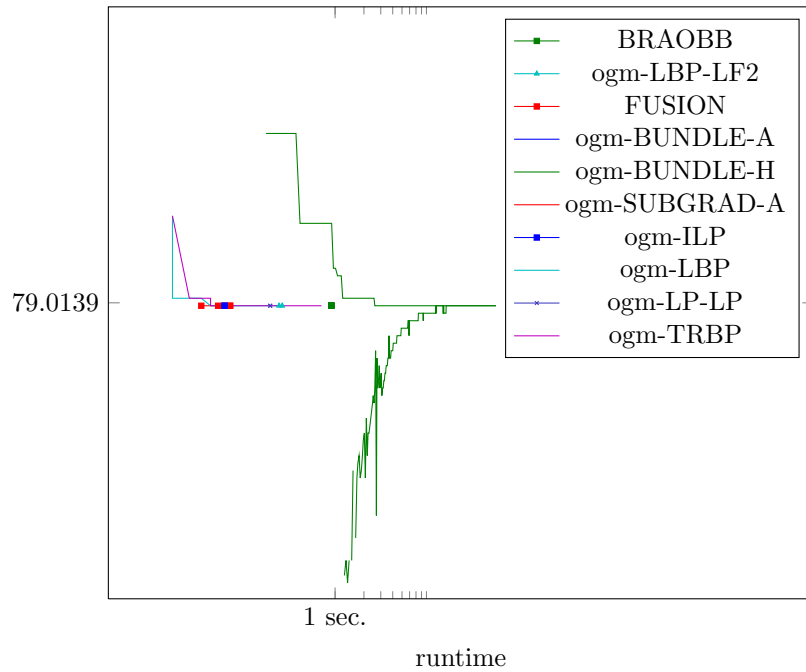


Figure 1033: Runtime results for the instance *gm247* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

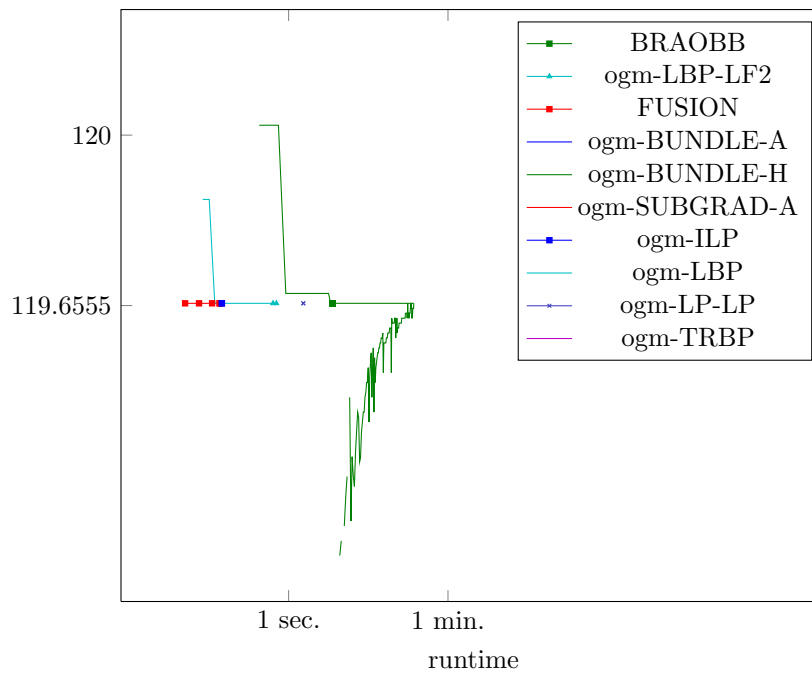


Figure 1034: Runtime results for the instance *gm248* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

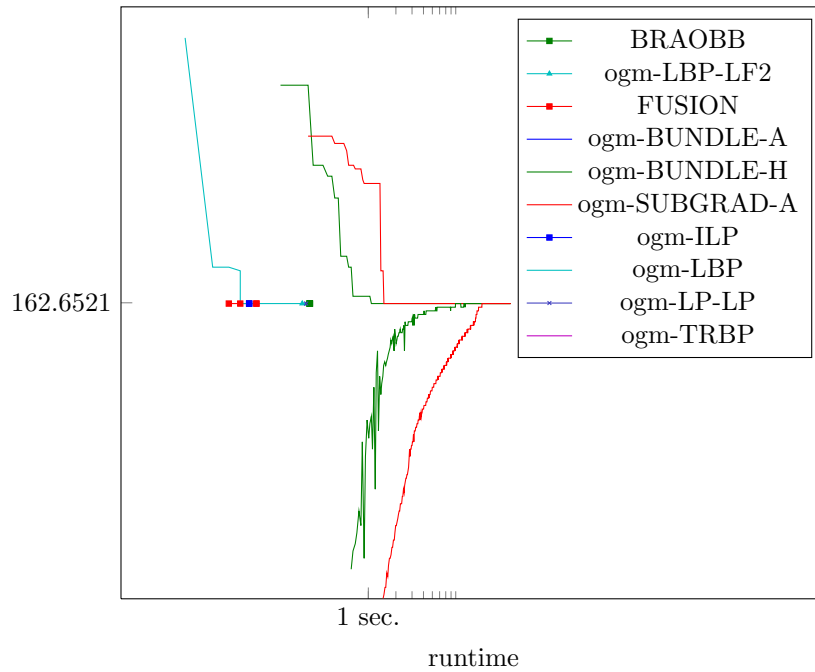


Figure 1035: Runtime results for the instance *gm249* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

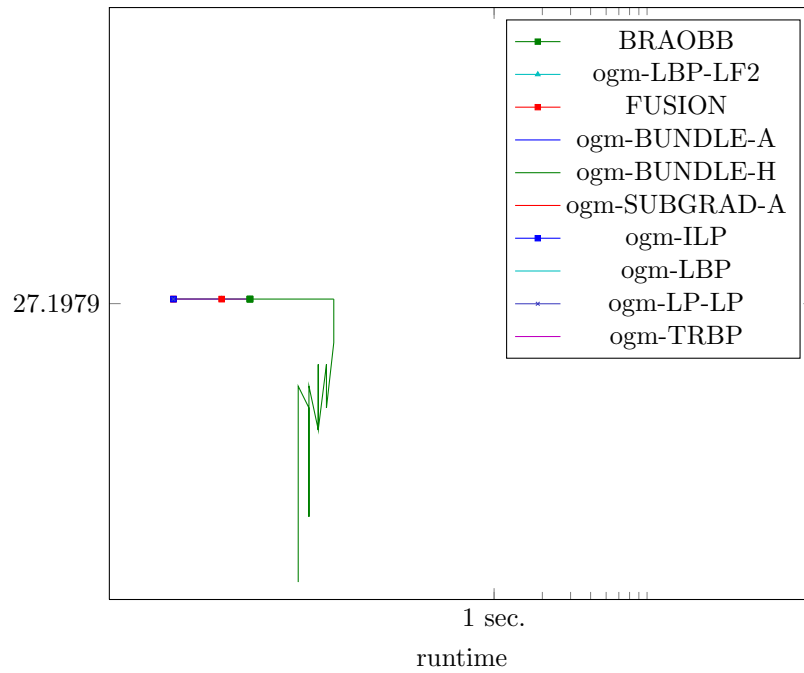


Figure 1036: Runtime results for the instance *gm24* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

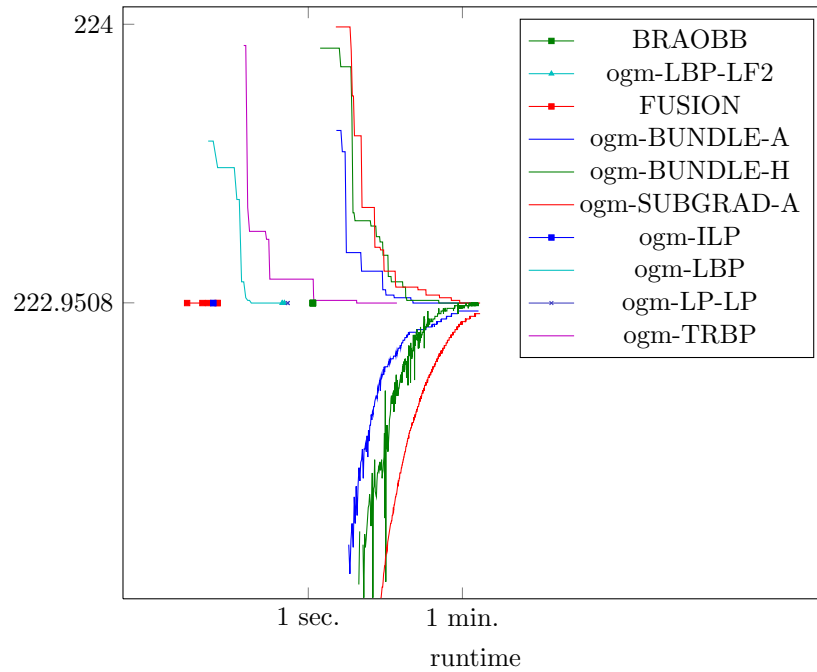


Figure 1037: Runtime results for the instance *gm250* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

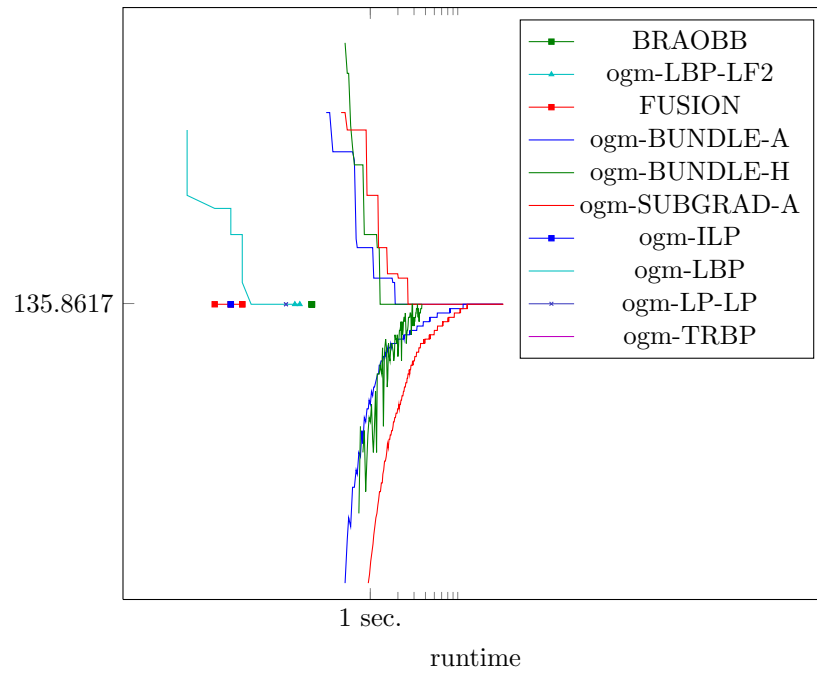


Figure 1038: Runtime results for the instance *gm251* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

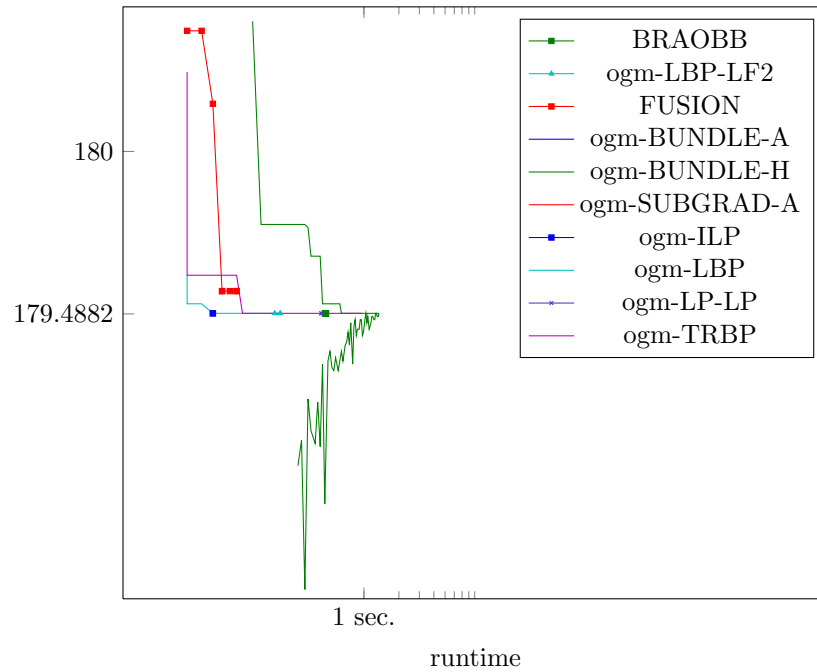


Figure 1039: Runtime results for the instance *gm252* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

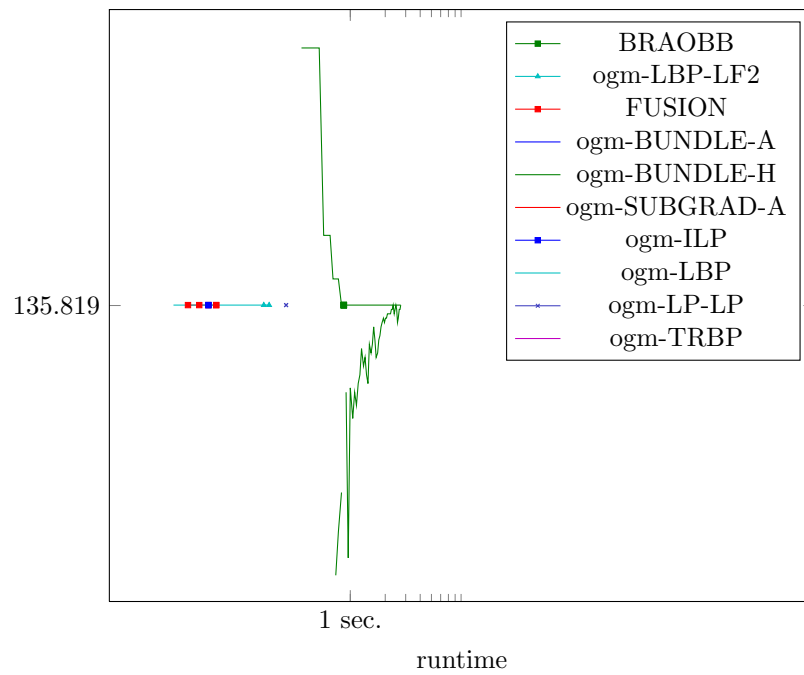


Figure 1040: Runtime results for the instance *gm253* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

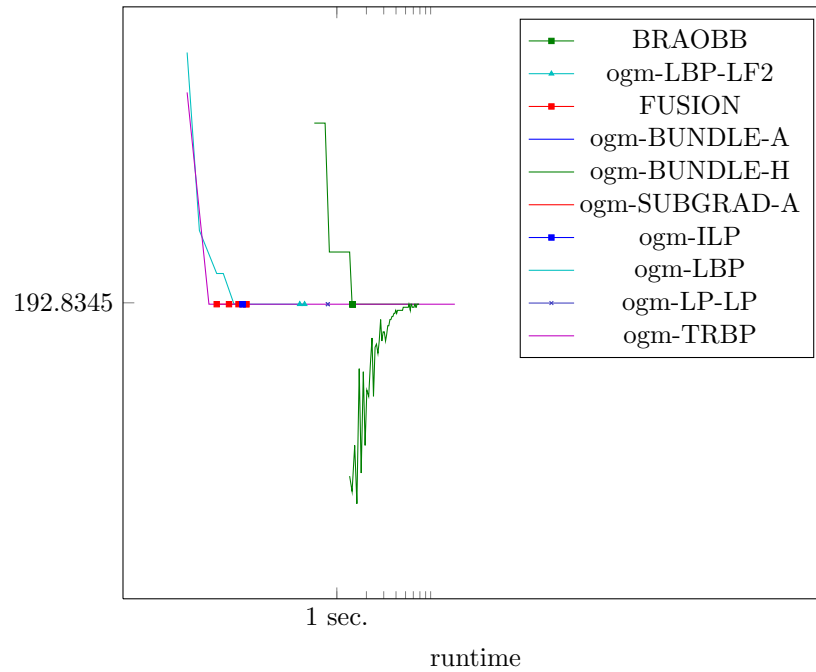


Figure 1041: Runtime results for the instance *gm254* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

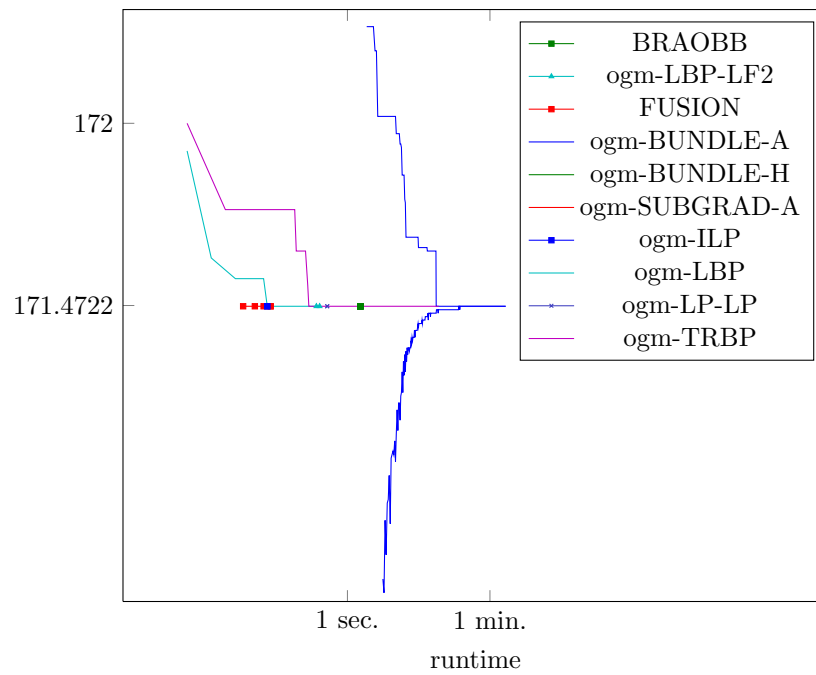


Figure 1042: Runtime results for the instance *gm255* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

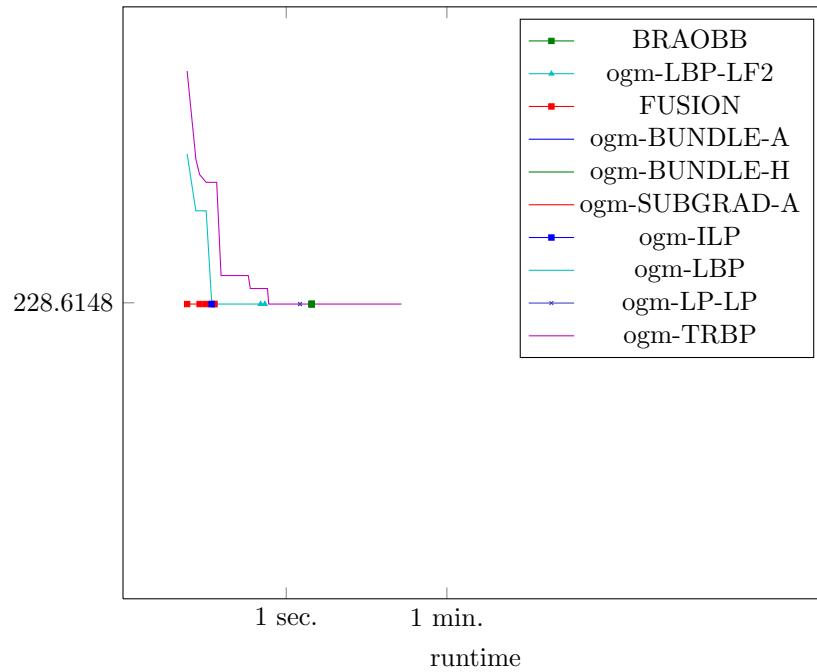


Figure 1043: Runtime results for the instance *gm256* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

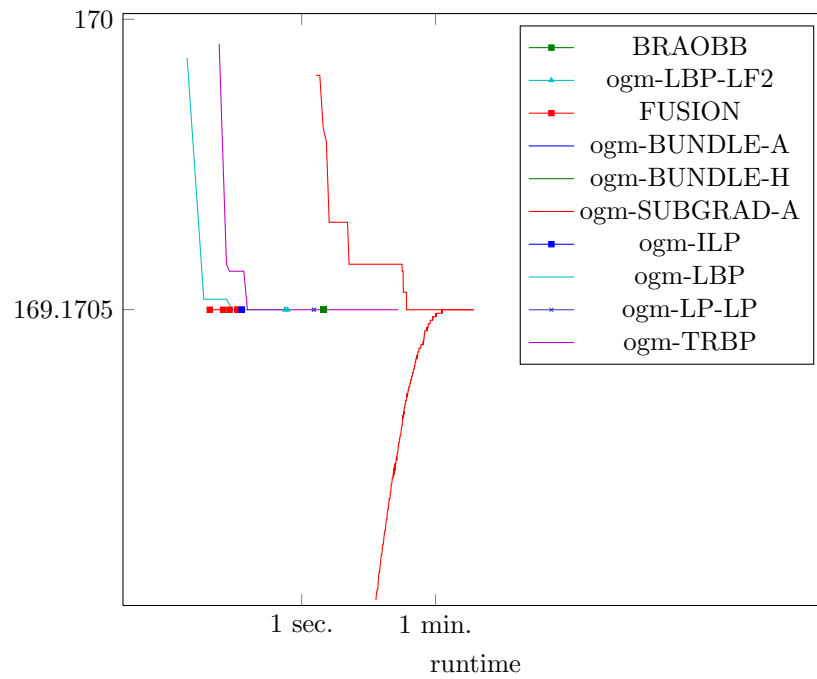


Figure 1044: Runtime results for the instance *gm257* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

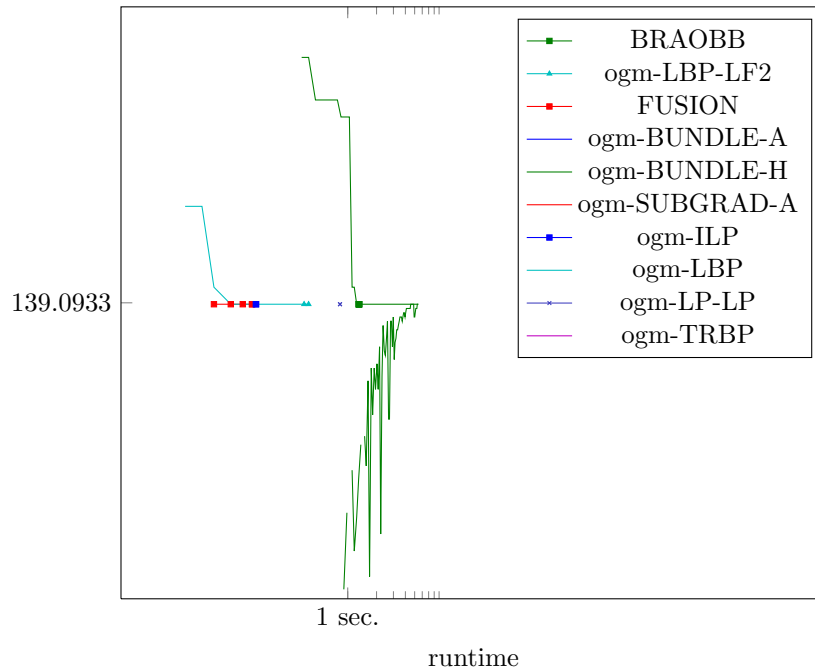


Figure 1045: Runtime results for the instance *gm258* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

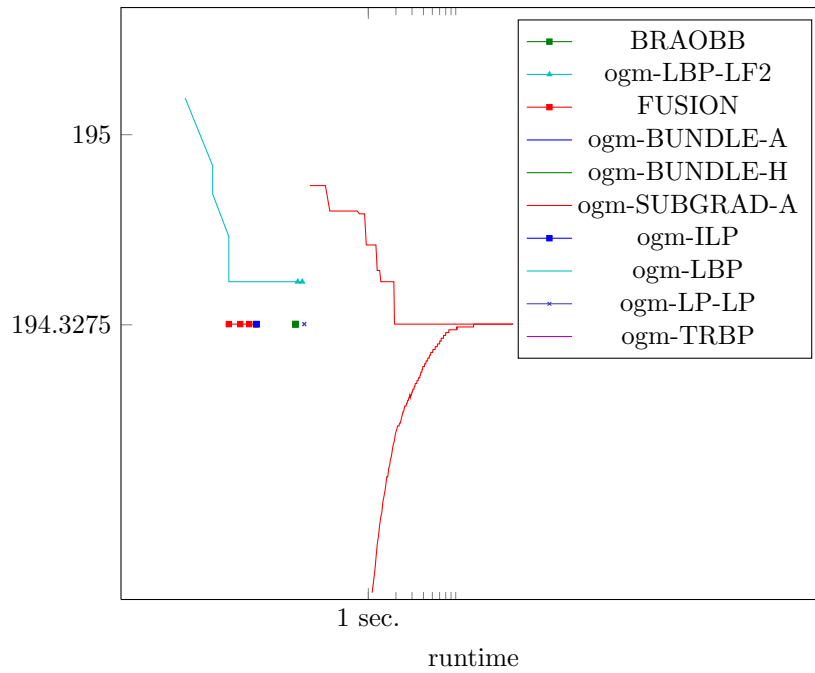


Figure 1046: Runtime results for the instance *gm259* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

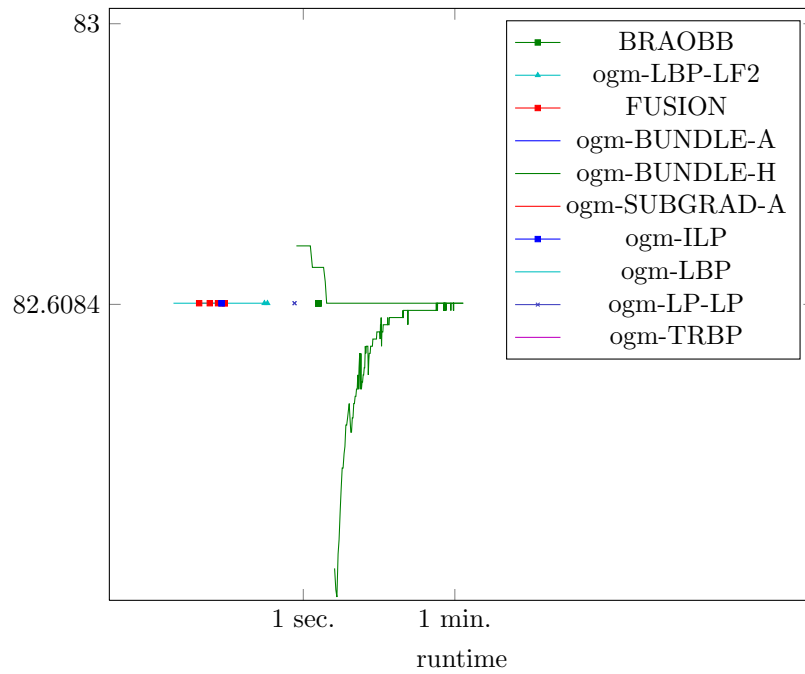


Figure 1047: Runtime results for the instance *gm25* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

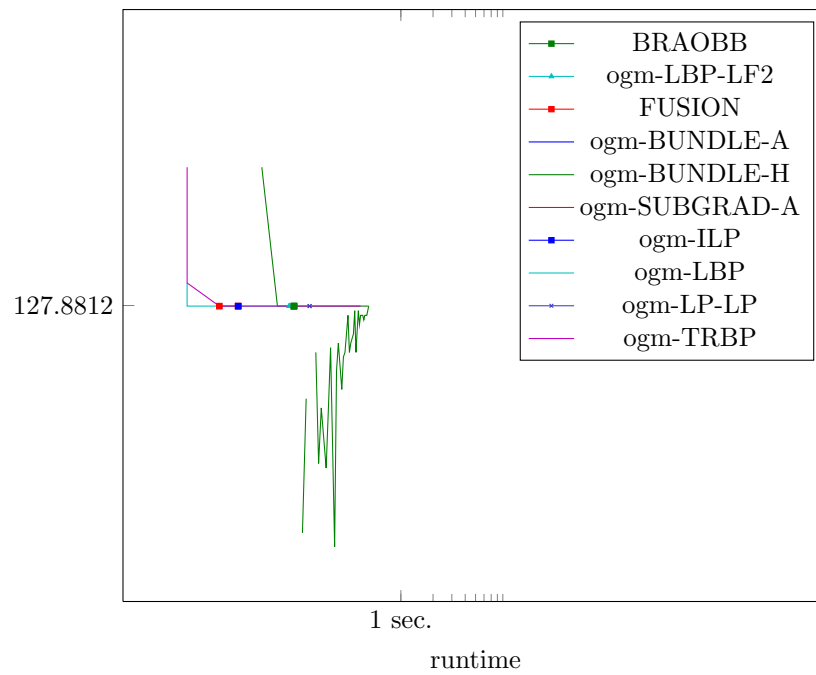


Figure 1048: Runtime results for the instance *gm260* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

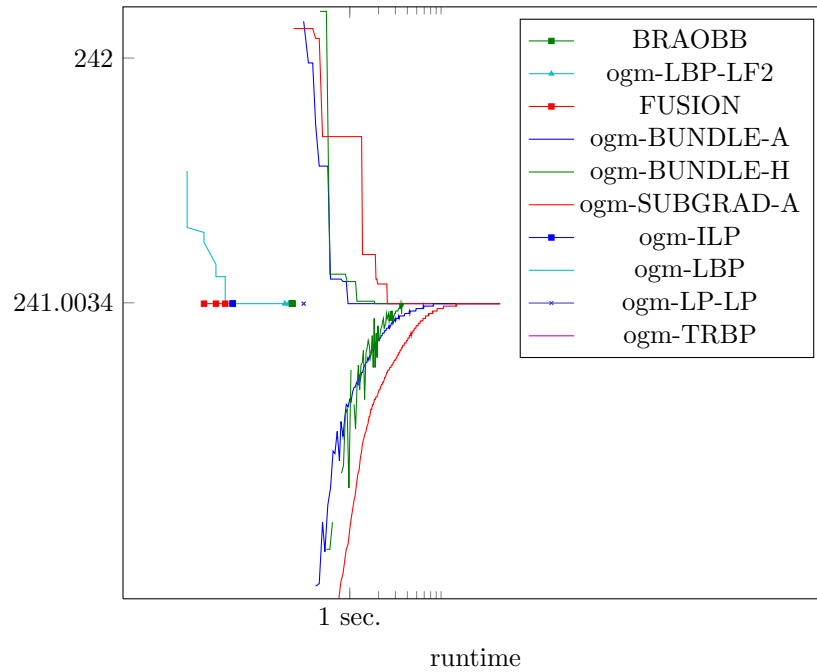


Figure 1049: Runtime results for the instance *gm261* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

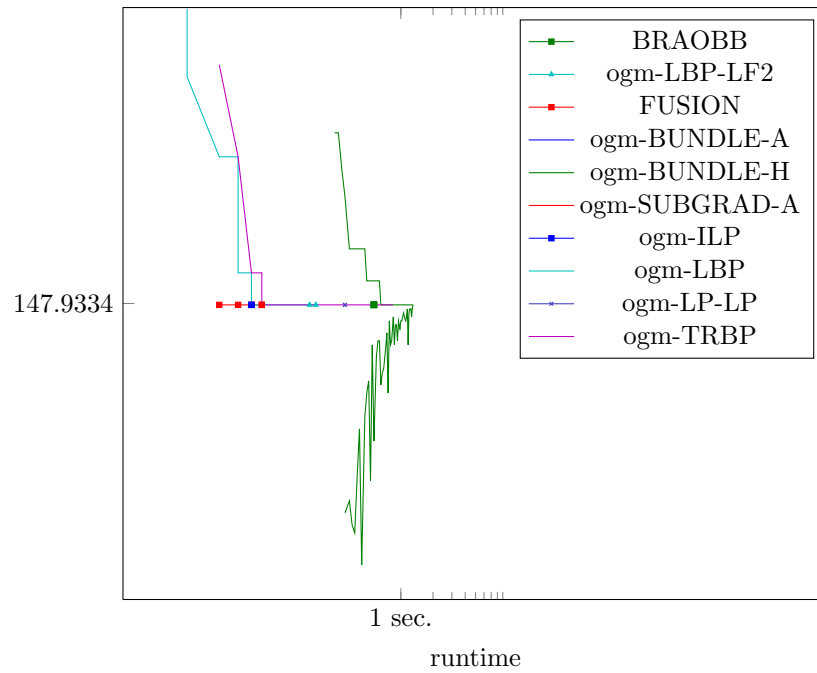


Figure 1050: Runtime results for the instance *gm262* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

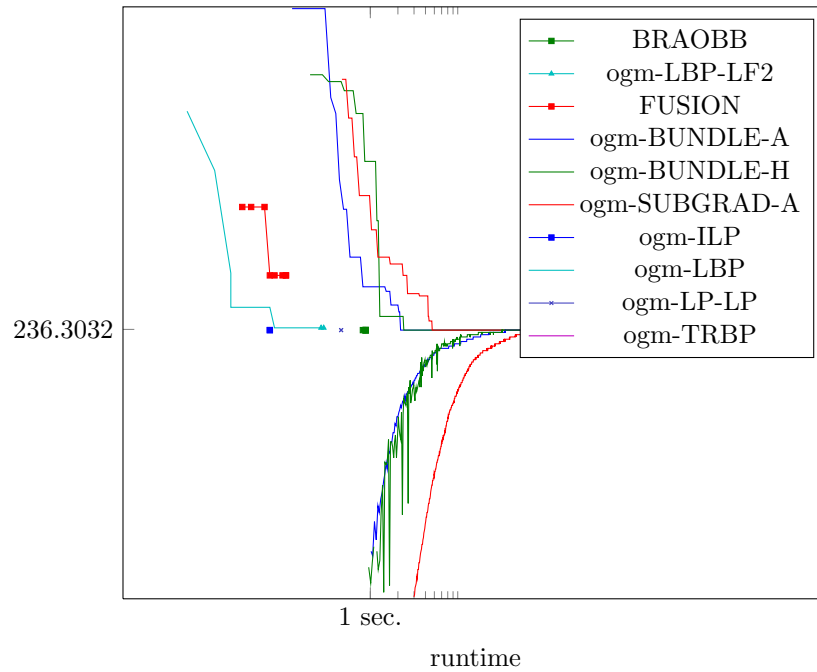


Figure 1051: Runtime results for the instance *gm263* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

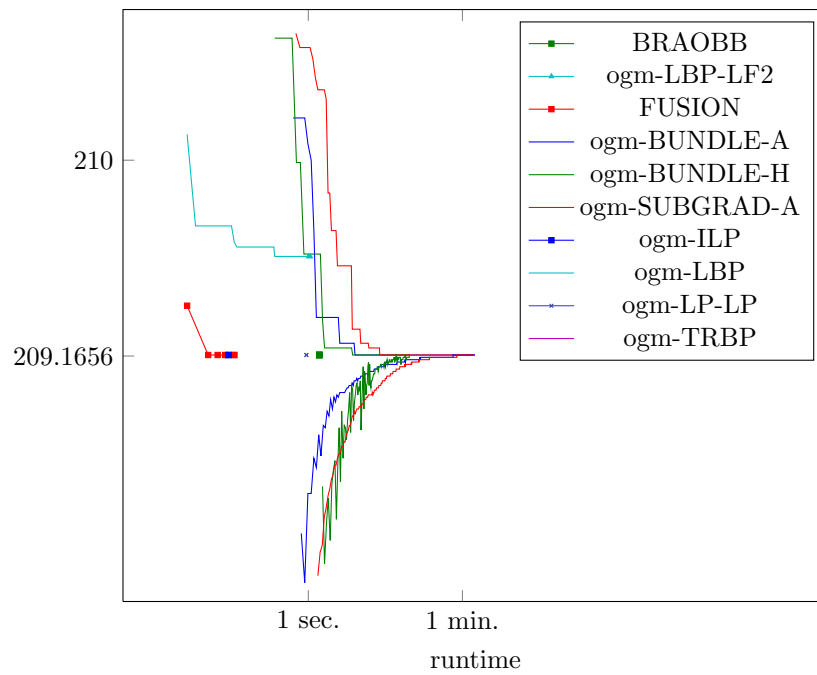


Figure 1052: Runtime results for the instance *gm264* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

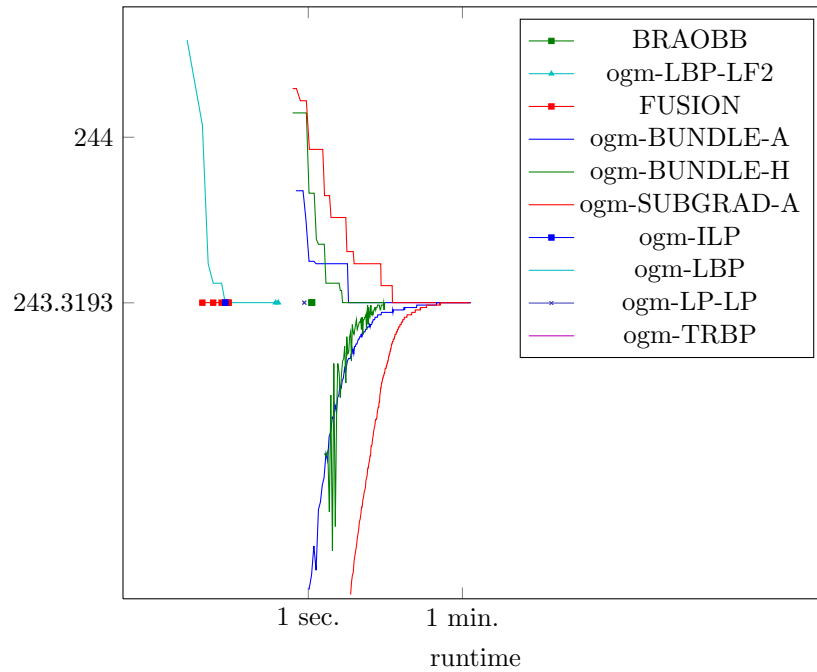


Figure 1053: Runtime results for the instance *gm265* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

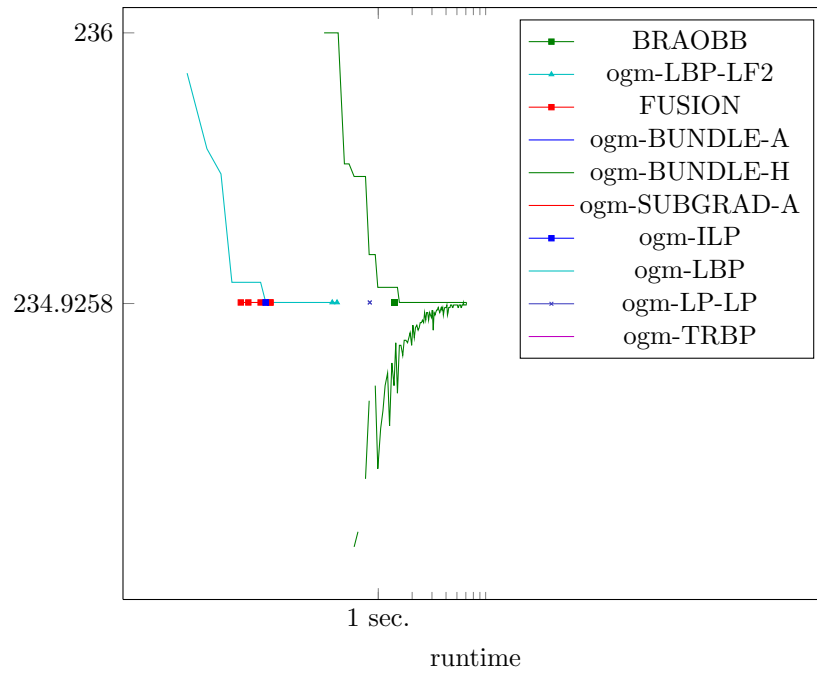


Figure 1054: Runtime results for the instance *gm266* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

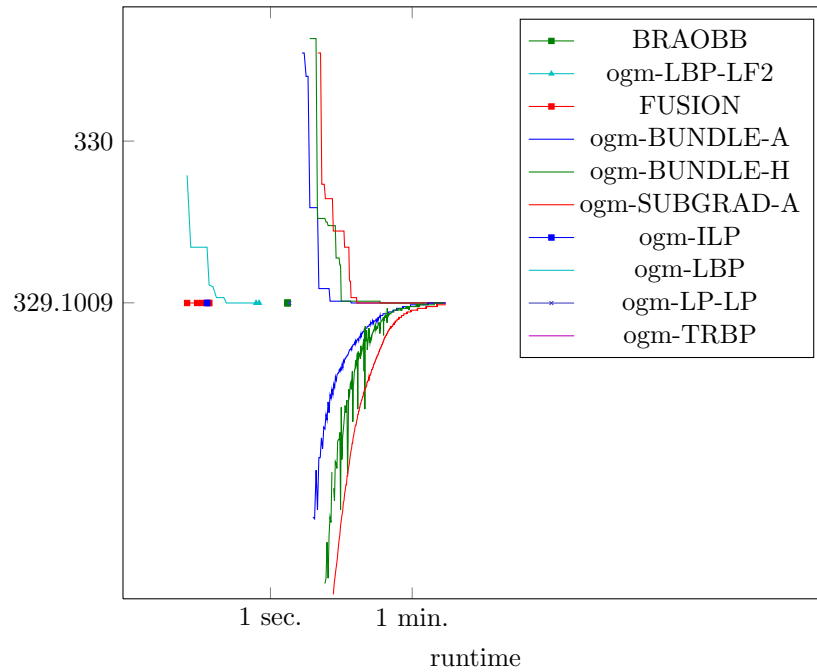


Figure 1055: Runtime results for the instance *gm267* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

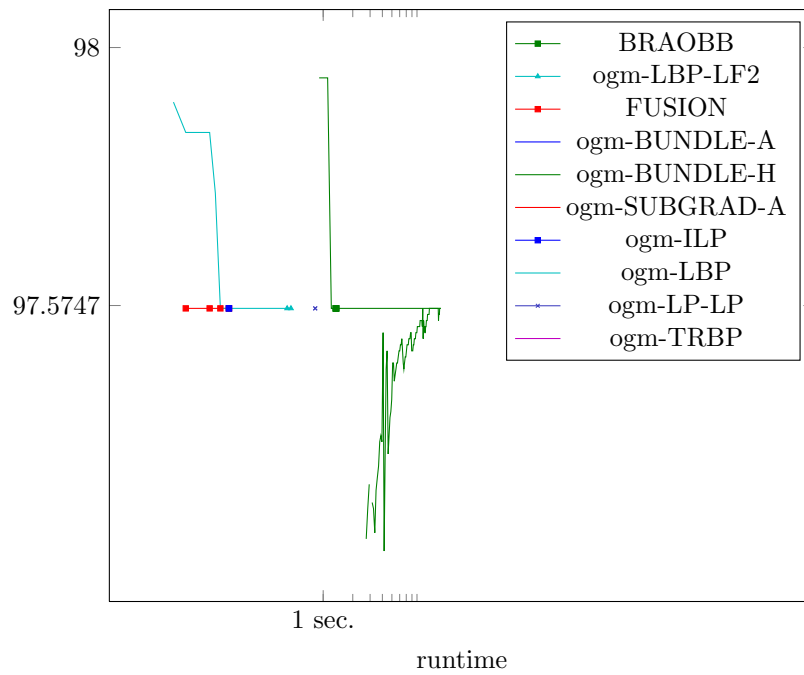


Figure 1056: Runtime results for the instance *gm268* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

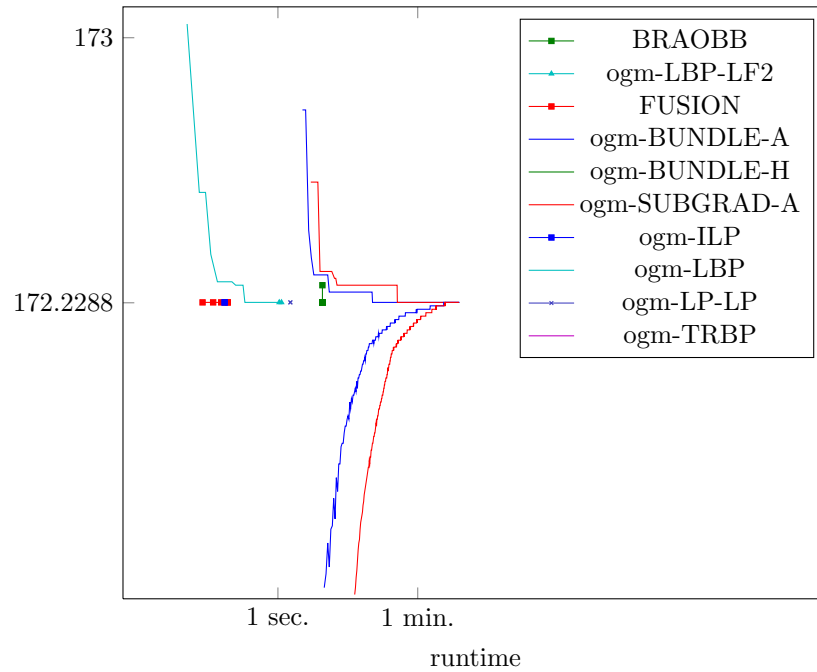


Figure 1057: Runtime results for the instance *gm269* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

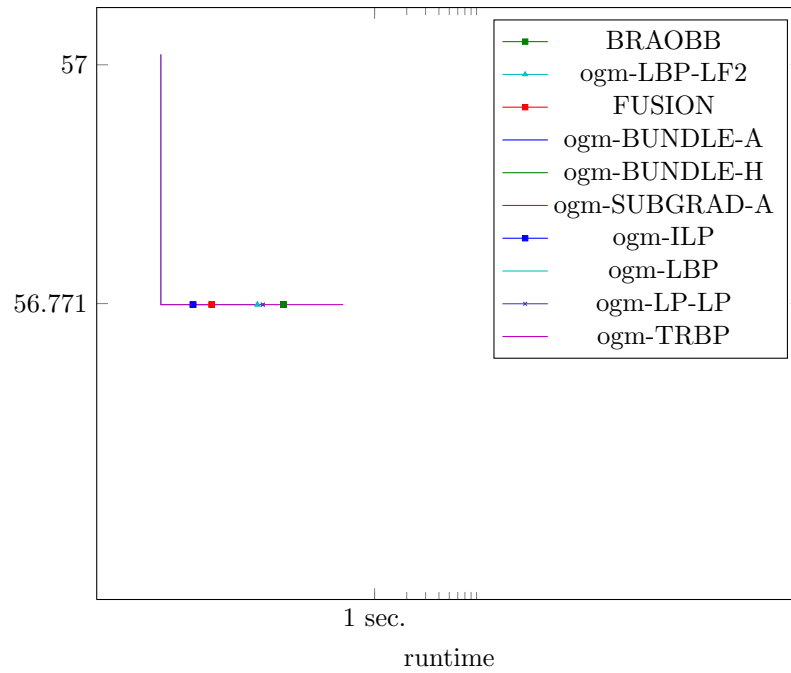


Figure 1058: Runtime results for the instance *gm26* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

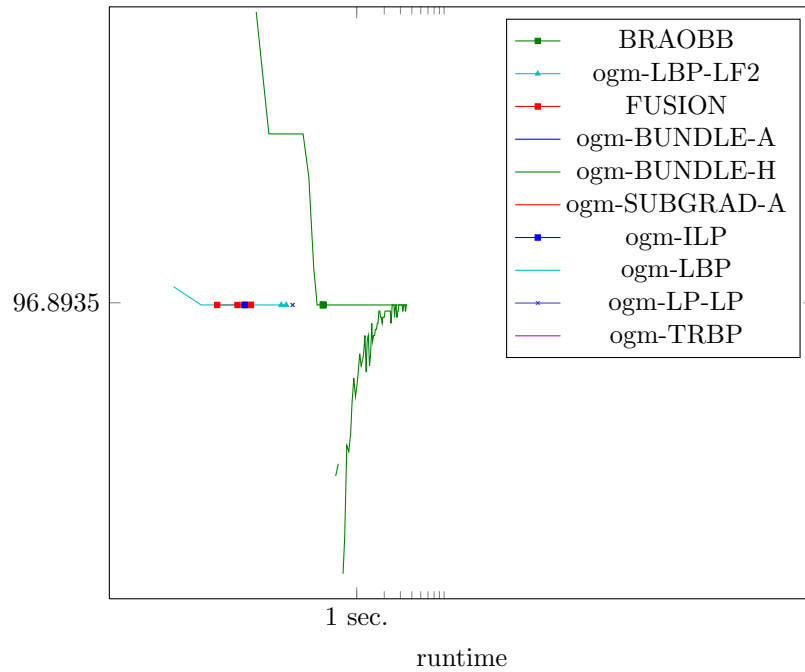


Figure 1059: Runtime results for the instance *gm270* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

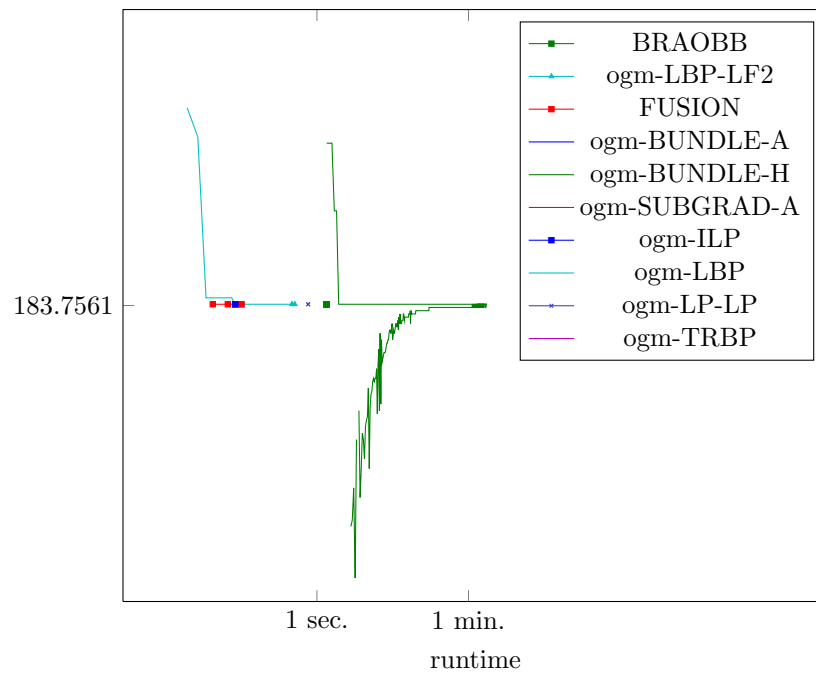


Figure 1060: Runtime results for the instance *gm271* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

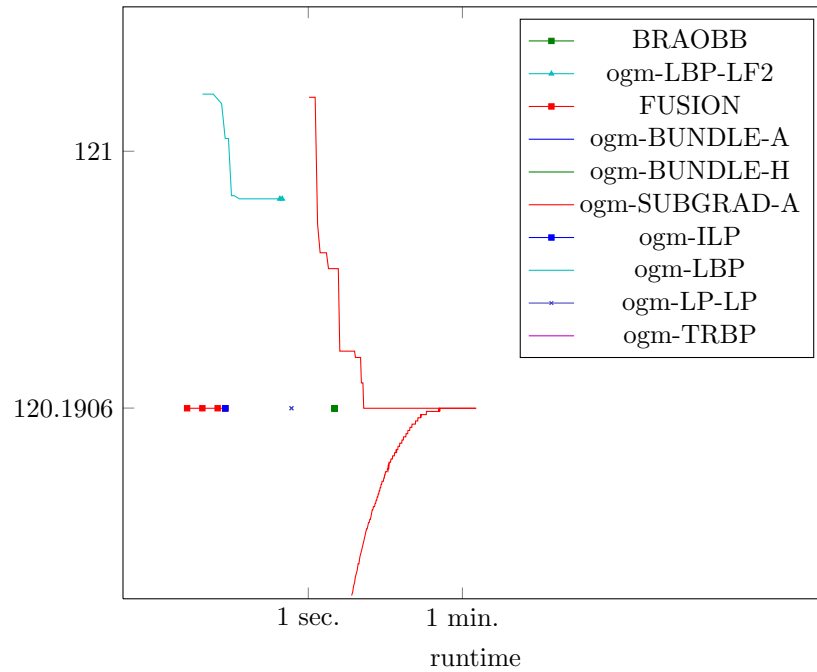


Figure 1061: Runtime results for the instance *gm272* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

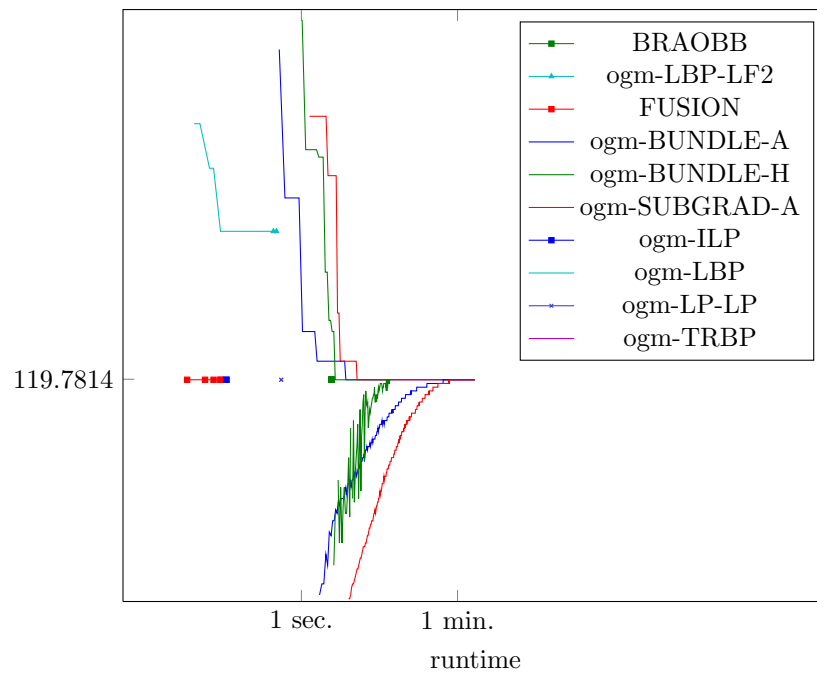


Figure 1062: Runtime results for the instance *gm273* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

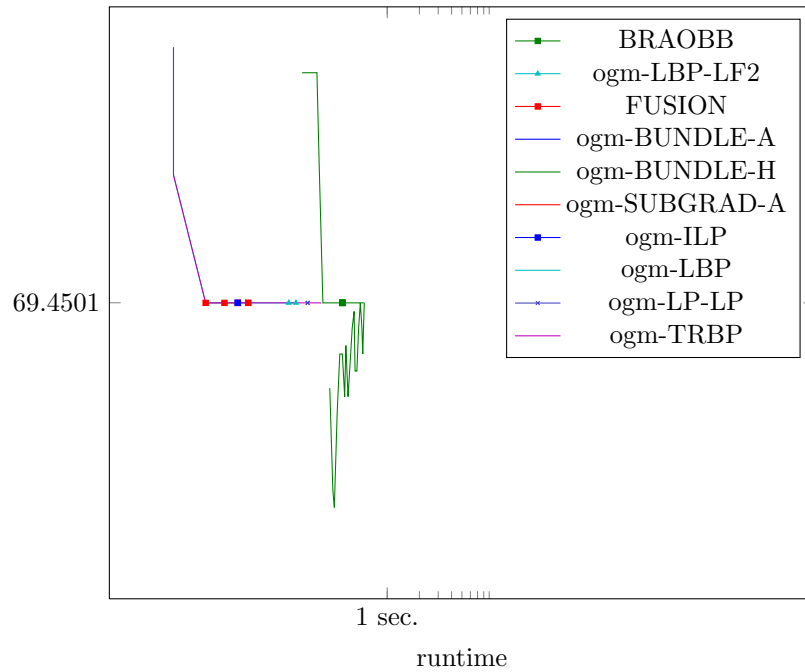


Figure 1063: Runtime results for the instance *gm274* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

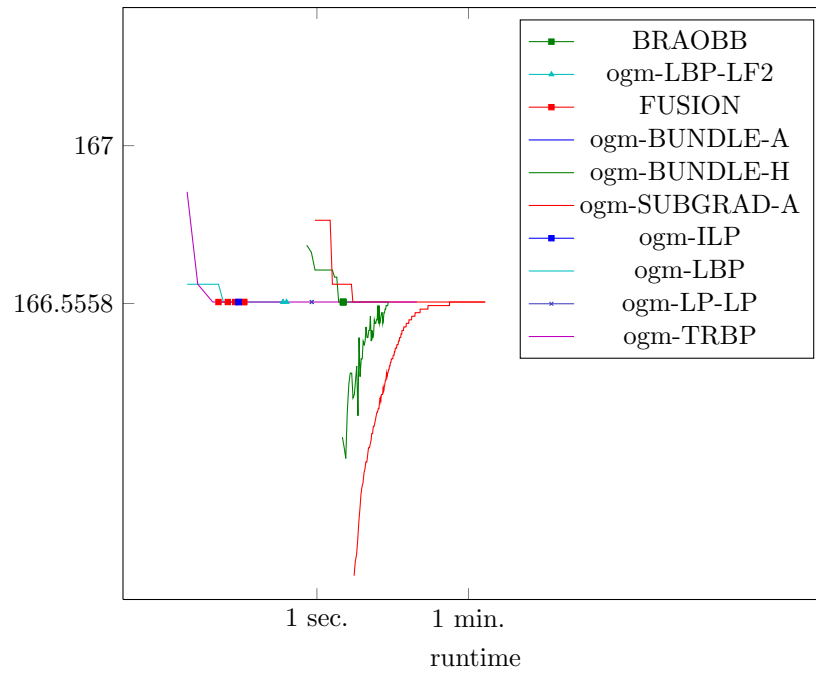


Figure 1064: Runtime results for the instance *gm275* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

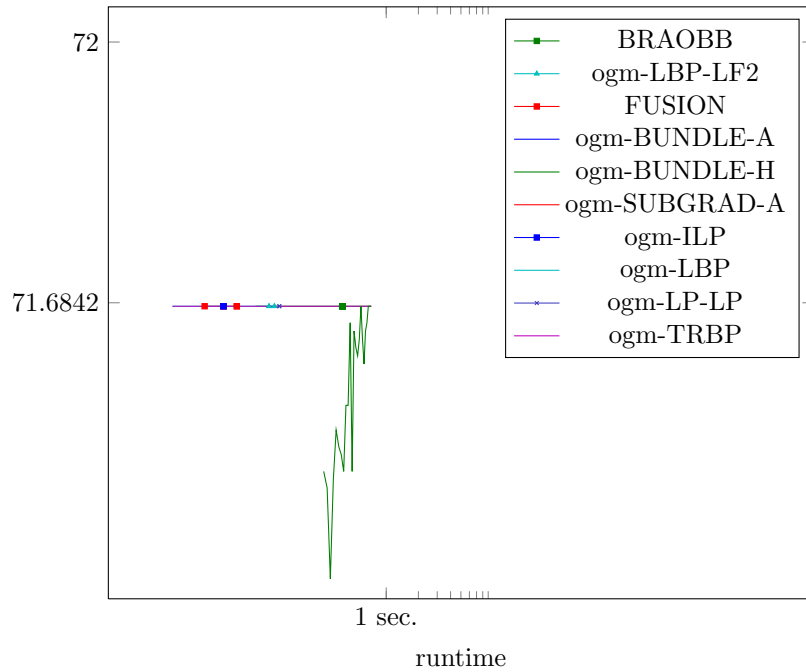


Figure 1065: Runtime results for the instance *gm276* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

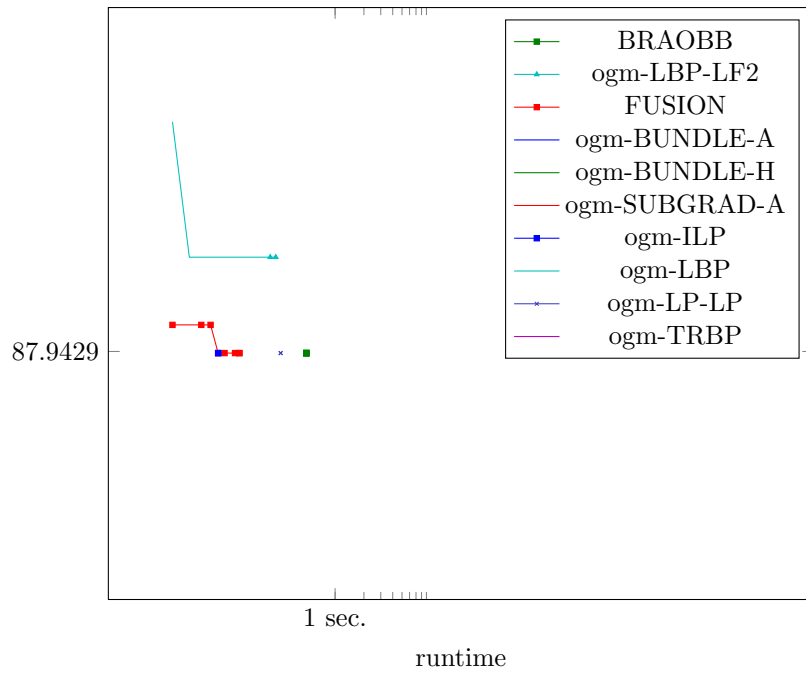


Figure 1066: Runtime results for the instance *gm277* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

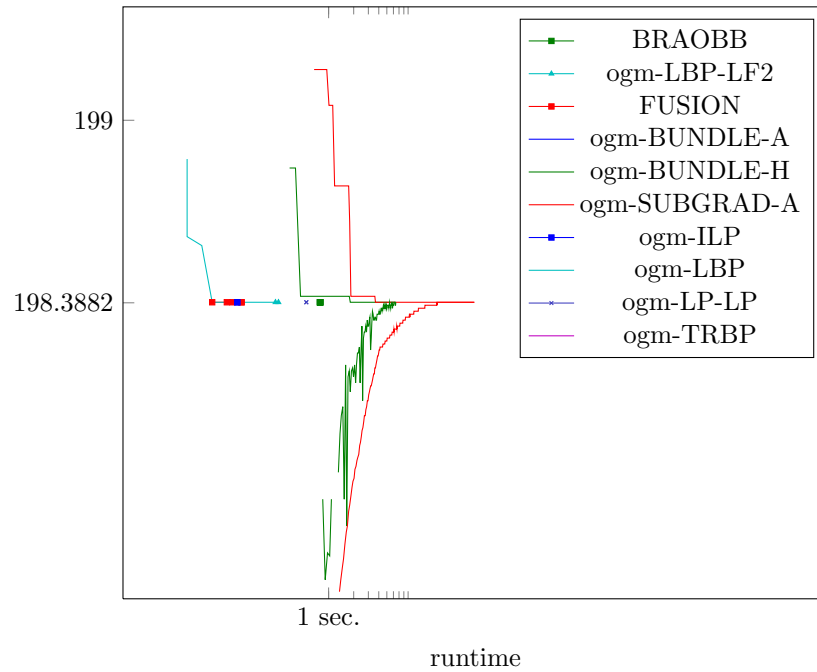


Figure 1067: Runtime results for the instance *gm278* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

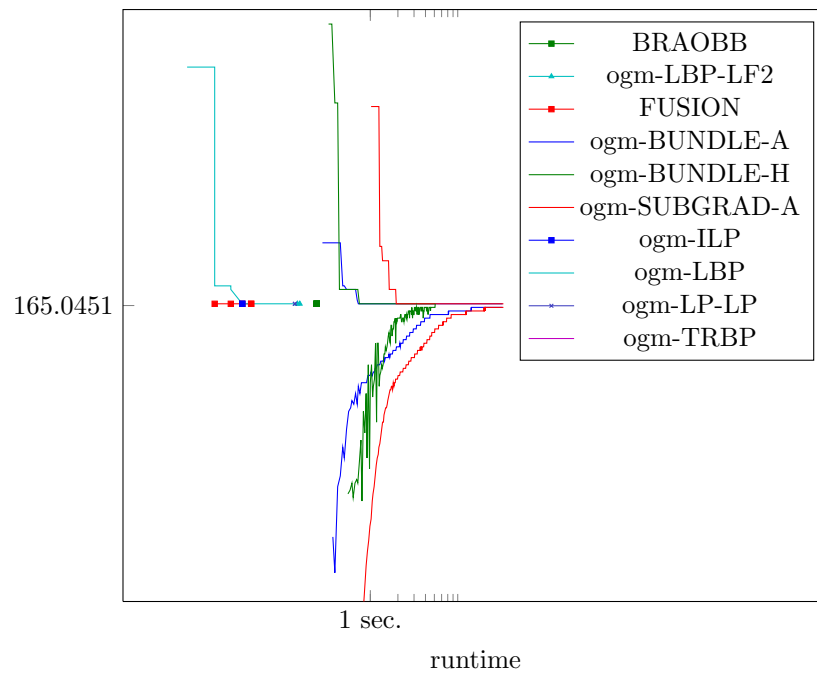


Figure 1068: Runtime results for the instance *gm279* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

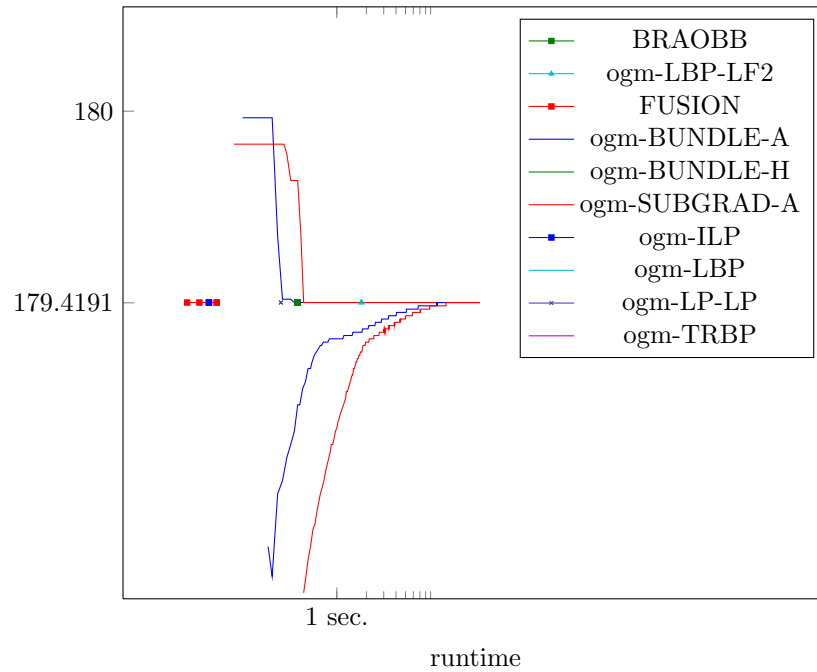


Figure 1069: Runtime results for the instance *gm27* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

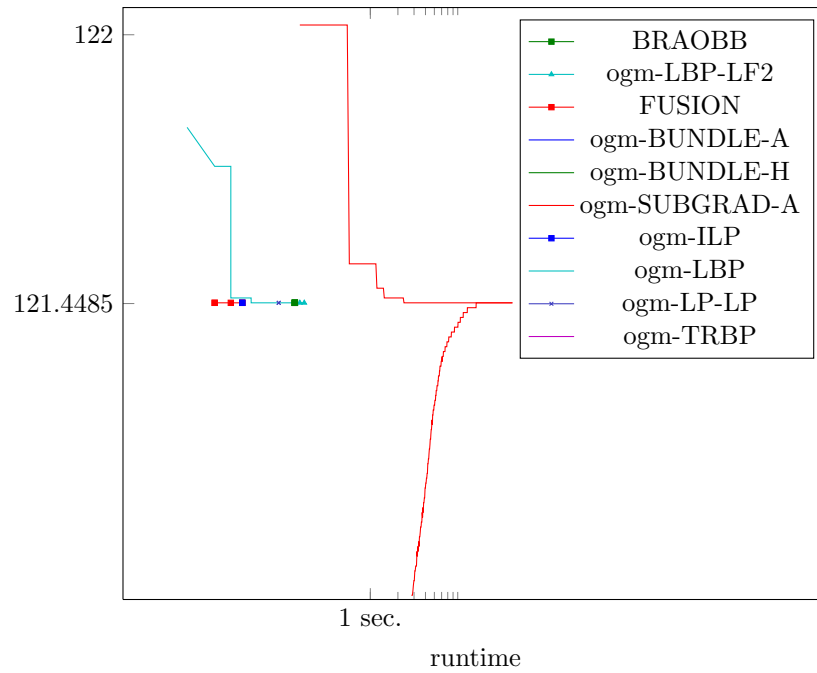


Figure 1070: Runtime results for the instance *gm280* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

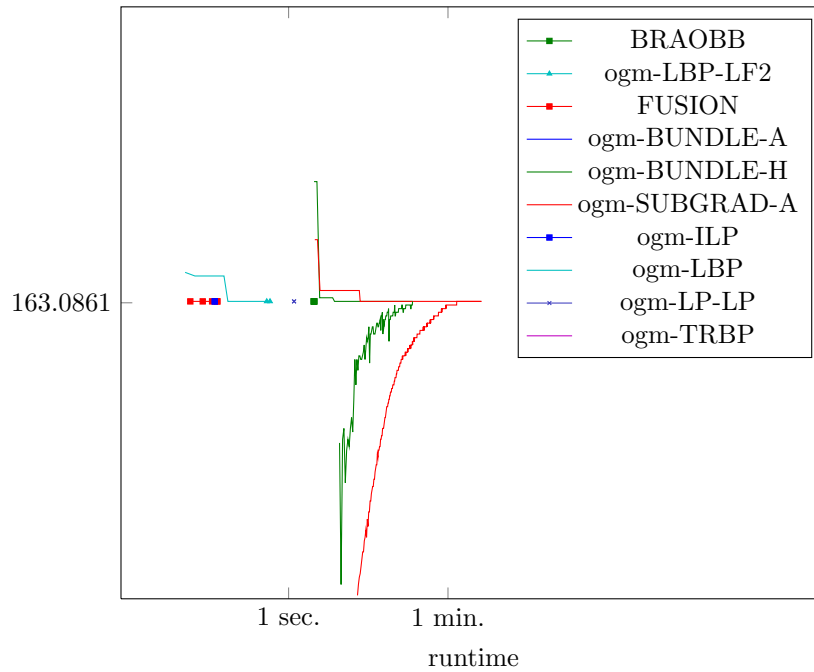


Figure 1071: Runtime results for the instance *gm281* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

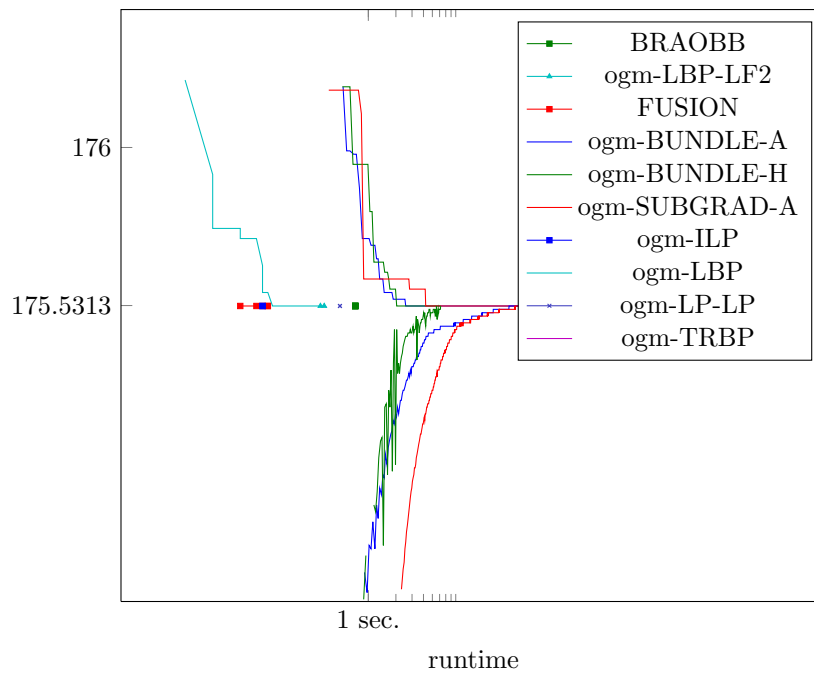


Figure 1072: Runtime results for the instance *gm282* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

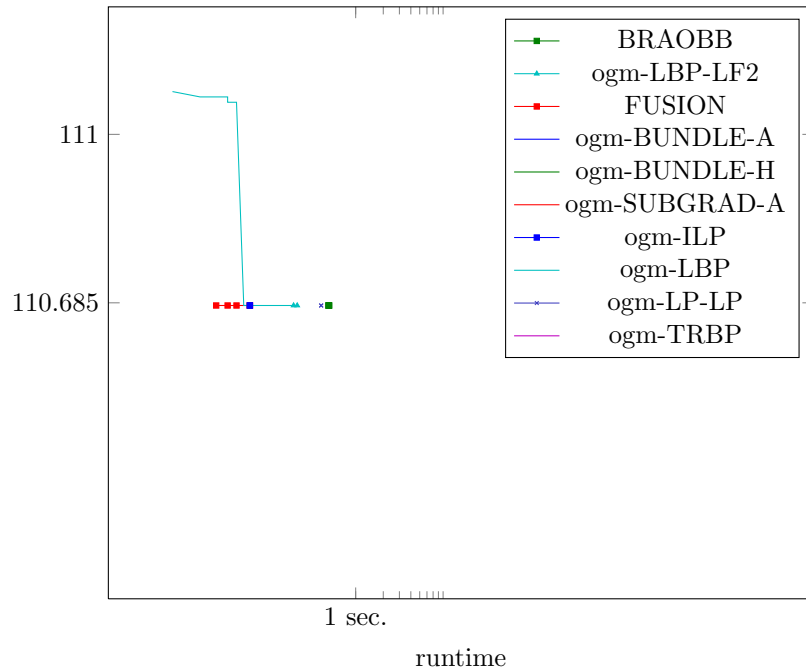


Figure 1073: Runtime results for the instance *gm283* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

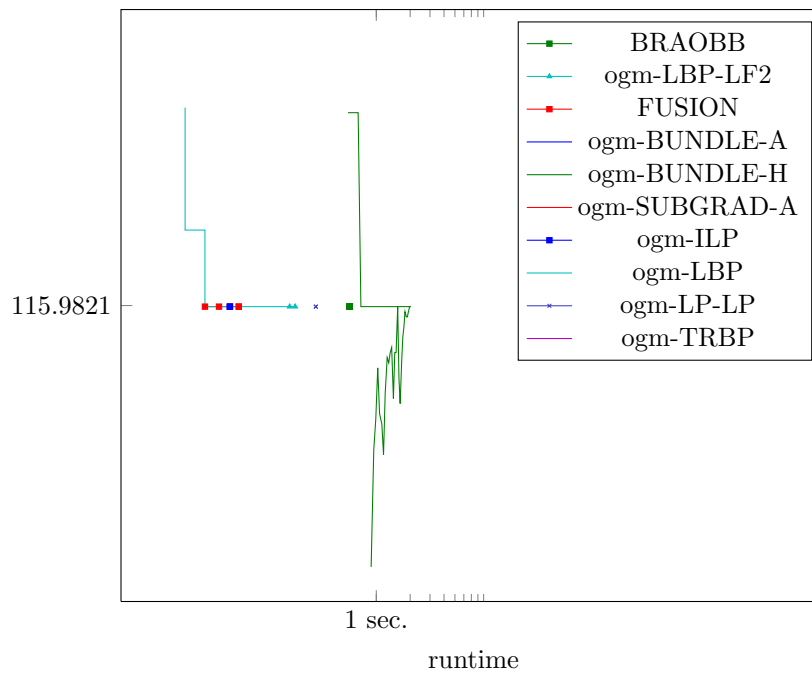


Figure 1074: Runtime results for the instance *gm284* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

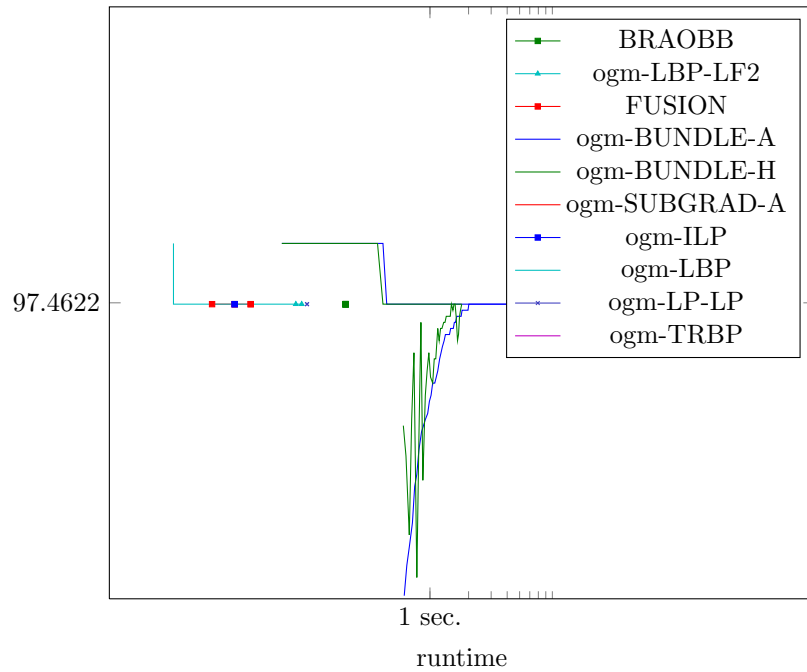


Figure 1075: Runtime results for the instance *gm285* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

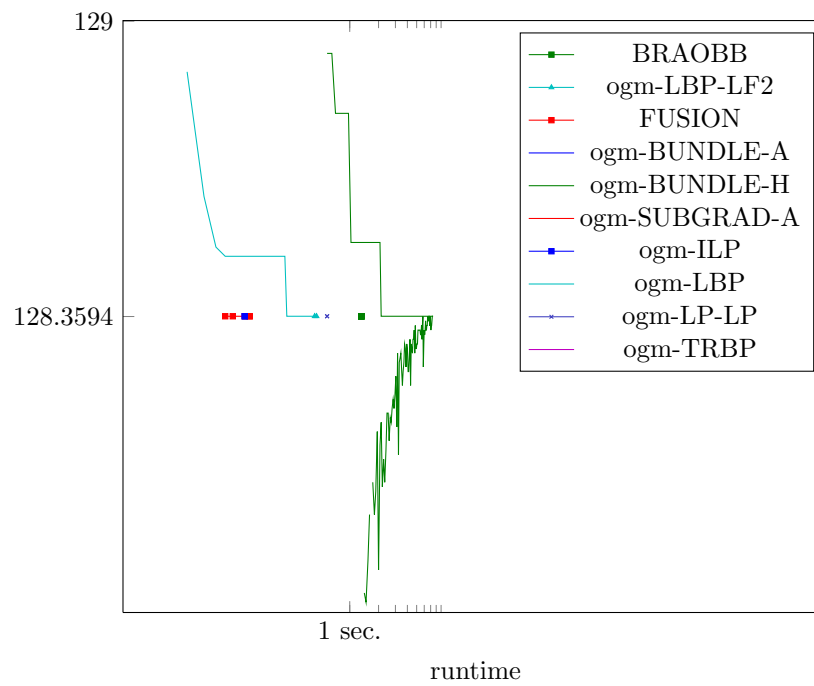


Figure 1076: Runtime results for the instance *gm286* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

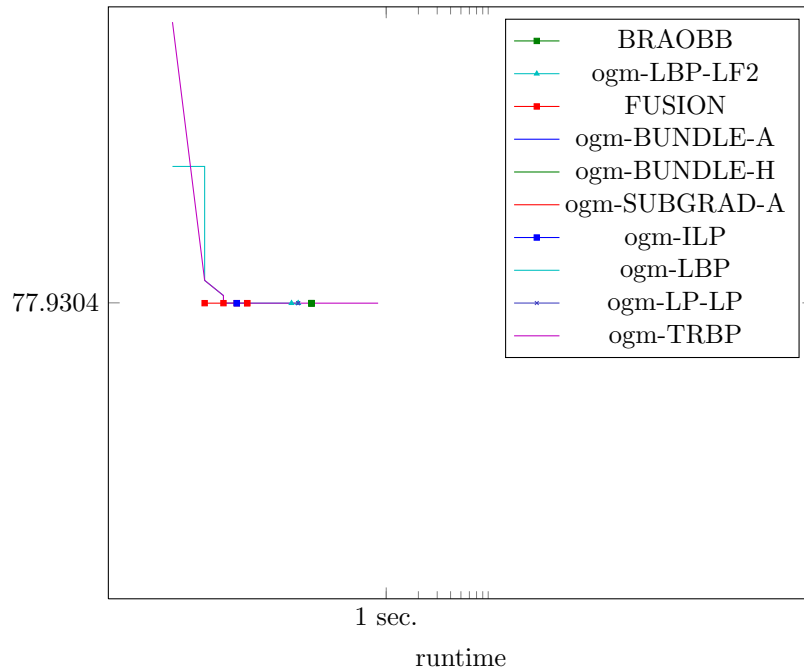


Figure 1077: Runtime results for the instance *gm287* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

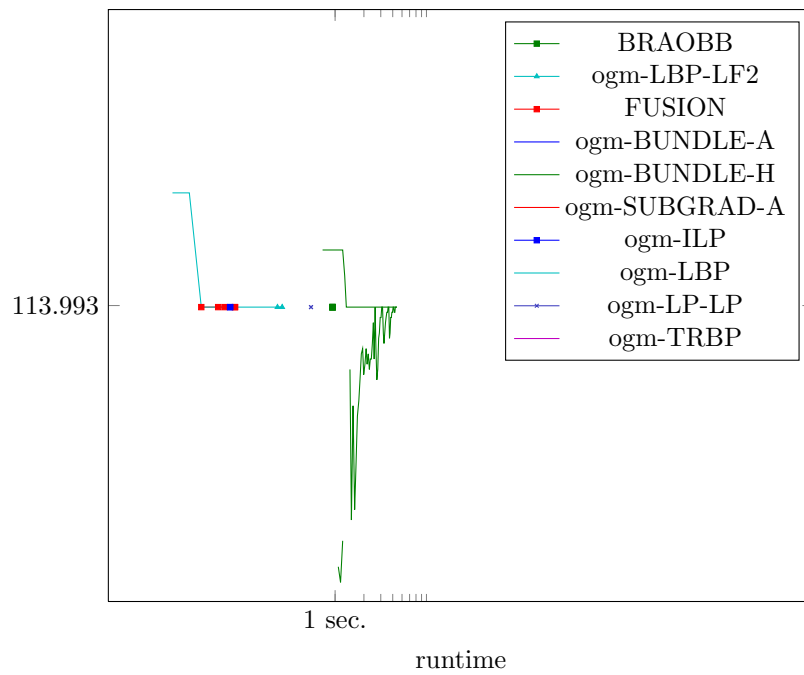


Figure 1078: Runtime results for the instance *gm288* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

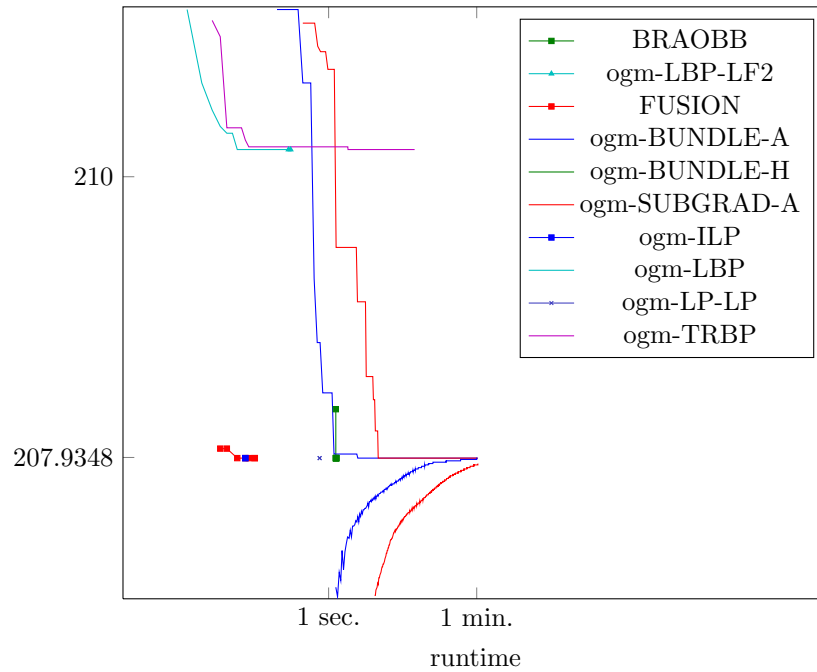


Figure 1079: Runtime results for the instance *gm289* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

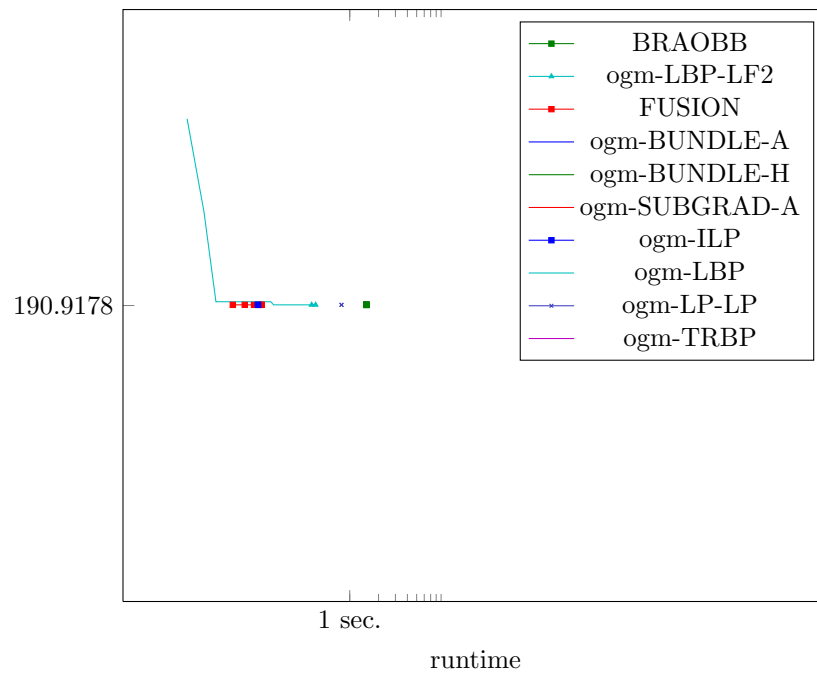


Figure 1080: Runtime results for the instance *gm28* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

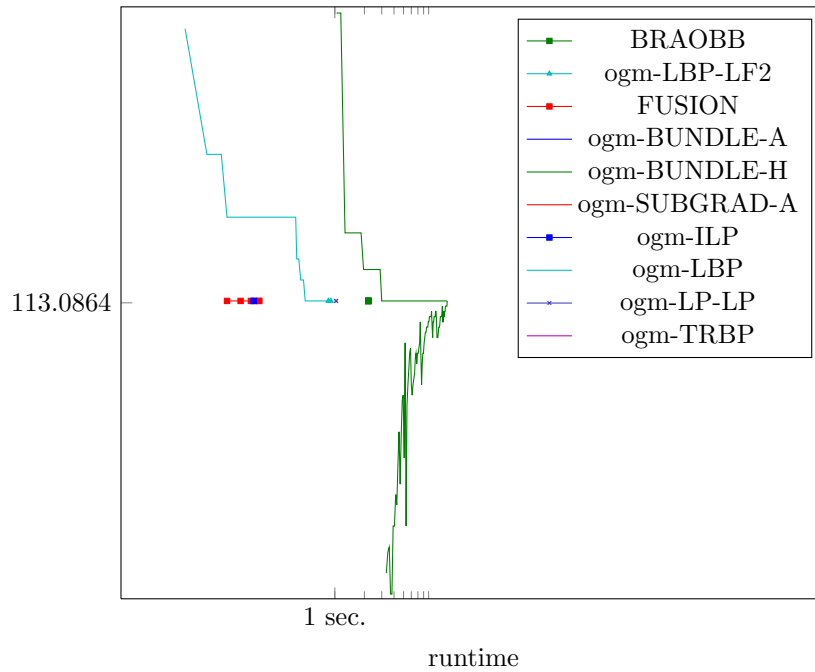


Figure 1081: Runtime results for the instance *gm290* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

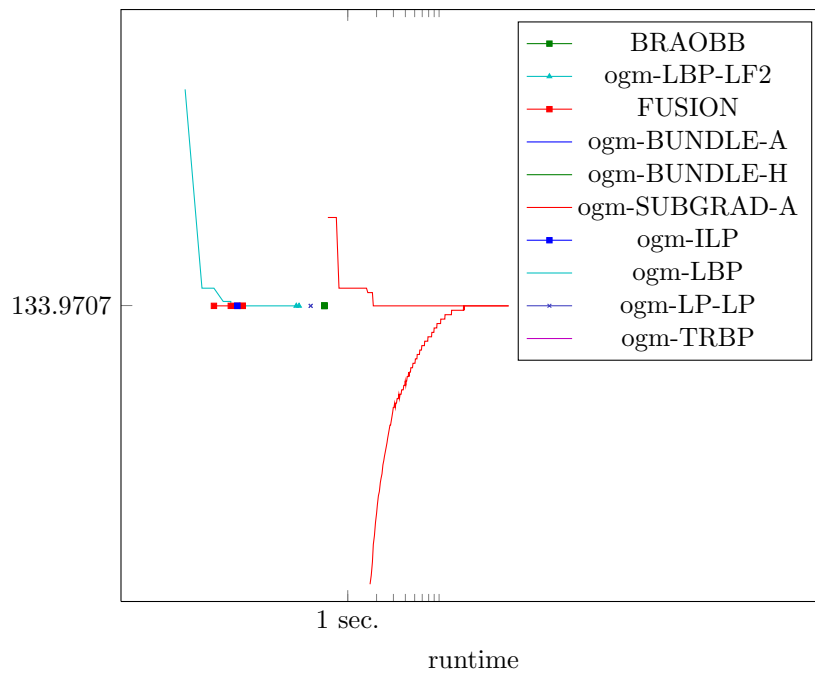


Figure 1082: Runtime results for the instance *gm291* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

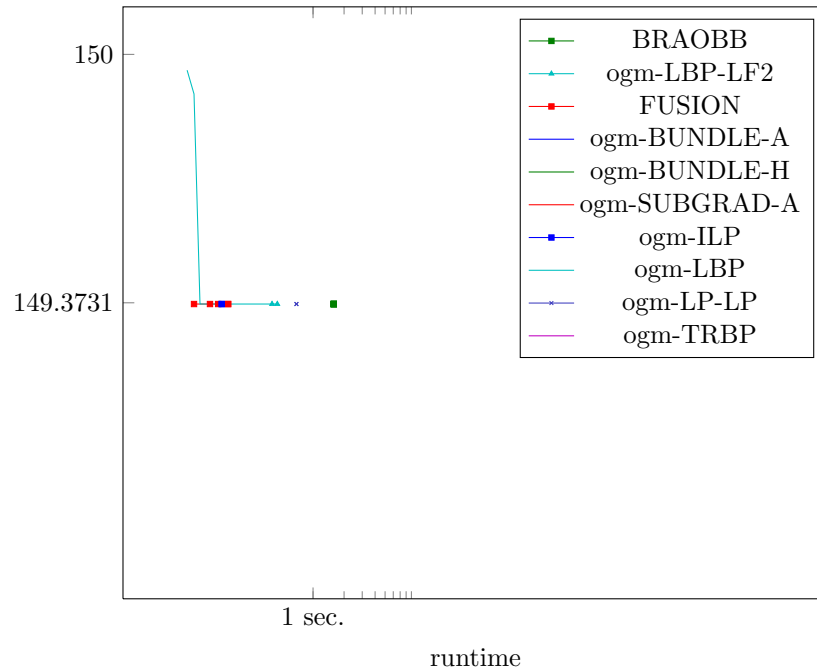


Figure 1083: Runtime results for the instance *gm292* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

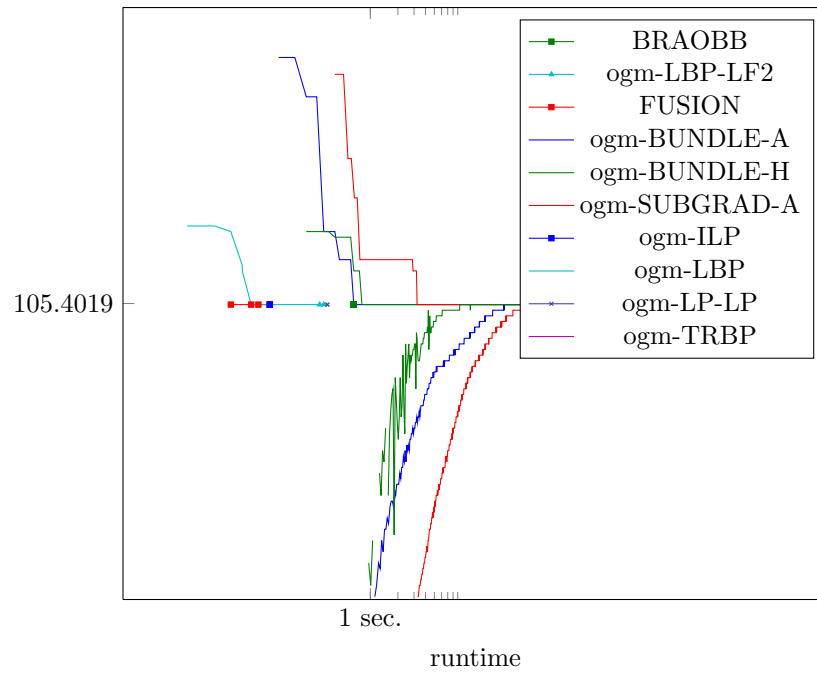


Figure 1084: Runtime results for the instance *gm293* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

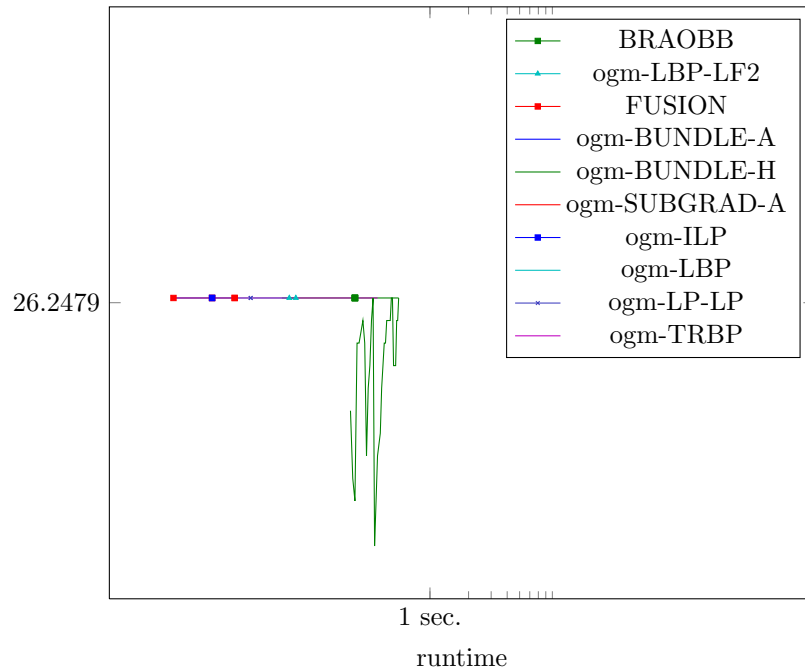


Figure 1085: Runtime results for the instance *gm294* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

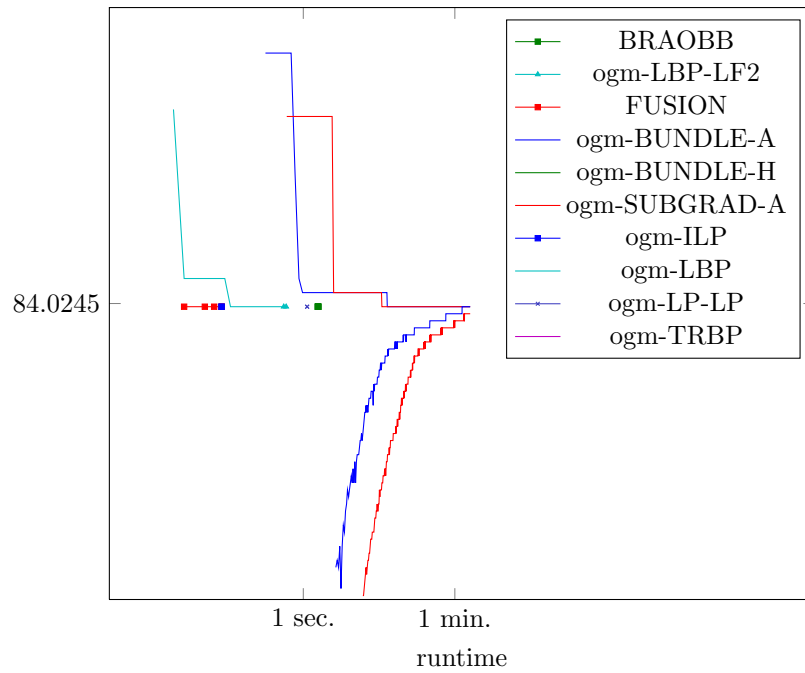


Figure 1086: Runtime results for the instance *gm295* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

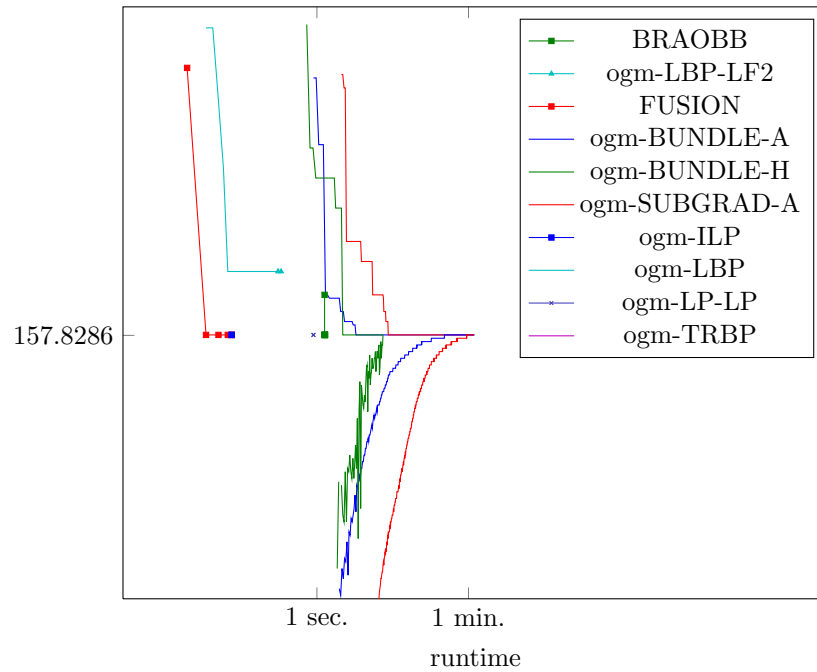


Figure 1087: Runtime results for the instance *gm296* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

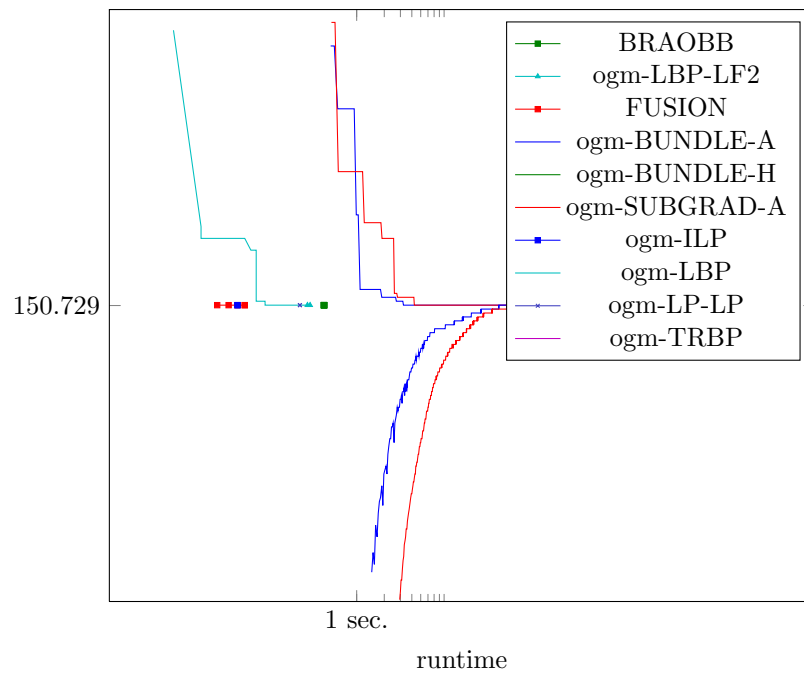


Figure 1088: Runtime results for the instance *gm297* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

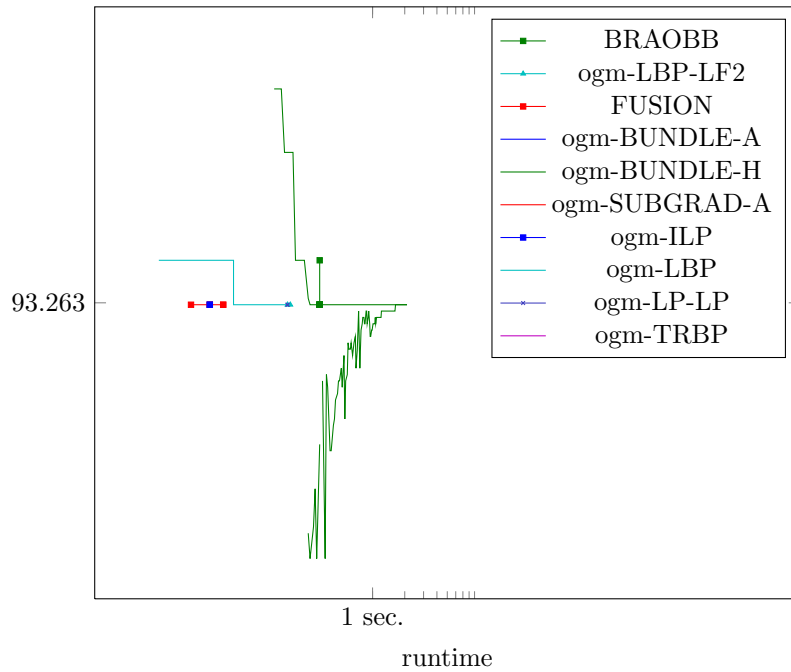


Figure 1089: Runtime results for the instance *gm298* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

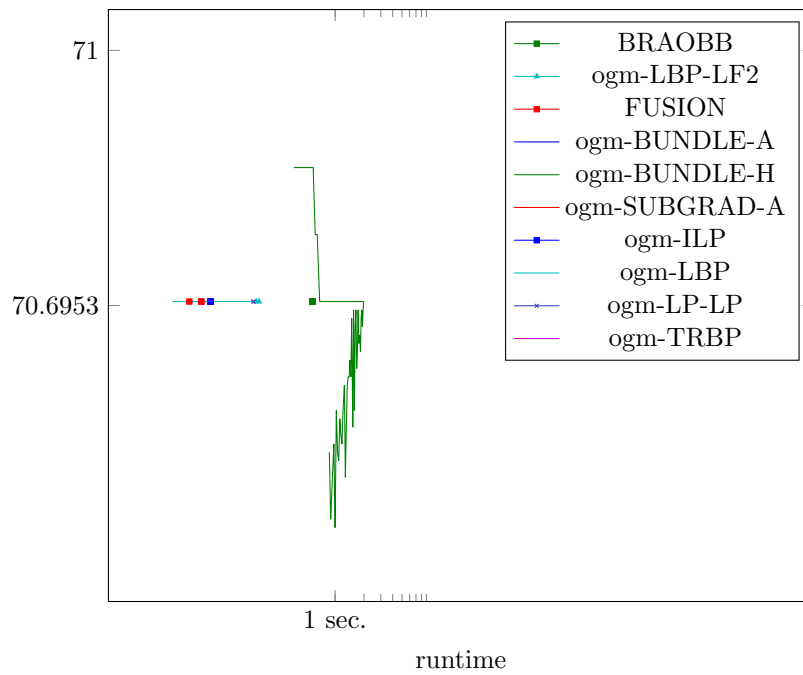


Figure 1090: Runtime results for the instance *gm299* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

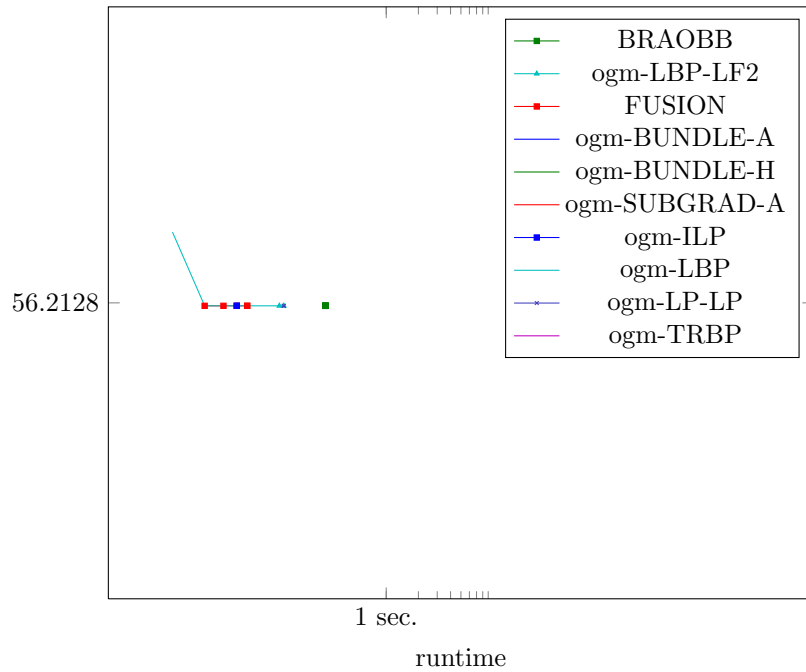


Figure 1091: Runtime results for the instance *gm29* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

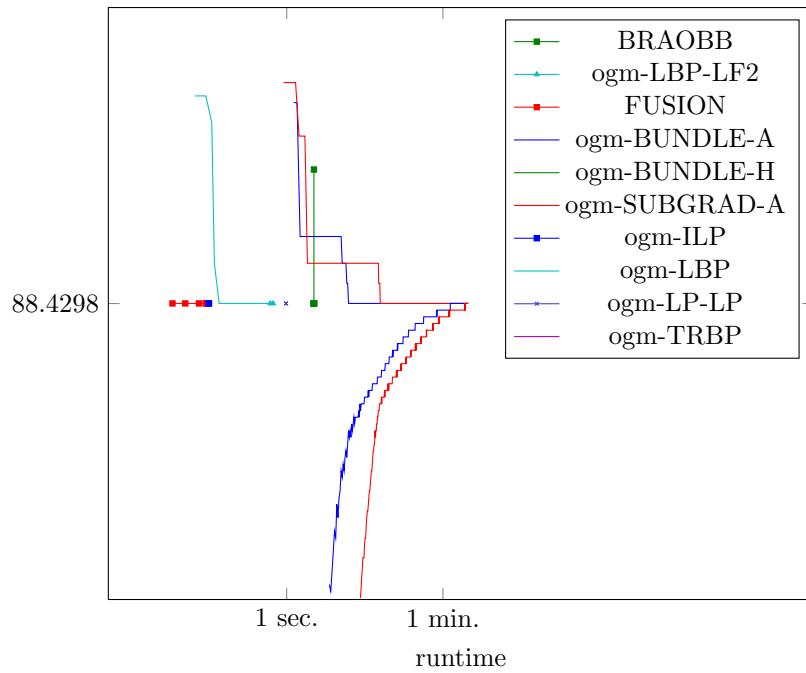


Figure 1092: Runtime results for the instance *gm2* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

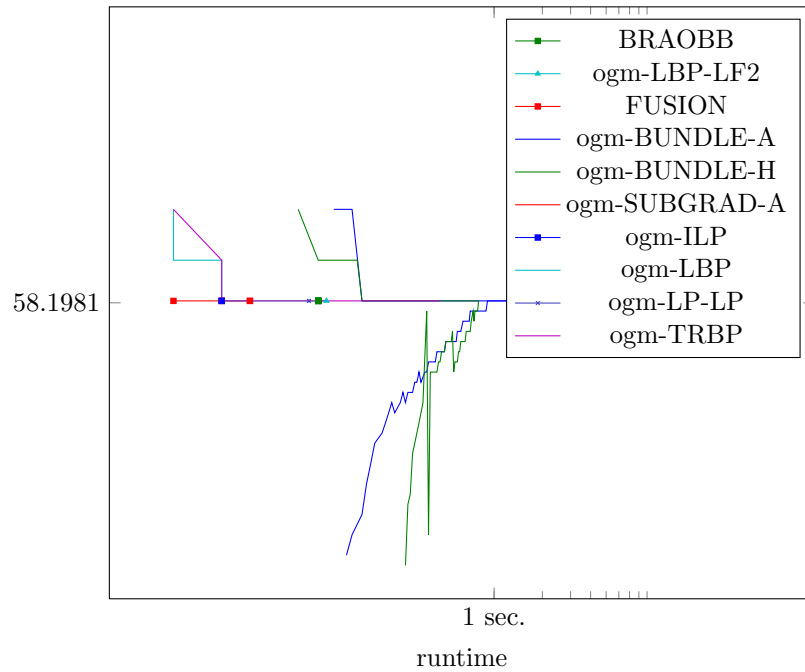


Figure 1093: Runtime results for the instance *gm300* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

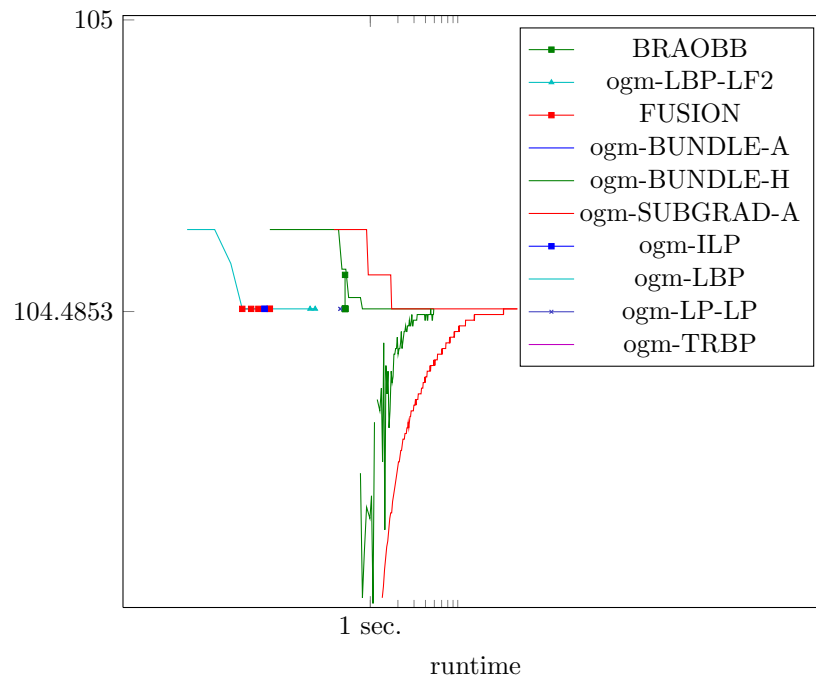


Figure 1094: Runtime results for the instance *gm30* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

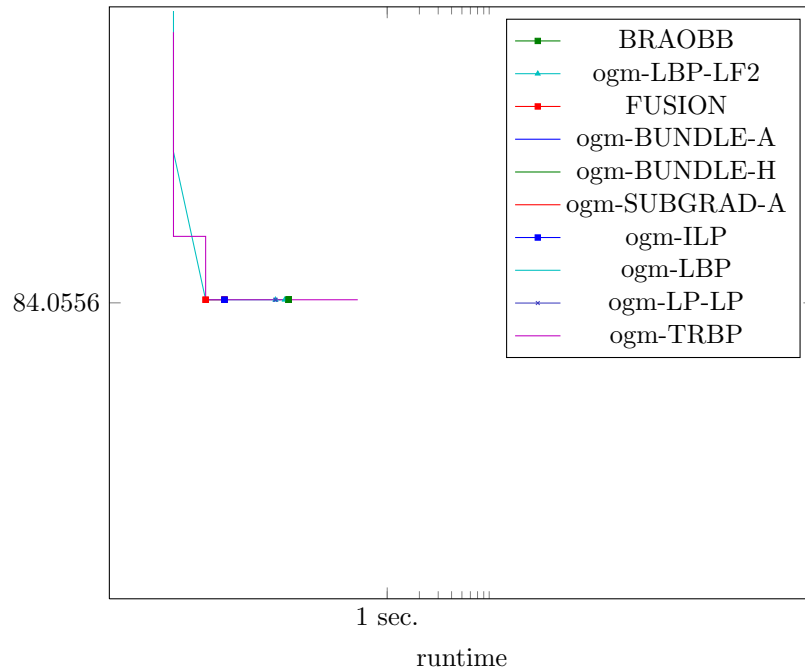


Figure 1095: Runtime results for the instance *gm31* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

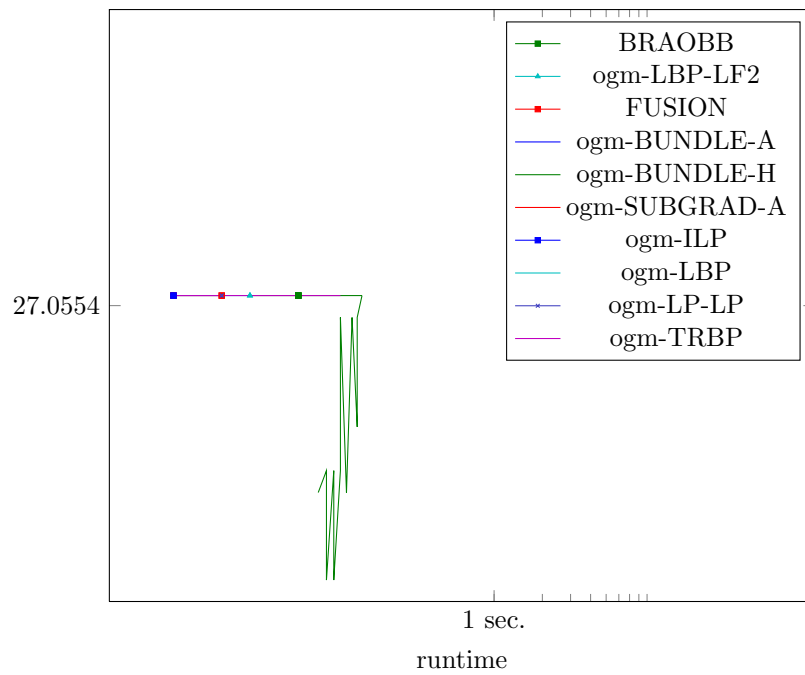


Figure 1096: Runtime results for the instance *gm32* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

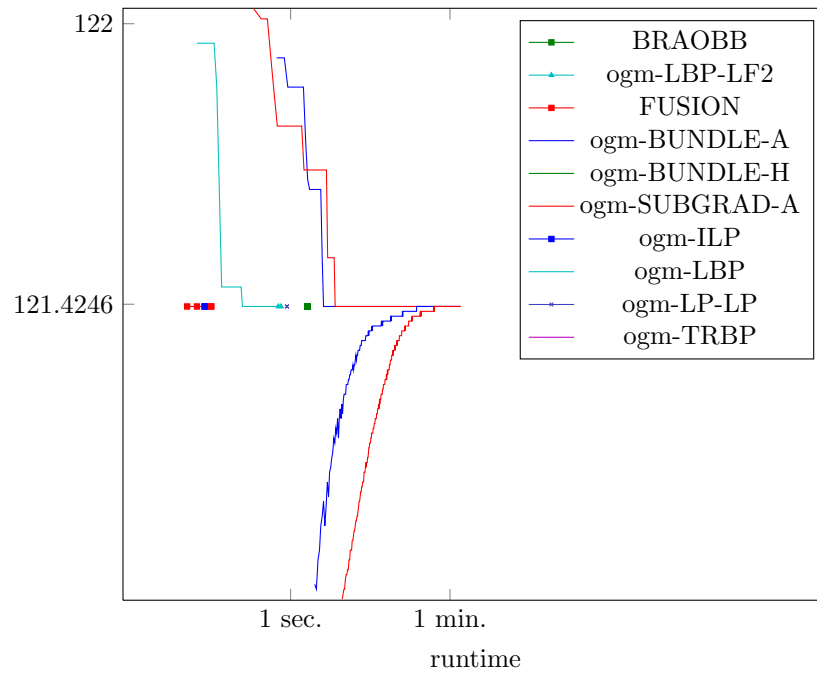


Figure 1097: Runtime results for the instance *gm33* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

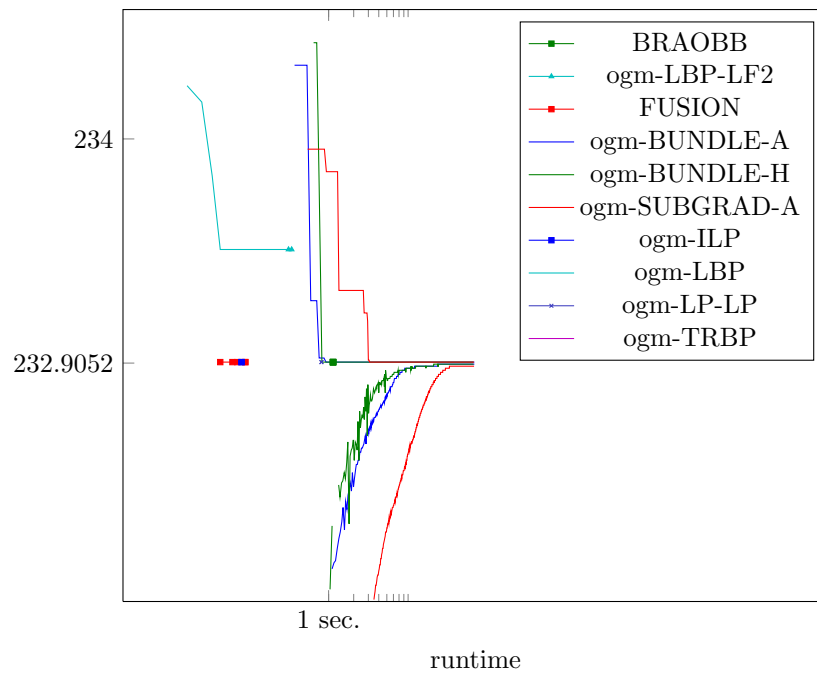


Figure 1098: Runtime results for the instance *gm34* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

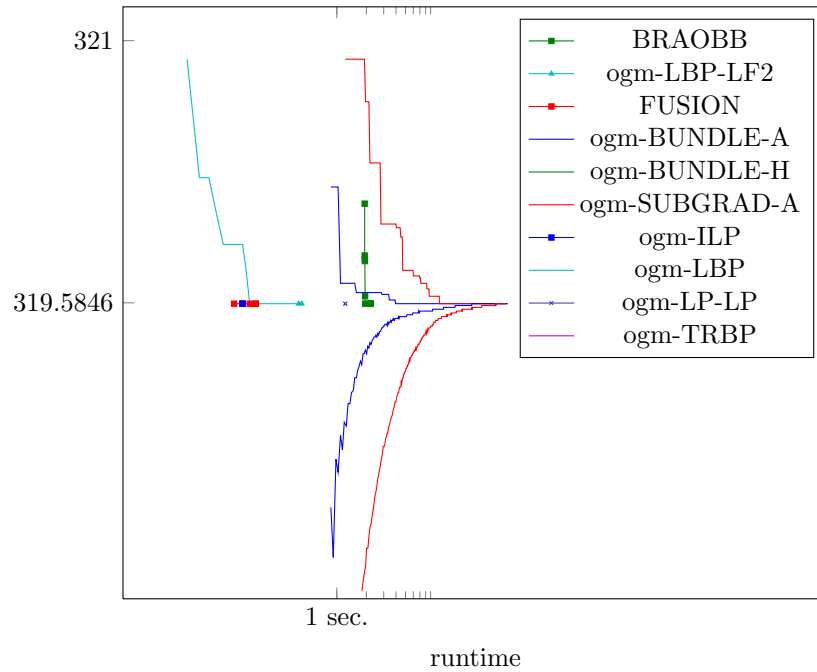


Figure 1099: Runtime results for the instance *gm35* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

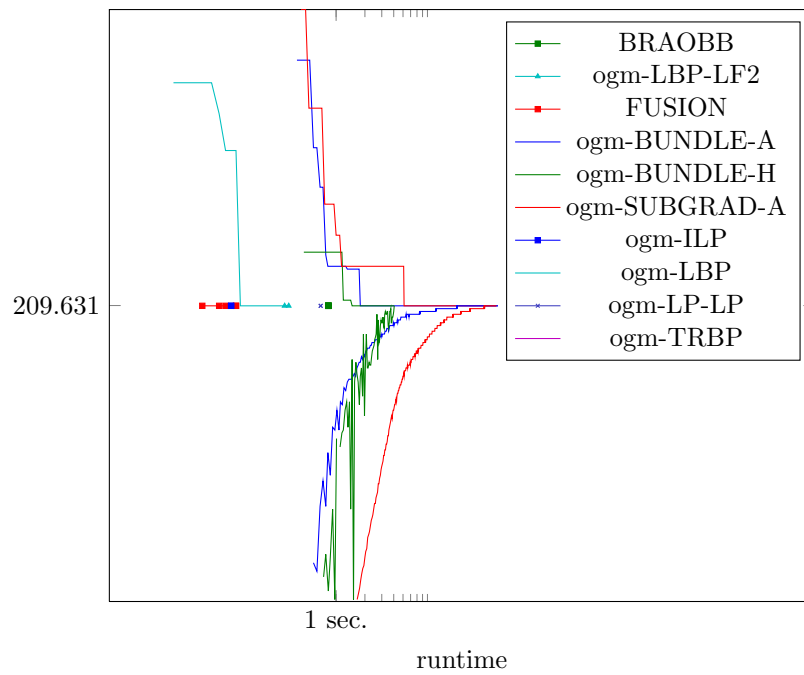


Figure 1100: Runtime results for the instance *gm36* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

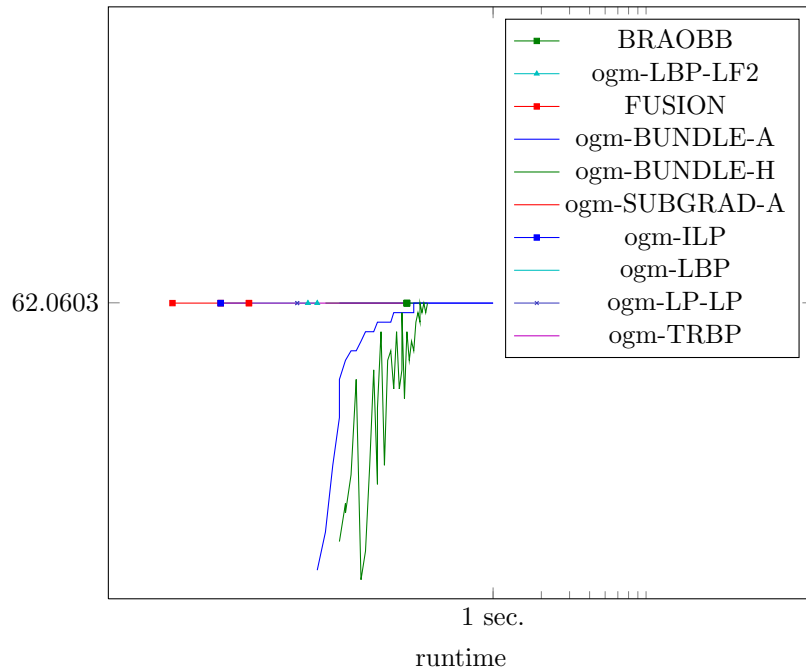


Figure 1101: Runtime results for the instance *gm37* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

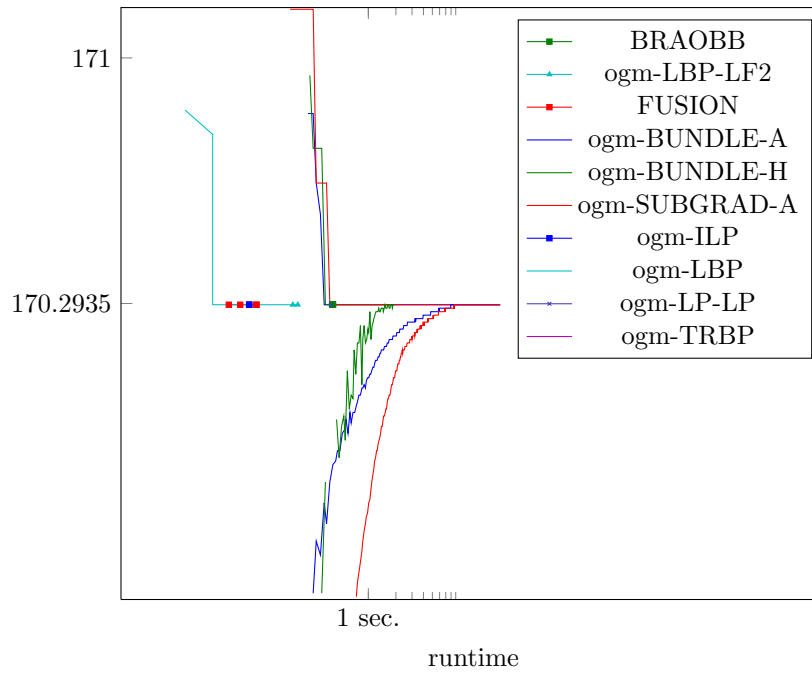


Figure 1102: Runtime results for the instance *gm38* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

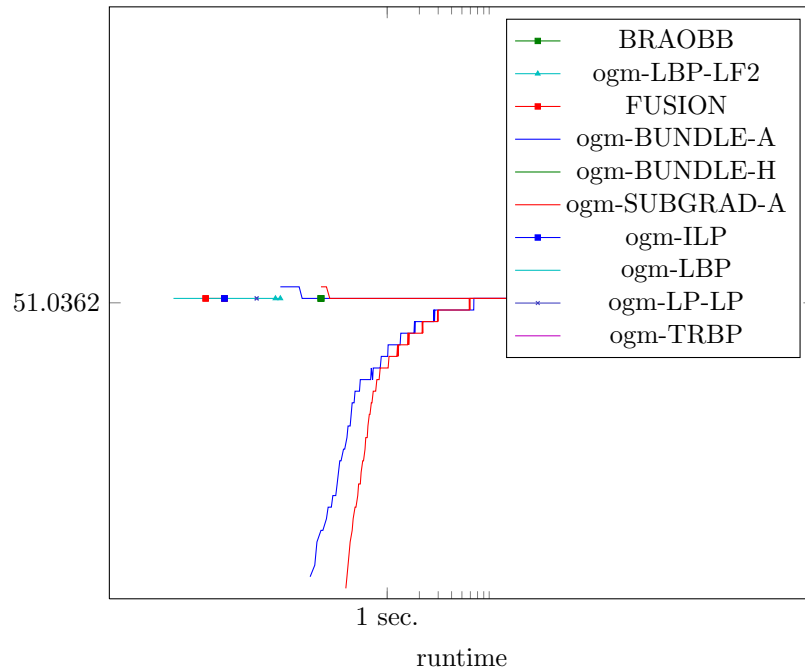


Figure 1103: Runtime results for the instance *gm39* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

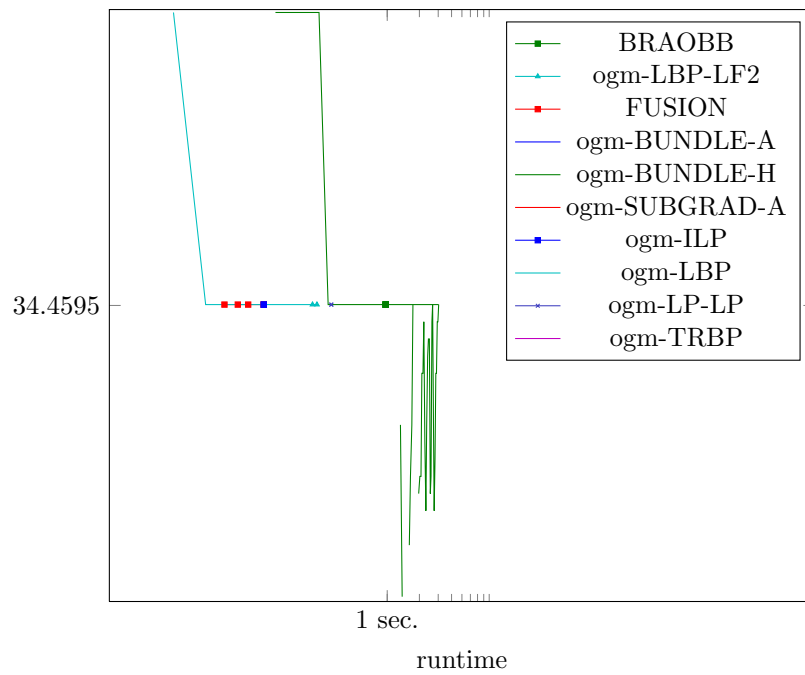


Figure 1104: Runtime results for the instance *gm3* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

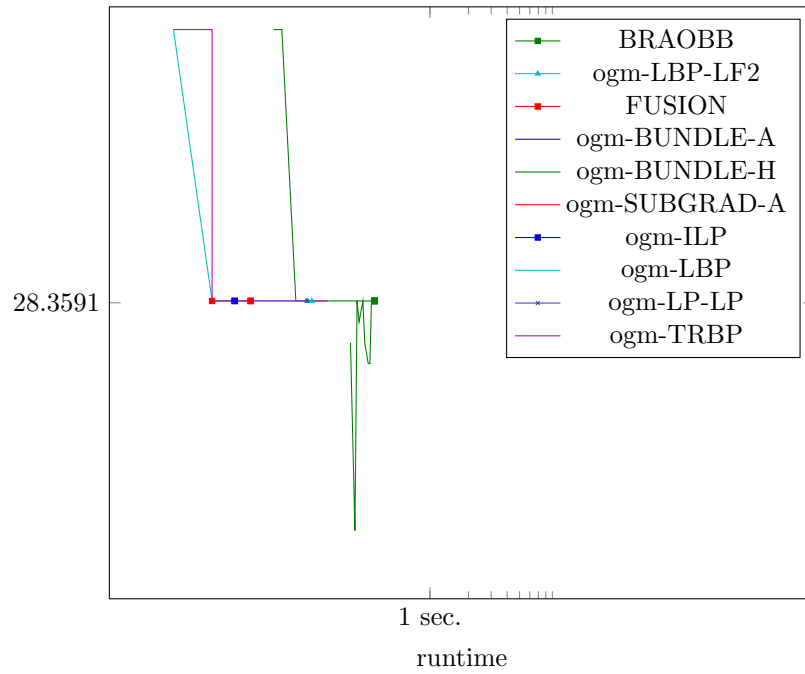


Figure 1105: Runtime results for the instance *gm40* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

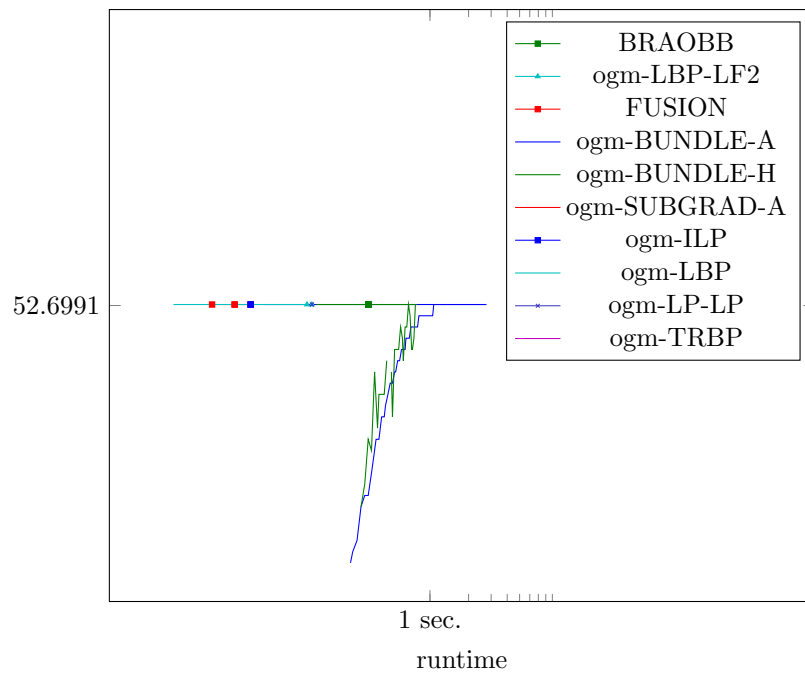


Figure 1106: Runtime results for the instance *gm41* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

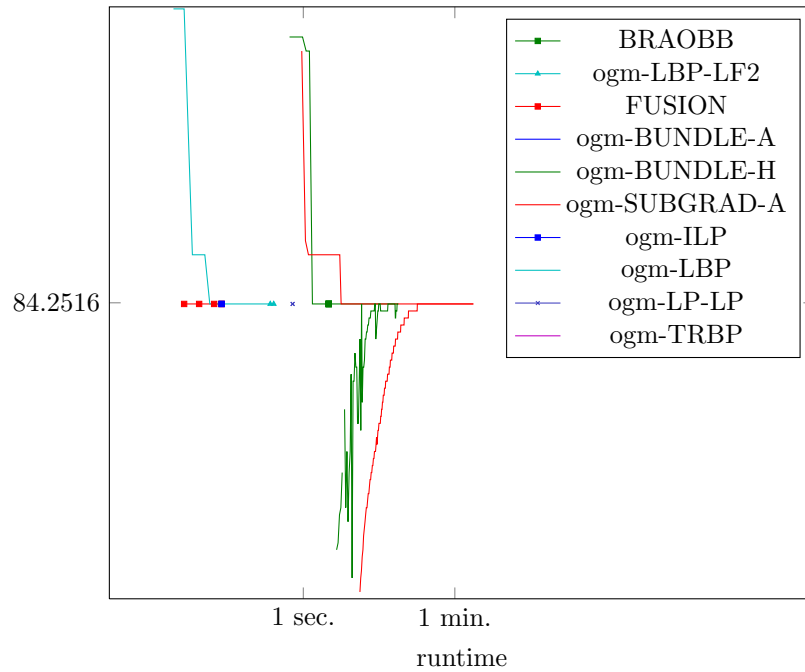


Figure 1107: Runtime results for the instance *gm42* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

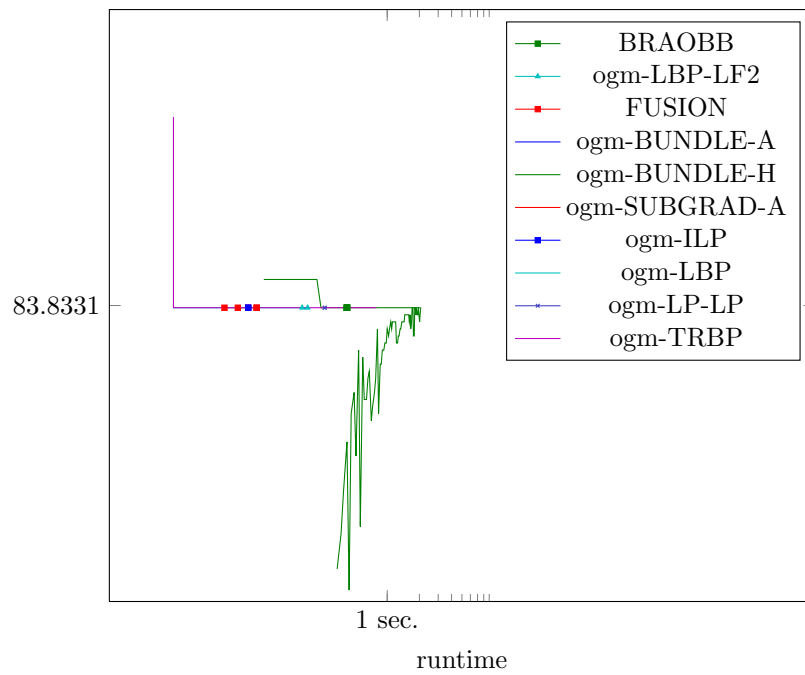


Figure 1108: Runtime results for the instance *gm43* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

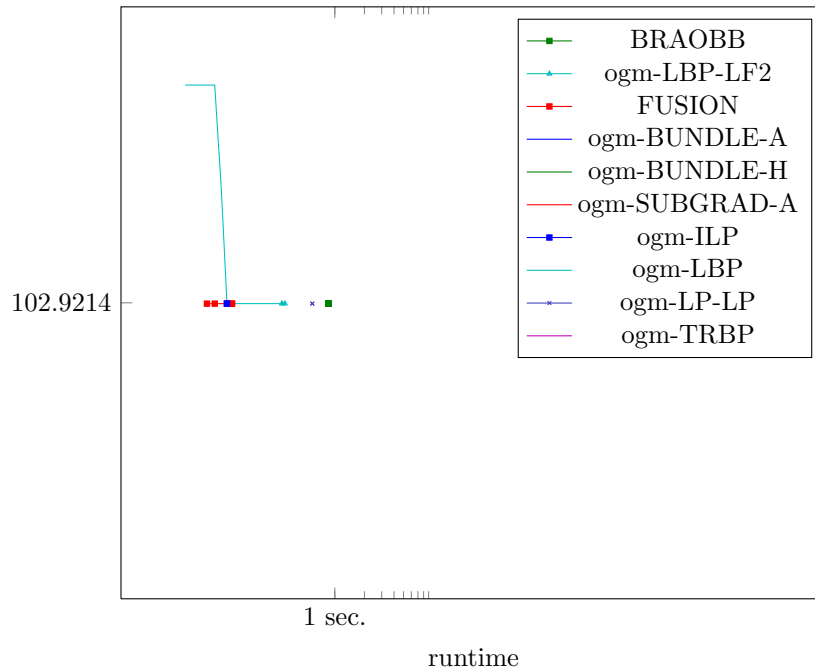


Figure 1109: Runtime results for the instance *gm44* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

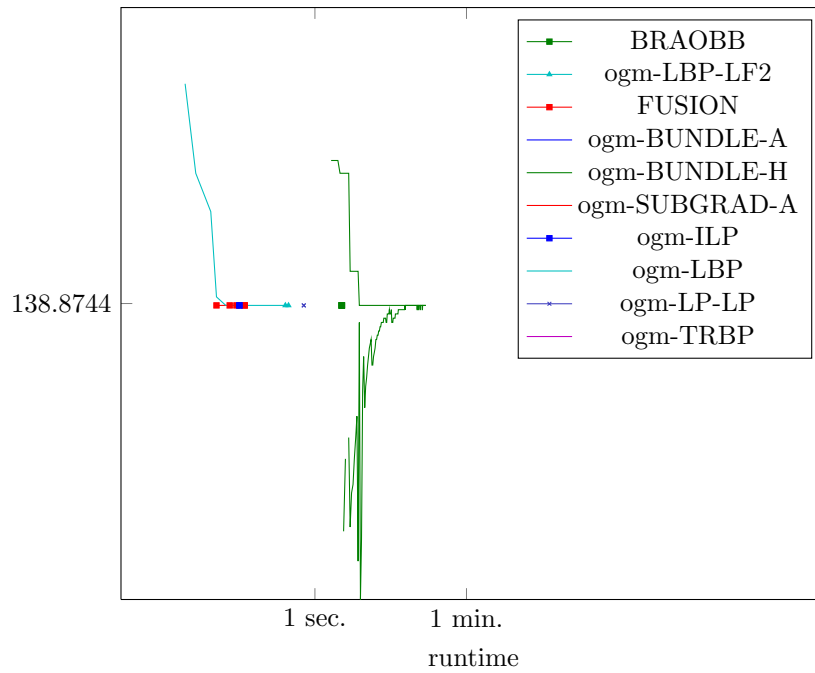


Figure 1110: Runtime results for the instance *gm45* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

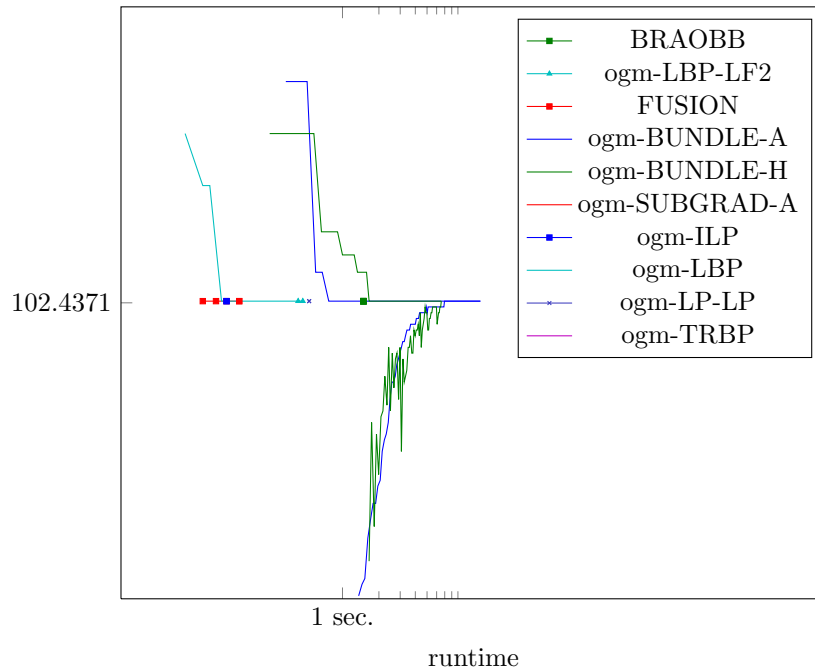


Figure 1111: Runtime results for the instance *gm46* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

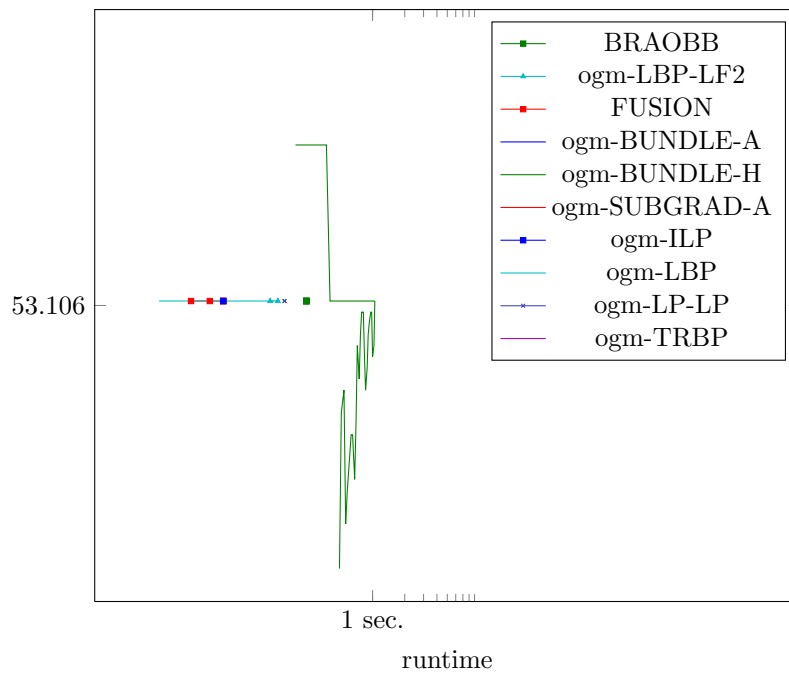


Figure 1112: Runtime results for the instance *gm47* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

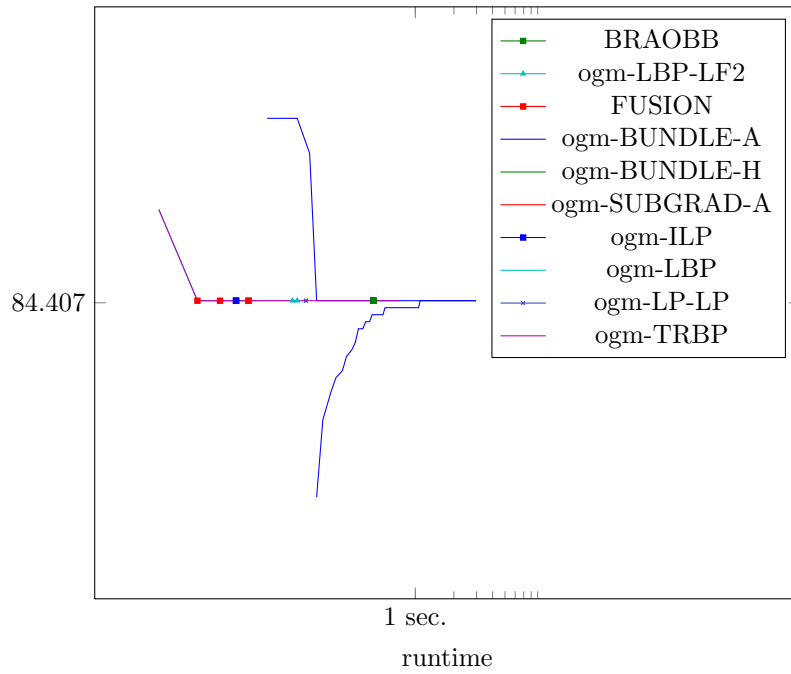


Figure 1113: Runtime results for the instance *gm48* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

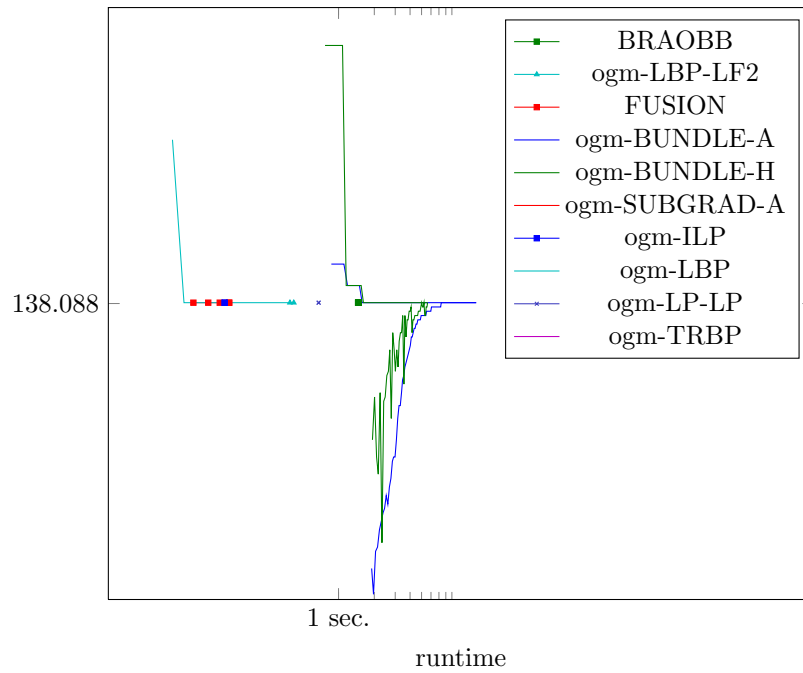


Figure 1114: Runtime results for the instance *gm49* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

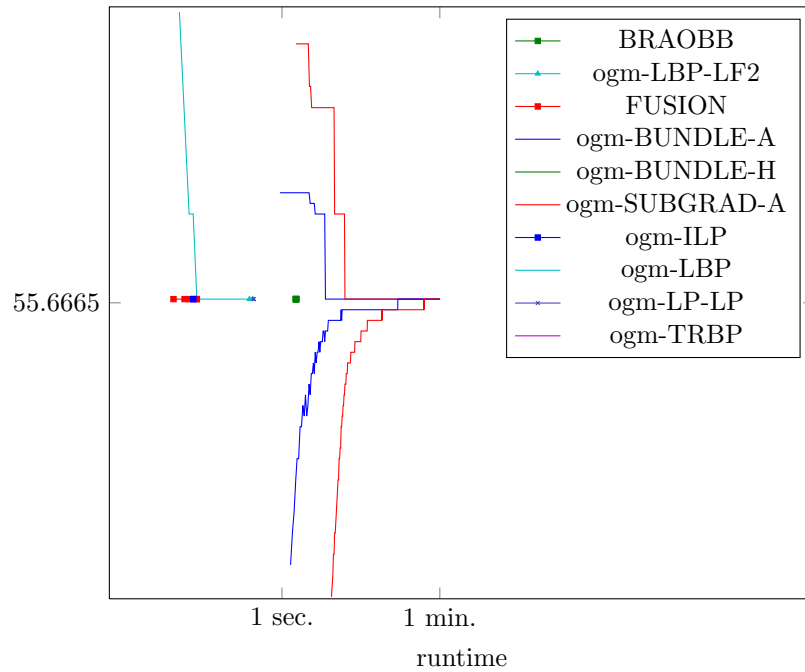


Figure 1115: Runtime results for the instance *gm4* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

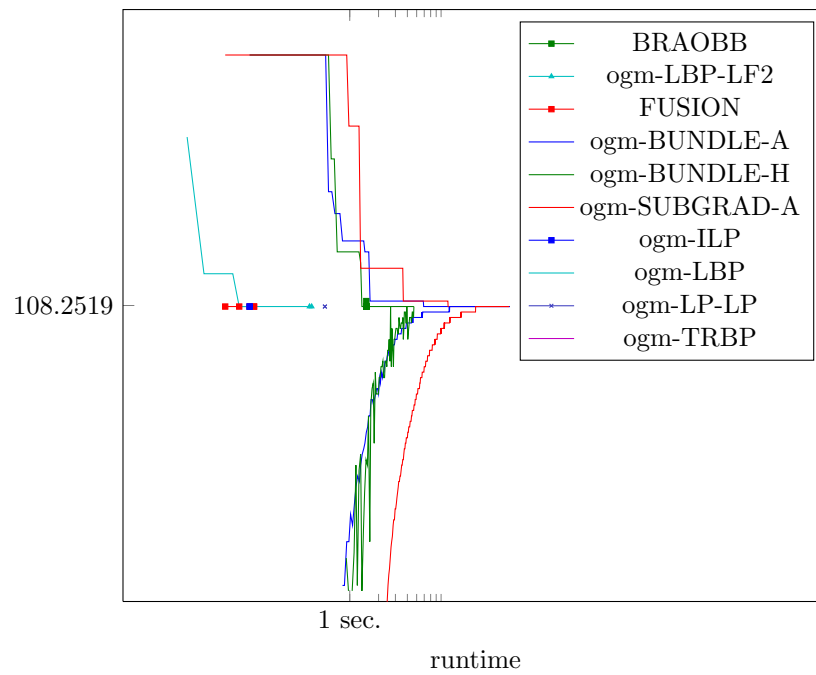


Figure 1116: Runtime results for the instance *gm50* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

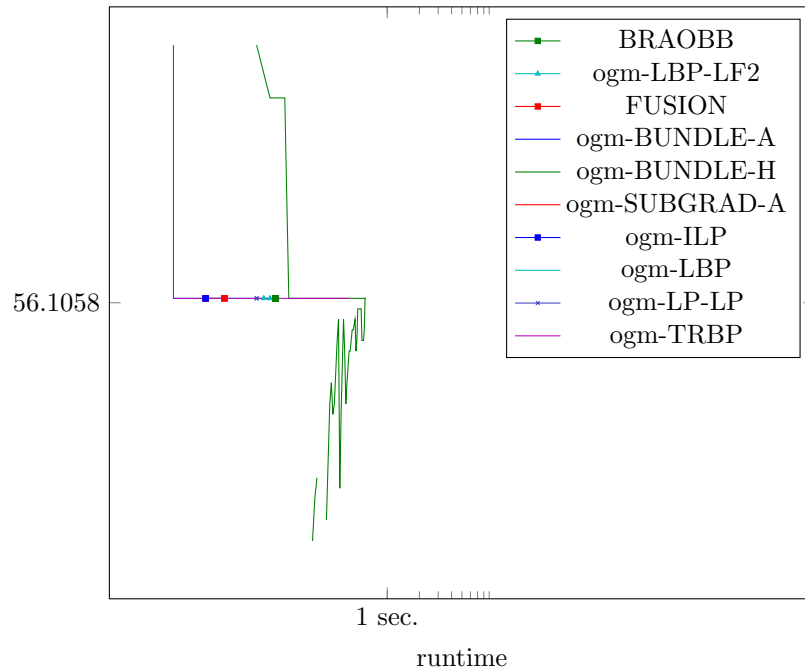


Figure 1117: Runtime results for the instance *gm51* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

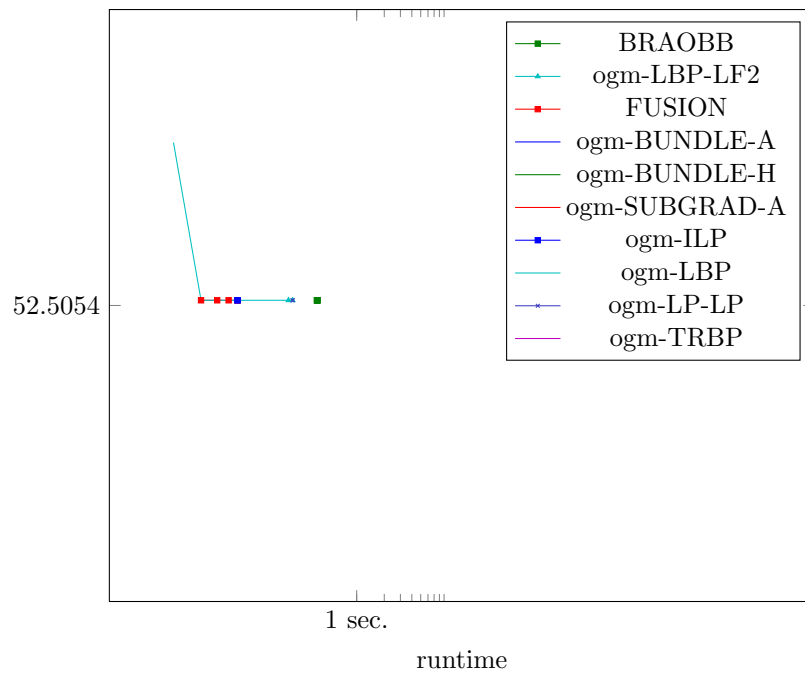


Figure 1118: Runtime results for the instance *gm52* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

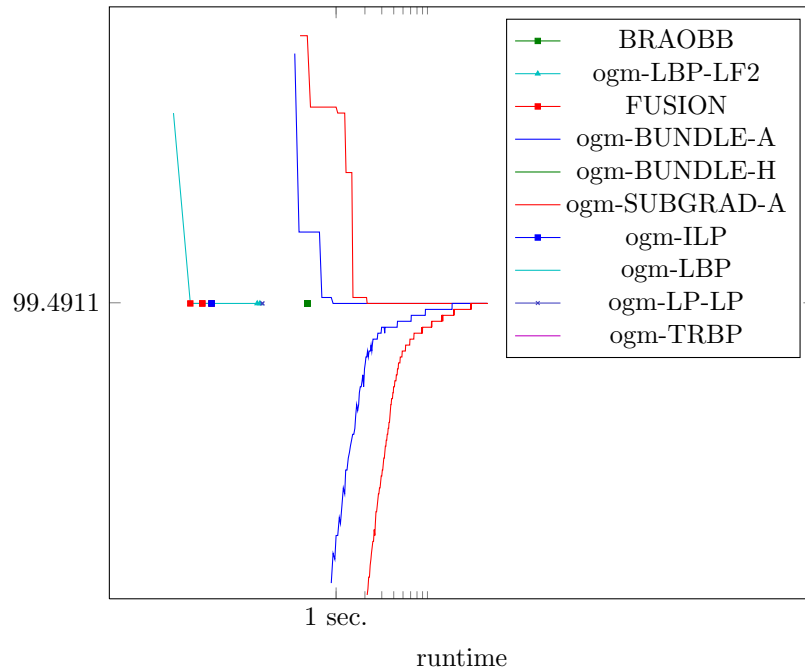


Figure 1119: Runtime results for the instance *gm53* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

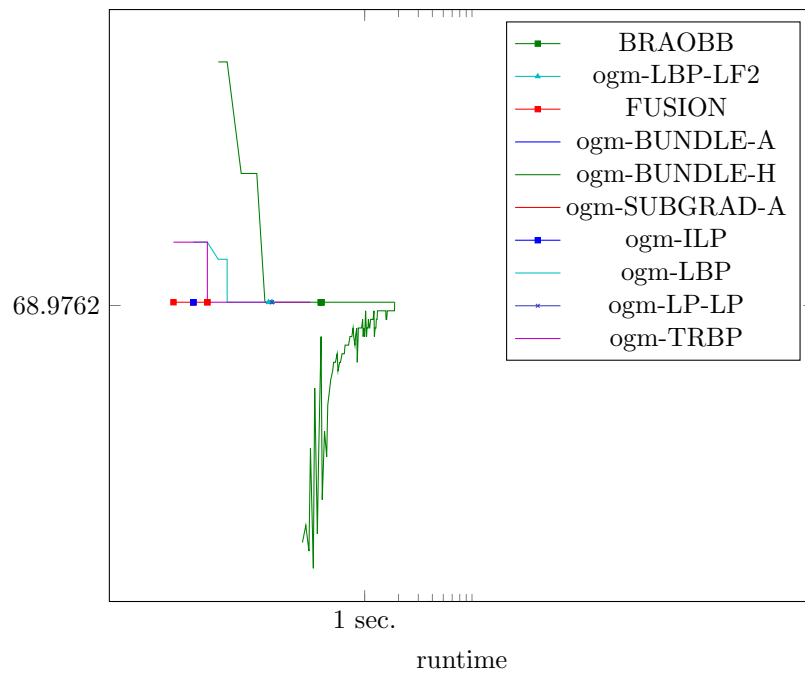


Figure 1120: Runtime results for the instance *gm54* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

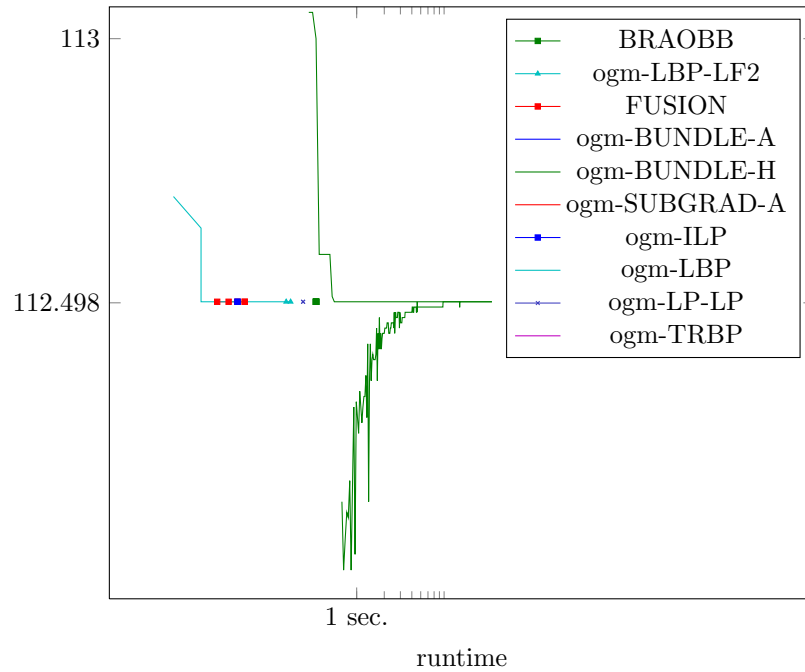


Figure 1121: Runtime results for the instance *gm55* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

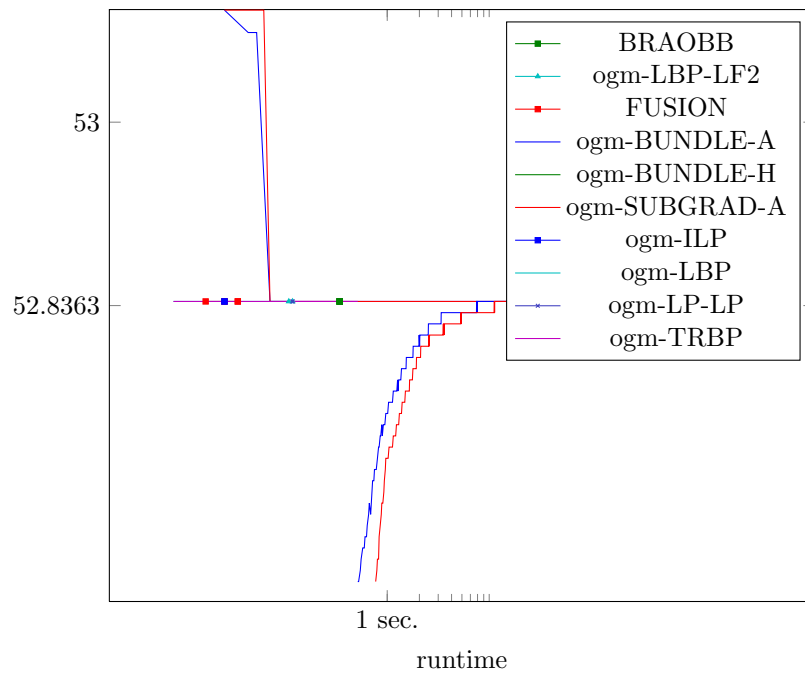


Figure 1122: Runtime results for the instance *gm56* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

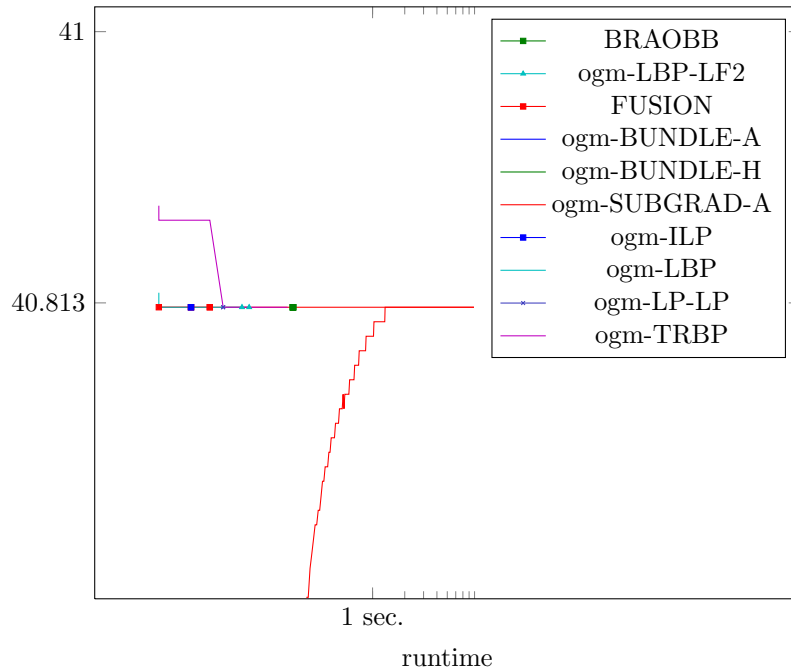


Figure 1123: Runtime results for the instance *gm57* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

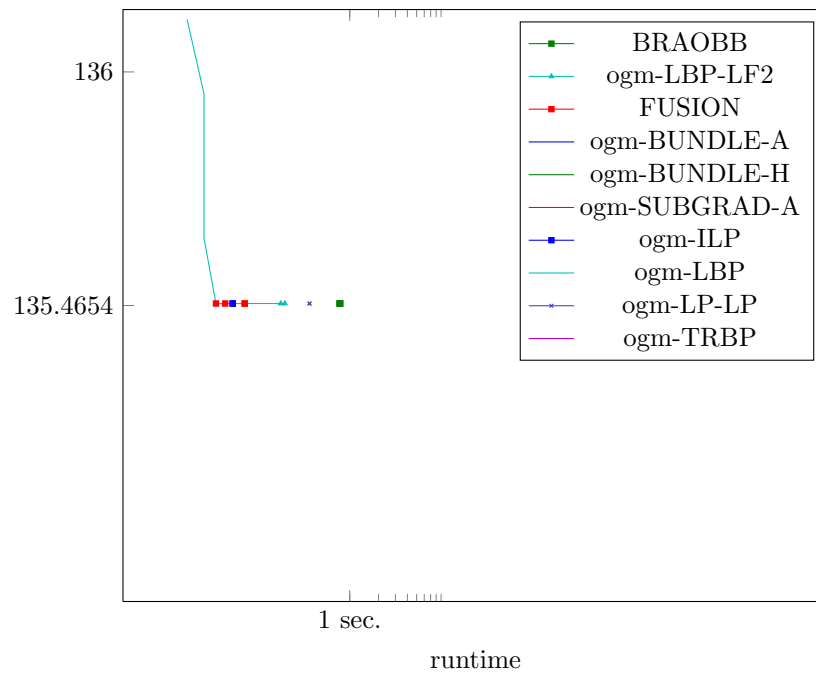


Figure 1124: Runtime results for the instance *gm58* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

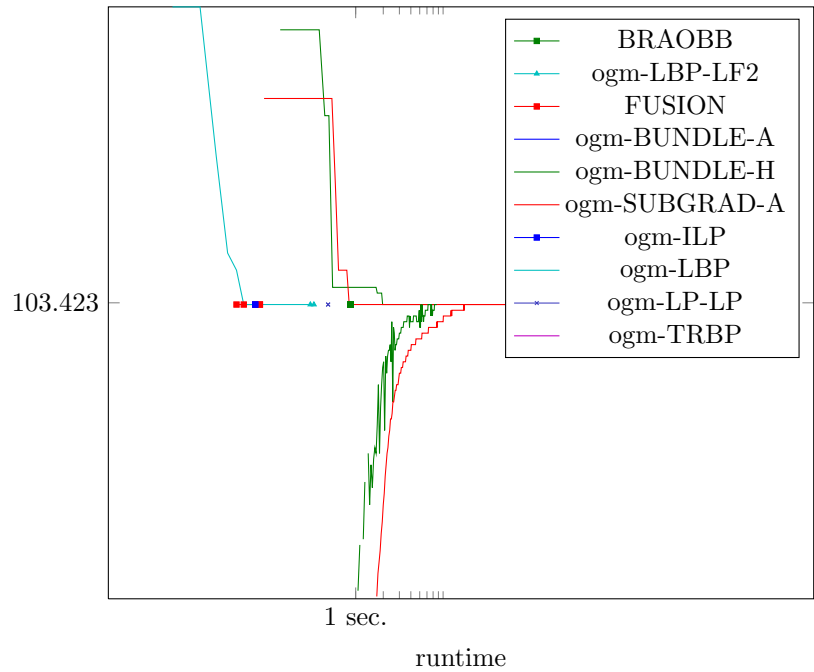


Figure 1125: Runtime results for the instance *gm59* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

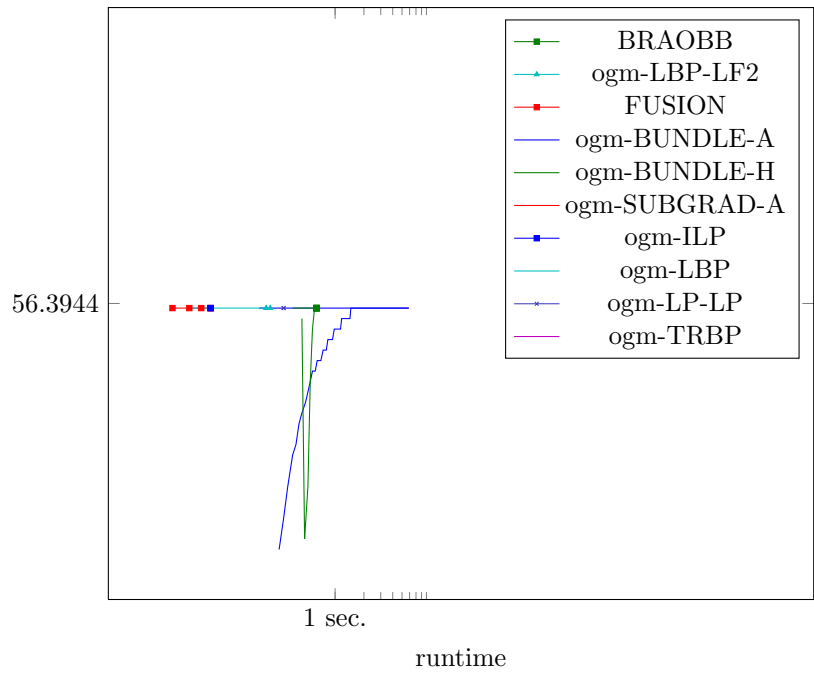


Figure 1126: Runtime results for the instance *gm5* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

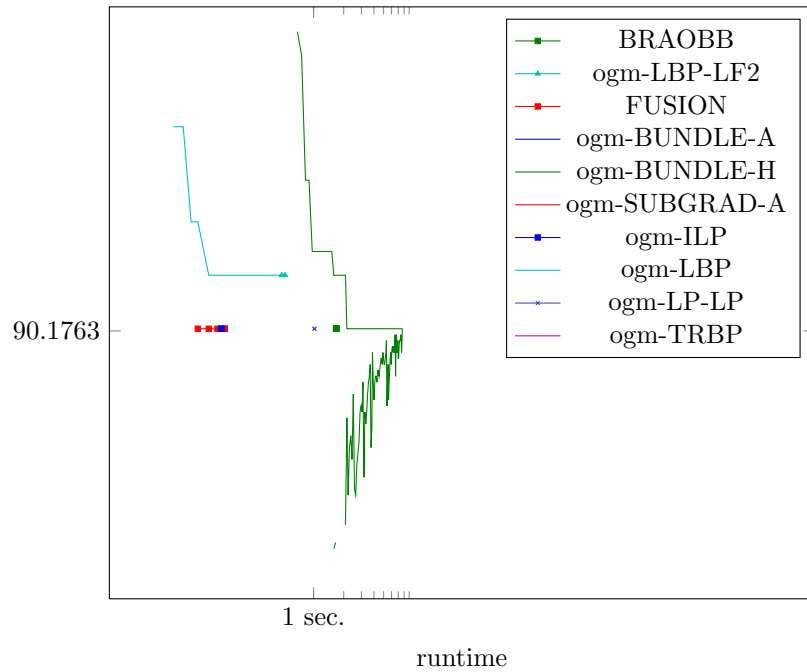


Figure 1127: Runtime results for the instance *gm60* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

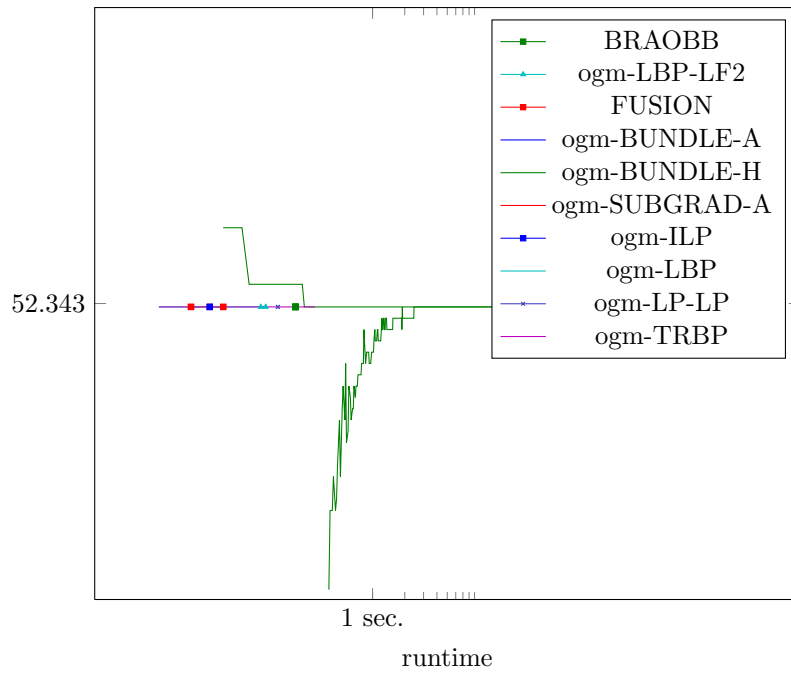


Figure 1128: Runtime results for the instance *gm61* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

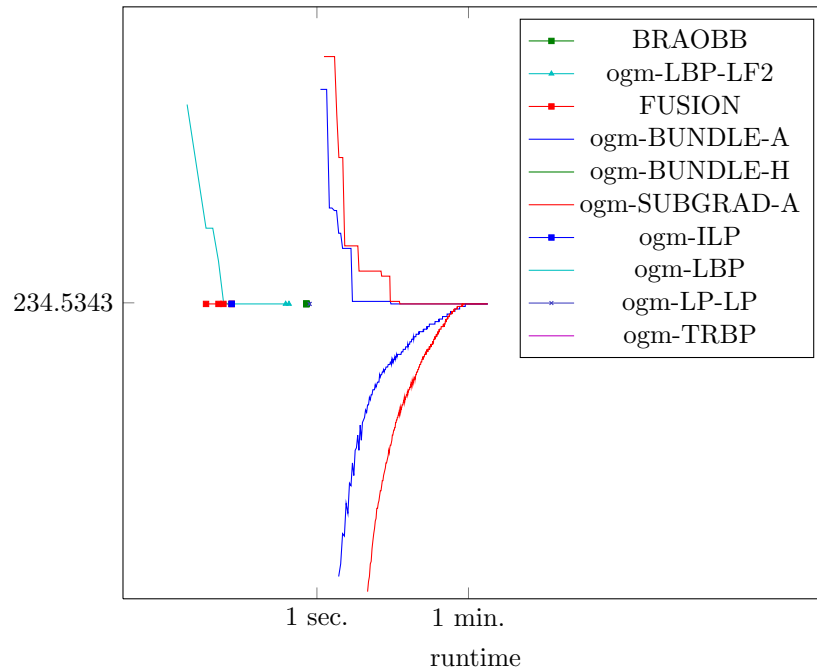


Figure 1129: Runtime results for the instance *gm62* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

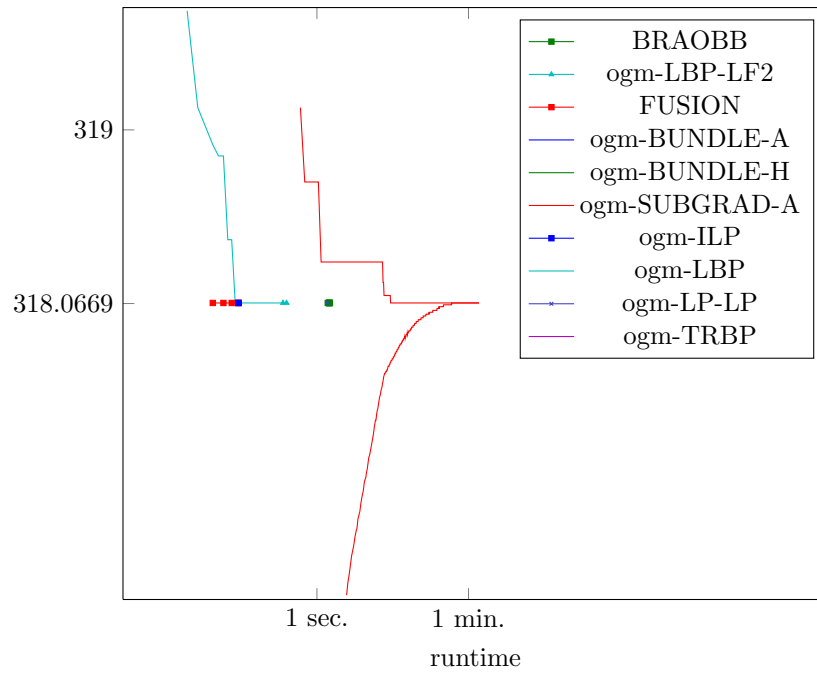


Figure 1130: Runtime results for the instance *gm63* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

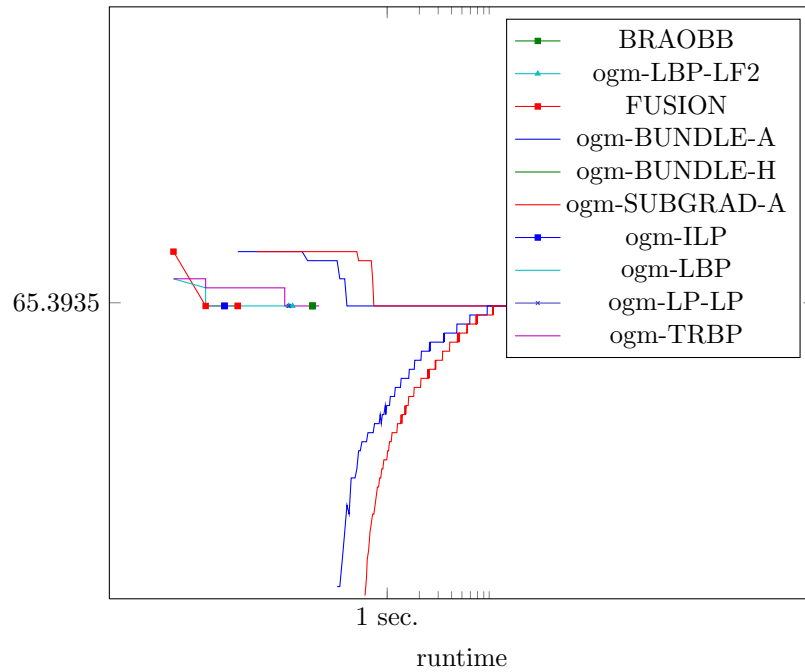


Figure 1131: Runtime results for the instance *gm64* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

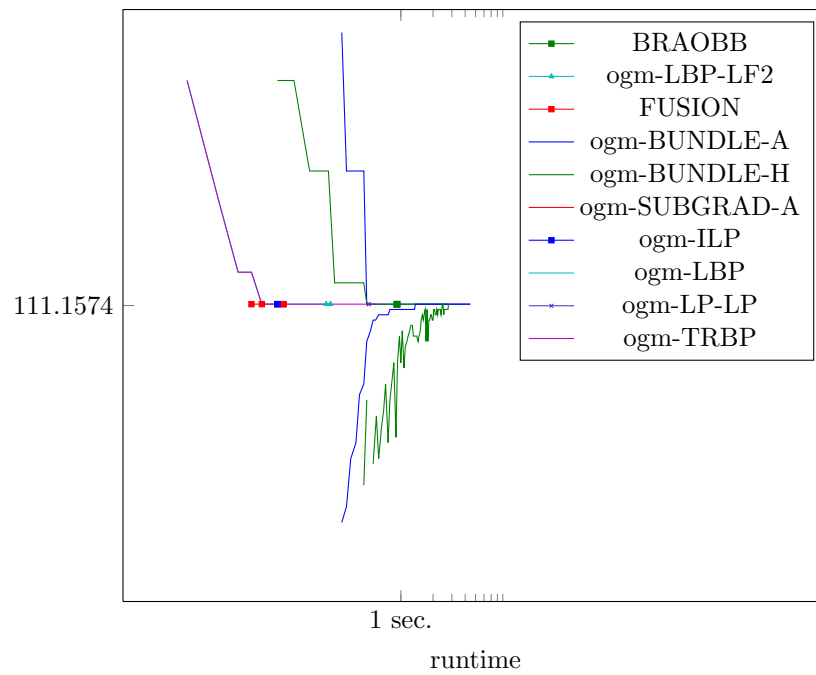


Figure 1132: Runtime results for the instance *gm65* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

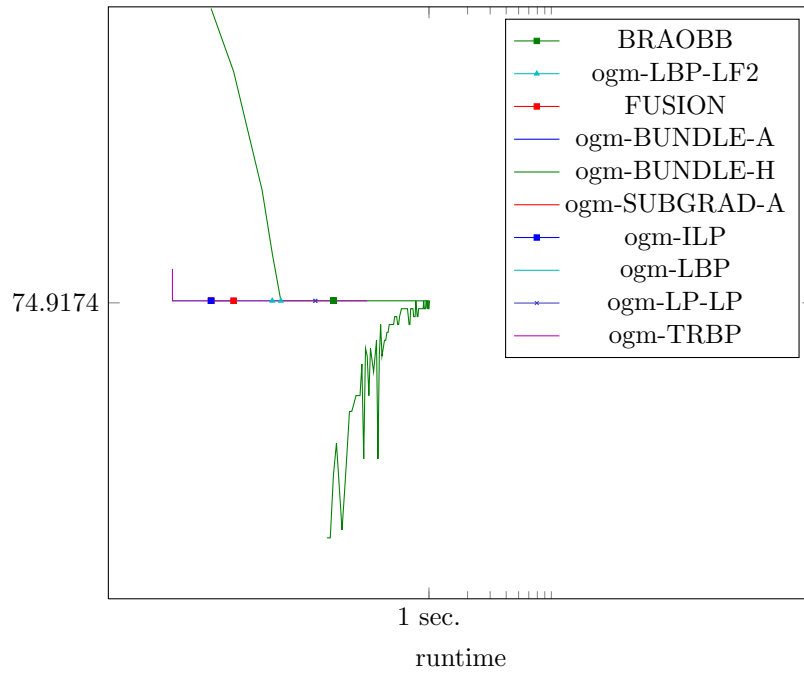


Figure 1133: Runtime results for the instance *gm66* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

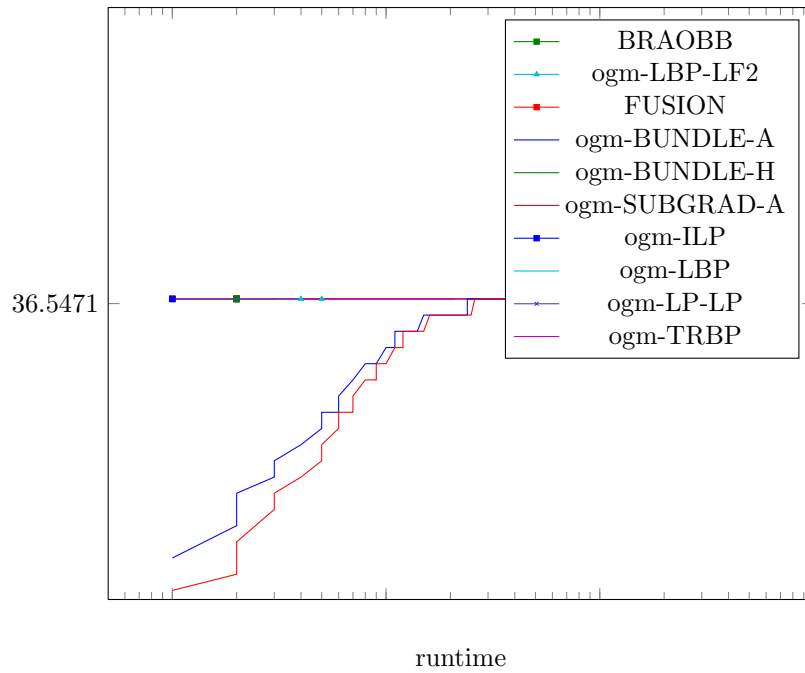


Figure 1134: Runtime results for the instance *gm67* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

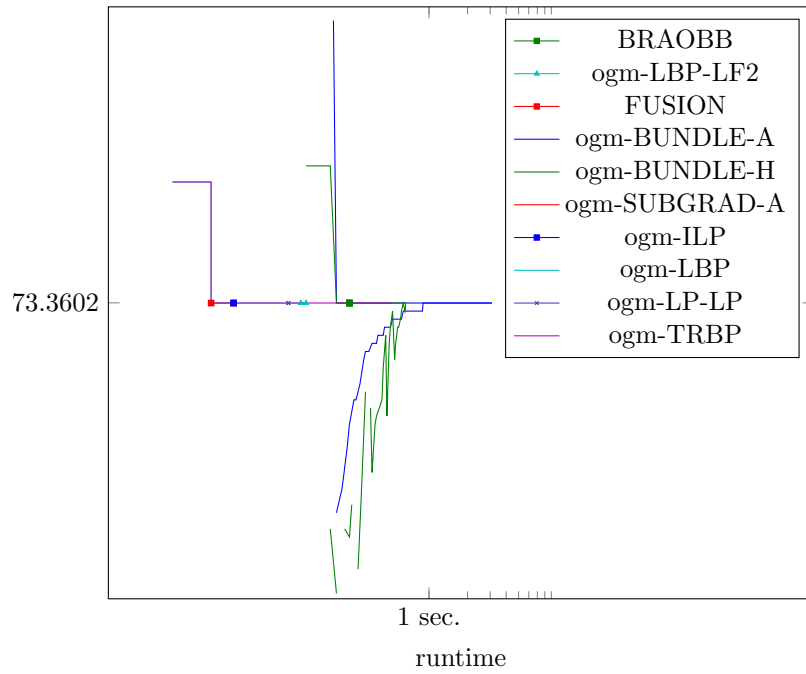


Figure 1135: Runtime results for the instance *gm68* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

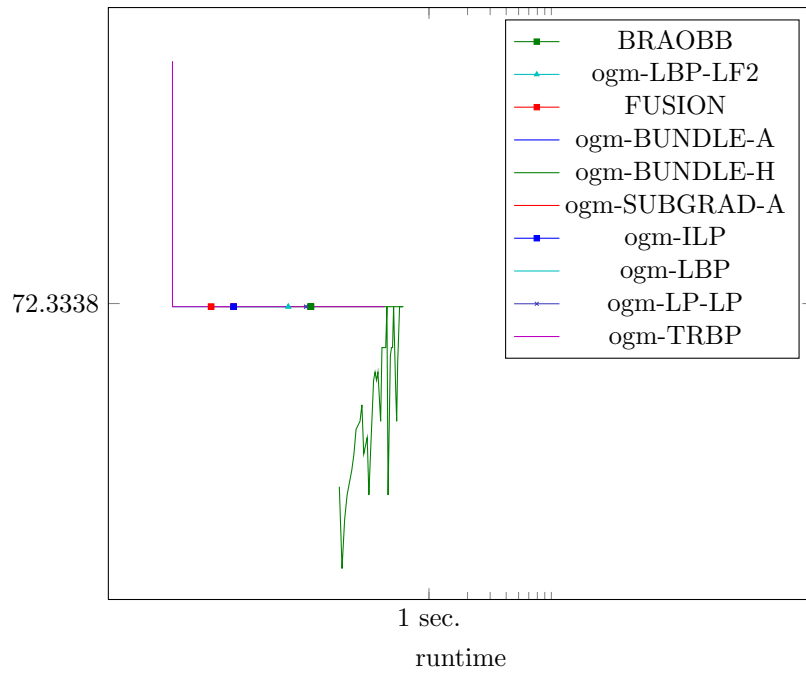


Figure 1136: Runtime results for the instance *gm69* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

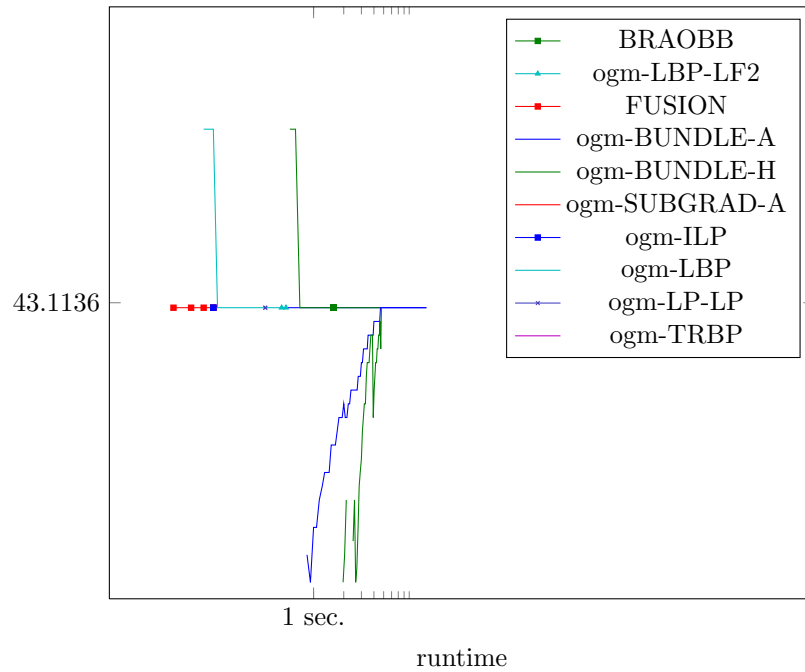


Figure 1137: Runtime results for the instance *gm6* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

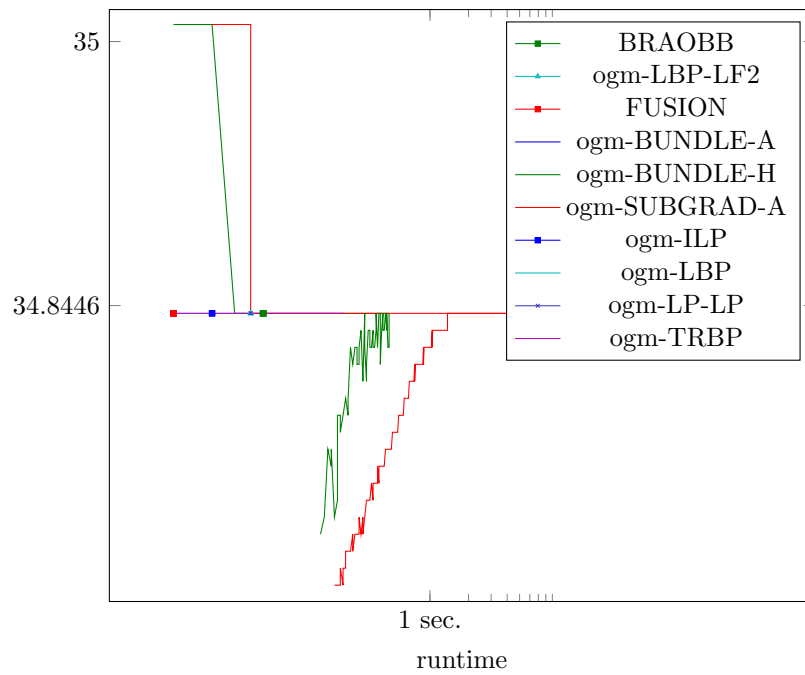


Figure 1138: Runtime results for the instance *gm70* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

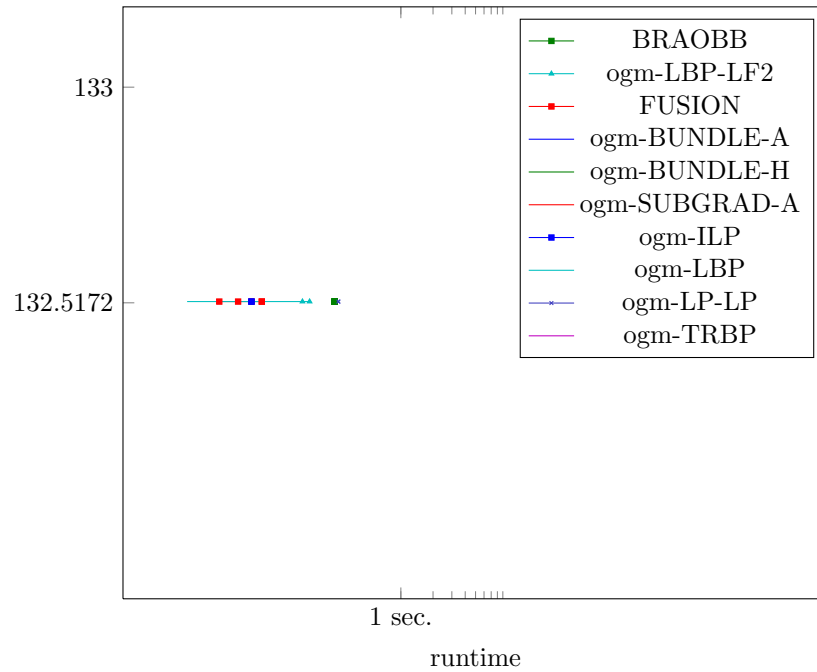


Figure 1139: Runtime results for the instance *gm71* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

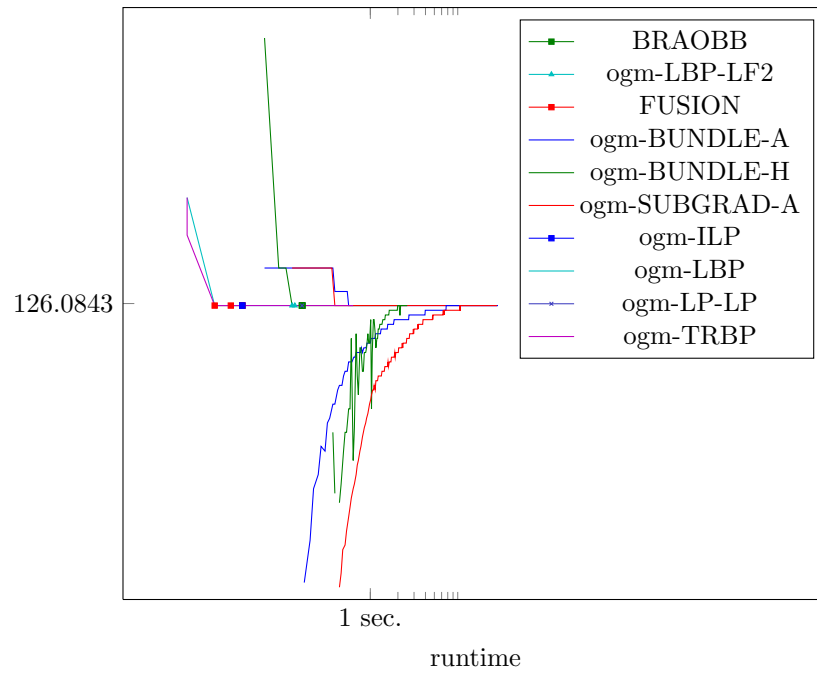


Figure 1140: Runtime results for the instance *gm72* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

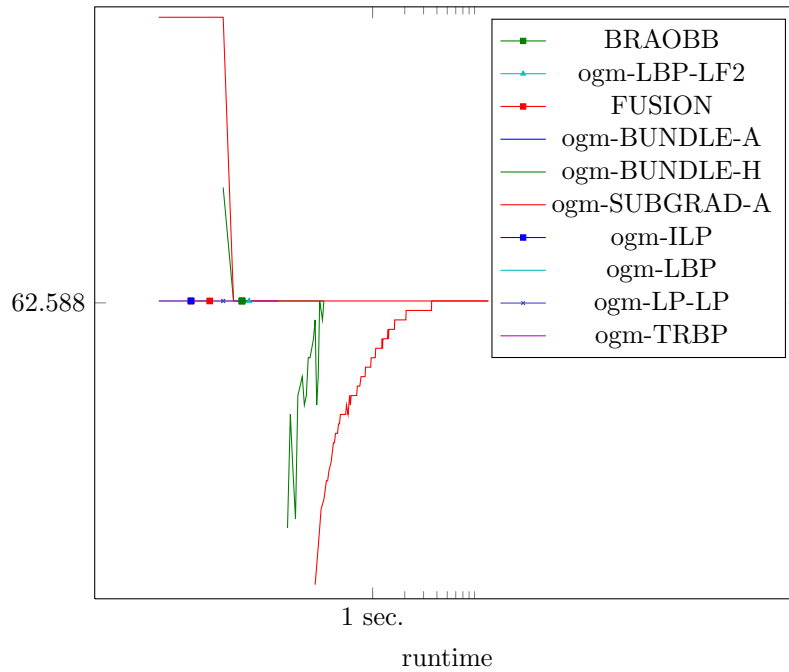


Figure 1141: Runtime results for the instance *gm73* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

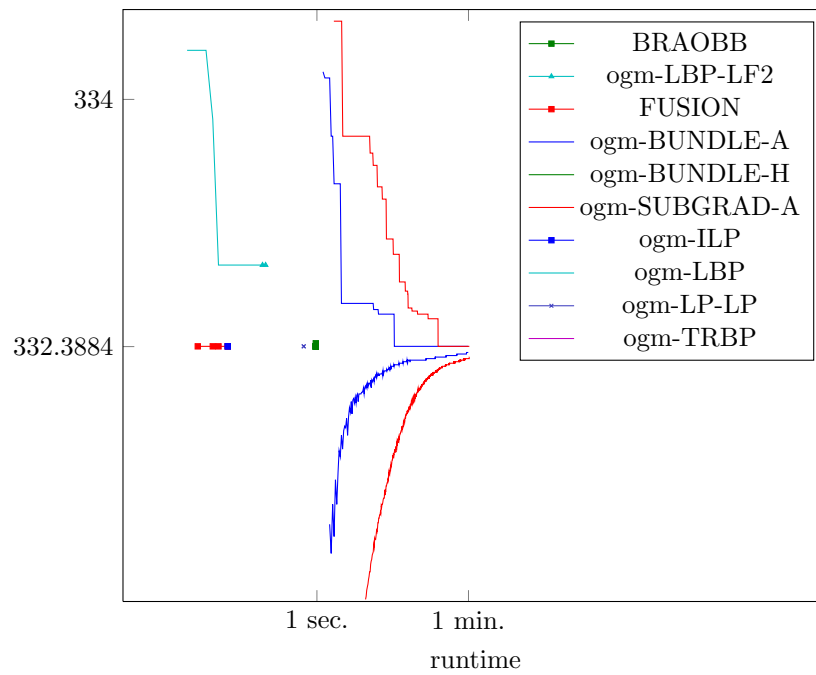


Figure 1142: Runtime results for the instance *gm74* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

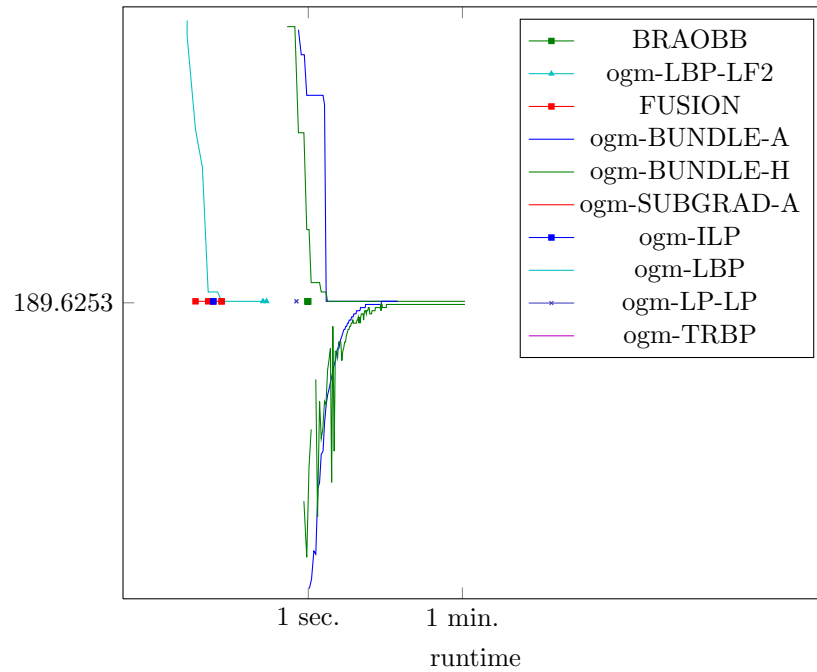


Figure 1143: Runtime results for the instance *gm75* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

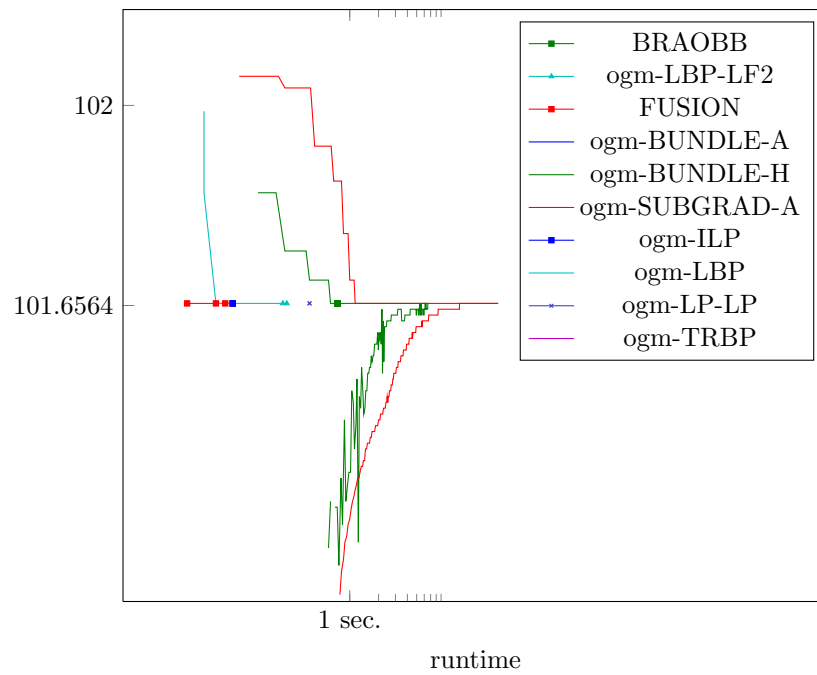


Figure 1144: Runtime results for the instance *gm76* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

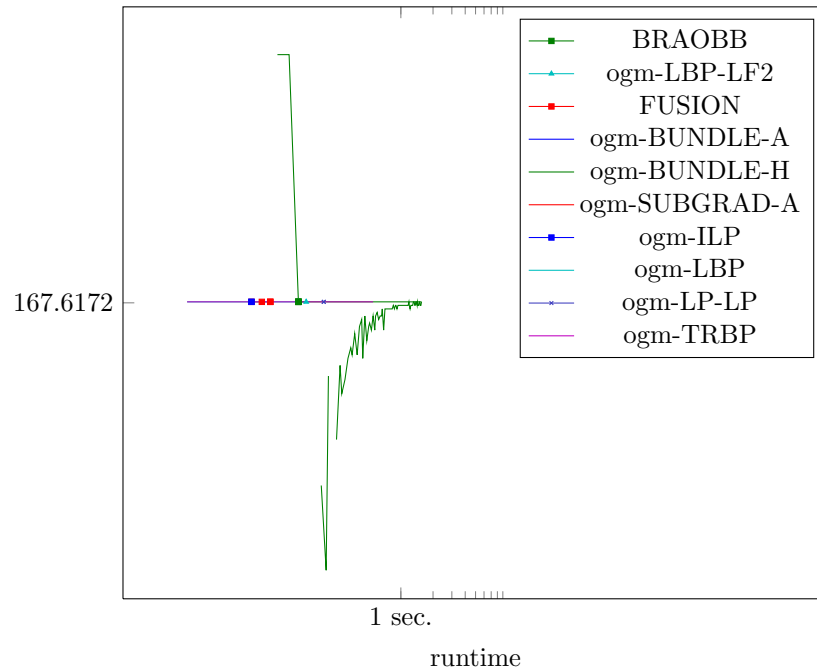


Figure 1145: Runtime results for the instance *gm77* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

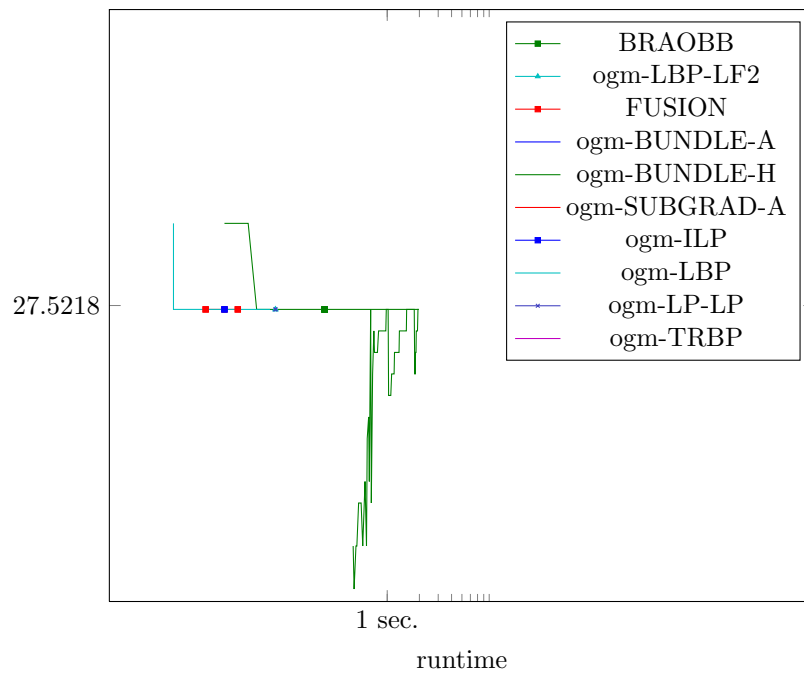


Figure 1146: Runtime results for the instance *gm78* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

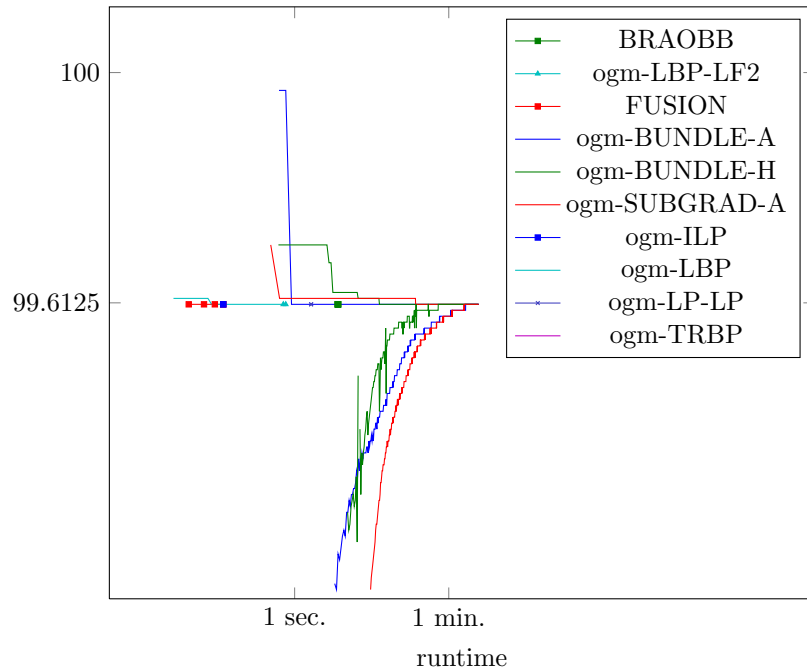


Figure 1147: Runtime results for the instance *gm79* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

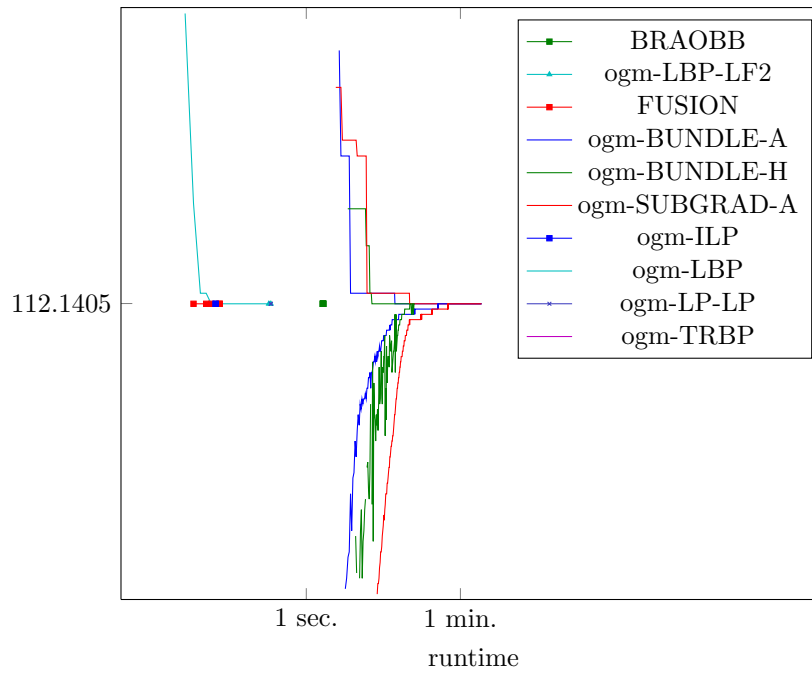


Figure 1148: Runtime results for the instance *gm7* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

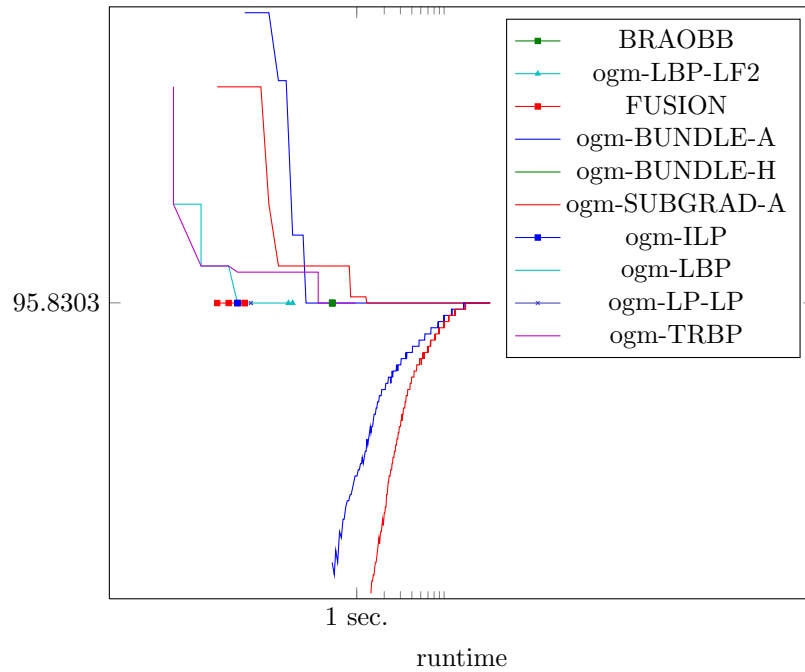


Figure 1149: Runtime results for the instance *gm80* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

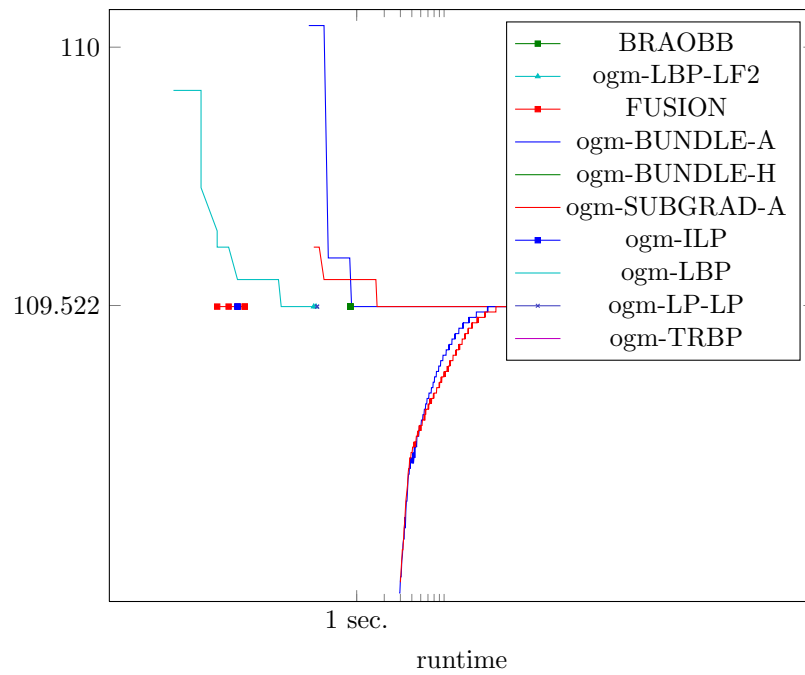


Figure 1150: Runtime results for the instance *gm81* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

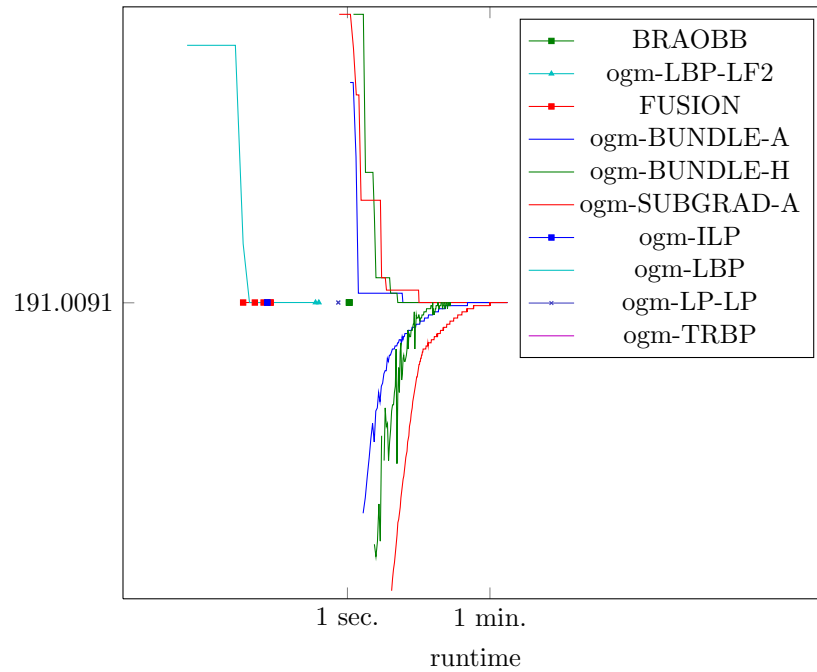


Figure 1151: Runtime results for the instance *gm82* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

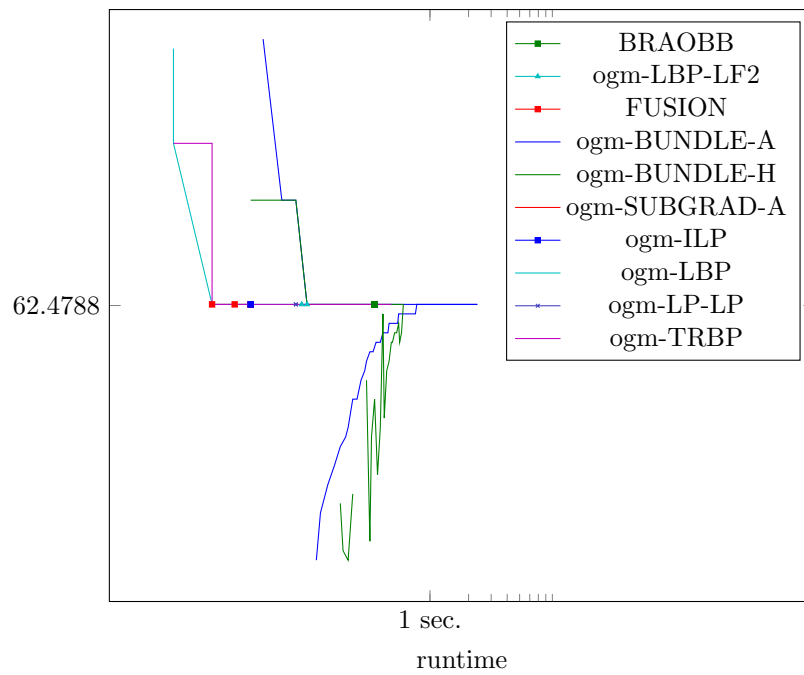


Figure 1152: Runtime results for the instance *gm83* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

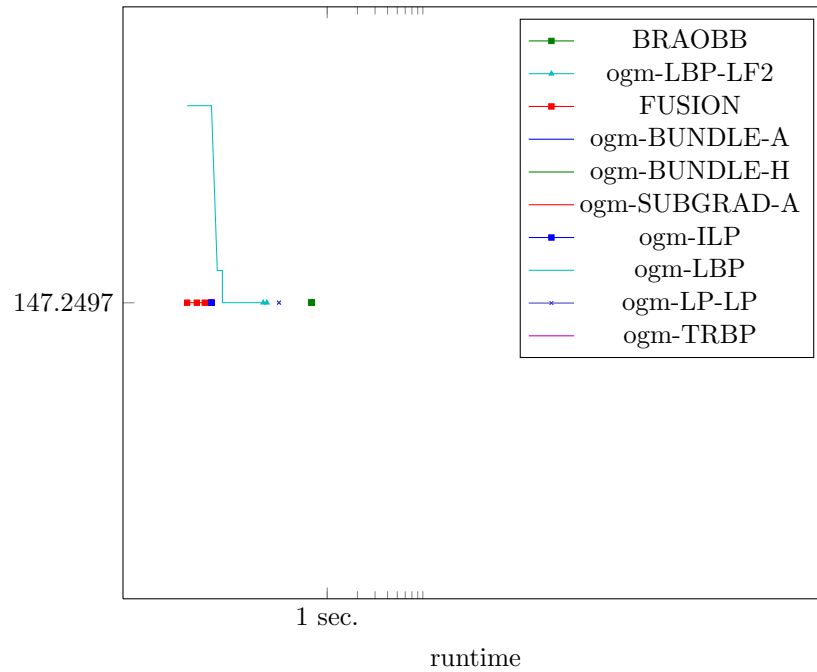


Figure 1153: Runtime results for the instance *gm84* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

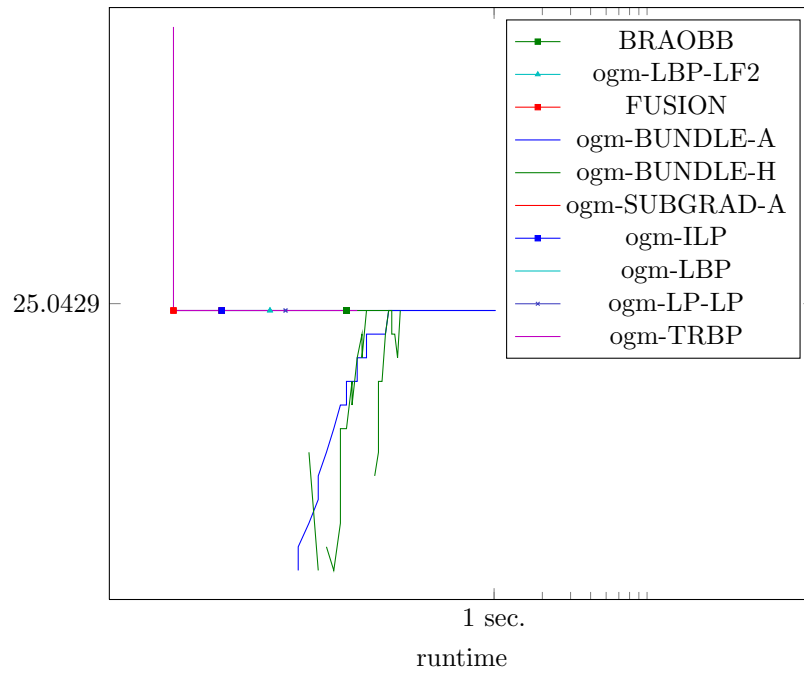


Figure 1154: Runtime results for the instance *gm85* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

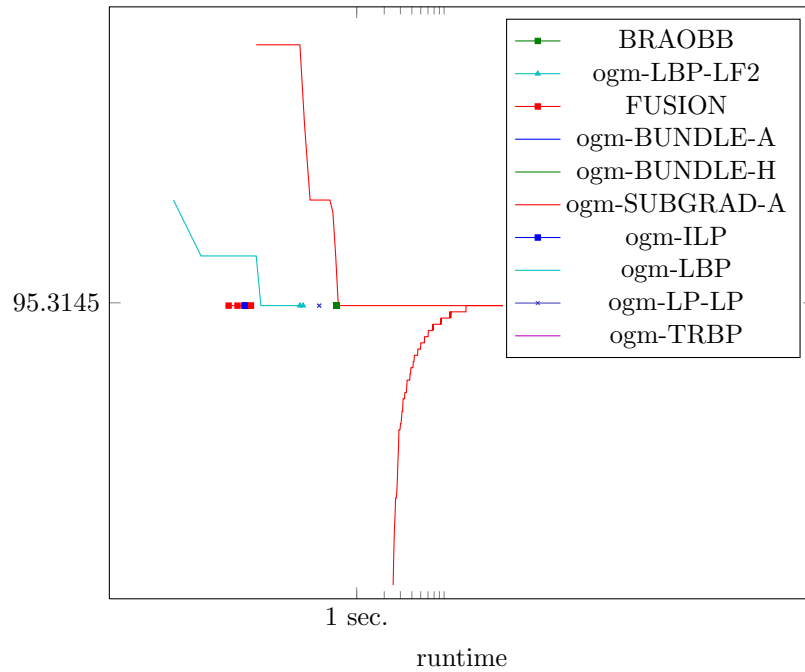


Figure 1155: Runtime results for the instance *gm86* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

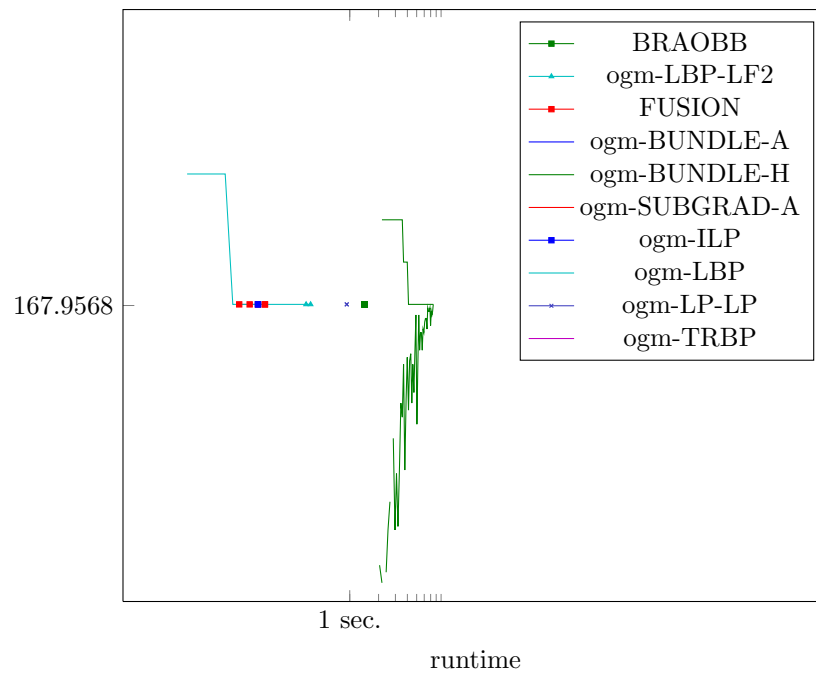


Figure 1156: Runtime results for the instance *gm87* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

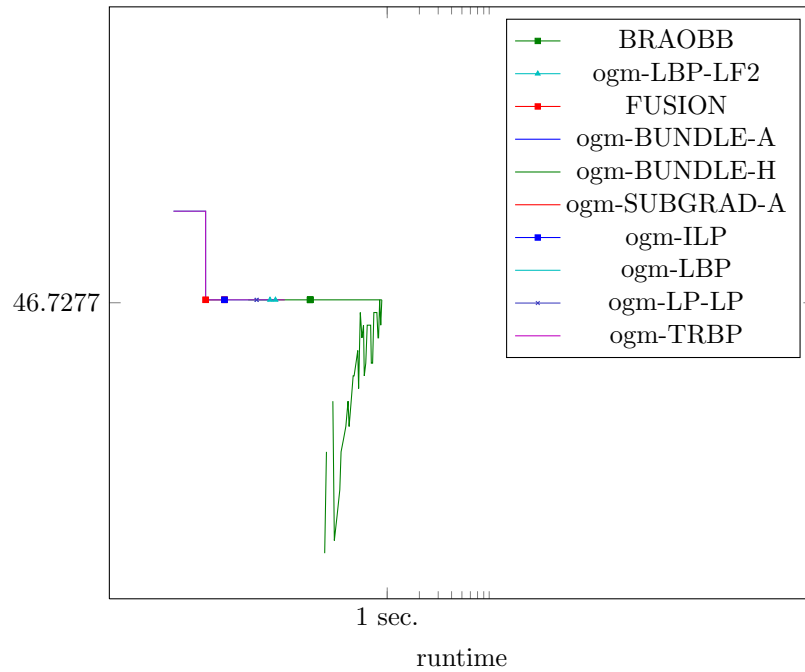


Figure 1157: Runtime results for the instance *gm88* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

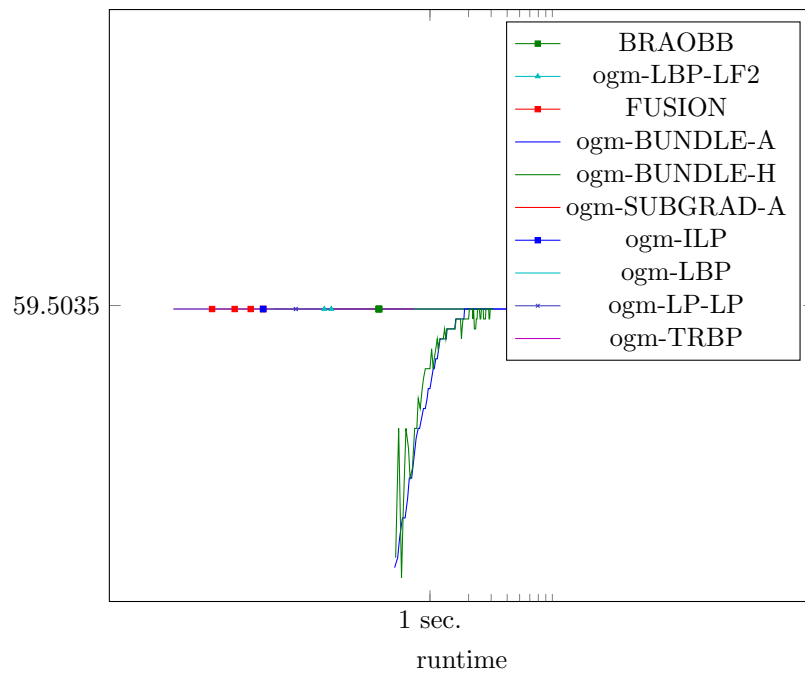


Figure 1158: Runtime results for the instance *gm89* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

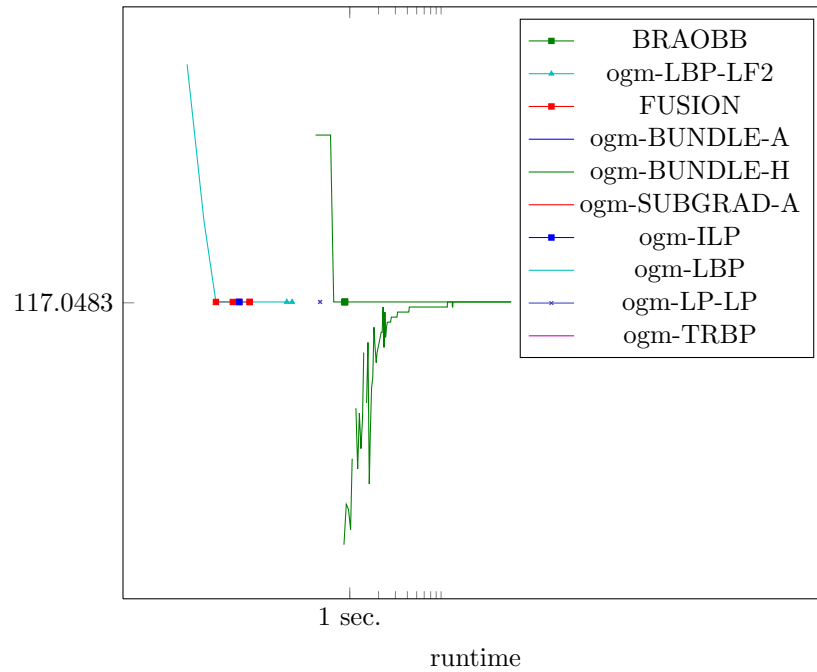


Figure 1159: Runtime results for the instance *gm8* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

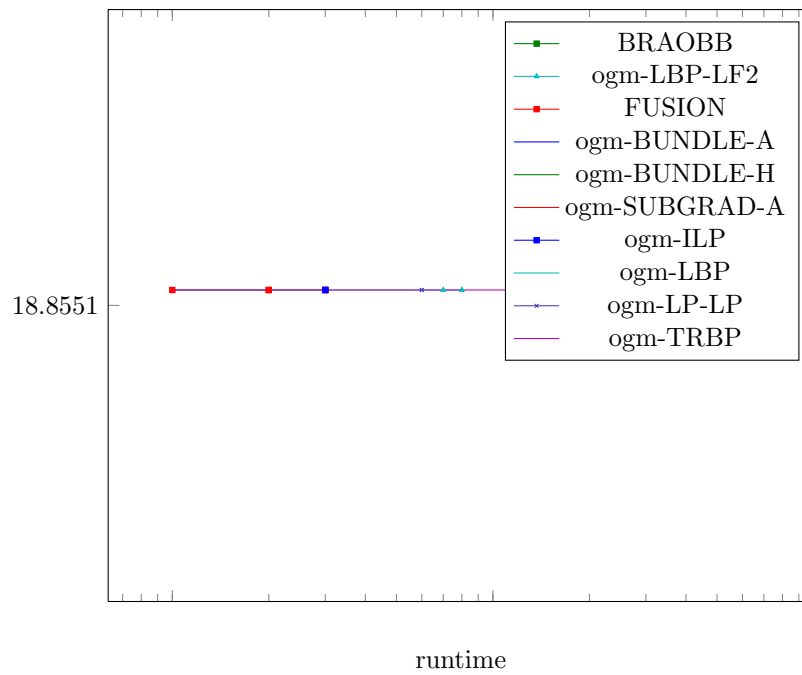


Figure 1160: Runtime results for the instance *gm90* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

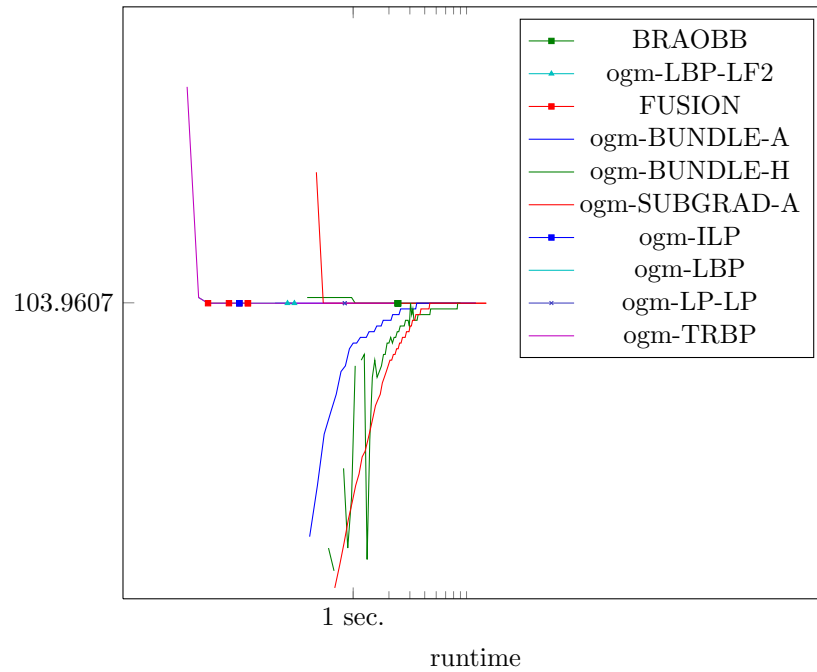


Figure 1161: Runtime results for the instance *gm91* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

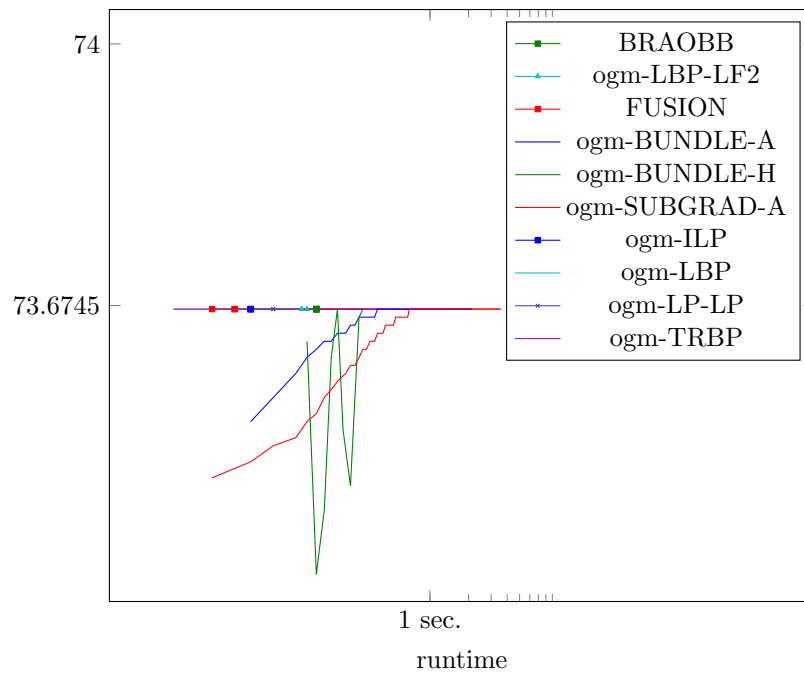


Figure 1162: Runtime results for the instance *gm92* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

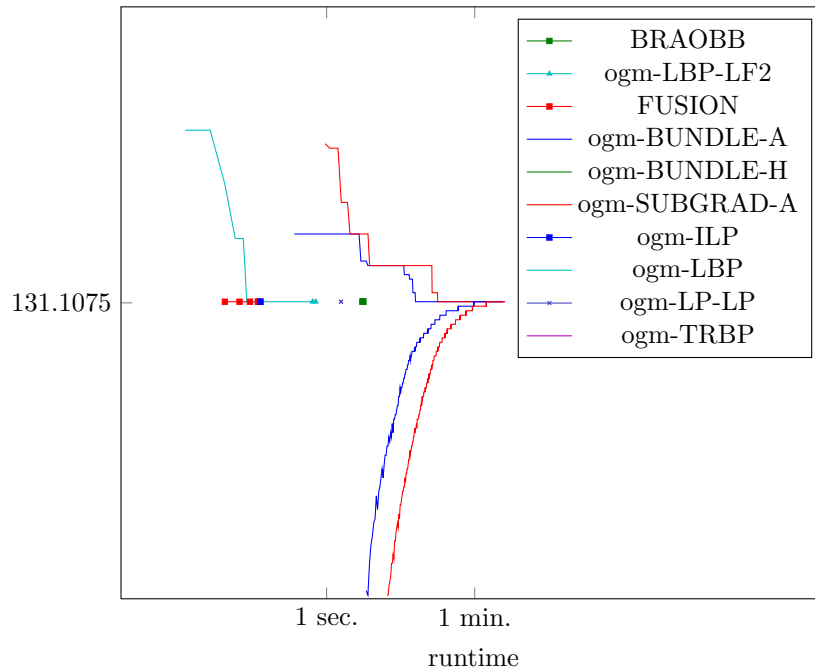


Figure 1163: Runtime results for the instance *gm93* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

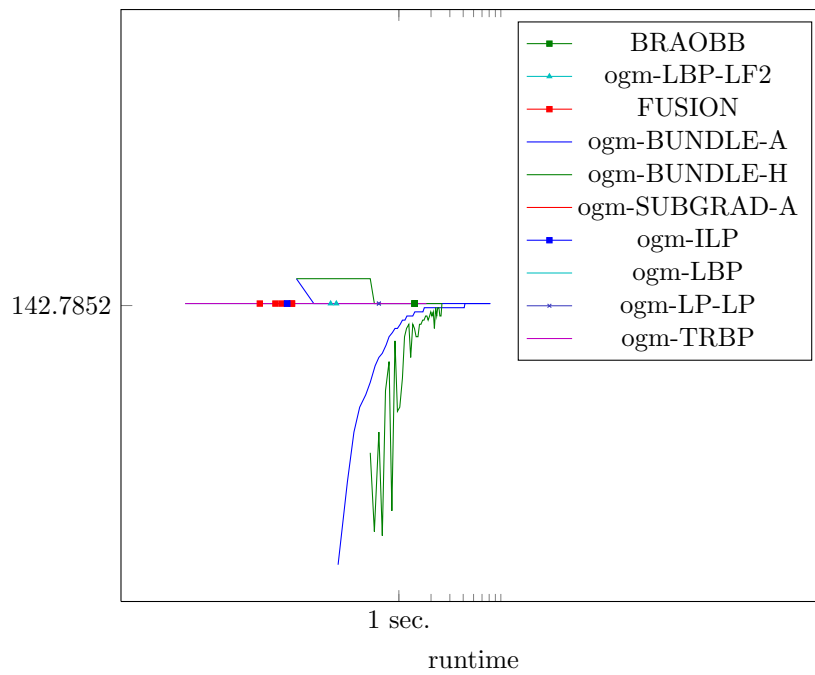


Figure 1164: Runtime results for the instance *gm94* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

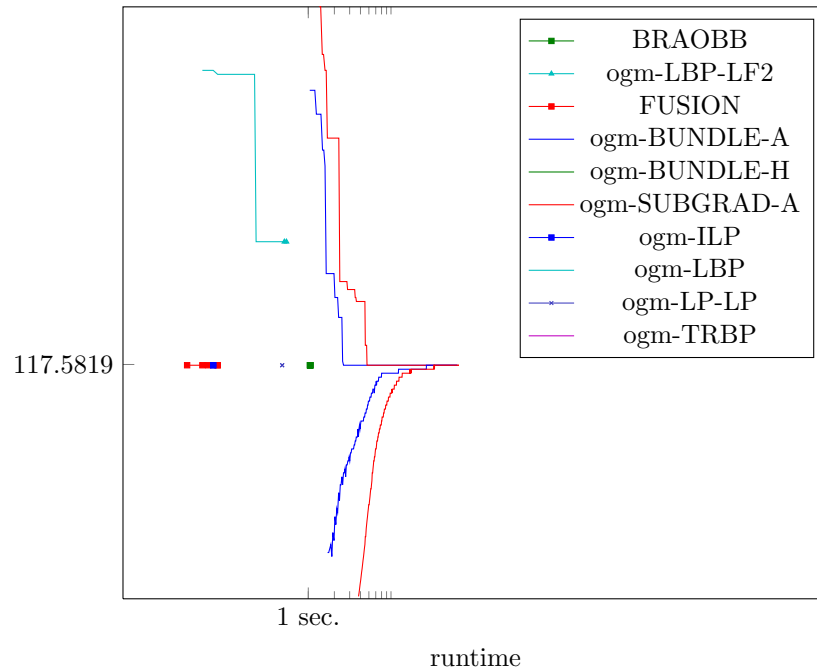


Figure 1165: Runtime results for the instance *gm95* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

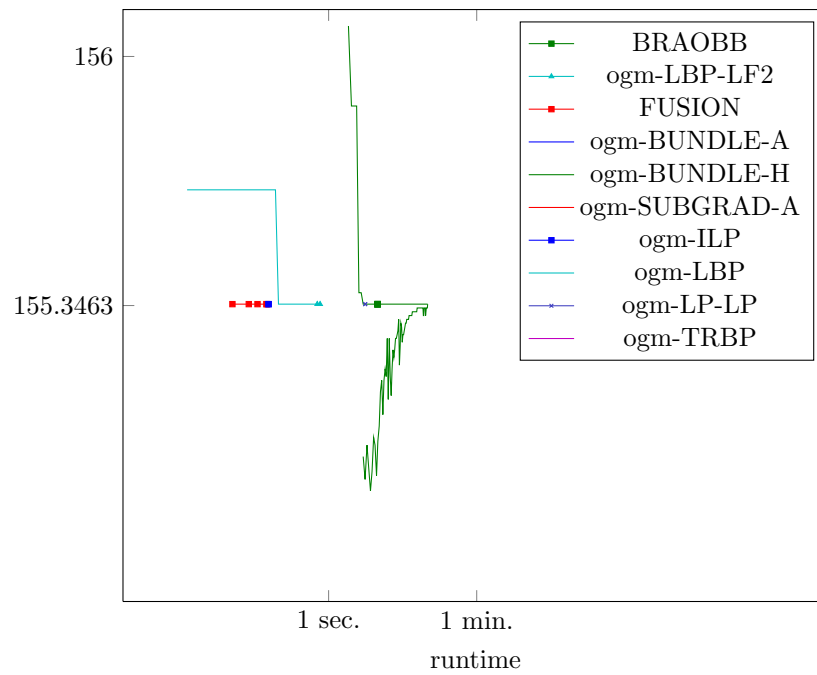


Figure 1166: Runtime results for the instance *gm96* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

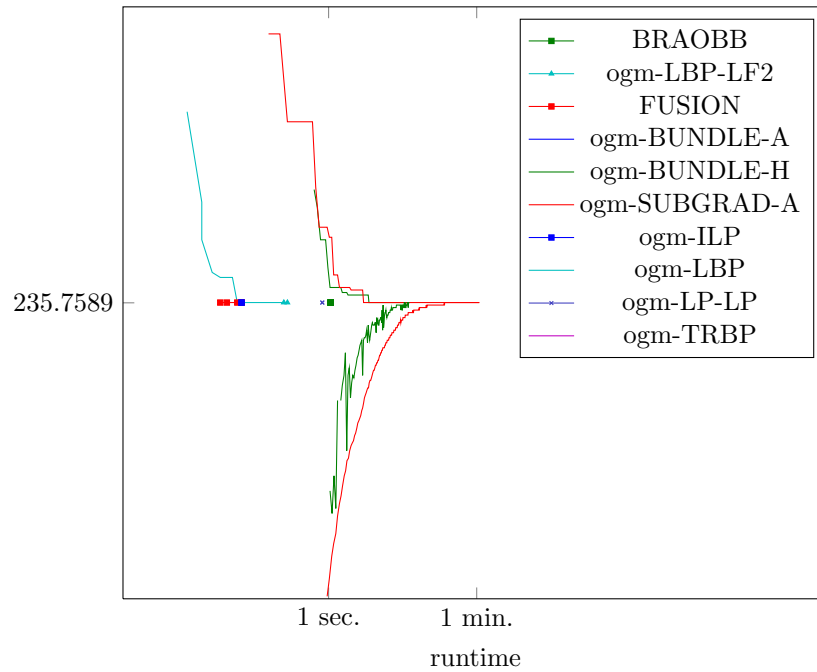


Figure 1167: Runtime results for the instance *gm97* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

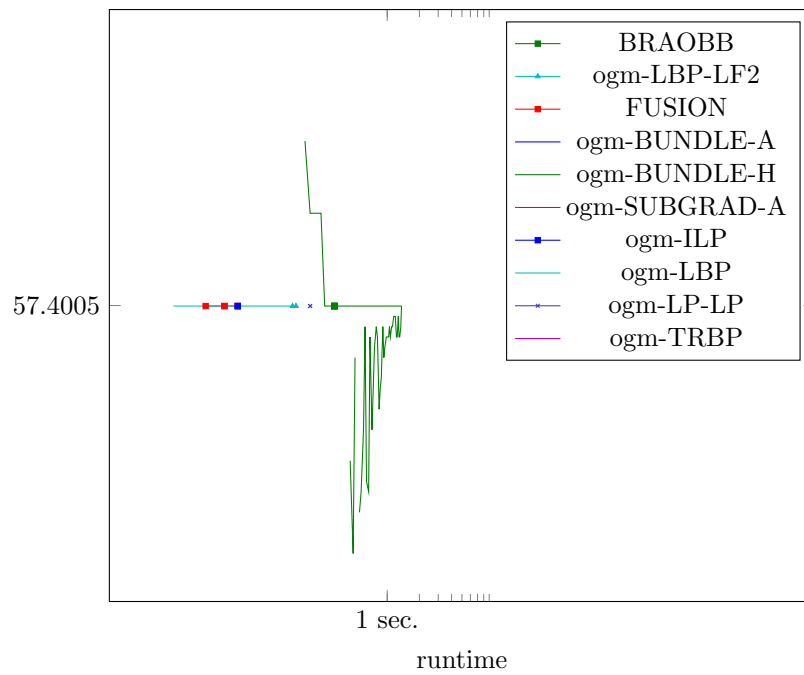


Figure 1168: Runtime results for the instance *gm98* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

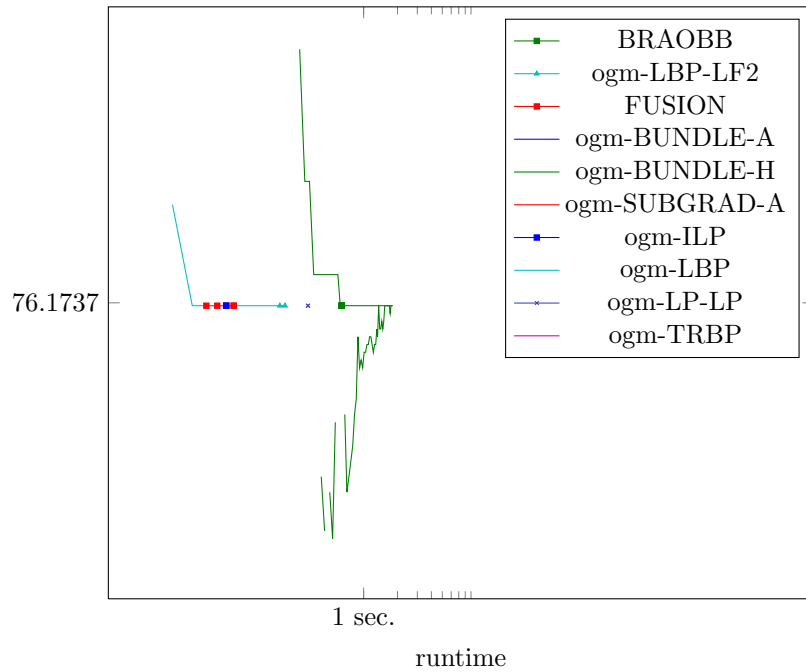


Figure 1169: Runtime results for the instance *gm99* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

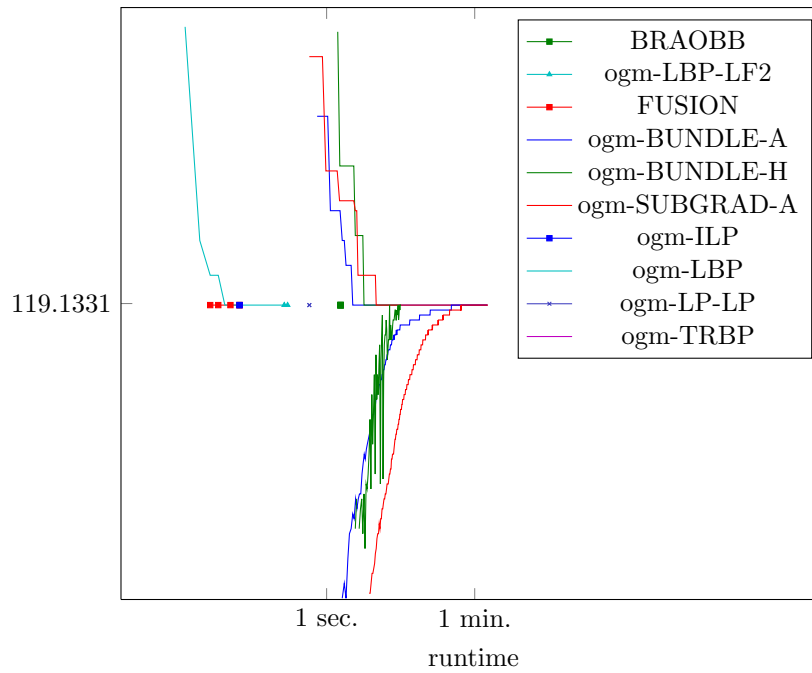


Figure 1170: Runtime results for the instance *gm9* of the *geo-surf-3* models. Plots show best value of integer solution and (if provided) best lower bound.

5.14. Geometric Scene Labeling 7 (geo-surf-7)

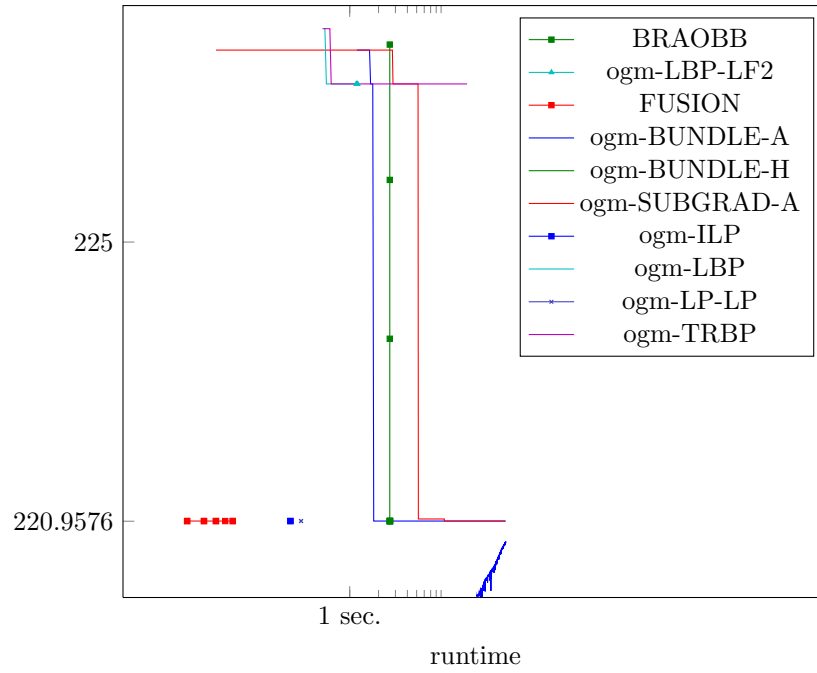


Figure 1171: Runtime results for the instance *gm100* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

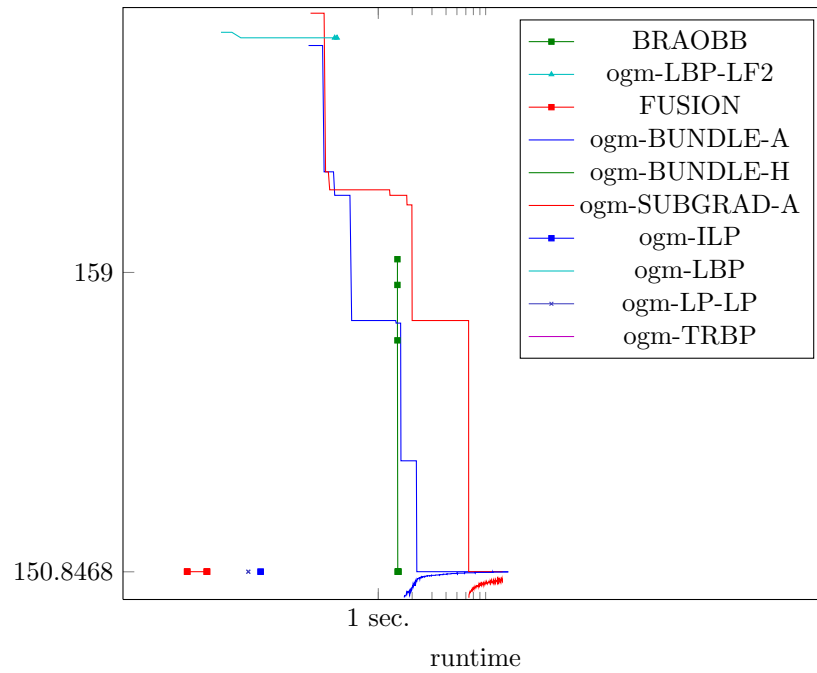


Figure 1172: Runtime results for the instance *gm101* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

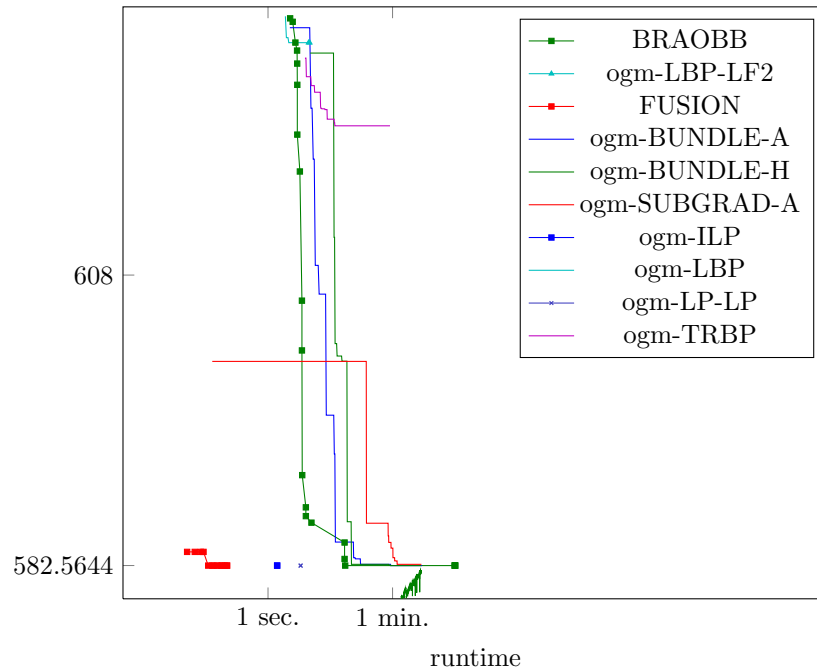


Figure 1173: Runtime results for the instance *gm102* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

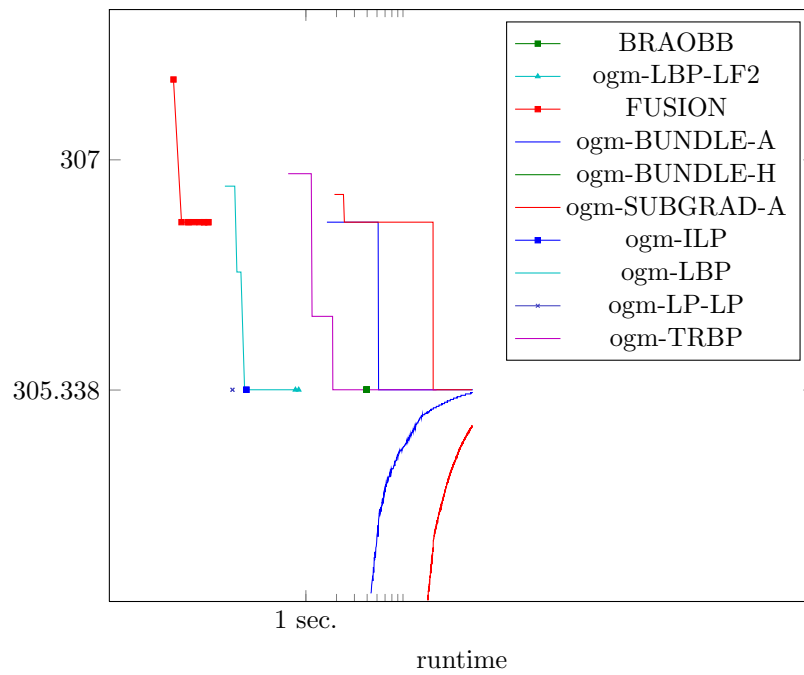


Figure 1174: Runtime results for the instance *gm103* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

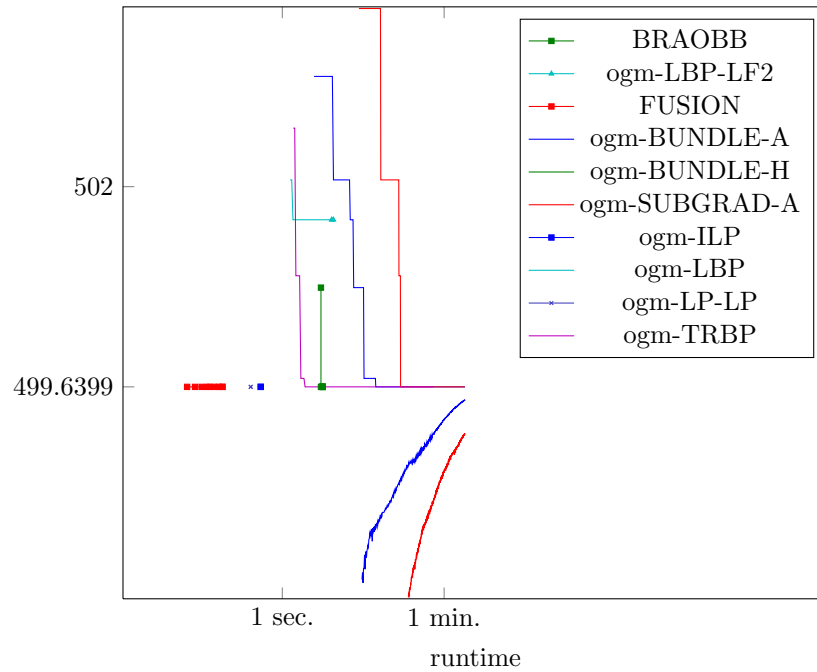


Figure 1175: Runtime results for the instance *gm104* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

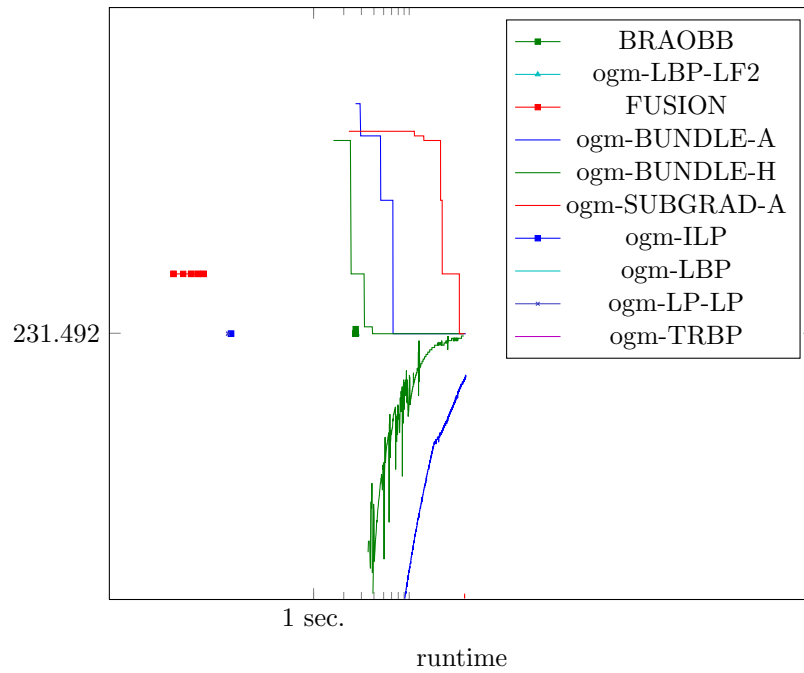


Figure 1176: Runtime results for the instance *gm105* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

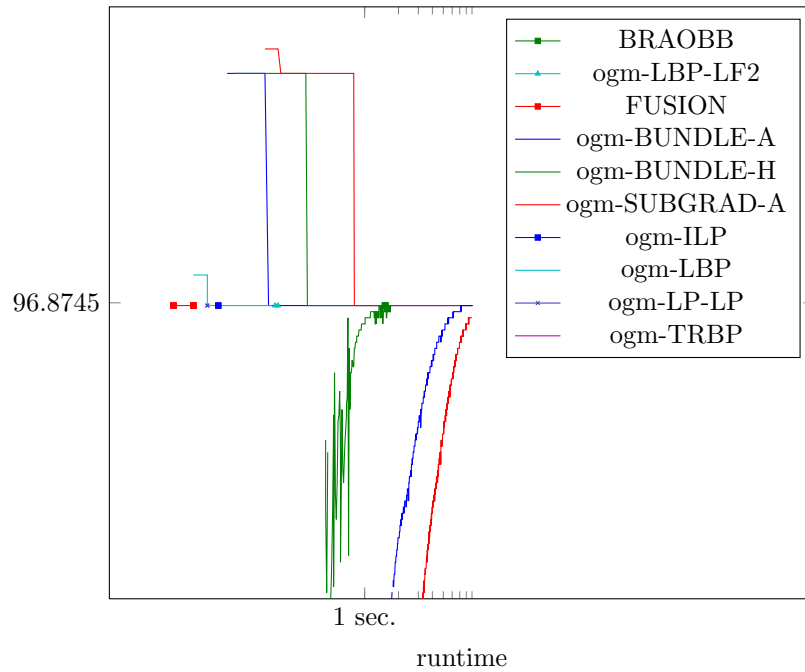


Figure 1177: Runtime results for the instance *gm106* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

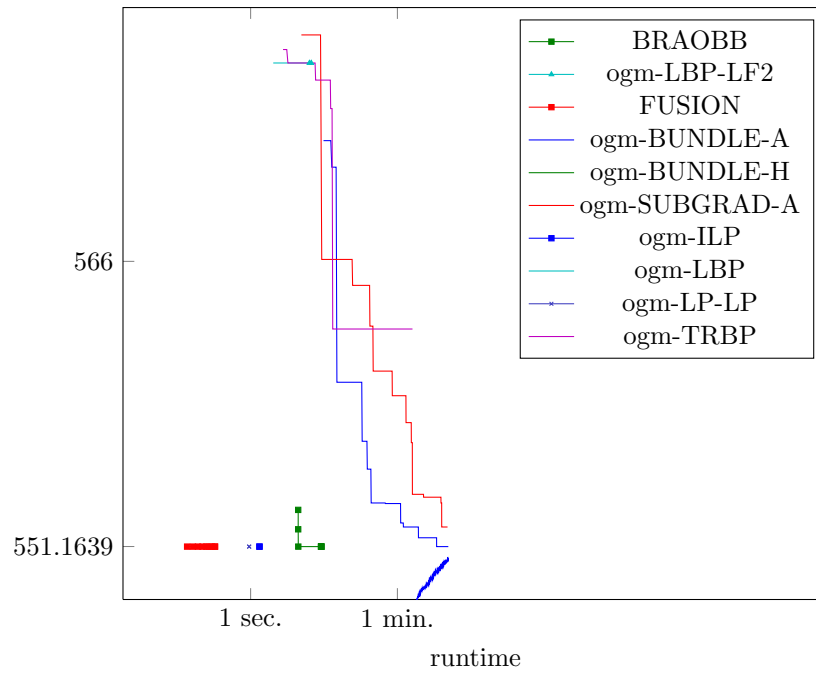


Figure 1178: Runtime results for the instance *gm107* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

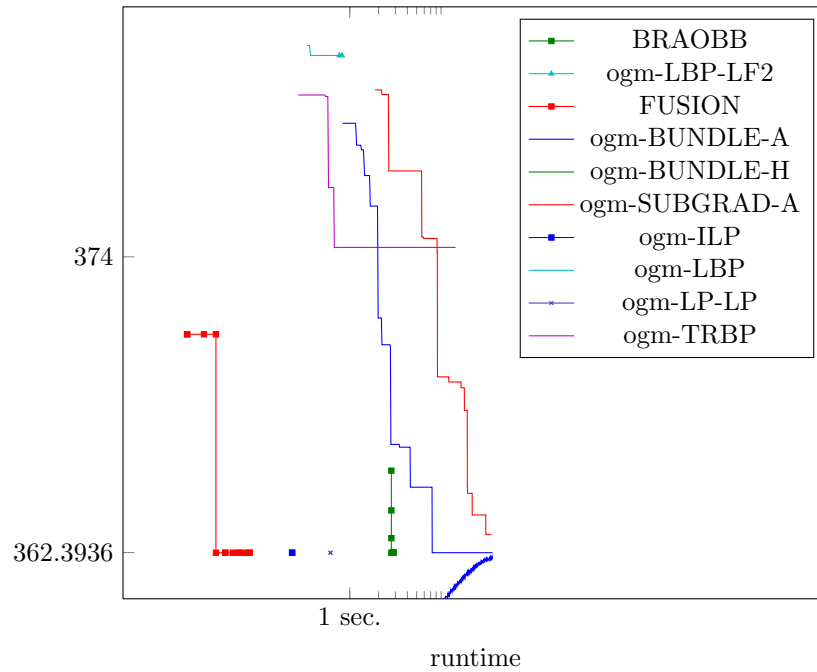


Figure 1179: Runtime results for the instance *gm108* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

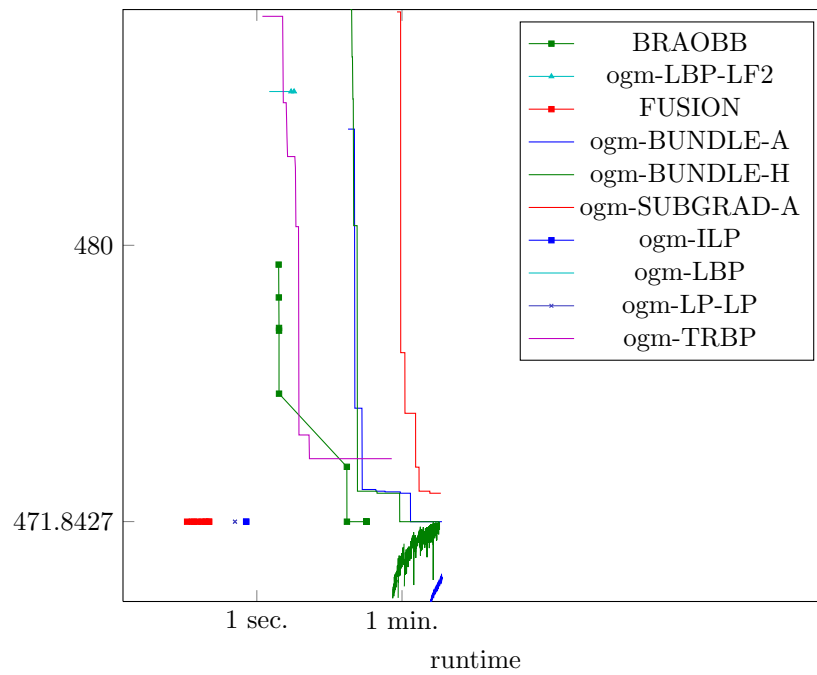


Figure 1180: Runtime results for the instance *gm109* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

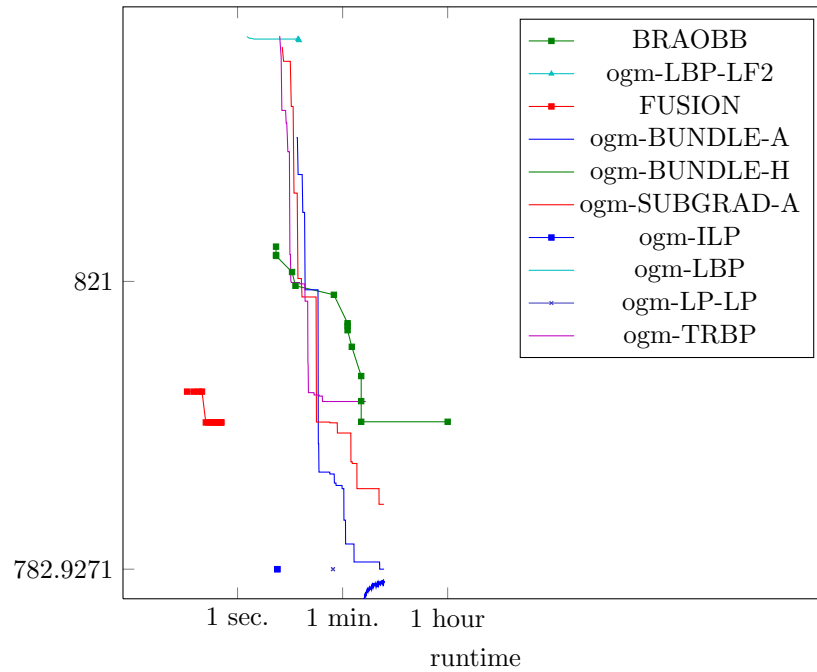


Figure 1181: Runtime results for the instance *gm10* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

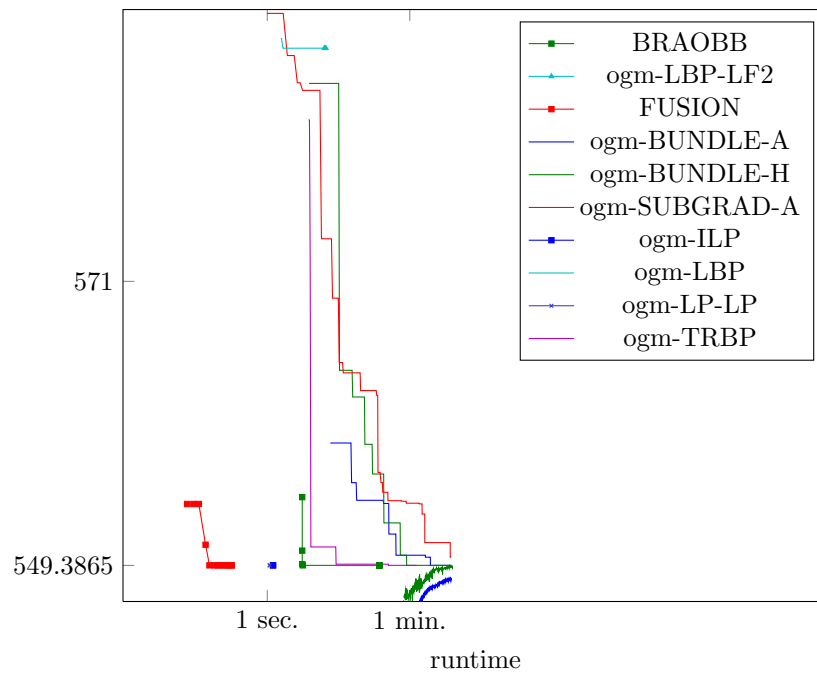


Figure 1182: Runtime results for the instance *gm110* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

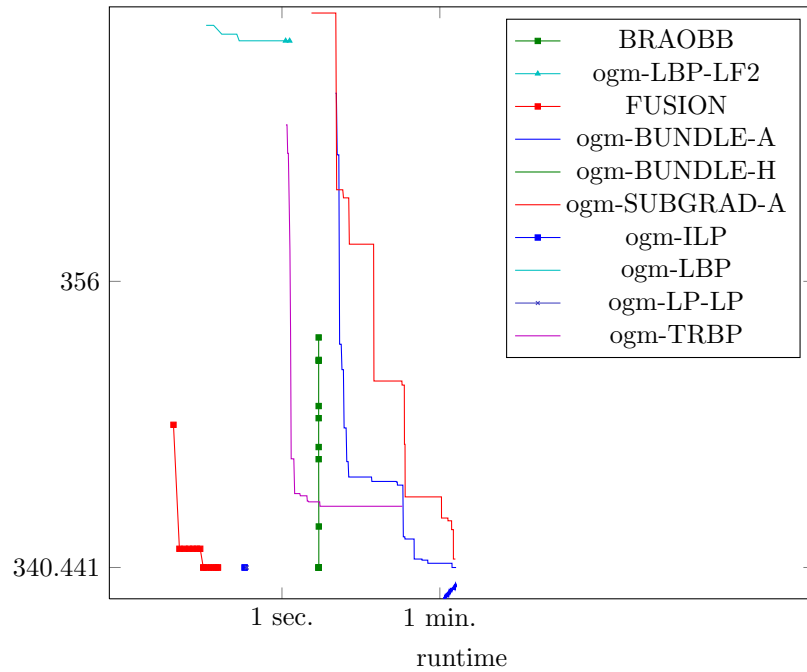


Figure 1183: Runtime results for the instance *gm111* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

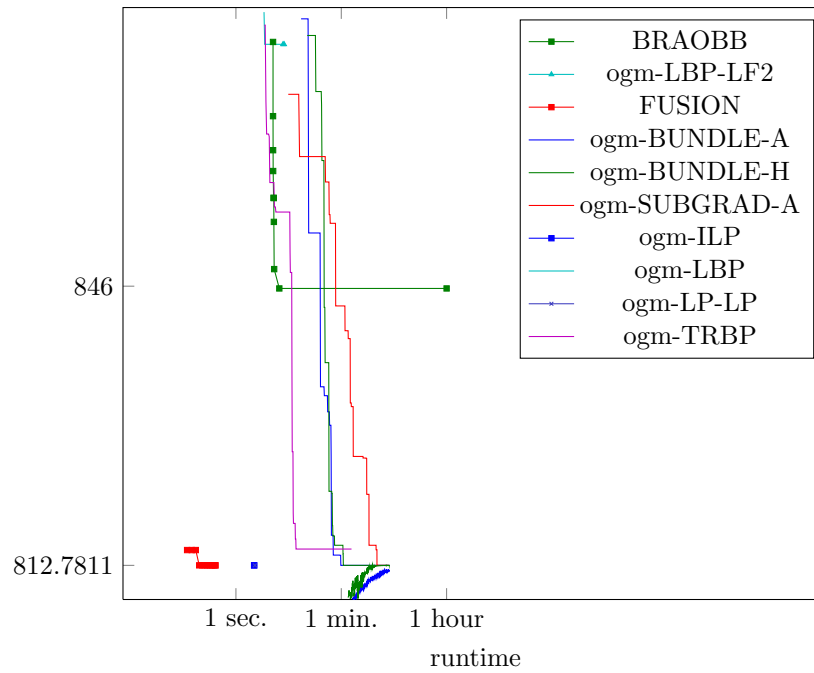


Figure 1184: Runtime results for the instance *gm112* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

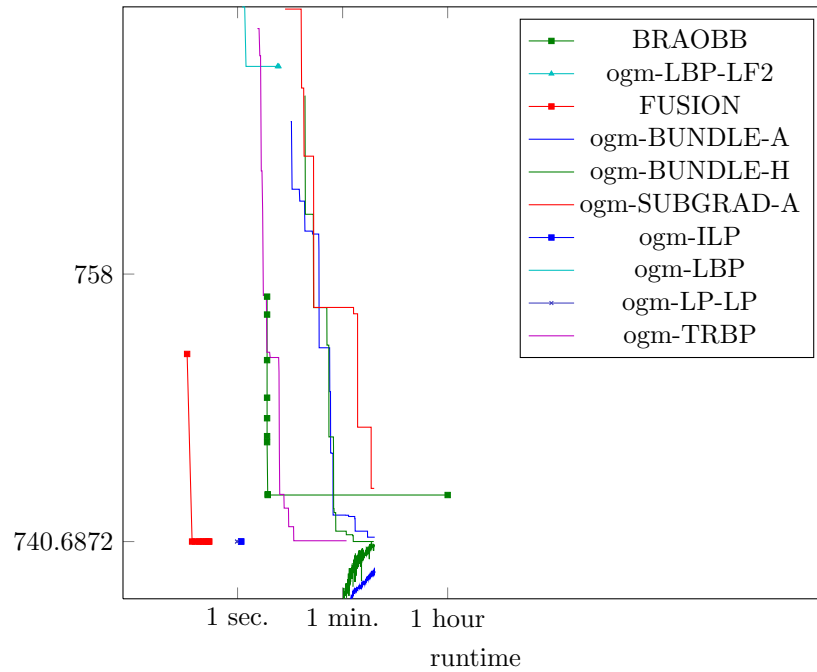


Figure 1185: Runtime results for the instance *gm113* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

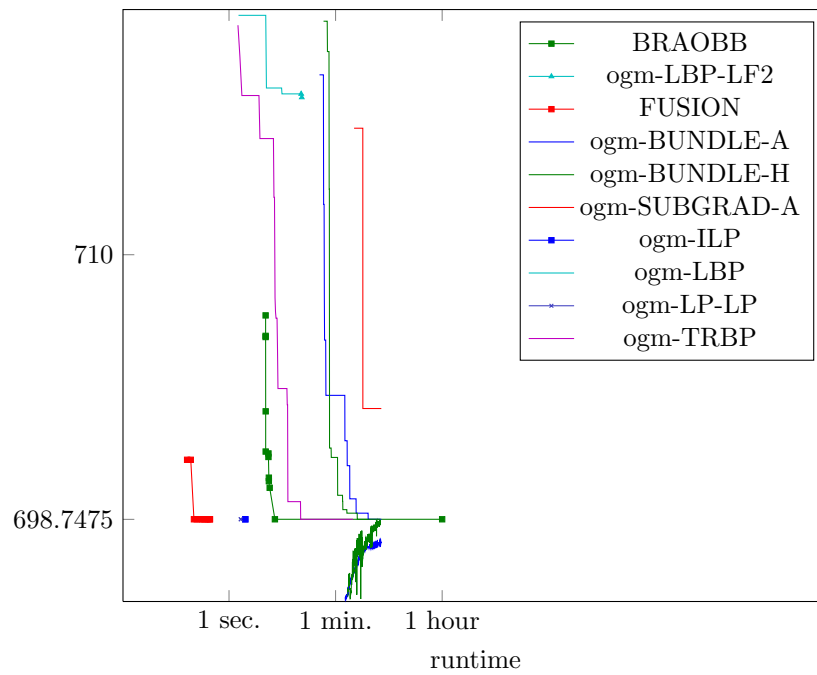


Figure 1186: Runtime results for the instance *gm114* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

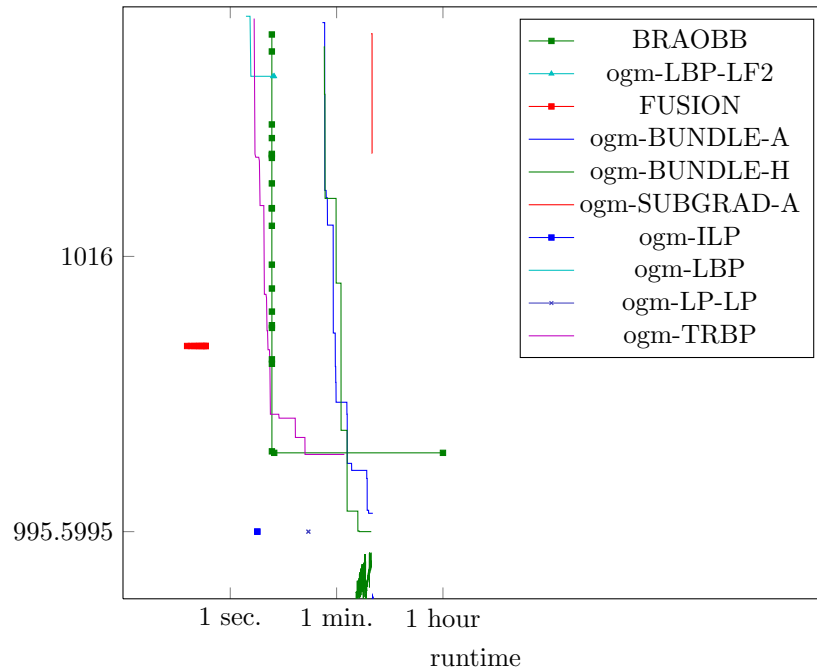


Figure 1187: Runtime results for the instance *gm115* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

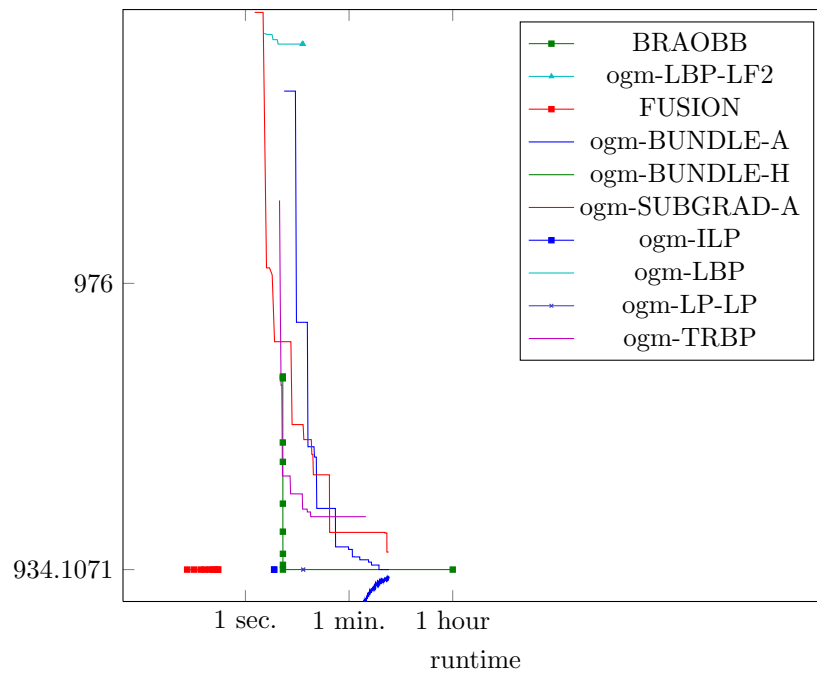


Figure 1188: Runtime results for the instance *gm116* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

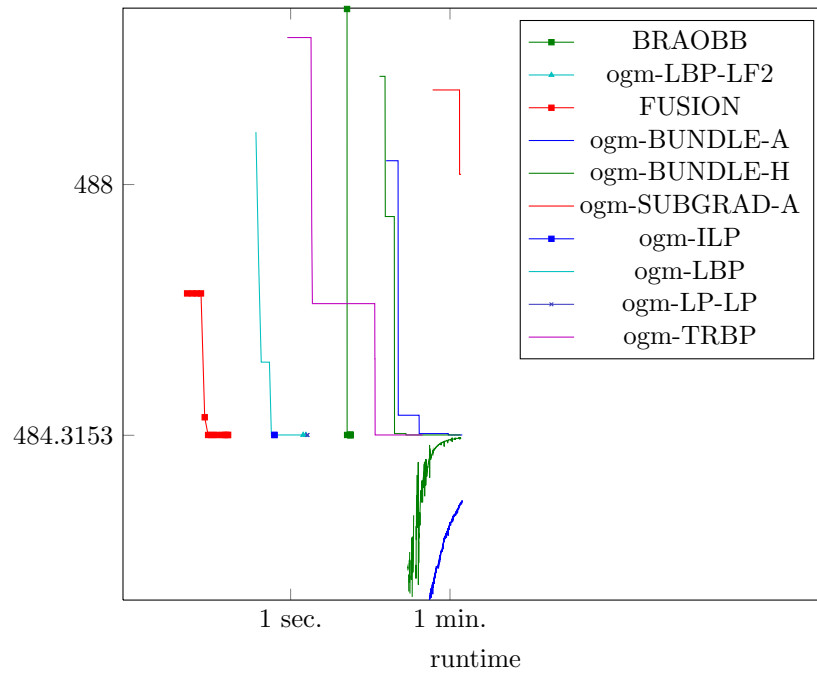


Figure 1189: Runtime results for the instance *gm117* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

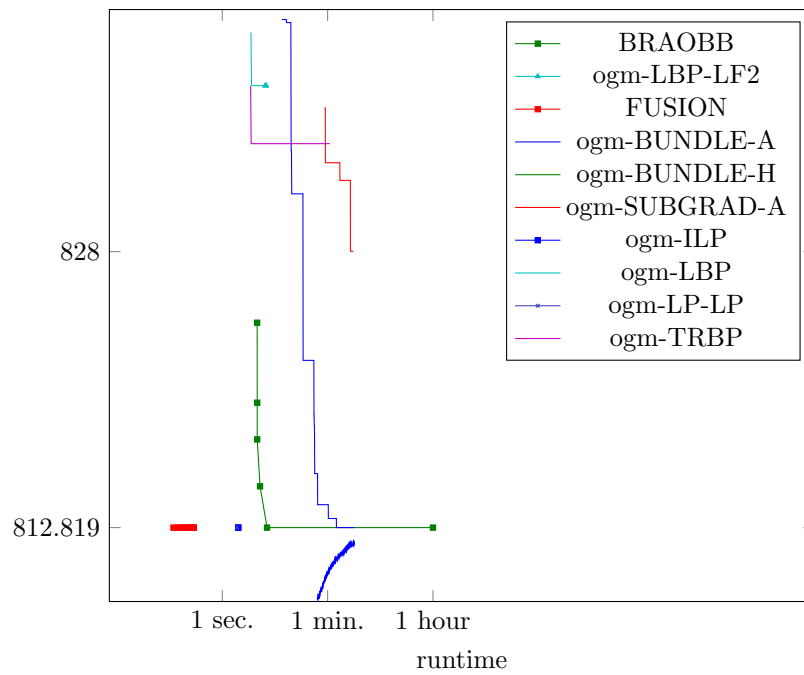


Figure 1190: Runtime results for the instance *gm118* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

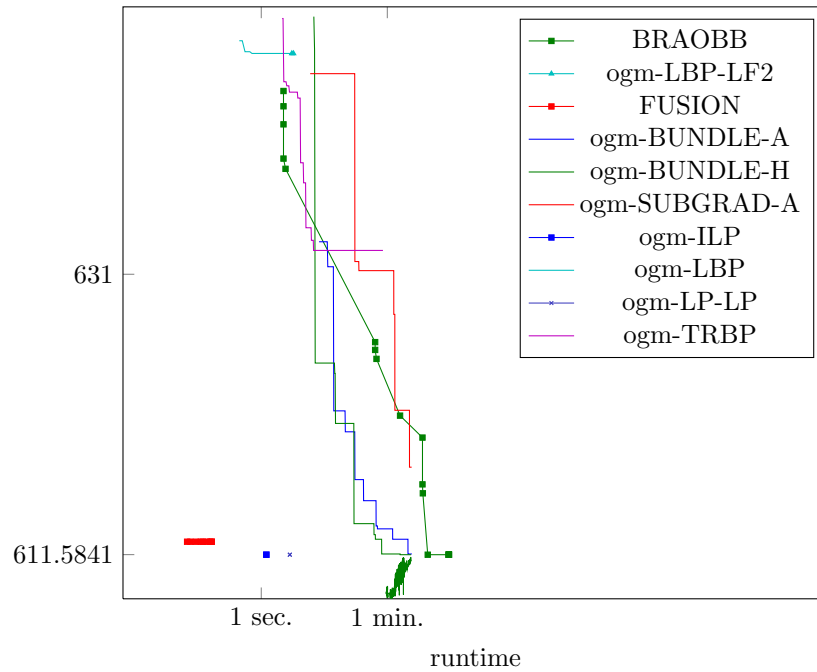


Figure 1191: Runtime results for the instance *gm119* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

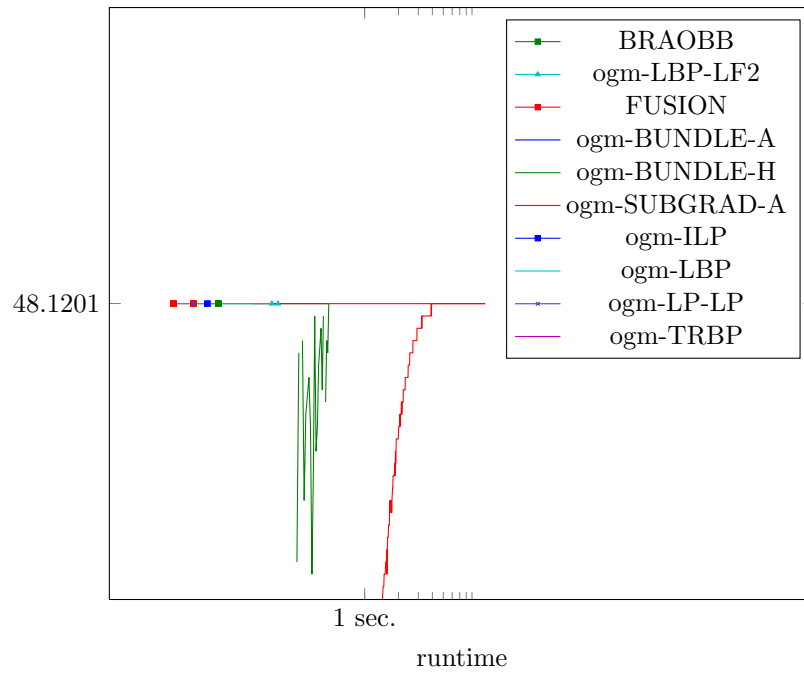


Figure 1192: Runtime results for the instance *gm11* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

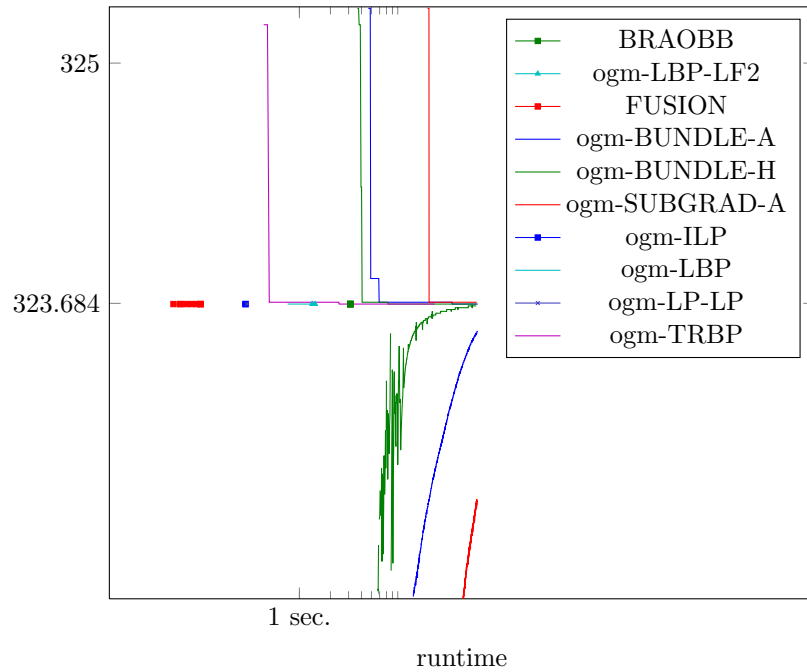


Figure 1193: Runtime results for the instance *gm120* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

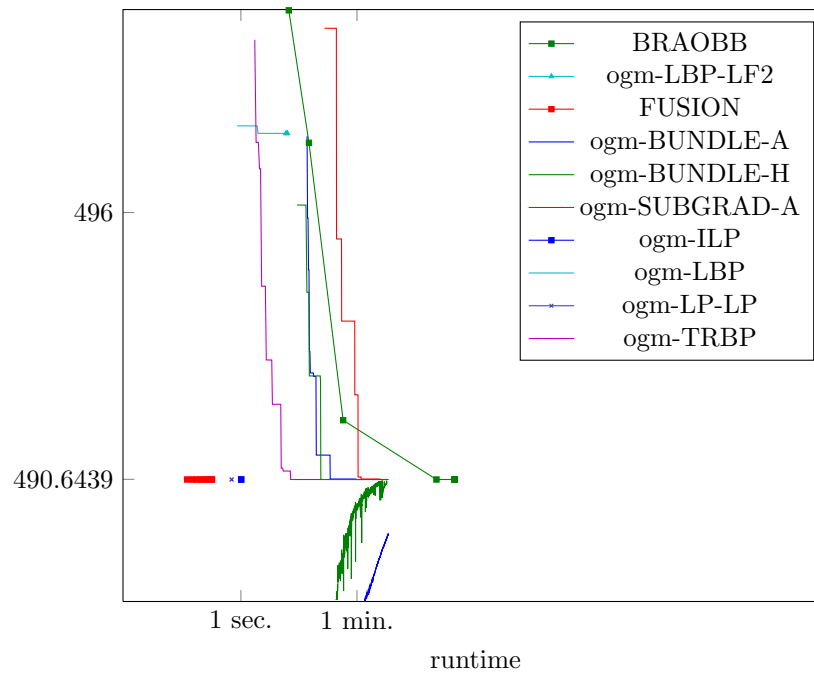


Figure 1194: Runtime results for the instance *gm121* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

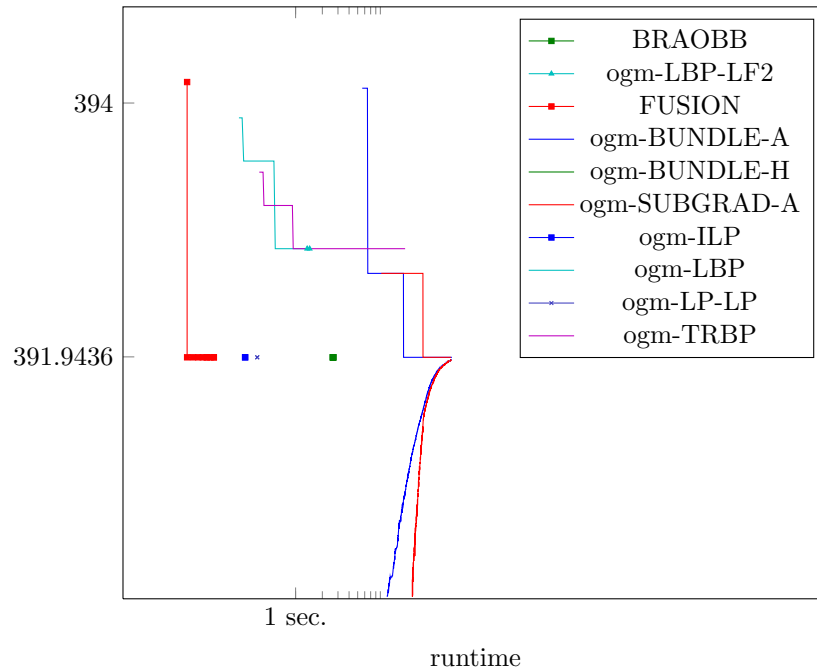


Figure 1195: Runtime results for the instance *gm122* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

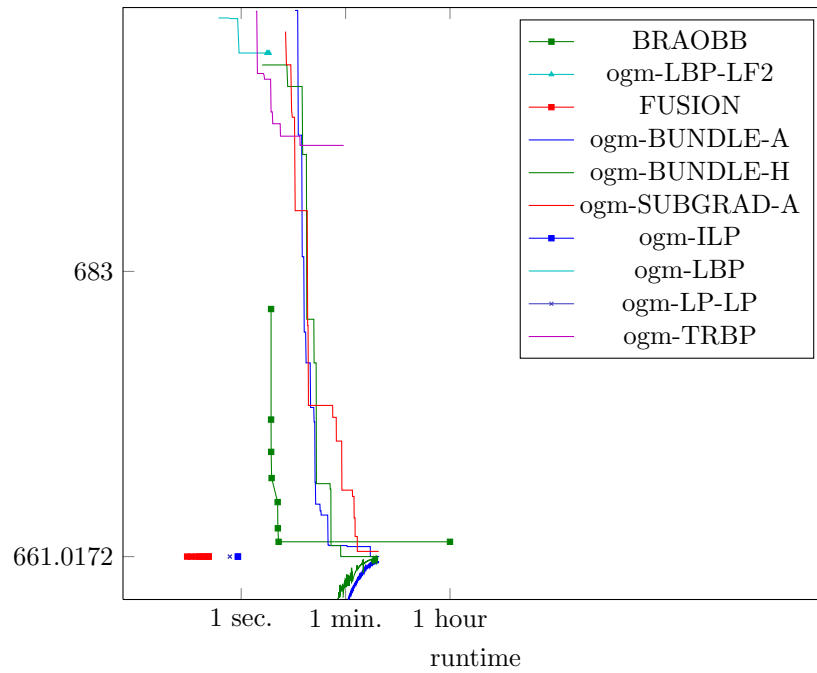


Figure 1196: Runtime results for the instance *gm123* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

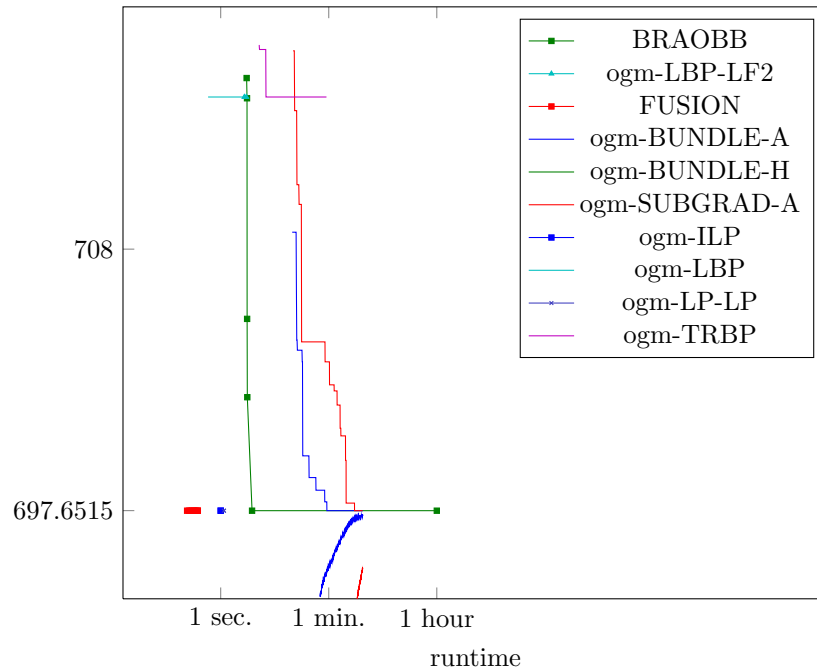


Figure 1197: Runtime results for the instance *gm124* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

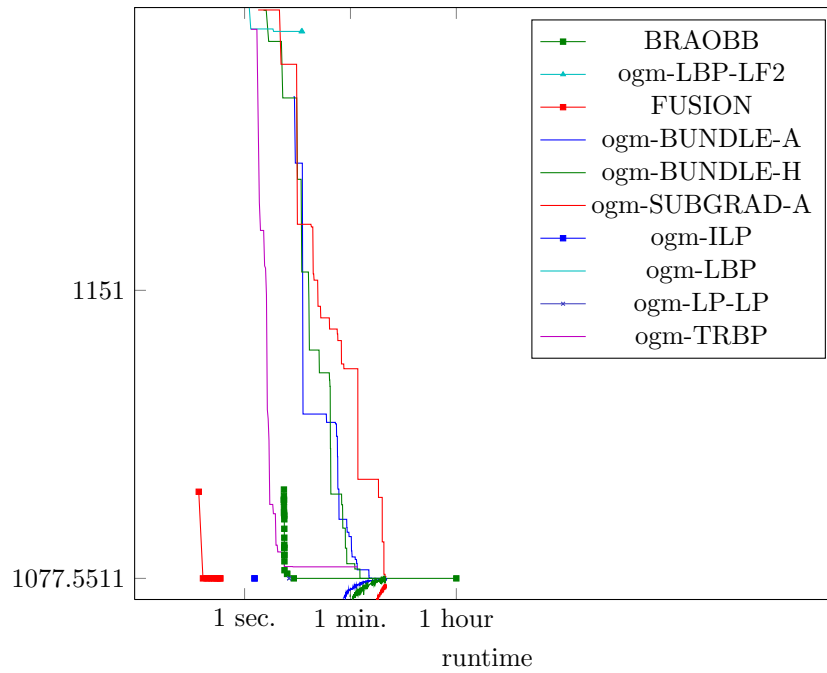


Figure 1198: Runtime results for the instance *gm125* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

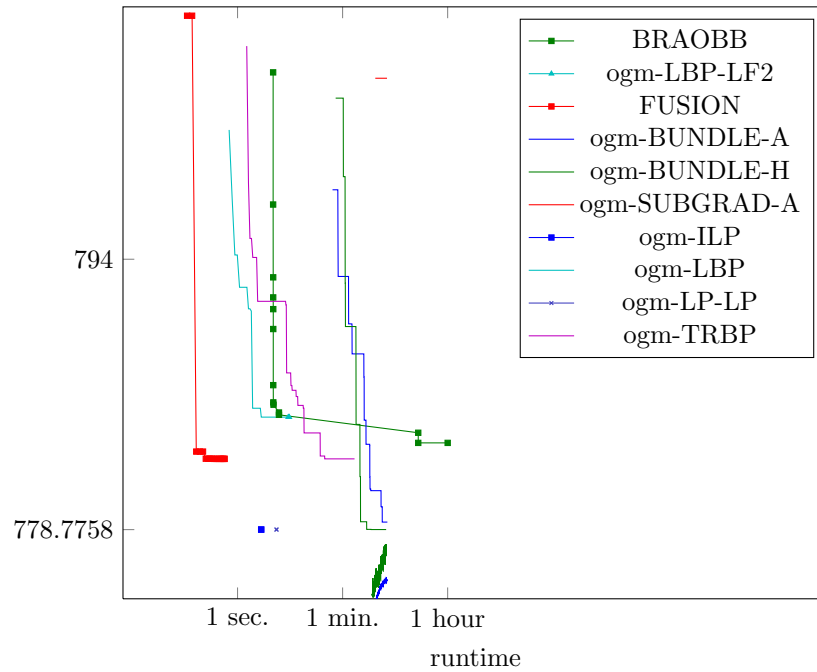


Figure 1199: Runtime results for the instance *gm126* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

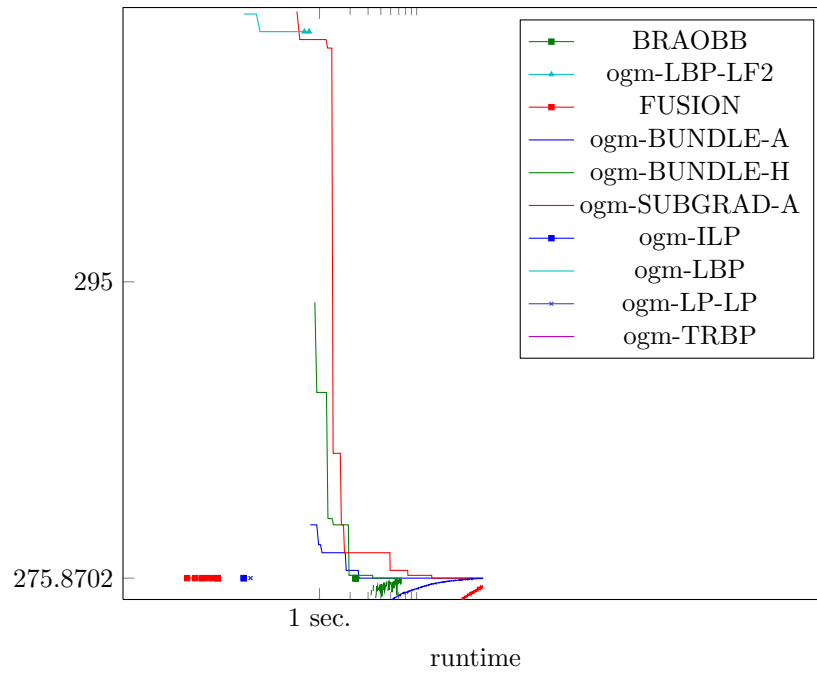


Figure 1200: Runtime results for the instance *gm127* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

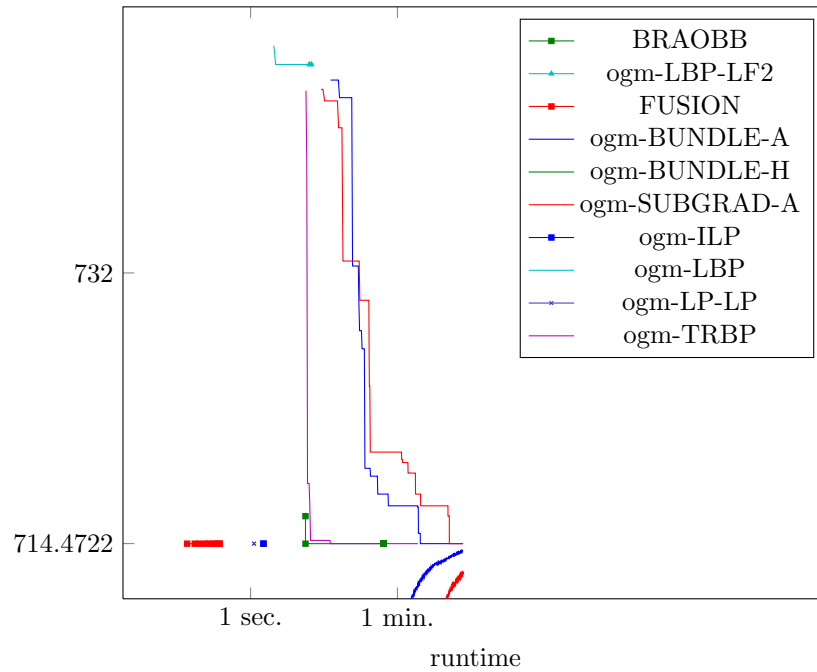


Figure 1201: Runtime results for the instance *gm128* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

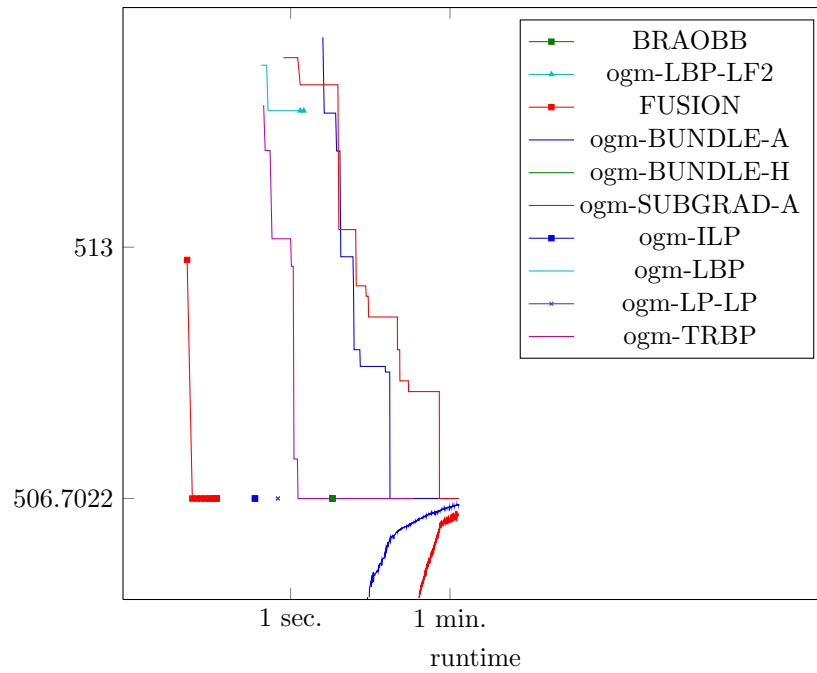


Figure 1202: Runtime results for the instance *gm129* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

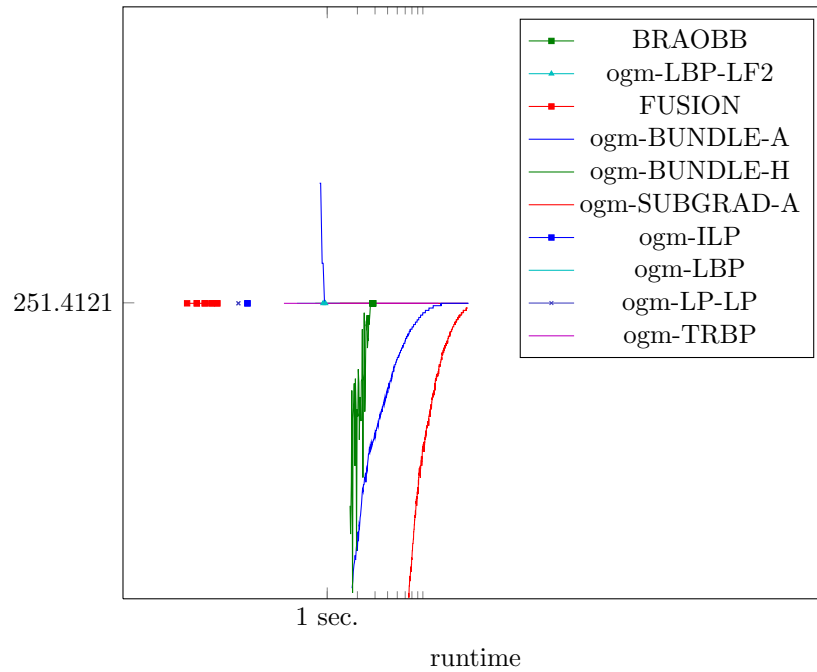


Figure 1203: Runtime results for the instance *gm12* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

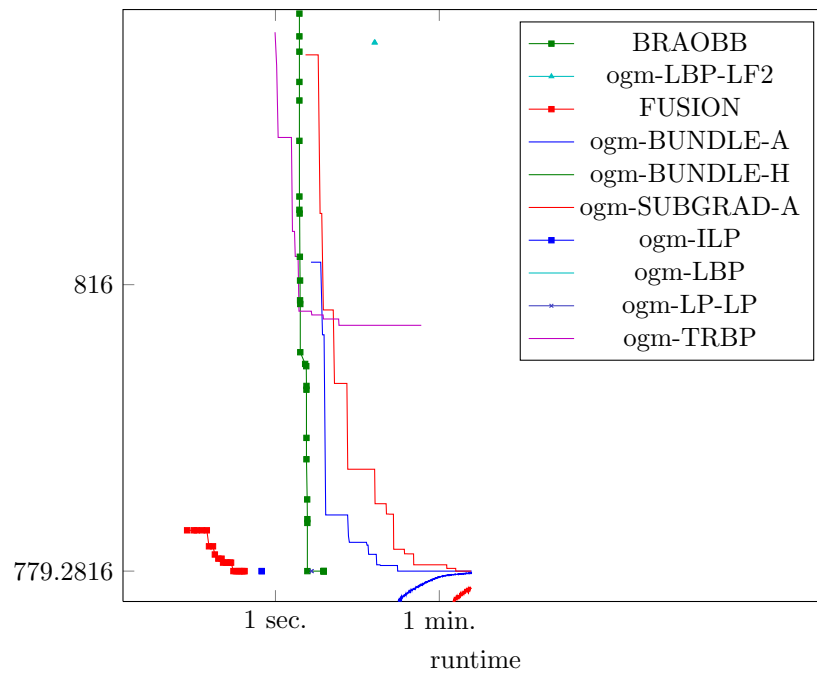


Figure 1204: Runtime results for the instance *gm130* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

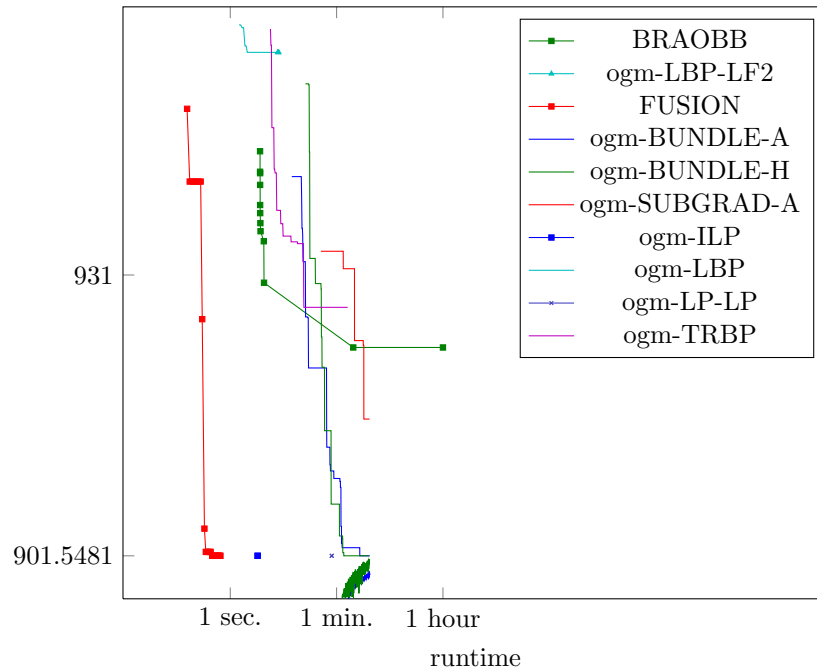


Figure 1205: Runtime results for the instance *gm131* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

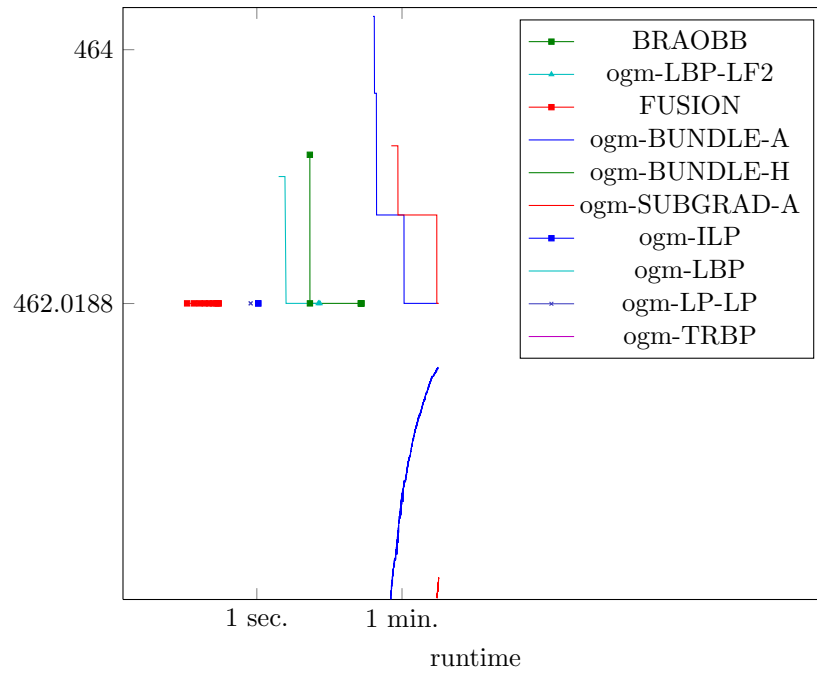


Figure 1206: Runtime results for the instance *gm132* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

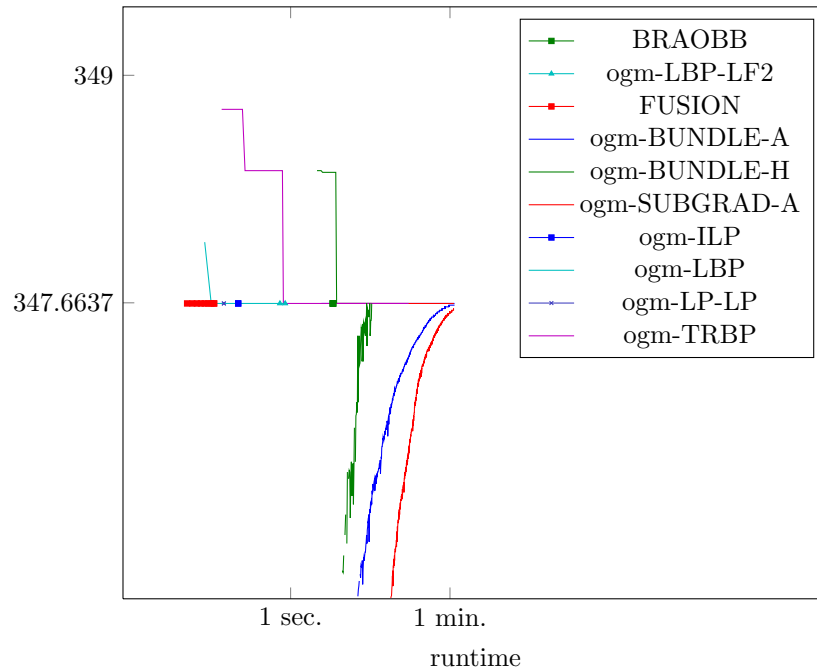


Figure 1207: Runtime results for the instance *gm133* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

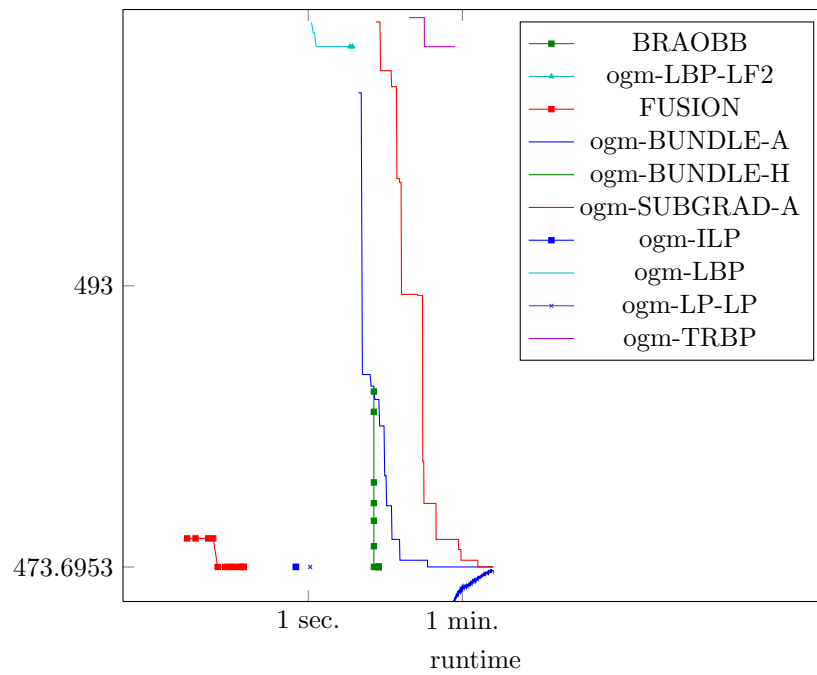


Figure 1208: Runtime results for the instance *gm134* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

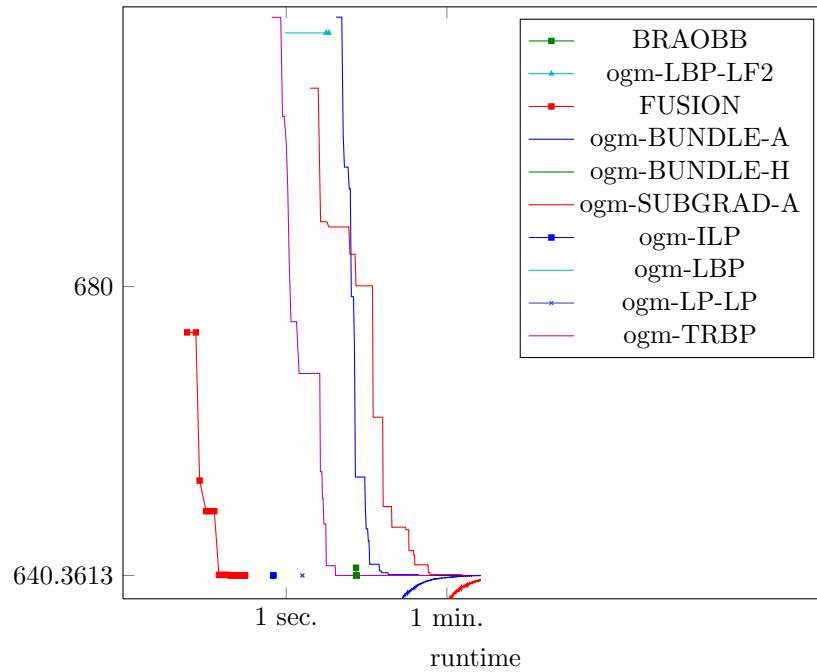


Figure 1209: Runtime results for the instance *gm135* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

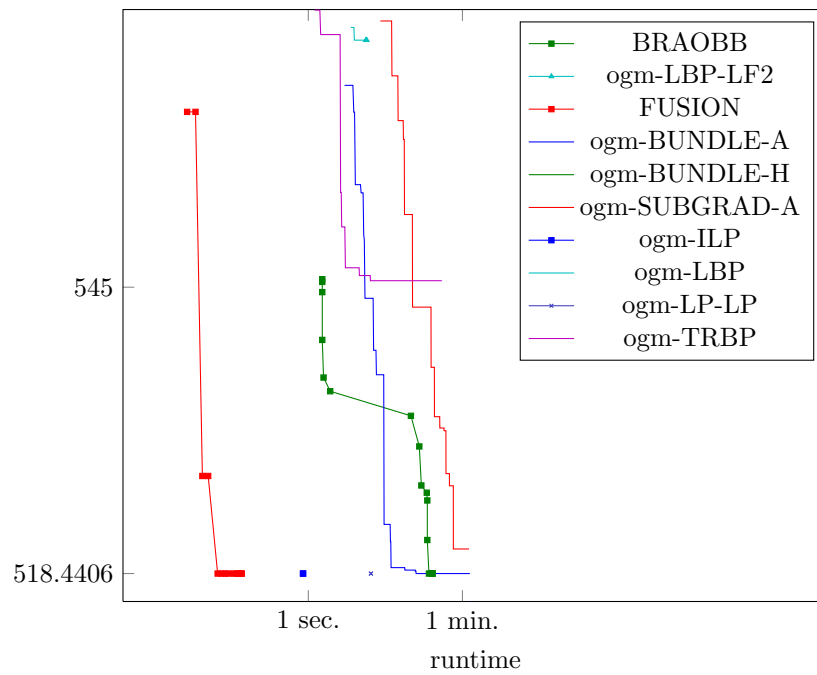


Figure 1210: Runtime results for the instance *gm136* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

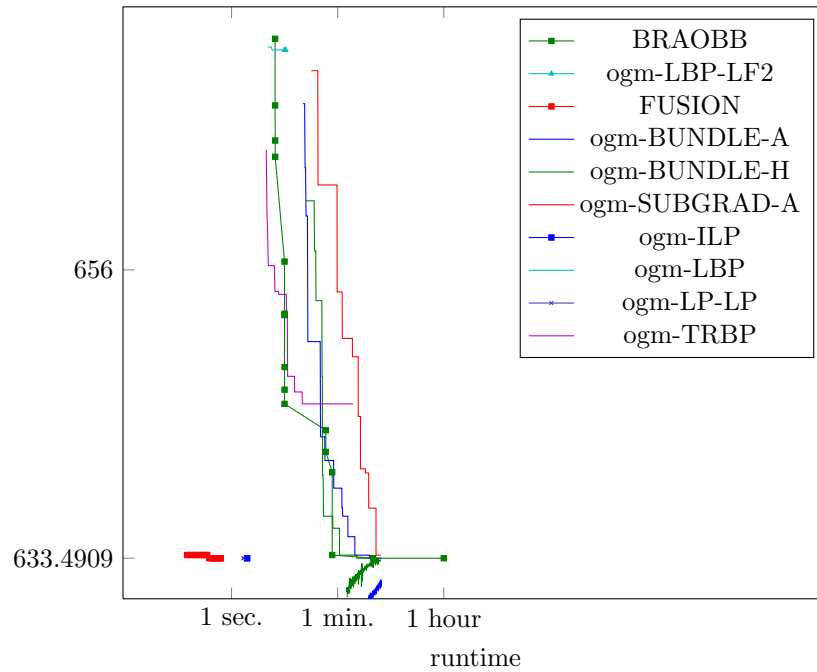


Figure 1211: Runtime results for the instance *gm137* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

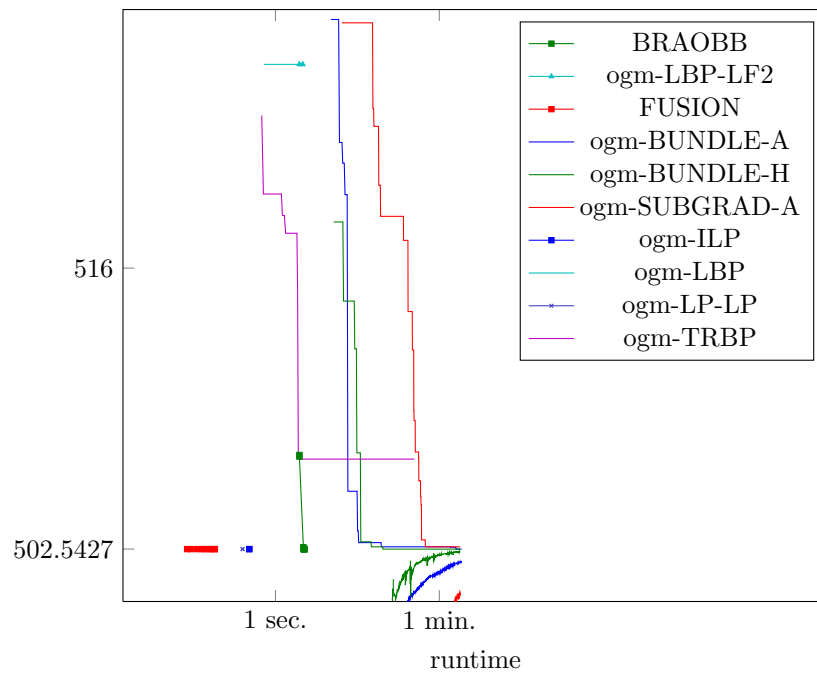


Figure 1212: Runtime results for the instance *gm138* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

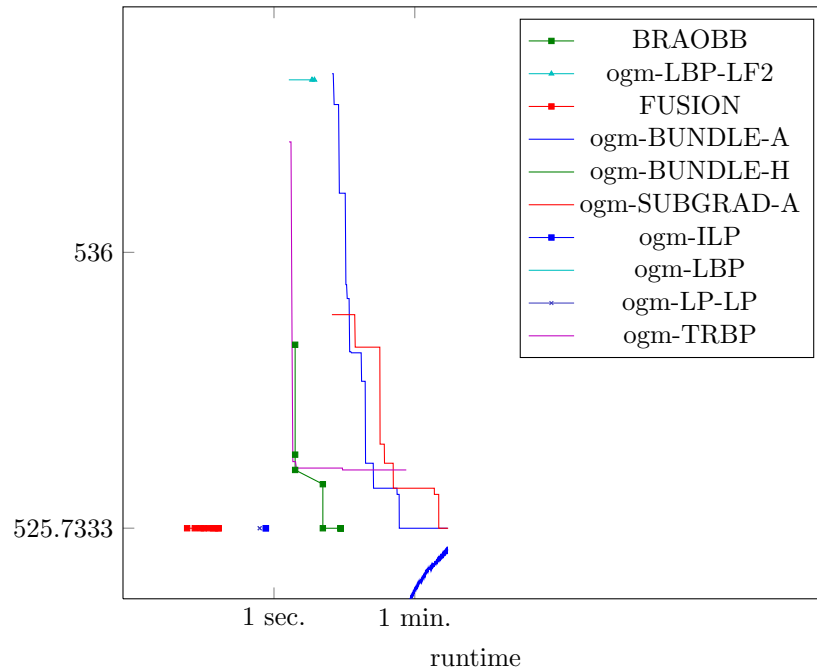


Figure 1213: Runtime results for the instance *gm139* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

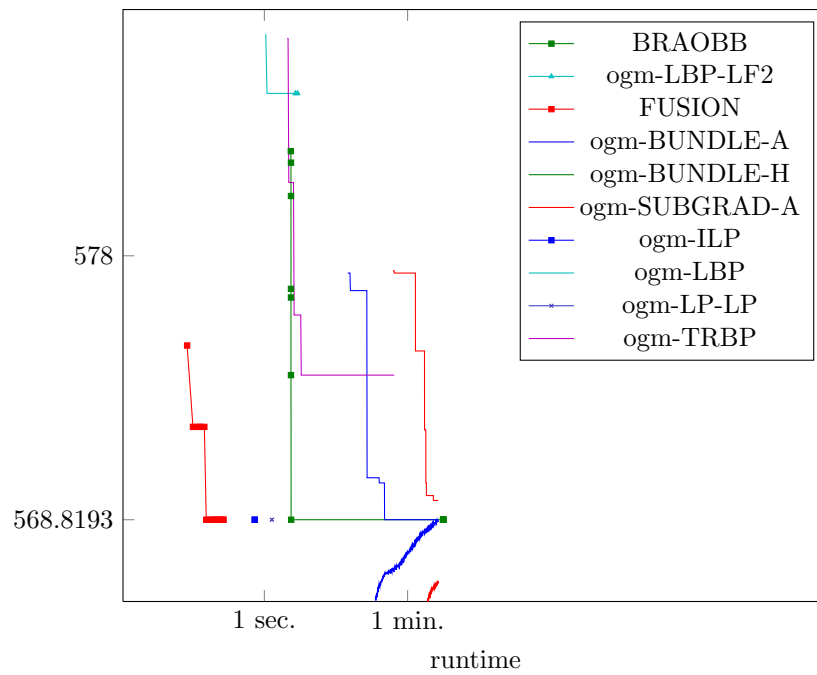


Figure 1214: Runtime results for the instance *gm13* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

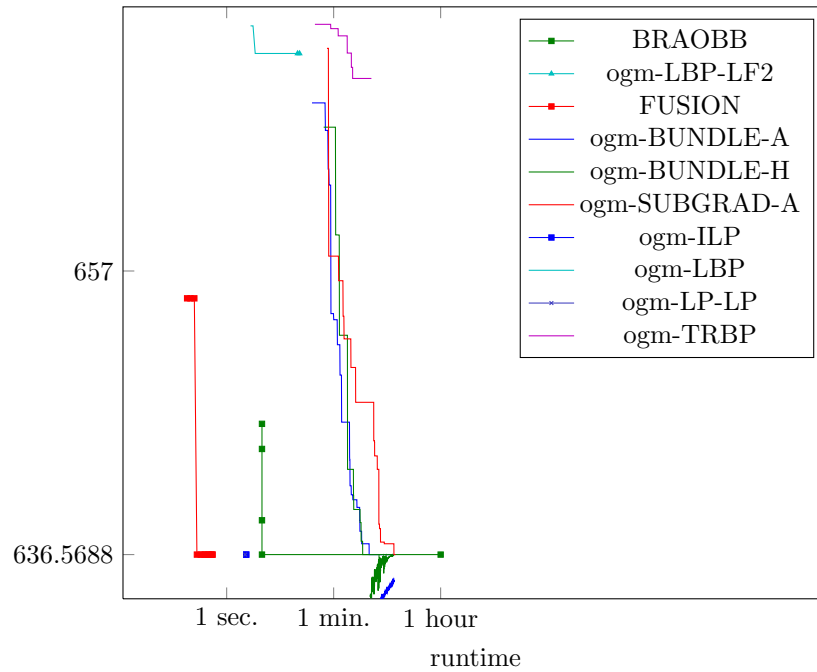


Figure 1215: Runtime results for the instance *gm140* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

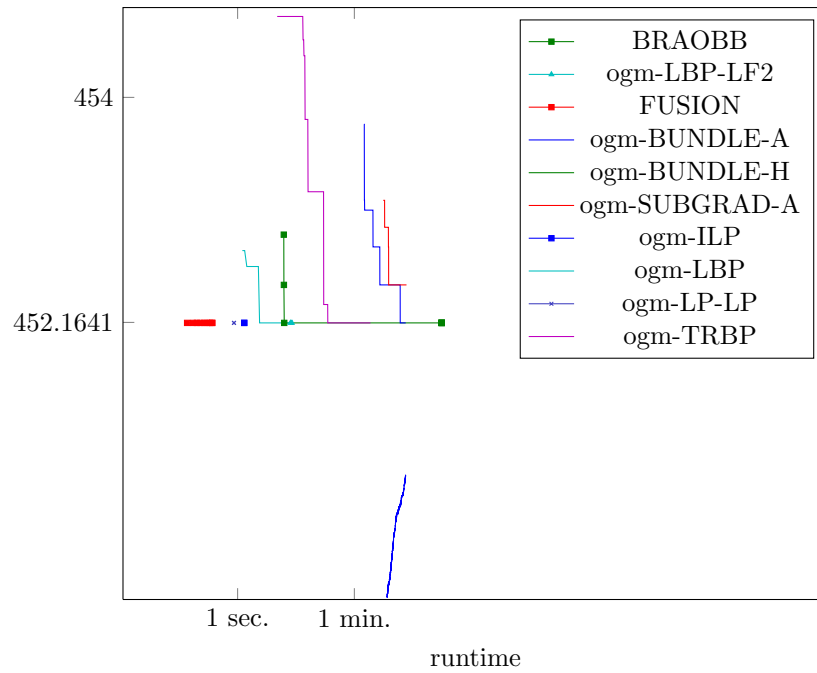


Figure 1216: Runtime results for the instance *gm141* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

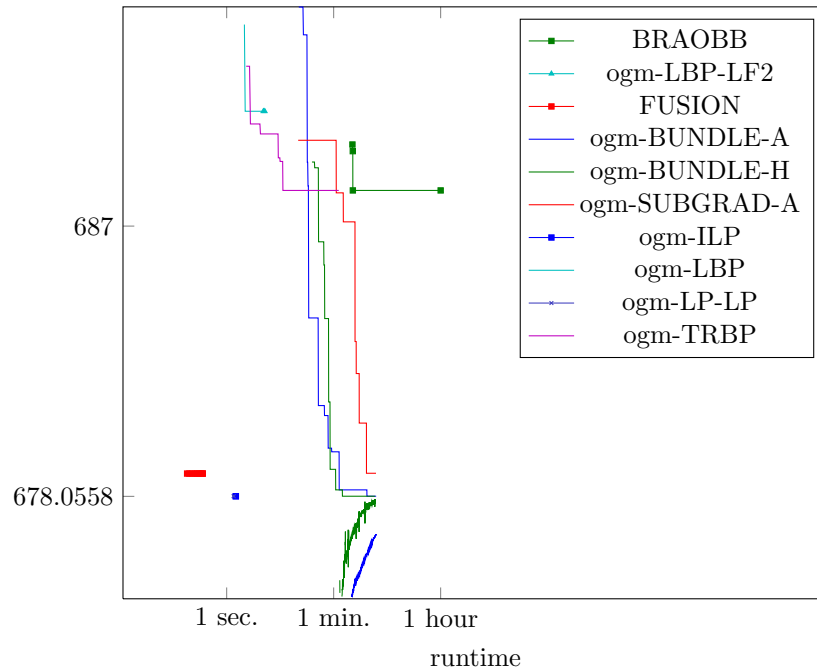


Figure 1217: Runtime results for the instance *gm142* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

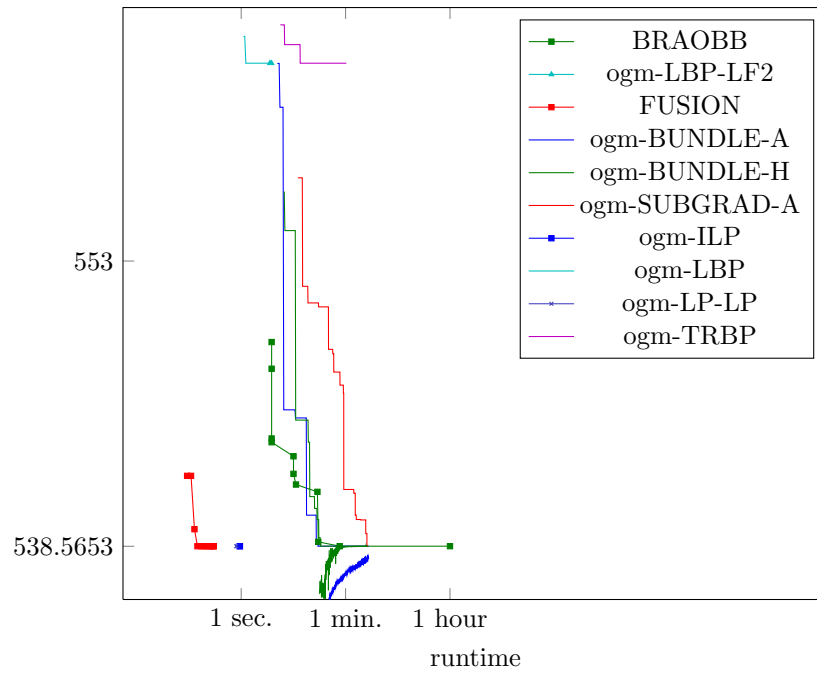


Figure 1218: Runtime results for the instance *gm143* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

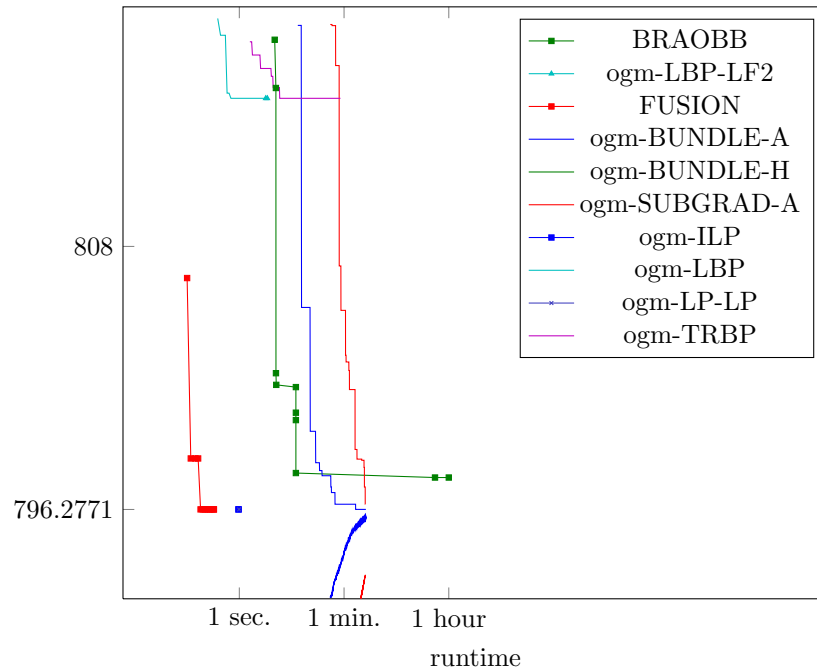


Figure 1219: Runtime results for the instance *gm144* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

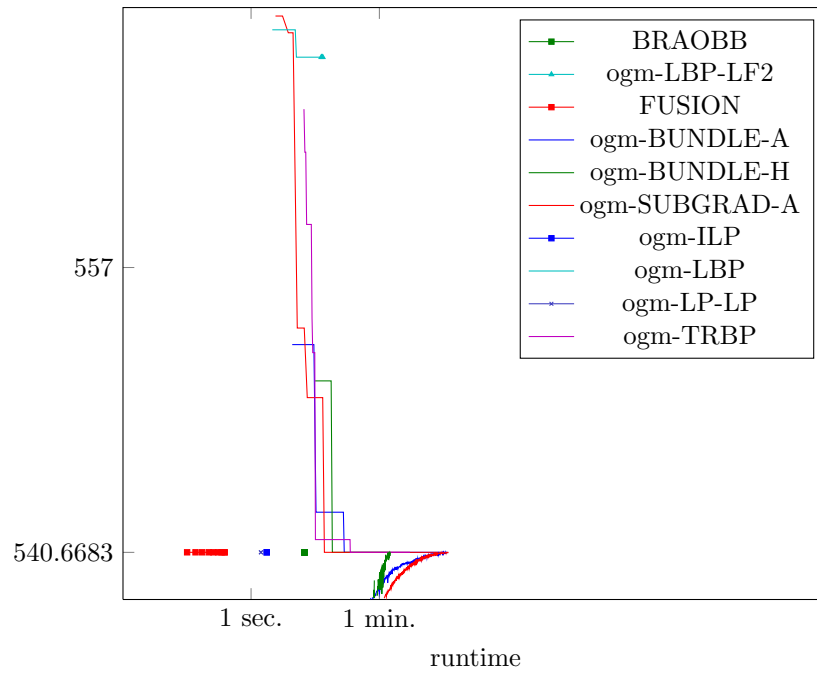


Figure 1220: Runtime results for the instance *gm145* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

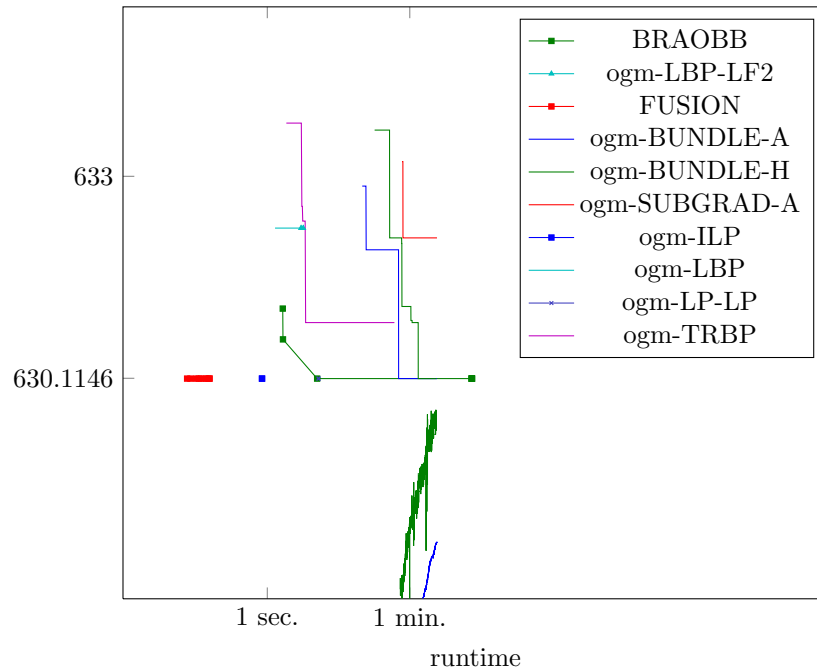


Figure 1221: Runtime results for the instance *gm146* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

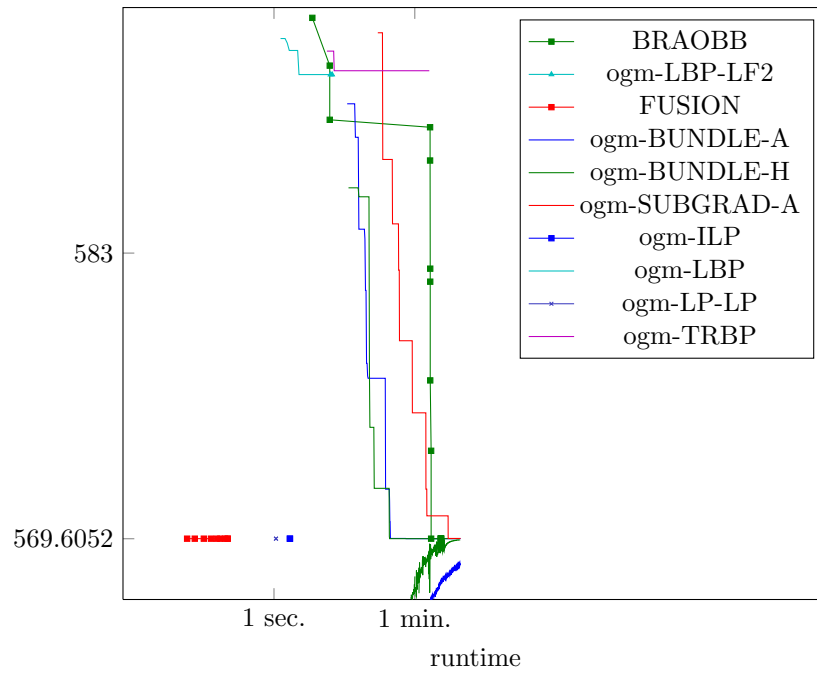


Figure 1222: Runtime results for the instance *gm147* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

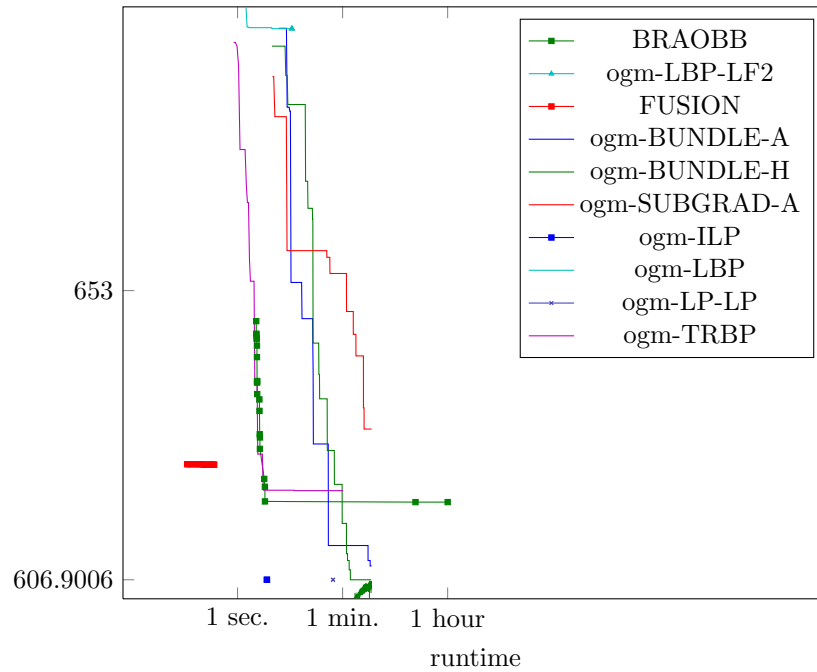


Figure 1223: Runtime results for the instance *gm148* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

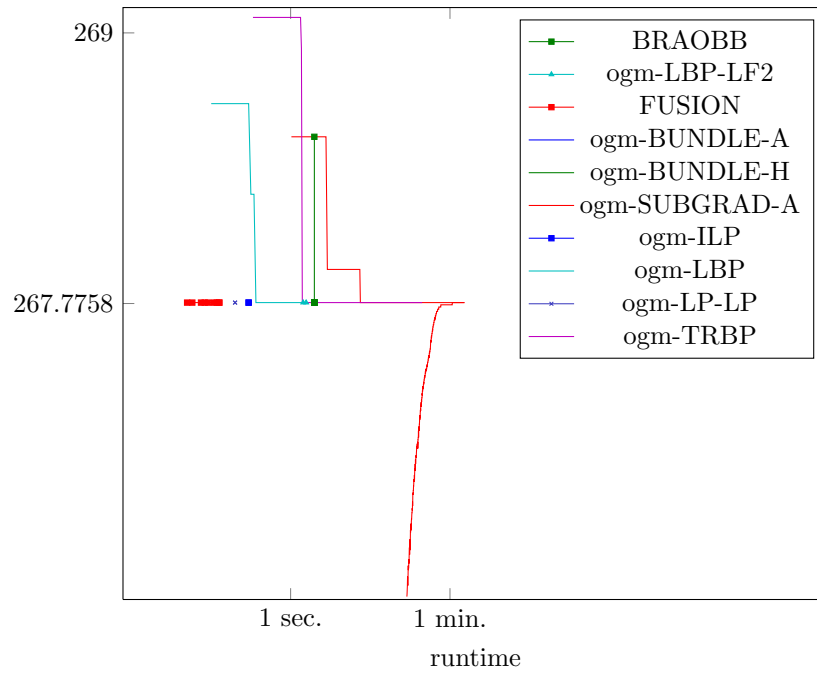


Figure 1224: Runtime results for the instance *gm149* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

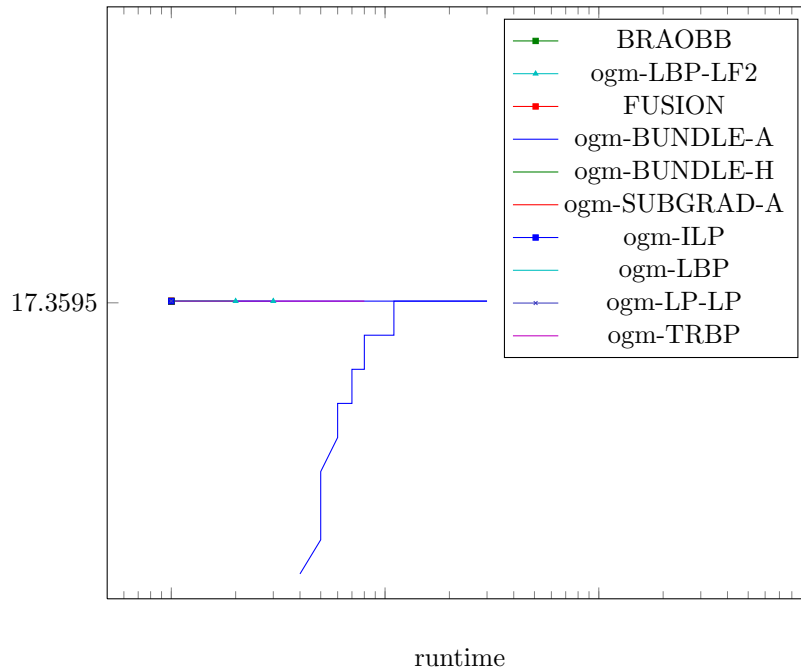


Figure 1225: Runtime results for the instance *gm14* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

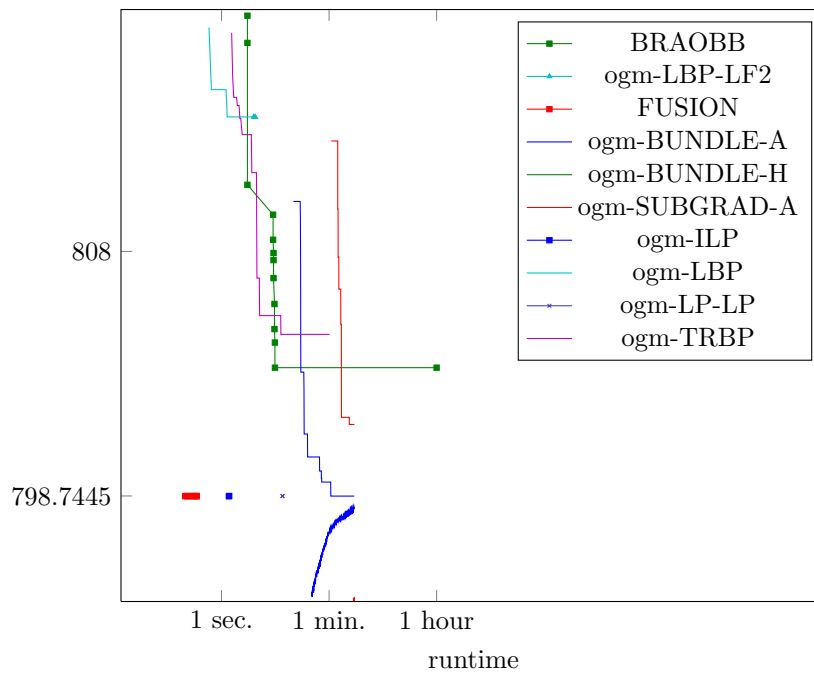


Figure 1226: Runtime results for the instance *gm150* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

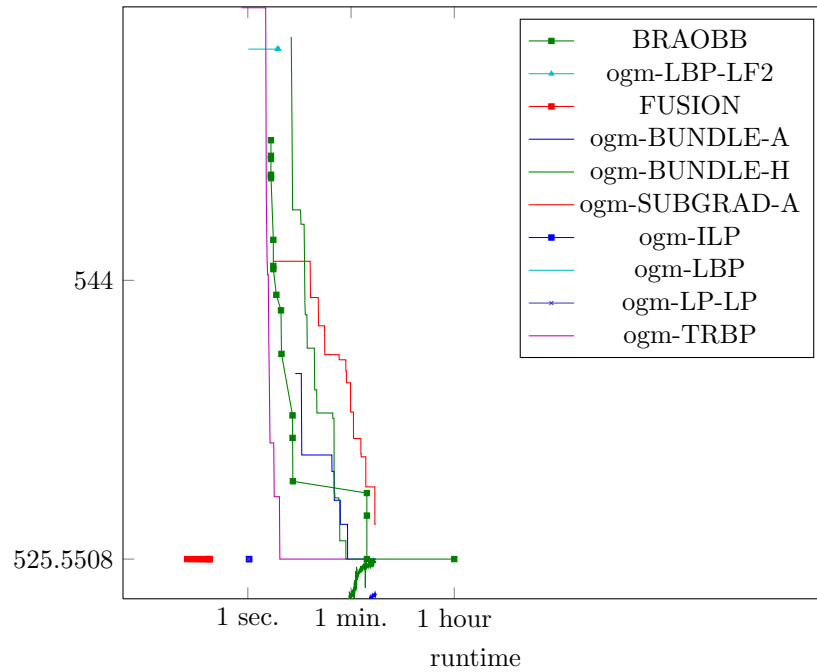


Figure 1227: Runtime results for the instance *gm151* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

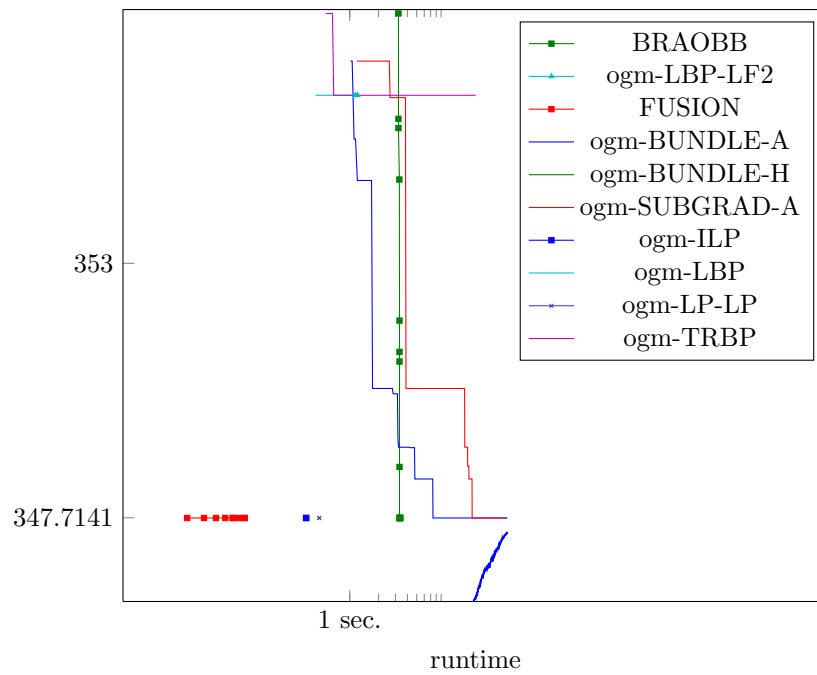


Figure 1228: Runtime results for the instance *gm152* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

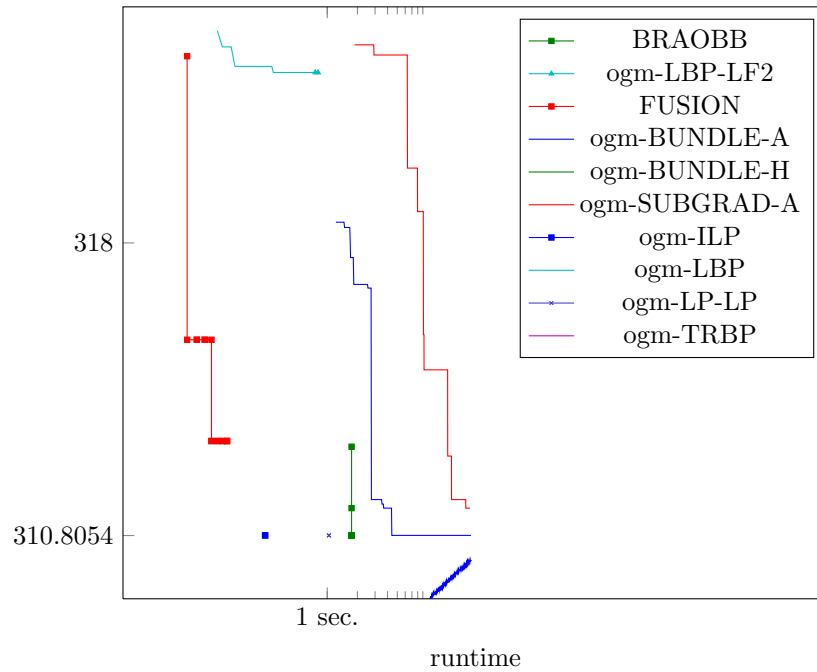


Figure 1229: Runtime results for the instance *gm153* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

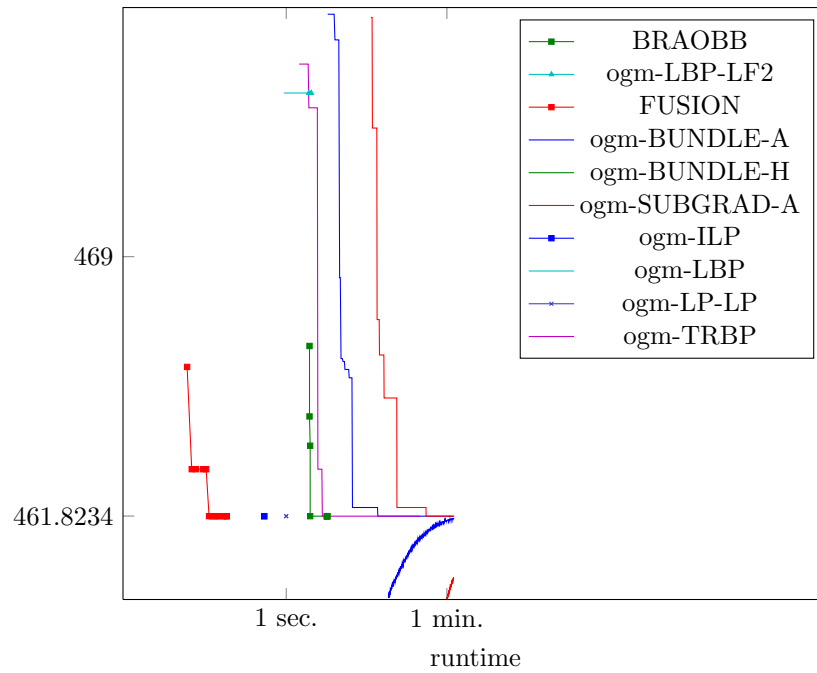


Figure 1230: Runtime results for the instance *gm154* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

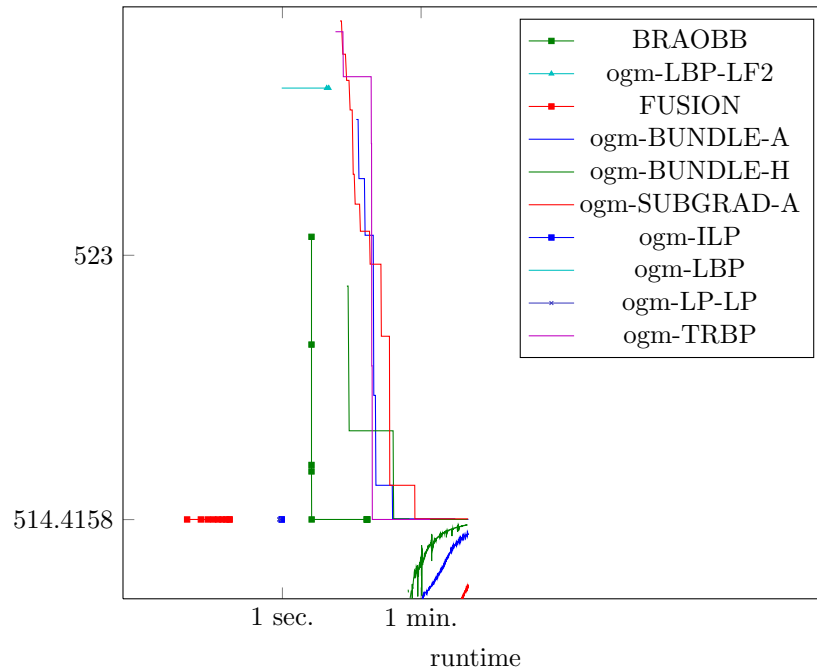


Figure 1231: Runtime results for the instance *gm155* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

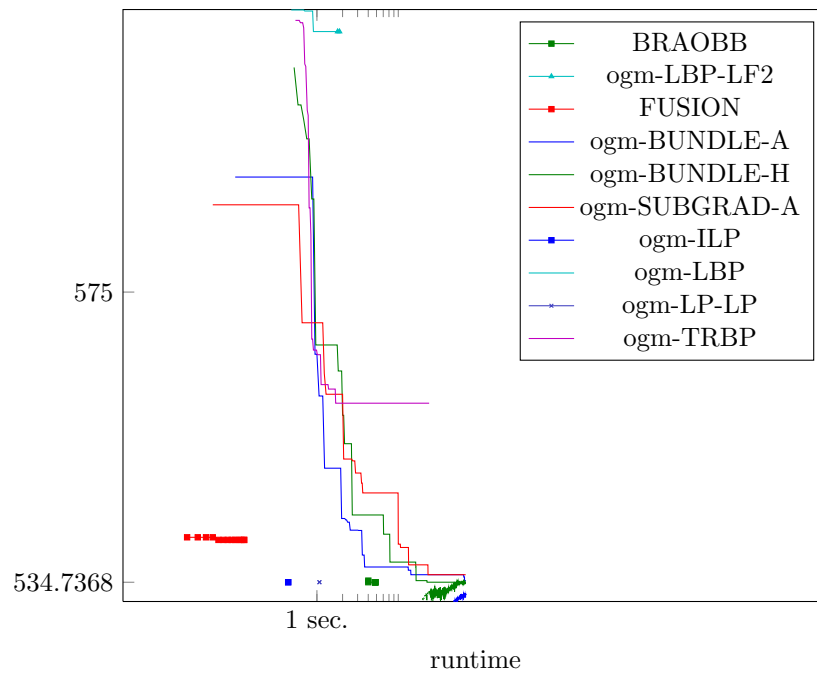


Figure 1232: Runtime results for the instance *gm156* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

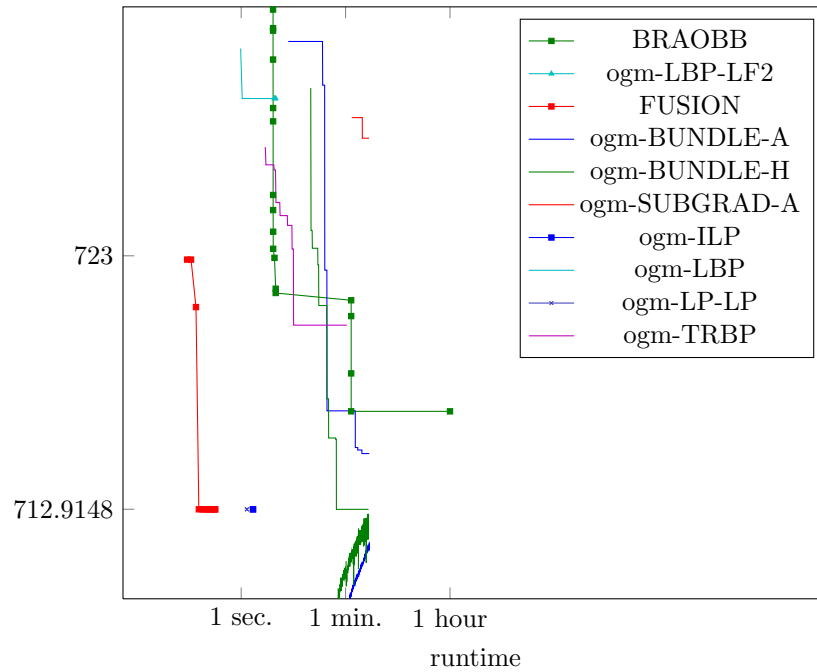


Figure 1233: Runtime results for the instance *gm157* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

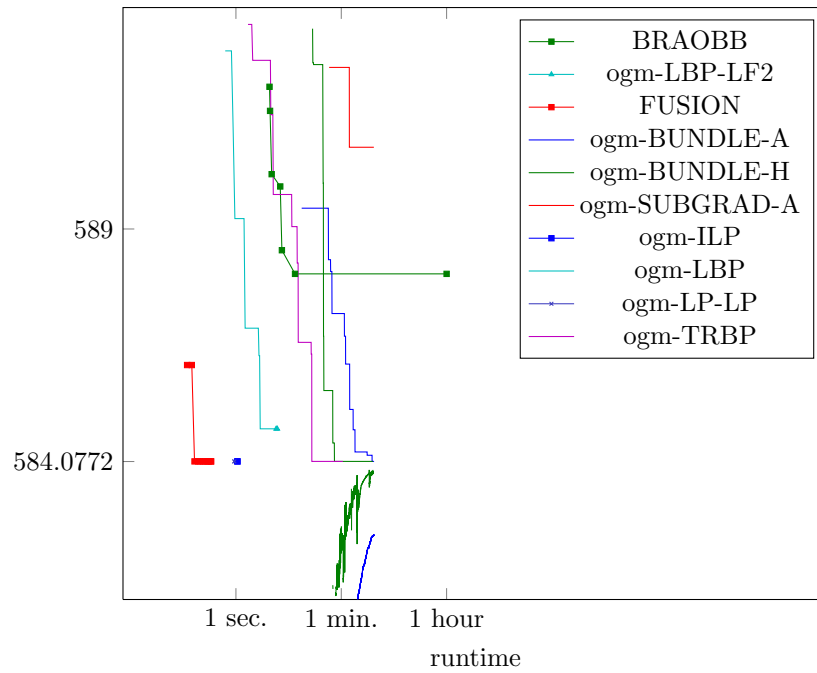


Figure 1234: Runtime results for the instance *gm158* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

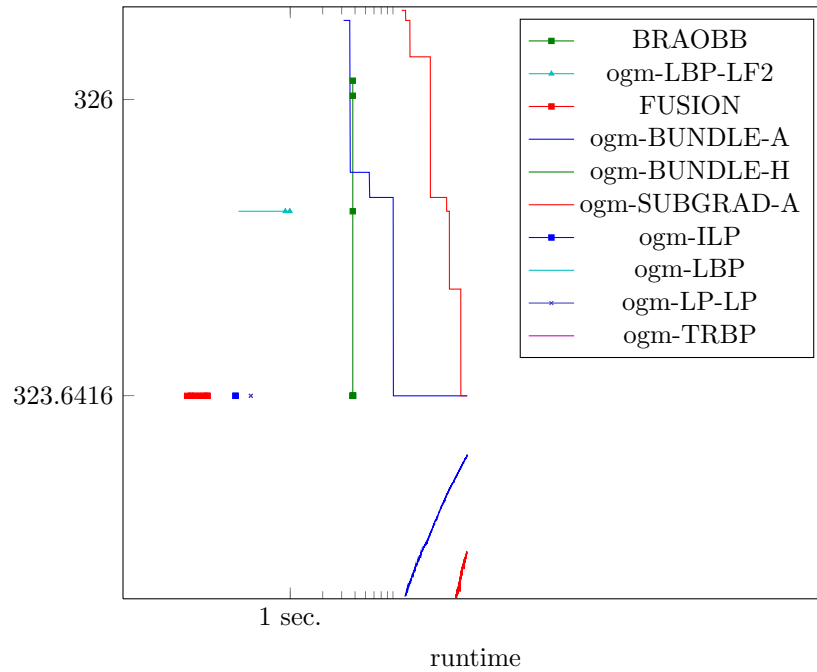


Figure 1235: Runtime results for the instance *gm159* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

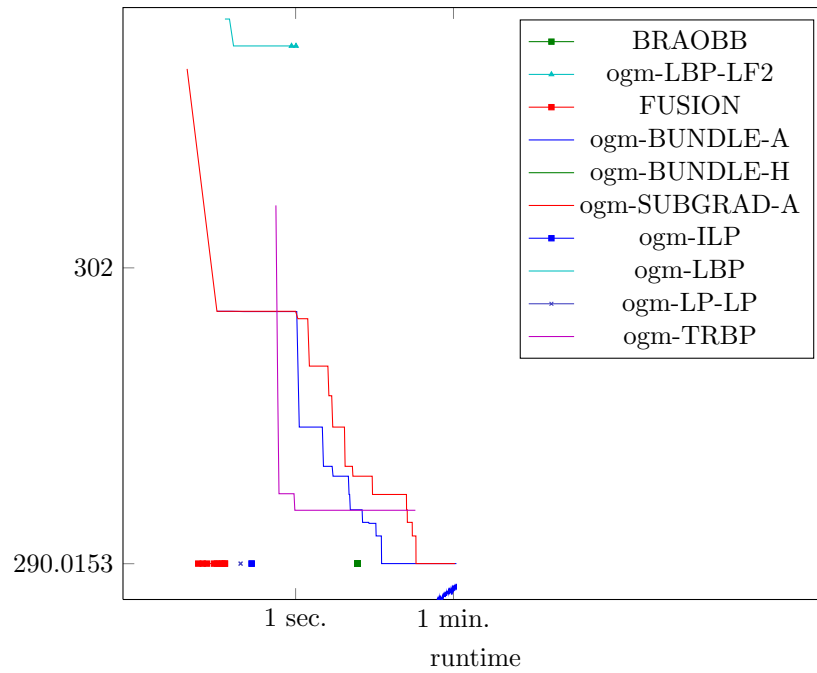


Figure 1236: Runtime results for the instance *gm15* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

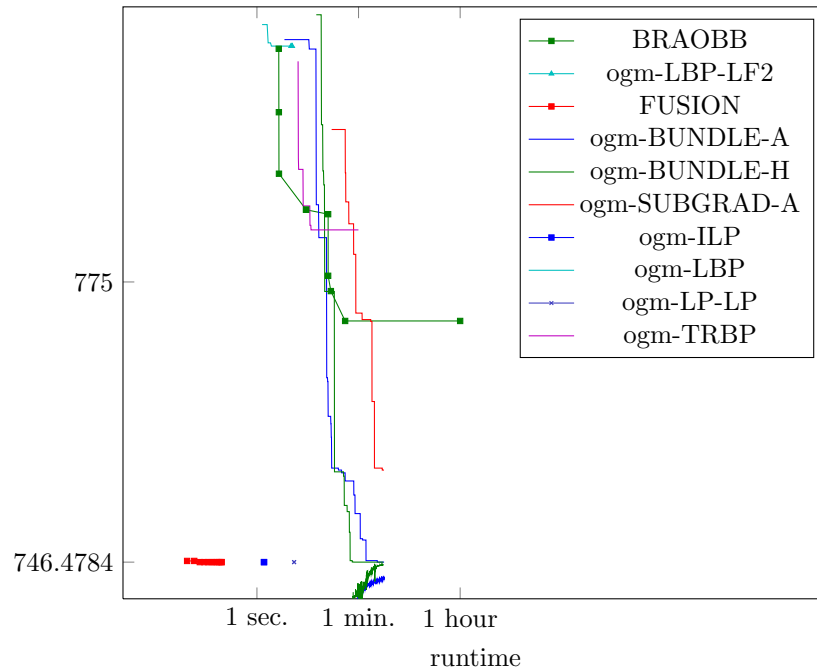


Figure 1237: Runtime results for the instance *gm160* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

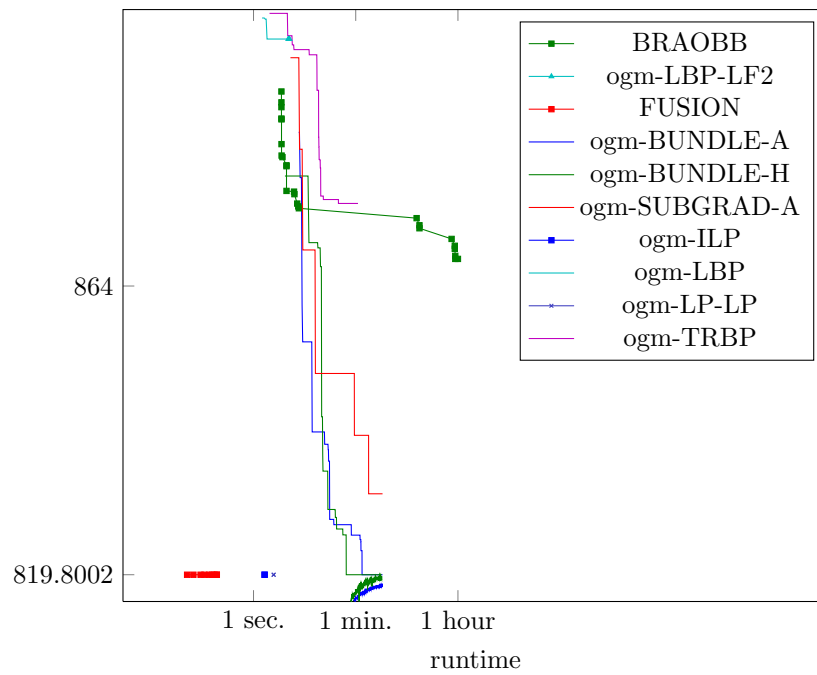


Figure 1238: Runtime results for the instance *gm161* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

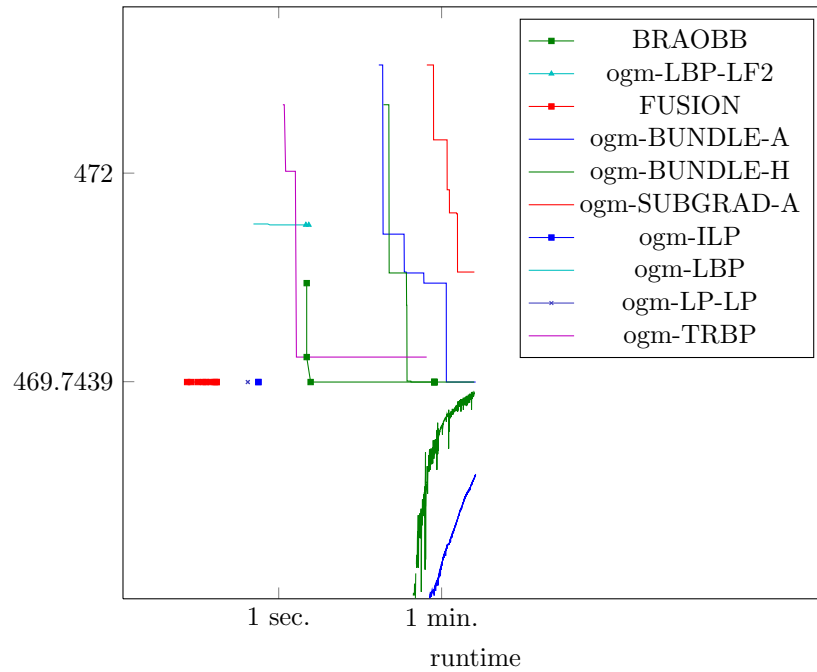


Figure 1239: Runtime results for the instance *gm162* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

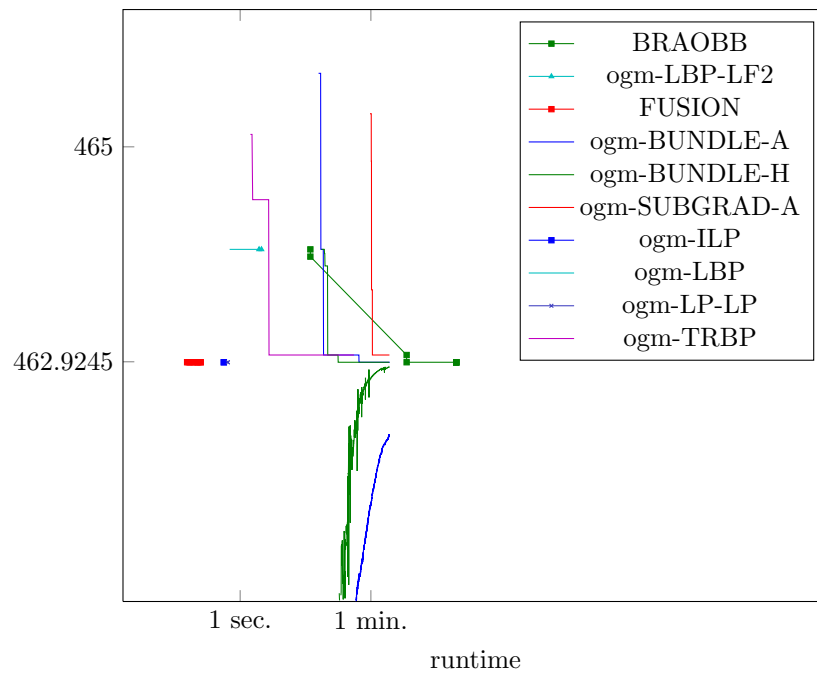


Figure 1240: Runtime results for the instance *gm163* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

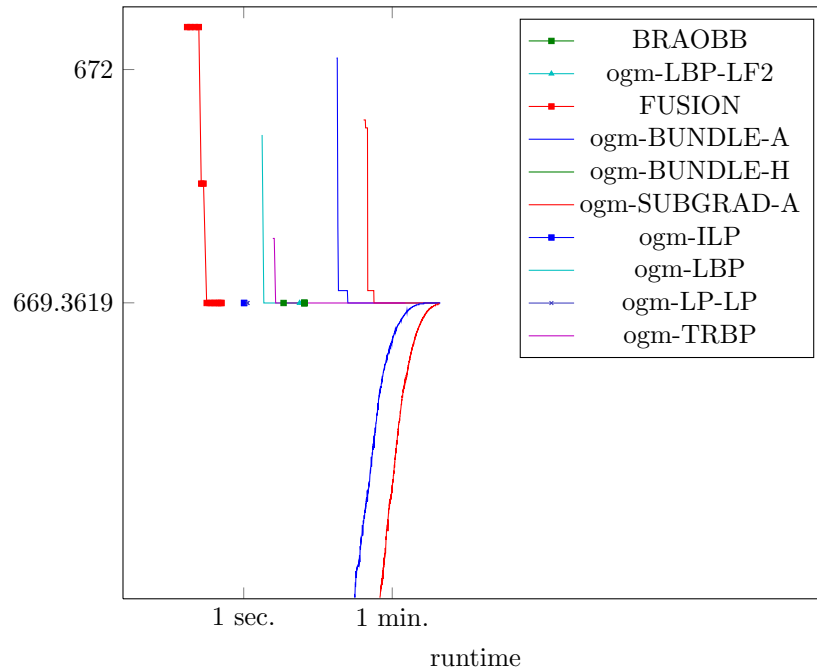


Figure 1241: Runtime results for the instance *gm164* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

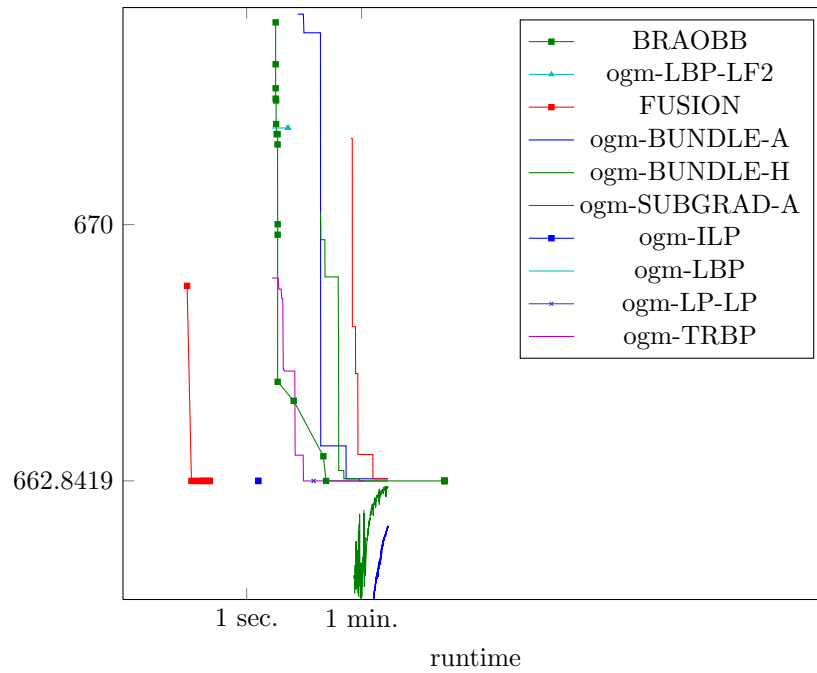


Figure 1242: Runtime results for the instance *gm165* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

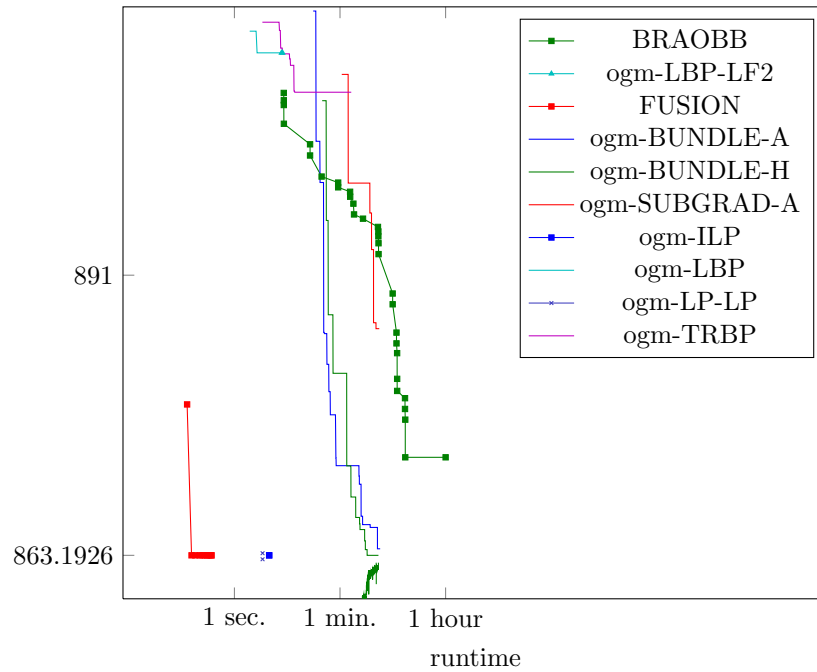


Figure 1243: Runtime results for the instance *gm166* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

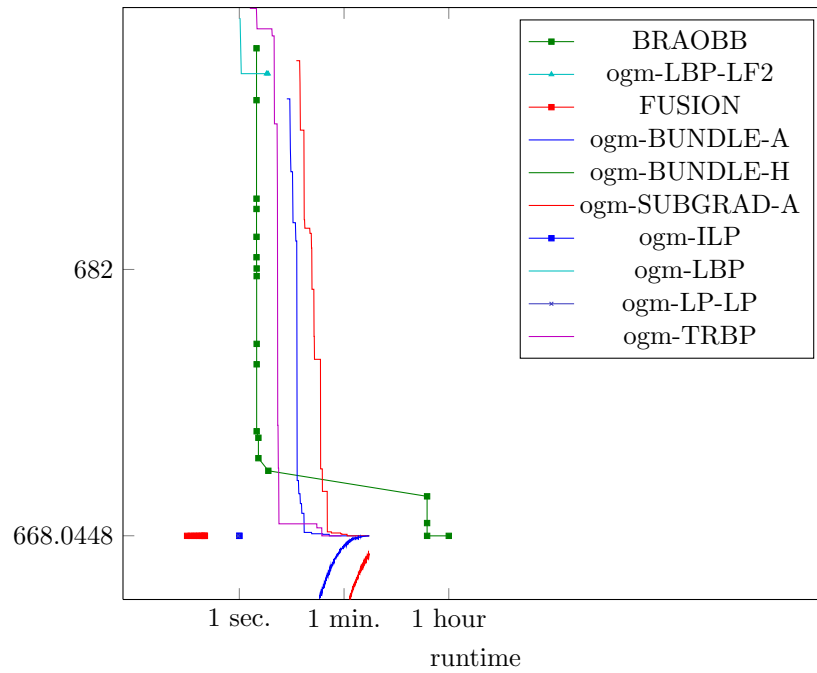


Figure 1244: Runtime results for the instance *gm167* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

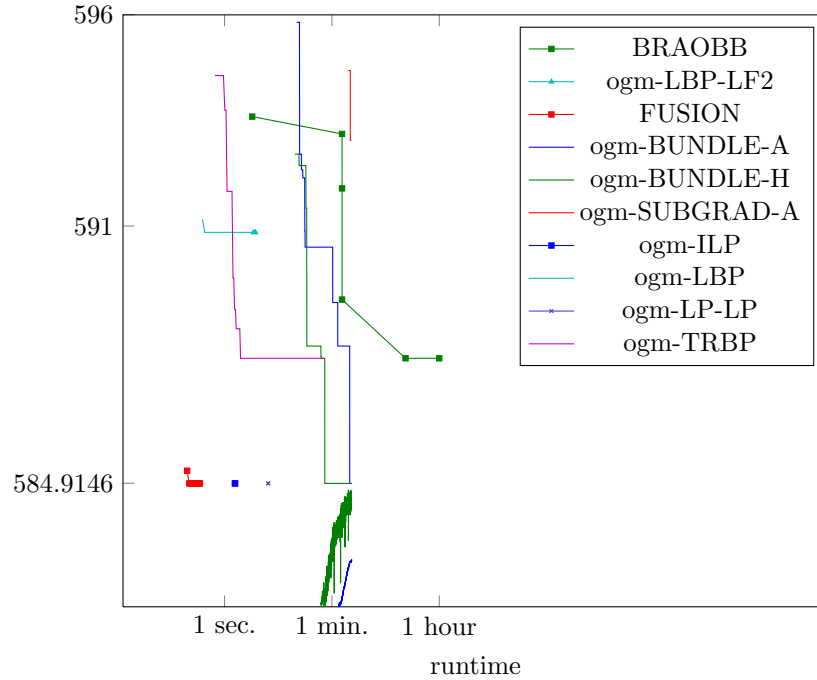


Figure 1245: Runtime results for the instance *gm168* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

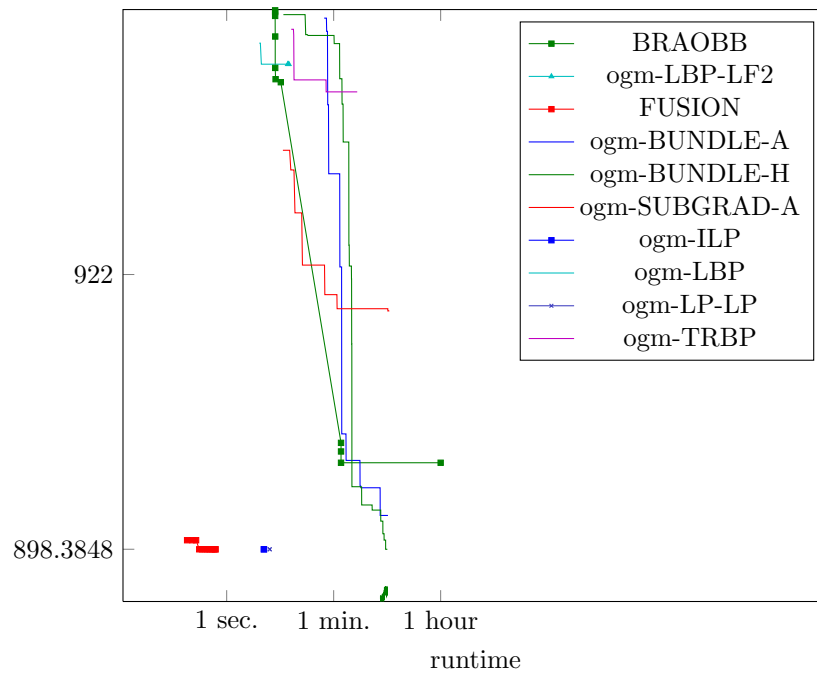


Figure 1246: Runtime results for the instance *gm169* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

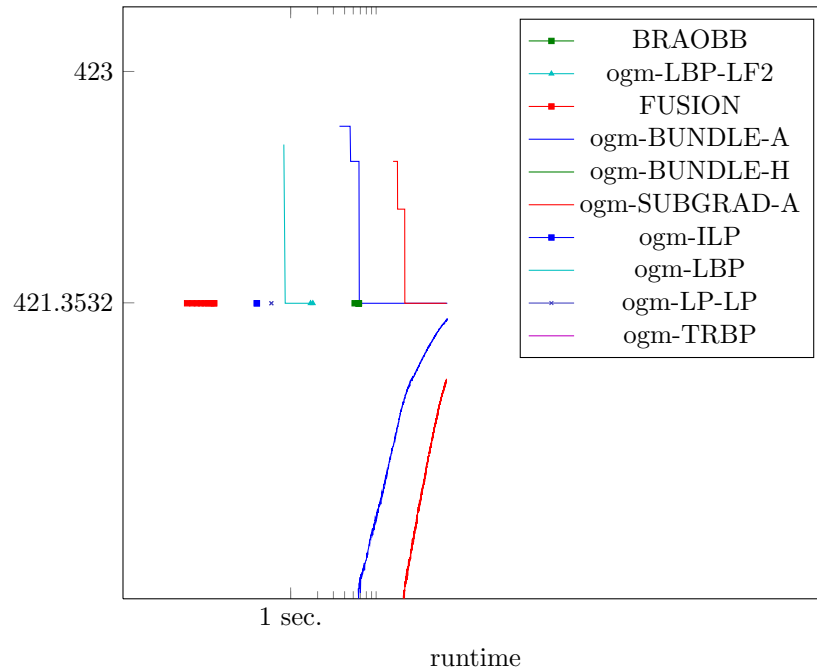


Figure 1247: Runtime results for the instance *gm16* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

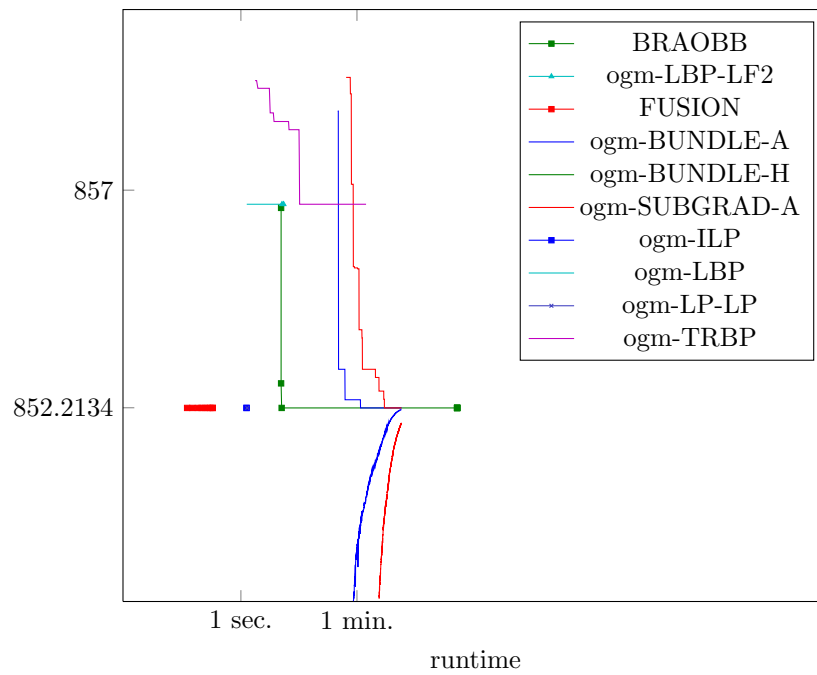


Figure 1248: Runtime results for the instance *gm170* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

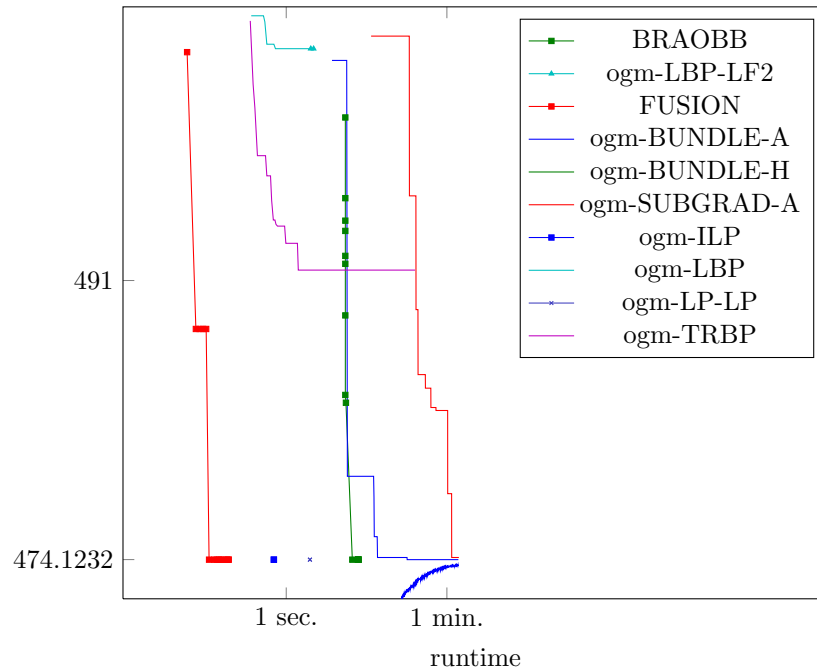


Figure 1249: Runtime results for the instance *gm171* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

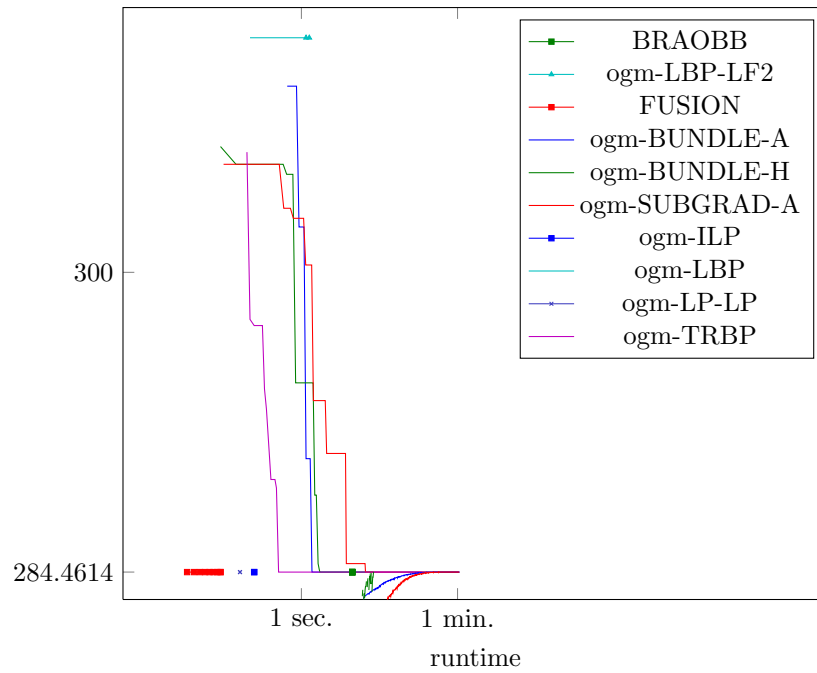


Figure 1250: Runtime results for the instance *gm172* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

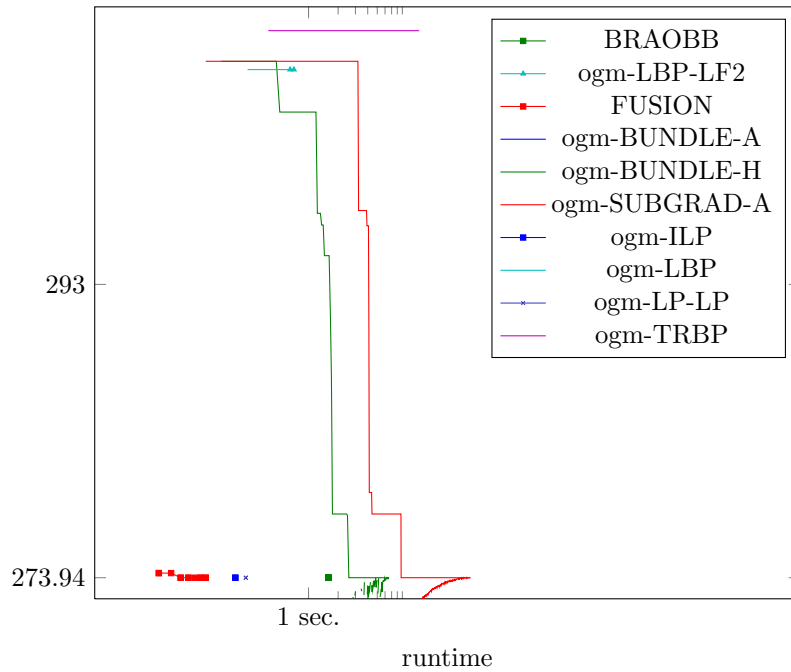


Figure 1251: Runtime results for the instance *gm173* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

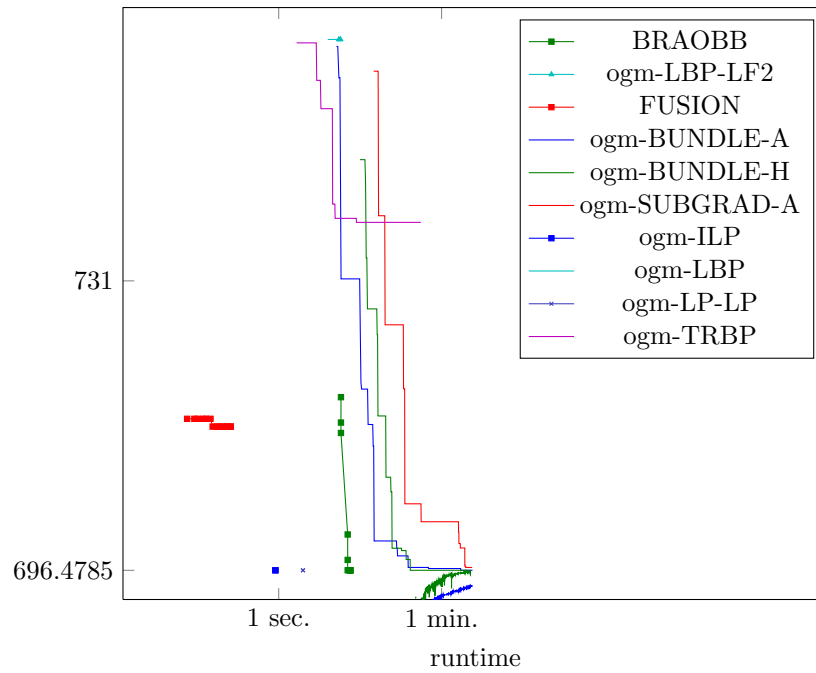


Figure 1252: Runtime results for the instance *gm174* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

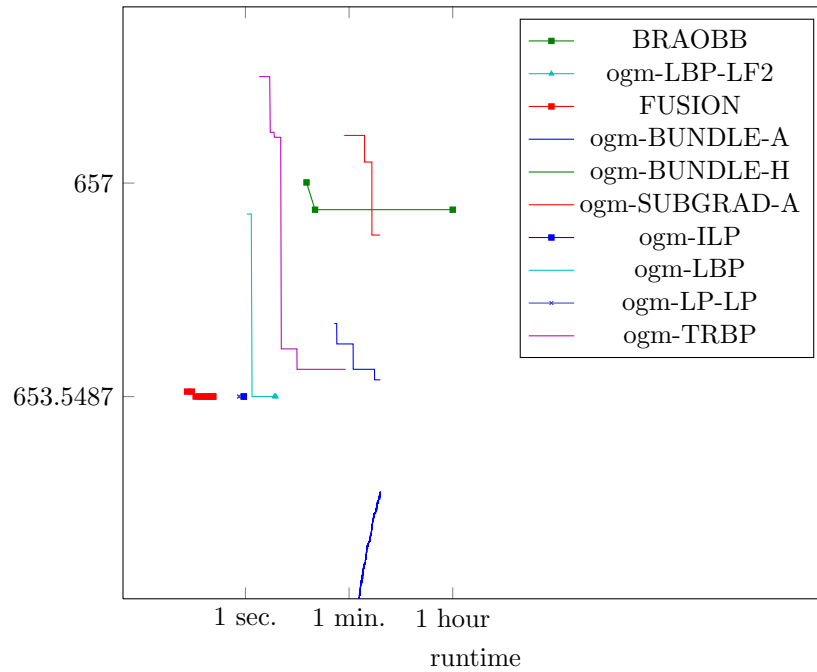


Figure 1253: Runtime results for the instance *gm175* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

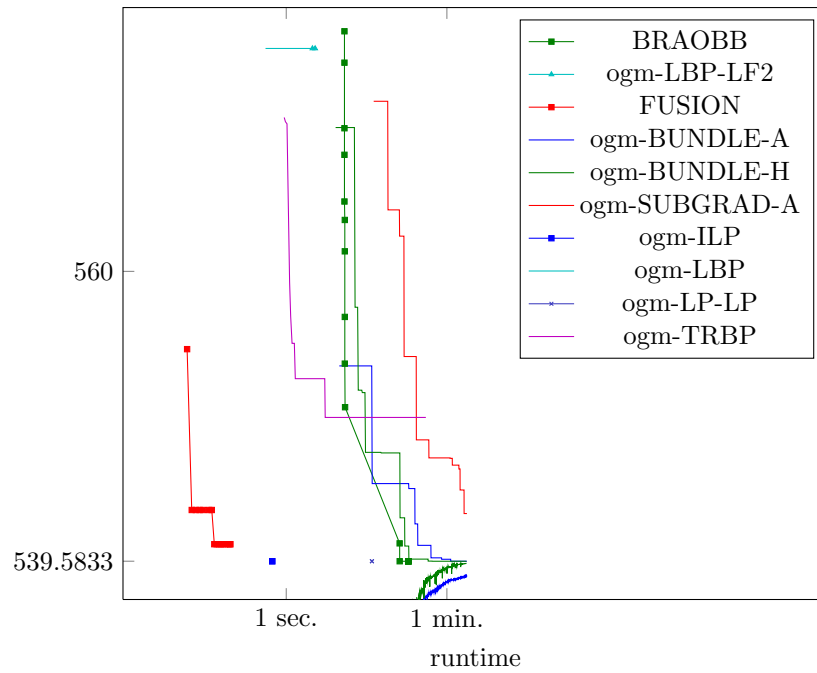


Figure 1254: Runtime results for the instance *gm176* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

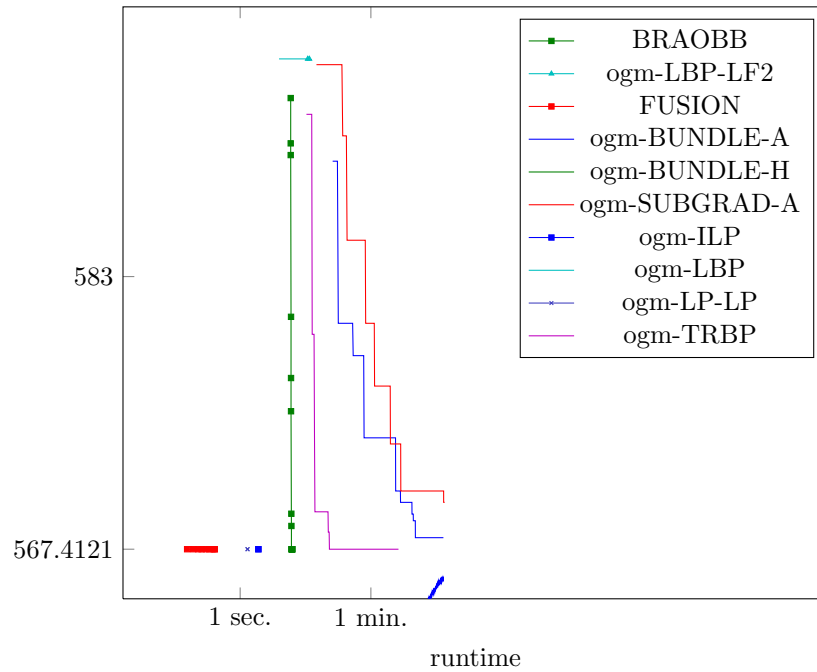


Figure 1255: Runtime results for the instance *gm177* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

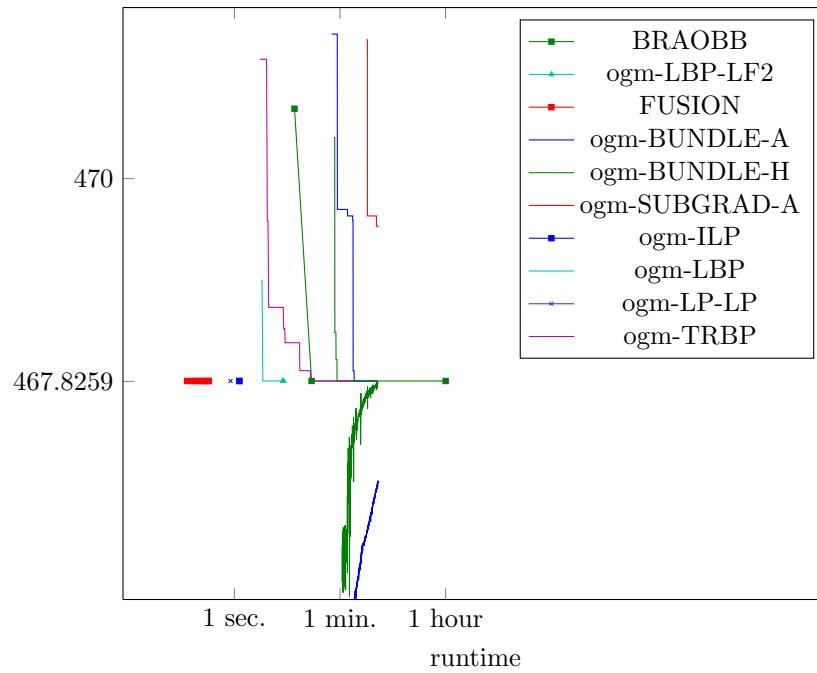


Figure 1256: Runtime results for the instance *gm178* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

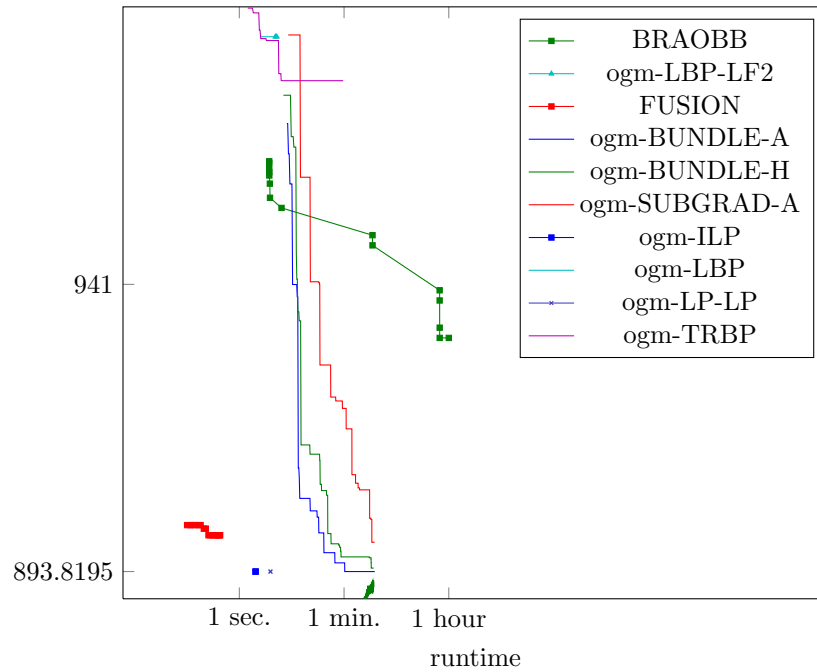


Figure 1257: Runtime results for the instance *gm179* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

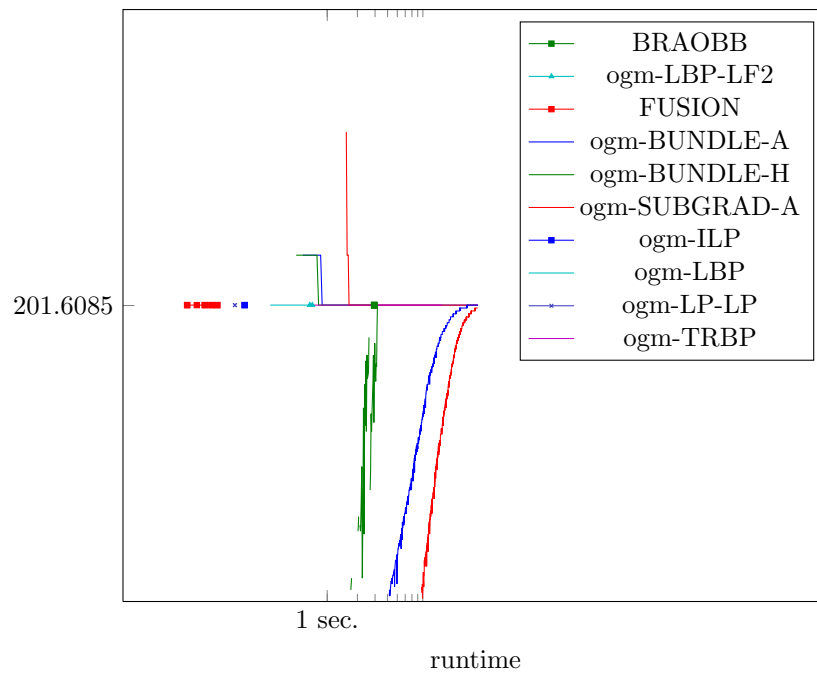


Figure 1258: Runtime results for the instance *gm17* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

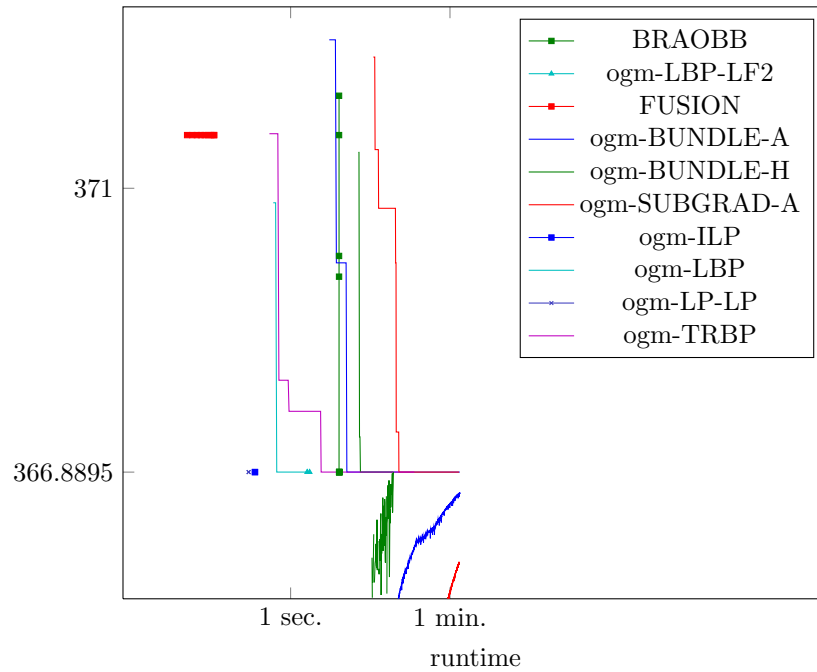


Figure 1259: Runtime results for the instance *gm180* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

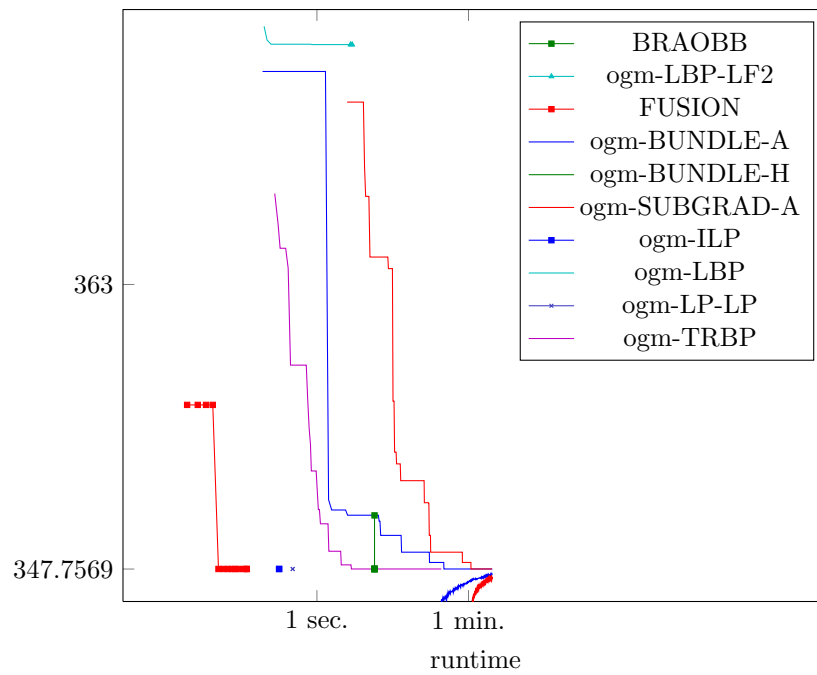


Figure 1260: Runtime results for the instance *gm181* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

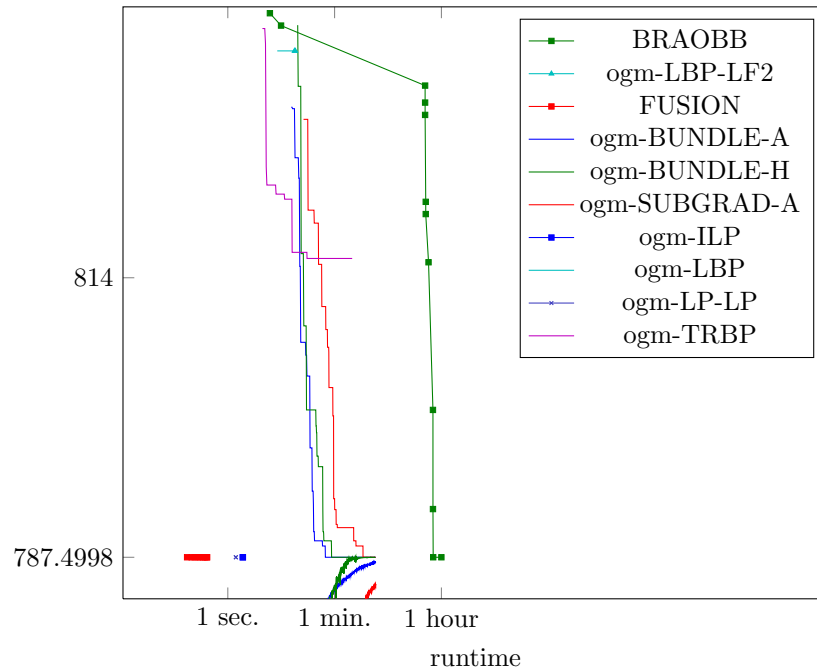


Figure 1261: Runtime results for the instance *gm182* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

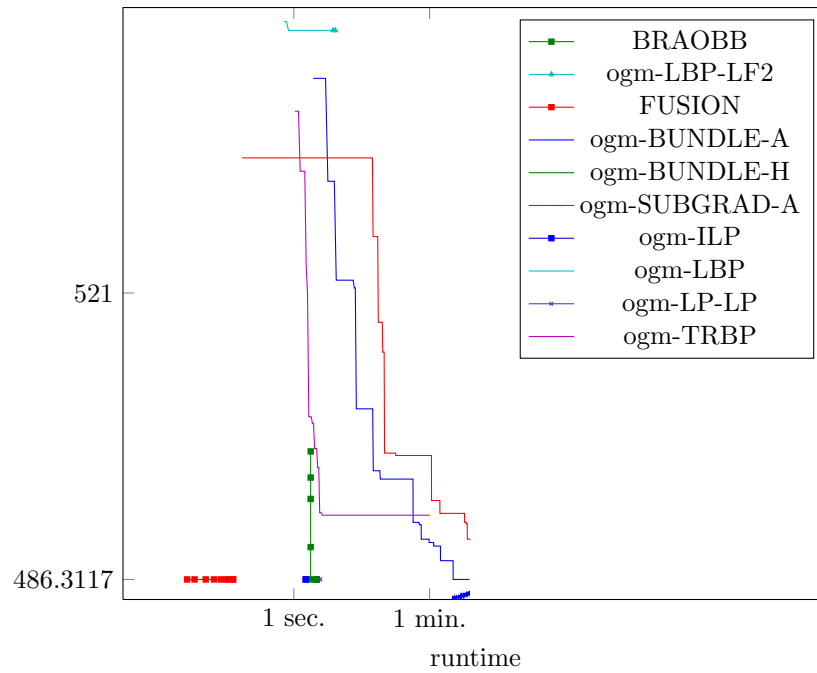


Figure 1262: Runtime results for the instance *gm183* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

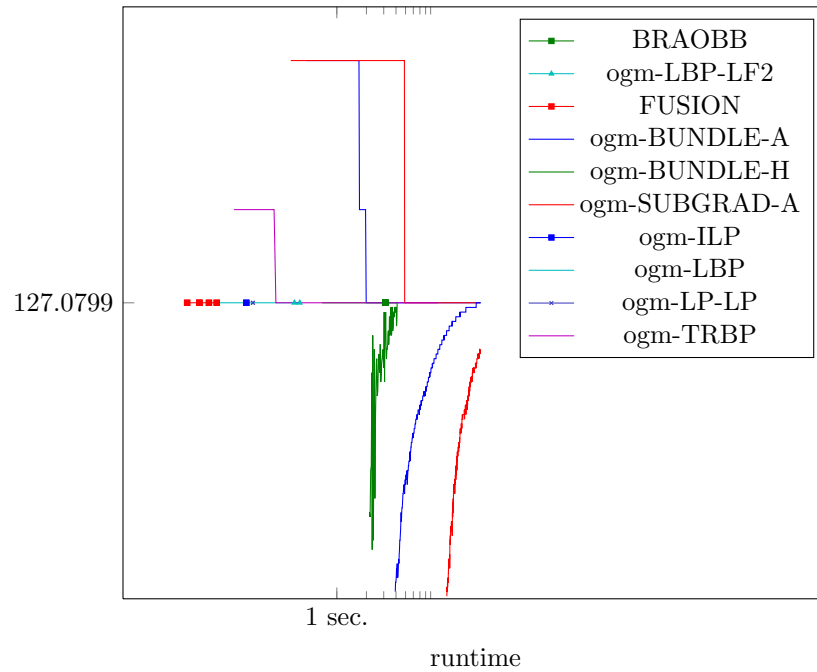


Figure 1263: Runtime results for the instance *gm184* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

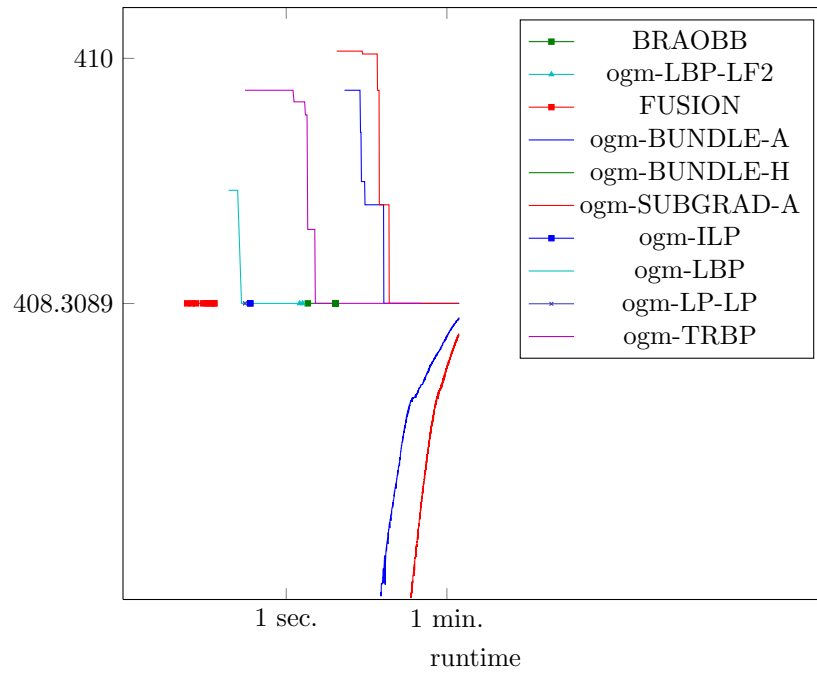


Figure 1264: Runtime results for the instance *gm185* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

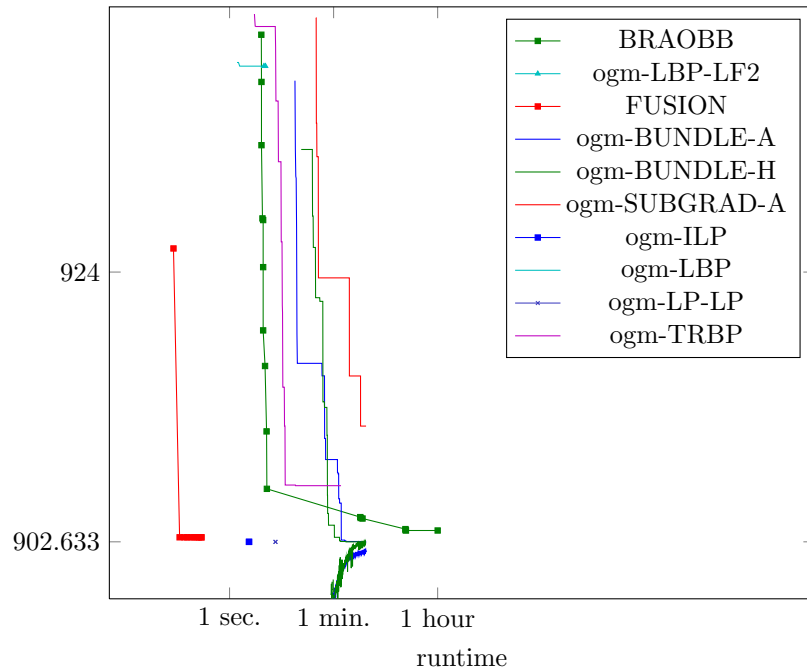


Figure 1265: Runtime results for the instance *gm186* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

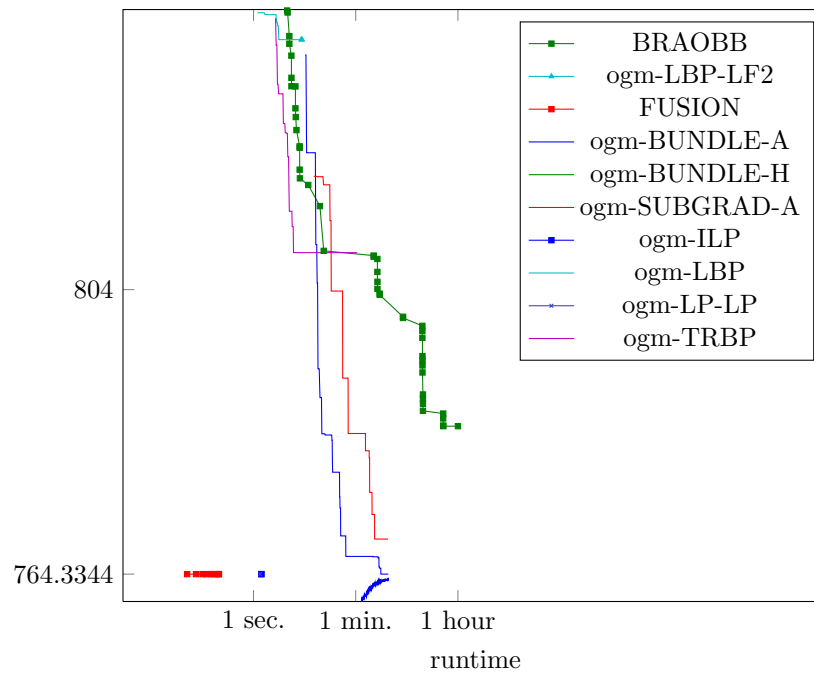


Figure 1266: Runtime results for the instance *gm187* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

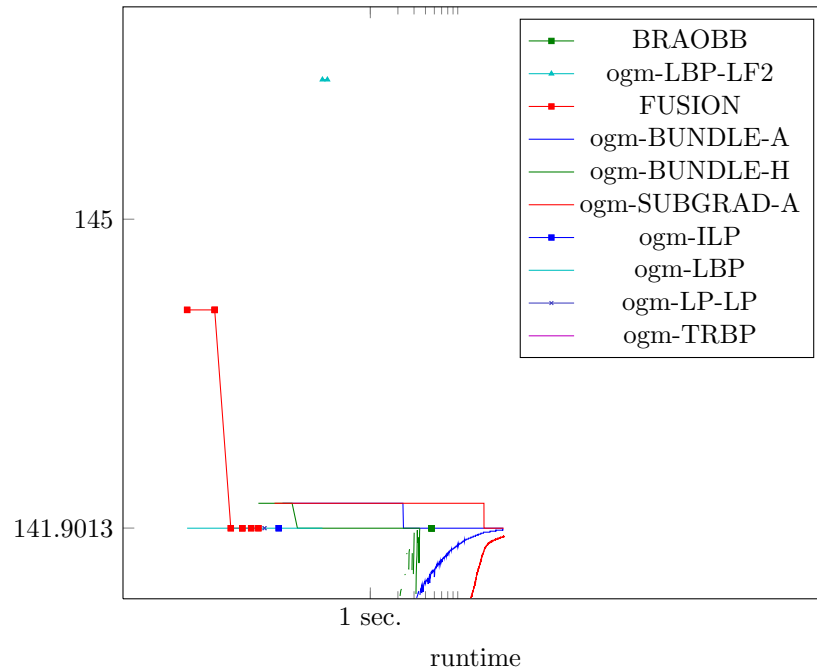


Figure 1267: Runtime results for the instance *gm188* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

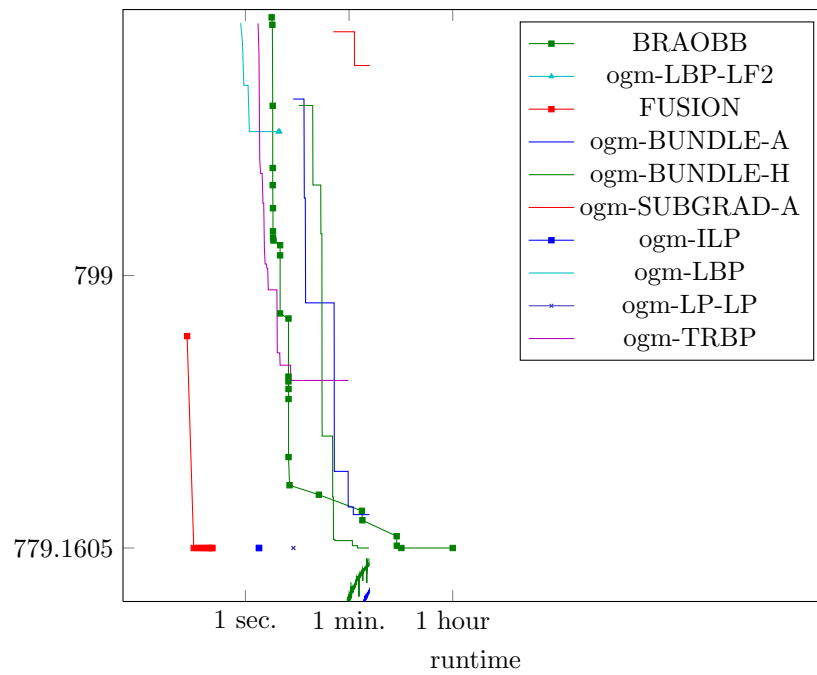


Figure 1268: Runtime results for the instance *gm189* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

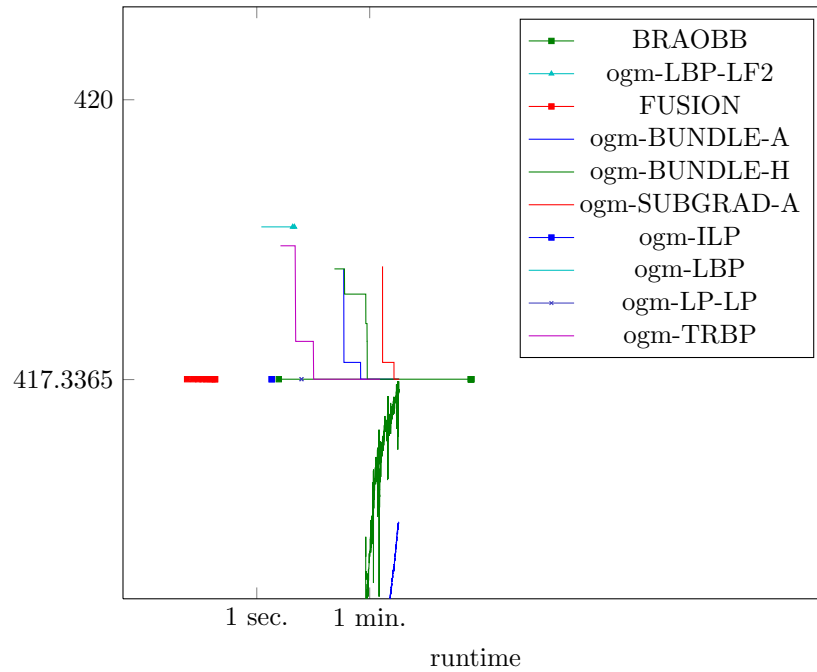


Figure 1269: Runtime results for the instance *gm18* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

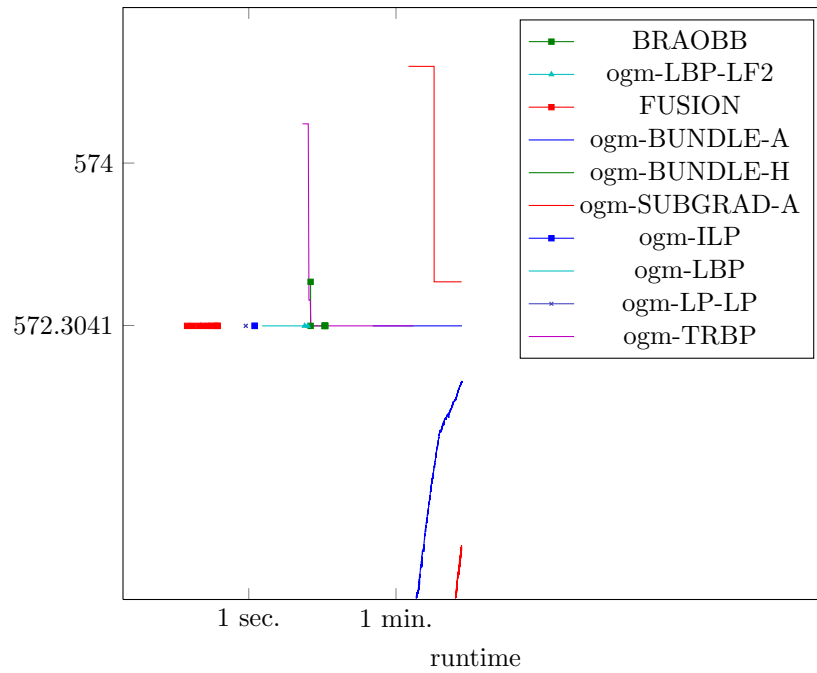


Figure 1270: Runtime results for the instance *gm190* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

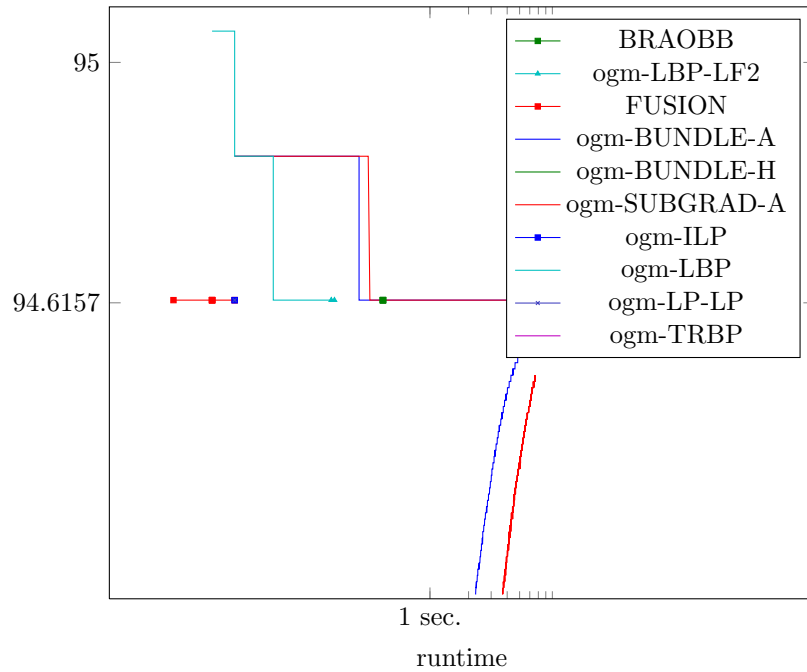


Figure 1271: Runtime results for the instance *gm191* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

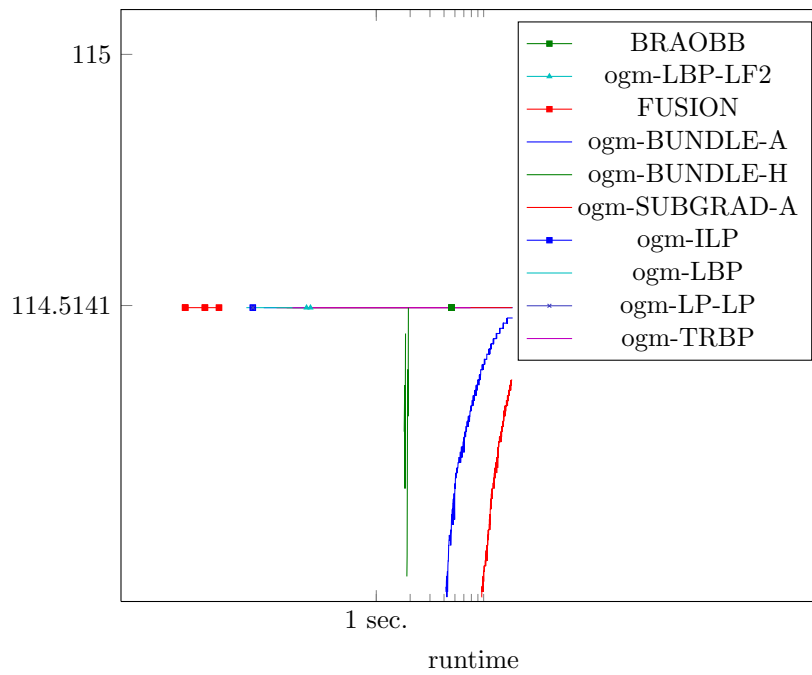


Figure 1272: Runtime results for the instance *gm192* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

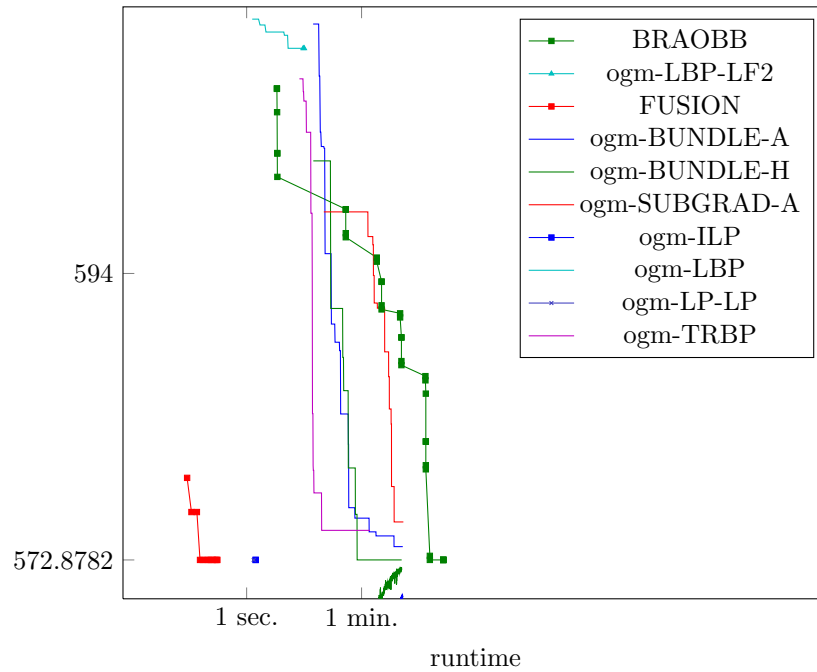


Figure 1273: Runtime results for the instance *gm193* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

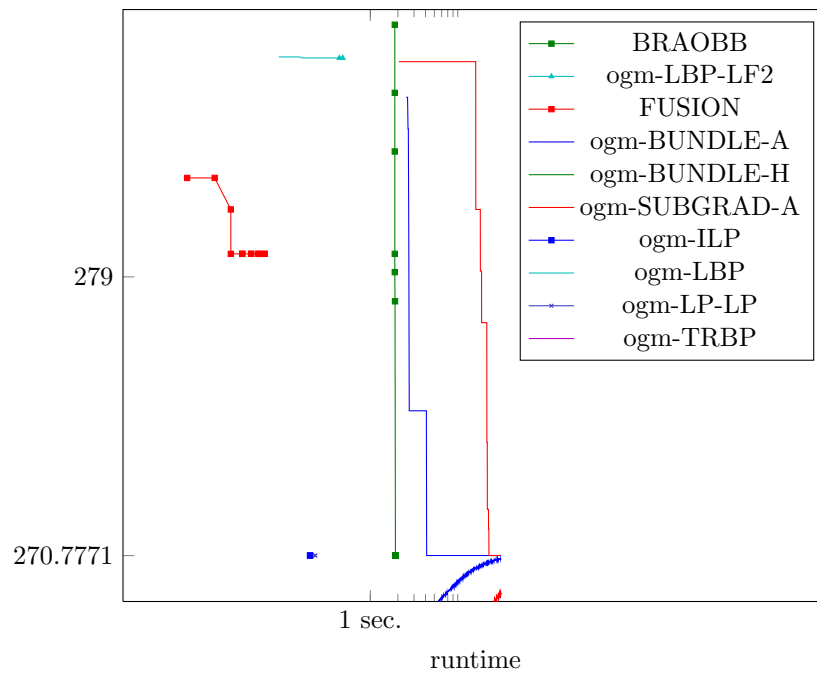


Figure 1274: Runtime results for the instance *gm194* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

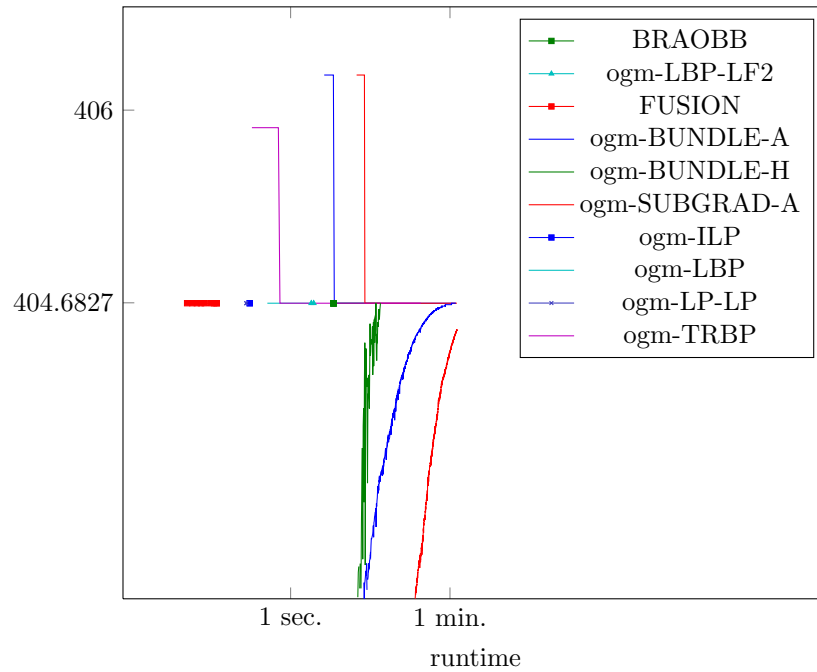


Figure 1275: Runtime results for the instance *gm195* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

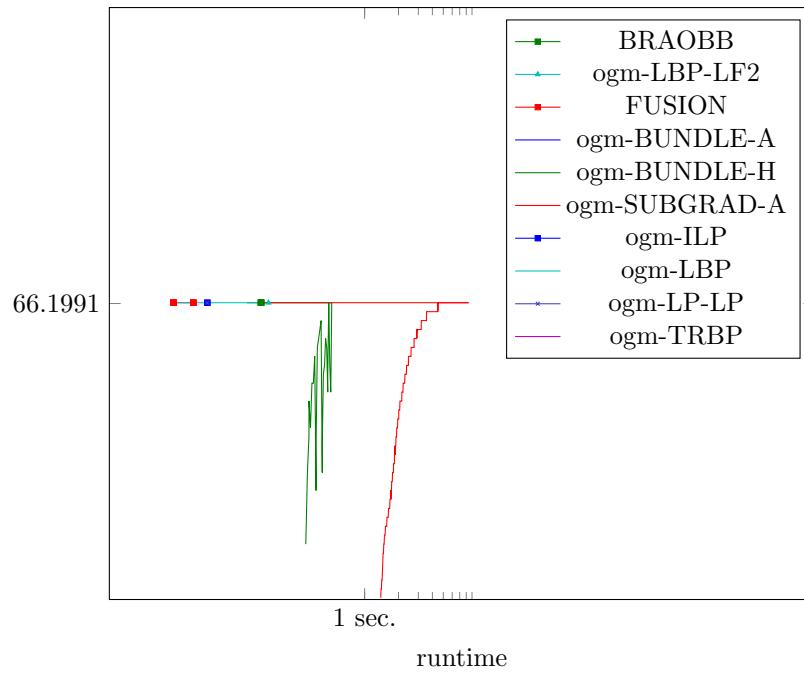


Figure 1276: Runtime results for the instance *gm196* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

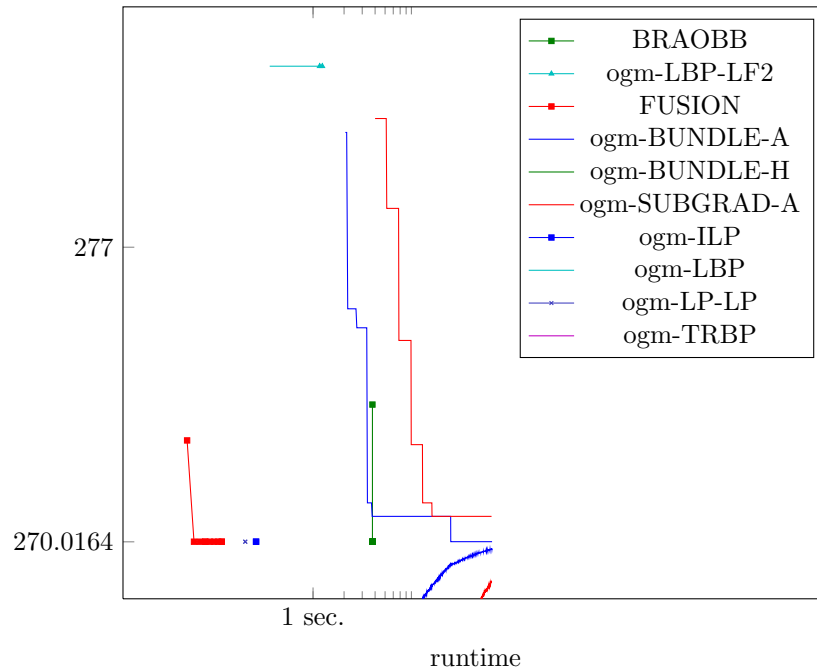


Figure 1277: Runtime results for the instance *gm197* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

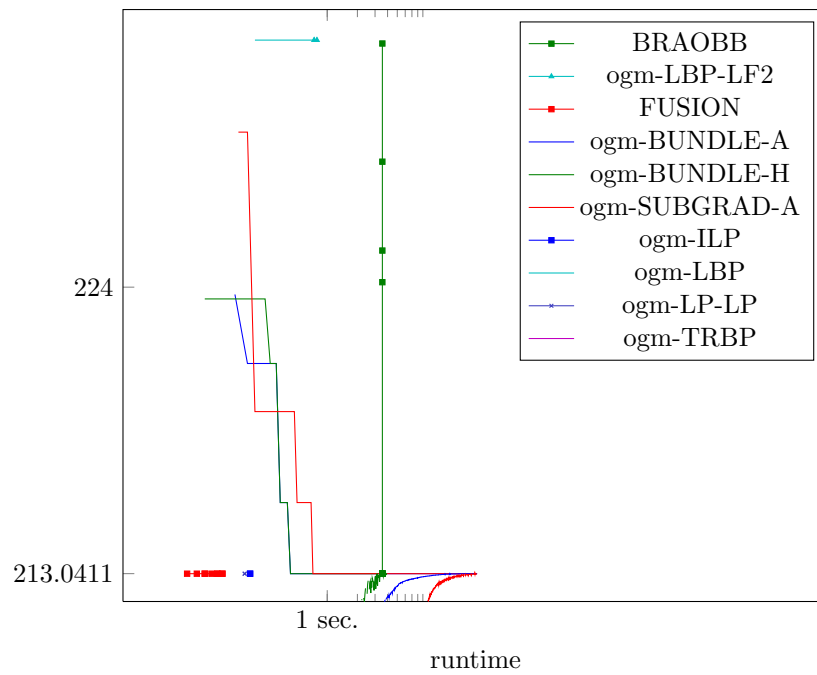


Figure 1278: Runtime results for the instance *gm198* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

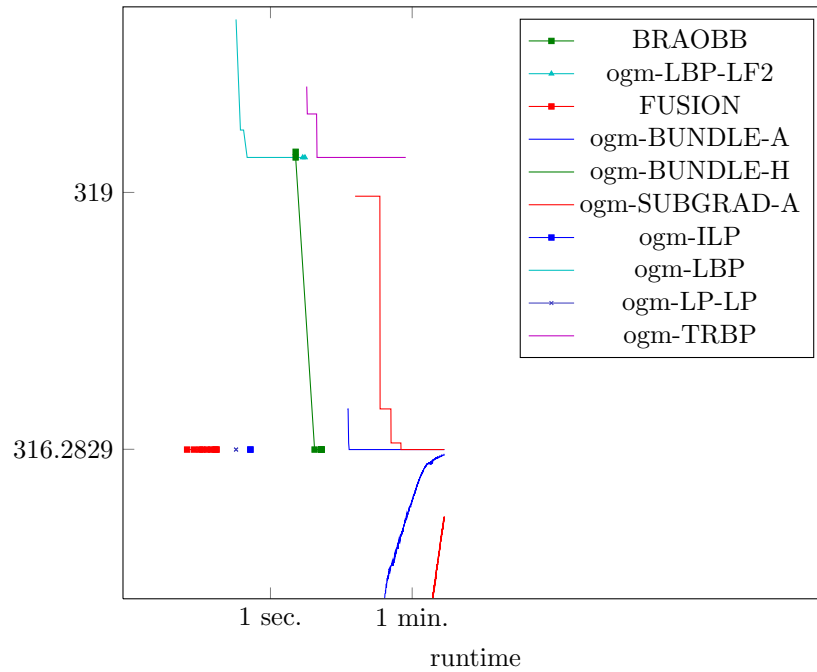


Figure 1279: Runtime results for the instance *gm199* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

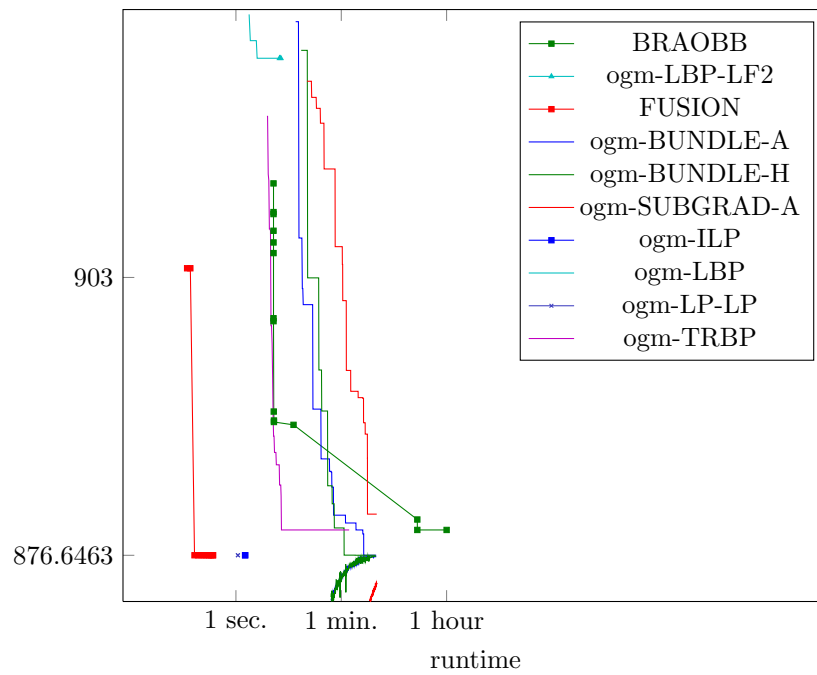


Figure 1280: Runtime results for the instance *gm19* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

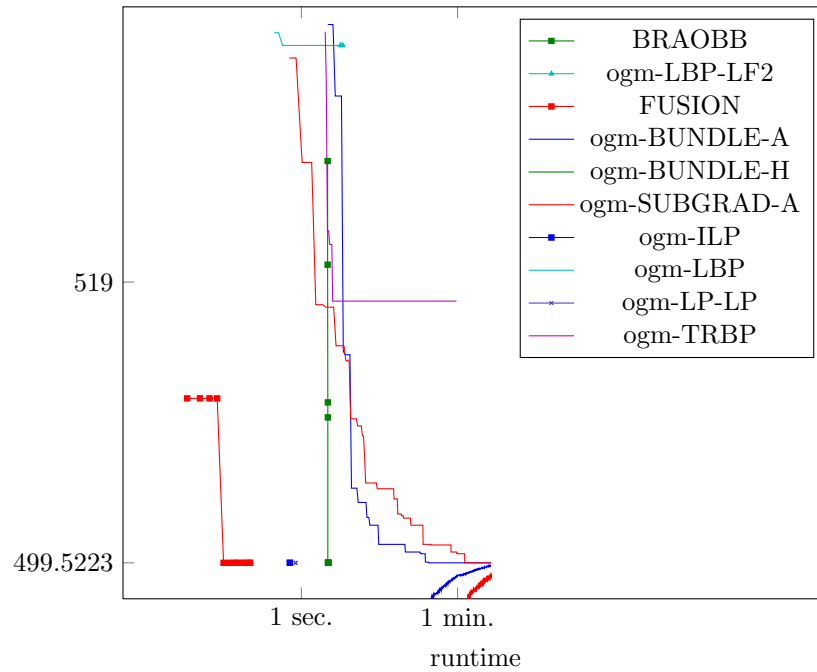


Figure 1281: Runtime results for the instance *gm1* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

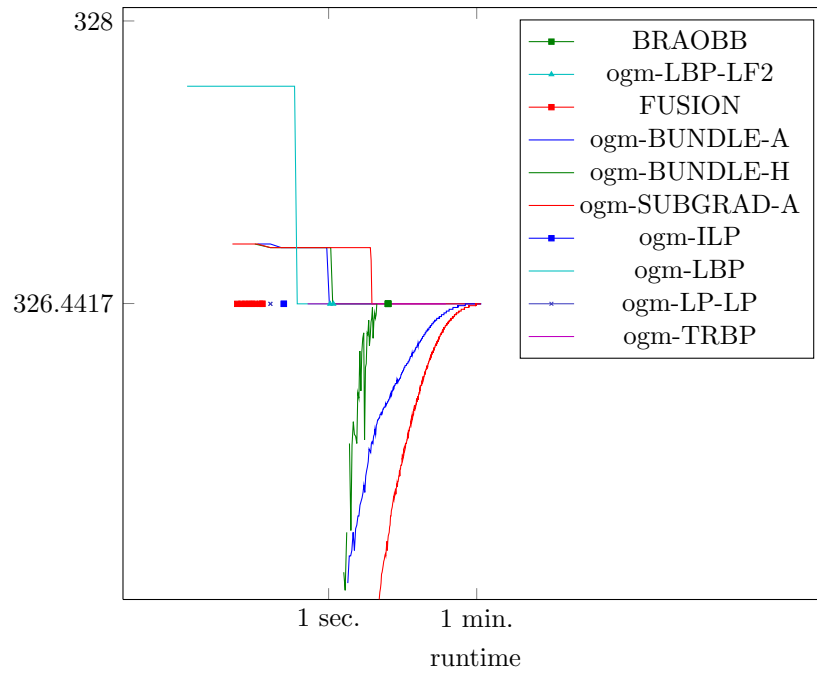


Figure 1282: Runtime results for the instance *gm200* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

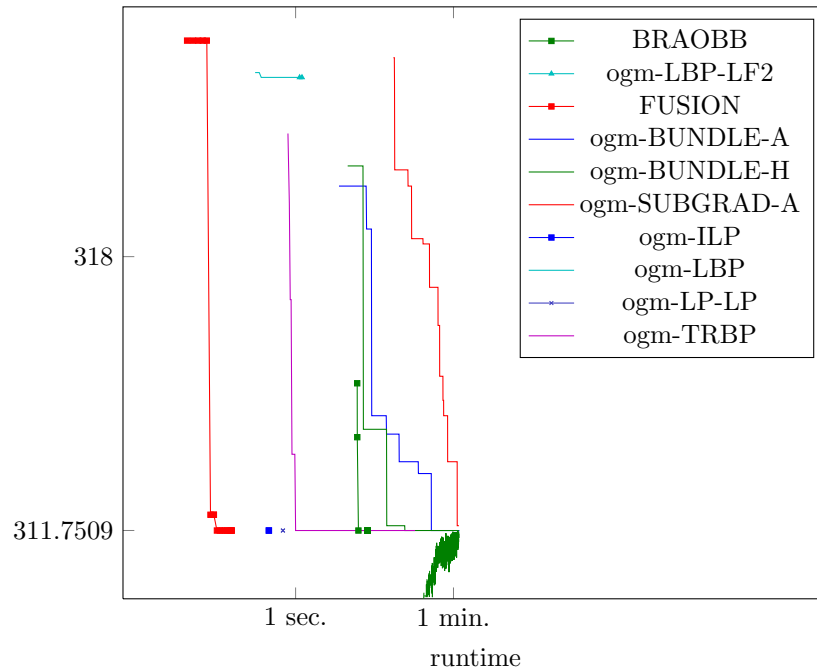


Figure 1283: Runtime results for the instance *gm201* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

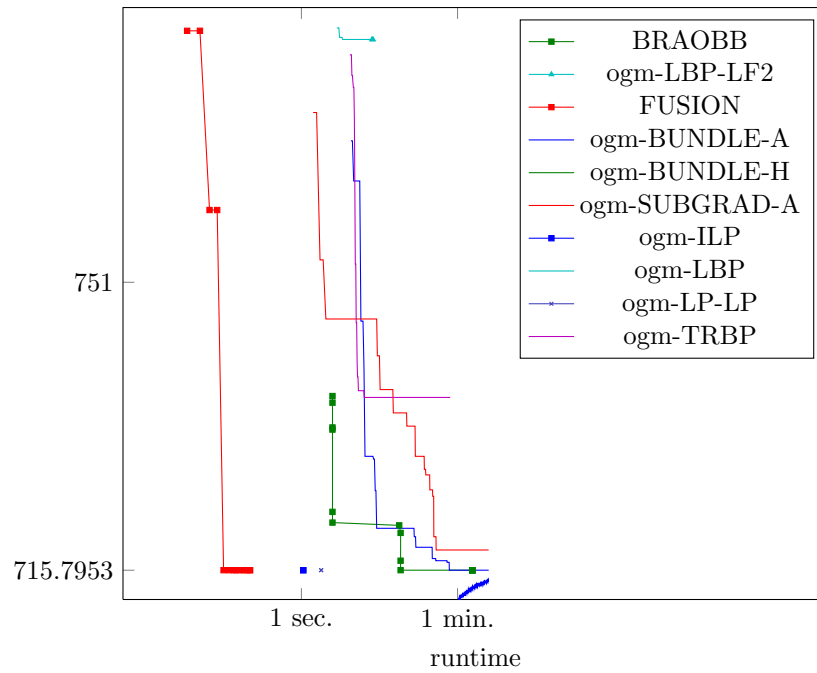


Figure 1284: Runtime results for the instance *gm202* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

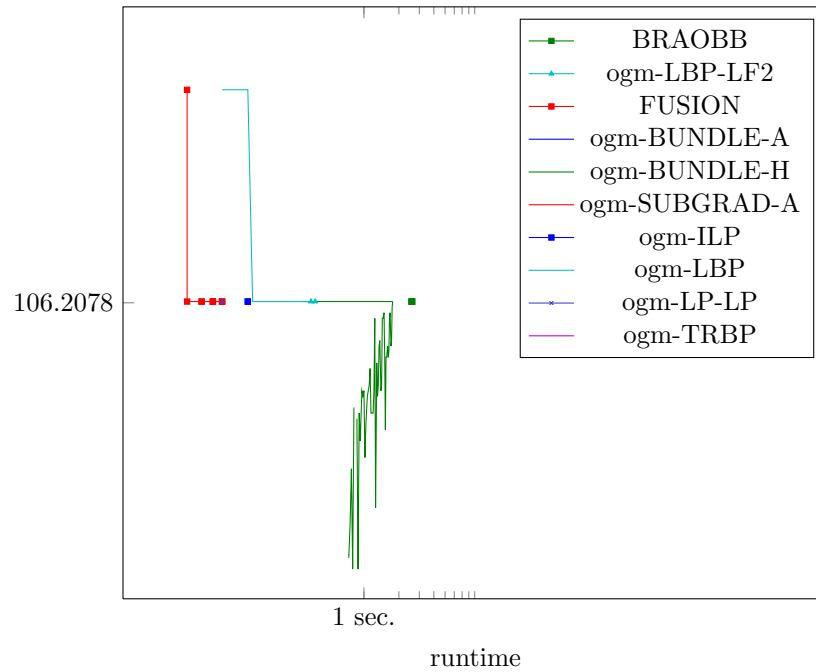


Figure 1285: Runtime results for the instance *gm203* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

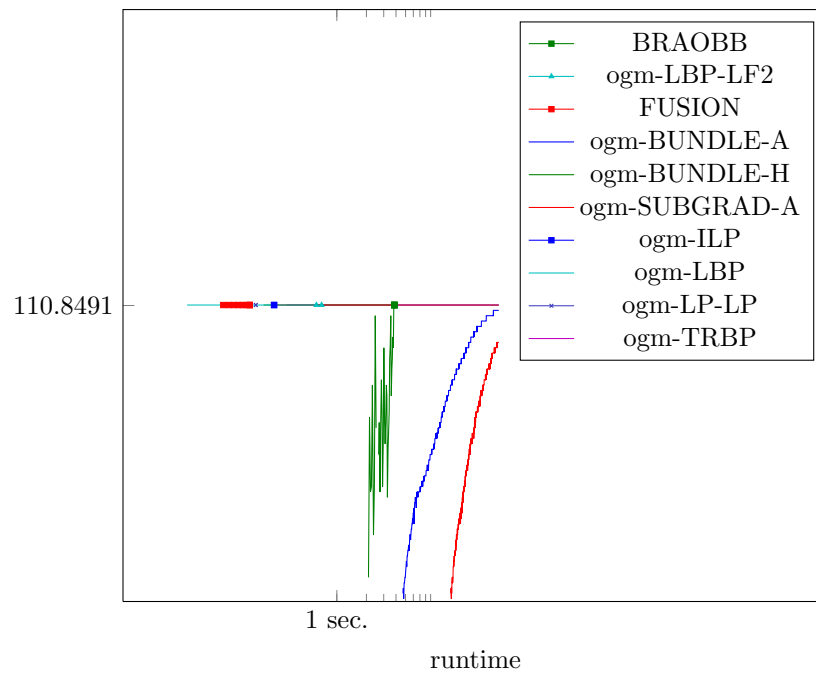


Figure 1286: Runtime results for the instance *gm204* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

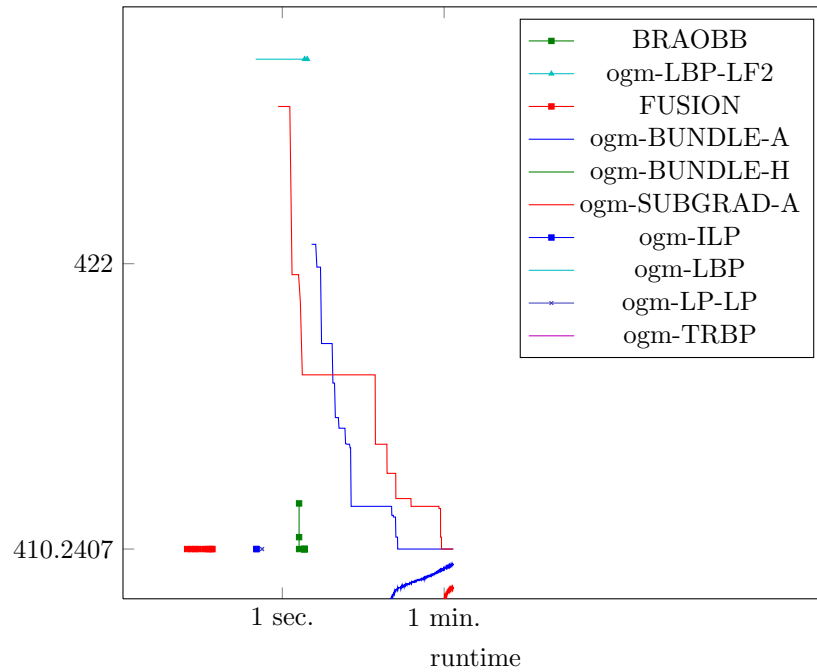


Figure 1287: Runtime results for the instance *gm205* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

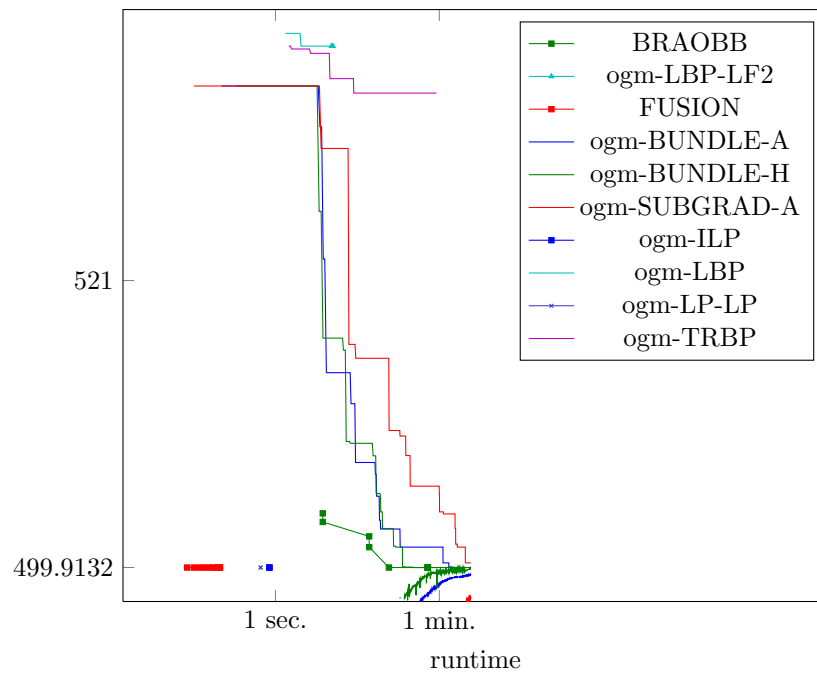


Figure 1288: Runtime results for the instance *gm206* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

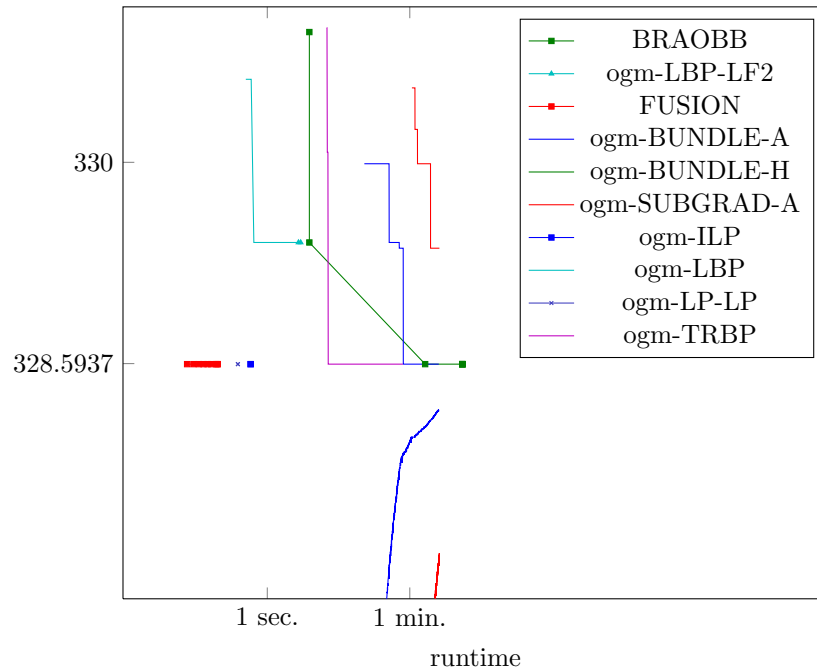


Figure 1289: Runtime results for the instance *gm207* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

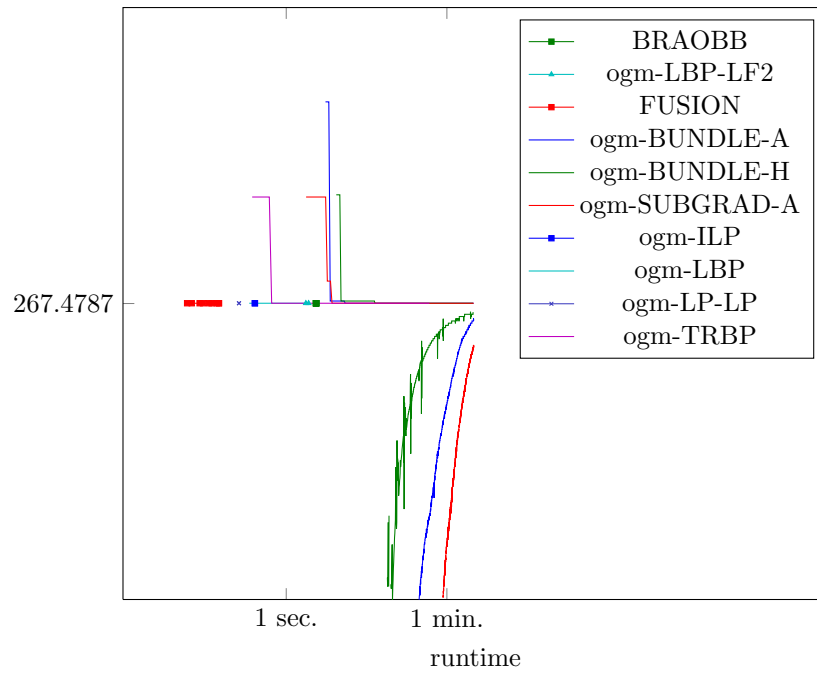


Figure 1290: Runtime results for the instance *gm208* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

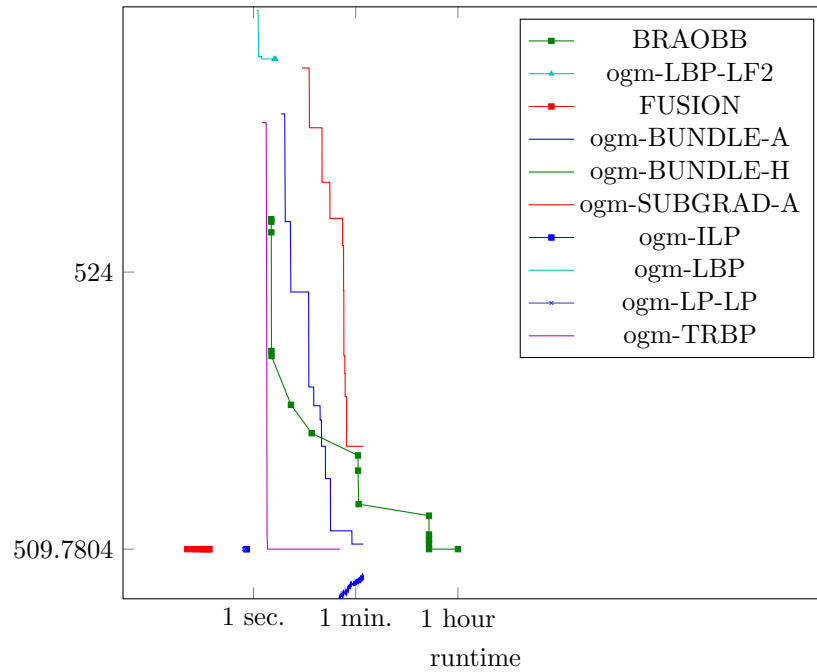


Figure 1291: Runtime results for the instance *gm209* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

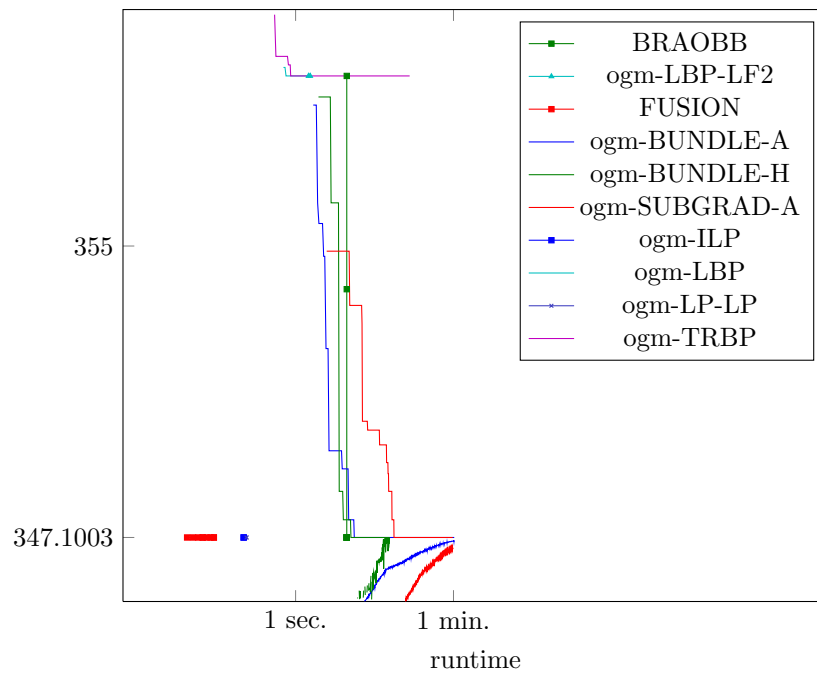


Figure 1292: Runtime results for the instance *gm20* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

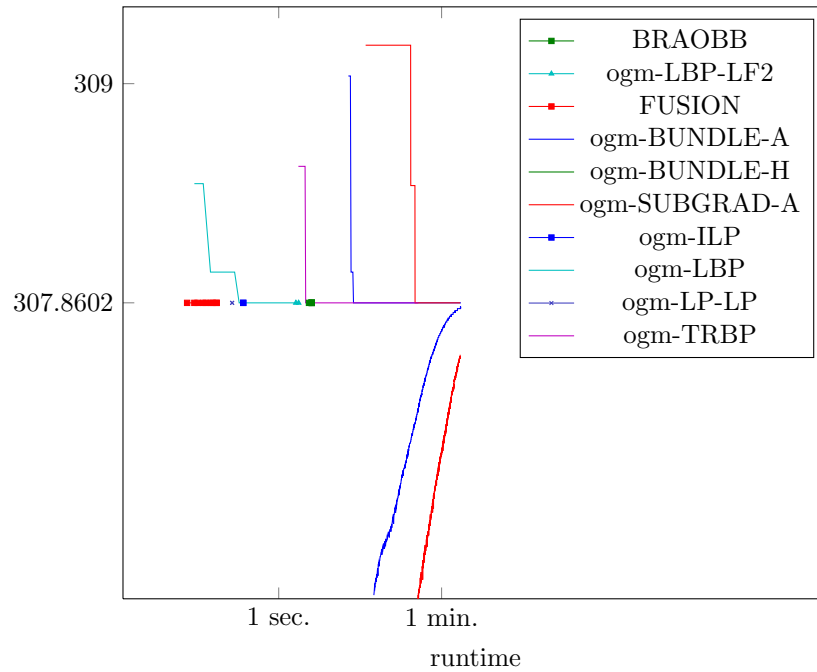


Figure 1293: Runtime results for the instance *gm210* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

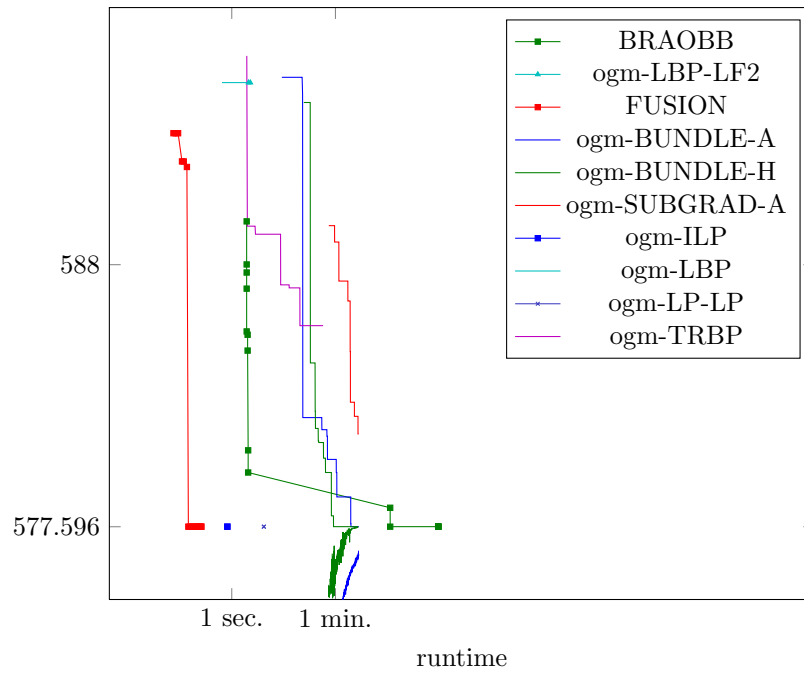


Figure 1294: Runtime results for the instance *gm211* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

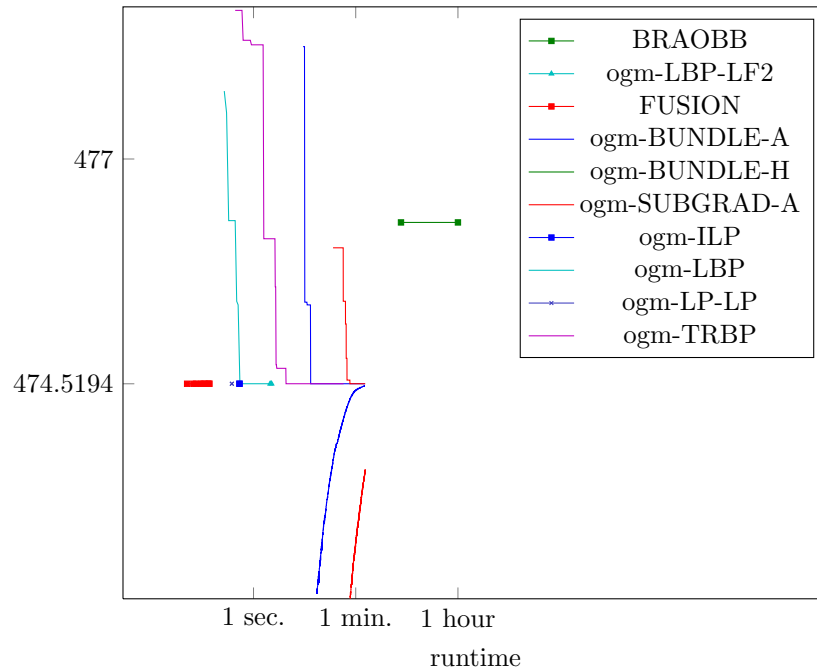


Figure 1295: Runtime results for the instance *gm212* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

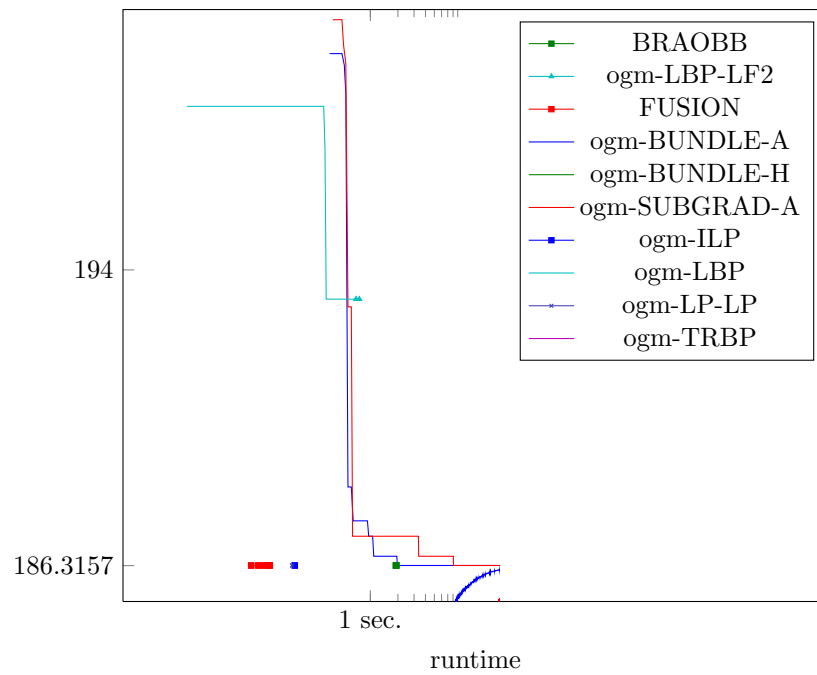


Figure 1296: Runtime results for the instance *gm213* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

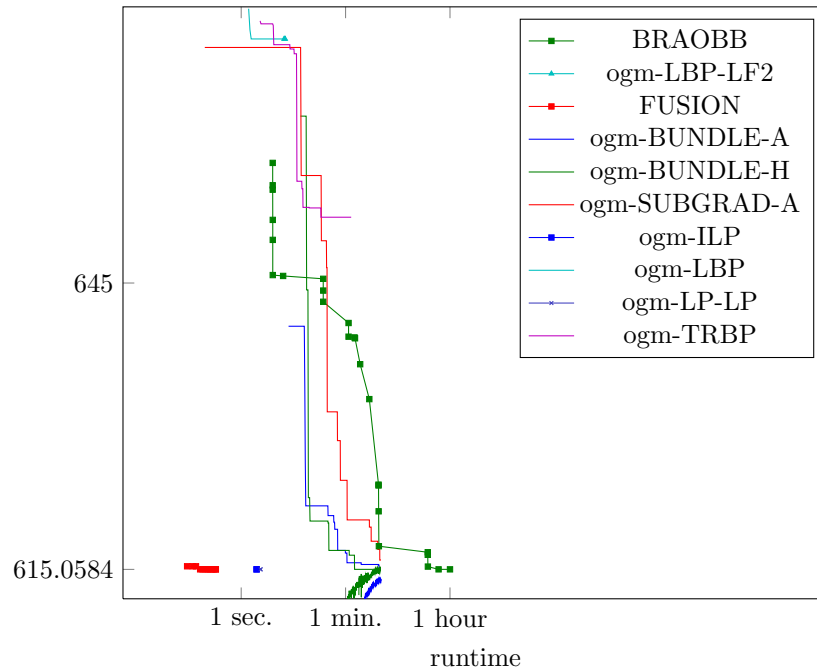


Figure 1297: Runtime results for the instance *gm214* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

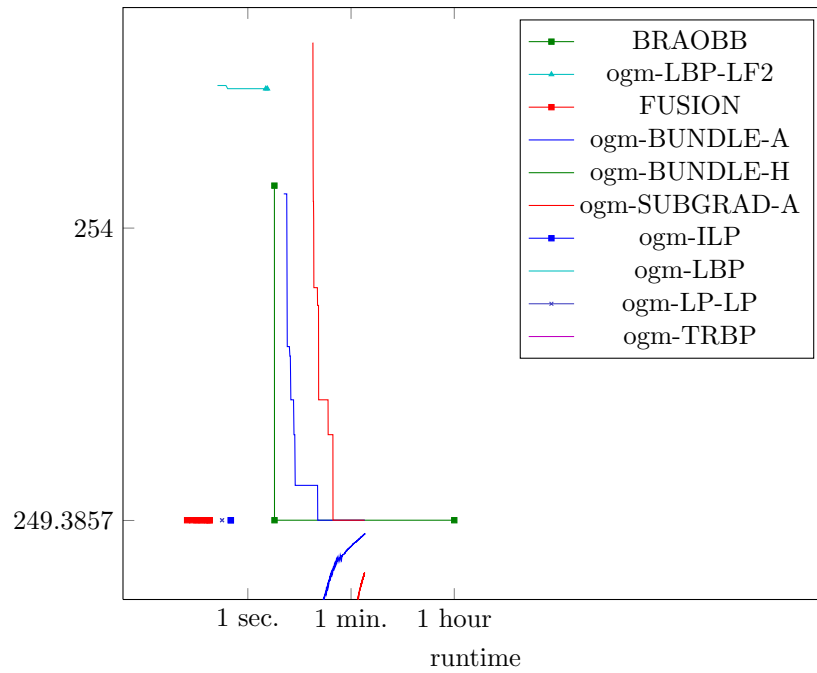


Figure 1298: Runtime results for the instance *gm215* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

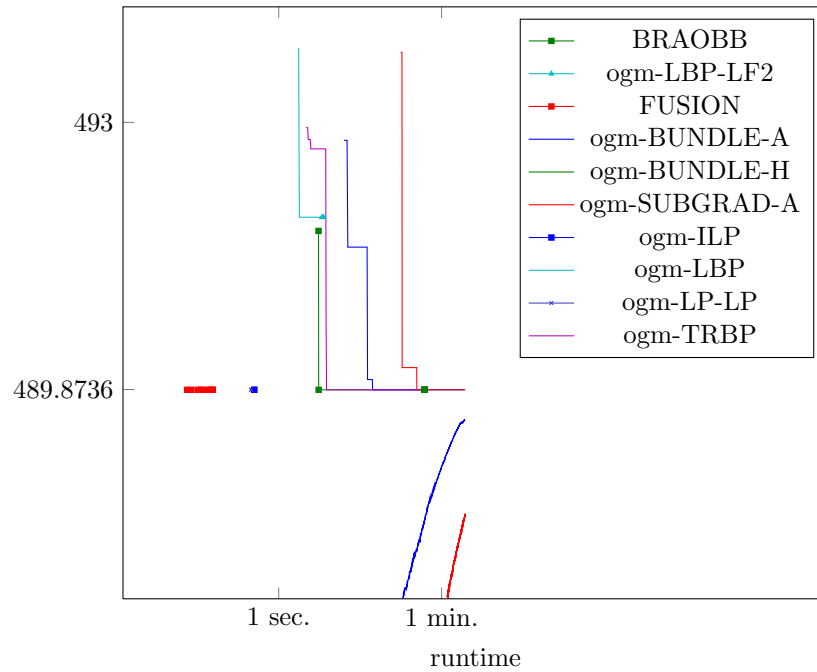


Figure 1299: Runtime results for the instance *gm216* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

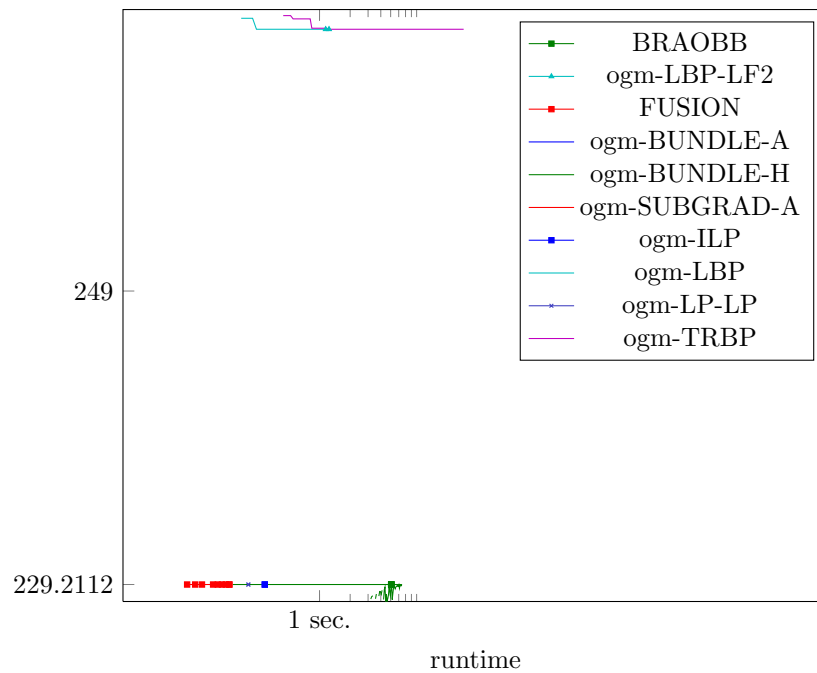


Figure 1300: Runtime results for the instance *gm217* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

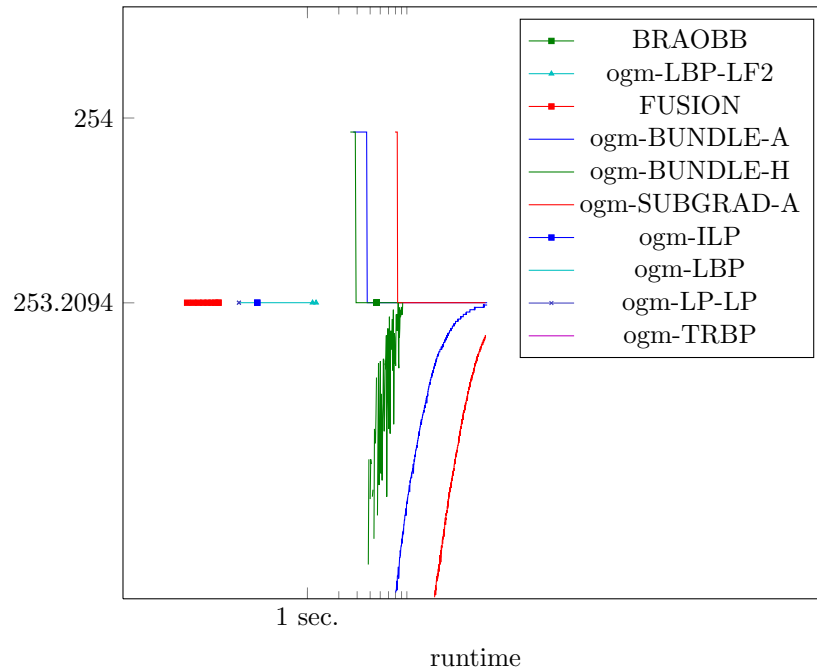


Figure 1301: Runtime results for the instance *gm218* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

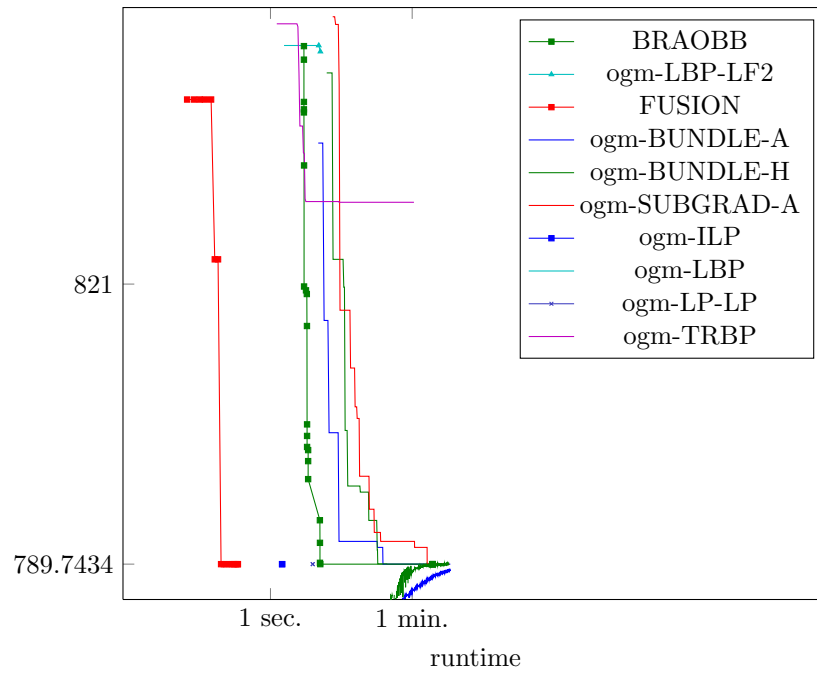


Figure 1302: Runtime results for the instance *gm219* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

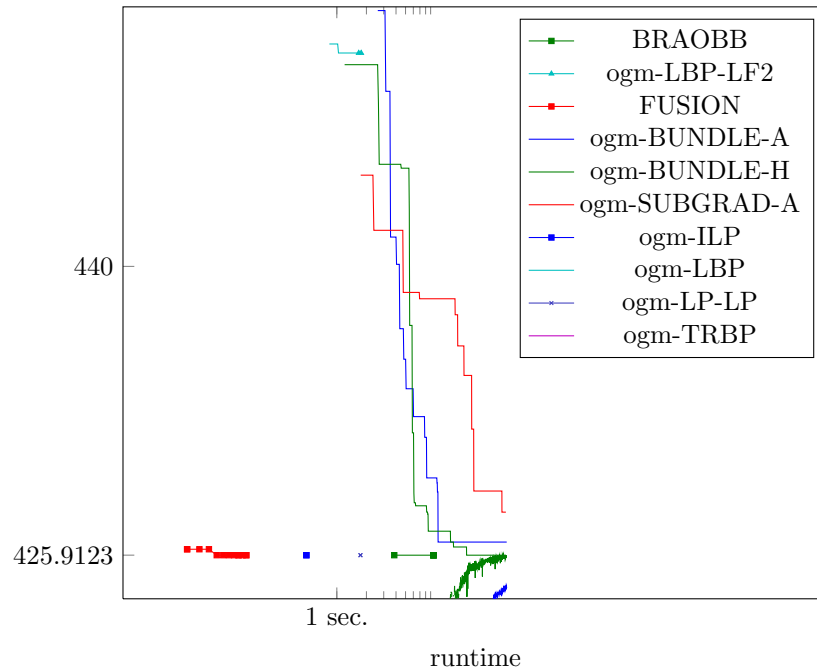


Figure 1303: Runtime results for the instance *gm21* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

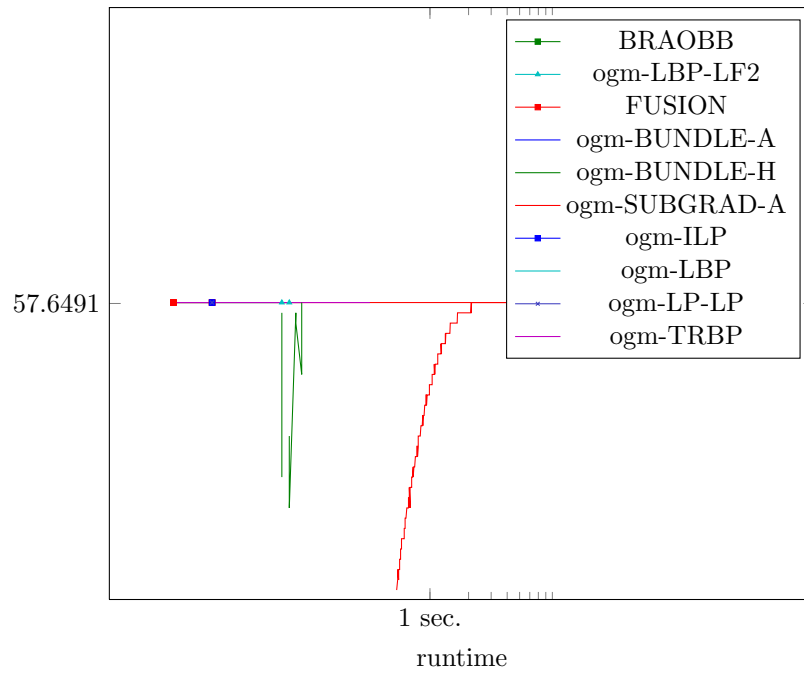


Figure 1304: Runtime results for the instance *gm220* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

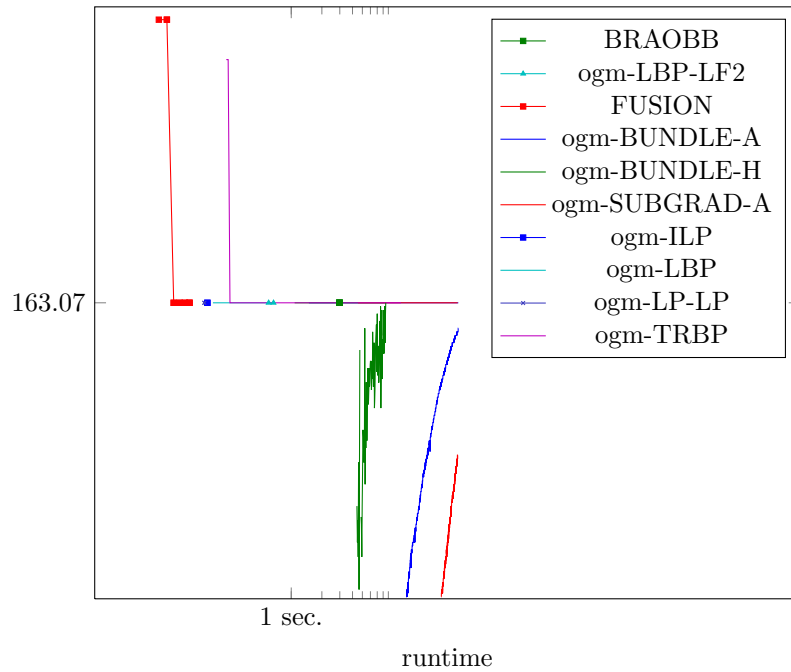


Figure 1305: Runtime results for the instance *gm221* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

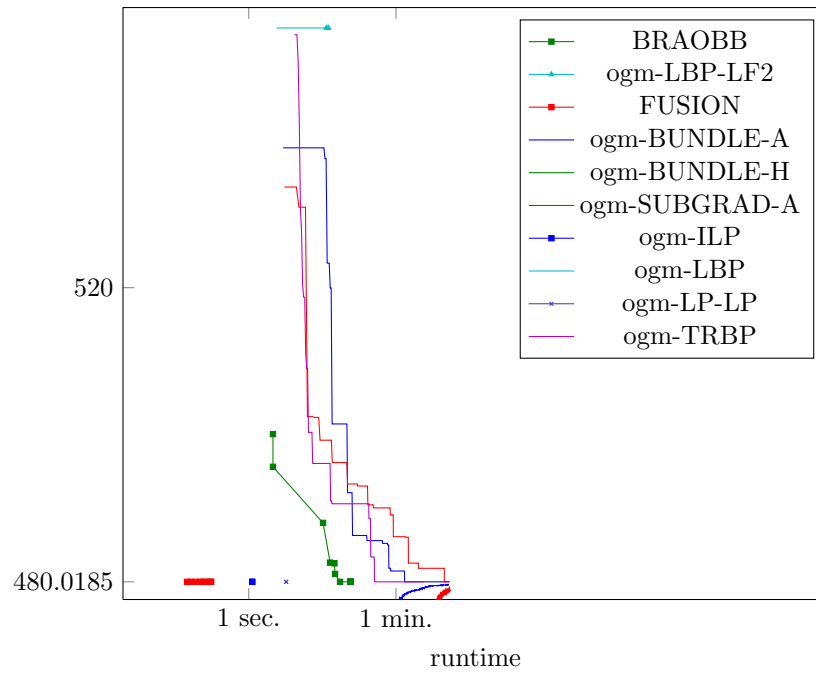


Figure 1306: Runtime results for the instance *gm222* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

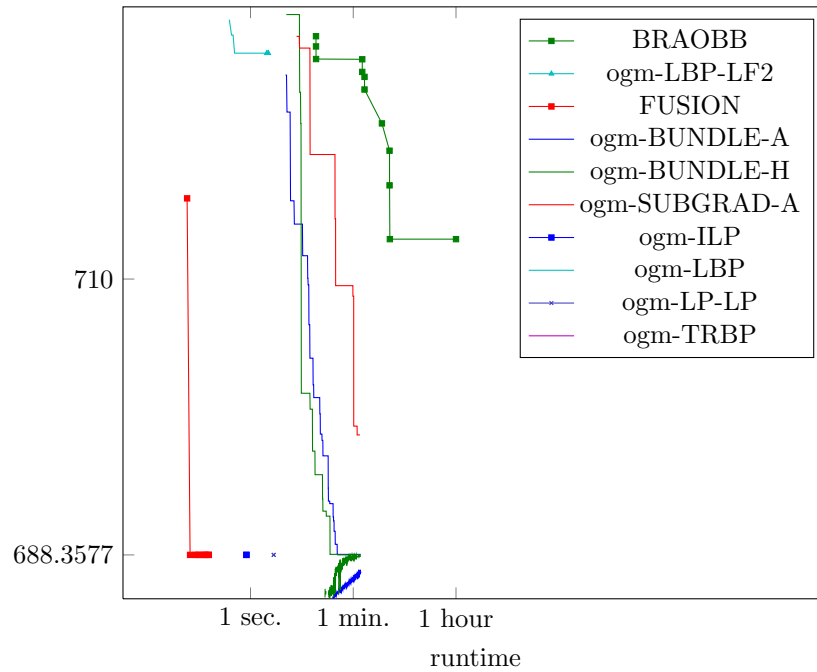


Figure 1307: Runtime results for the instance *gm223* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

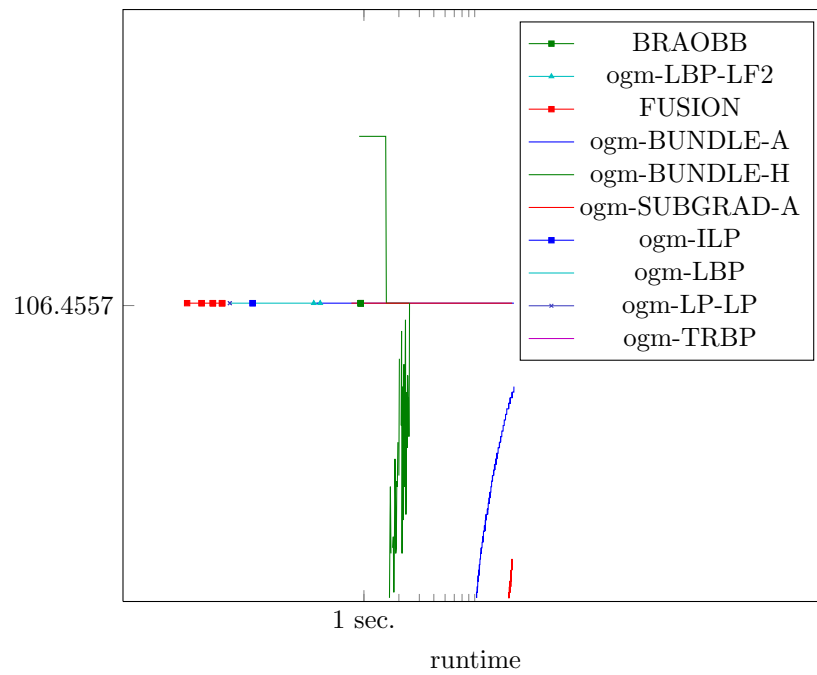


Figure 1308: Runtime results for the instance *gm224* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

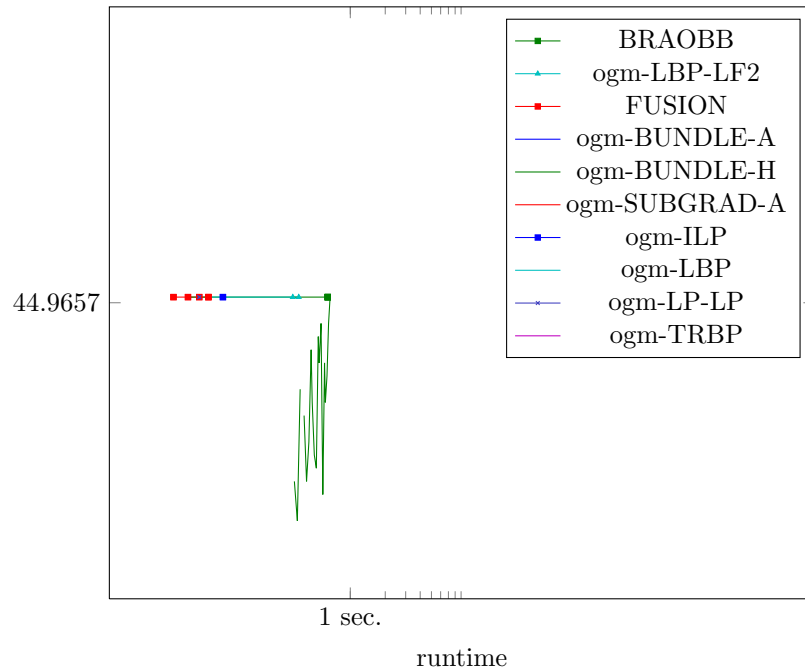


Figure 1309: Runtime results for the instance *gm225* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

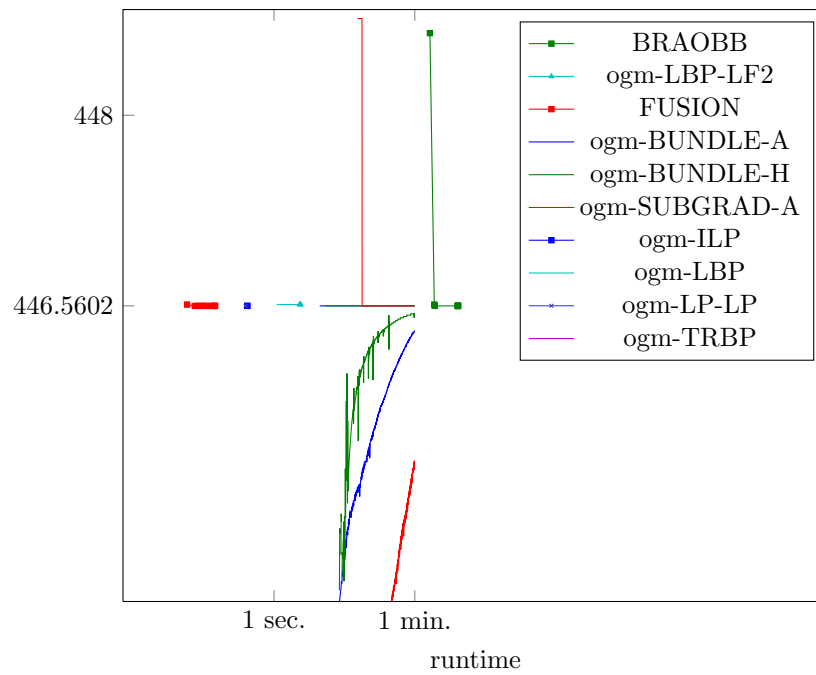


Figure 1310: Runtime results for the instance *gm226* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

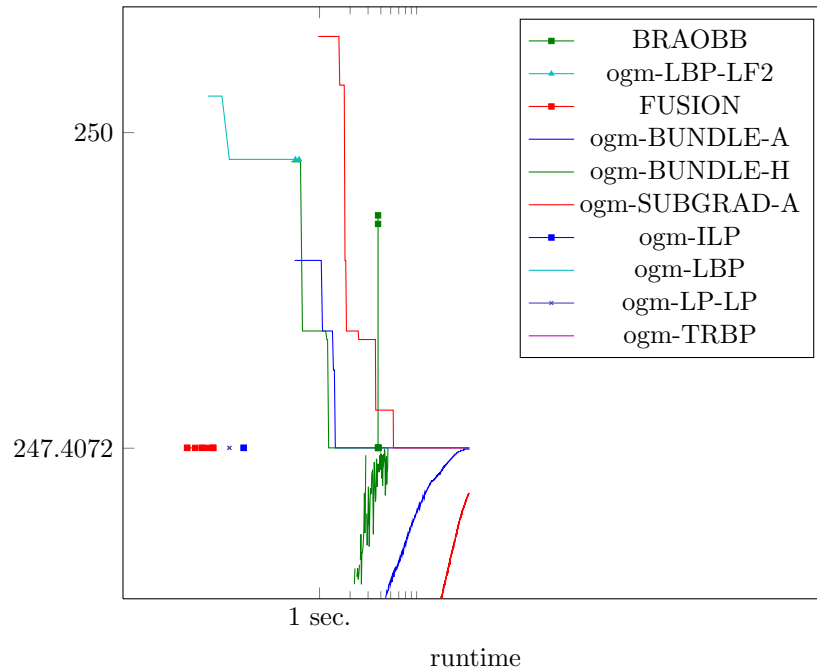


Figure 1311: Runtime results for the instance *gm227* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

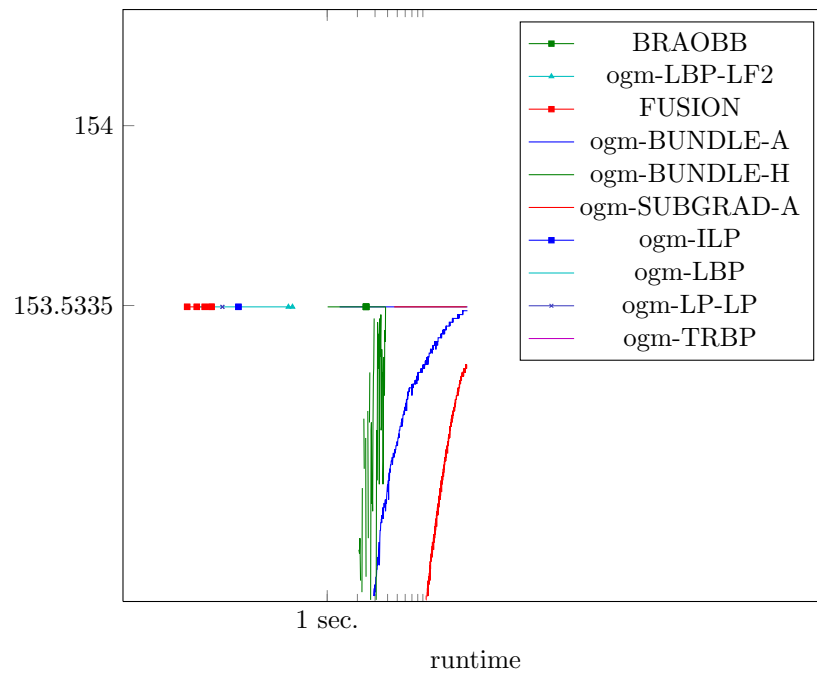


Figure 1312: Runtime results for the instance *gm228* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

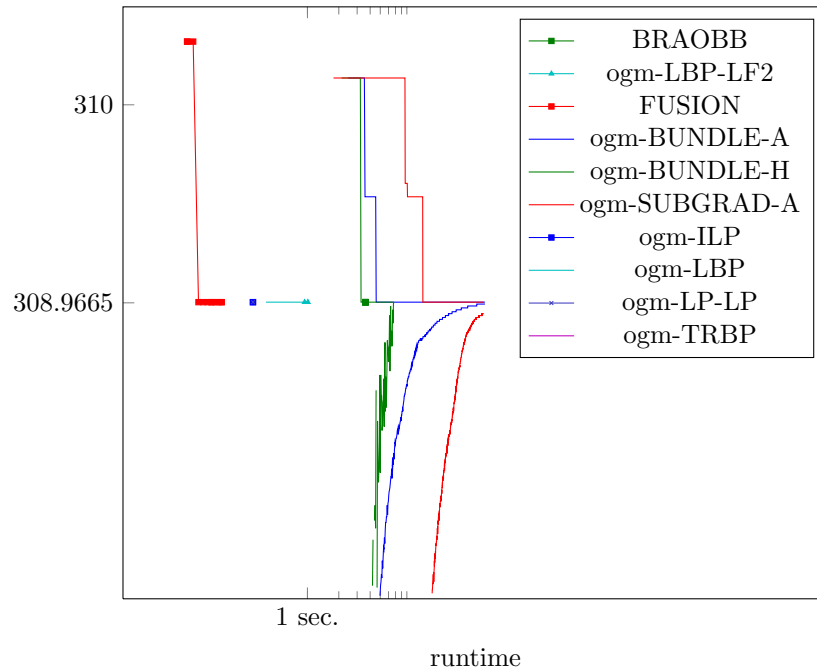


Figure 1313: Runtime results for the instance *gm229* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

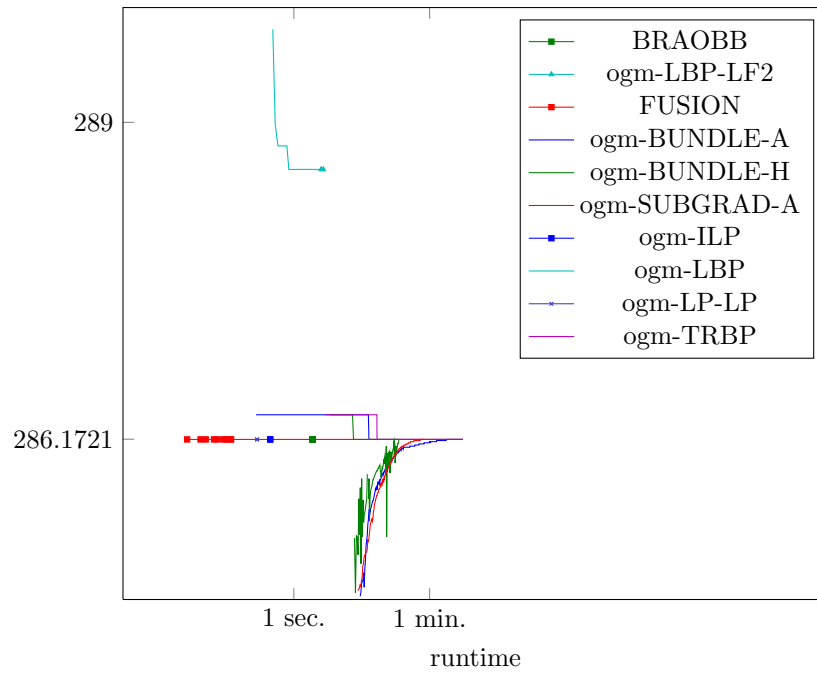


Figure 1314: Runtime results for the instance *gm22* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

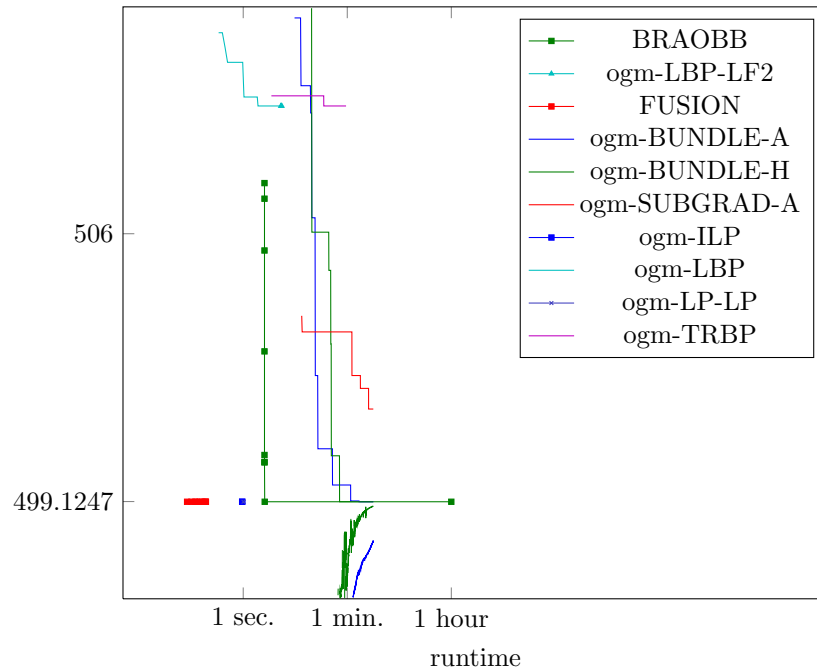


Figure 1315: Runtime results for the instance *gm230* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

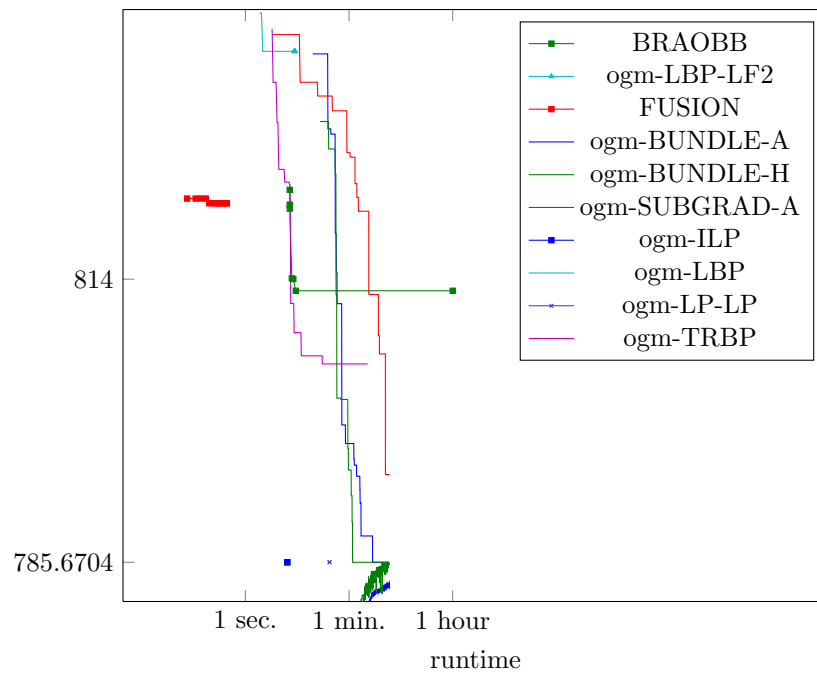


Figure 1316: Runtime results for the instance *gm231* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

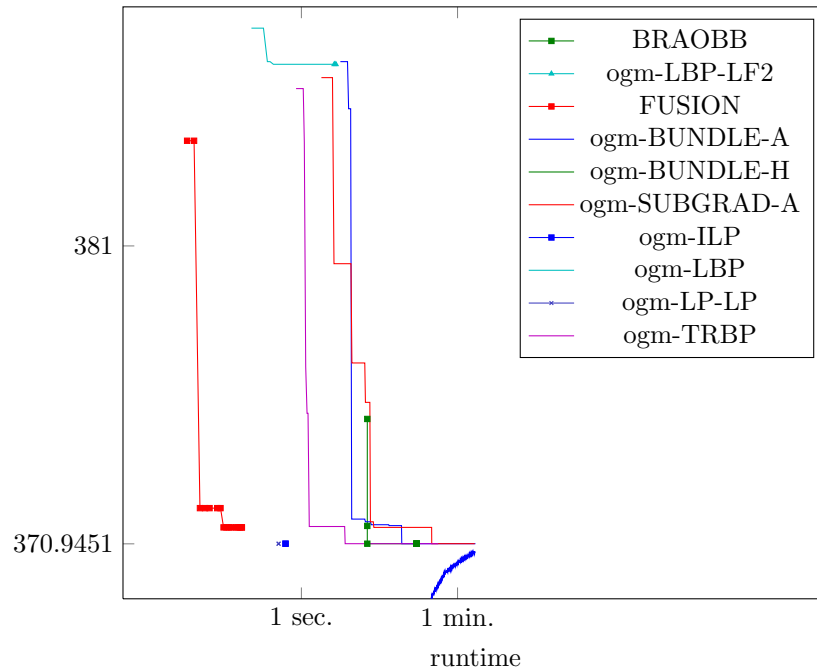


Figure 1317: Runtime results for the instance *gm232* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

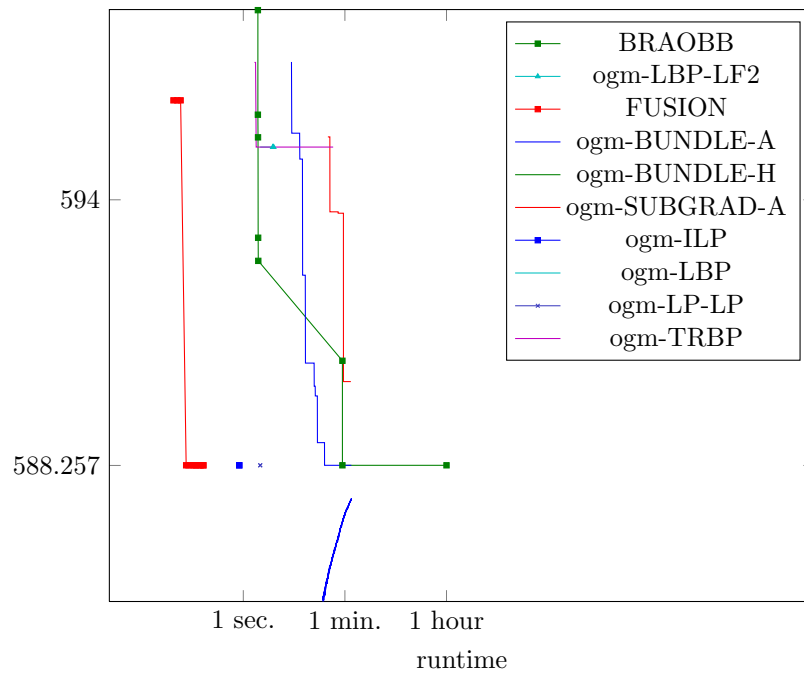


Figure 1318: Runtime results for the instance *gm233* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

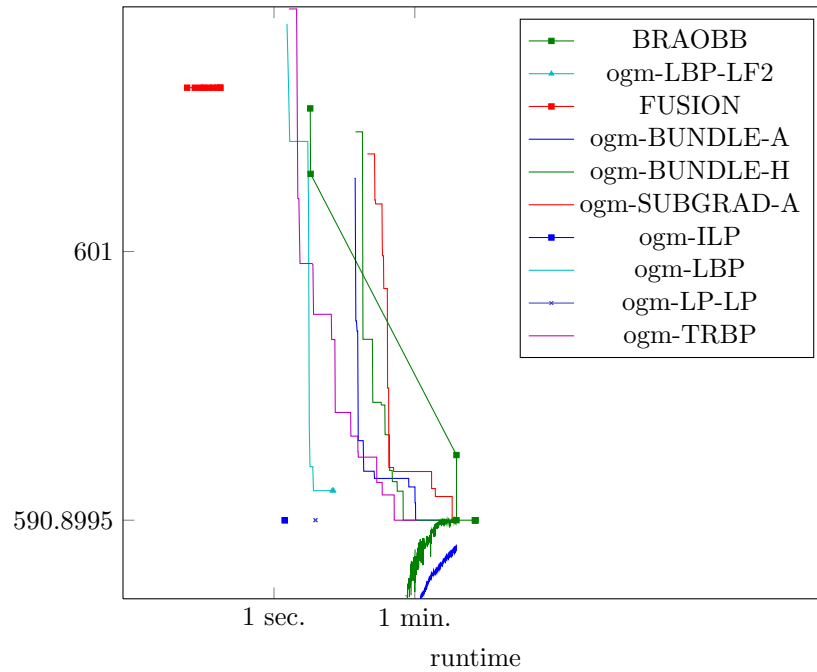


Figure 1319: Runtime results for the instance *gm234* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

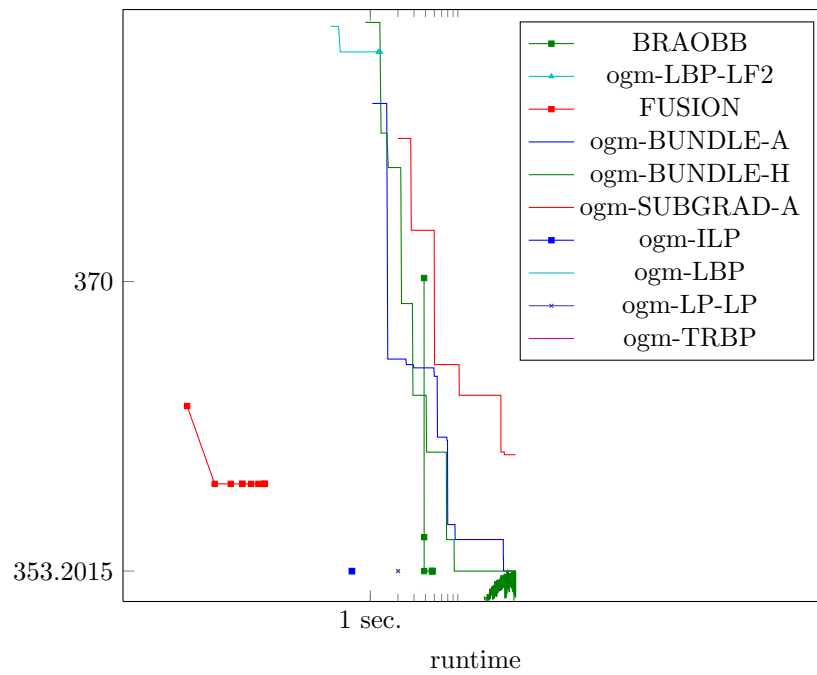


Figure 1320: Runtime results for the instance *gm235* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

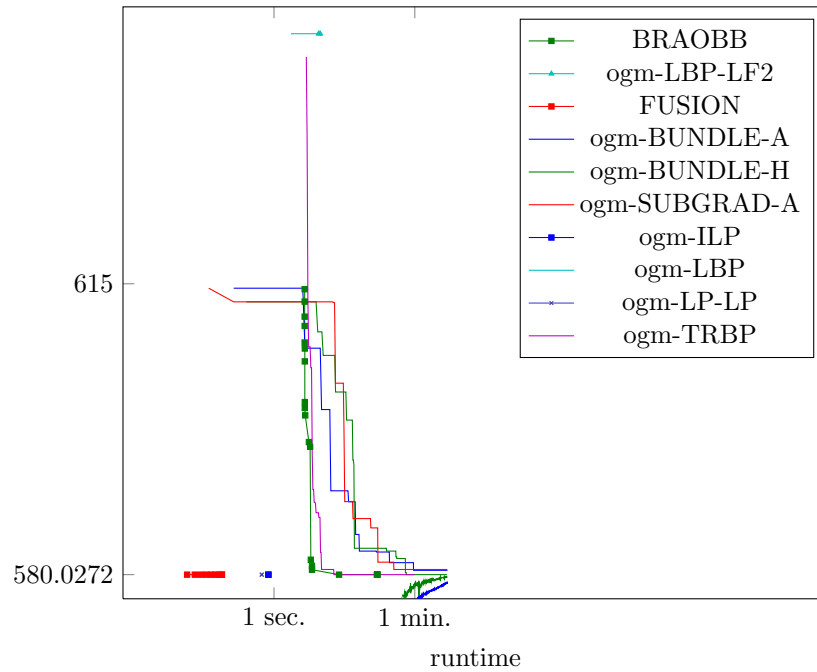


Figure 1321: Runtime results for the instance *gm236* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

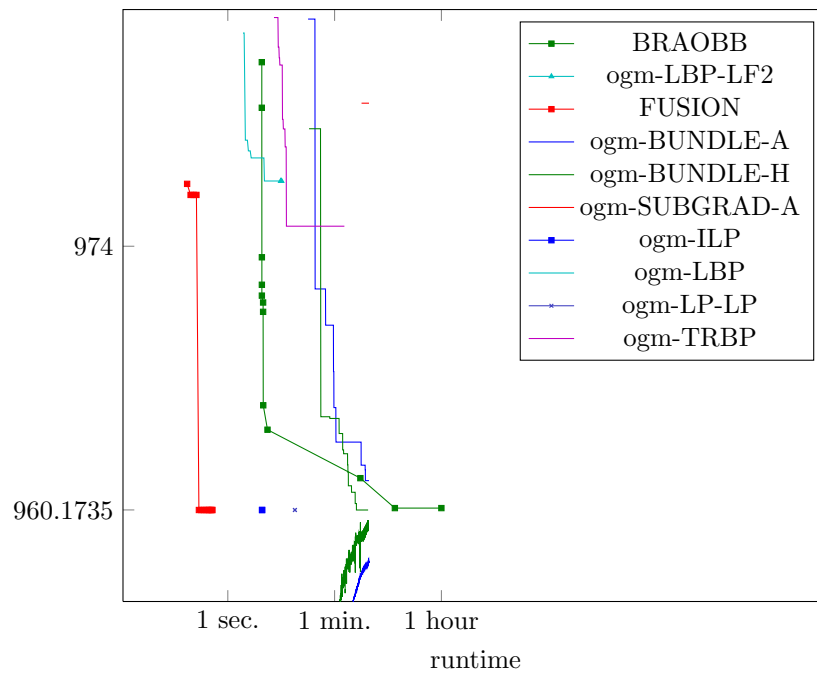


Figure 1322: Runtime results for the instance *gm237* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

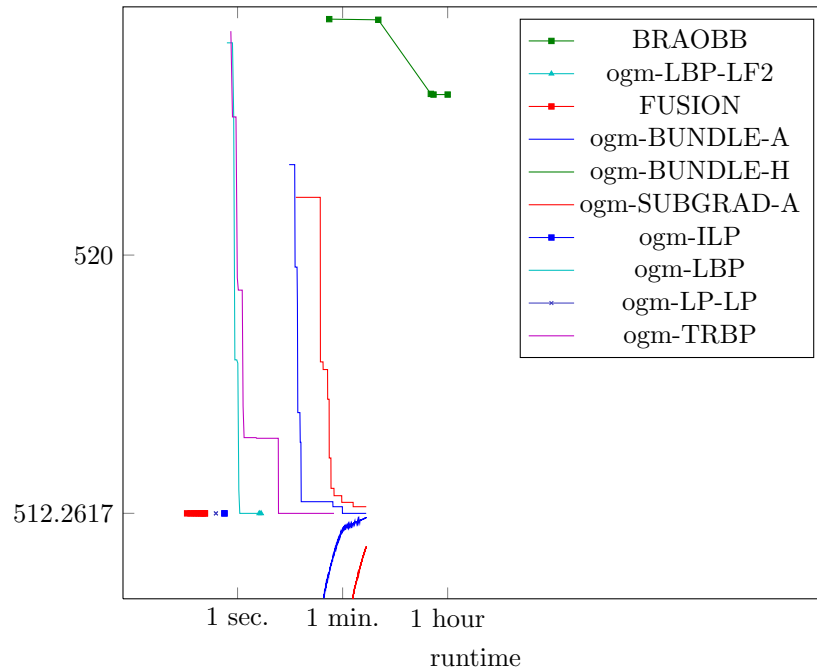


Figure 1323: Runtime results for the instance *gm238* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

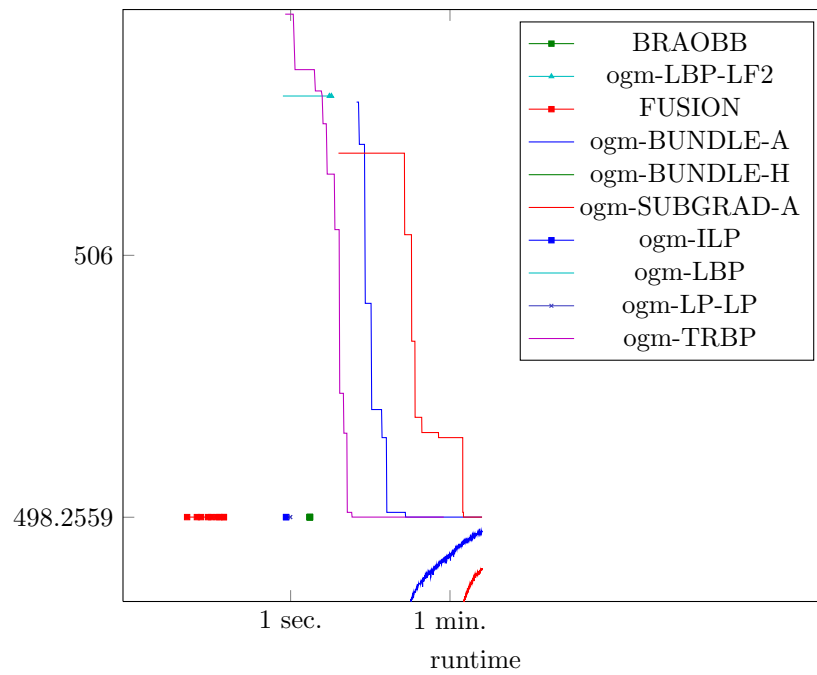


Figure 1324: Runtime results for the instance *gm239* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

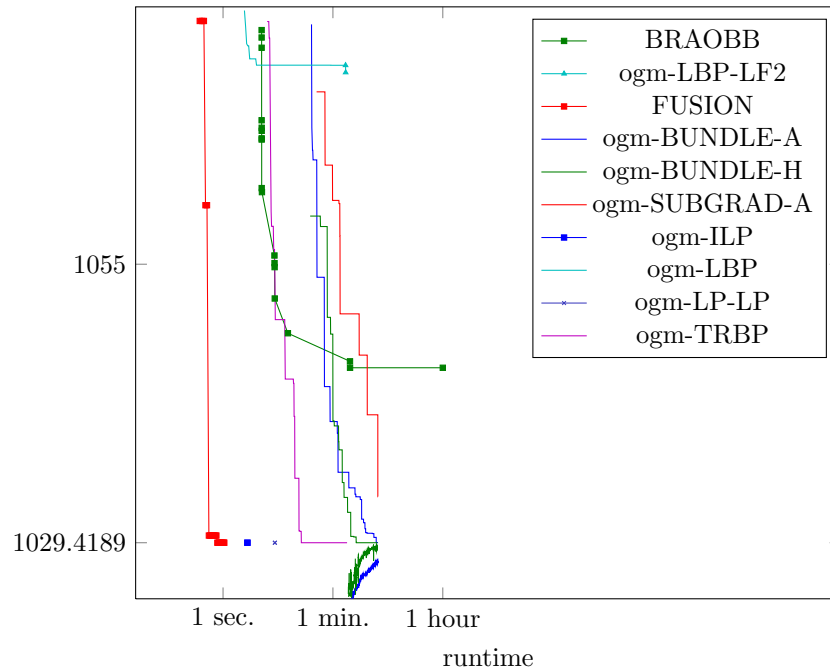


Figure 1325: Runtime results for the instance *gm23* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

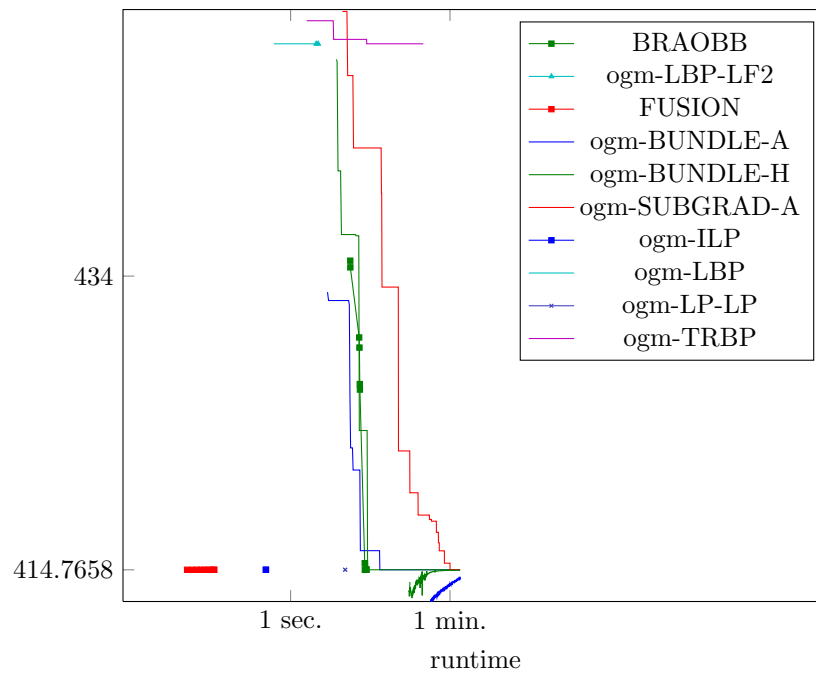


Figure 1326: Runtime results for the instance *gm240* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

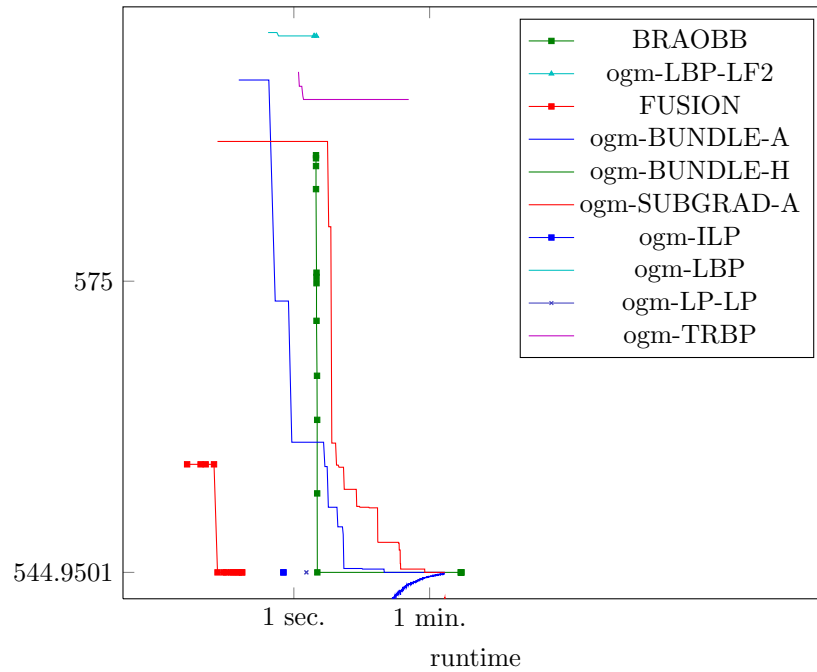


Figure 1327: Runtime results for the instance *gm241* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

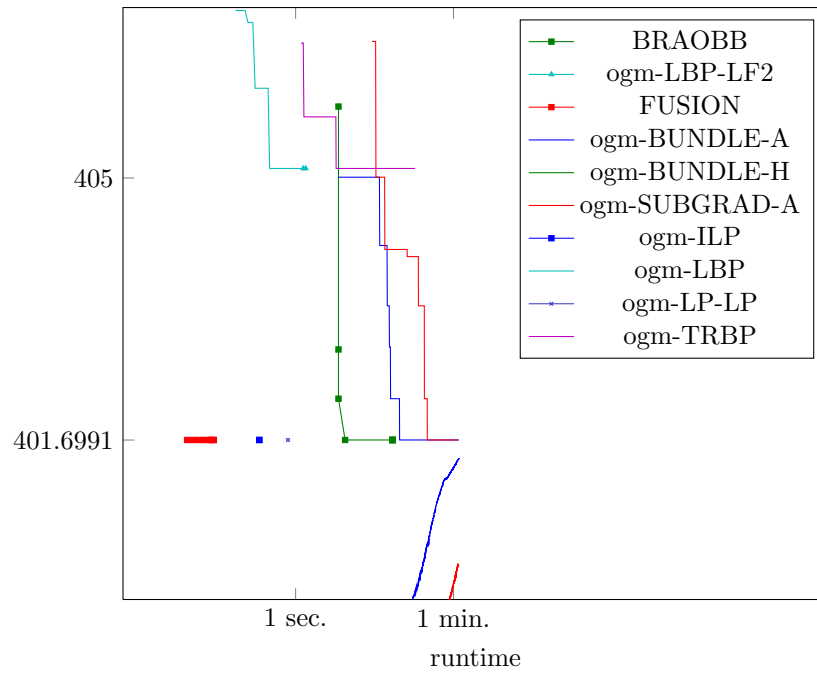


Figure 1328: Runtime results for the instance *gm242* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

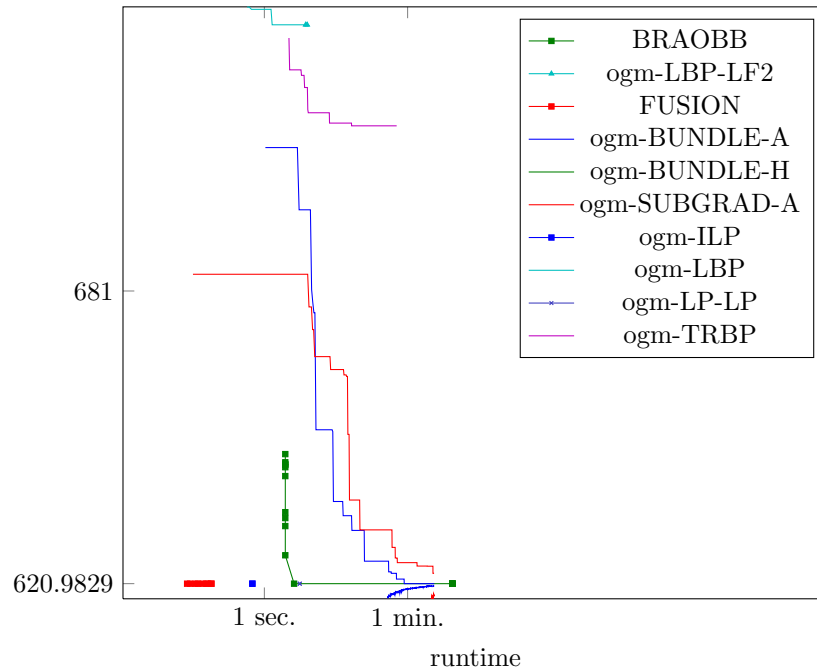


Figure 1329: Runtime results for the instance *gm243* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

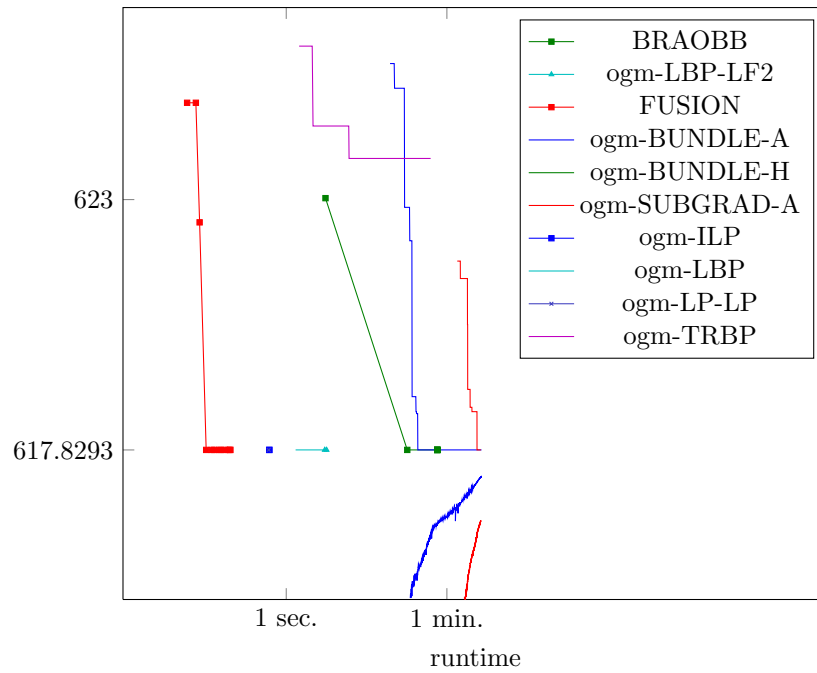


Figure 1330: Runtime results for the instance *gm244* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

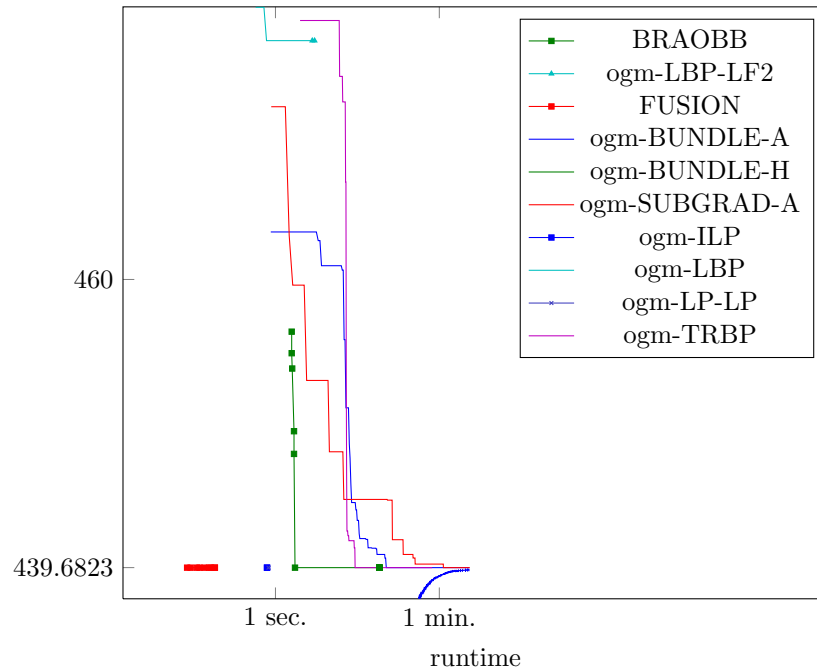


Figure 1331: Runtime results for the instance *gm245* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

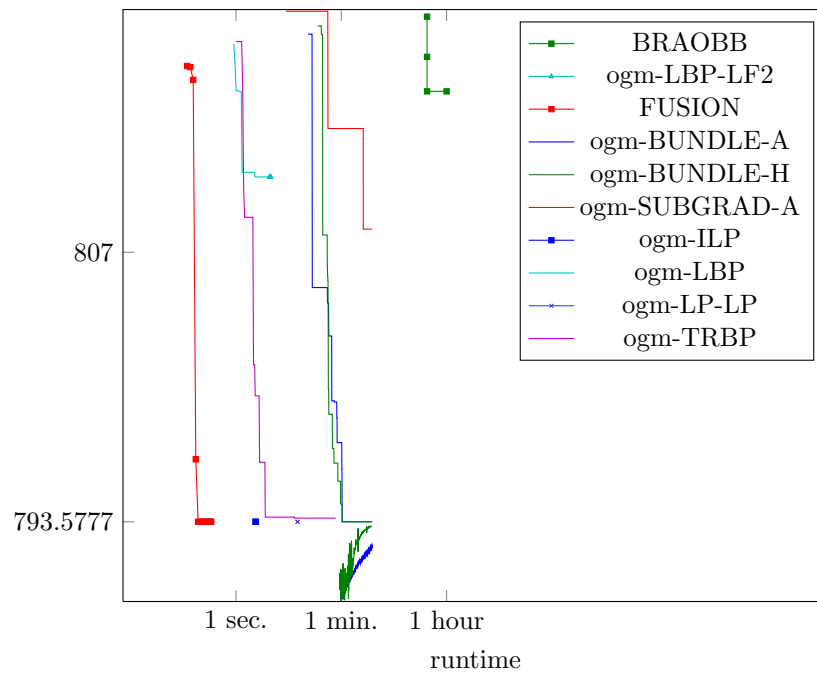


Figure 1332: Runtime results for the instance *gm246* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

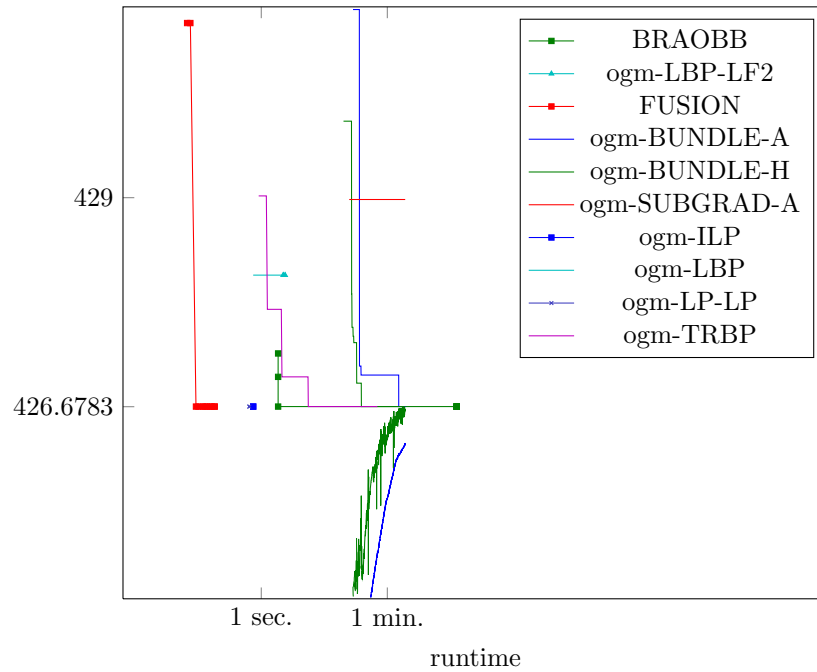


Figure 1333: Runtime results for the instance *gm247* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

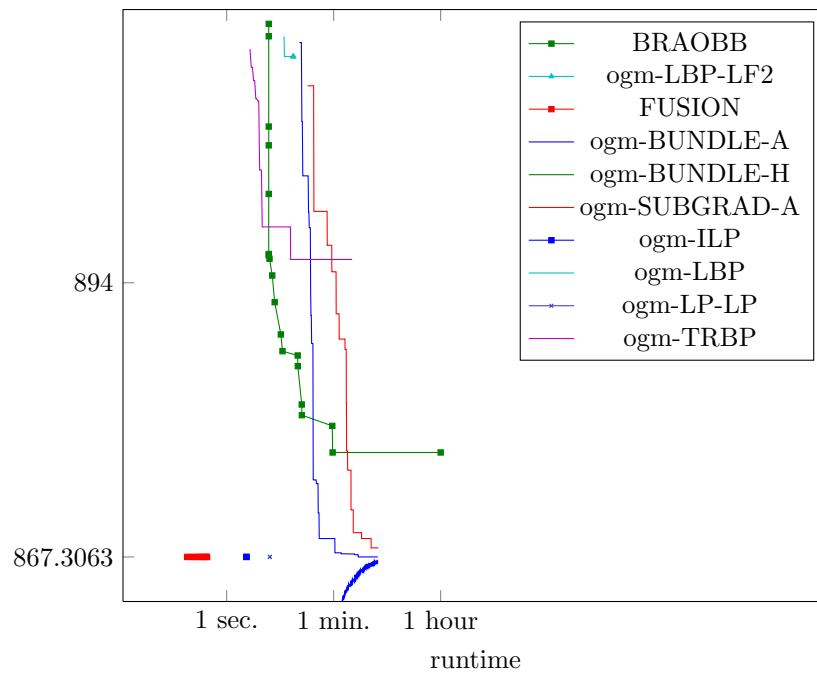


Figure 1334: Runtime results for the instance *gm248* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

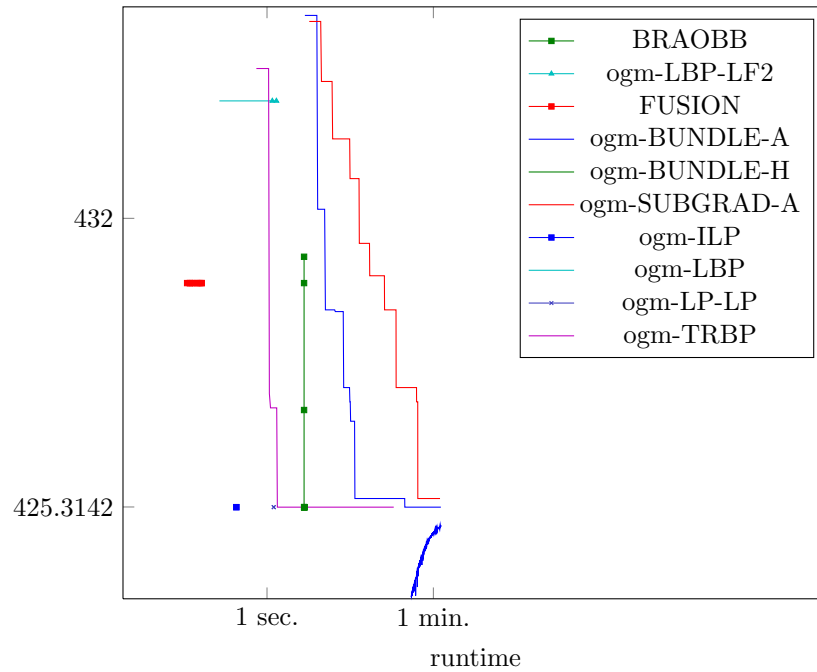


Figure 1335: Runtime results for the instance *gm249* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

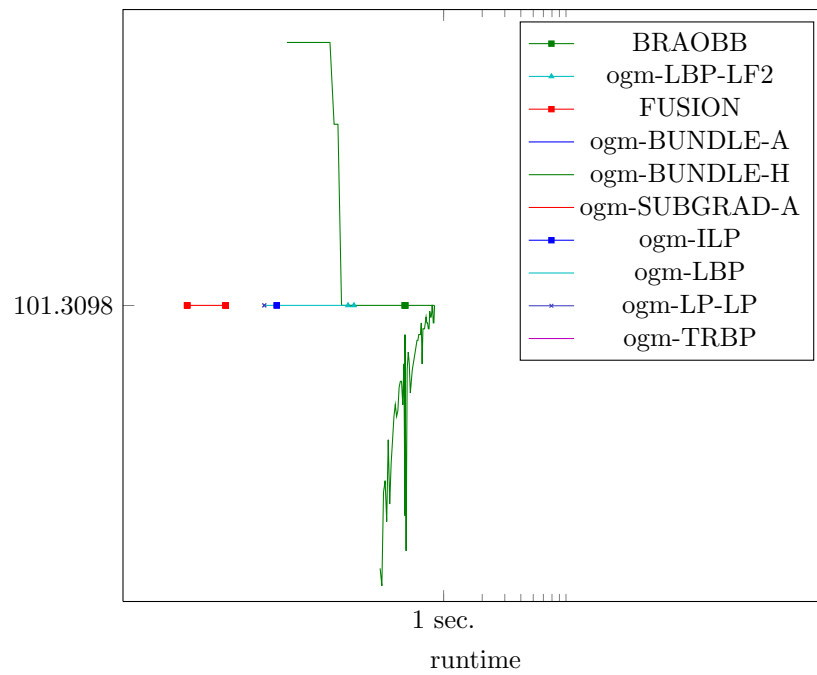


Figure 1336: Runtime results for the instance *gm24* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

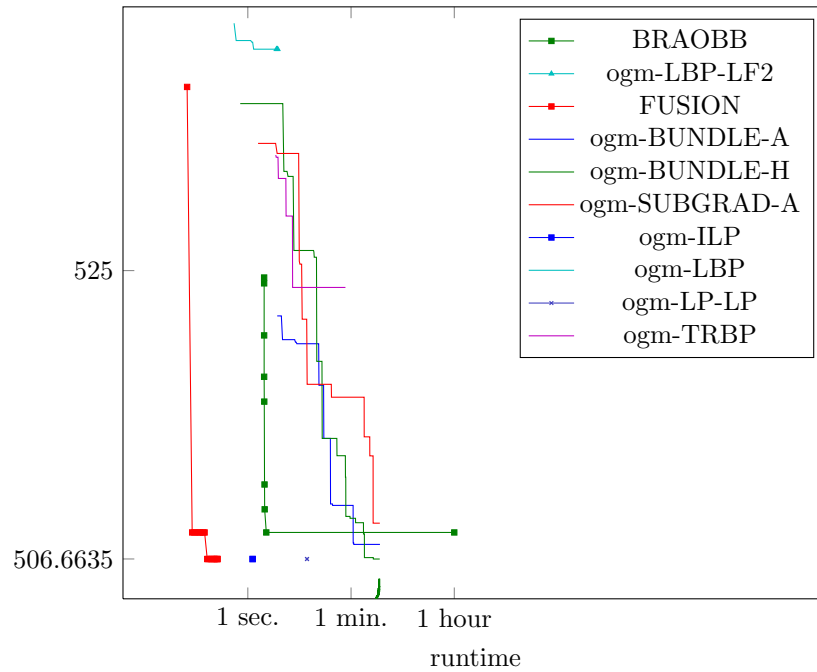


Figure 1337: Runtime results for the instance *gm250* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

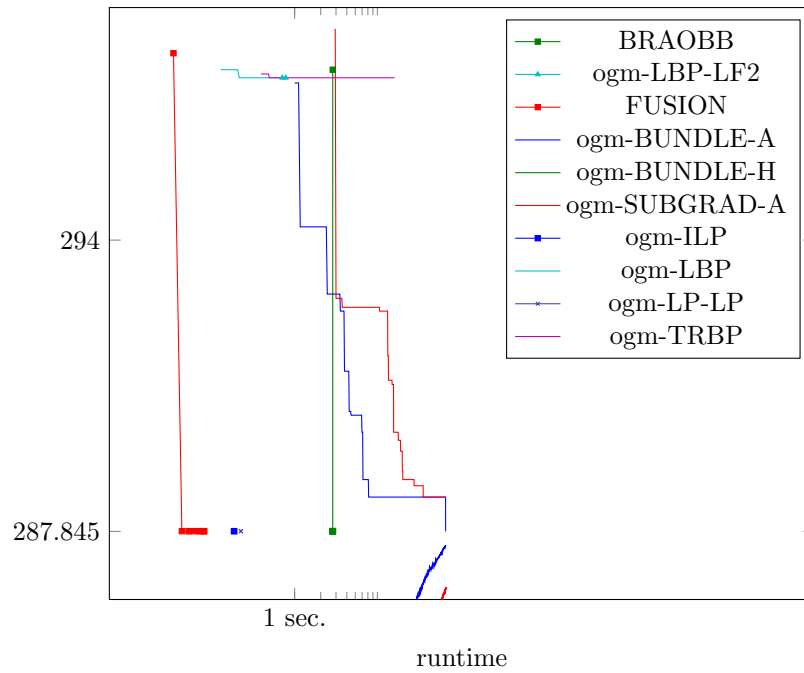


Figure 1338: Runtime results for the instance *gm251* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

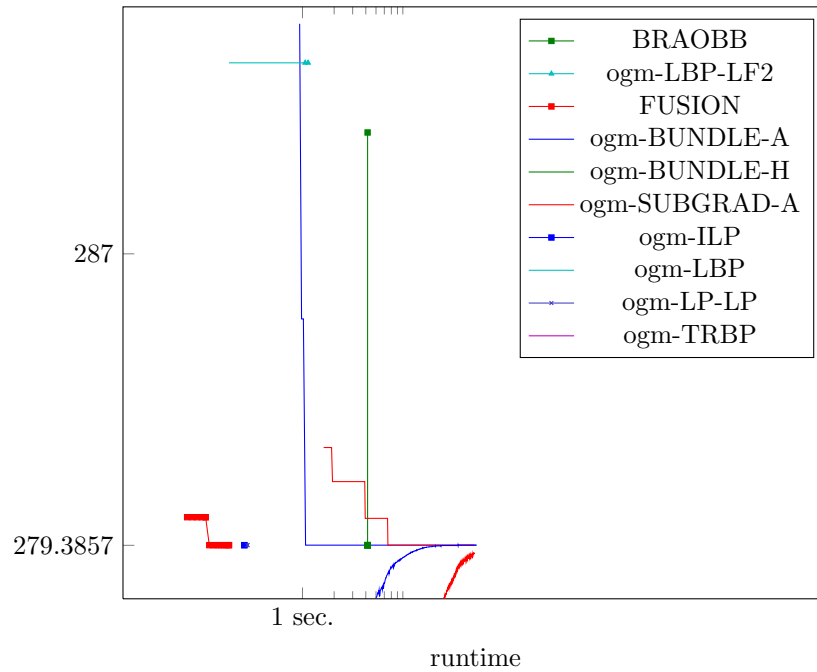


Figure 1339: Runtime results for the instance *gm252* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

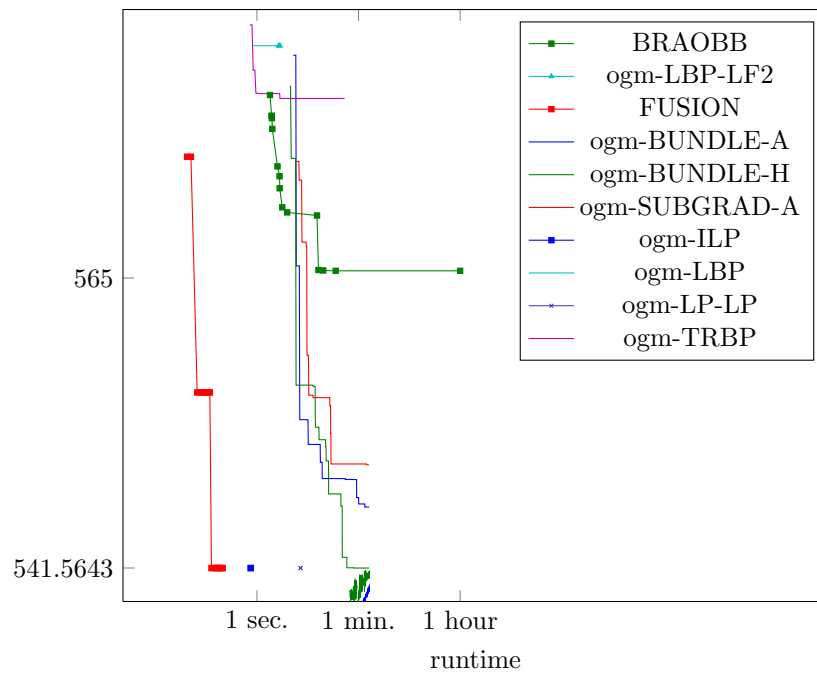


Figure 1340: Runtime results for the instance *gm253* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

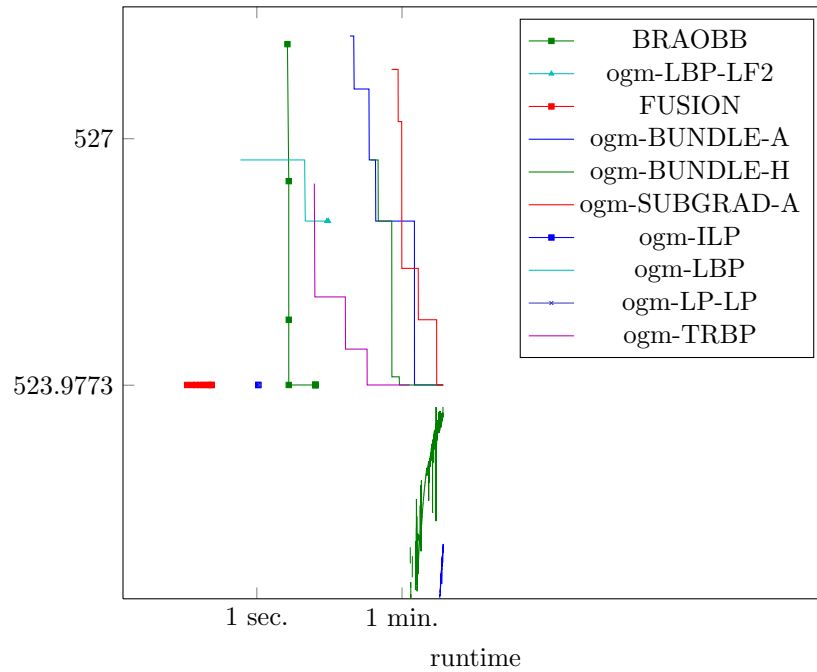


Figure 1341: Runtime results for the instance *gm254* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

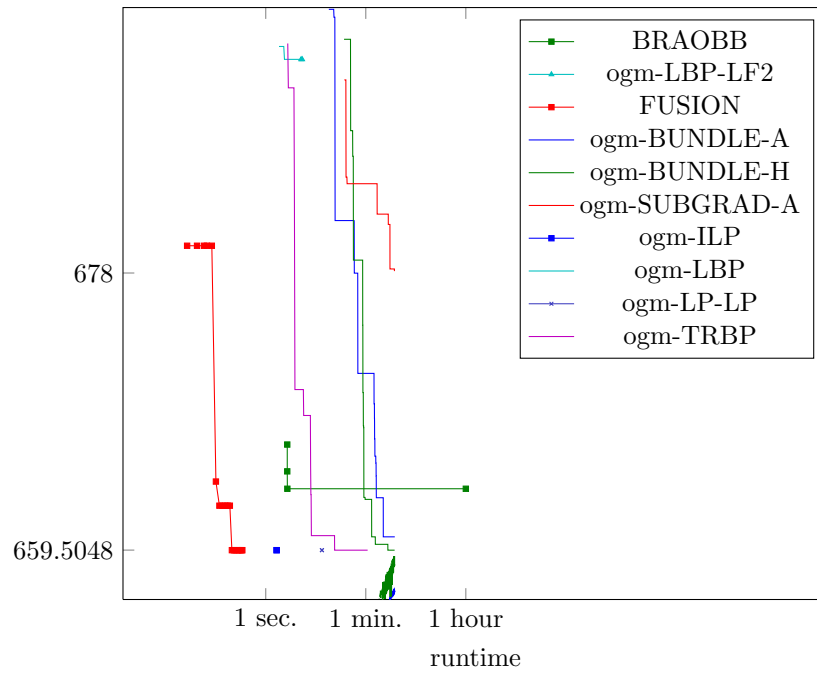


Figure 1342: Runtime results for the instance *gm255* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

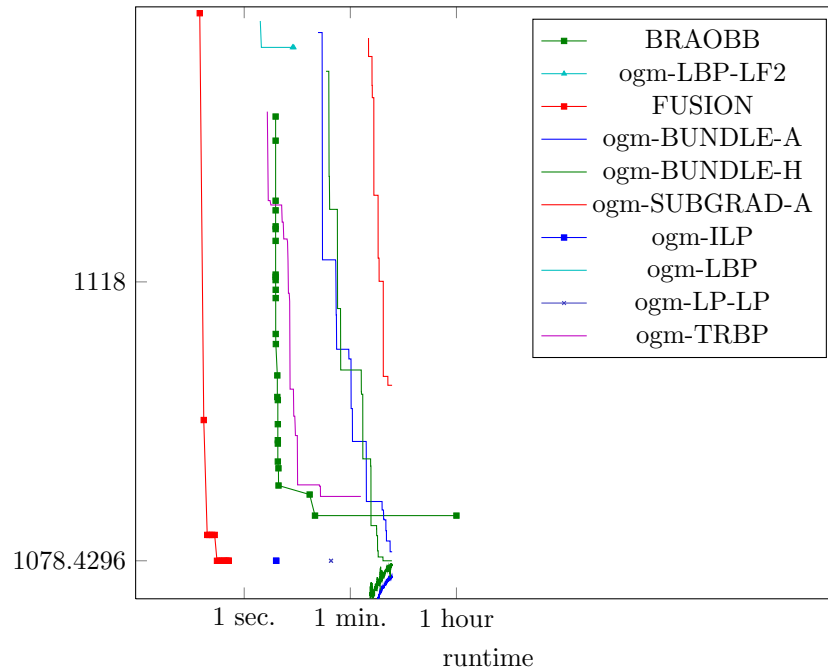


Figure 1343: Runtime results for the instance *gm256* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

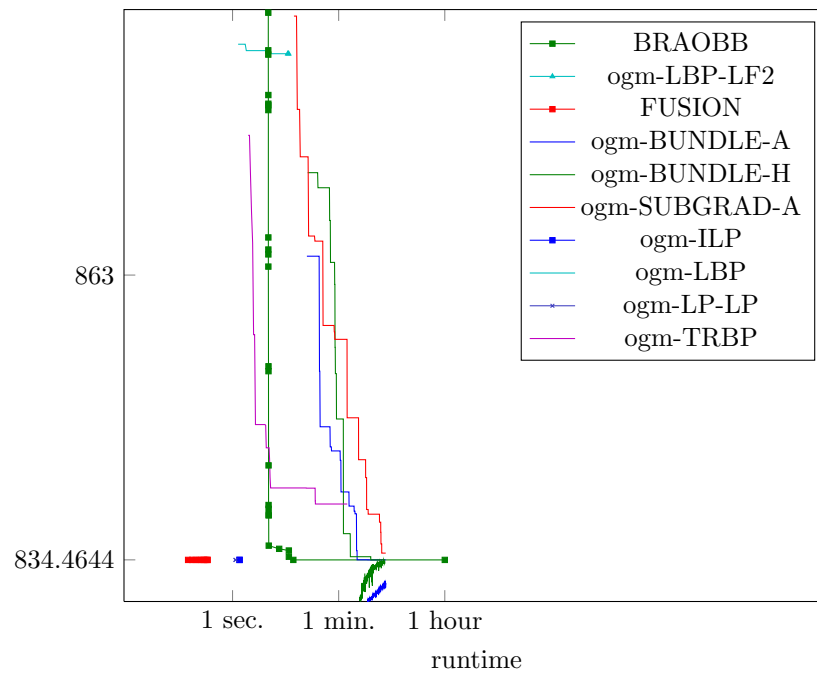


Figure 1344: Runtime results for the instance *gm257* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

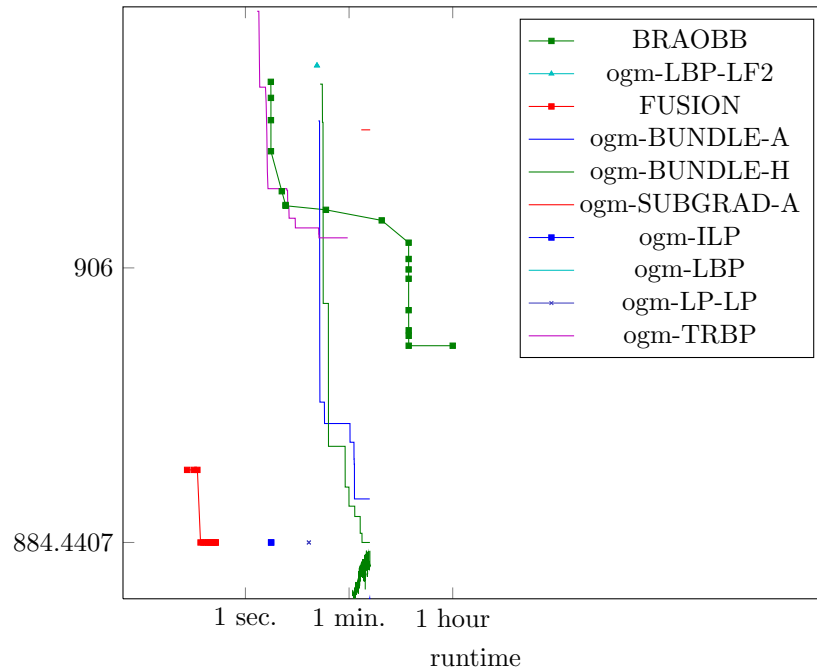


Figure 1345: Runtime results for the instance *gm258* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

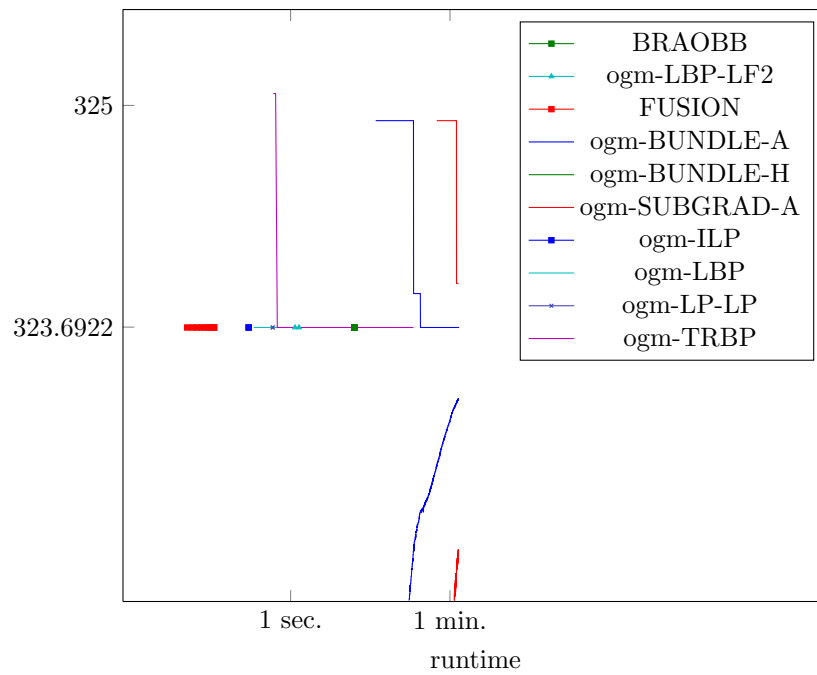


Figure 1346: Runtime results for the instance *gm259* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

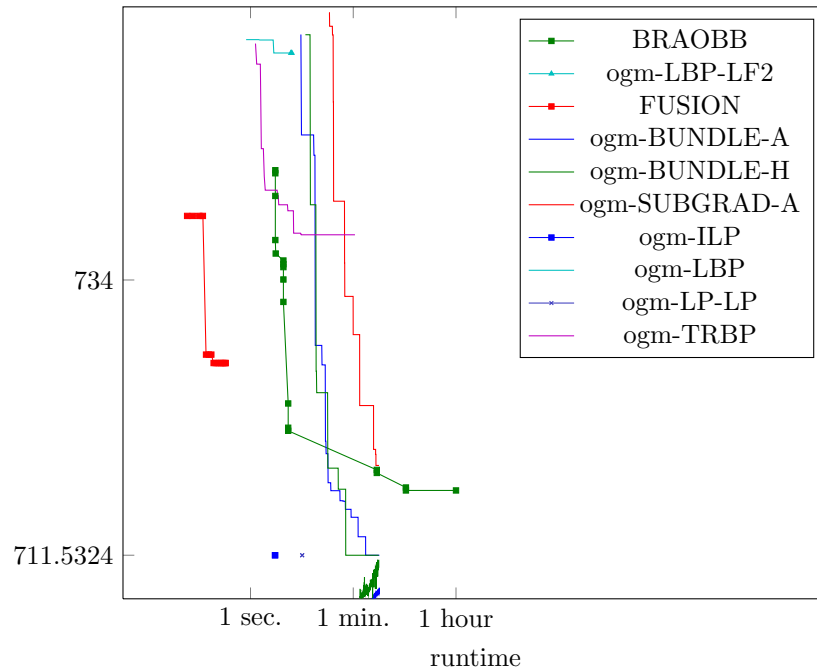


Figure 1347: Runtime results for the instance *gm25* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

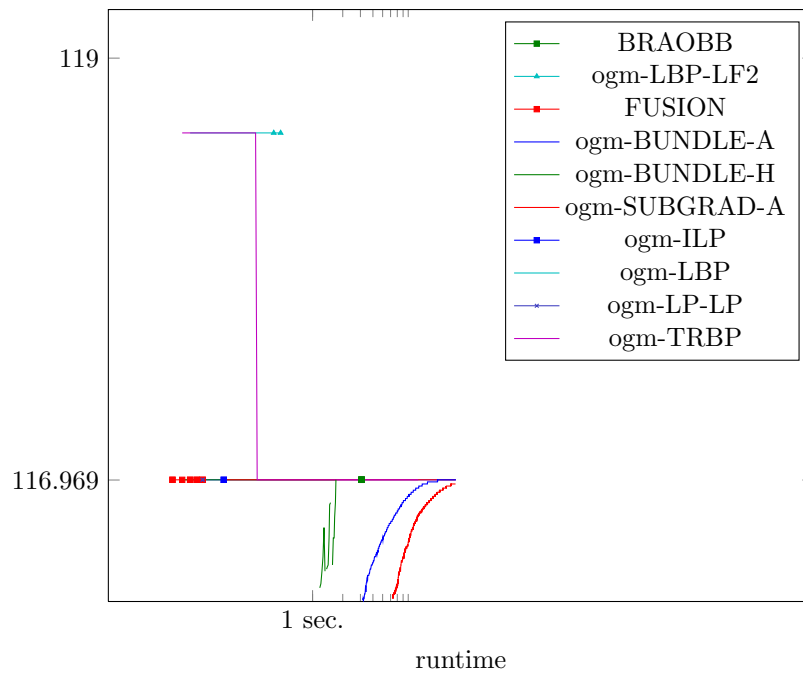


Figure 1348: Runtime results for the instance *gm260* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

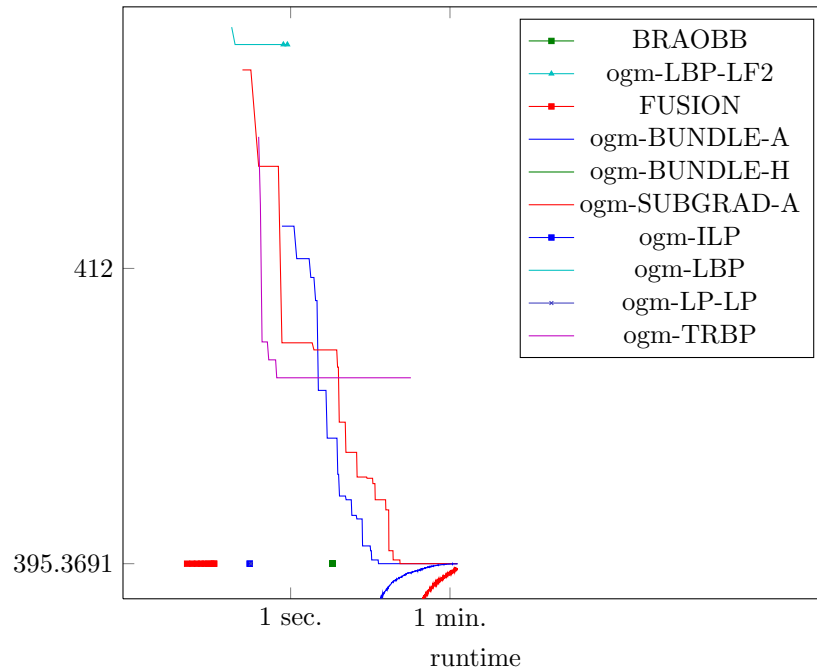


Figure 1349: Runtime results for the instance *gm261* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

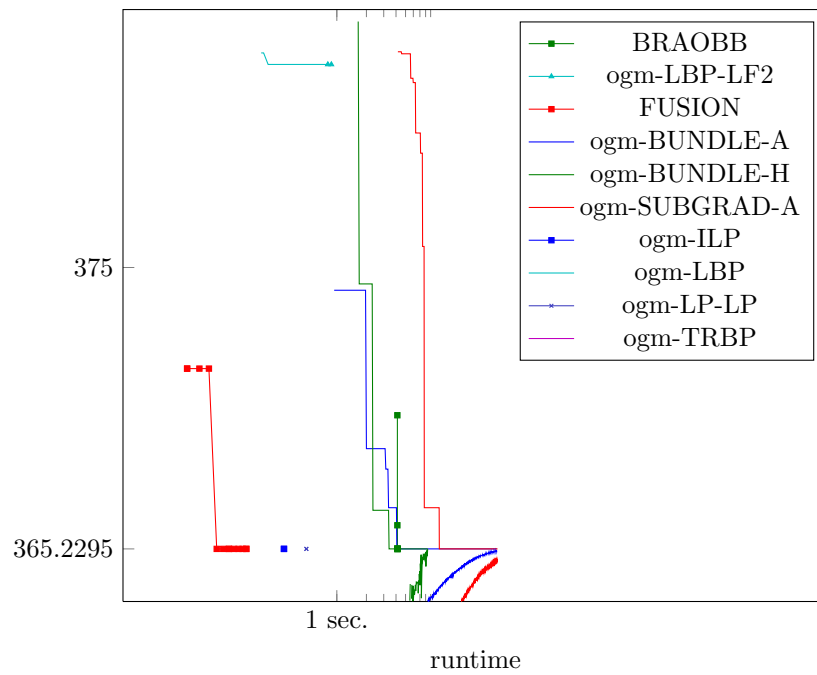


Figure 1350: Runtime results for the instance *gm262* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

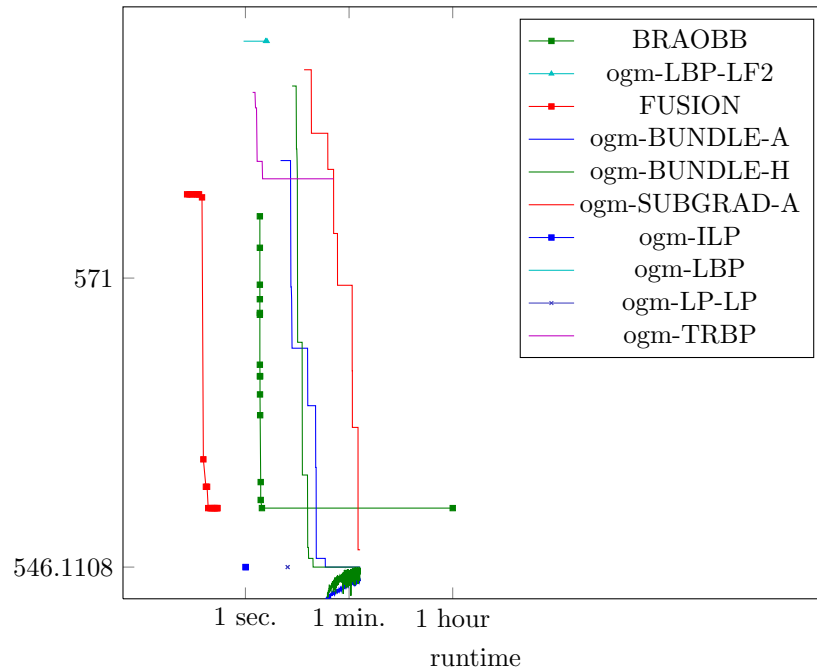


Figure 1351: Runtime results for the instance *gm263* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

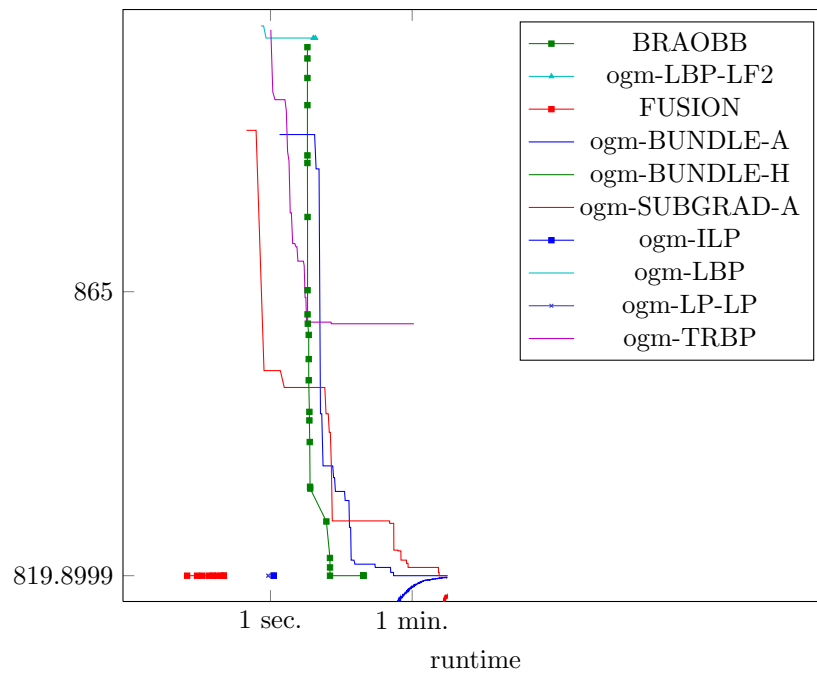


Figure 1352: Runtime results for the instance *gm264* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

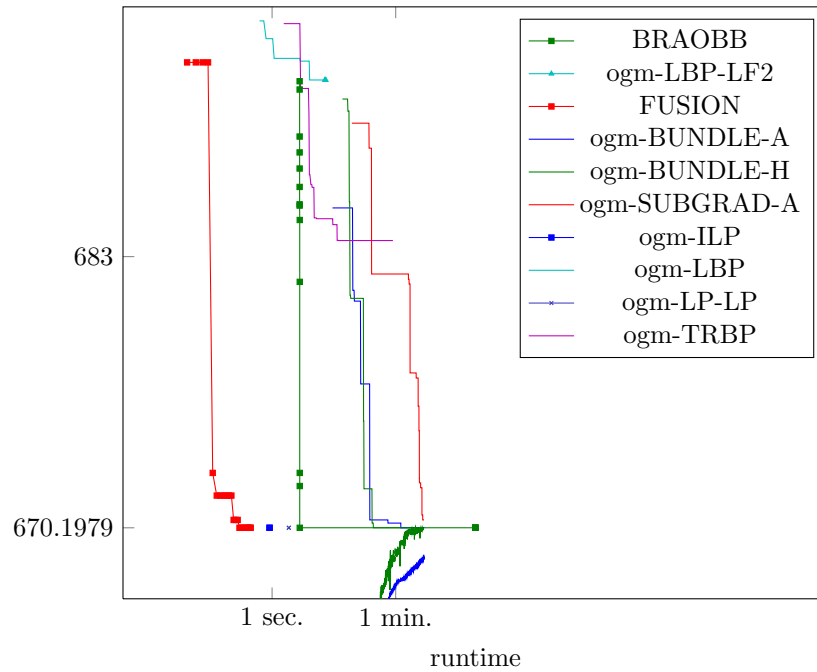


Figure 1353: Runtime results for the instance *gm265* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

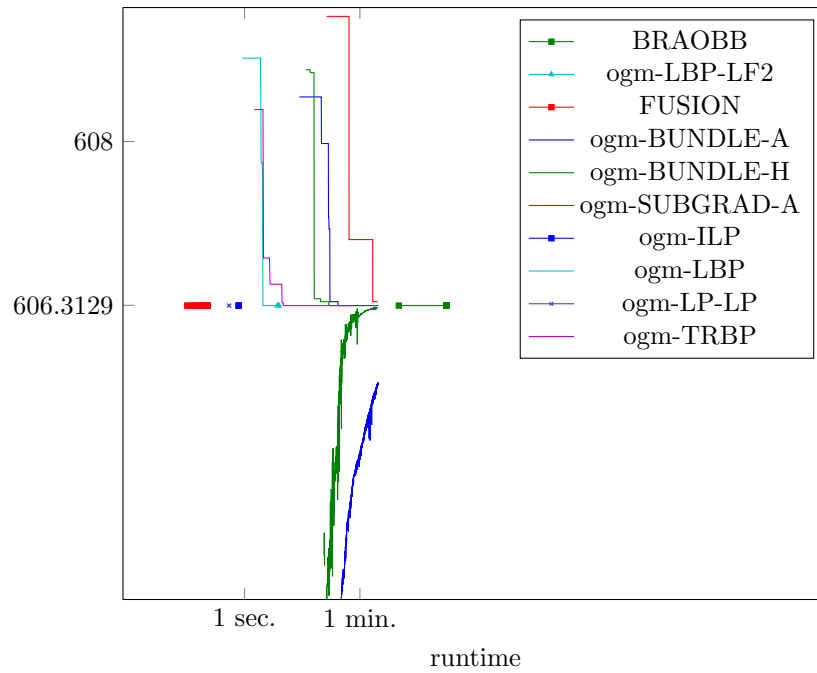


Figure 1354: Runtime results for the instance *gm266* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

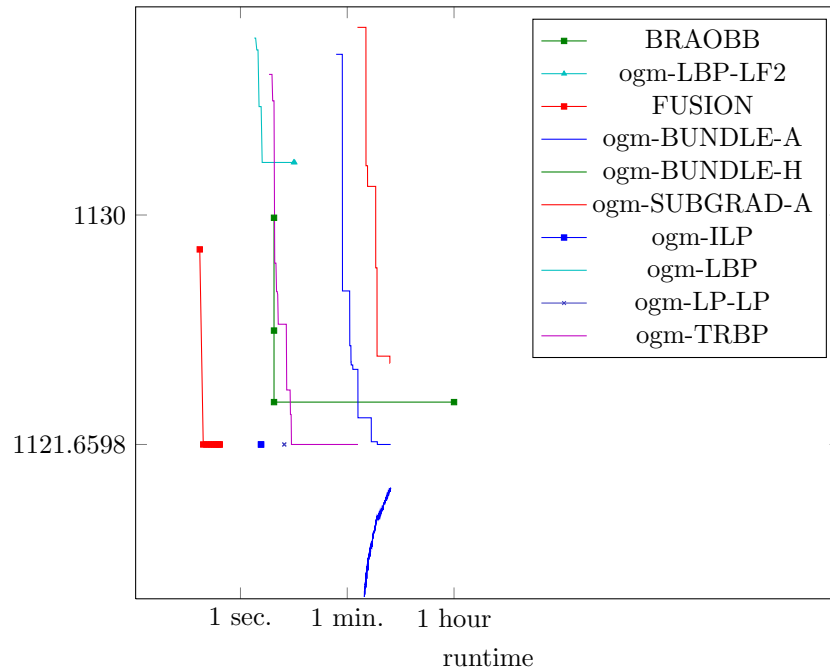


Figure 1355: Runtime results for the instance *gm267* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

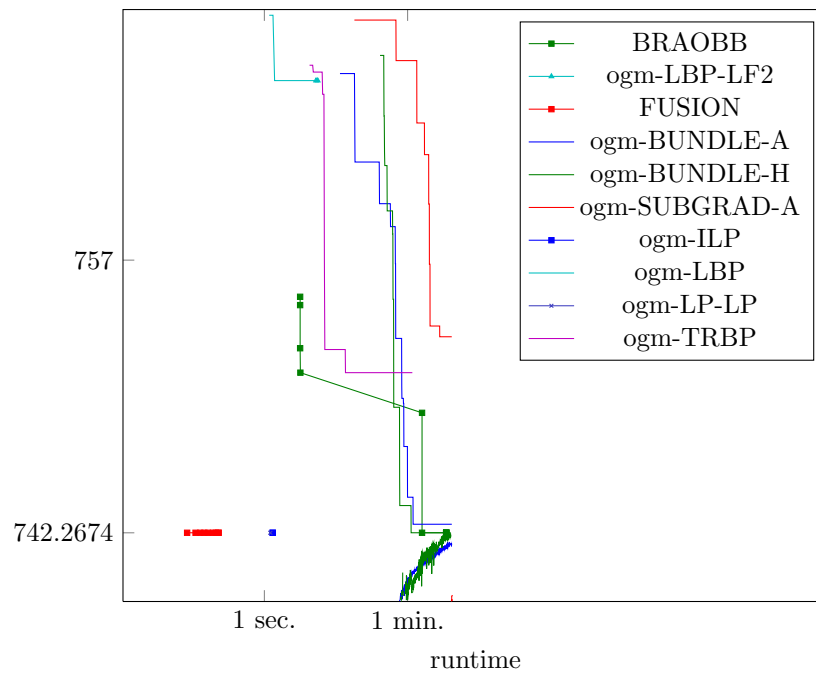


Figure 1356: Runtime results for the instance *gm268* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

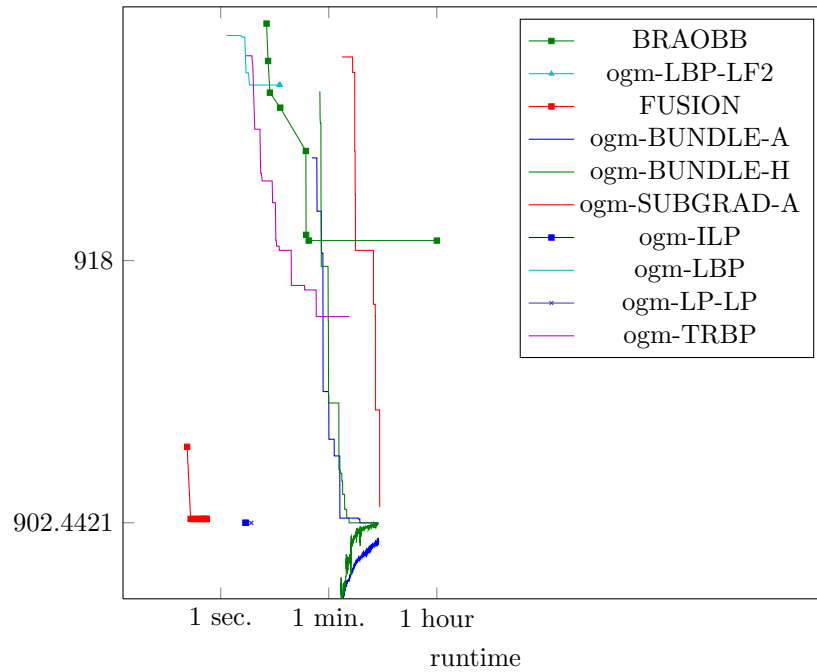


Figure 1357: Runtime results for the instance *gm269* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

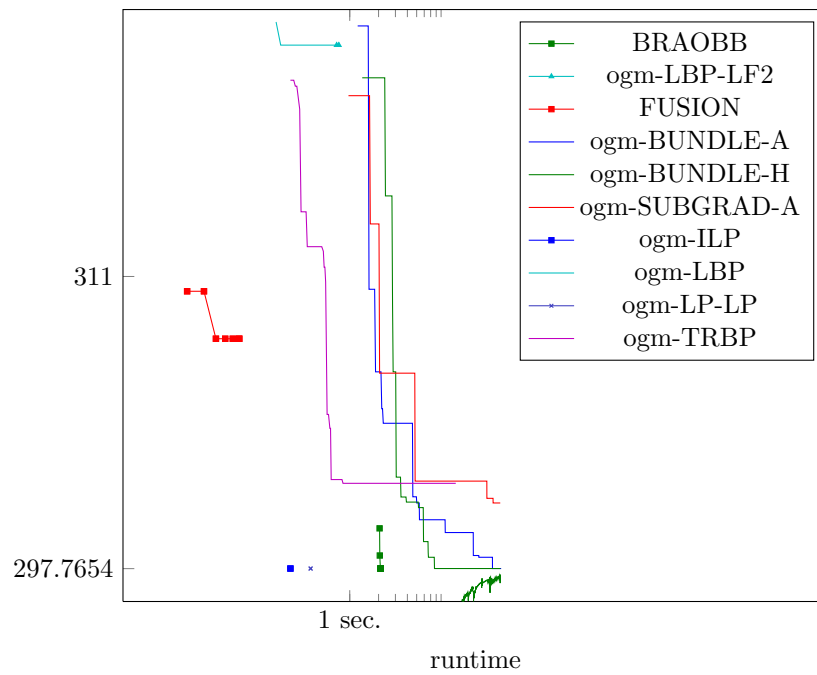


Figure 1358: Runtime results for the instance *gm26* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

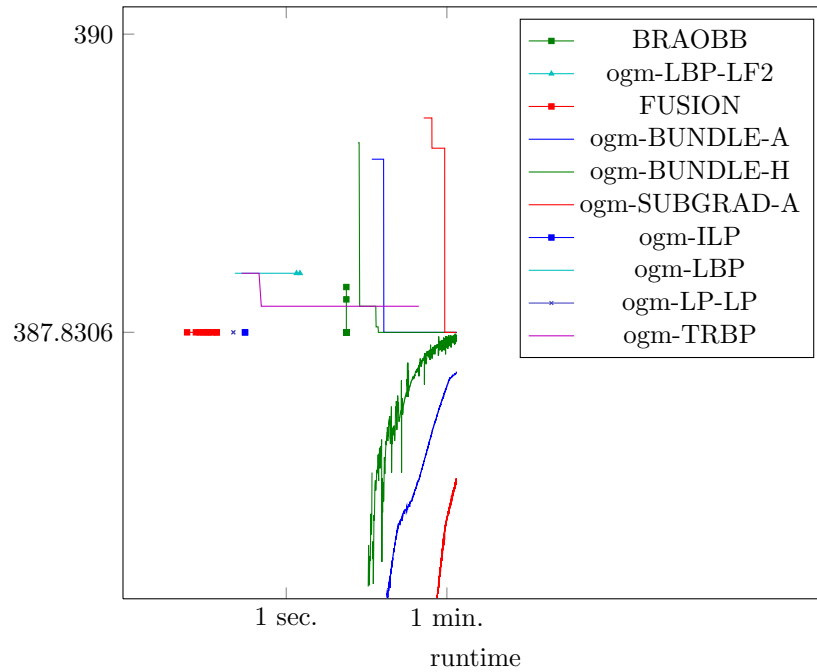


Figure 1359: Runtime results for the instance *gm270* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

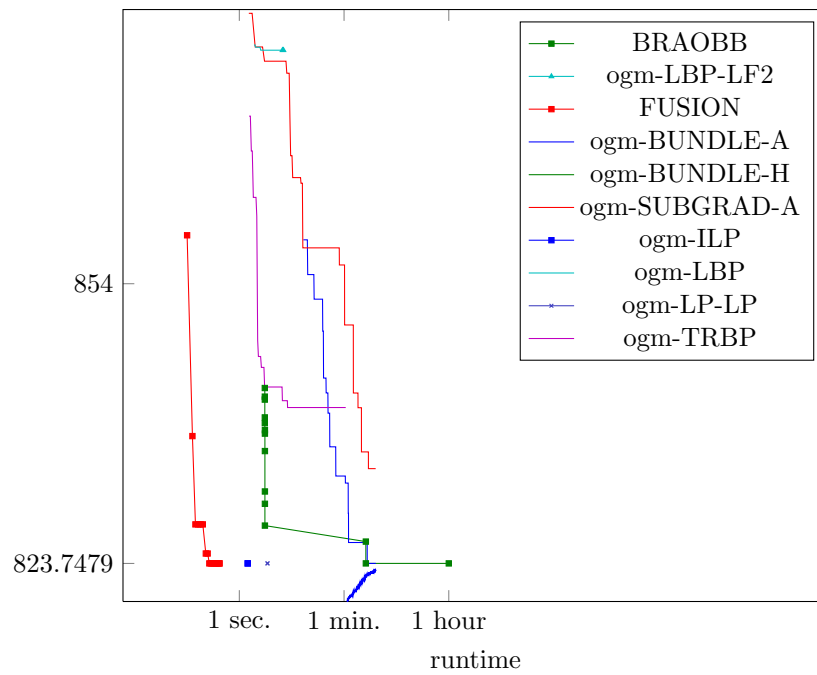


Figure 1360: Runtime results for the instance *gm271* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

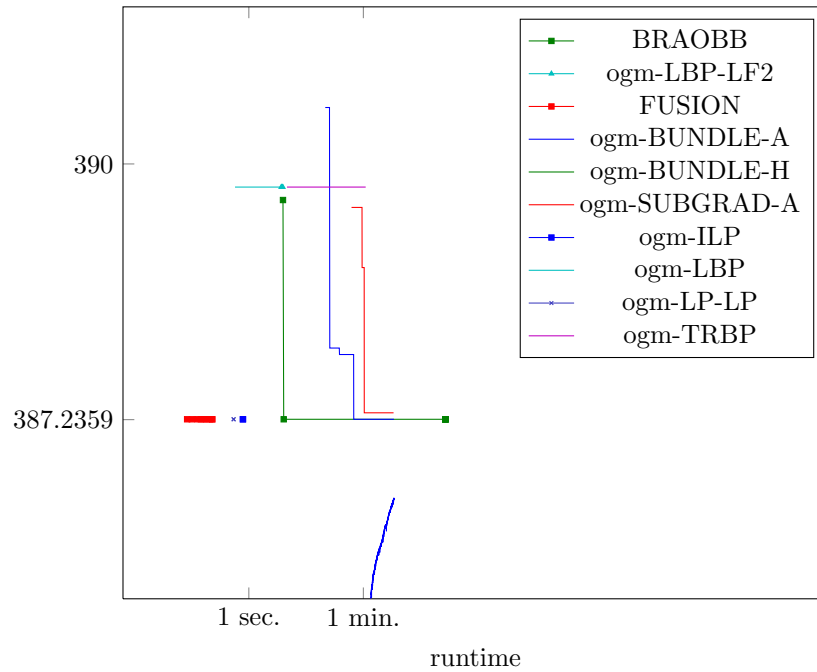


Figure 1361: Runtime results for the instance *gm272* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

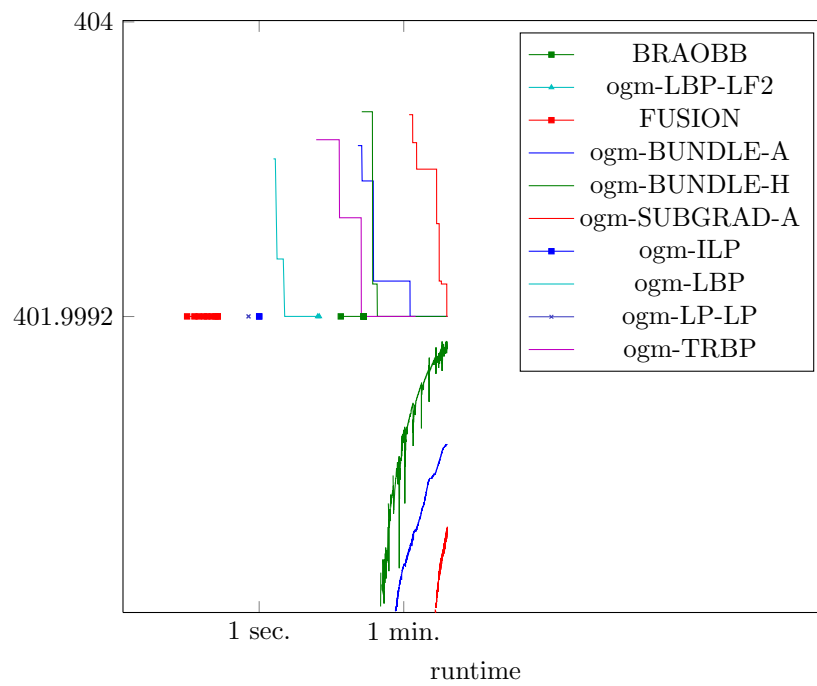


Figure 1362: Runtime results for the instance *gm273* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

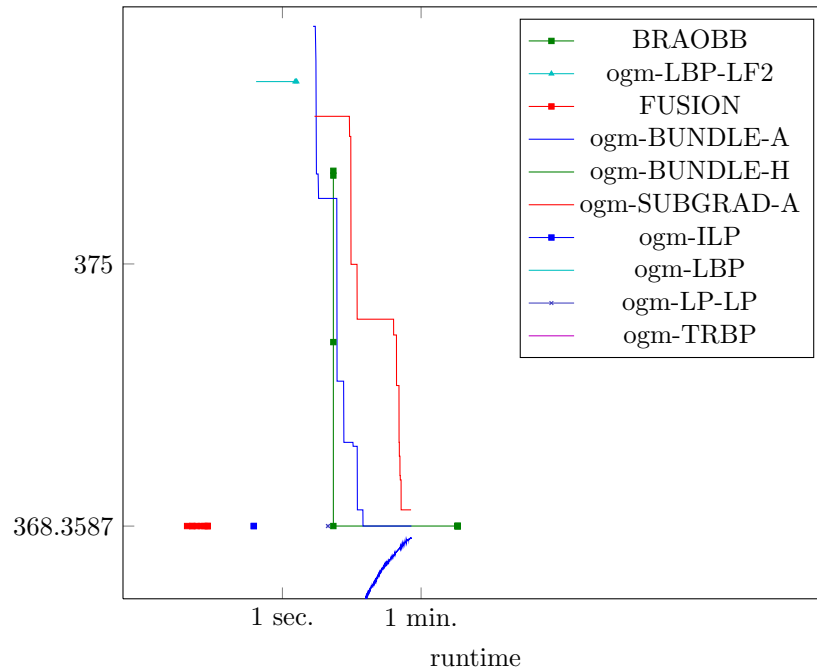


Figure 1363: Runtime results for the instance *gm274* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

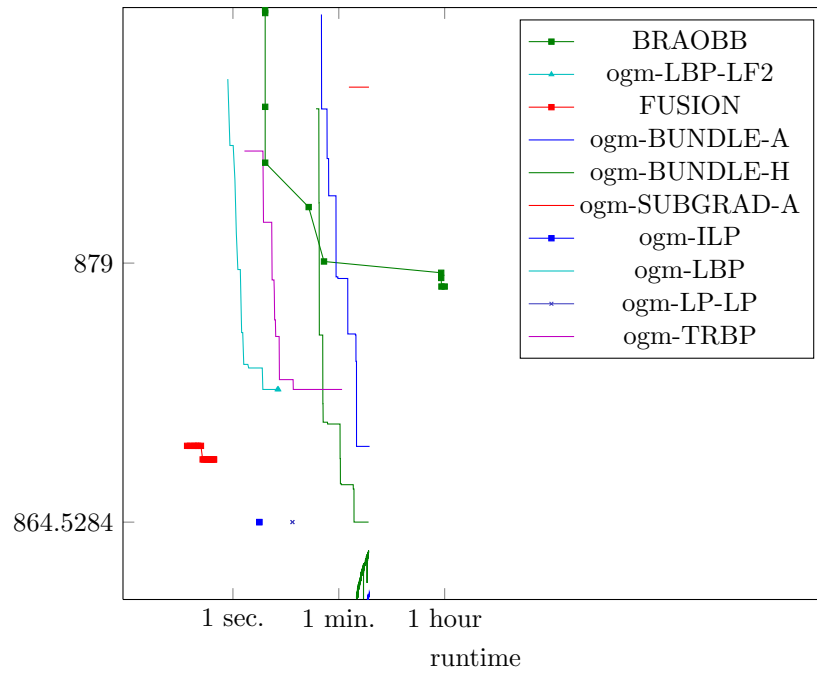


Figure 1364: Runtime results for the instance *gm275* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

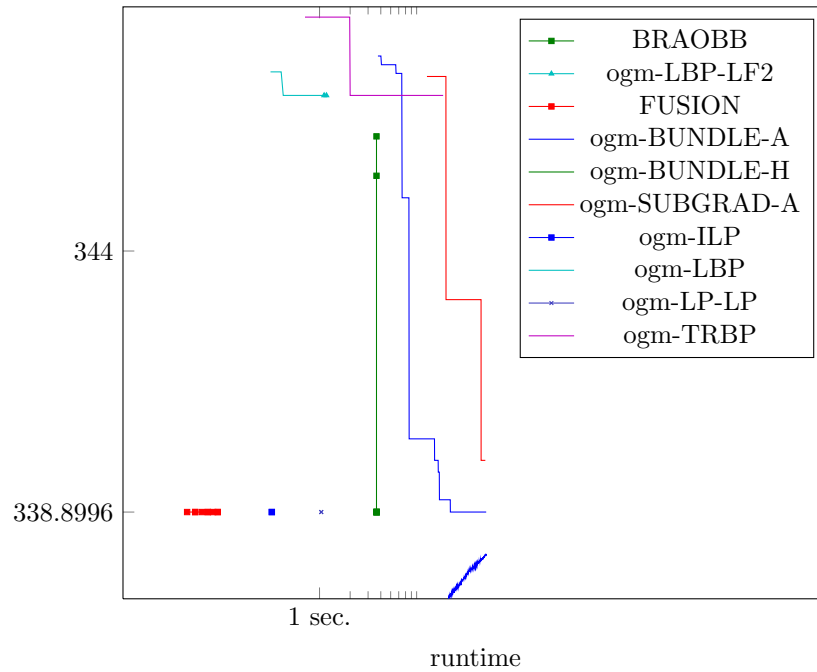


Figure 1365: Runtime results for the instance *gm276* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

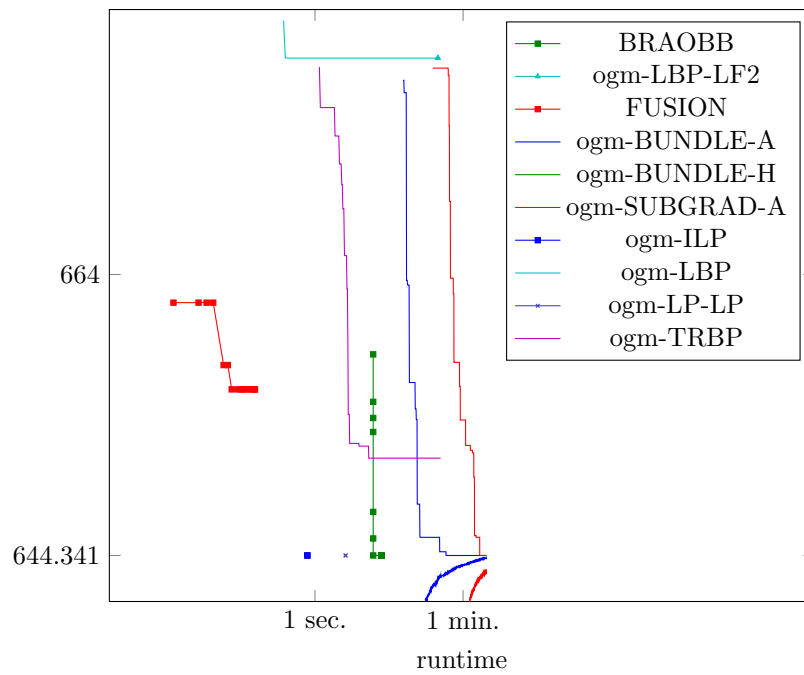


Figure 1366: Runtime results for the instance *gm277* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

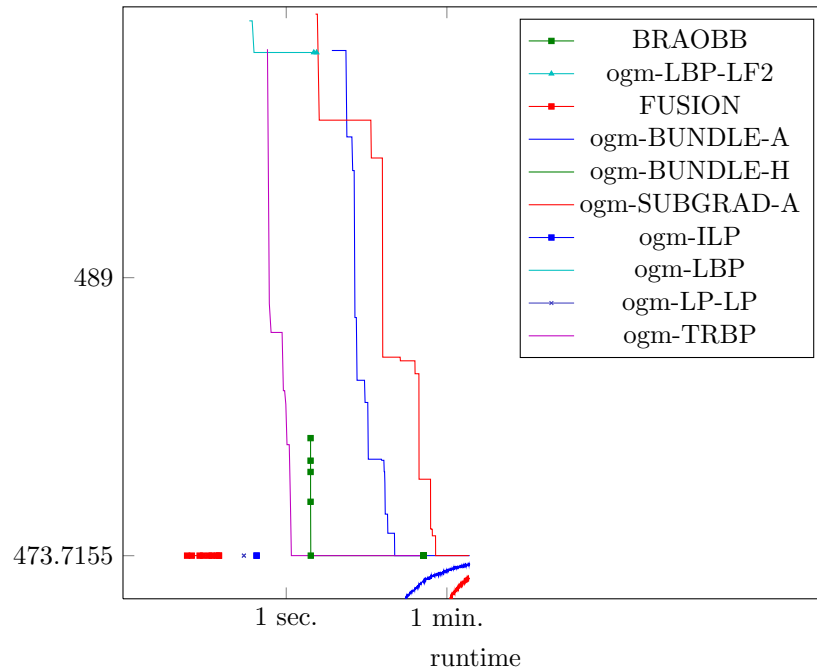


Figure 1367: Runtime results for the instance *gm278* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

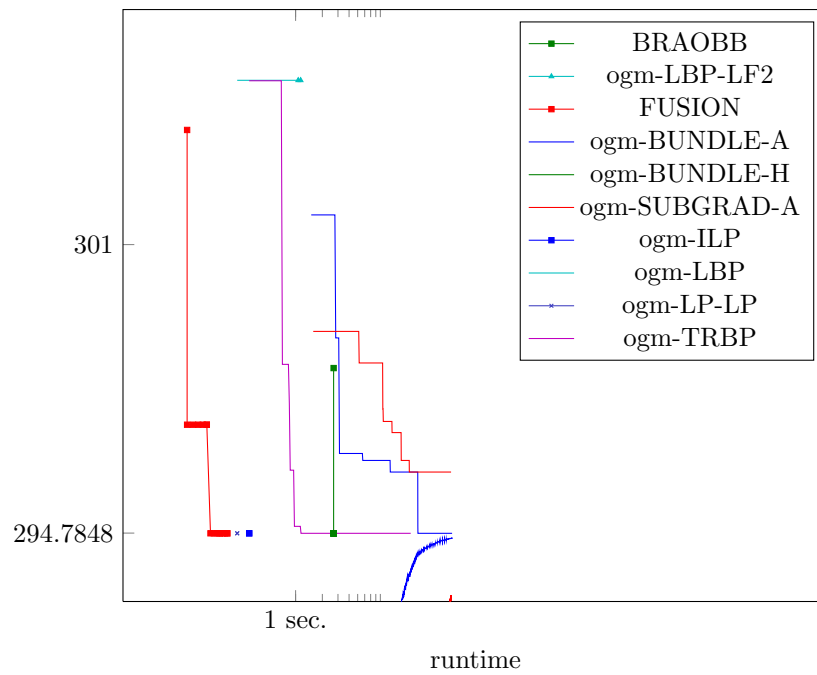


Figure 1368: Runtime results for the instance *gm279* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

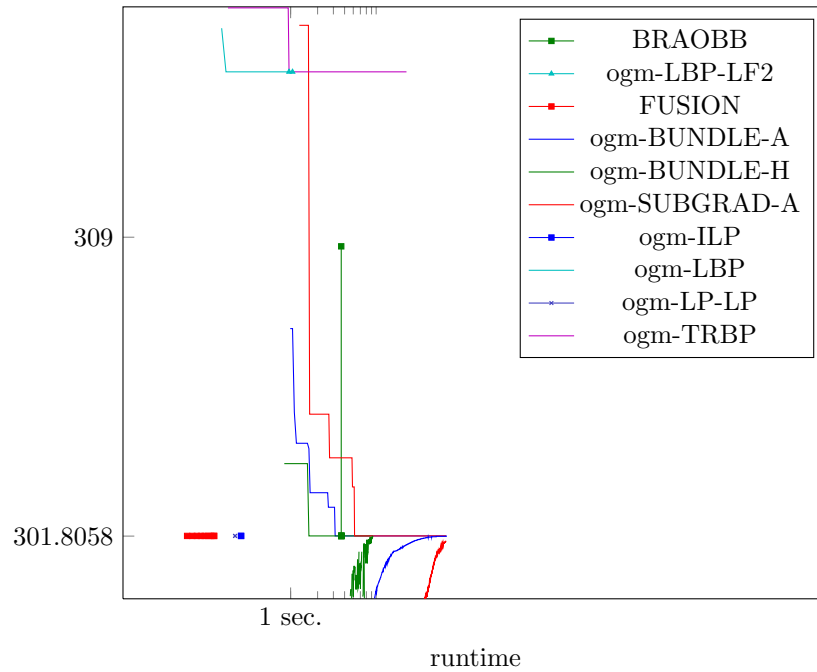


Figure 1369: Runtime results for the instance *gm27* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

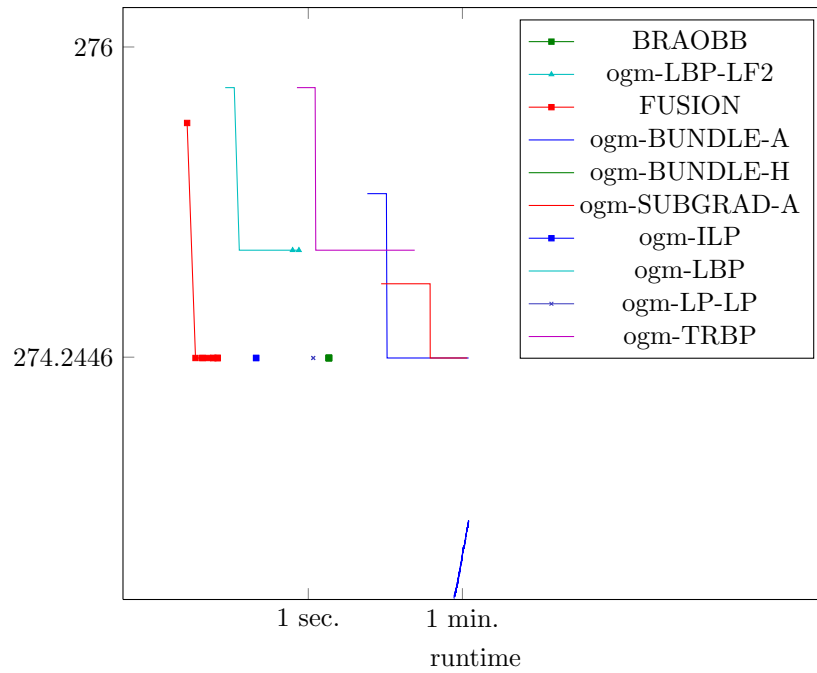


Figure 1370: Runtime results for the instance *gm280* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

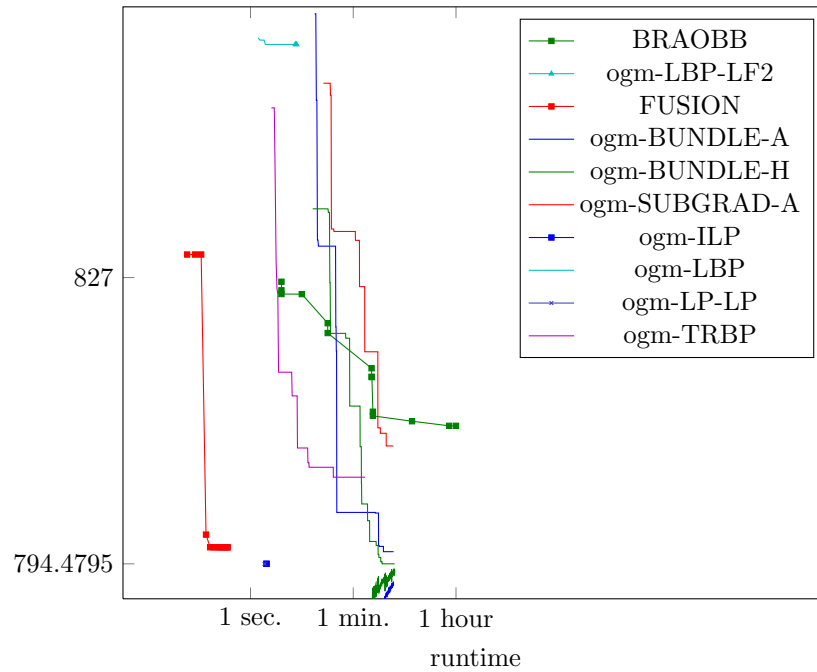


Figure 1371: Runtime results for the instance *gm281* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

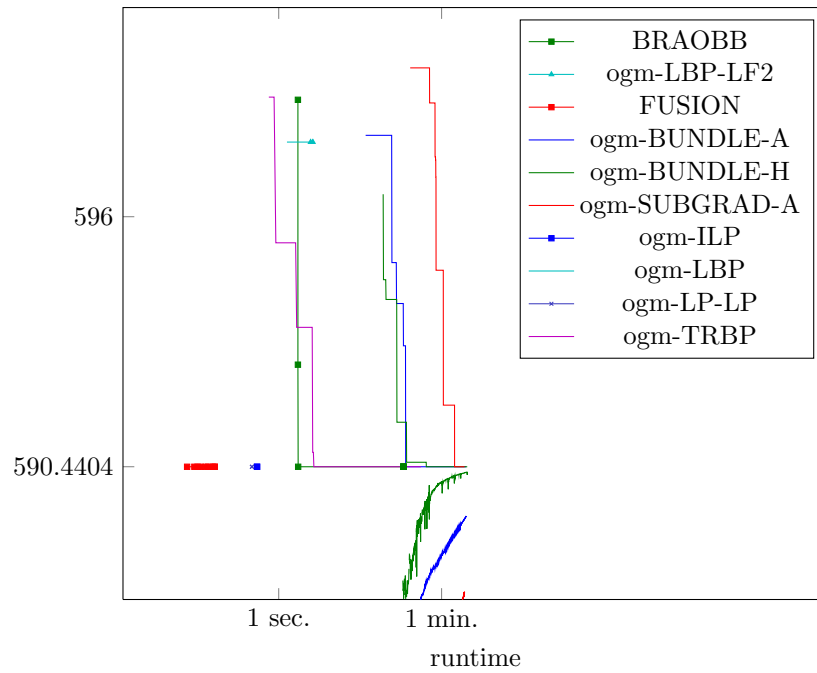


Figure 1372: Runtime results for the instance *gm282* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

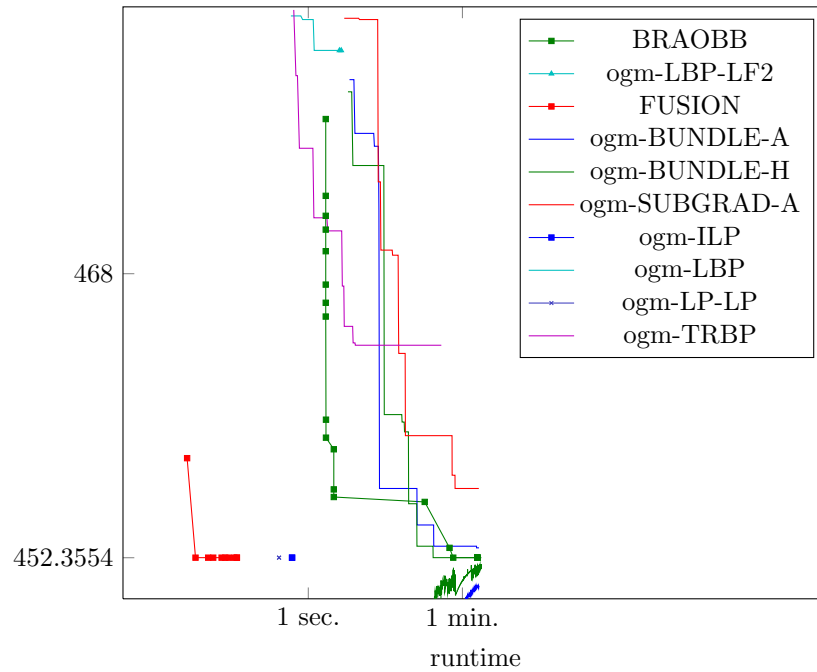


Figure 1373: Runtime results for the instance *gm283* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

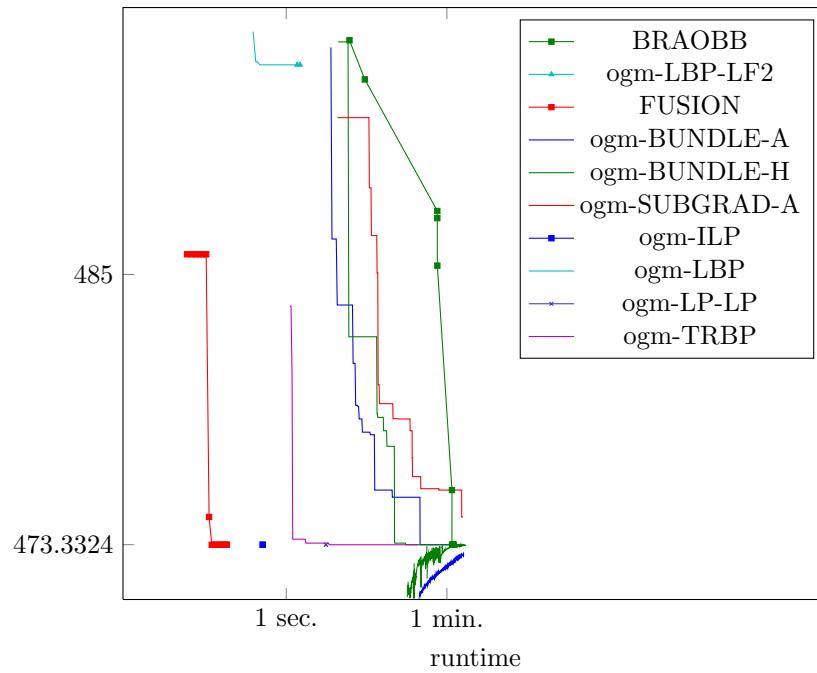


Figure 1374: Runtime results for the instance *gm284* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

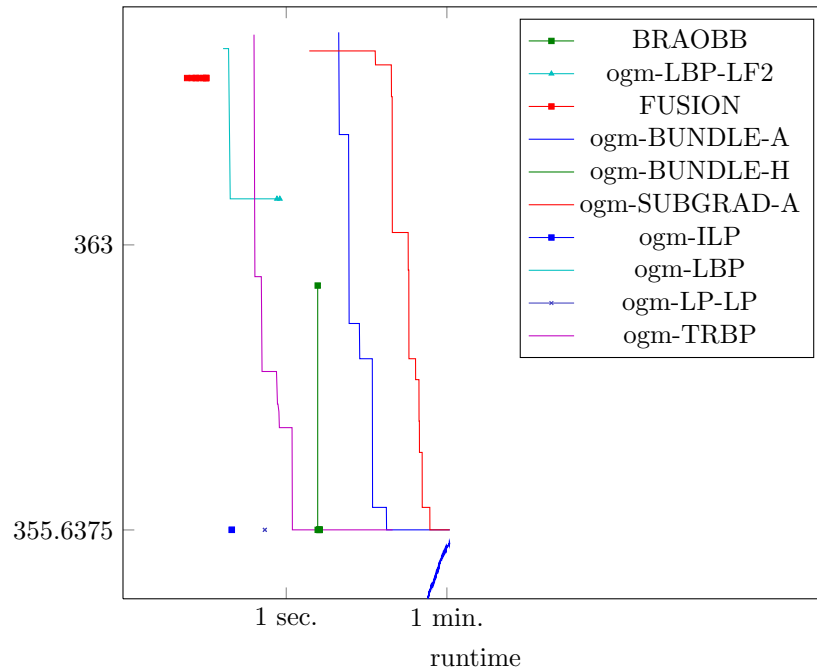


Figure 1375: Runtime results for the instance *gm285* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

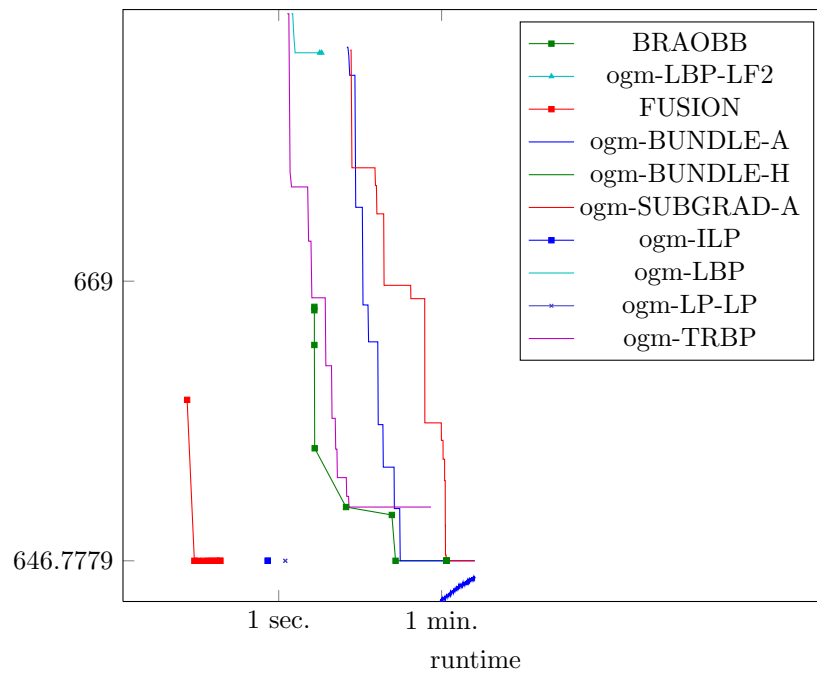


Figure 1376: Runtime results for the instance *gm286* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

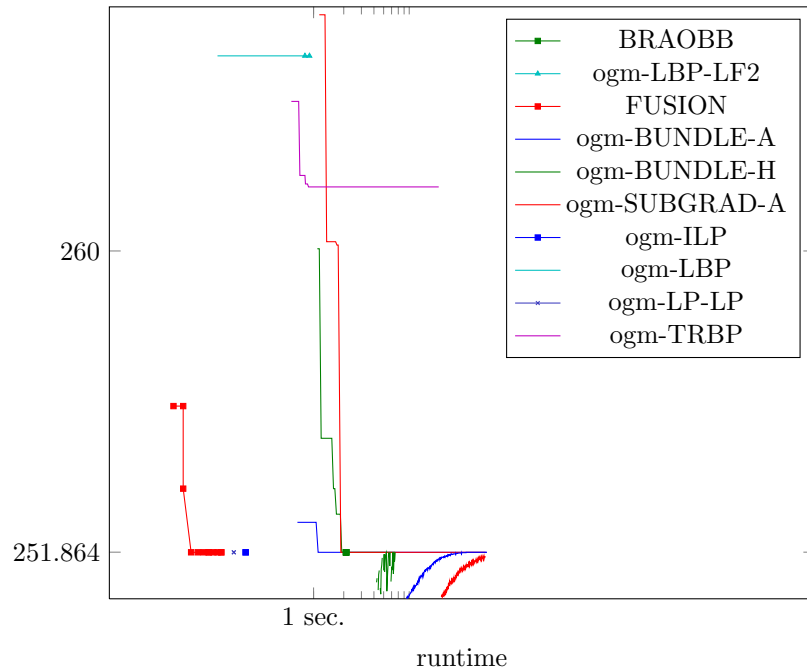


Figure 1377: Runtime results for the instance *gm287* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

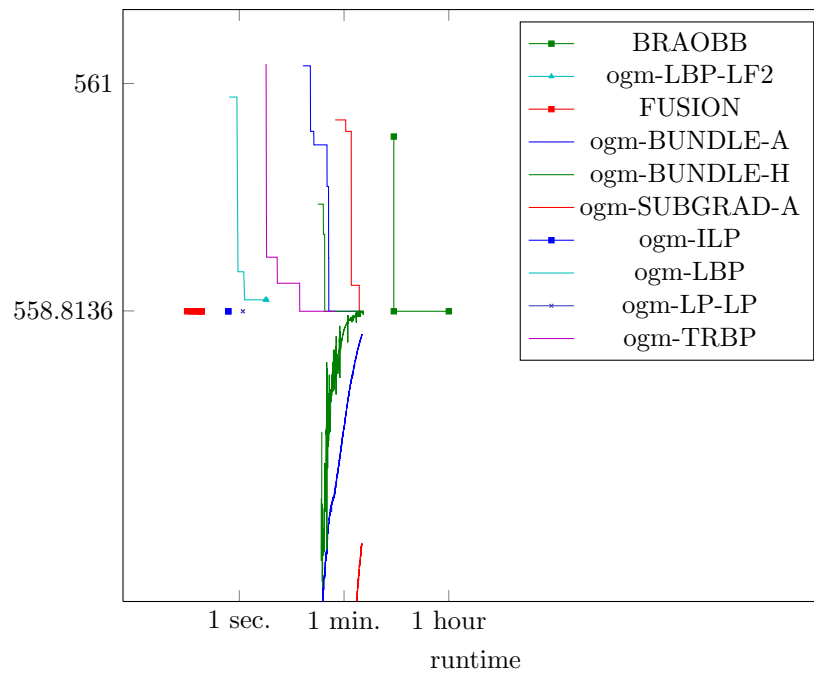


Figure 1378: Runtime results for the instance *gm288* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

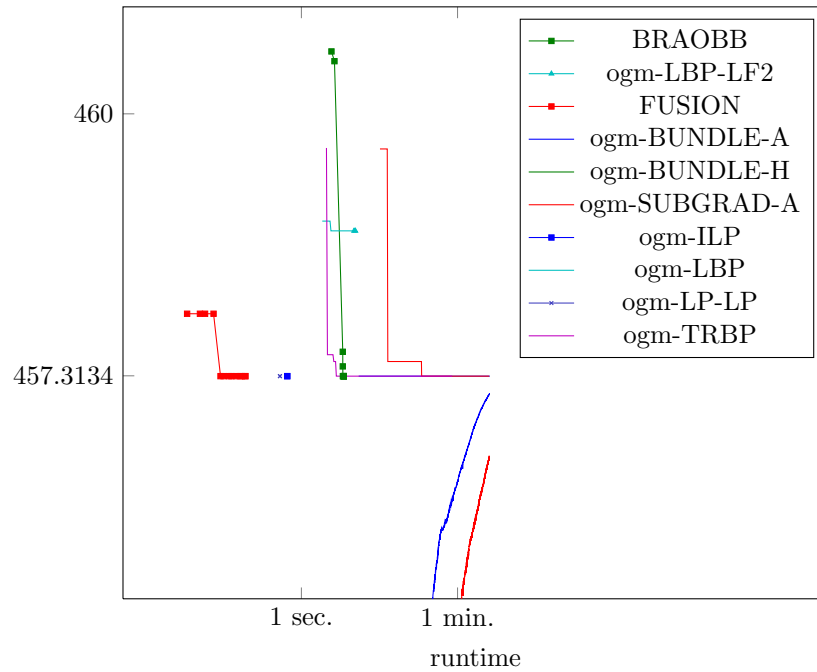


Figure 1379: Runtime results for the instance *gm289* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

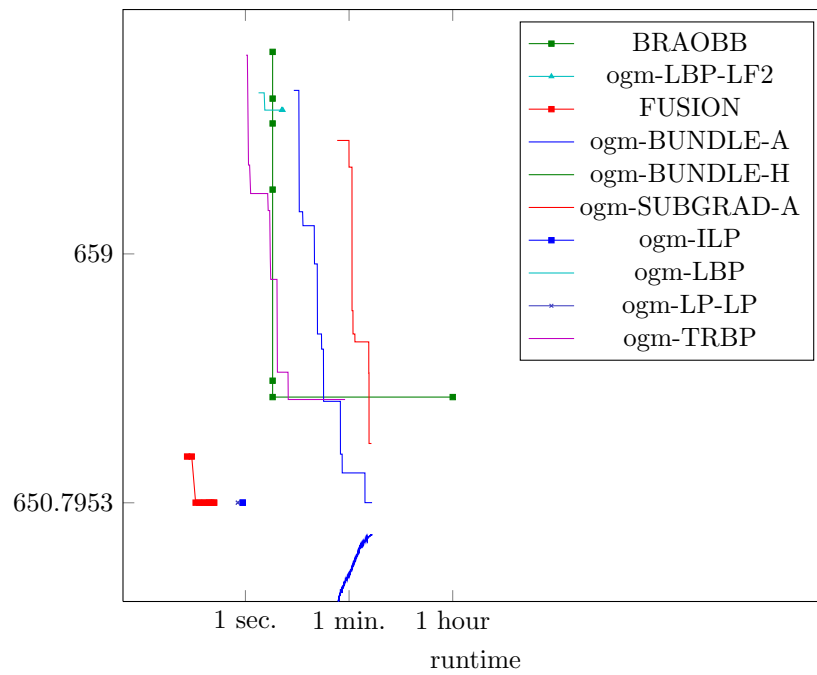


Figure 1380: Runtime results for the instance *gm28* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

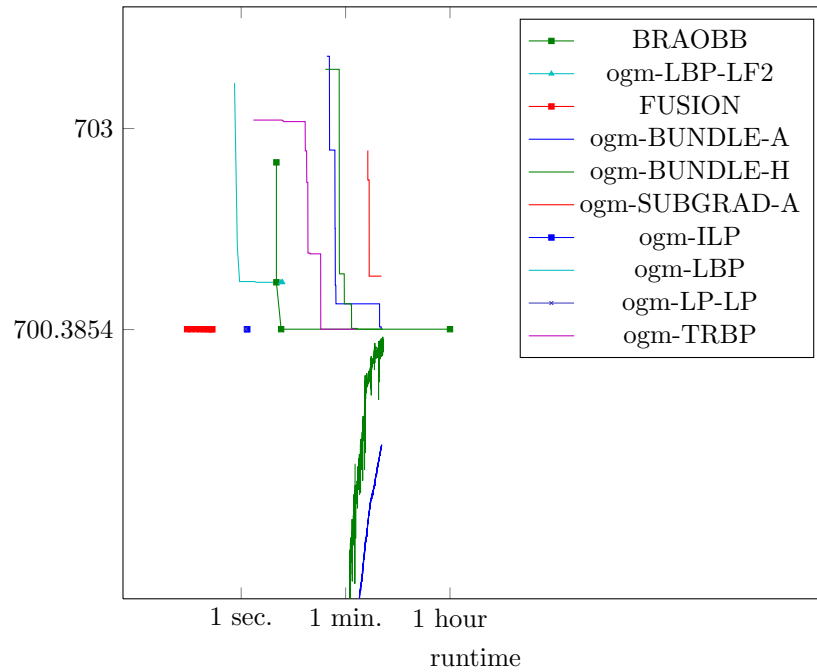


Figure 1381: Runtime results for the instance *gm290* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

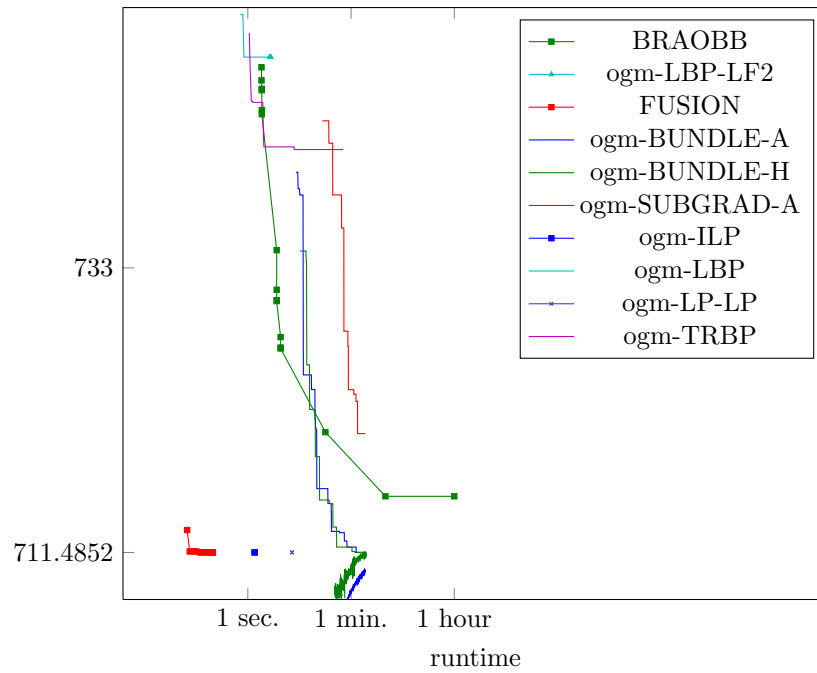


Figure 1382: Runtime results for the instance *gm291* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

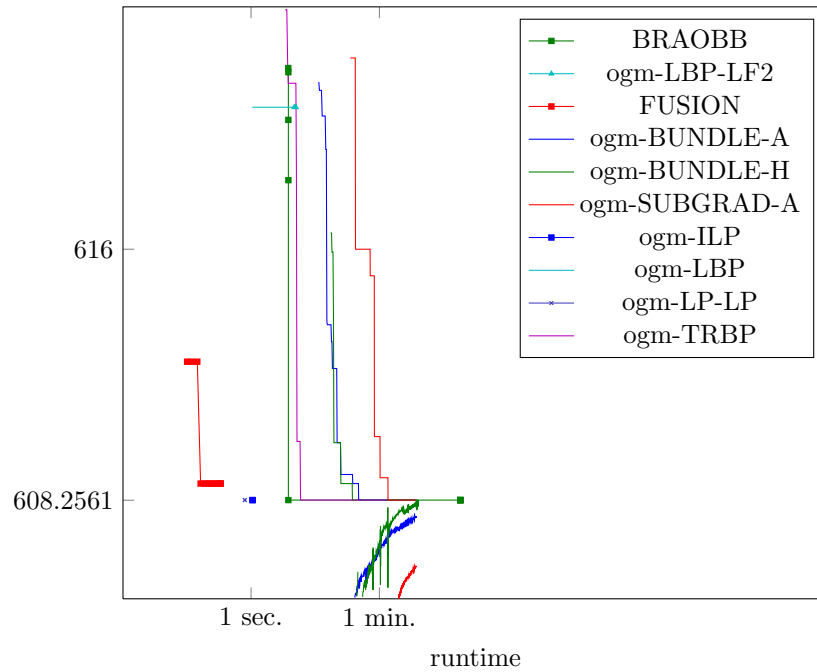


Figure 1383: Runtime results for the instance *gm292* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

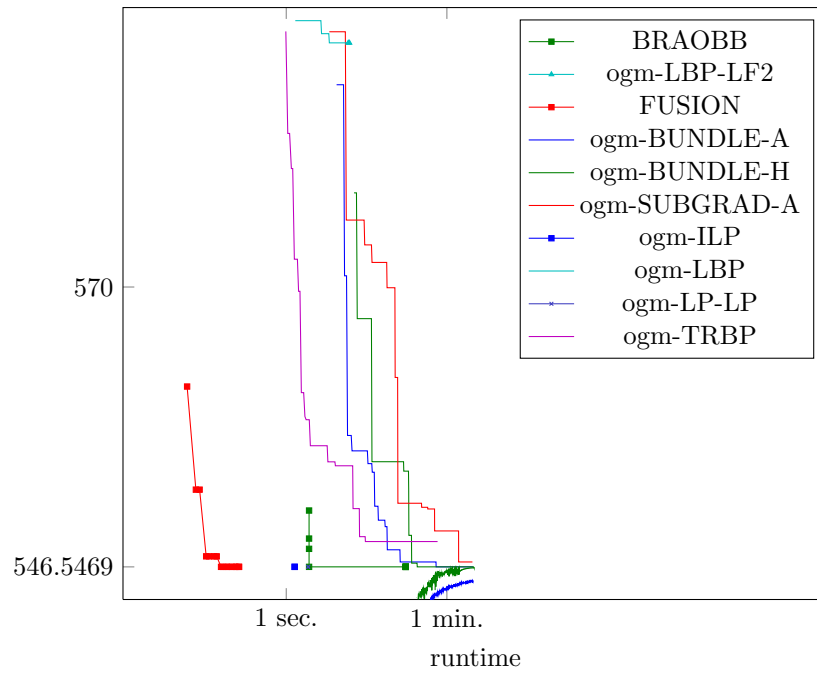


Figure 1384: Runtime results for the instance *gm293* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

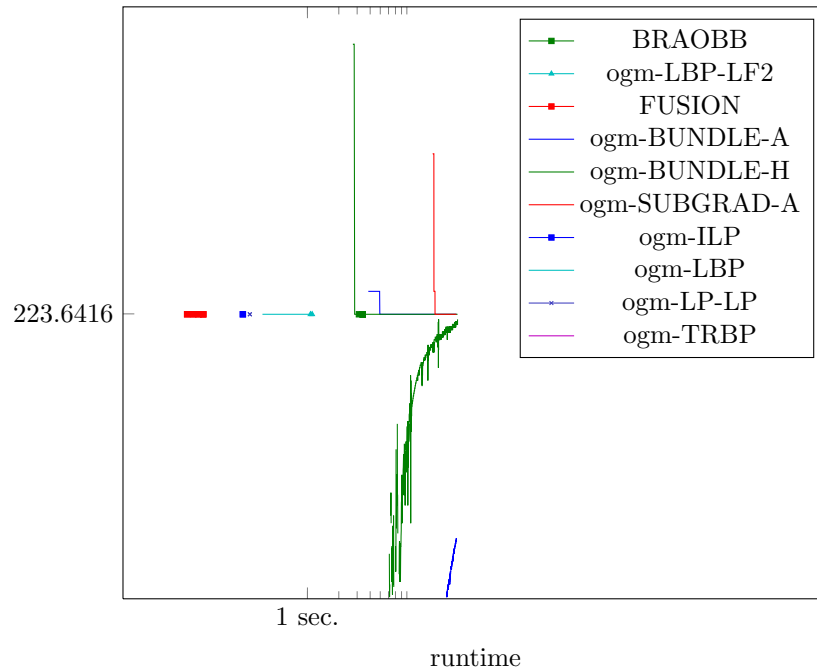


Figure 1385: Runtime results for the instance *gm294* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

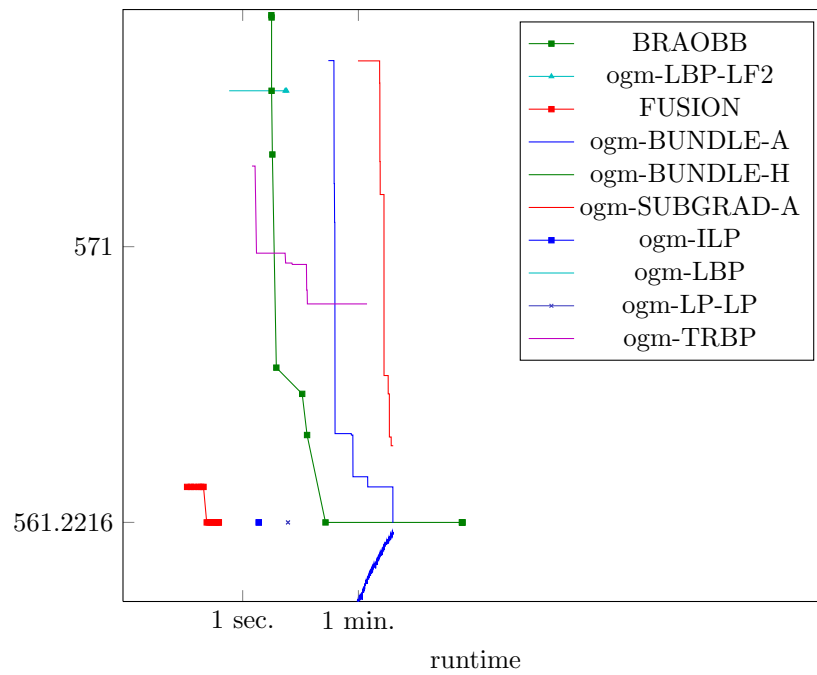


Figure 1386: Runtime results for the instance *gm295* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

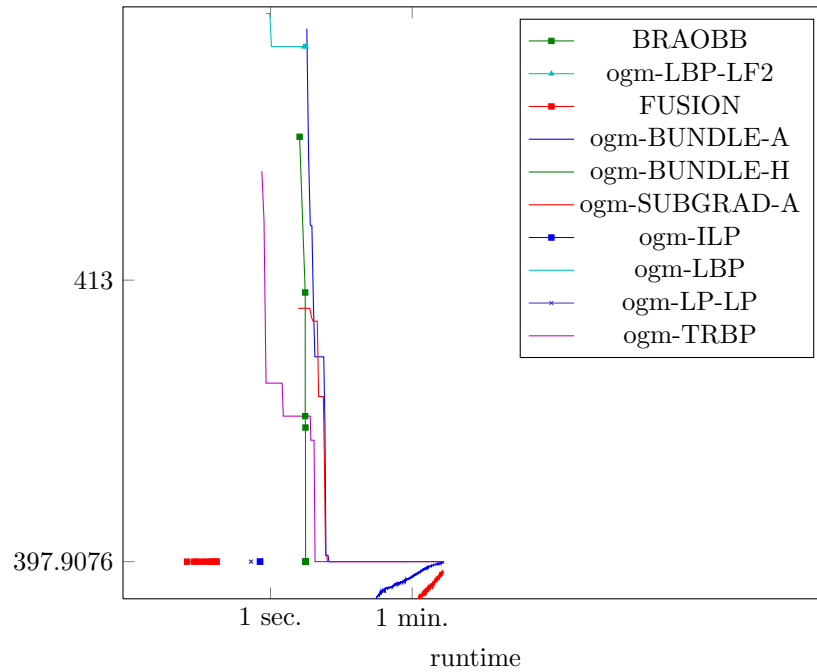


Figure 1387: Runtime results for the instance *gm296* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

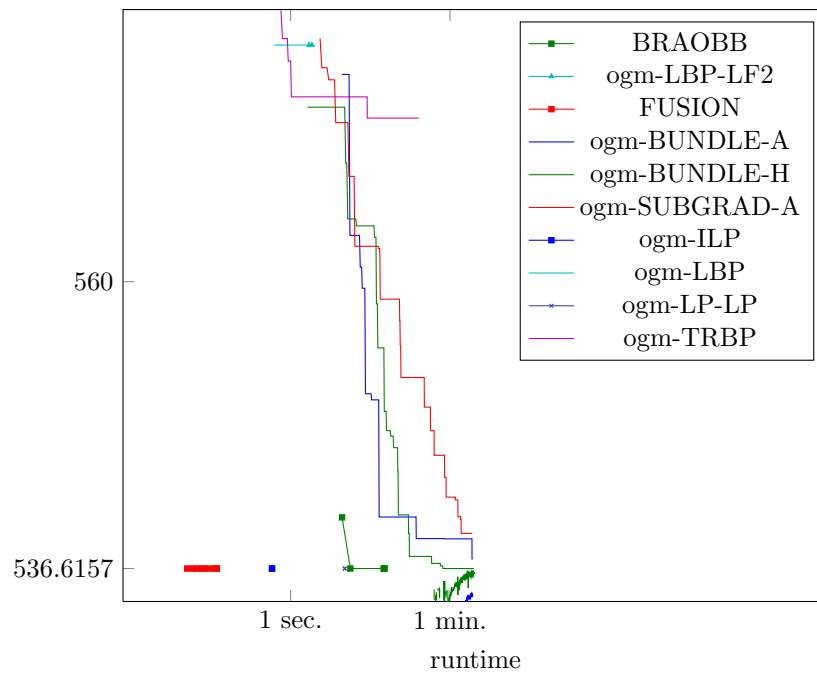


Figure 1388: Runtime results for the instance *gm297* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

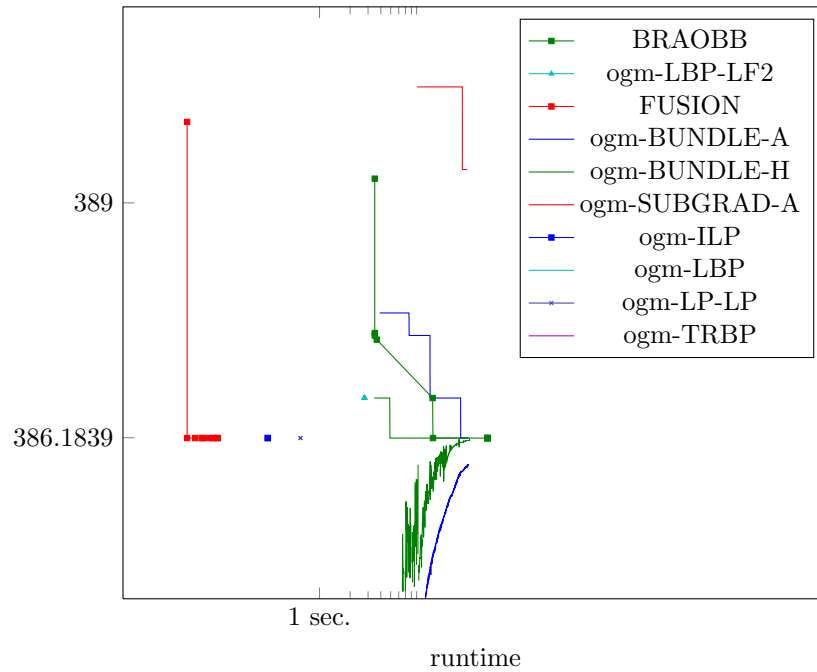


Figure 1389: Runtime results for the instance *gm298* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

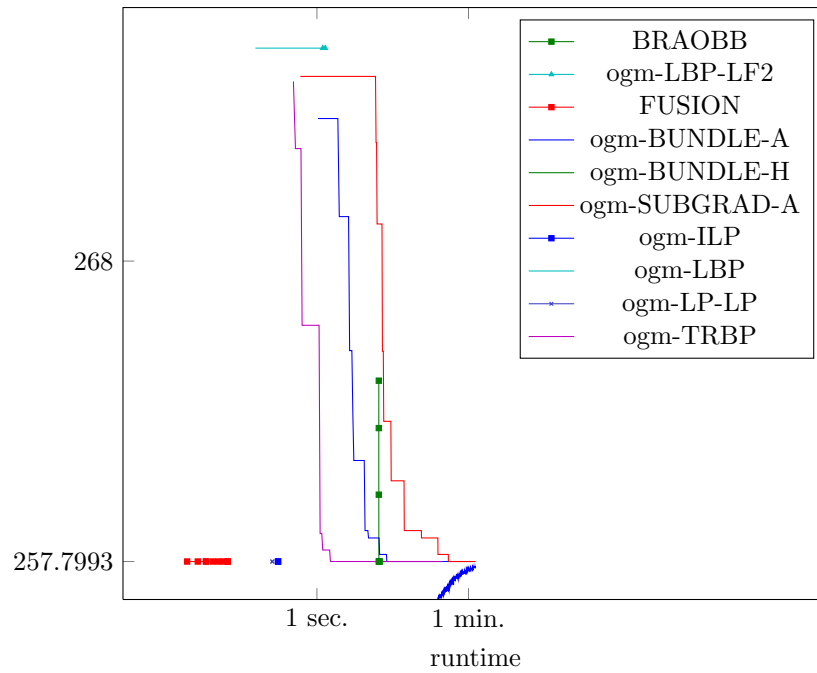


Figure 1390: Runtime results for the instance *gm299* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

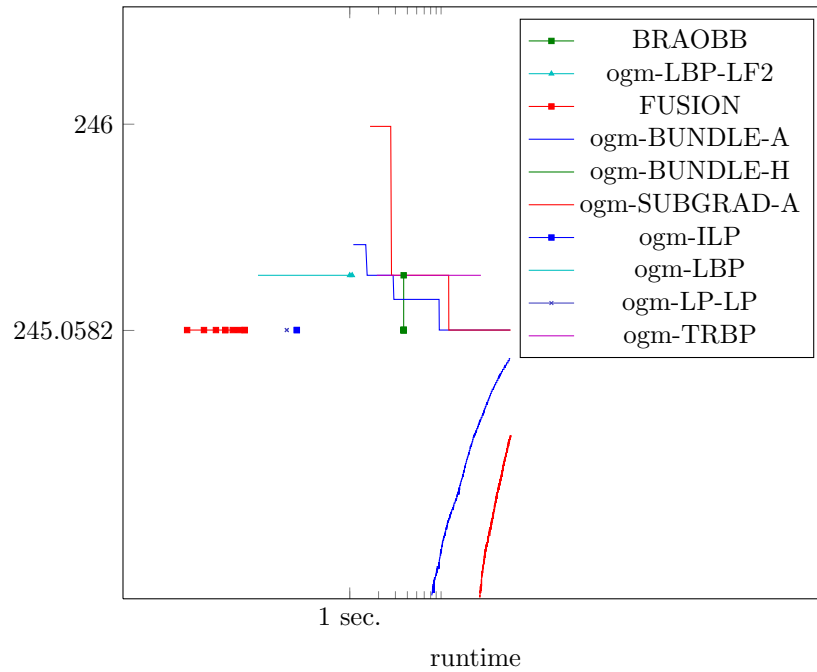


Figure 1391: Runtime results for the instance *gm29* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

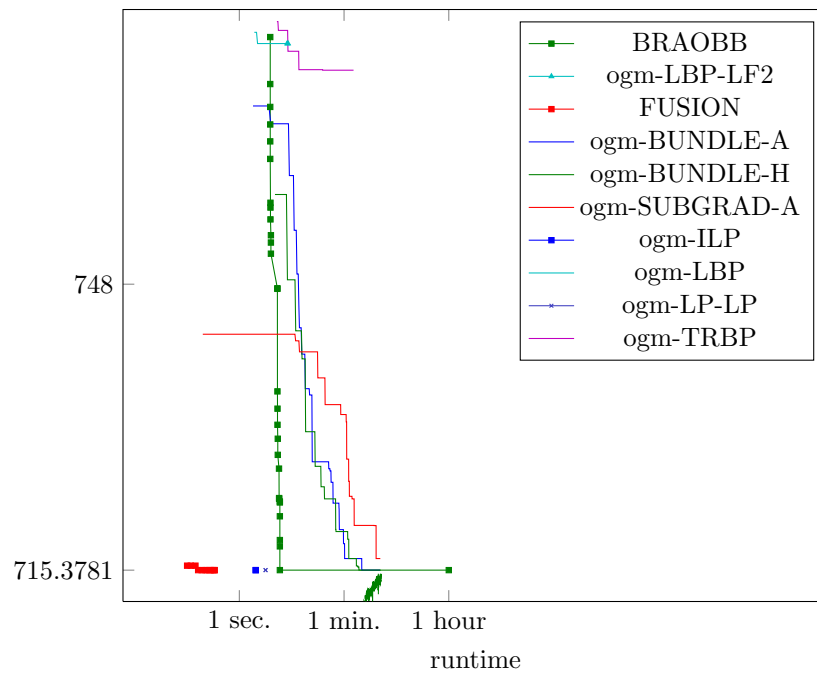


Figure 1392: Runtime results for the instance *gm2* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

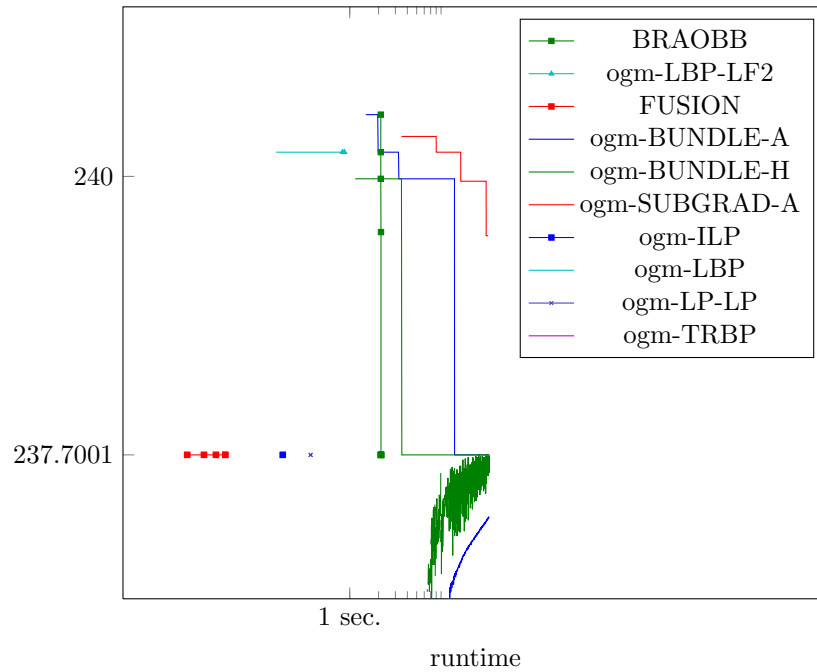


Figure 1393: Runtime results for the instance *gm300* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

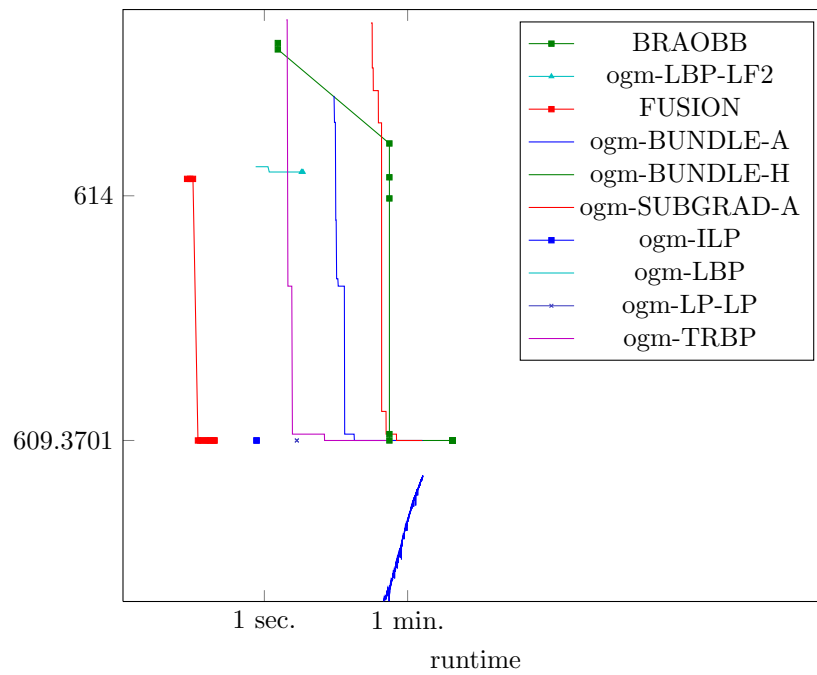


Figure 1394: Runtime results for the instance *gm30* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

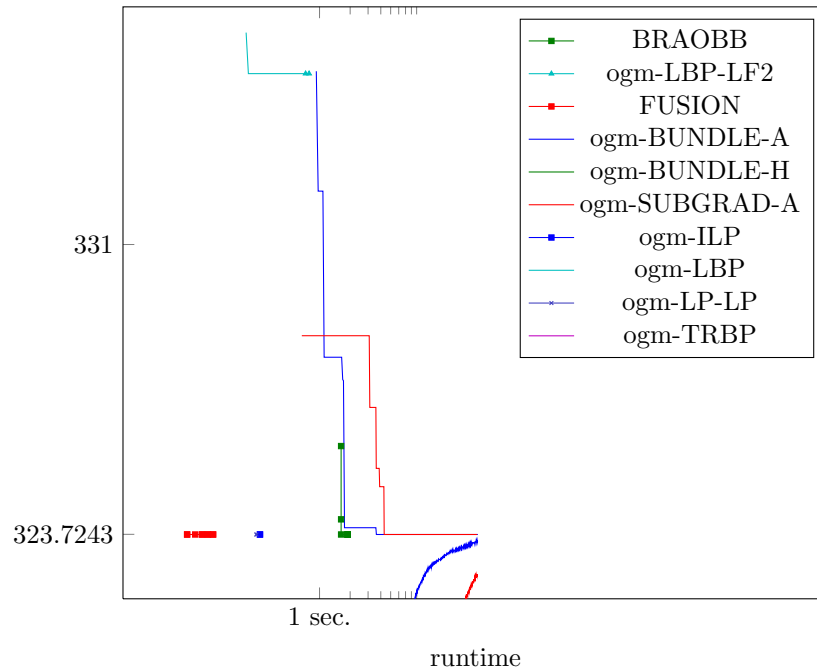


Figure 1395: Runtime results for the instance *gm31* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

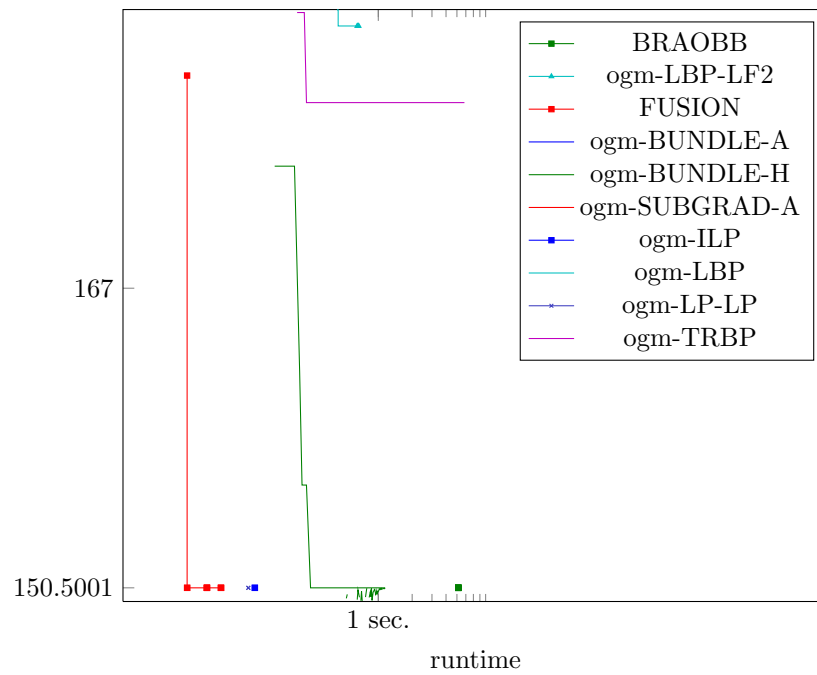


Figure 1396: Runtime results for the instance *gm32* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

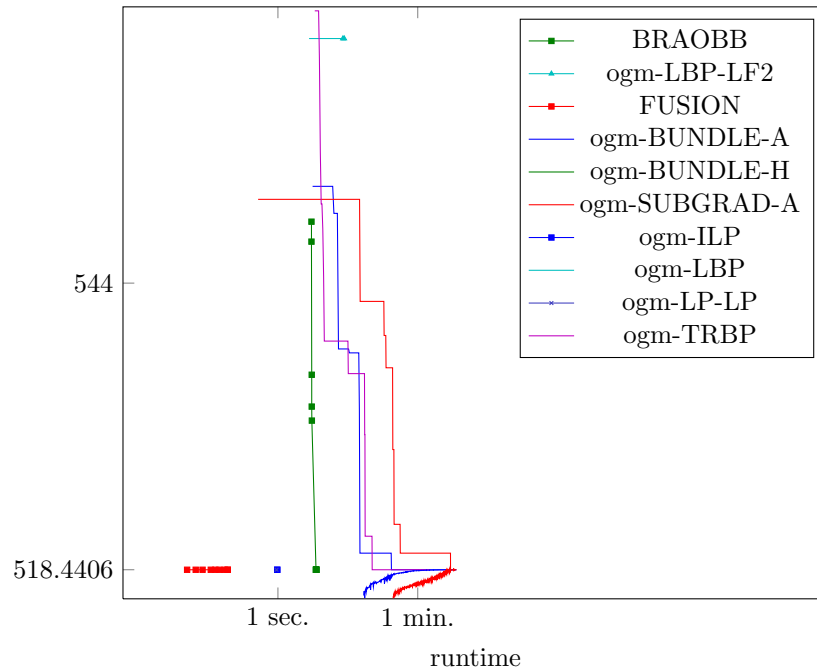


Figure 1397: Runtime results for the instance *gm33* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

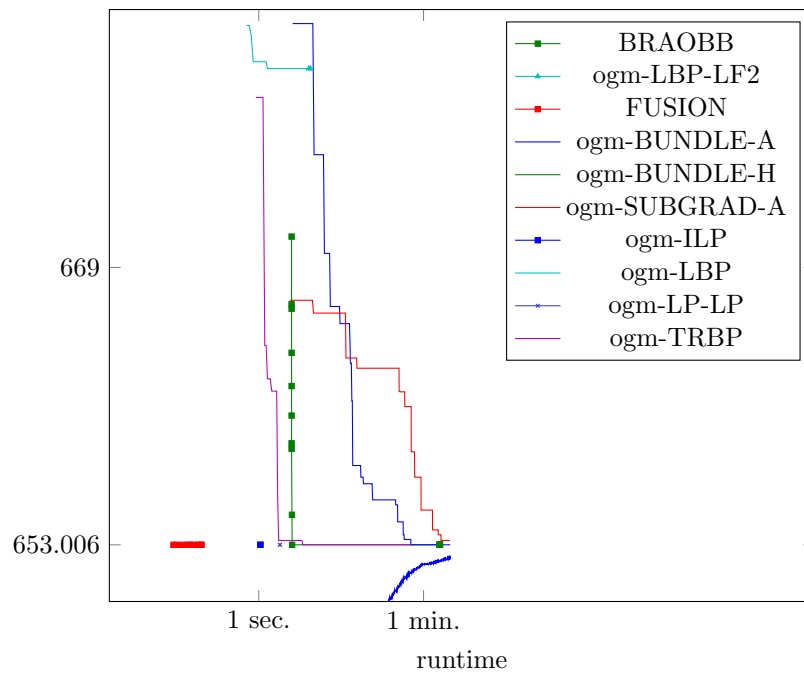


Figure 1398: Runtime results for the instance *gm34* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

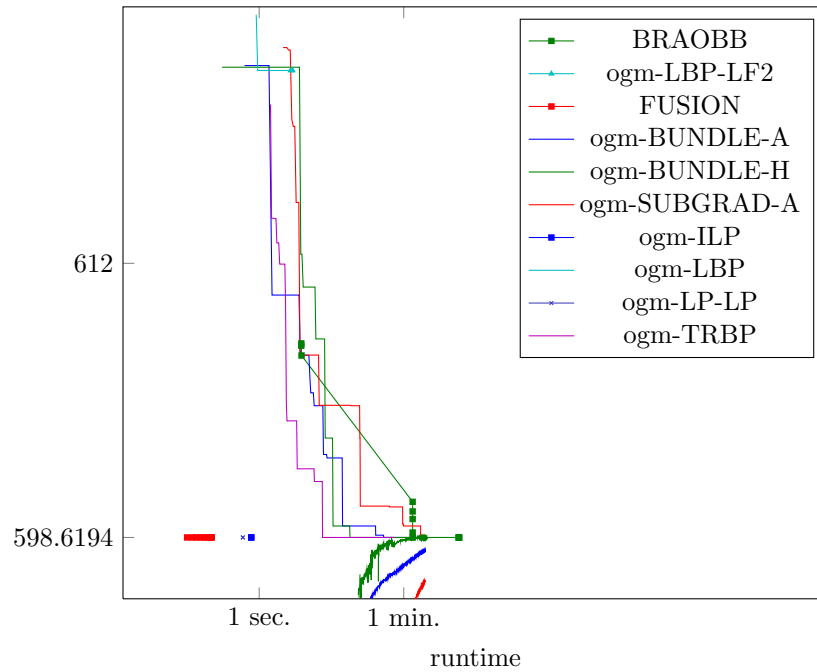


Figure 1399: Runtime results for the instance *gm35* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

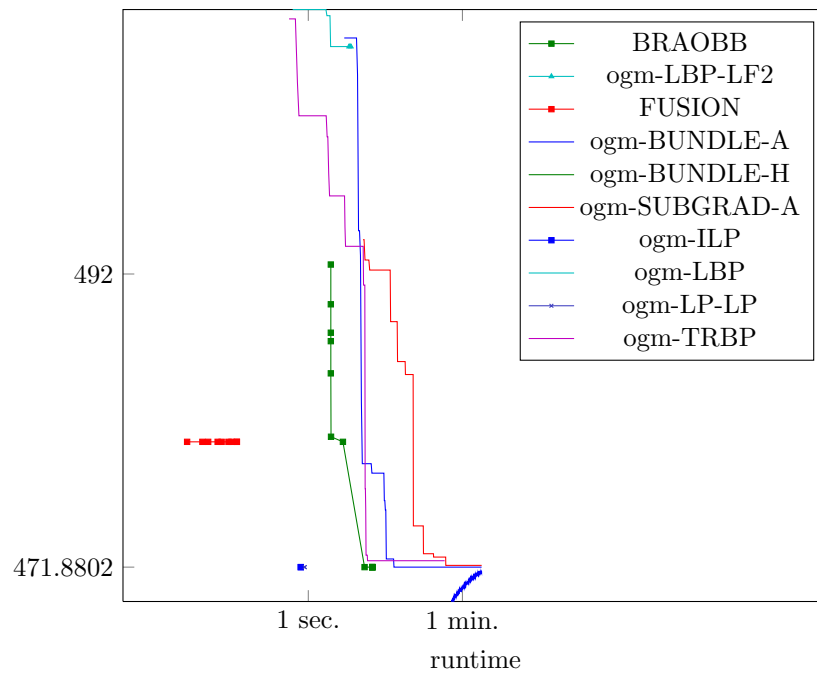


Figure 1400: Runtime results for the instance *gm36* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

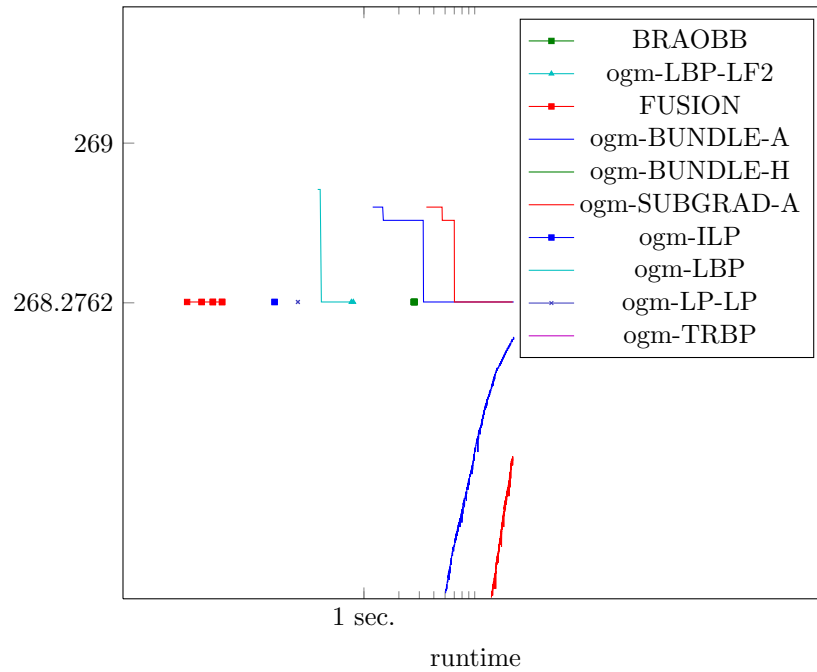


Figure 1401: Runtime results for the instance *gm37* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

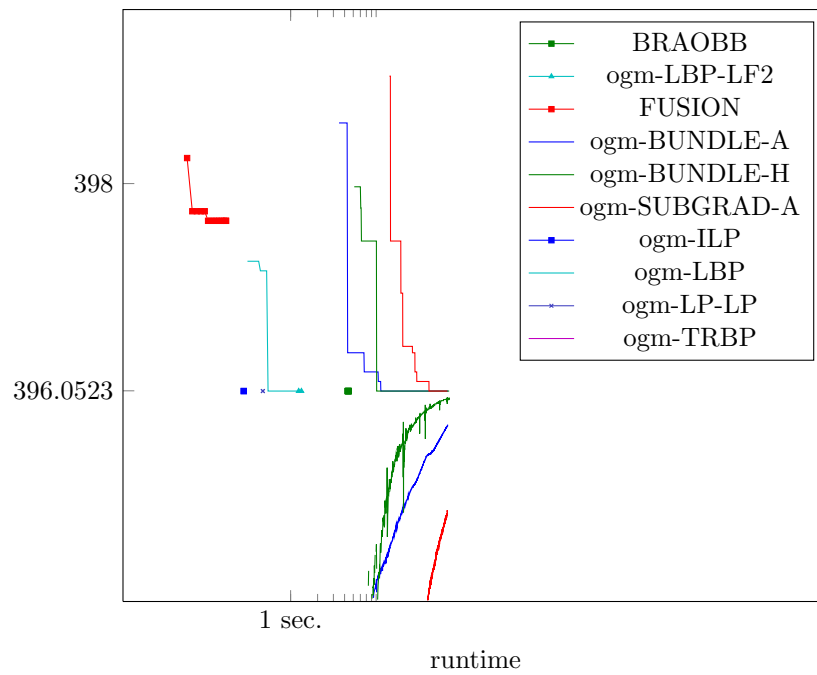


Figure 1402: Runtime results for the instance *gm38* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

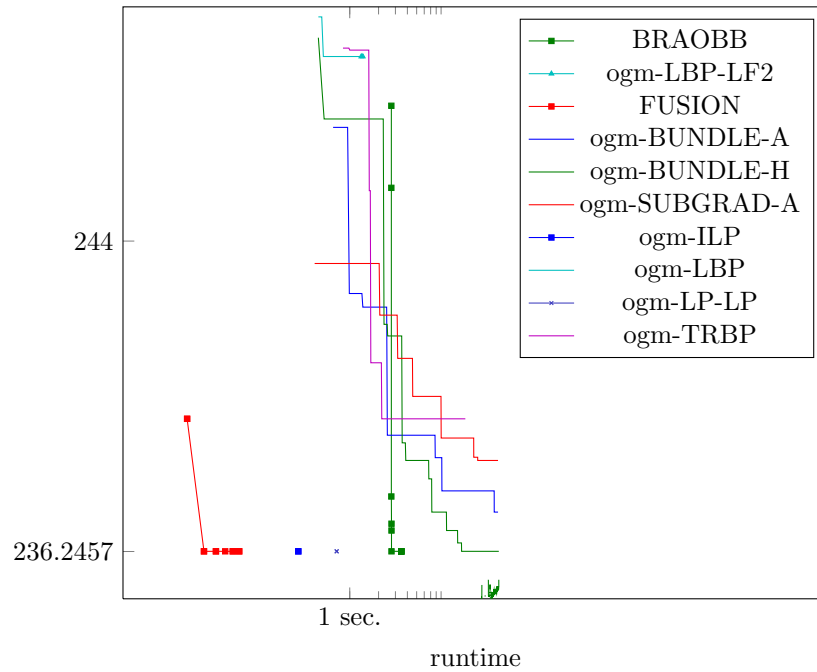


Figure 1403: Runtime results for the instance *gm39* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

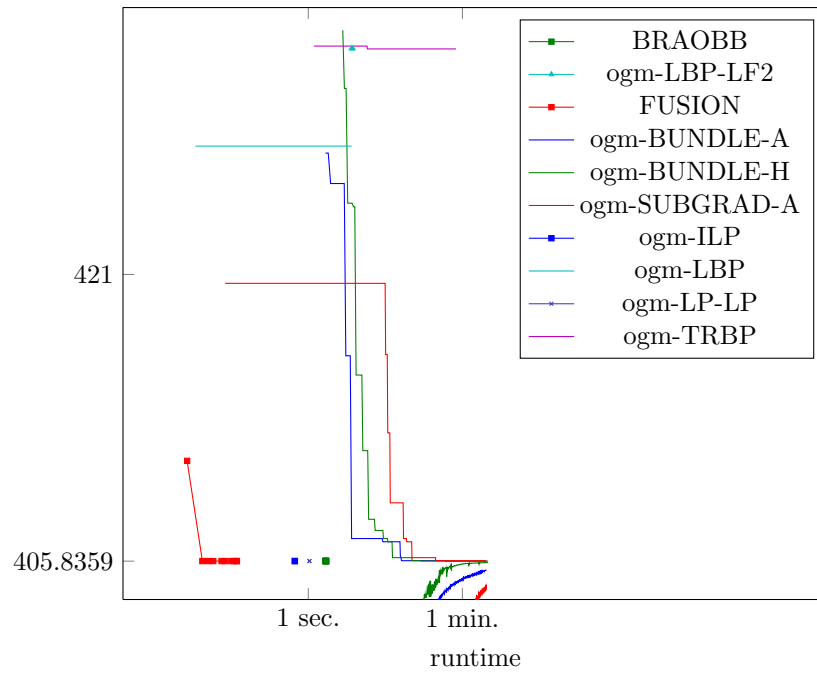


Figure 1404: Runtime results for the instance *gm3* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

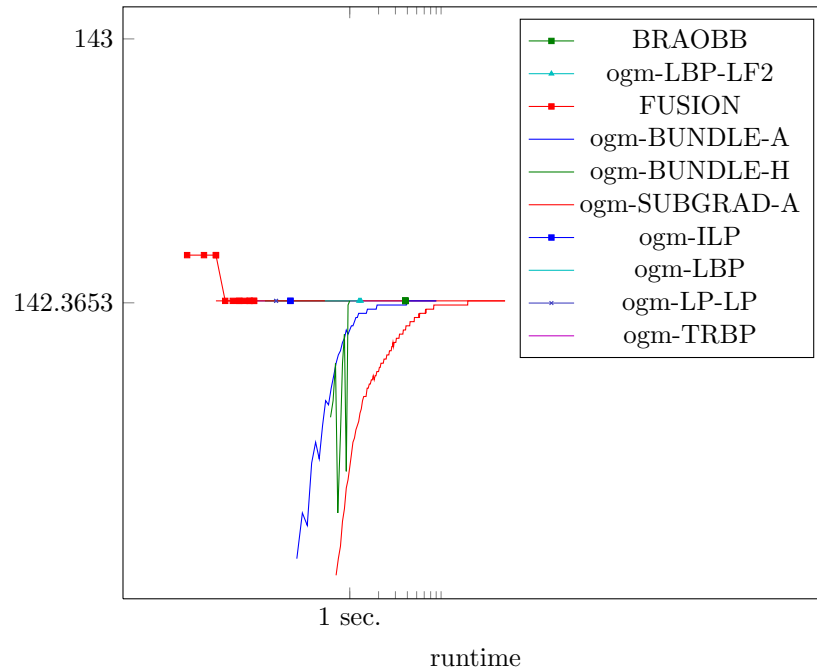


Figure 1405: Runtime results for the instance *gm40* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

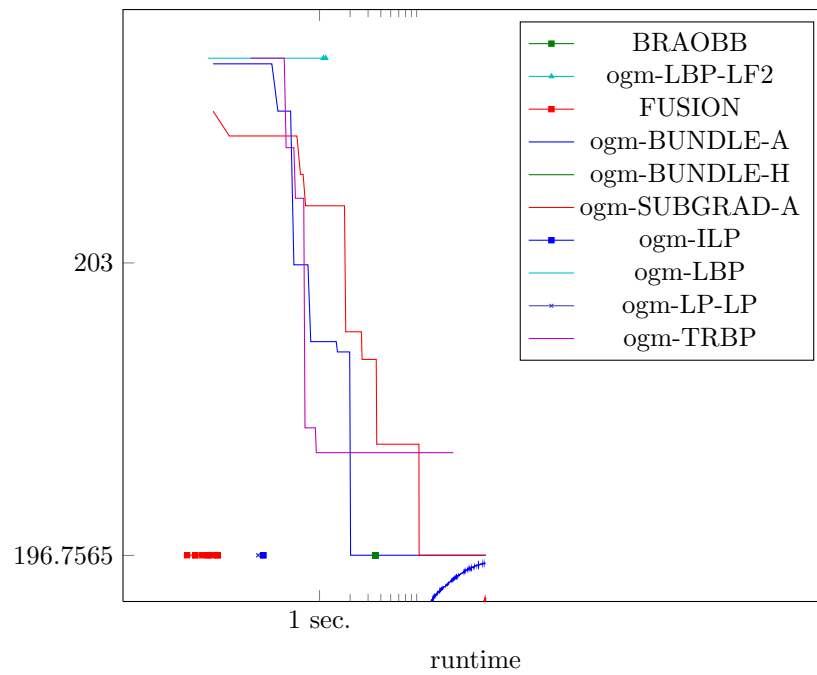


Figure 1406: Runtime results for the instance *gm41* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

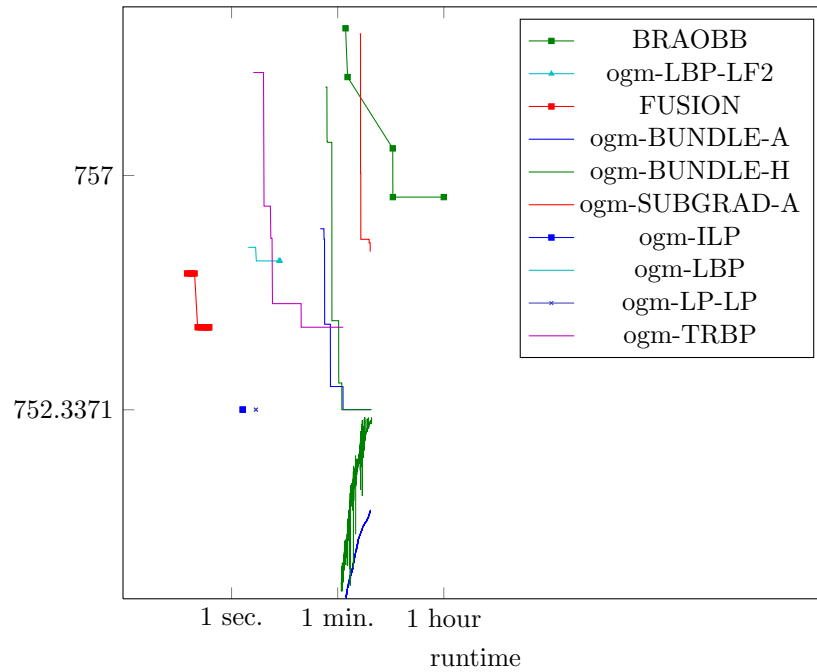


Figure 1407: Runtime results for the instance *gm42* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

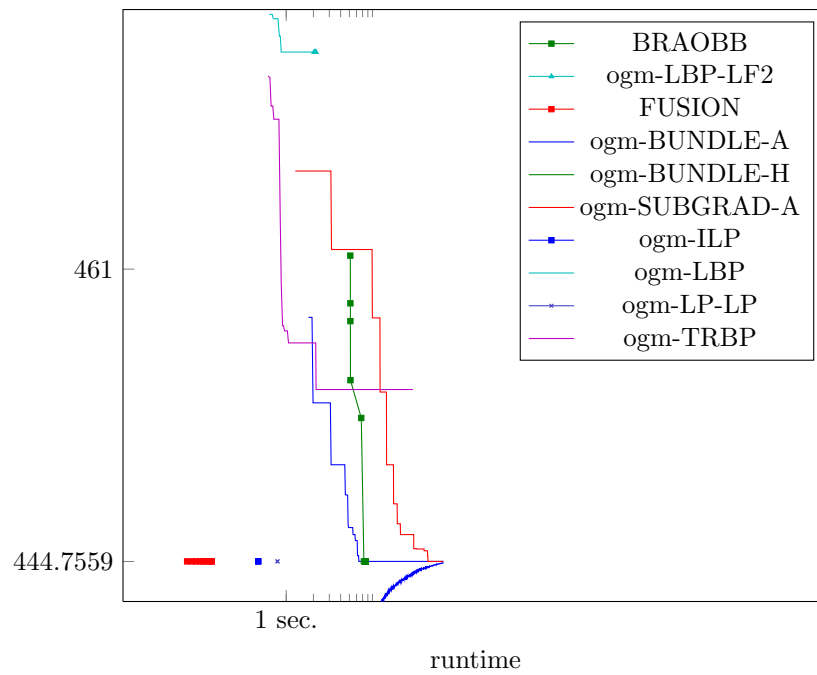


Figure 1408: Runtime results for the instance *gm43* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

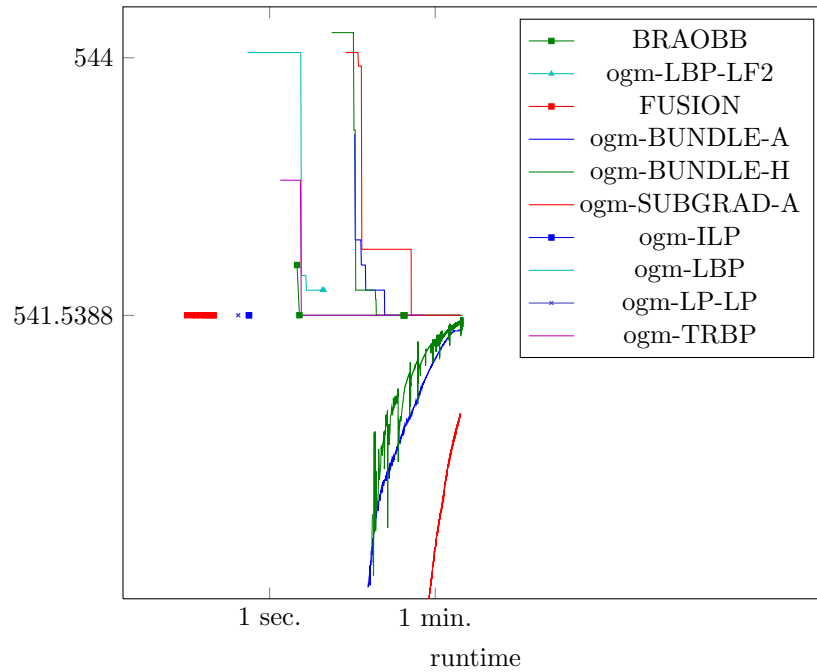


Figure 1409: Runtime results for the instance *gm44* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

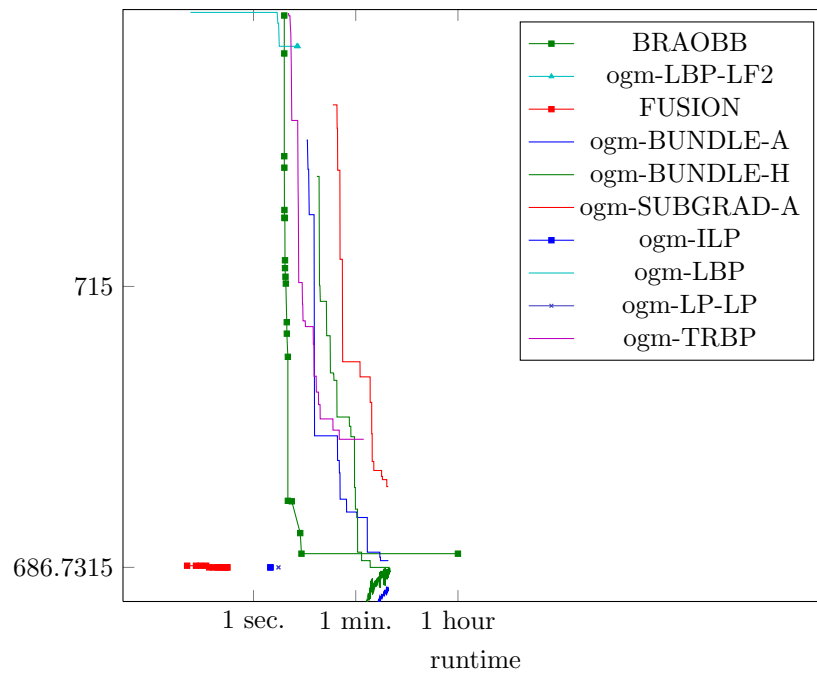


Figure 1410: Runtime results for the instance *gm45* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

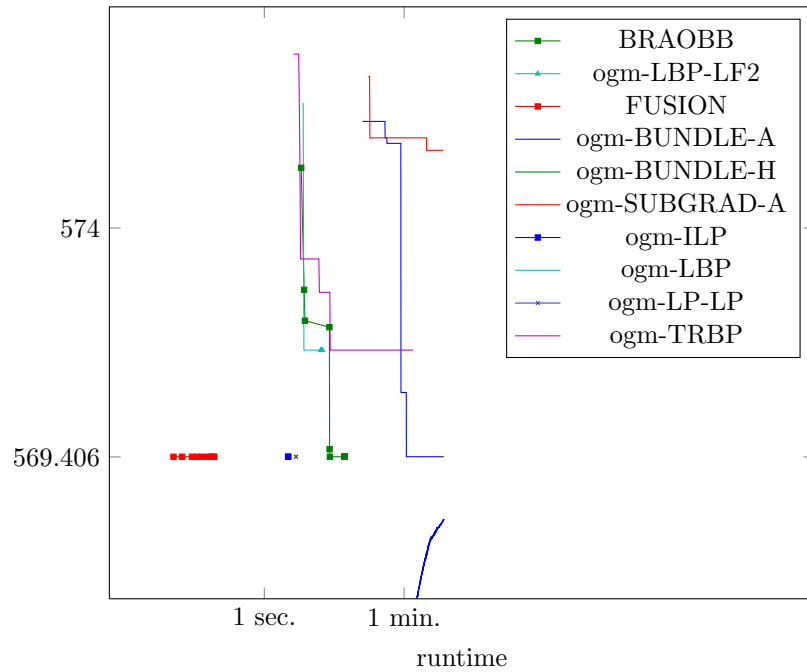


Figure 1411: Runtime results for the instance *gm46* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

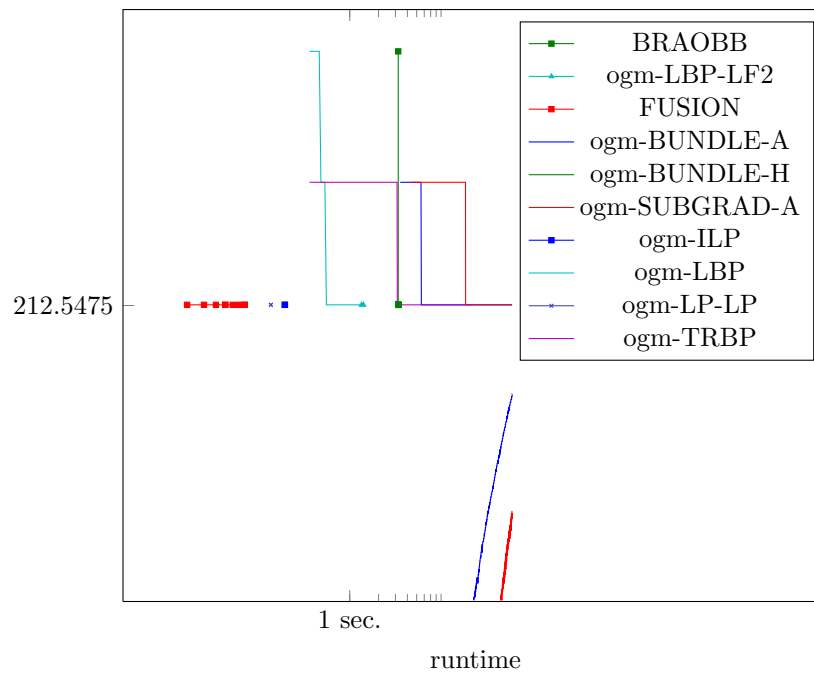


Figure 1412: Runtime results for the instance *gm47* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

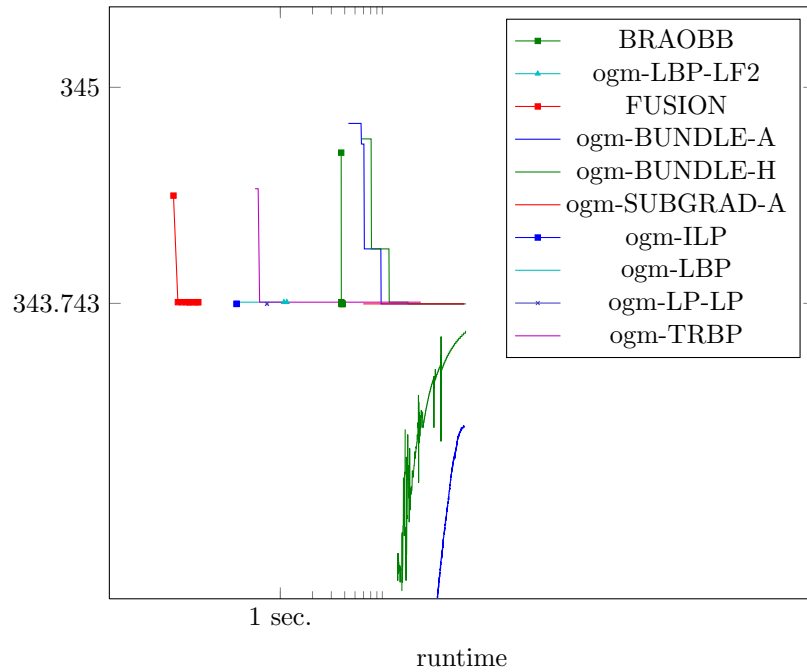


Figure 1413: Runtime results for the instance *gm48* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

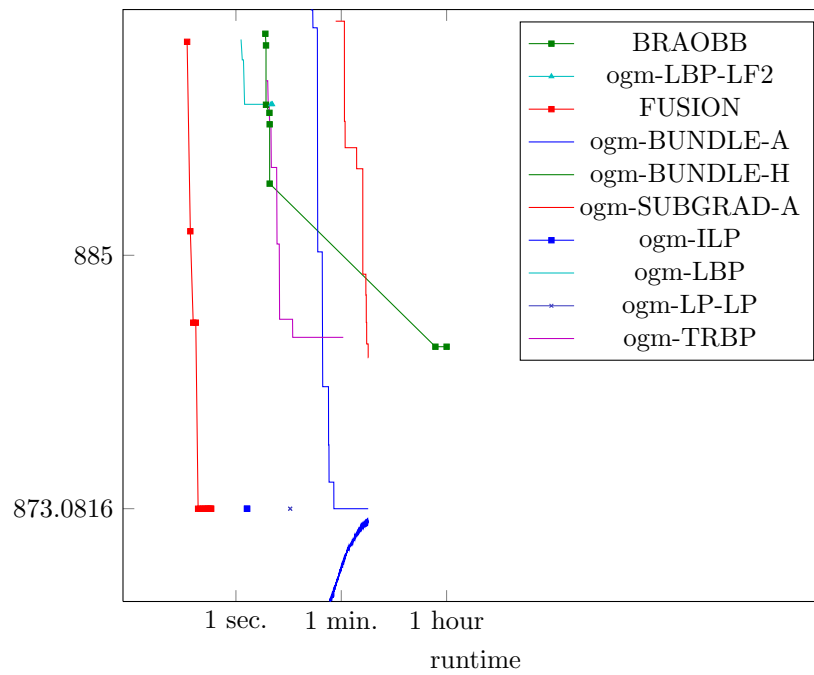


Figure 1414: Runtime results for the instance *gm49* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

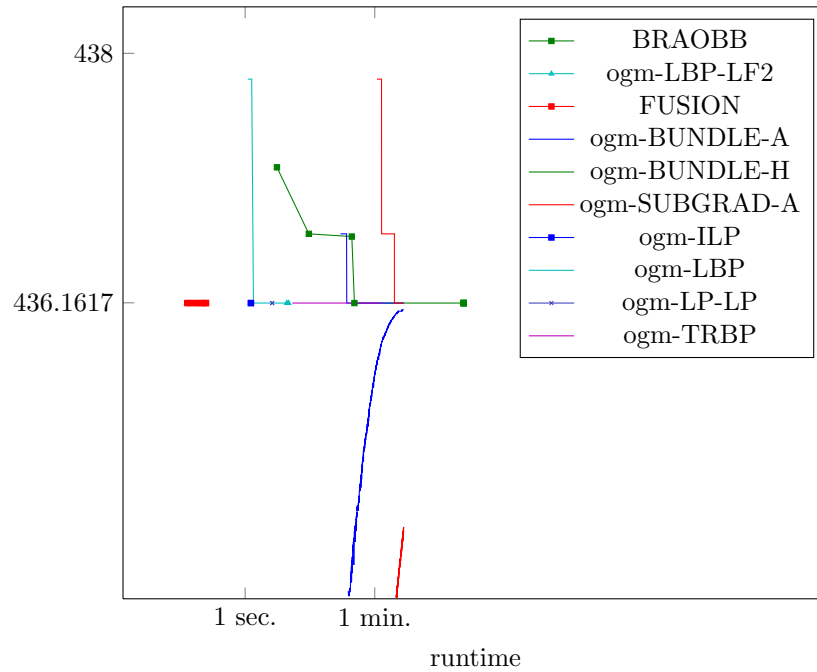


Figure 1415: Runtime results for the instance *gm4* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

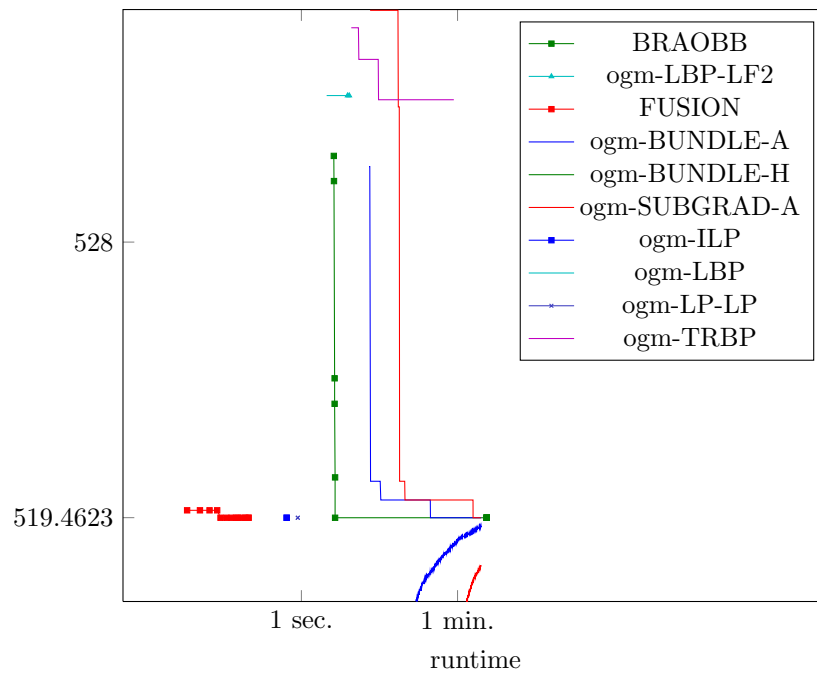


Figure 1416: Runtime results for the instance *gm50* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

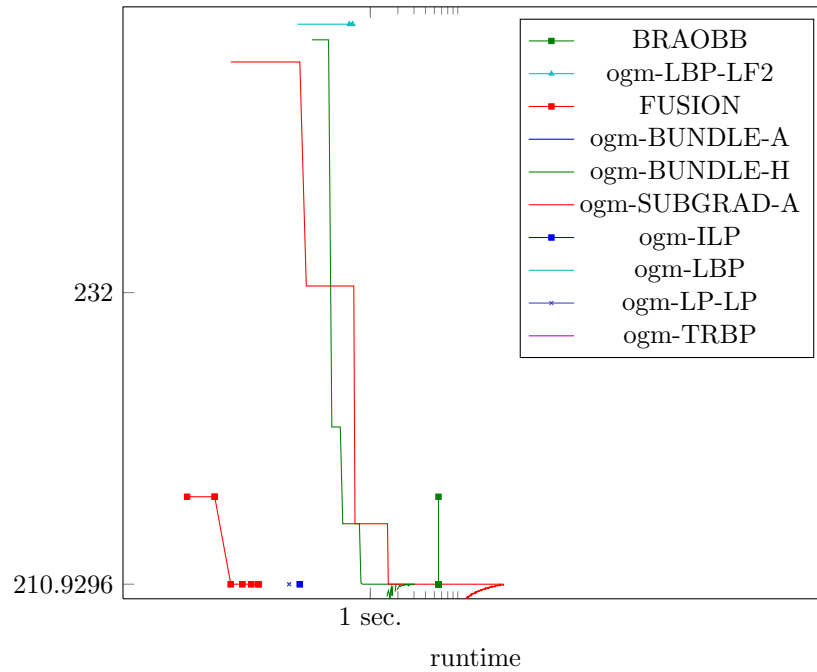


Figure 1417: Runtime results for the instance *gm51* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

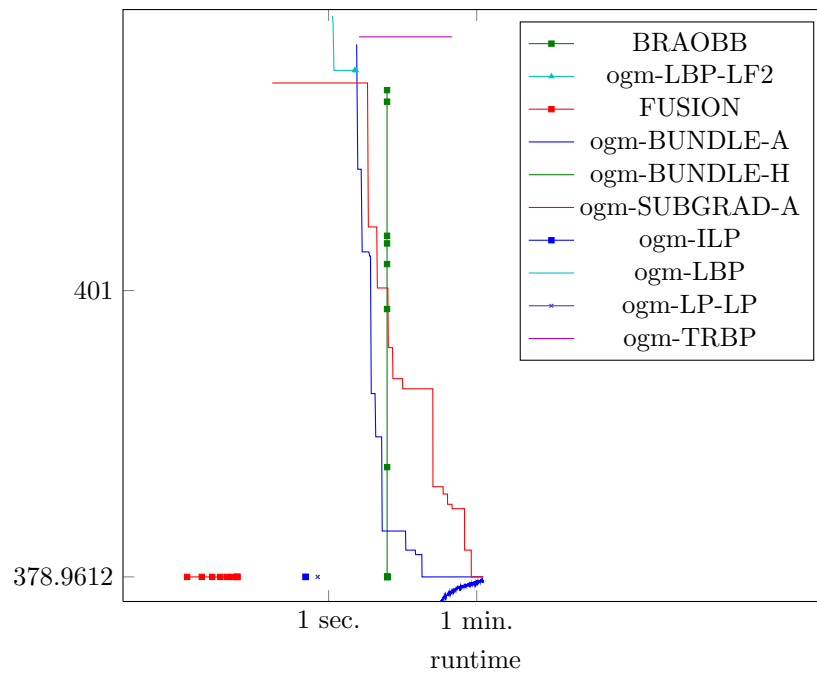


Figure 1418: Runtime results for the instance *gm52* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

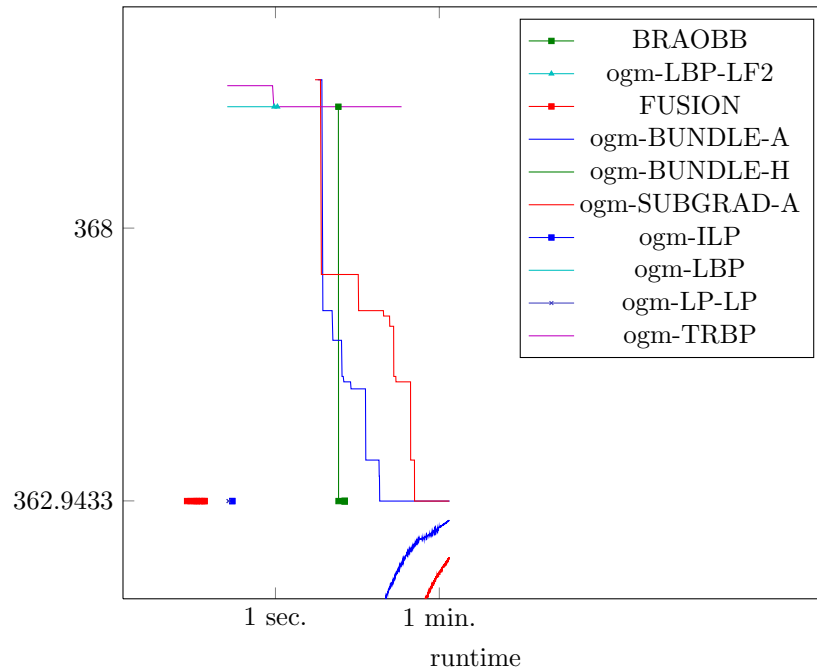


Figure 1419: Runtime results for the instance *gm53* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

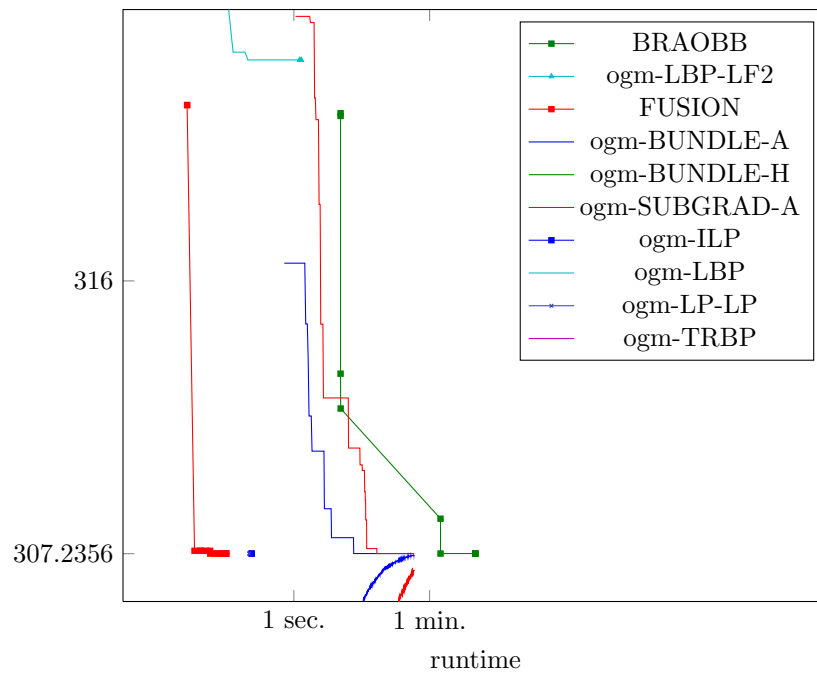


Figure 1420: Runtime results for the instance *gm54* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

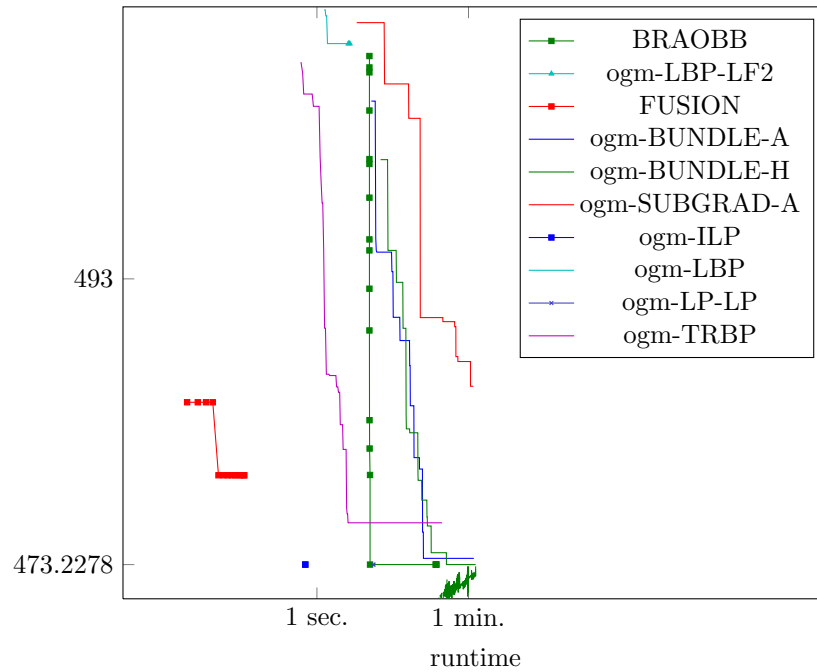


Figure 1421: Runtime results for the instance *gm55* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

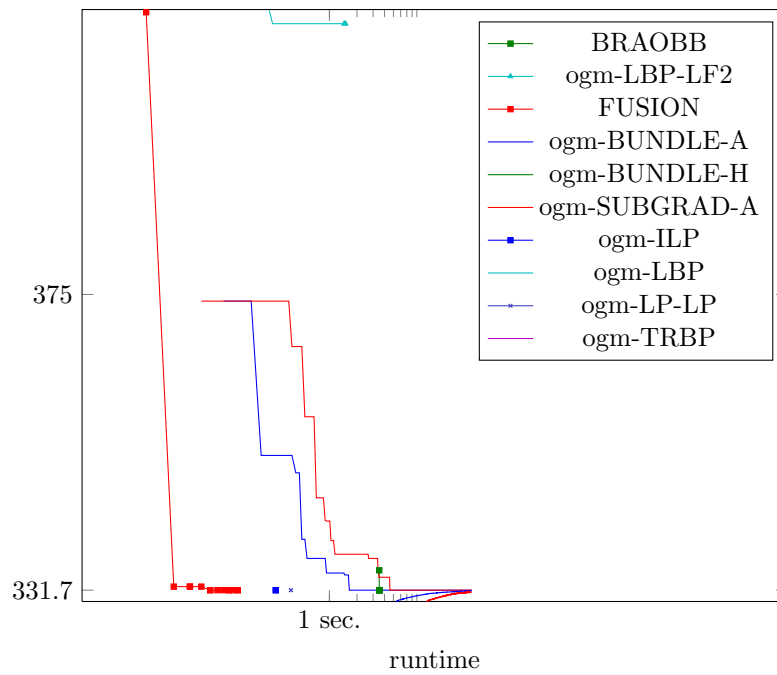


Figure 1422: Runtime results for the instance *gm56* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

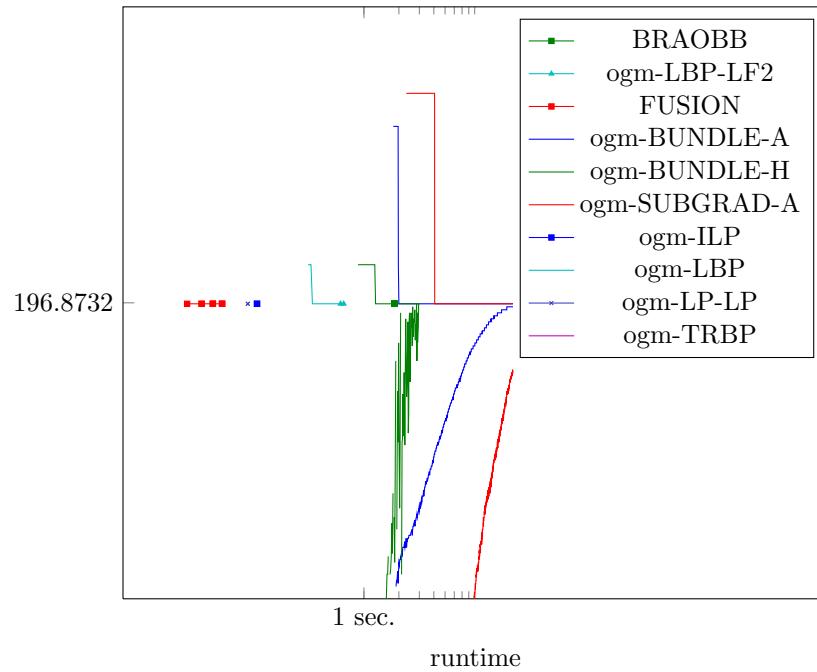


Figure 1423: Runtime results for the instance *gm57* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

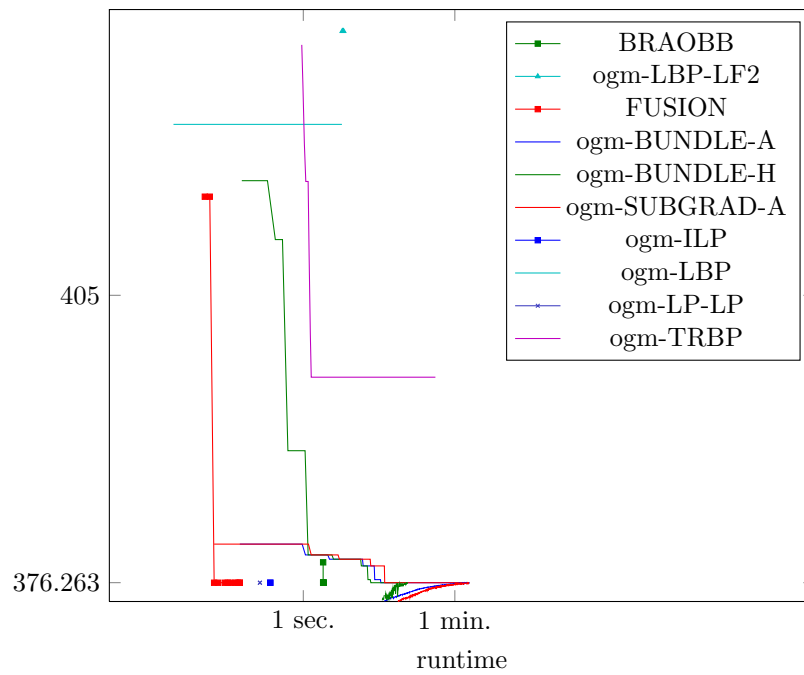


Figure 1424: Runtime results for the instance *gm58* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

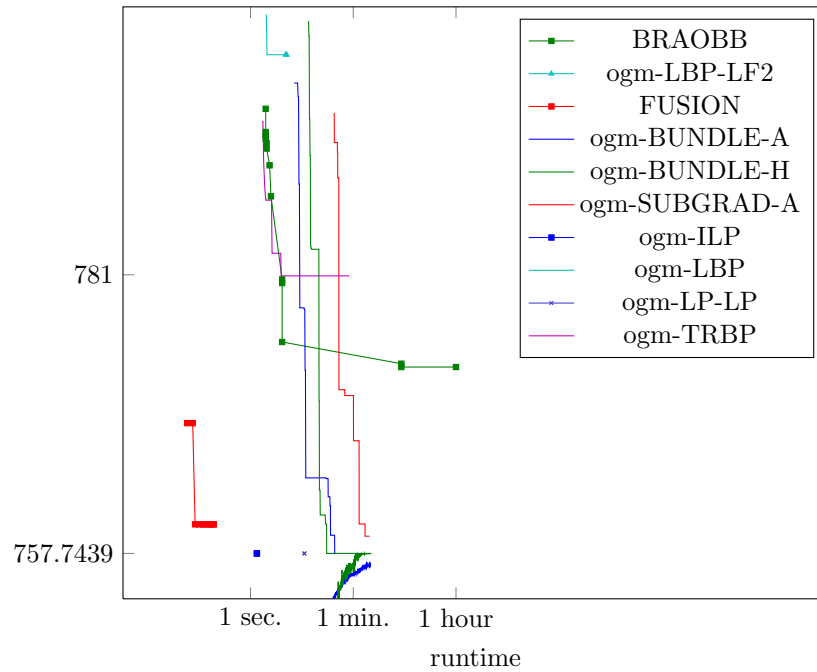


Figure 1425: Runtime results for the instance *gm59* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

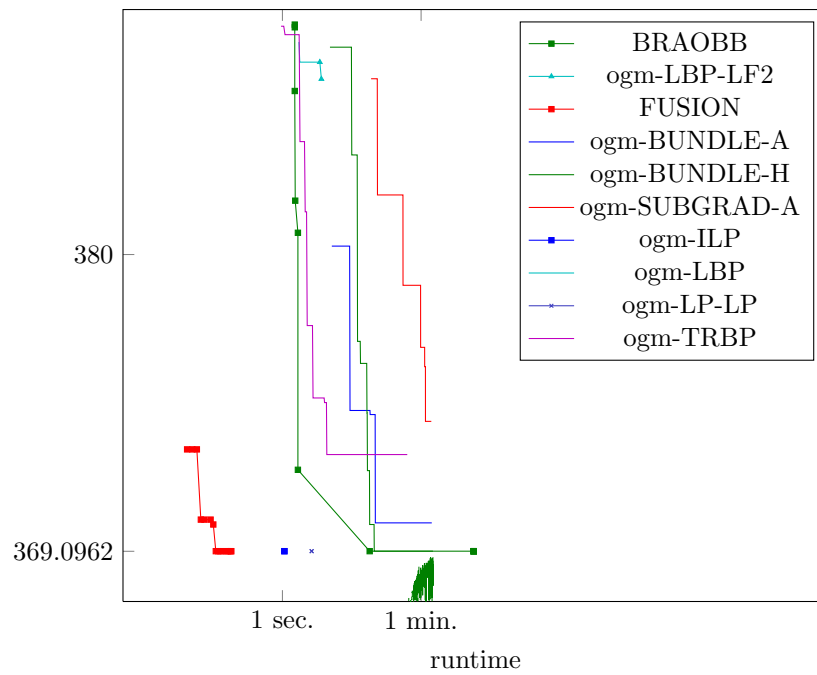


Figure 1426: Runtime results for the instance *gm5* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

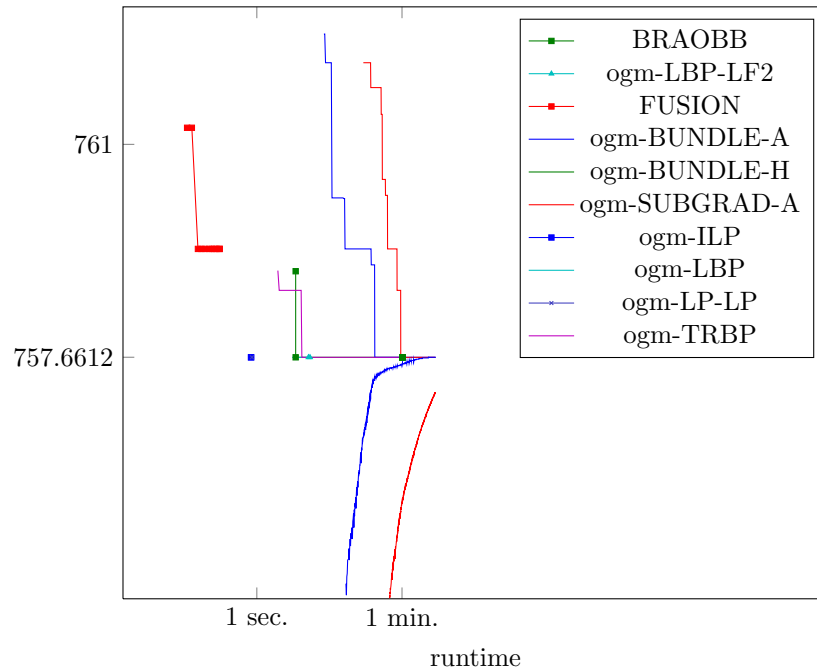


Figure 1427: Runtime results for the instance *gm60* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

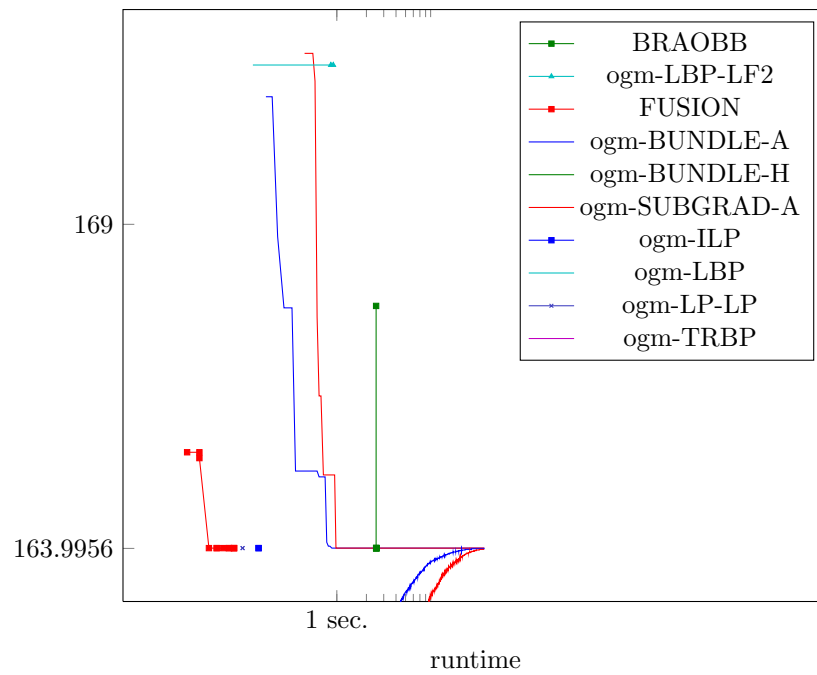


Figure 1428: Runtime results for the instance *gm61* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

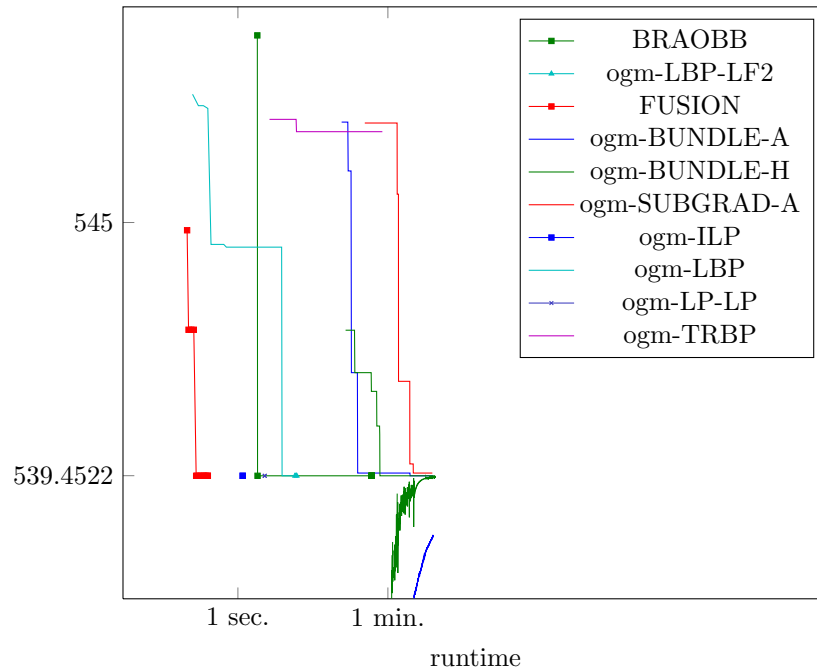


Figure 1429: Runtime results for the instance *gm62* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

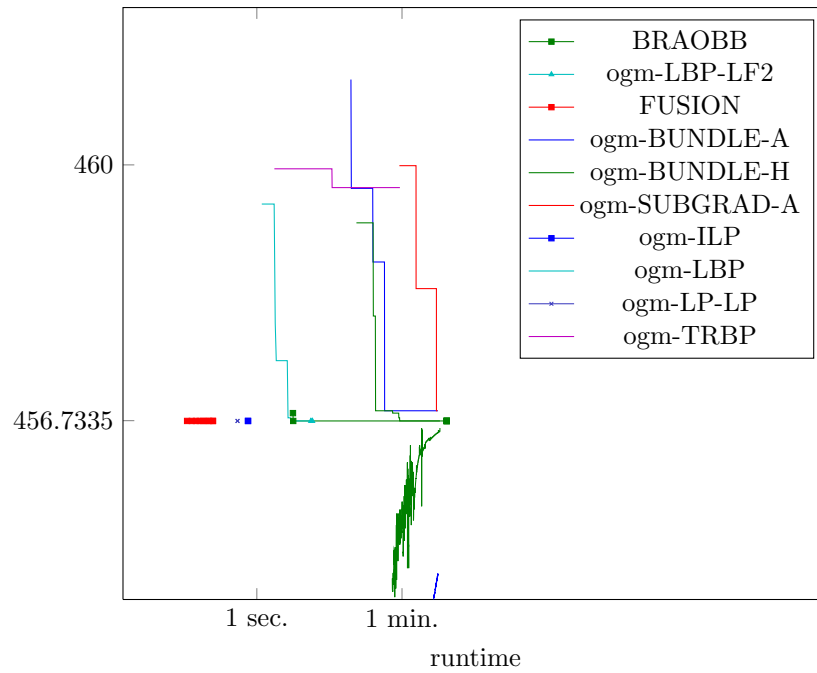


Figure 1430: Runtime results for the instance *gm63* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

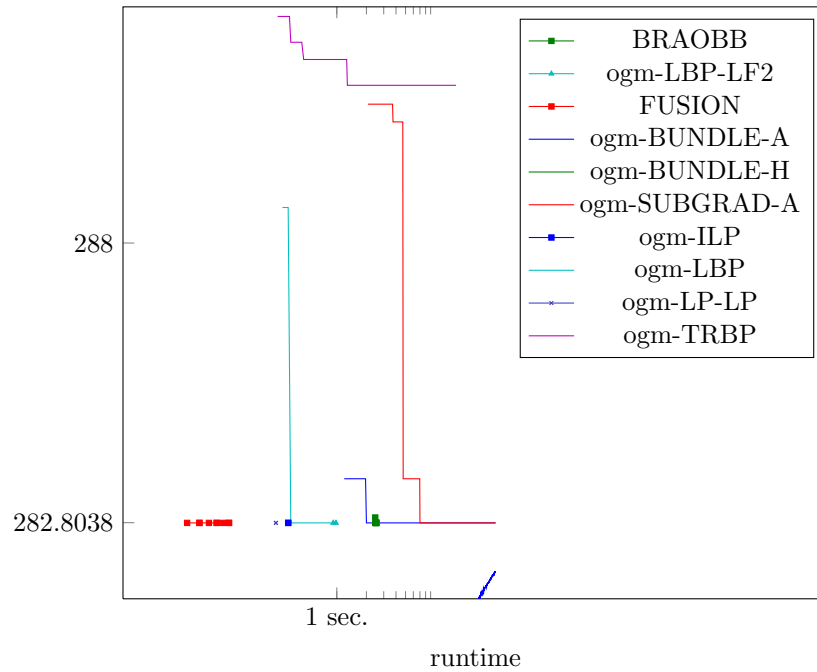


Figure 1431: Runtime results for the instance *gm64* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

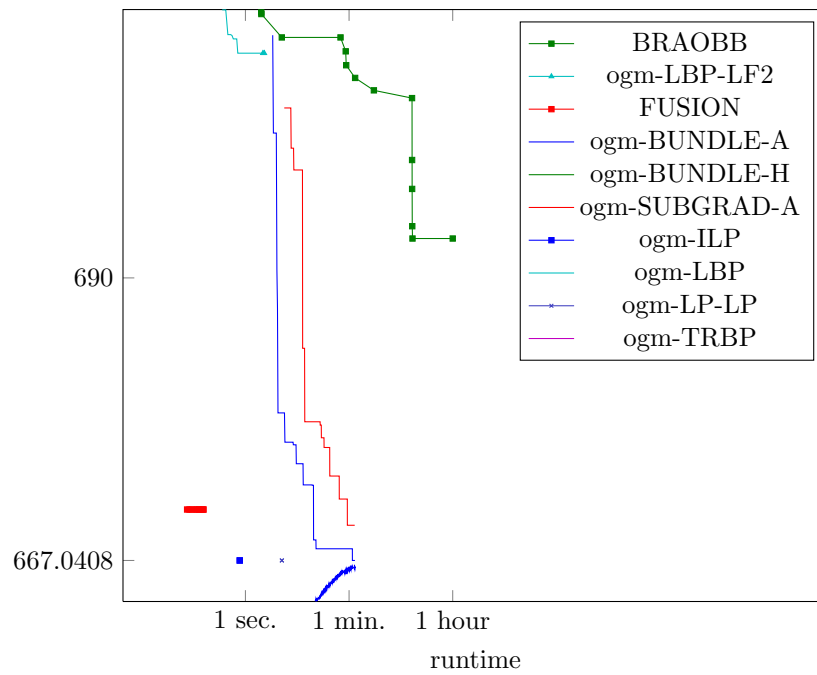


Figure 1432: Runtime results for the instance *gm65* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

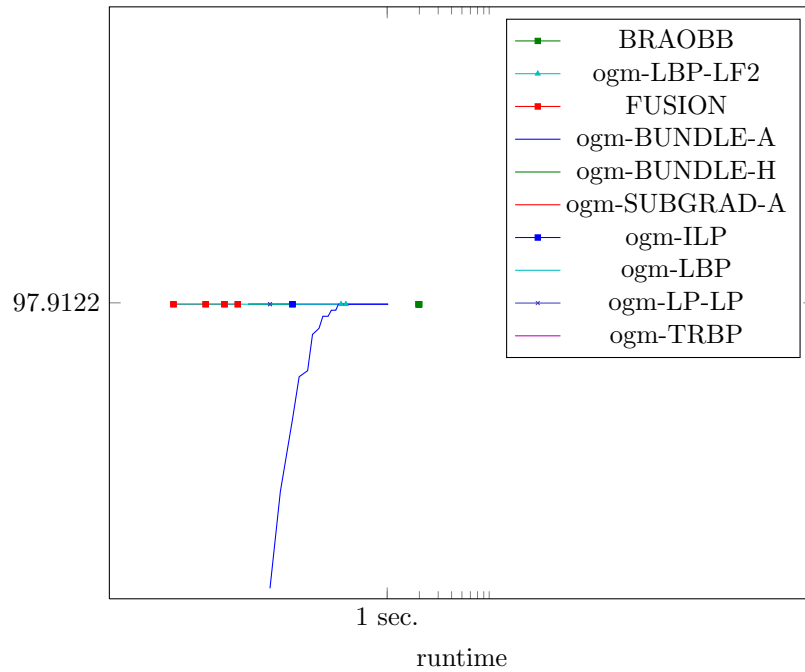


Figure 1433: Runtime results for the instance *gm66* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

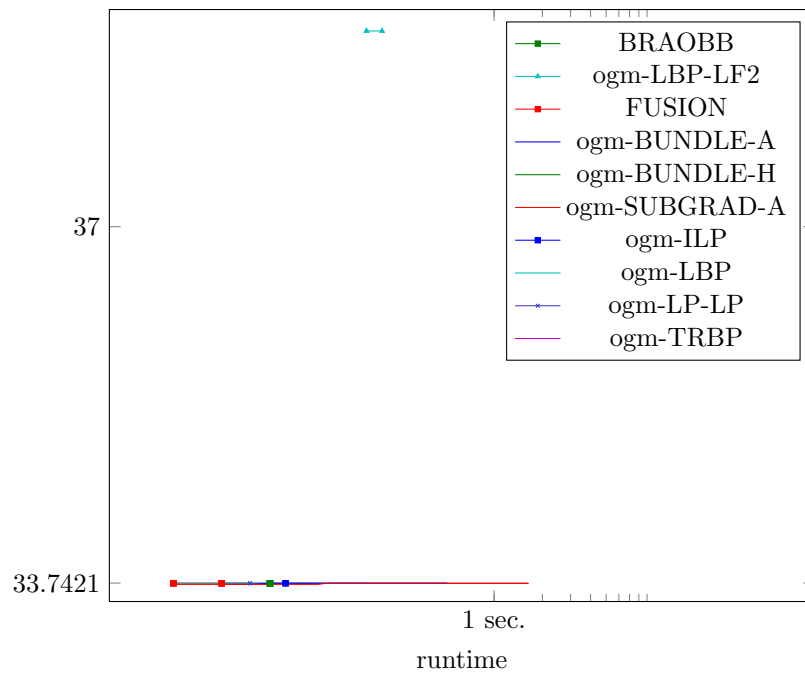


Figure 1434: Runtime results for the instance *gm67* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

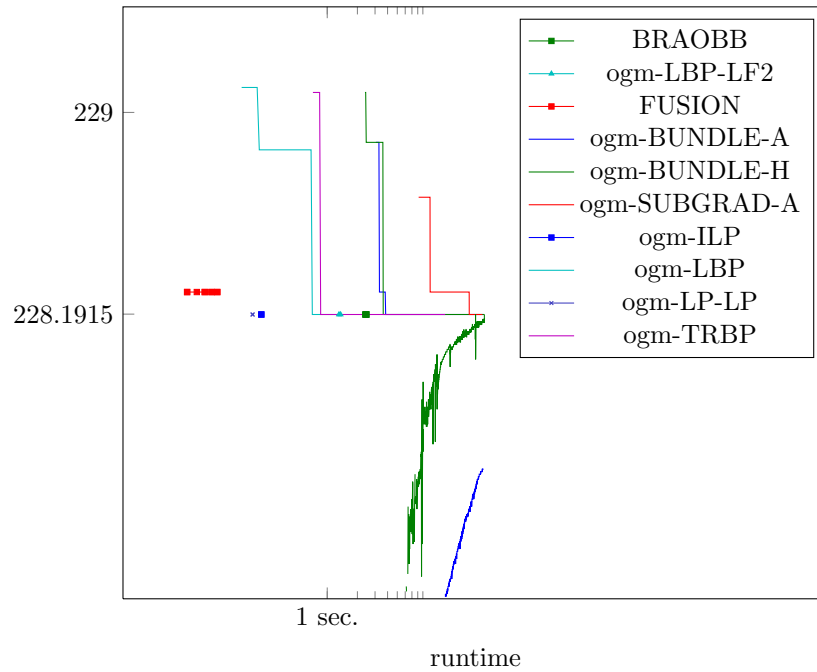


Figure 1435: Runtime results for the instance *gm68* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

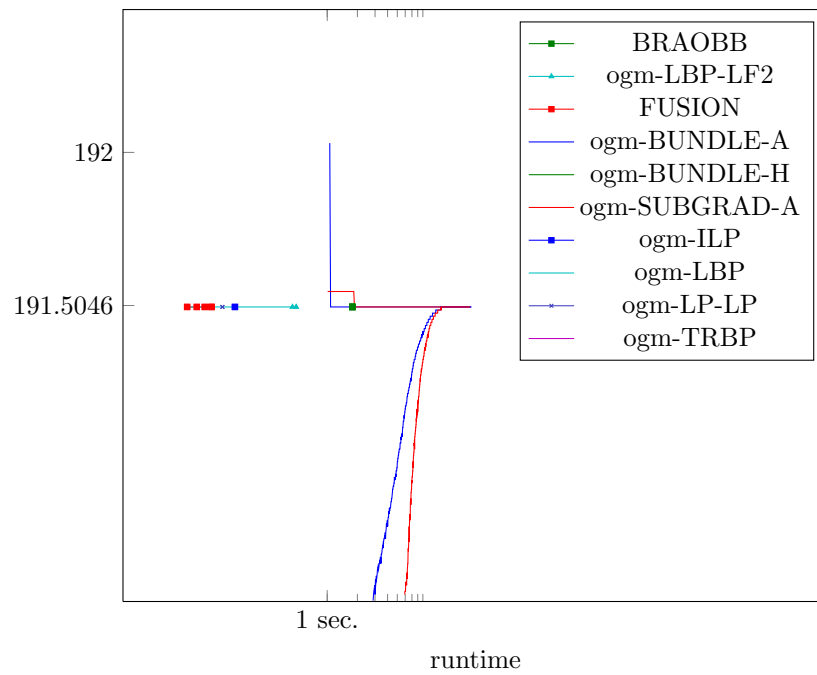


Figure 1436: Runtime results for the instance *gm69* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

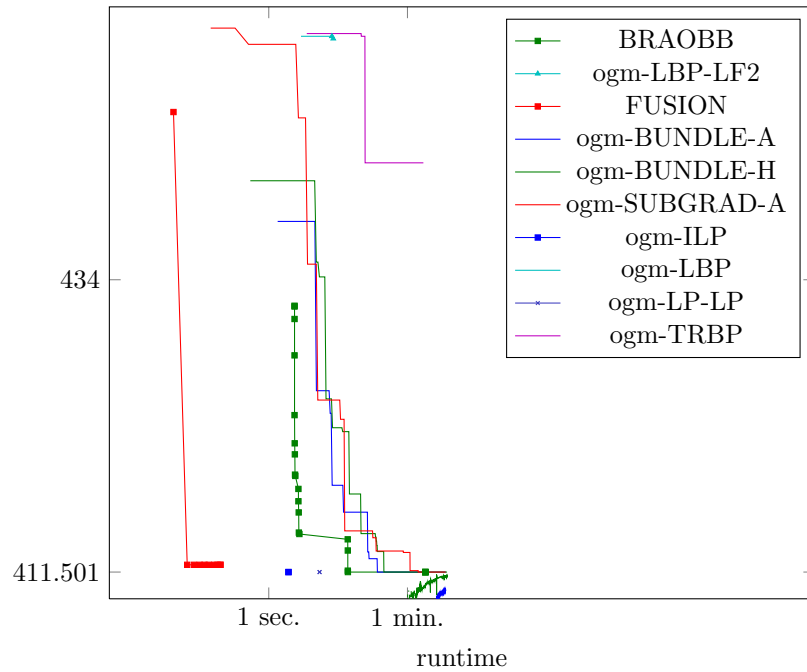


Figure 1437: Runtime results for the instance *gm6* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

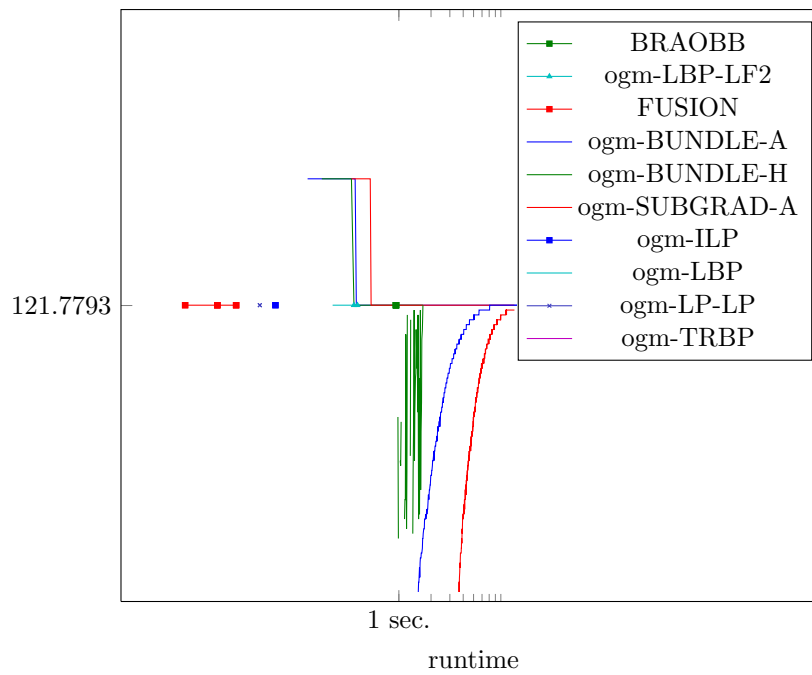


Figure 1438: Runtime results for the instance *gm70* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

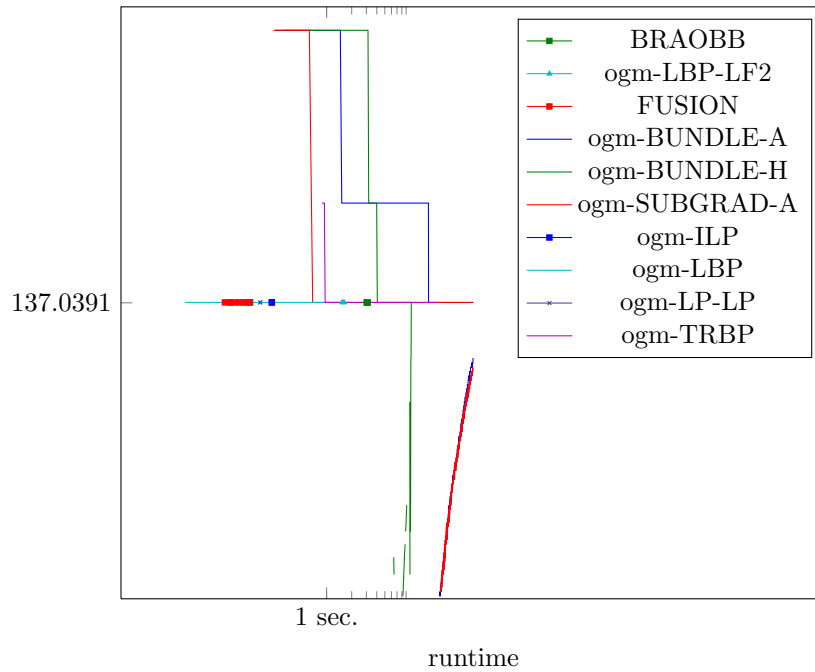


Figure 1439: Runtime results for the instance *gm71* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

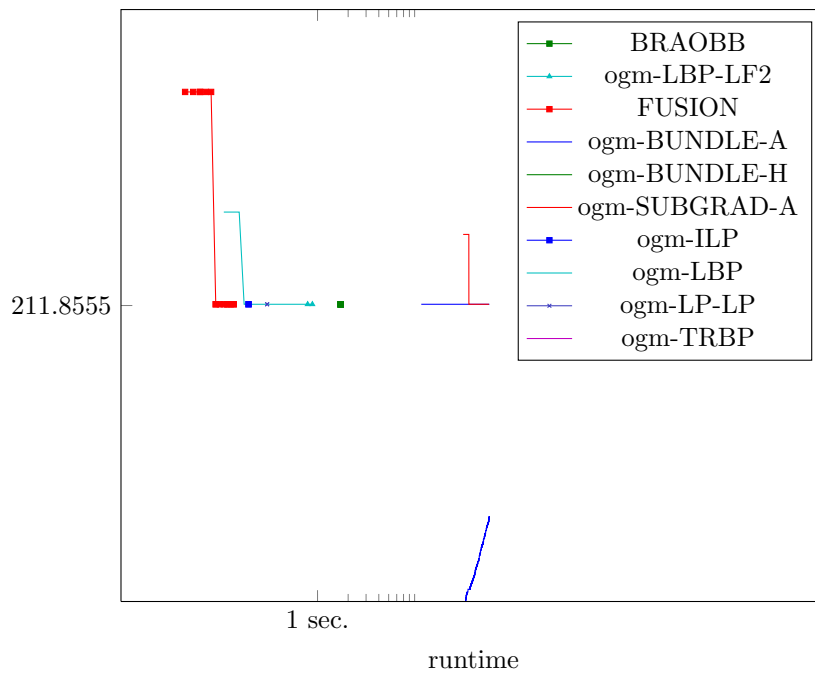


Figure 1440: Runtime results for the instance *gm72* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

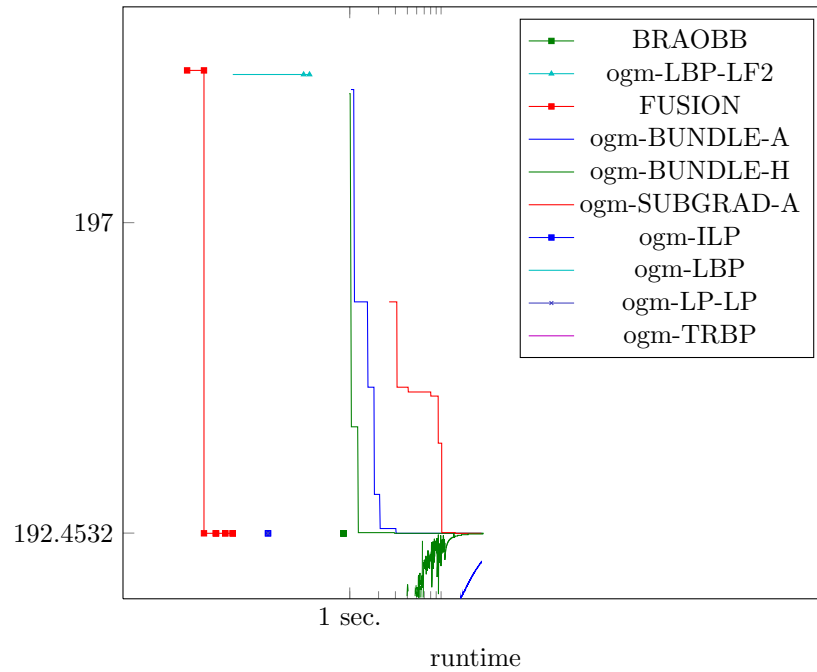


Figure 1441: Runtime results for the instance *gm73* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

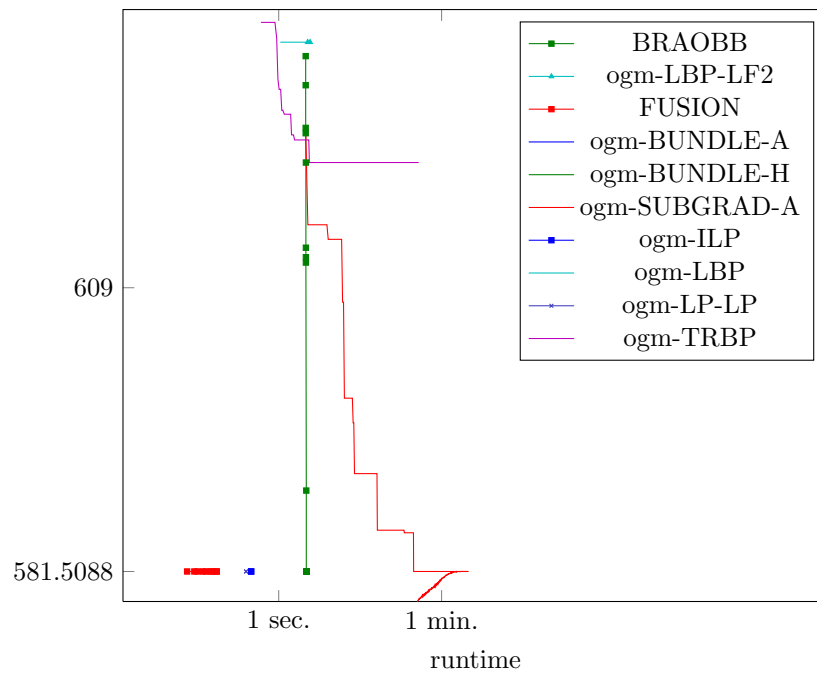


Figure 1442: Runtime results for the instance *gm74* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

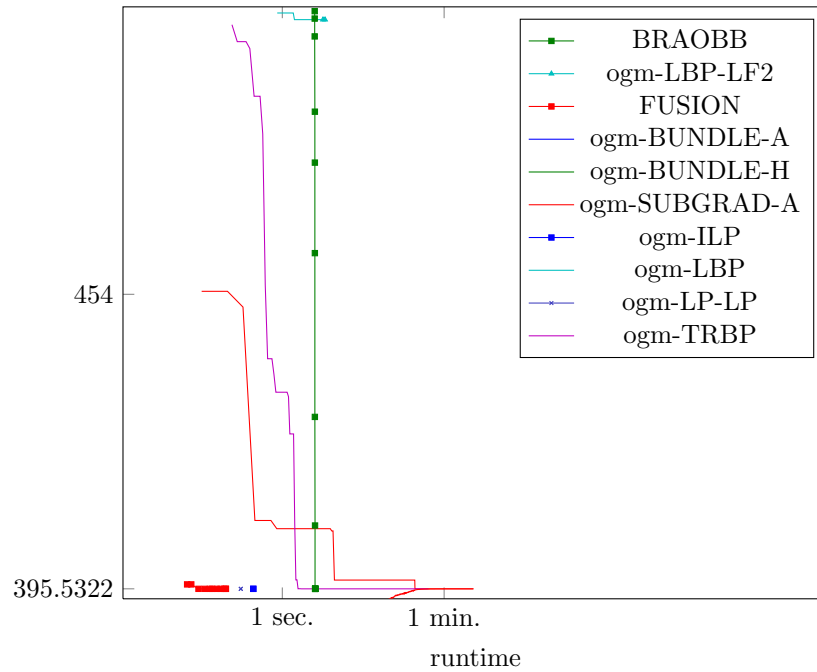


Figure 1443: Runtime results for the instance *gm75* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

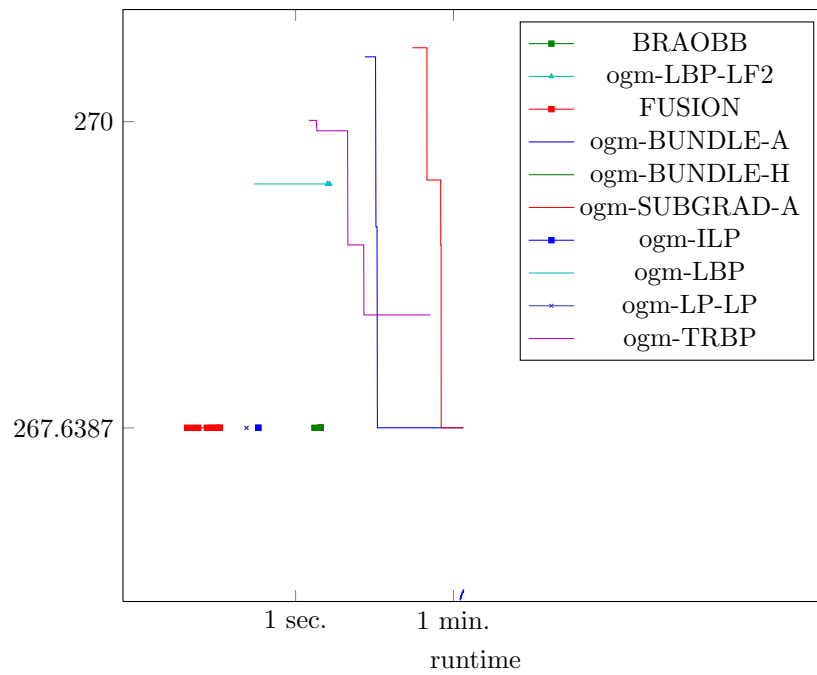


Figure 1444: Runtime results for the instance *gm76* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

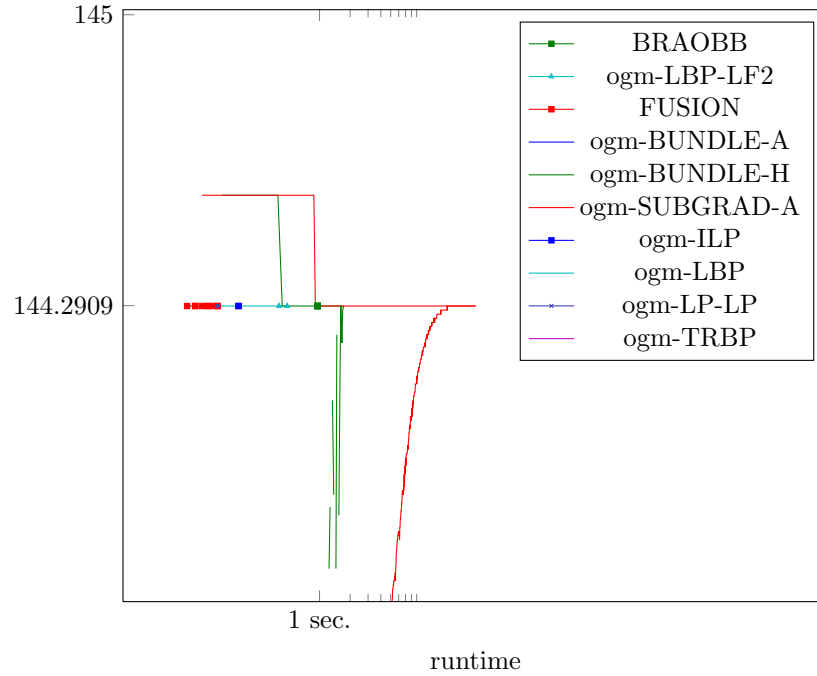


Figure 1445: Runtime results for the instance *gm77* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

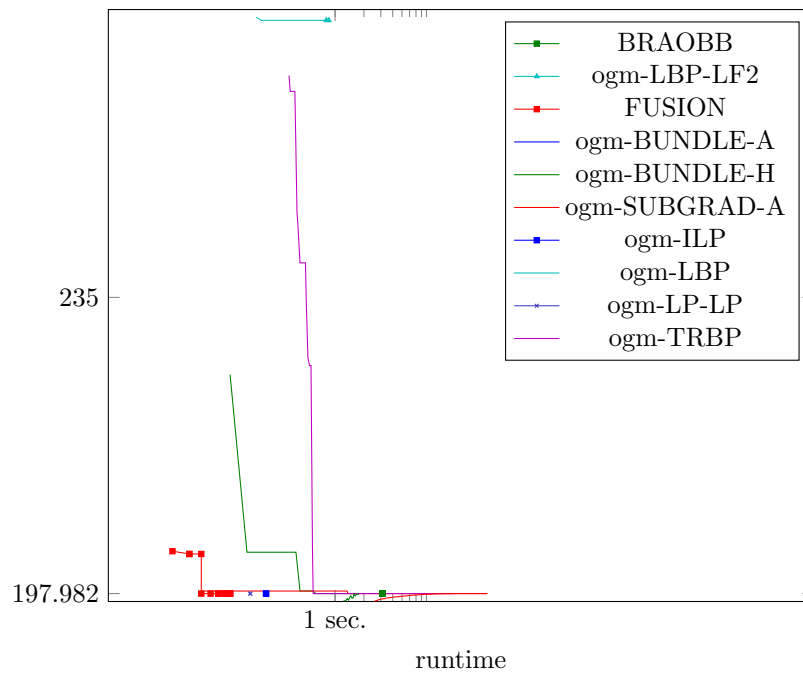


Figure 1446: Runtime results for the instance *gm78* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

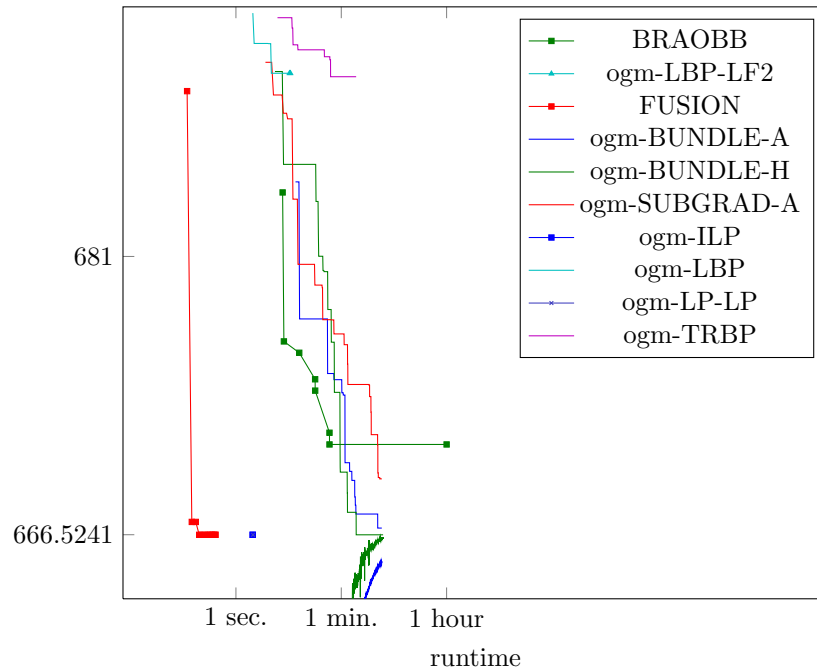


Figure 1447: Runtime results for the instance *gm79* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

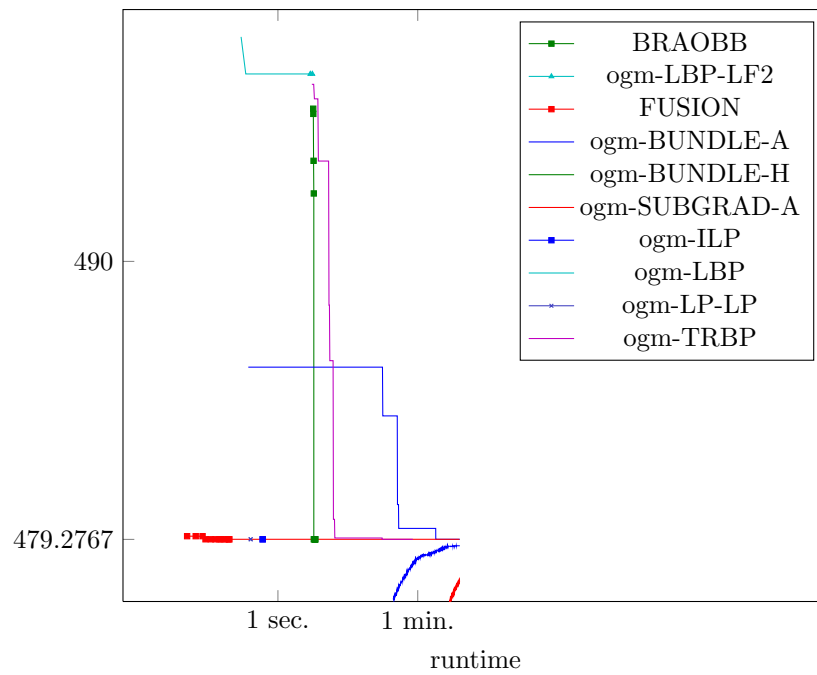


Figure 1448: Runtime results for the instance *gm7* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

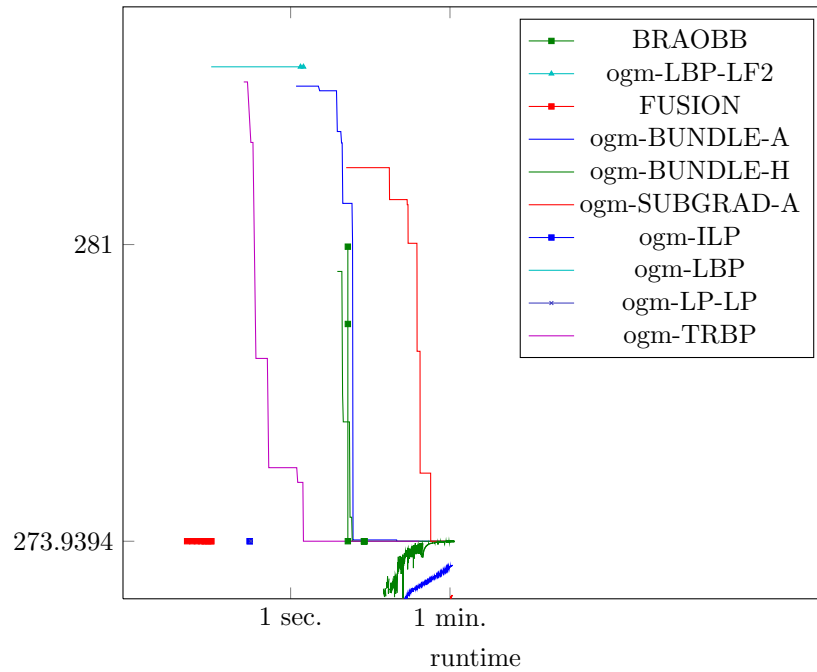


Figure 1449: Runtime results for the instance *gm80* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

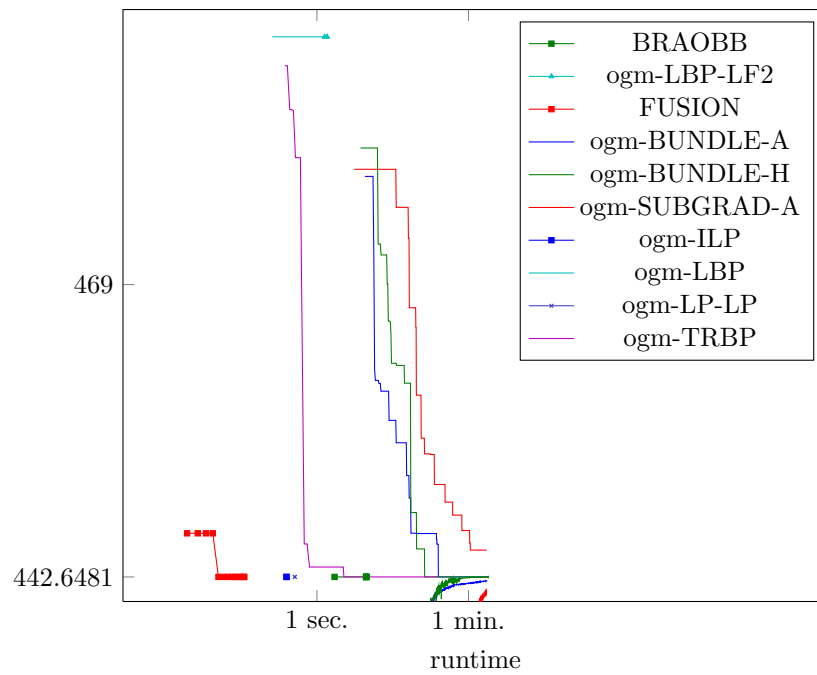


Figure 1450: Runtime results for the instance *gm81* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

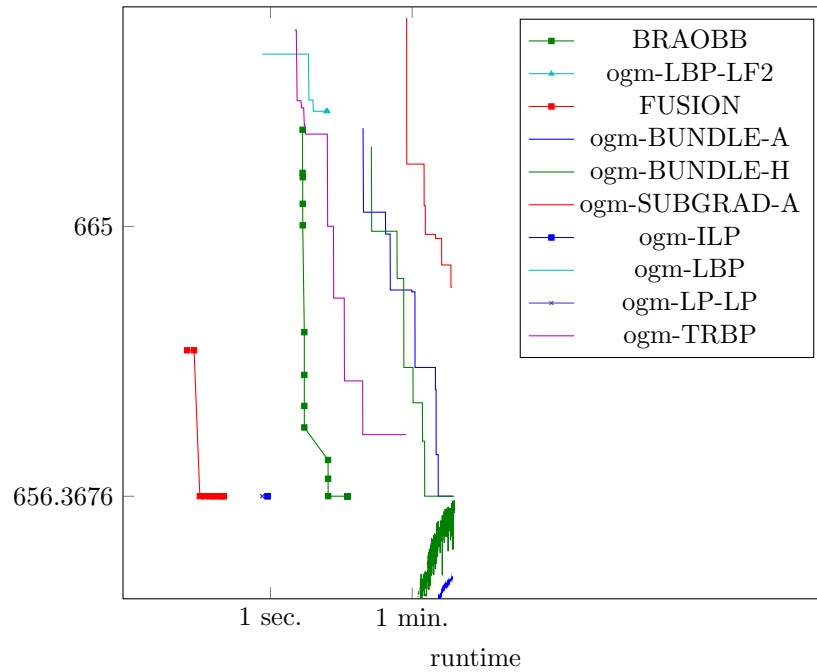


Figure 1451: Runtime results for the instance *gm82* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

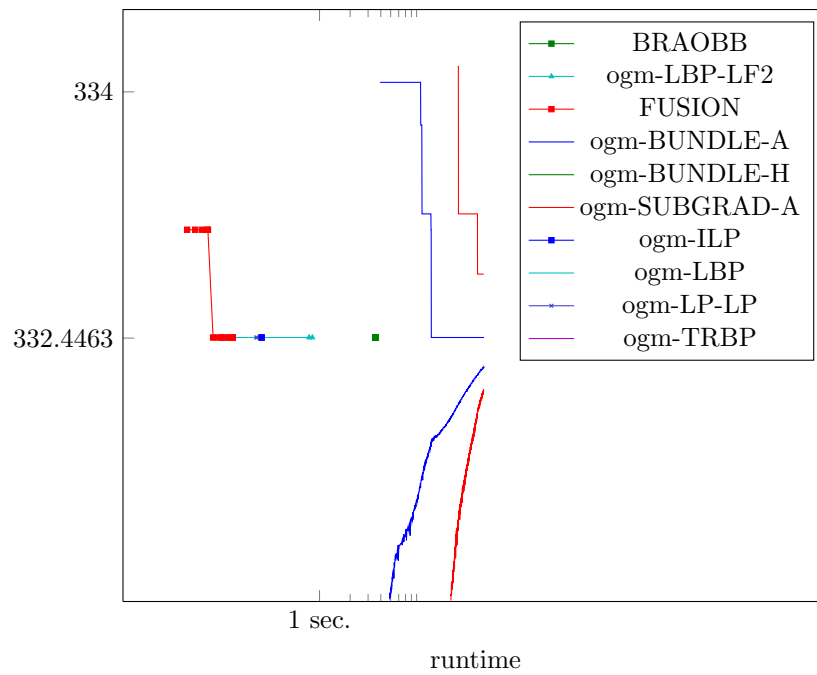


Figure 1452: Runtime results for the instance *gm83* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

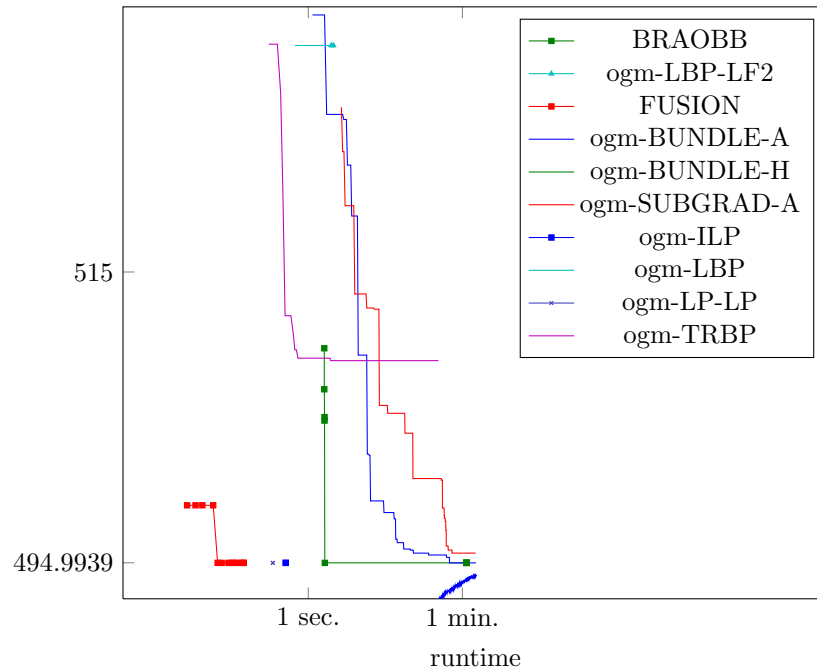


Figure 1453: Runtime results for the instance *gm84* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

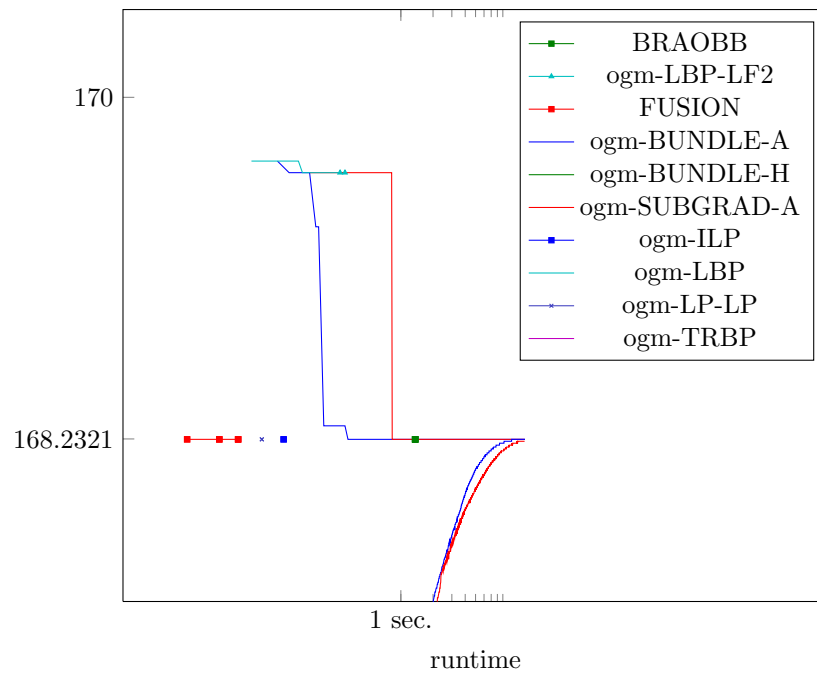


Figure 1454: Runtime results for the instance *gm85* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

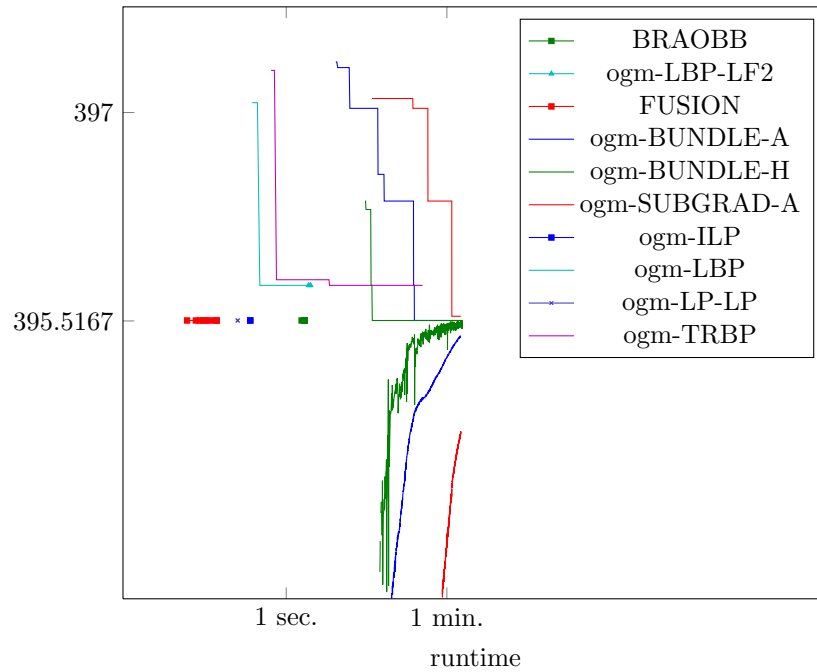


Figure 1455: Runtime results for the instance *gm86* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

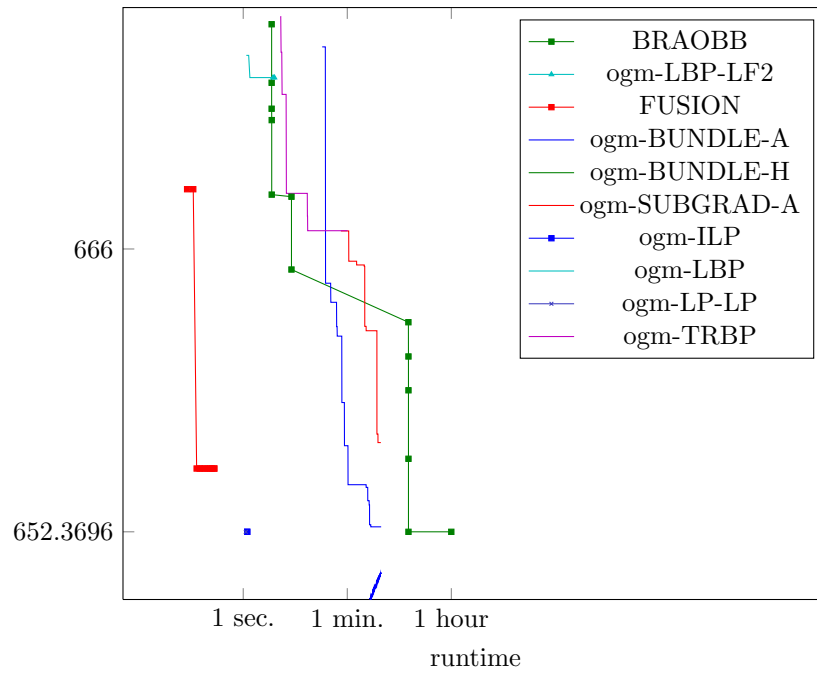


Figure 1456: Runtime results for the instance *gm87* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

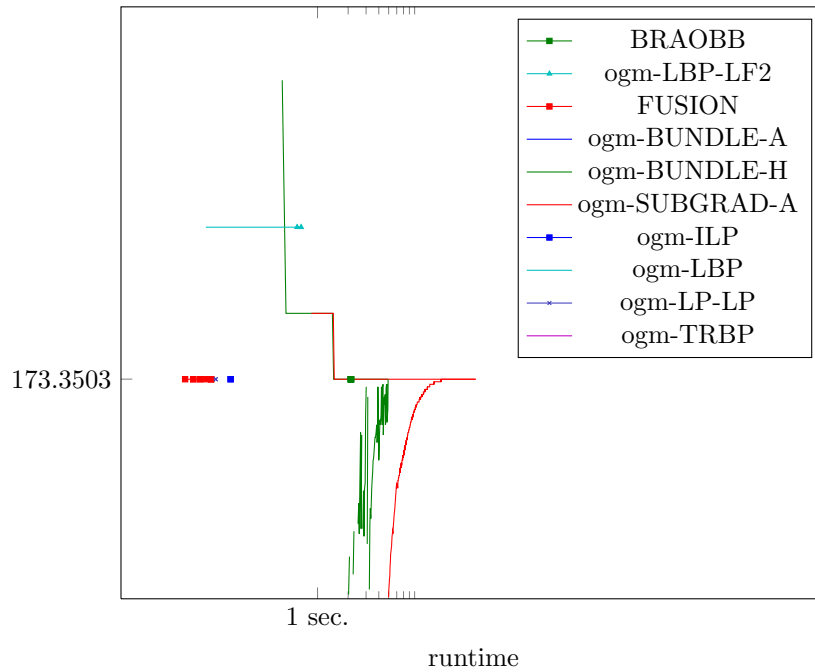


Figure 1457: Runtime results for the instance *gm88* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

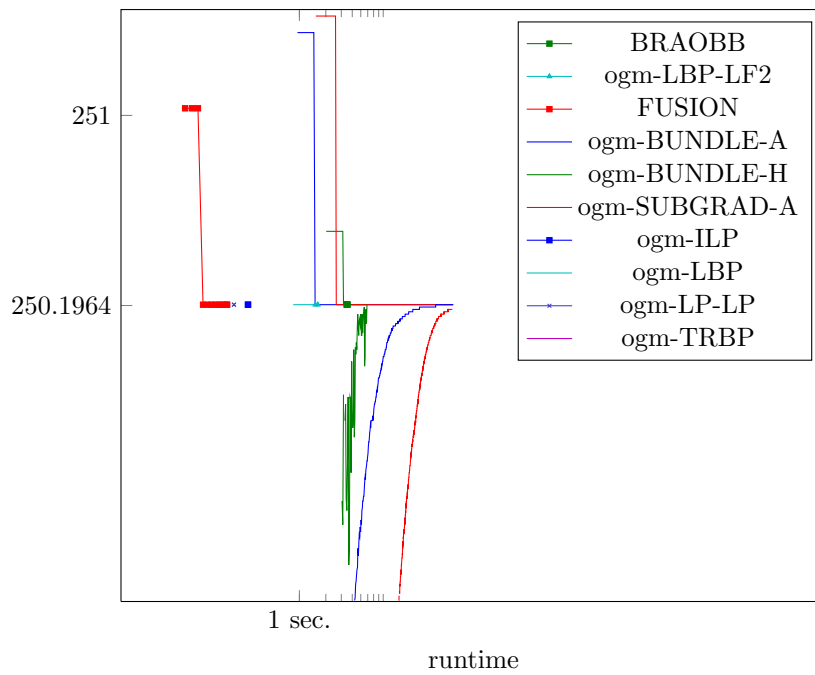


Figure 1458: Runtime results for the instance *gm89* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

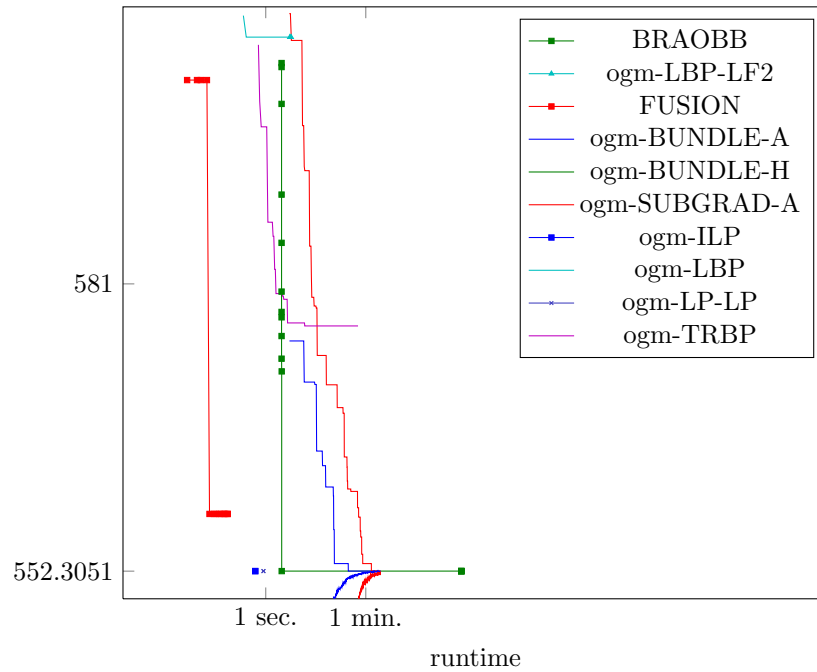


Figure 1459: Runtime results for the instance *gm8* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

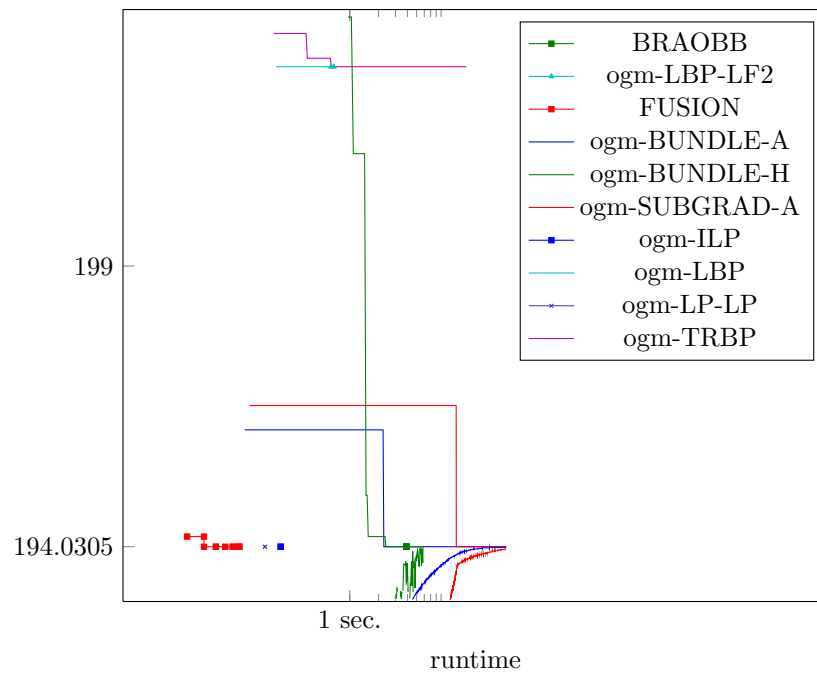


Figure 1460: Runtime results for the instance *gm90* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

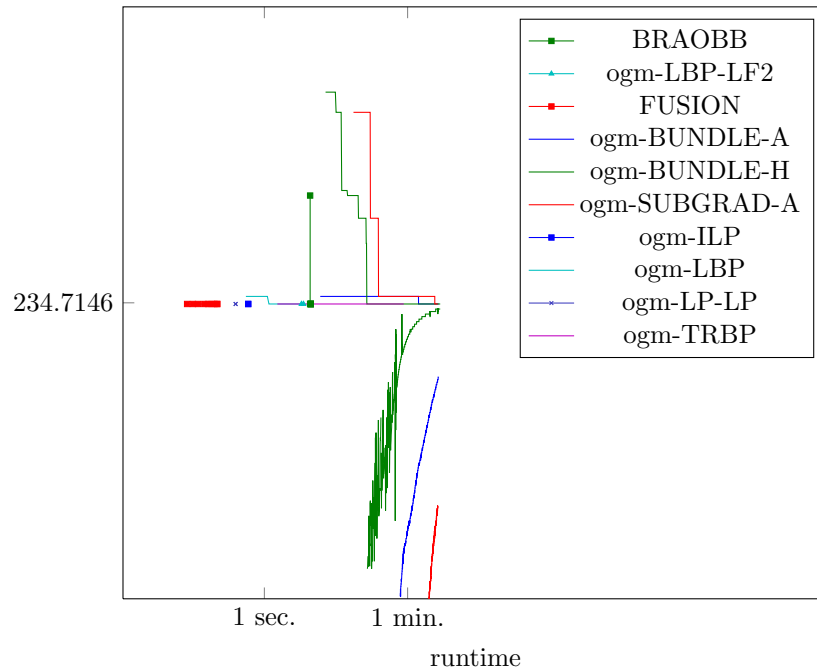


Figure 1461: Runtime results for the instance *gm91* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

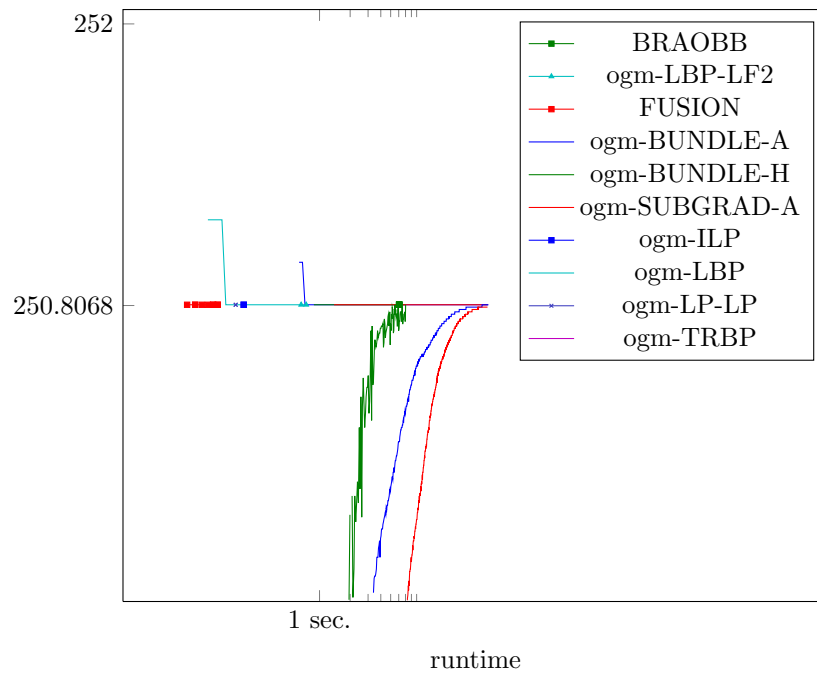


Figure 1462: Runtime results for the instance *gm92* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

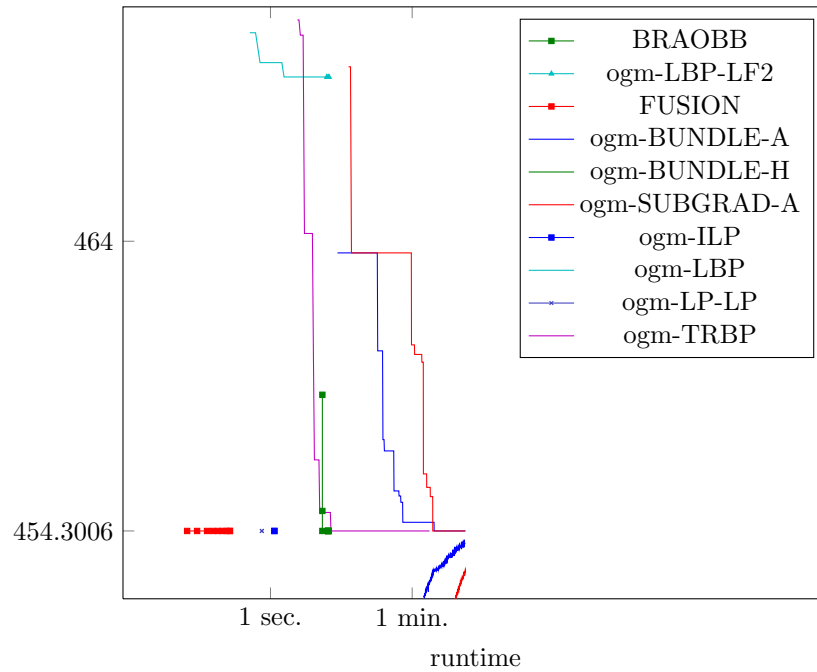


Figure 1463: Runtime results for the instance *gm93* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

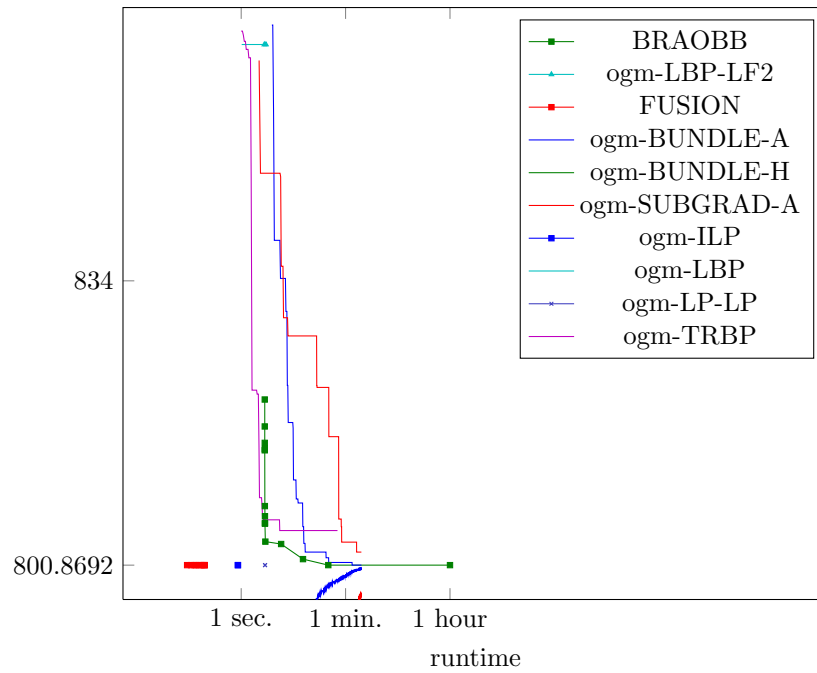


Figure 1464: Runtime results for the instance *gm94* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

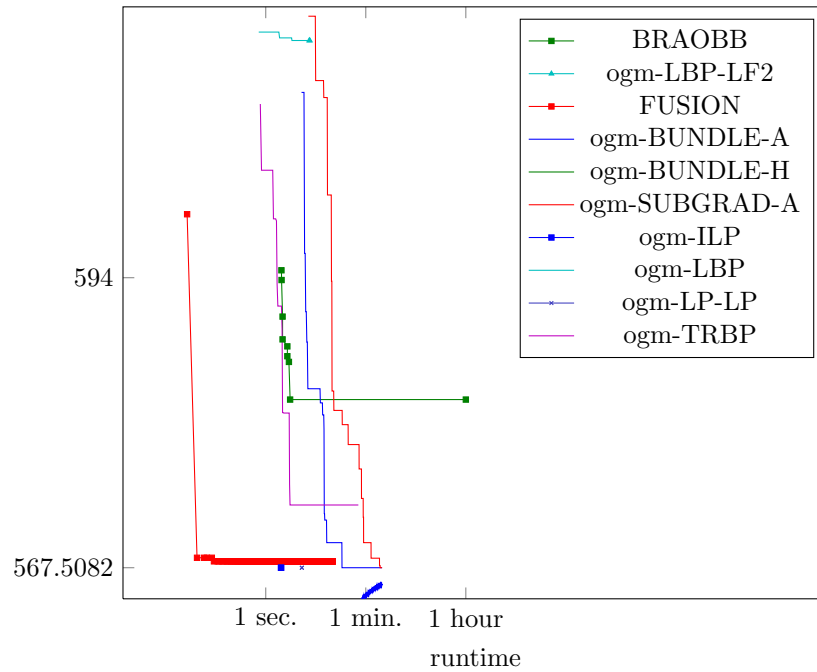


Figure 1465: Runtime results for the instance *gm95* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

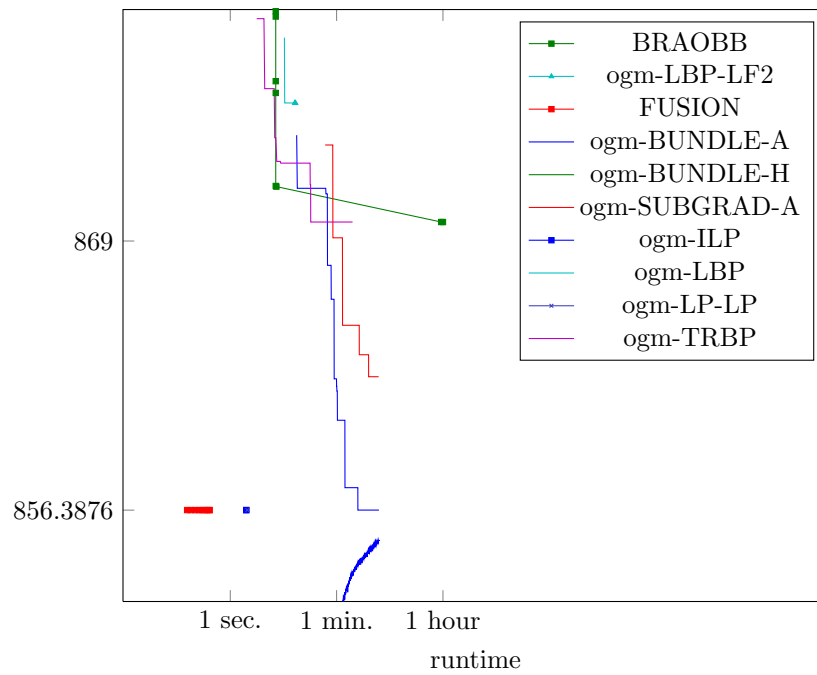


Figure 1466: Runtime results for the instance *gm96* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

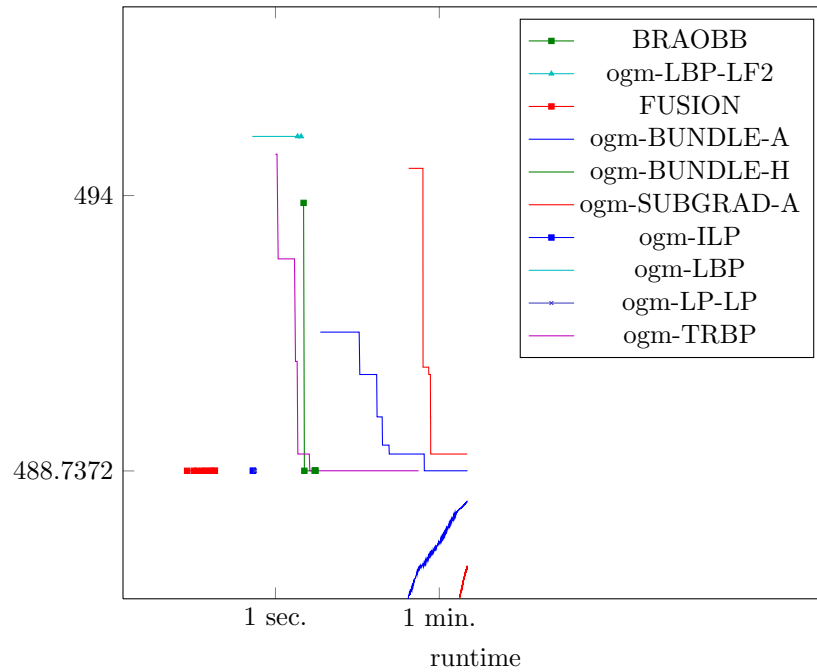


Figure 1467: Runtime results for the instance *gm97* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

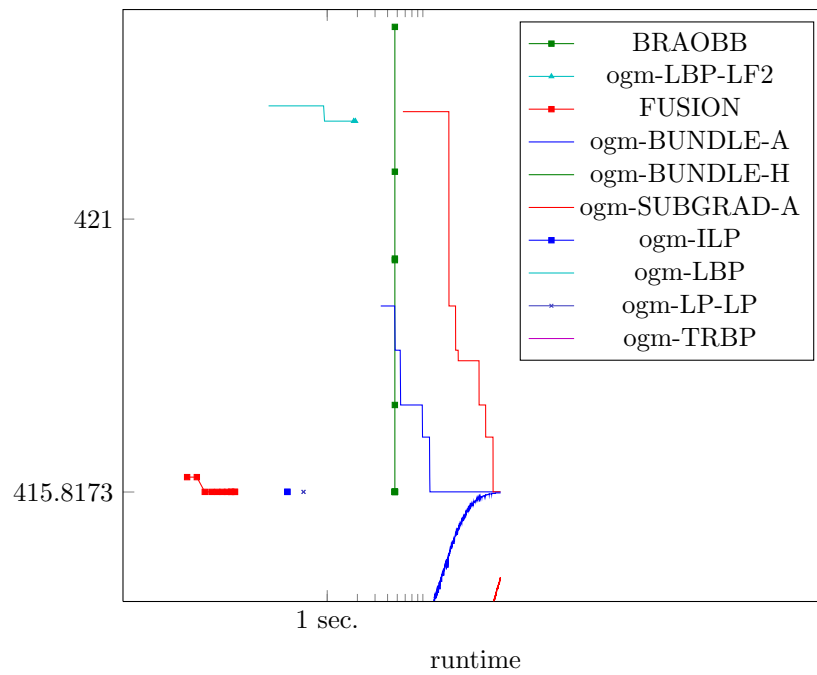


Figure 1468: Runtime results for the instance *gm98* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

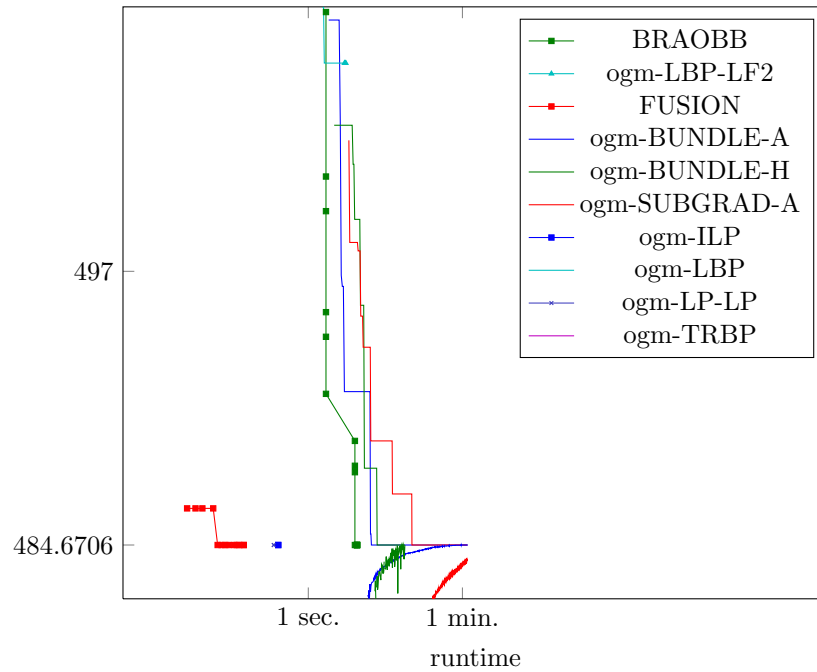


Figure 1469: Runtime results for the instance *gm99* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

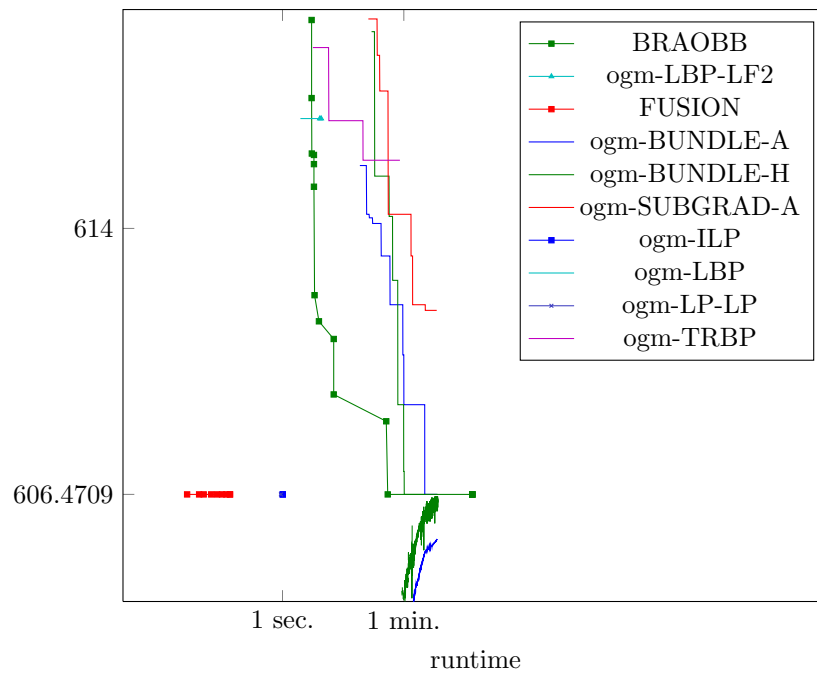


Figure 1470: Runtime results for the instance *gm9* of the *geo-surf-7* models. Plots show best value of integer solution and (if provided) best lower bound.

5.15. Hierarchical Image Segmentation (correlation-clustering)

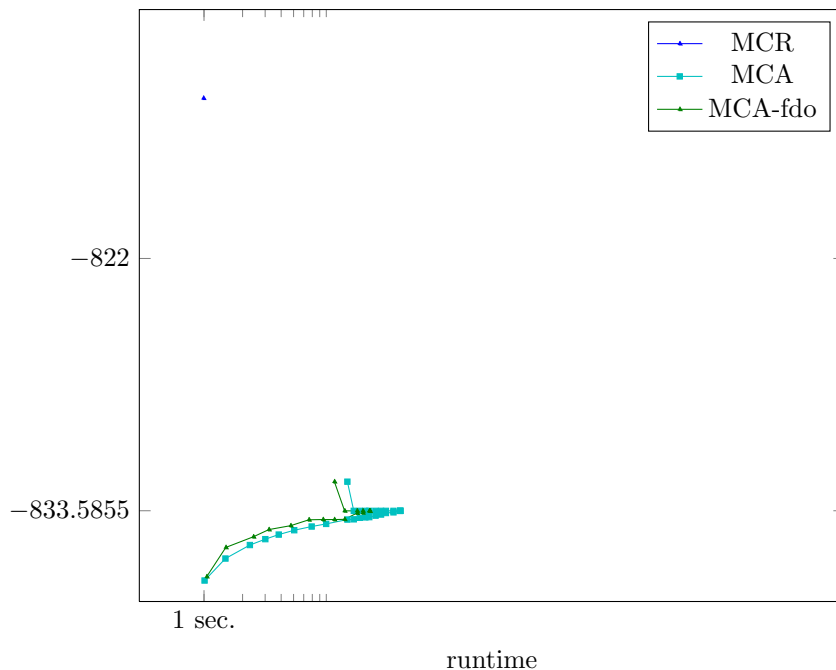


Figure 1471: Runtime results for the instance 0000047 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

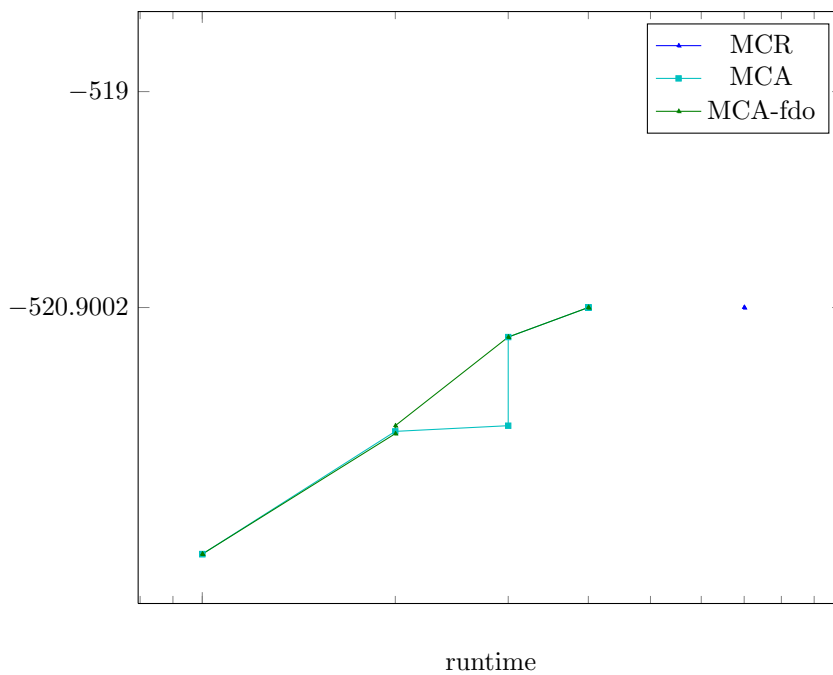


Figure 1472: Runtime results for the instance 0000051 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

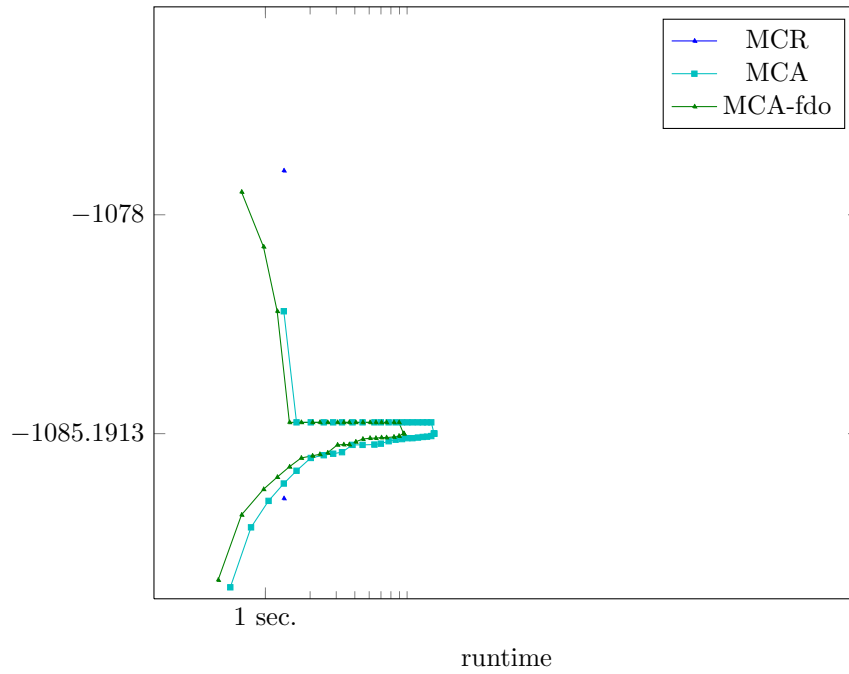


Figure 1473: Runtime results for the instance 0000059 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

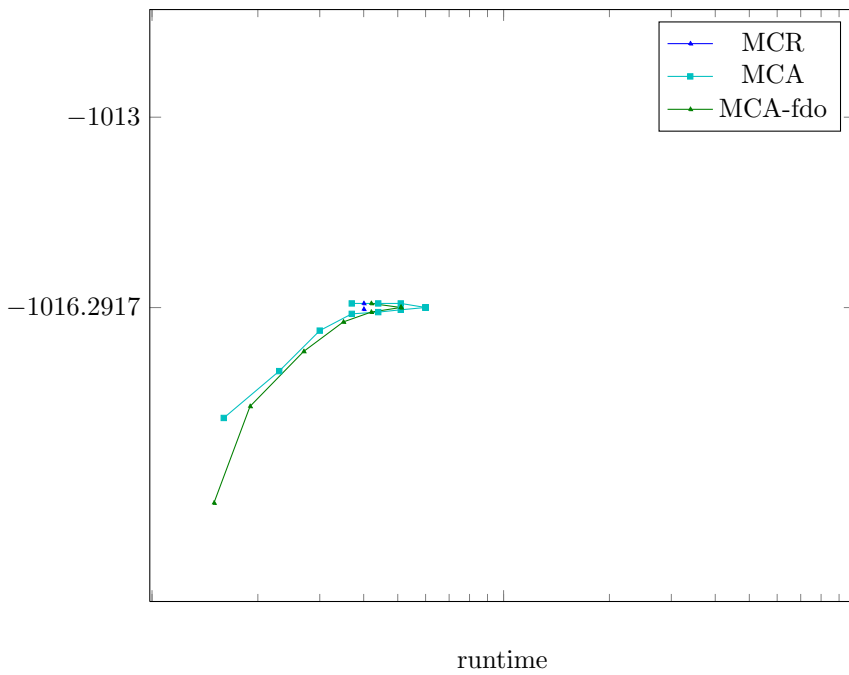


Figure 1474: Runtime results for the instance 0000072 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

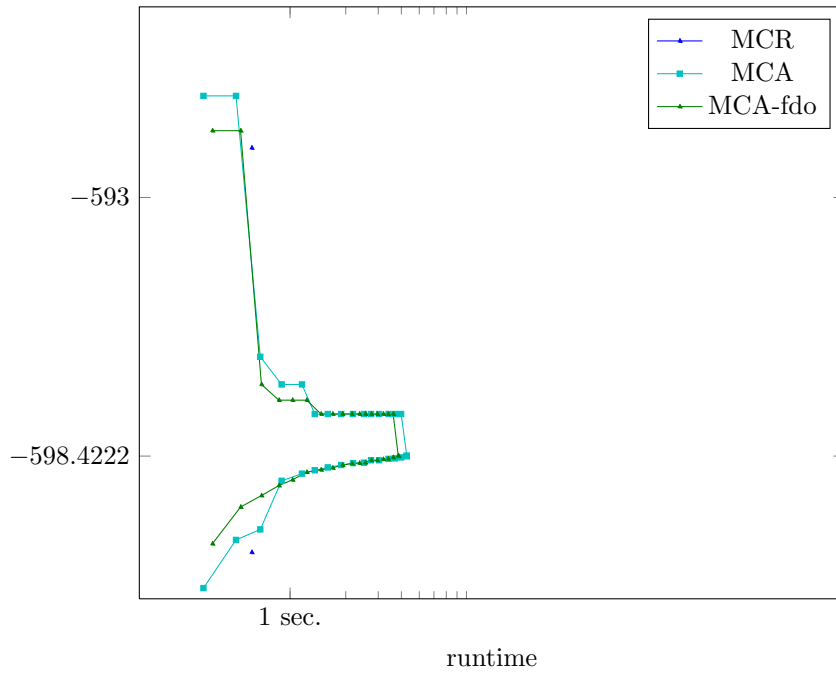


Figure 1475: Runtime results for the instance 0000087 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

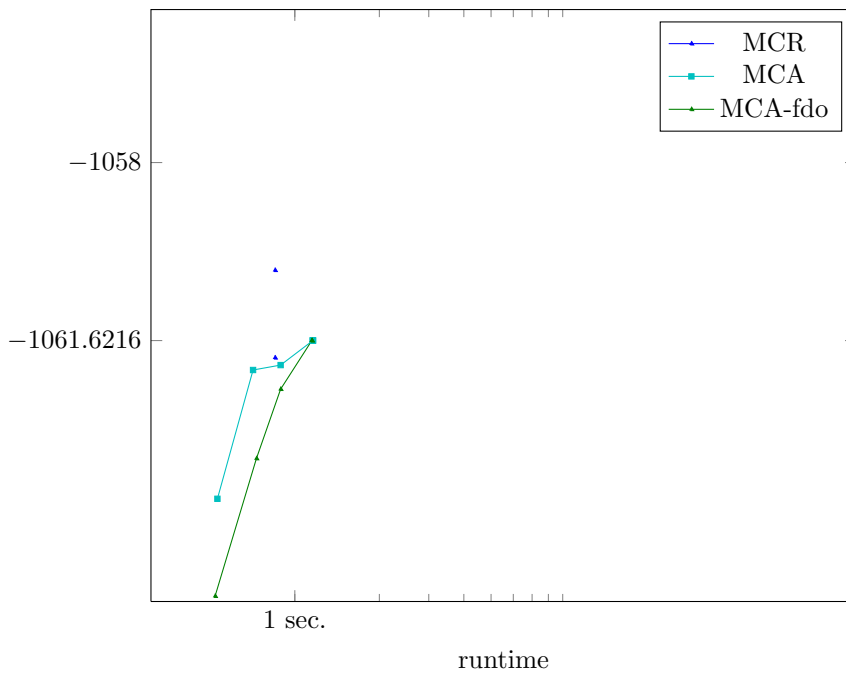


Figure 1476: Runtime results for the instance 0000176 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

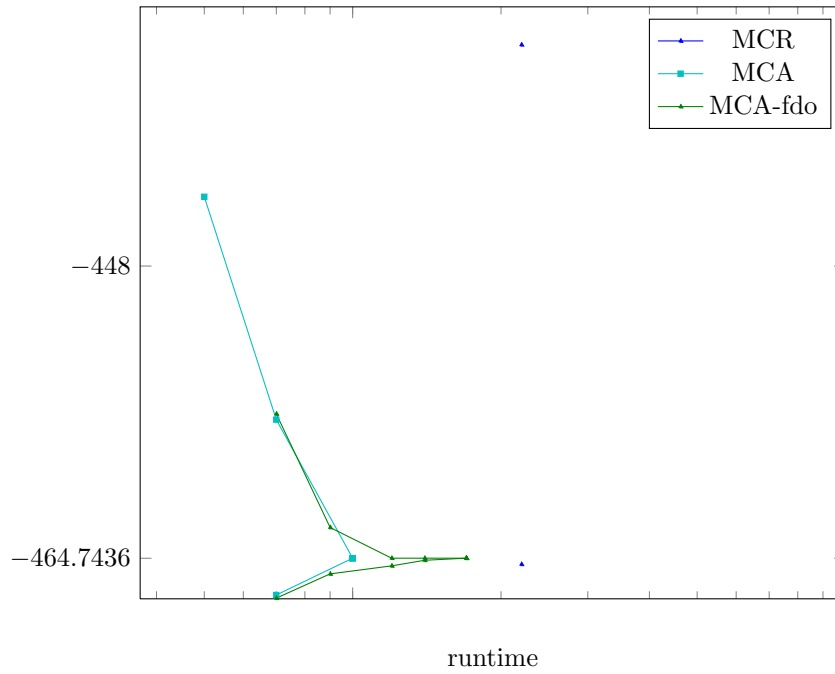


Figure 1477: Runtime results for the instance 0000382 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

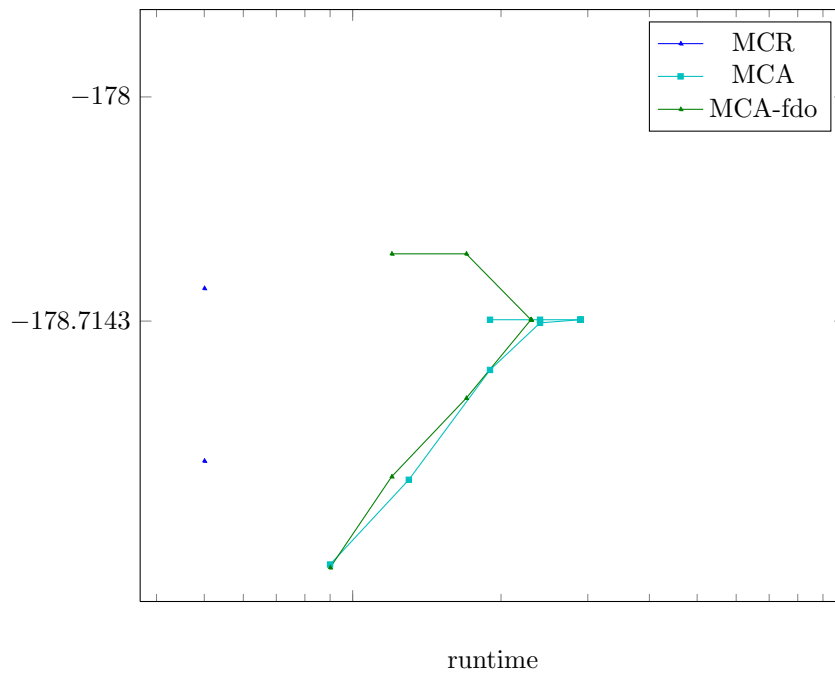


Figure 1478: Runtime results for the instance 0000631 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

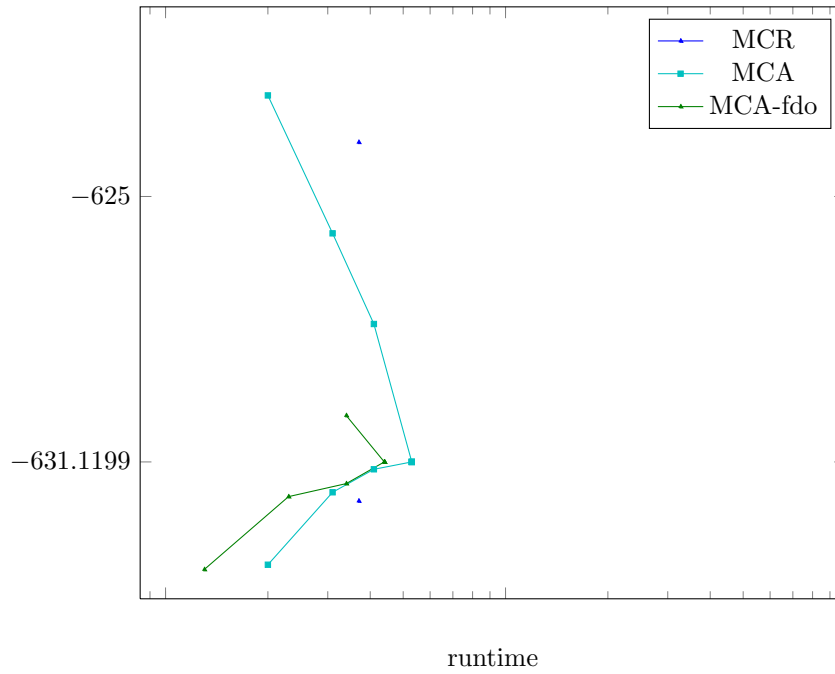


Figure 1479: Runtime results for the instance 0000643 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

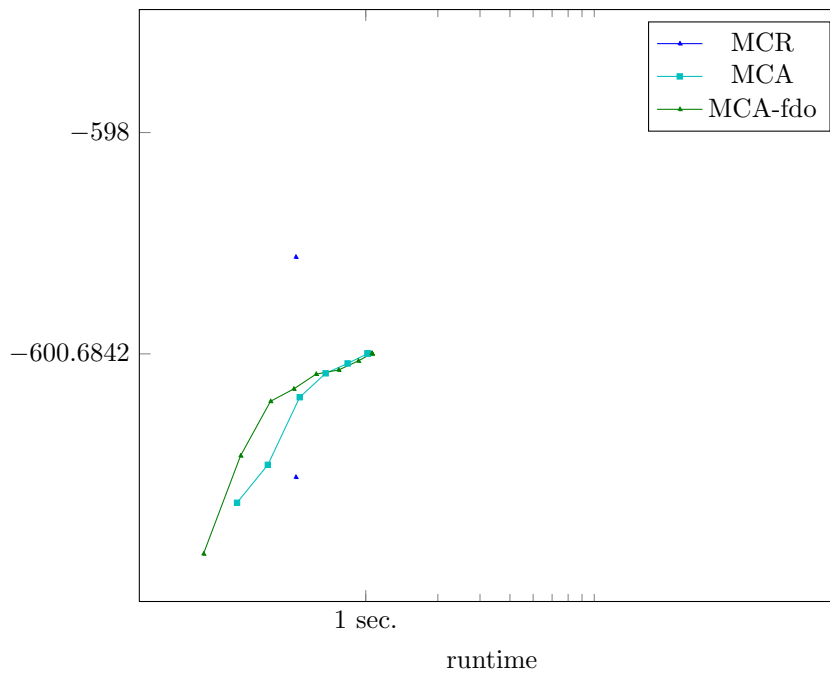


Figure 1480: Runtime results for the instance 0000697 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

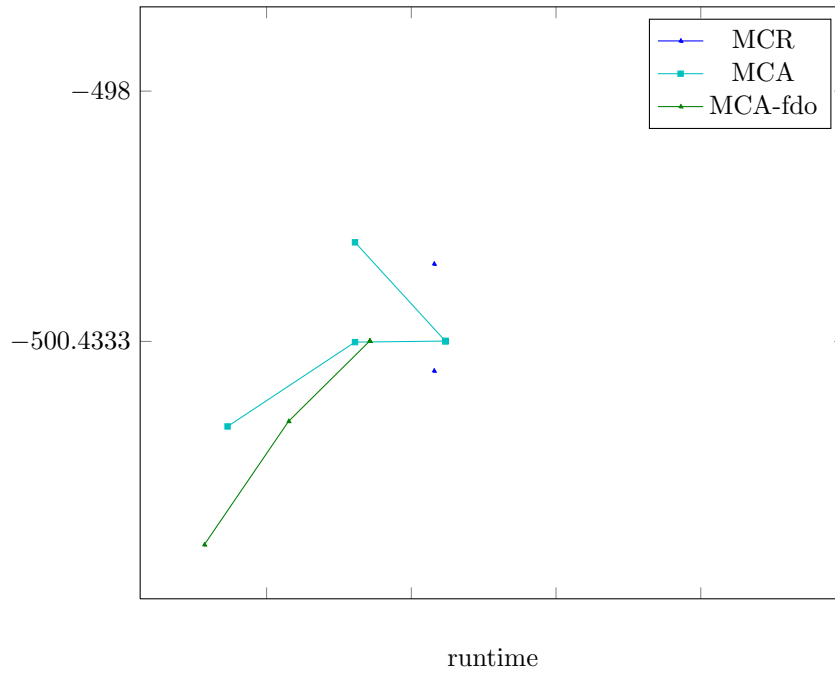


Figure 1481: Runtime results for the instance 0000759 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

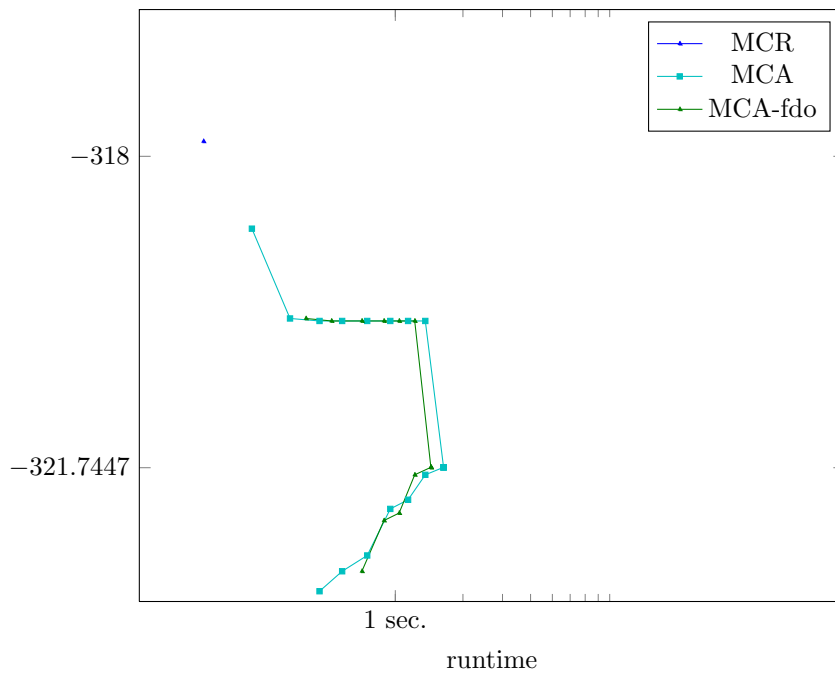


Figure 1482: Runtime results for the instance 0000794 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

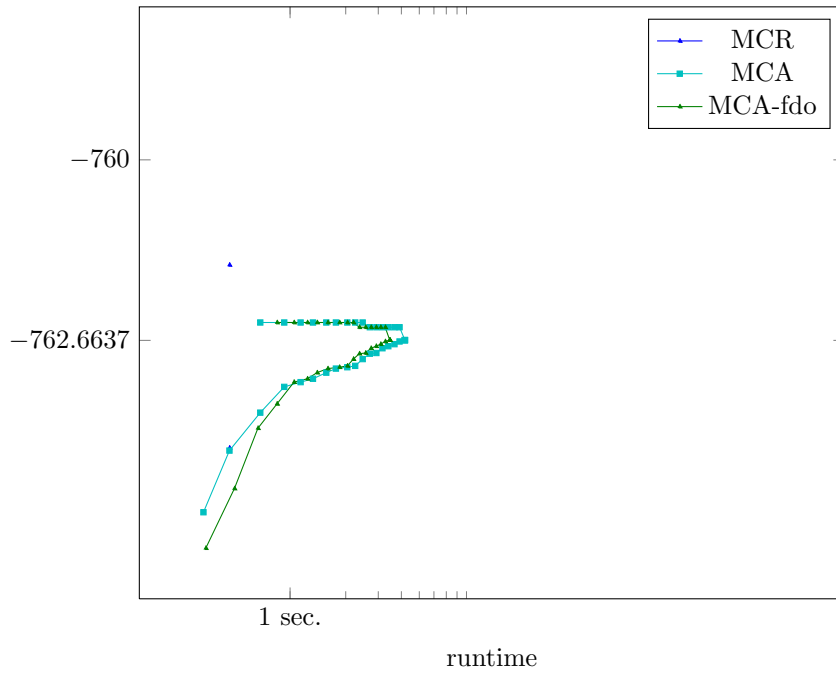


Figure 1483: Runtime results for the instance 0000952 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

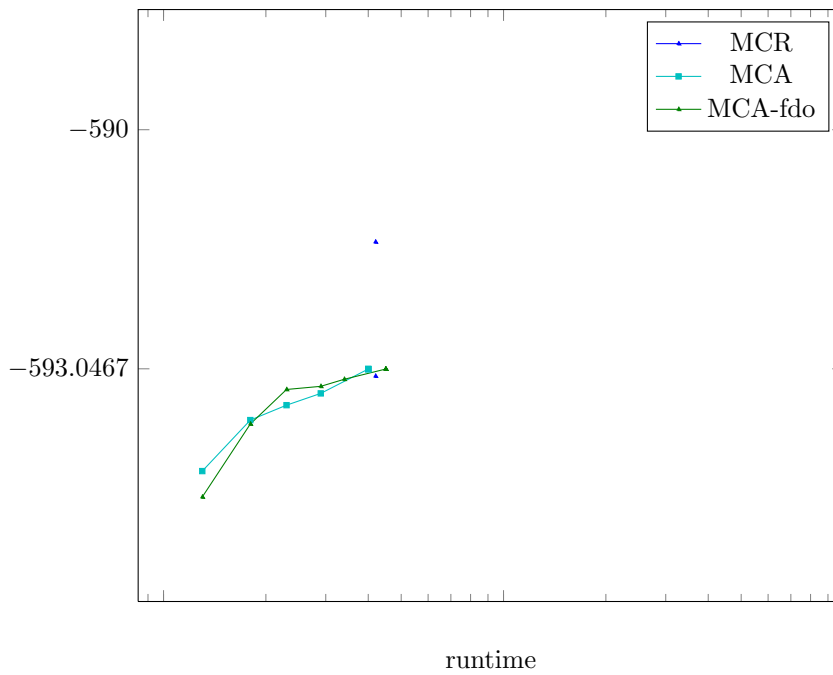


Figure 1484: Runtime results for the instance 0001677 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

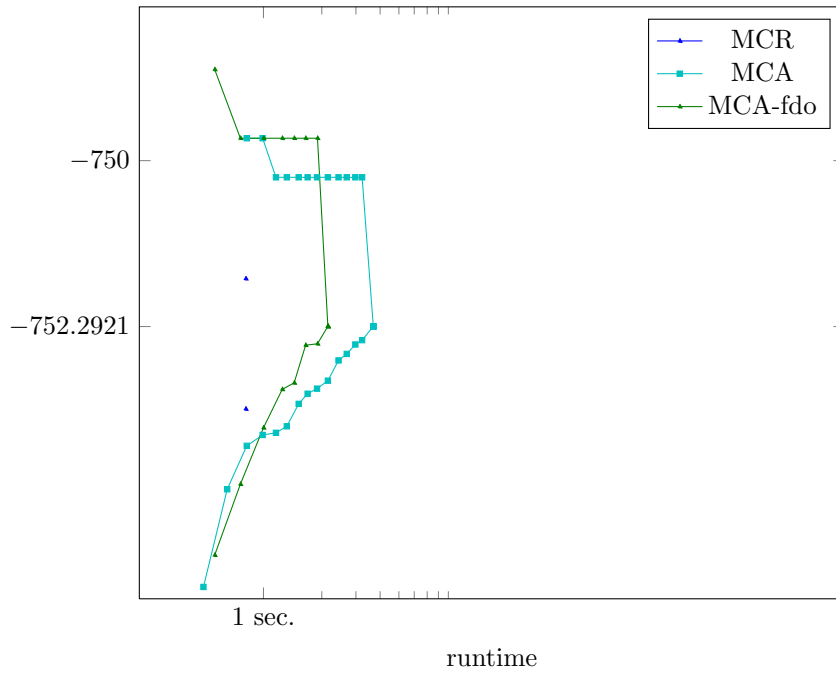


Figure 1485: Runtime results for the instance 0002136 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

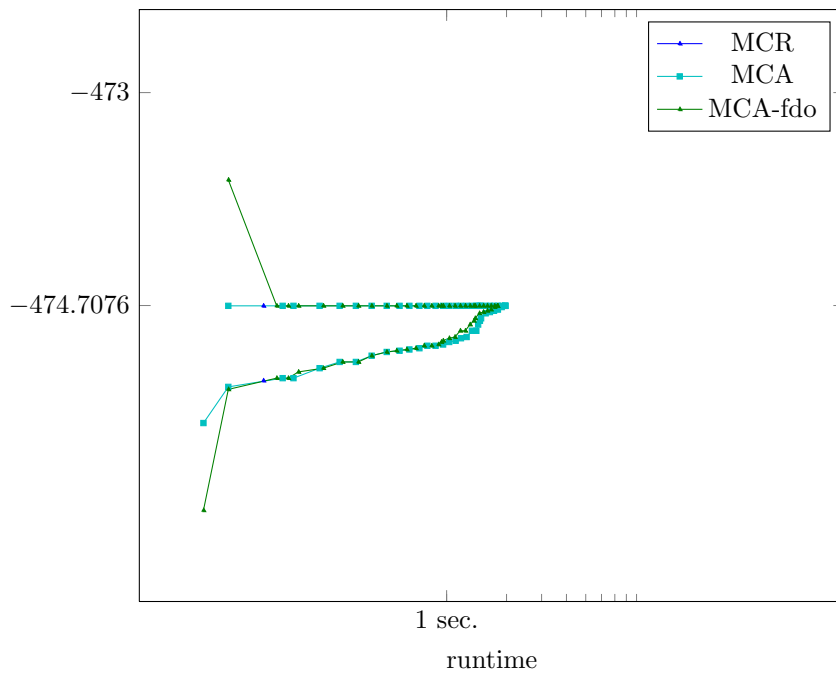


Figure 1486: Runtime results for the instance 0002395 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

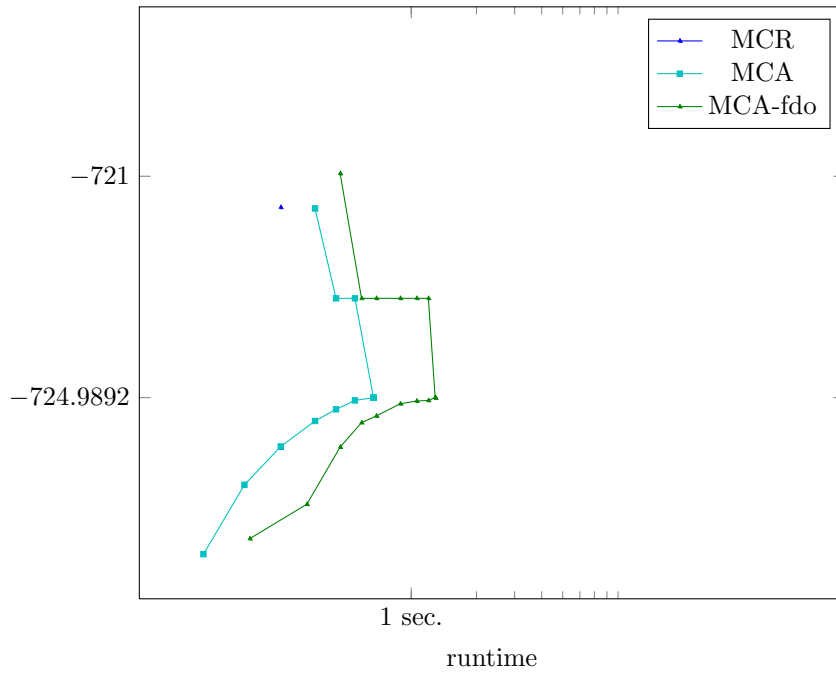


Figure 1487: Runtime results for the instance 0002755 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

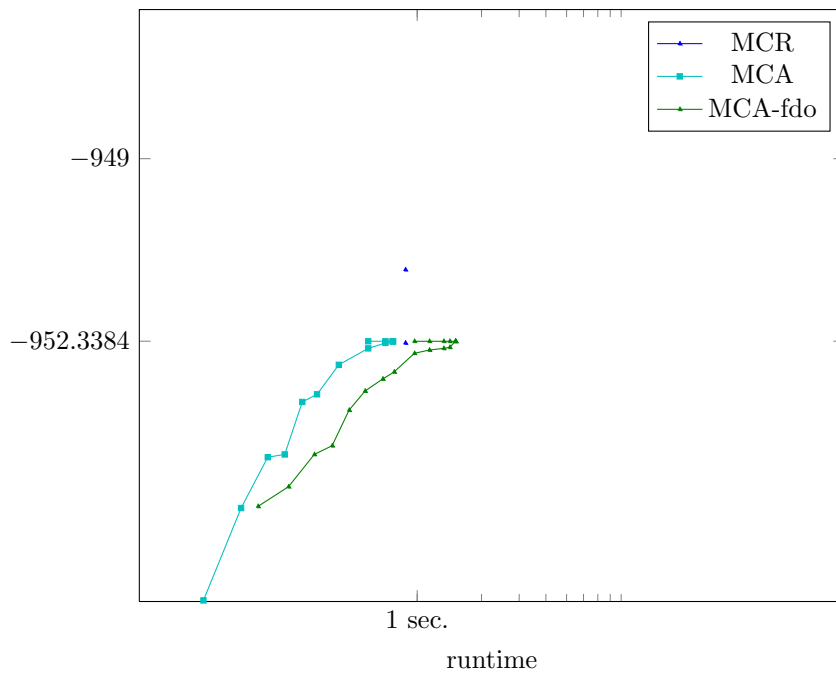


Figure 1488: Runtime results for the instance 0003178 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

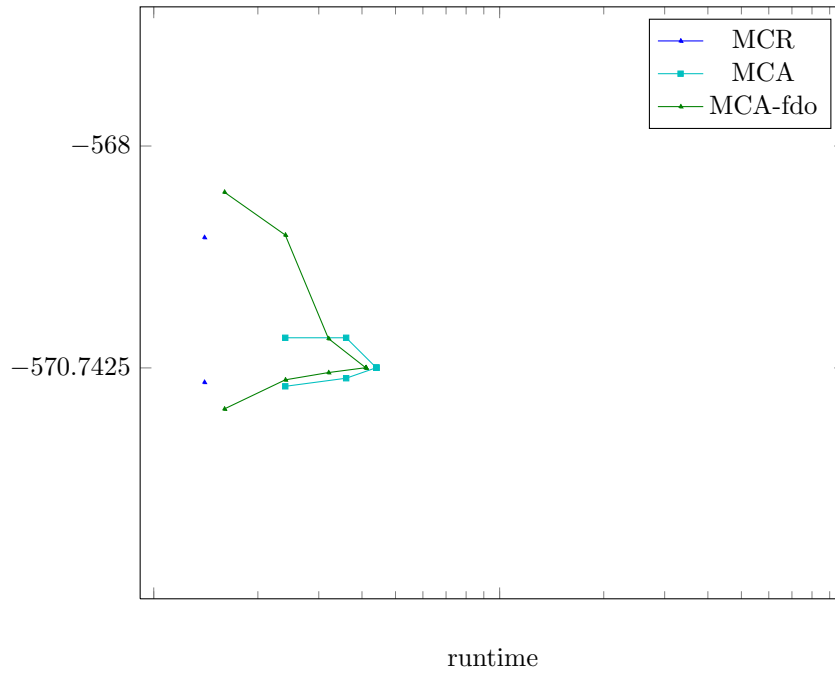


Figure 1489: Runtime results for the instance 0003423 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

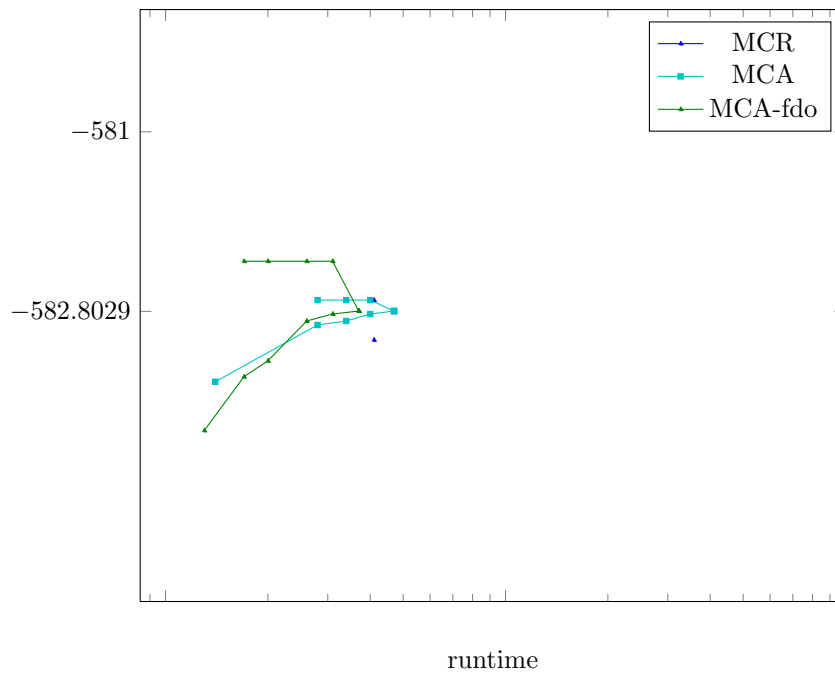


Figure 1490: Runtime results for the instance 0003463 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

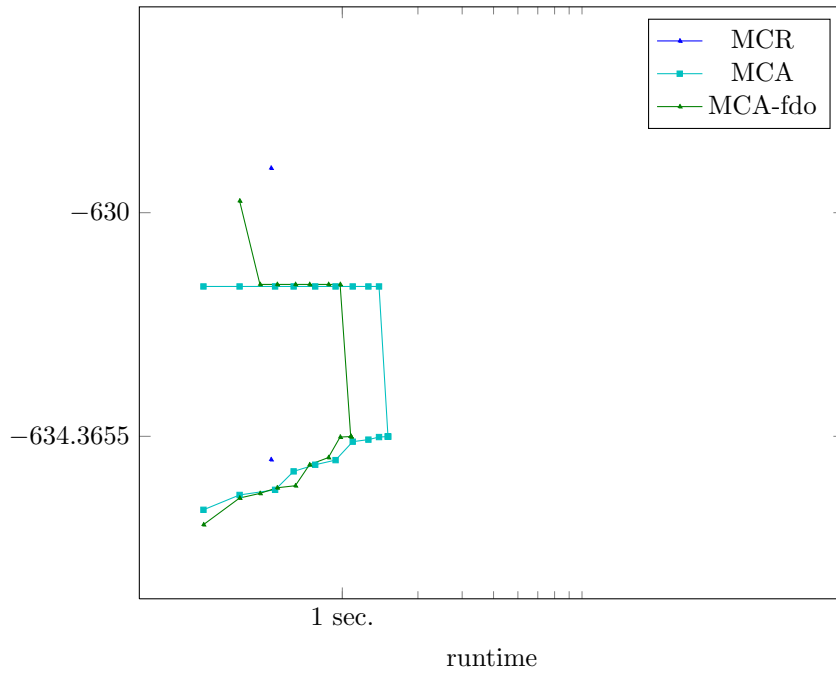


Figure 1491: Runtime results for the instance 0003728 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

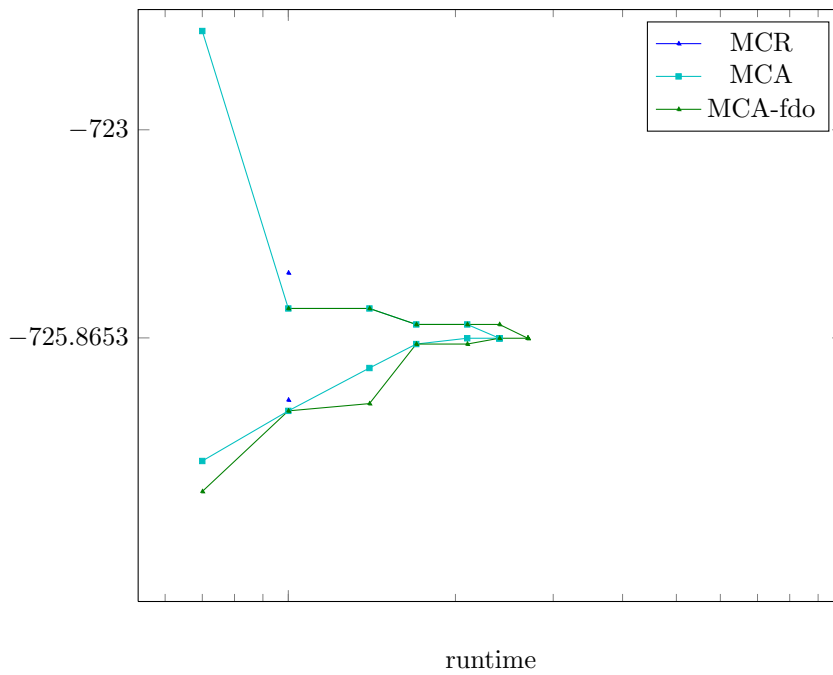


Figure 1492: Runtime results for the instance 0003793 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

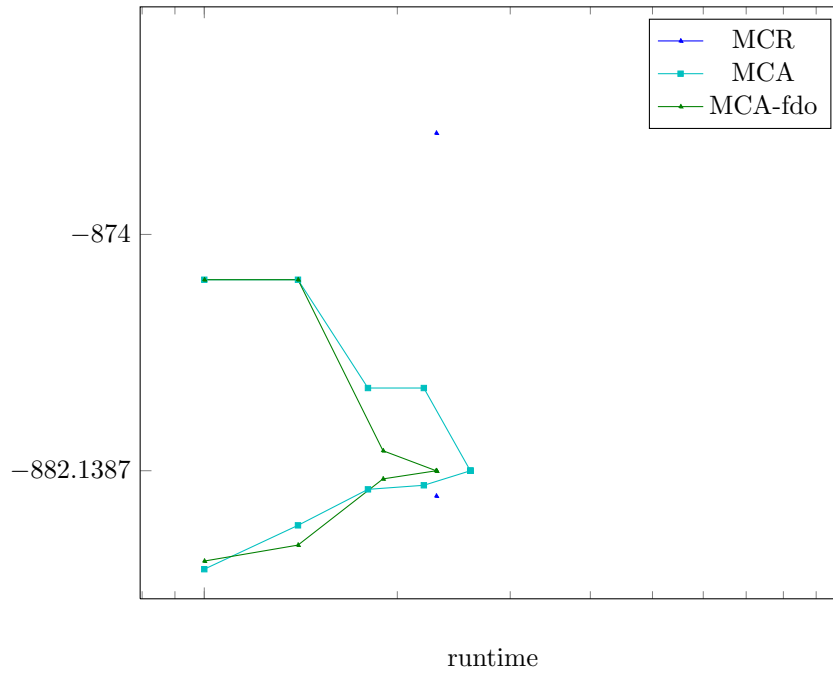


Figure 1493: Runtime results for the instance 0003957 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

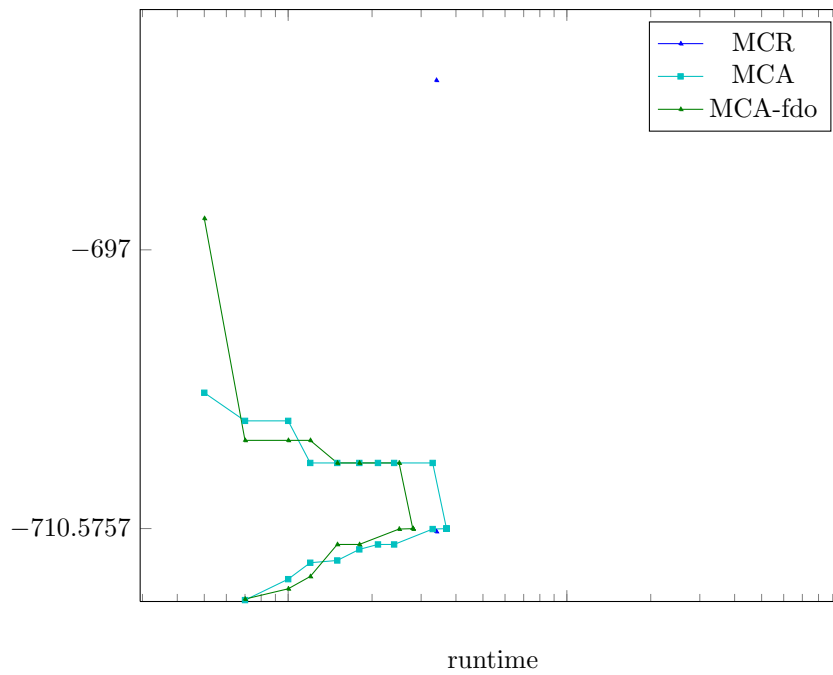


Figure 1494: Runtime results for the instance 0004028 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

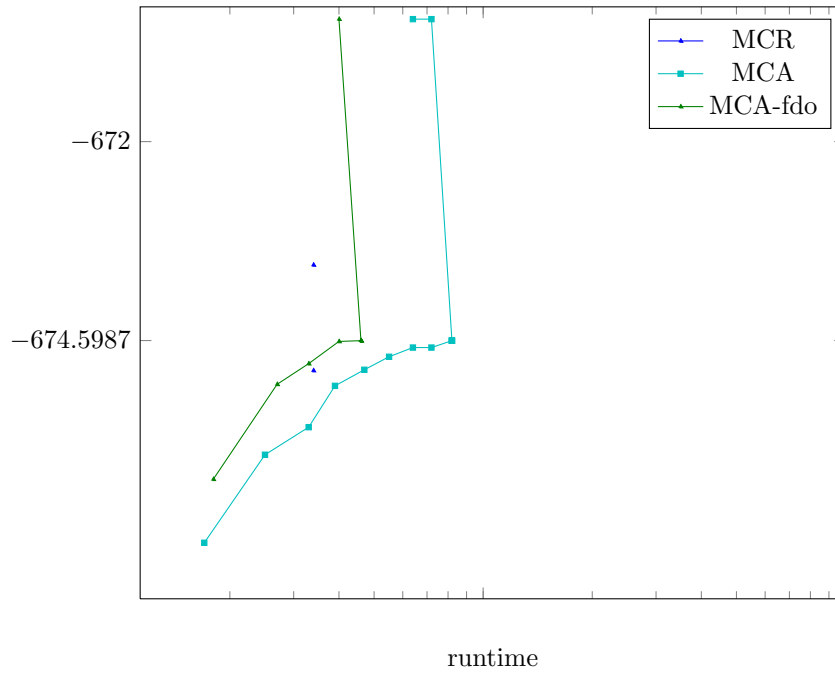


Figure 1495: Runtime results for the instance 0004069 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

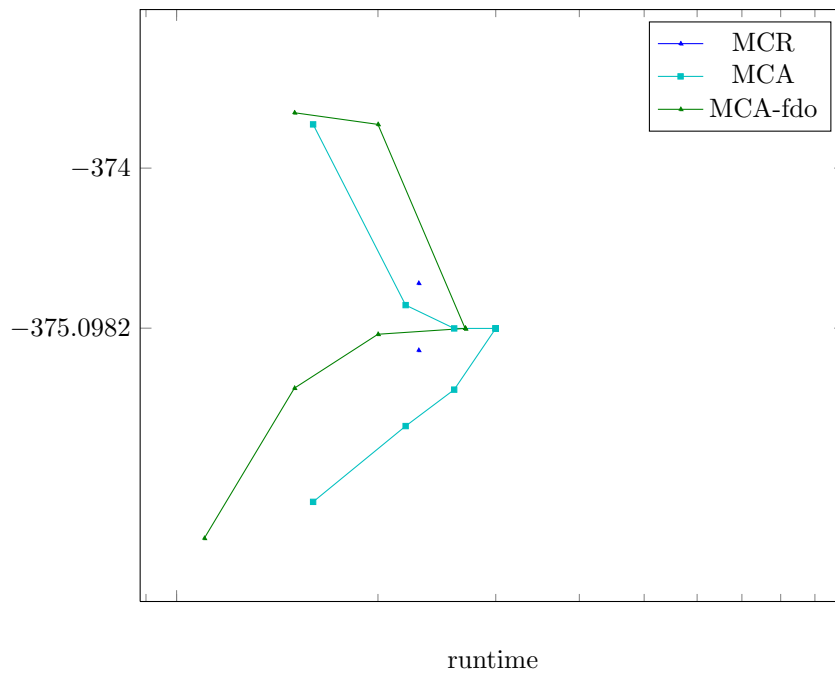


Figure 1496: Runtime results for the instance 0004294 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

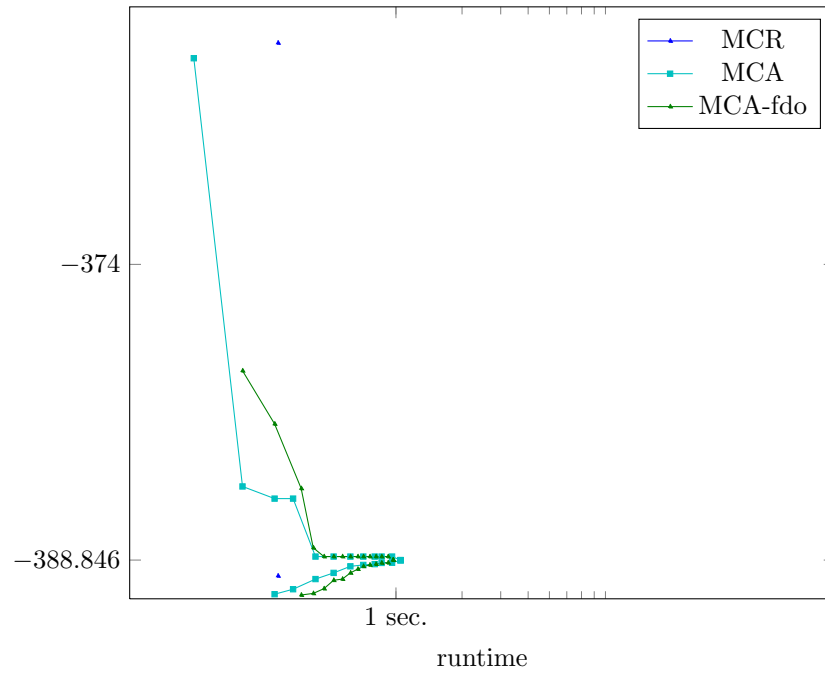


Figure 1499: Runtime results for the instance 0005074 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

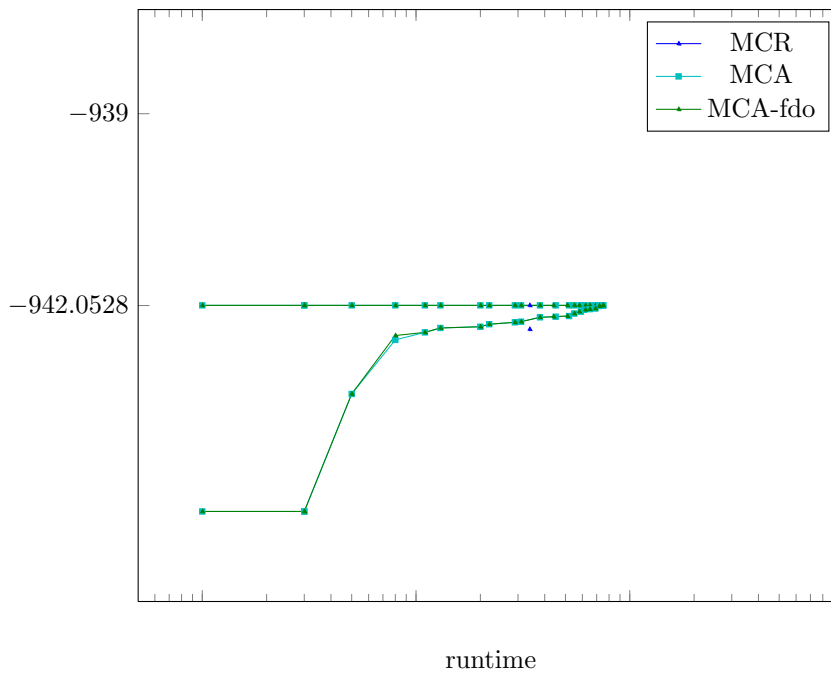


Figure 1500: Runtime results for the instance 0005079 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

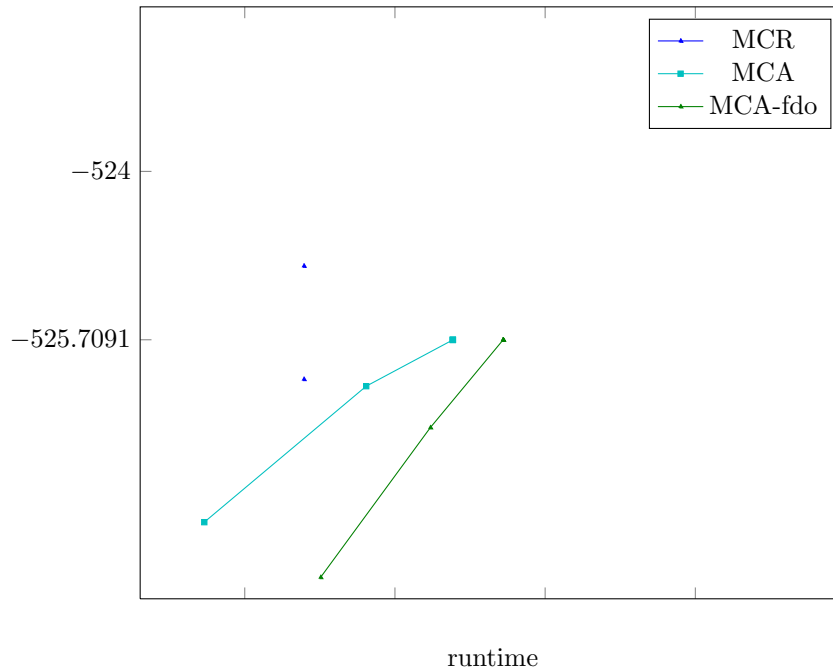


Figure 1501: Runtime results for the instance 0005633 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

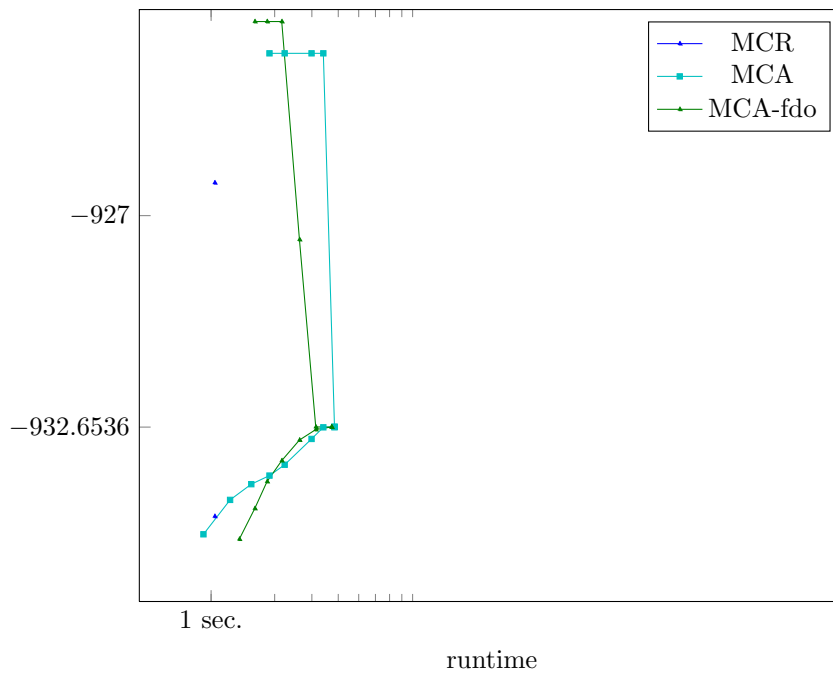


Figure 1502: Runtime results for the instance 0006575 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

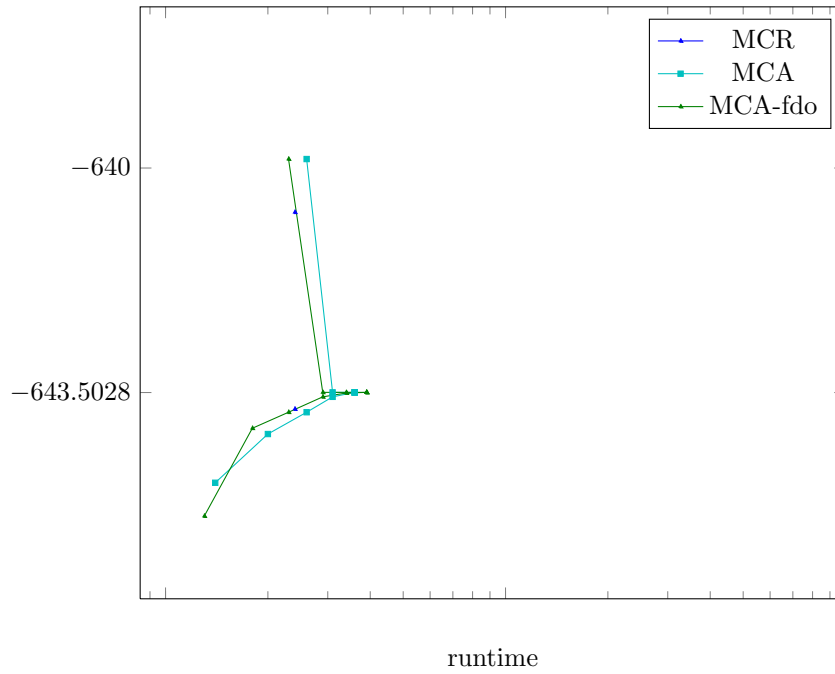


Figure 1503: Runtime results for the instance 0007323 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

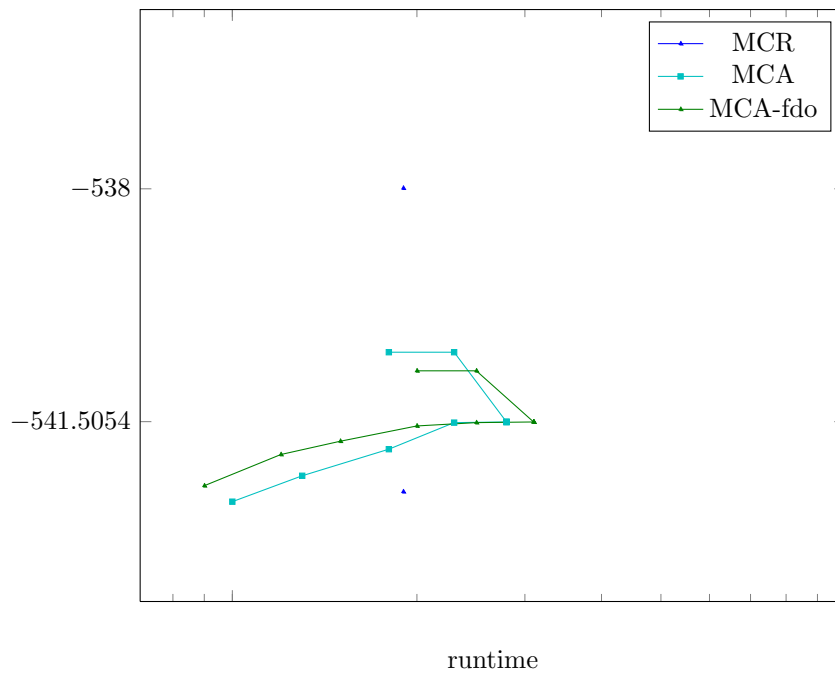


Figure 1504: Runtime results for the instance 0007545 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

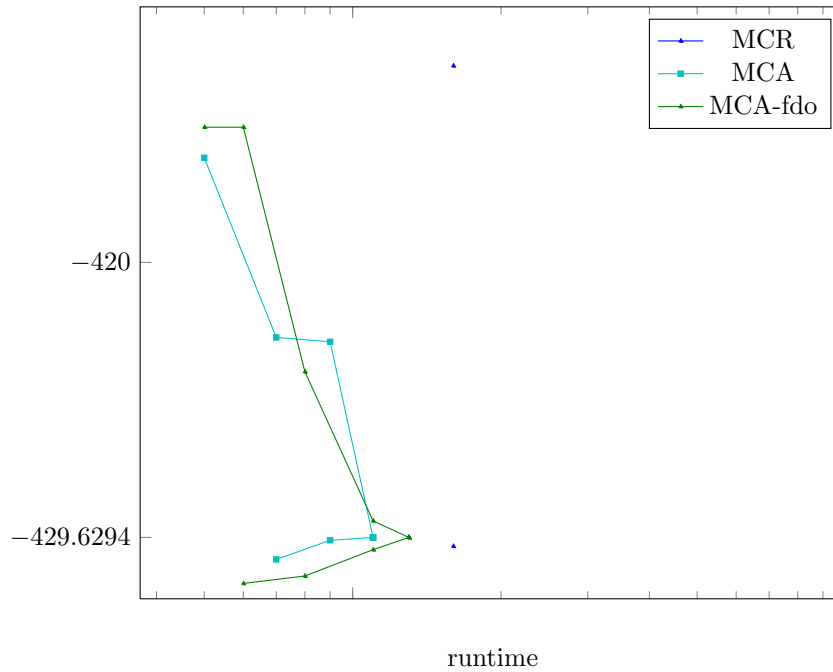


Figure 1505: Runtime results for the instance 0007932 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

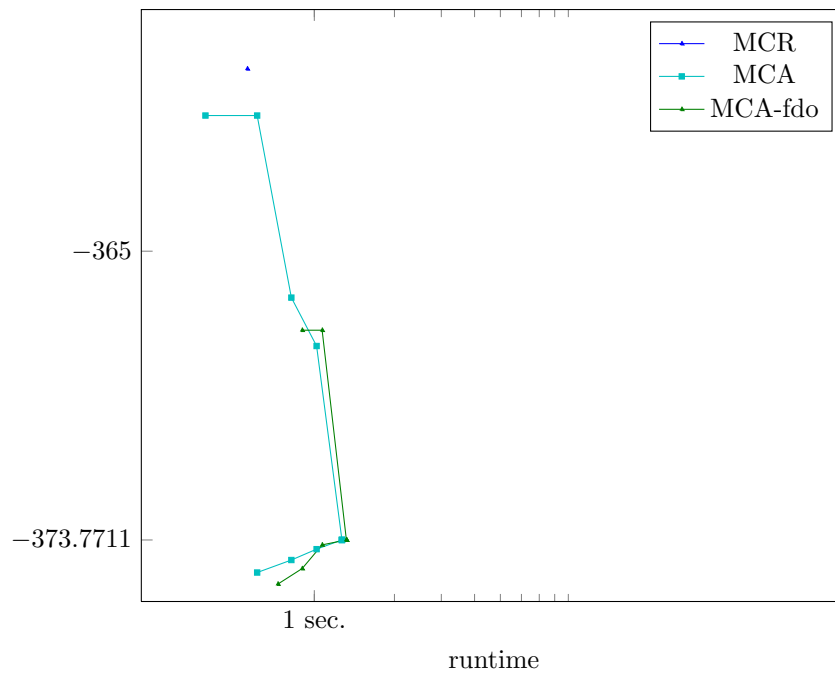


Figure 1506: Runtime results for the instance 0009212 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

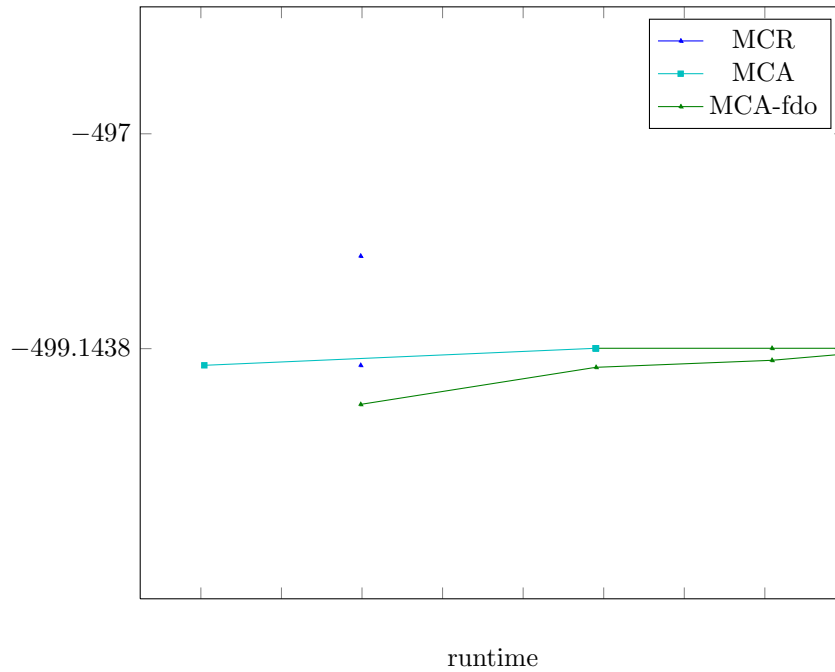


Figure 1507: Runtime results for the instance 0010830 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

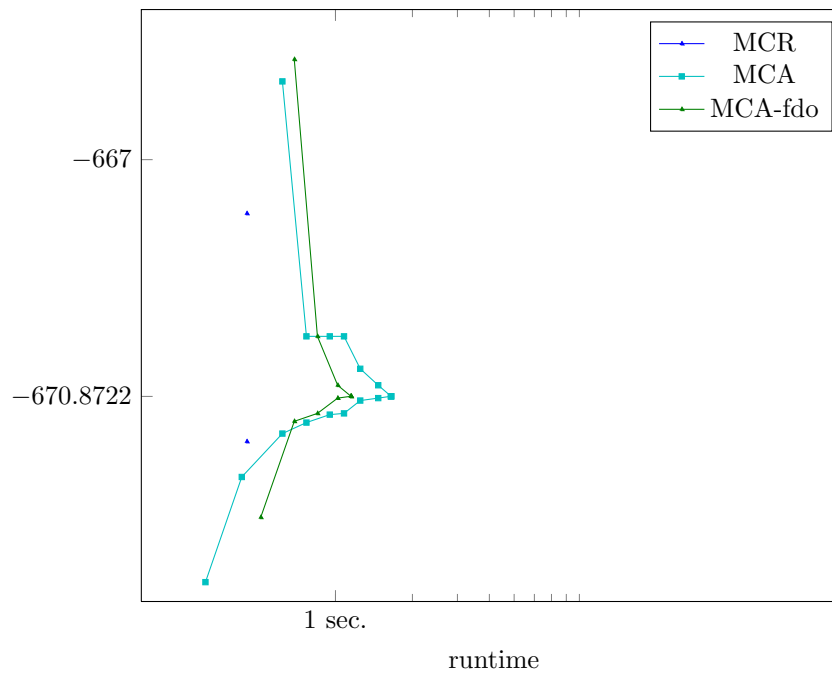


Figure 1508: Runtime results for the instance 0010950 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

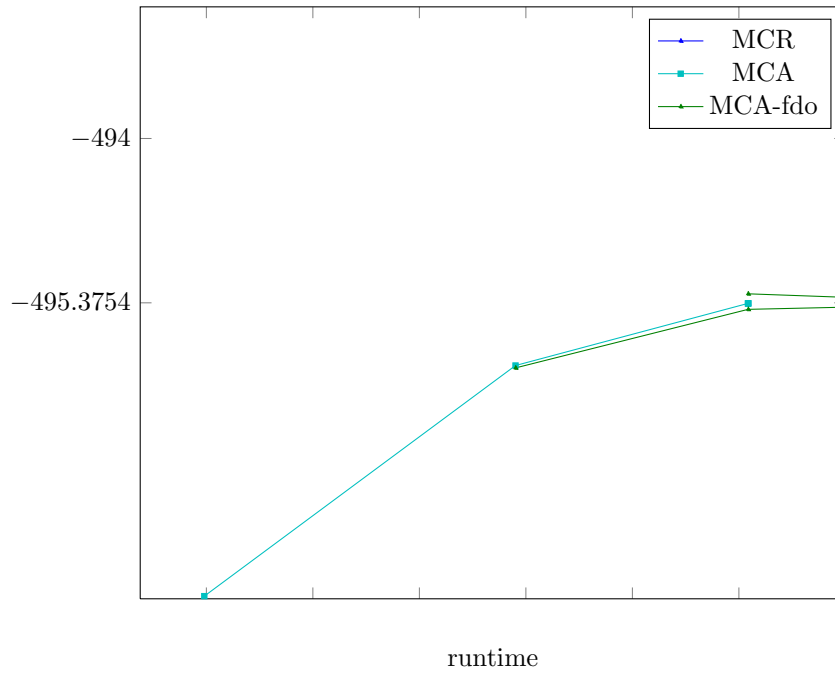


Figure 1509: Runtime results for the instance 0011003 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

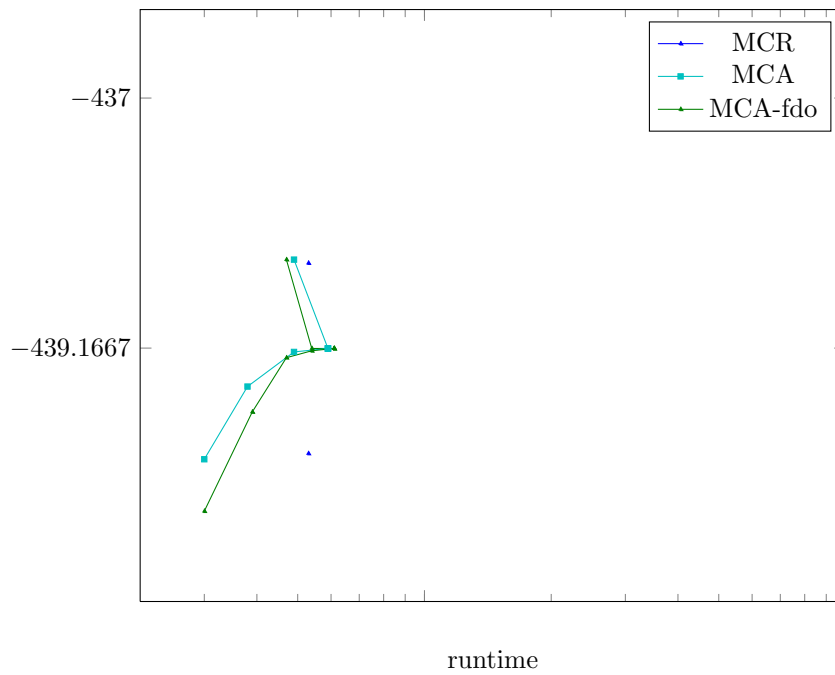


Figure 1510: Runtime results for the instance 0011033 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

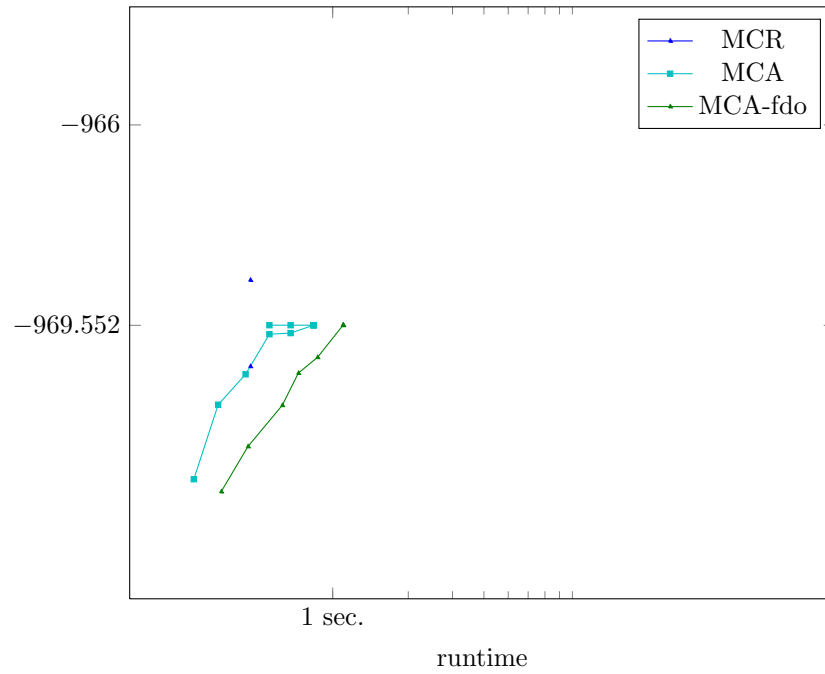


Figure 1511: Runtime results for the instance 0011073 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

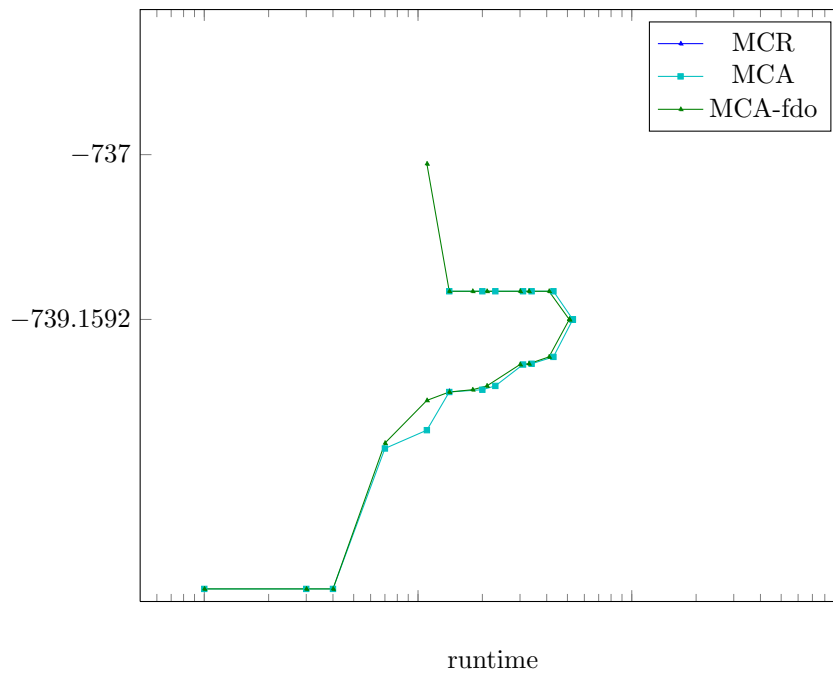


Figure 1512: Runtime results for the instance 0011088 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

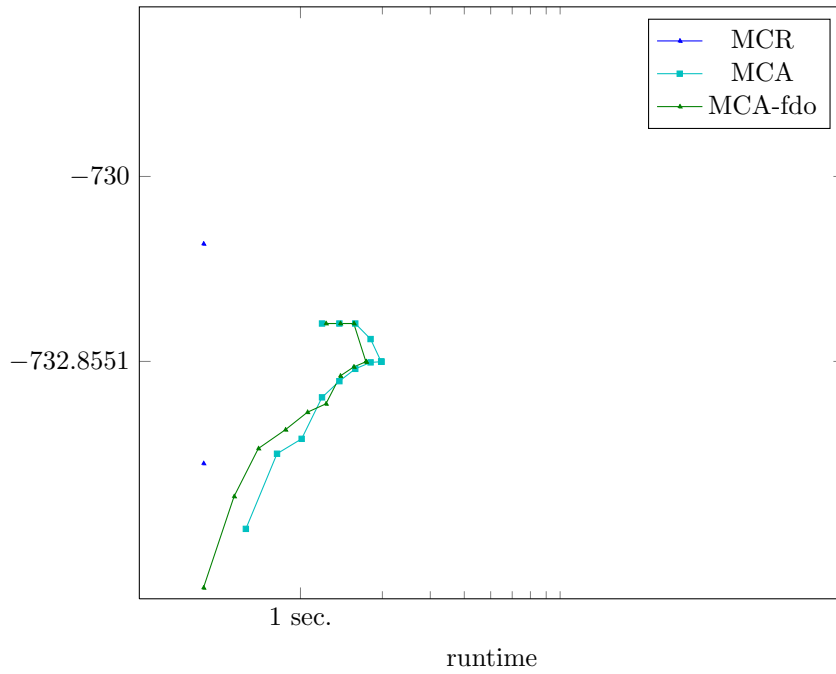


Figure 1513: Runtime results for the instance 0011116 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

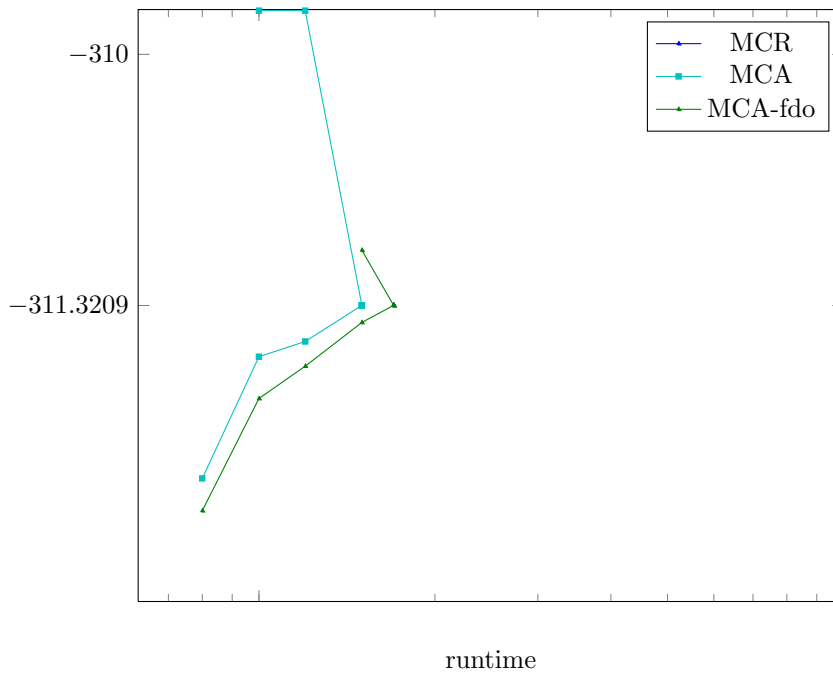


Figure 1514: Runtime results for the instance 0011154 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

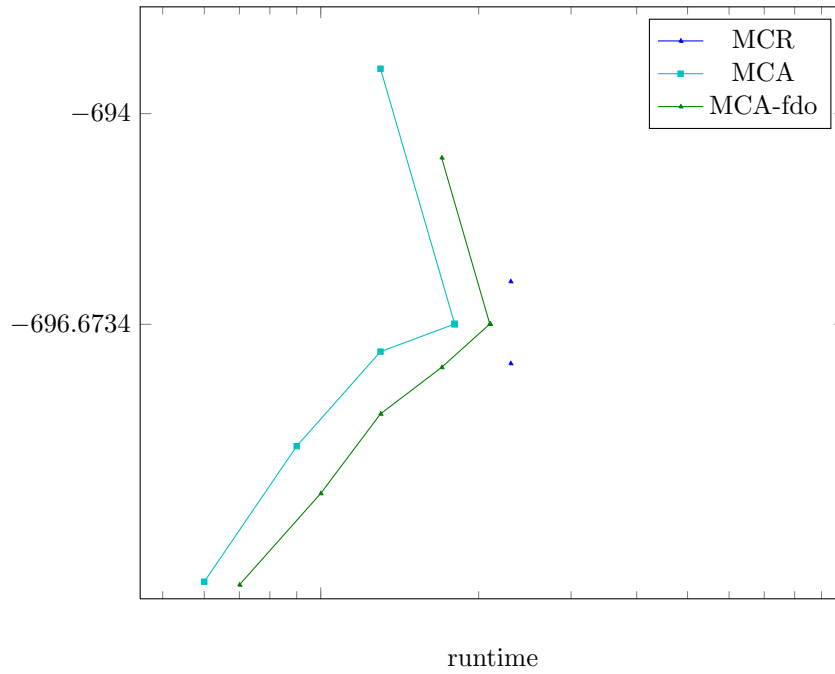


Figure 1515: Runtime results for the instance *0100026* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

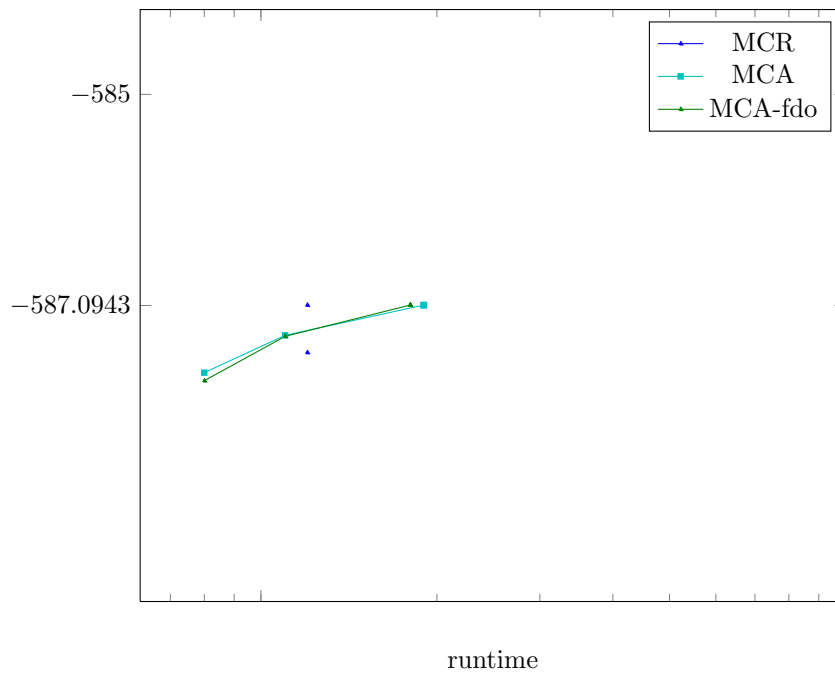


Figure 1516: Runtime results for the instance *0100030* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

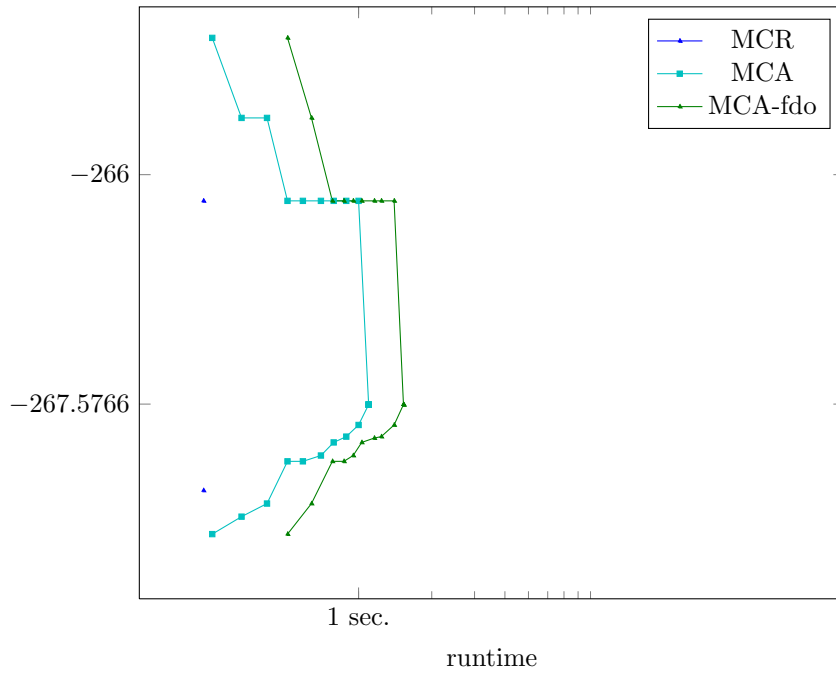


Figure 1517: Runtime results for the instance 0100061 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

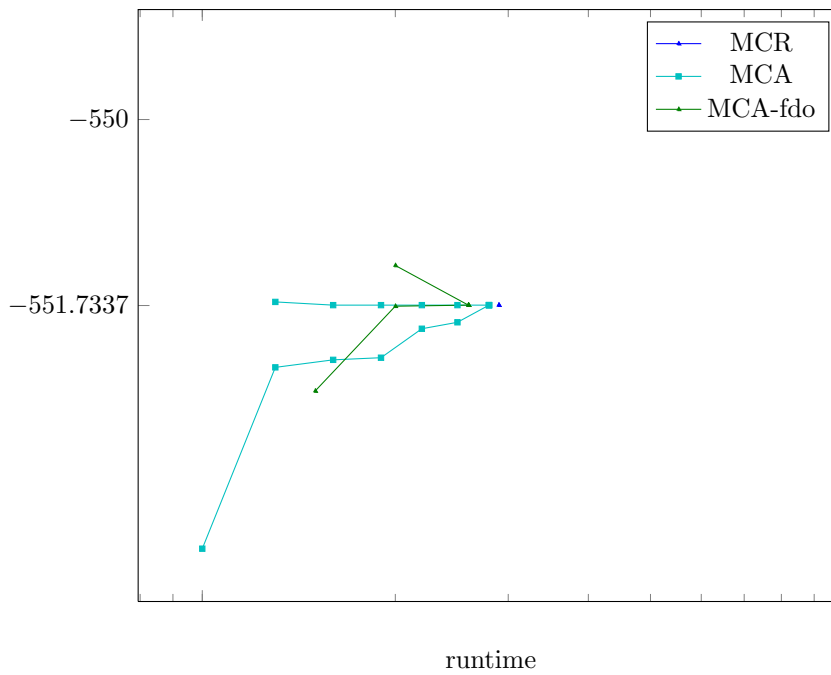


Figure 1518: Runtime results for the instance 0100091 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

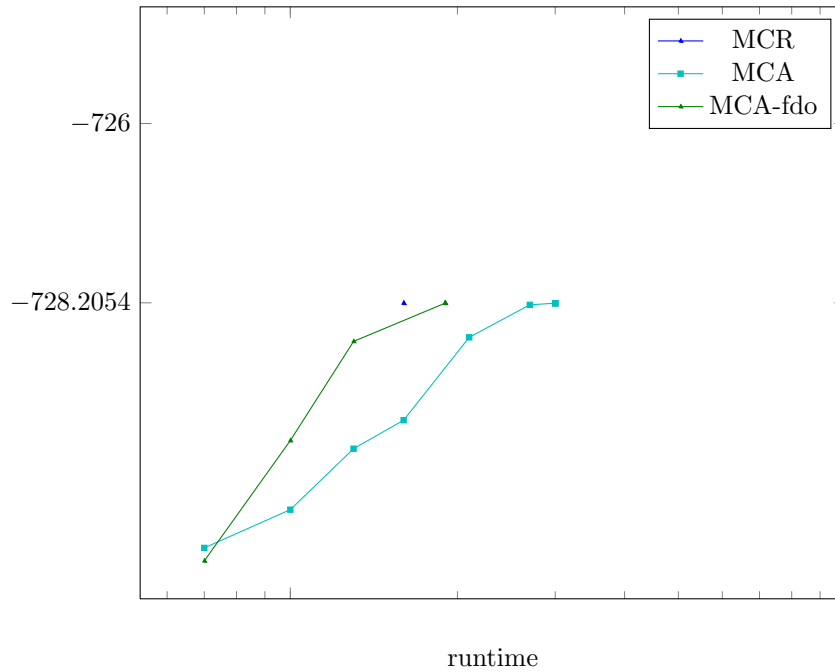


Figure 1519: Runtime results for the instance *0100113* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

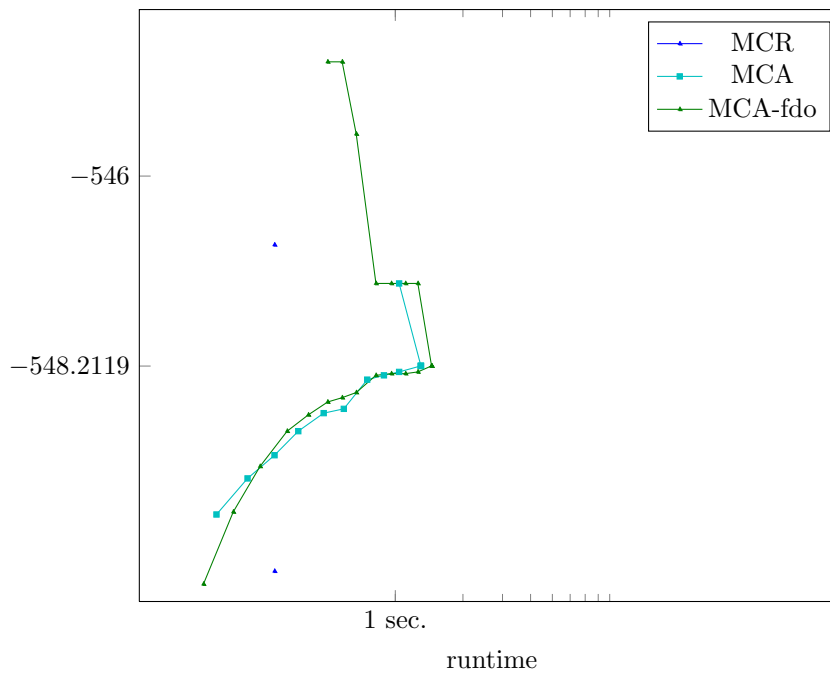


Figure 1520: Runtime results for the instance *0100132* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

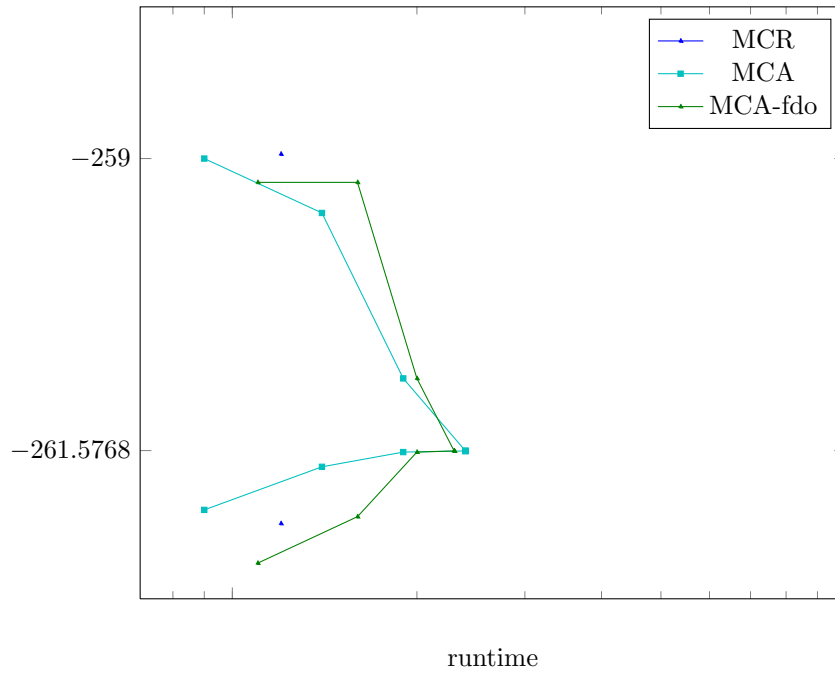
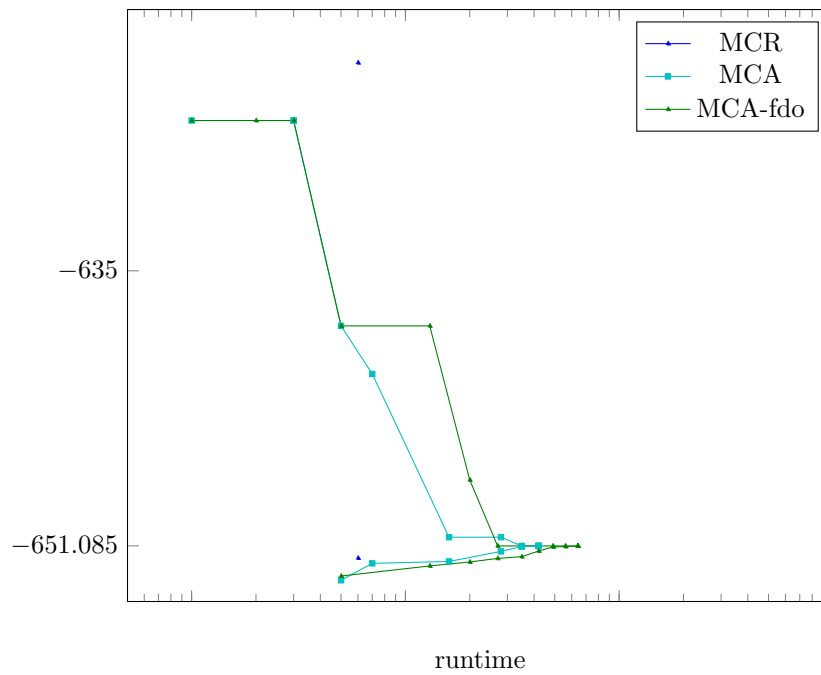


Figure 1521: Runtime results for the instance 0100164 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



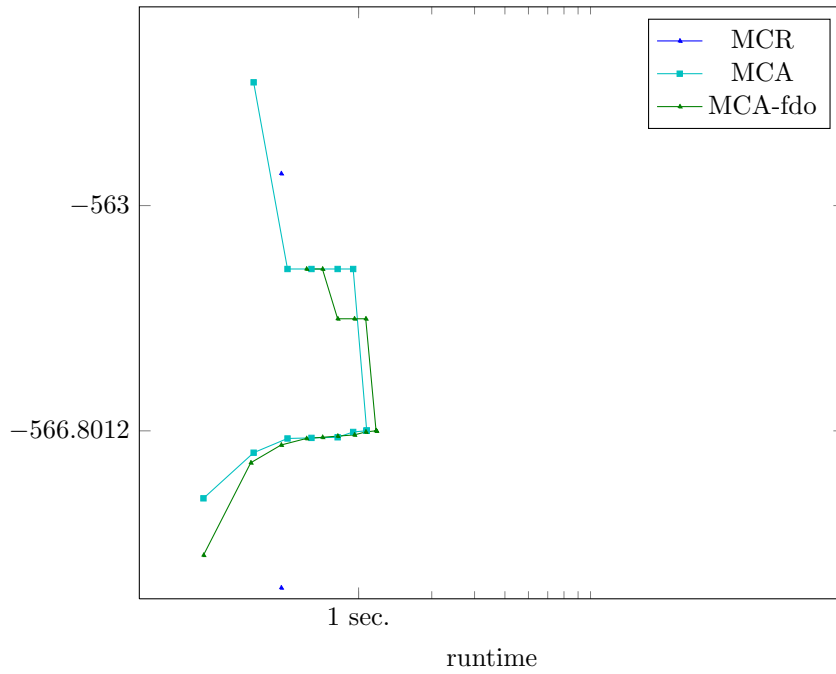


Figure 1523: Runtime results for the instance *0100477* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

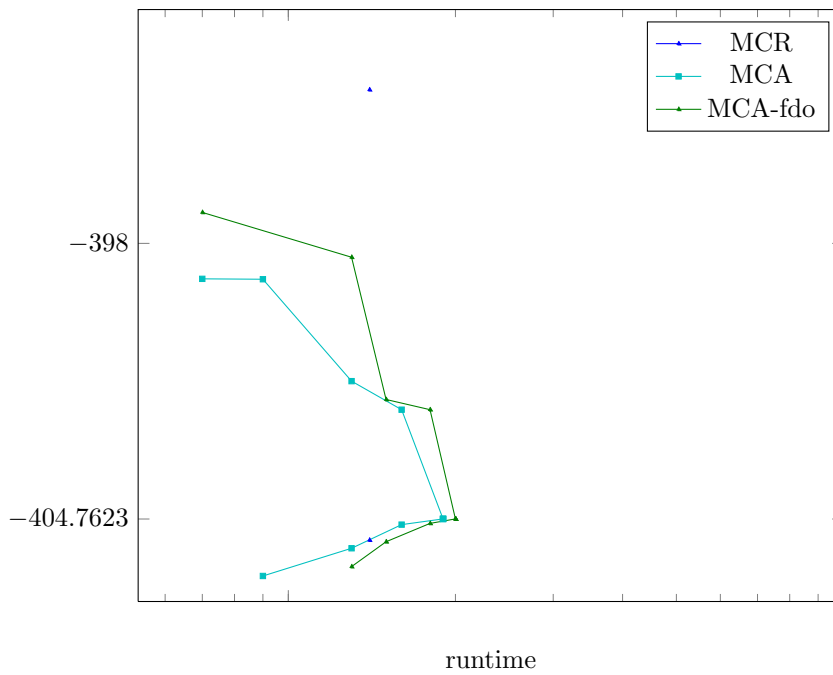


Figure 1524: Runtime results for the instance *0100579* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

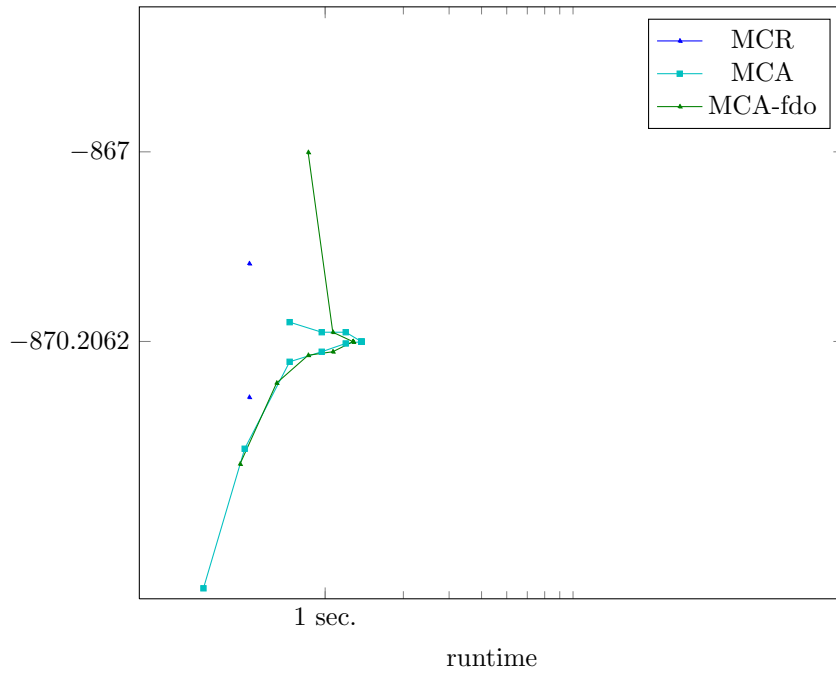


Figure 1525: Runtime results for the instance 0100628 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

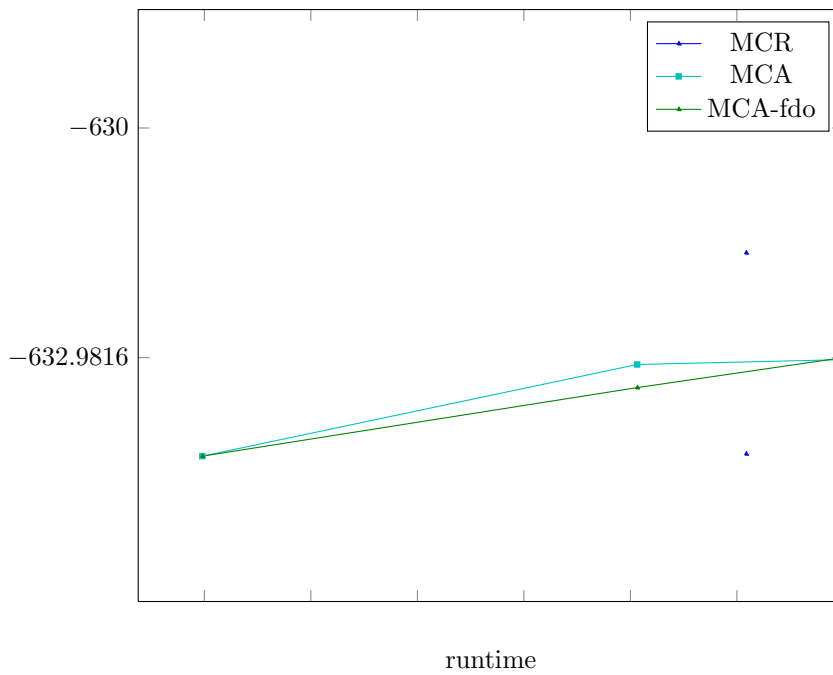


Figure 1526: Runtime results for the instance 0100740 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

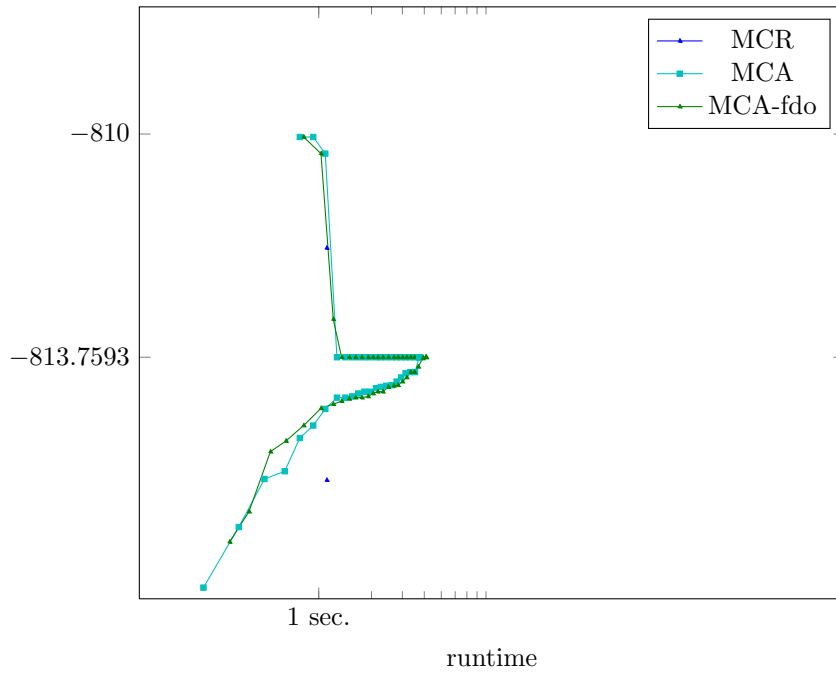


Figure 1527: Runtime results for the instance *0100787* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

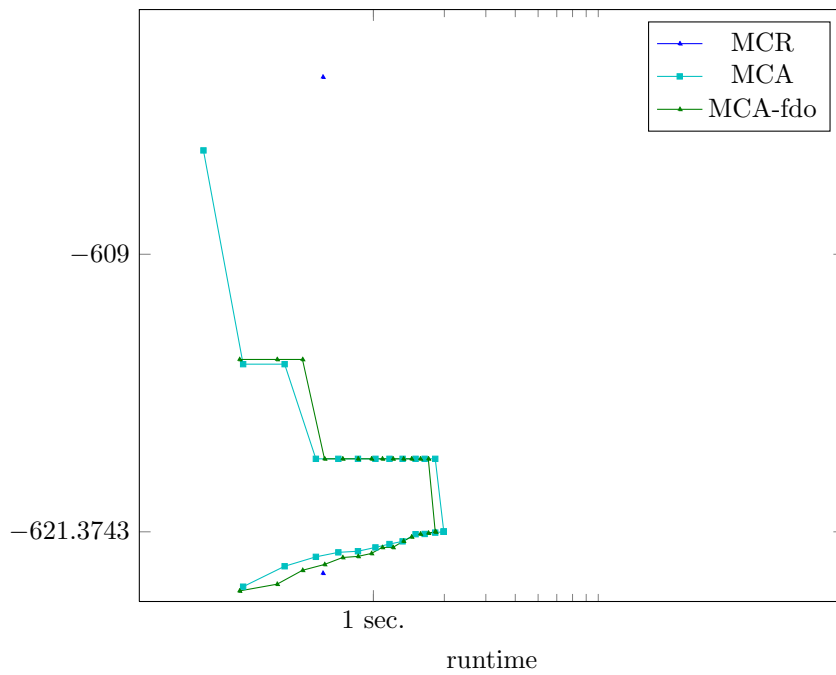


Figure 1528: Runtime results for the instance *0100822* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

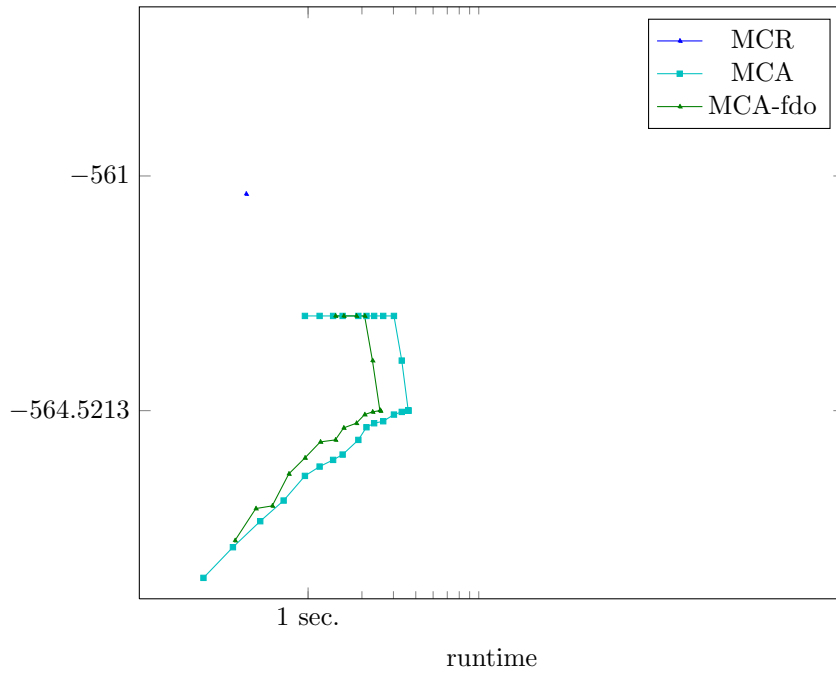


Figure 1529: Runtime results for the instance 0100851 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

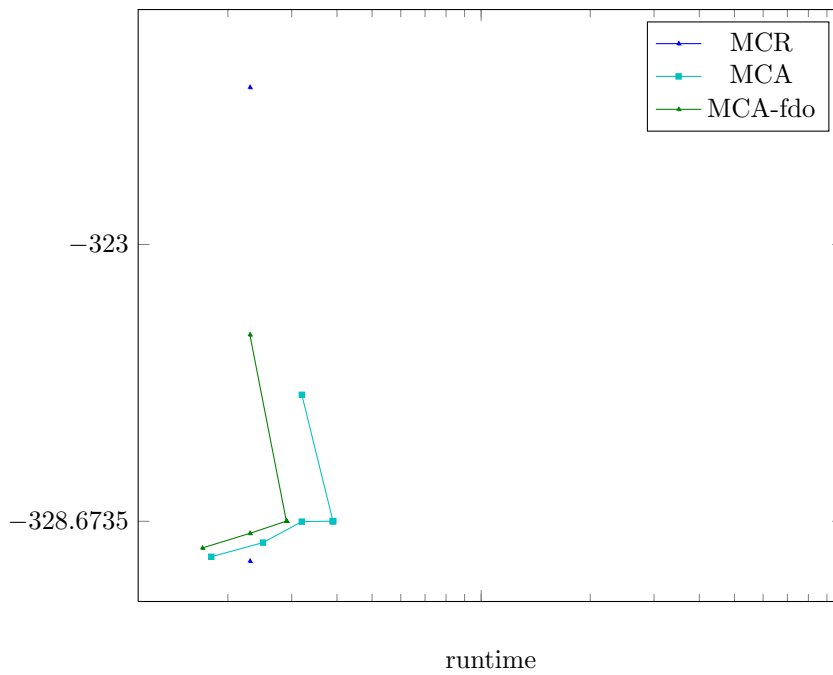


Figure 1530: Runtime results for the instance 0100855 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

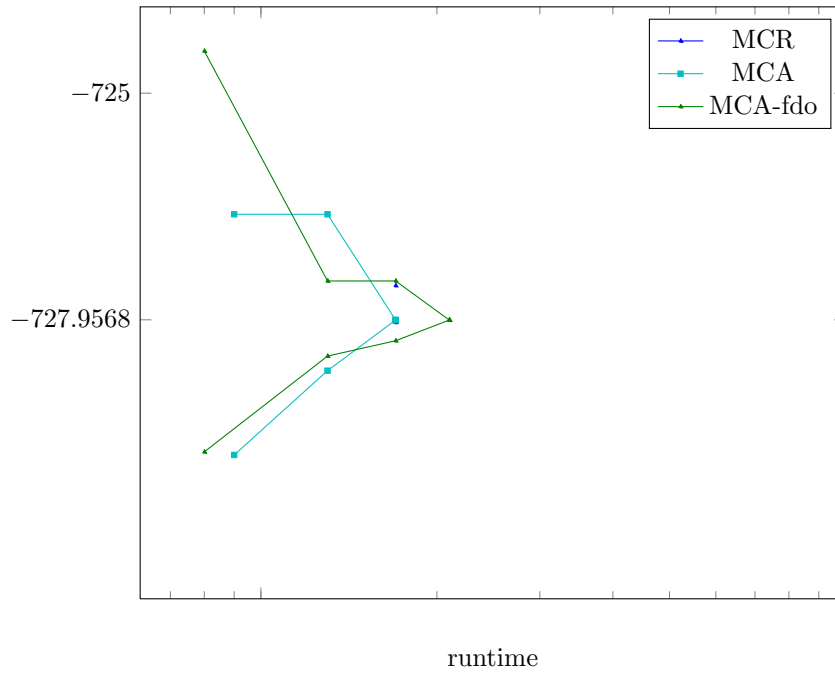


Figure 1531: Runtime results for the instance *0100892* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

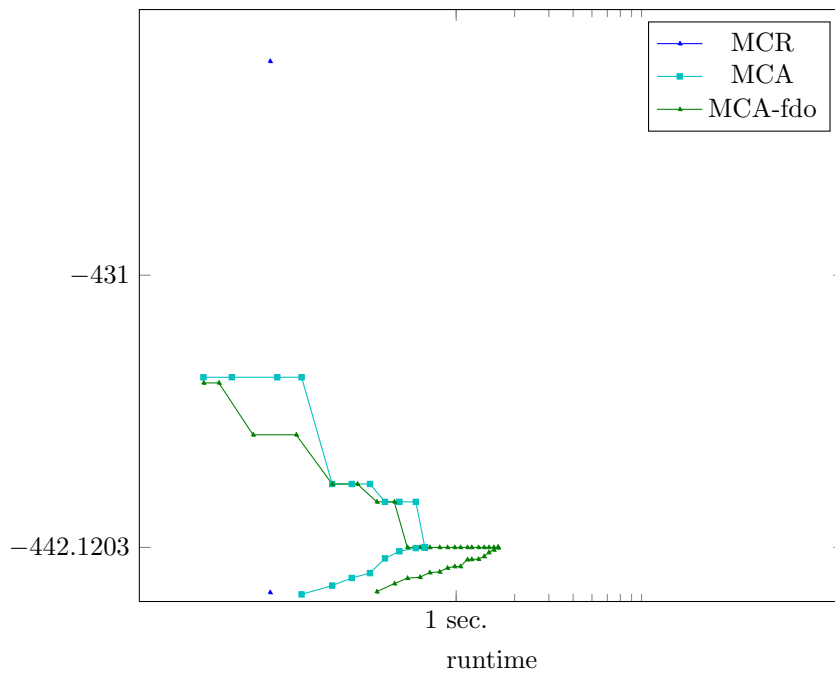


Figure 1532: Runtime results for the instance *0100935* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

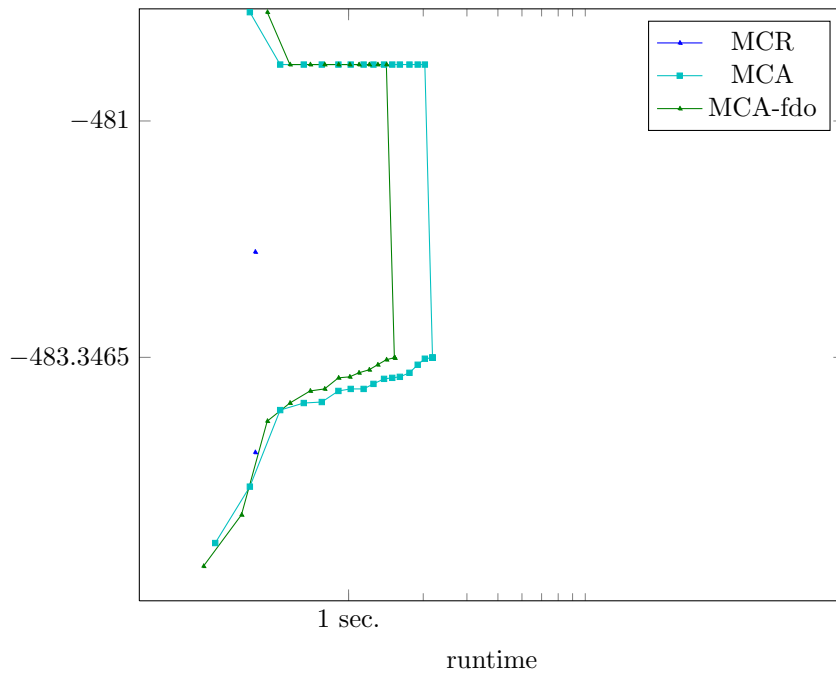


Figure 1533: Runtime results for the instance 0101060 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

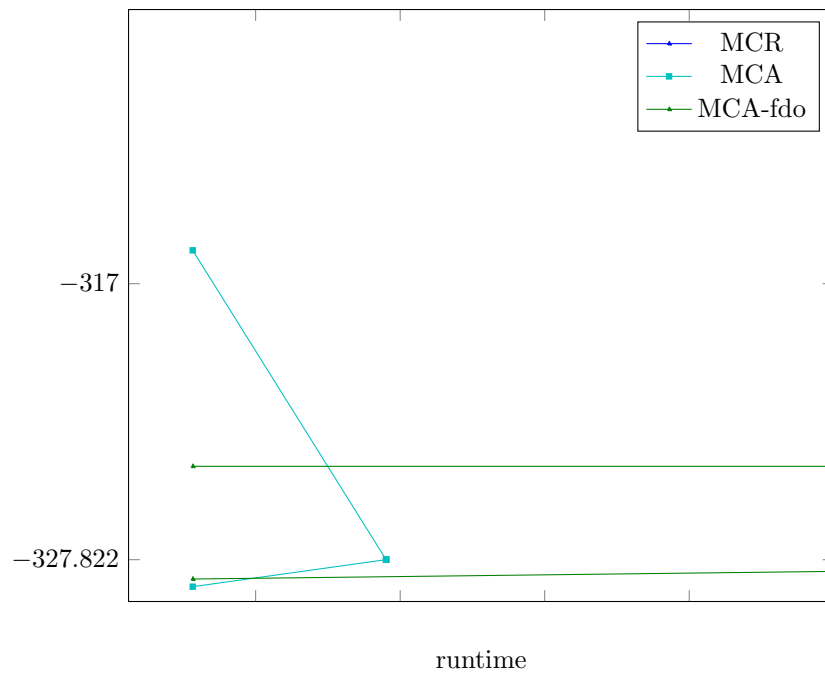


Figure 1534: Runtime results for the instance 0101121 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

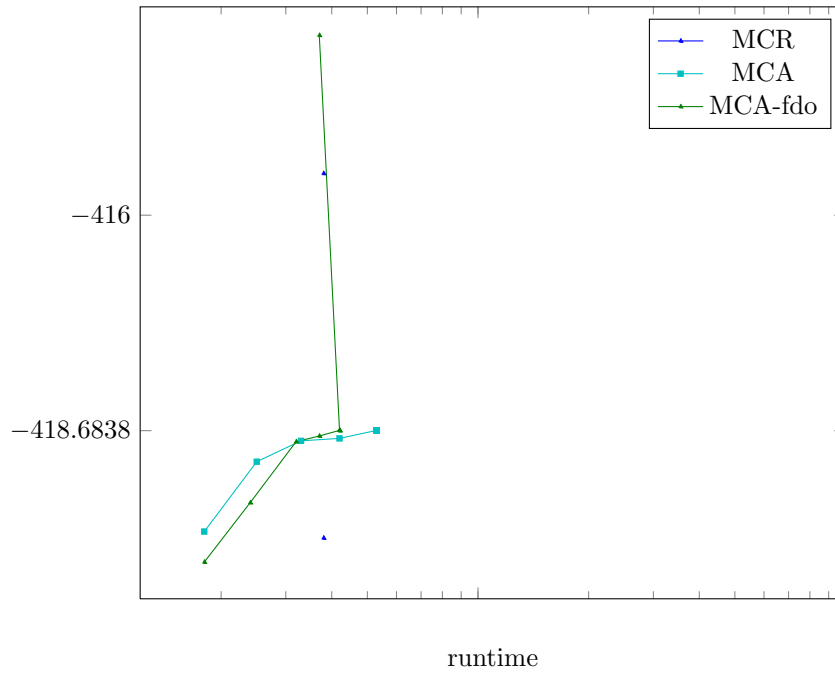


Figure 1535: Runtime results for the instance *0101434* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

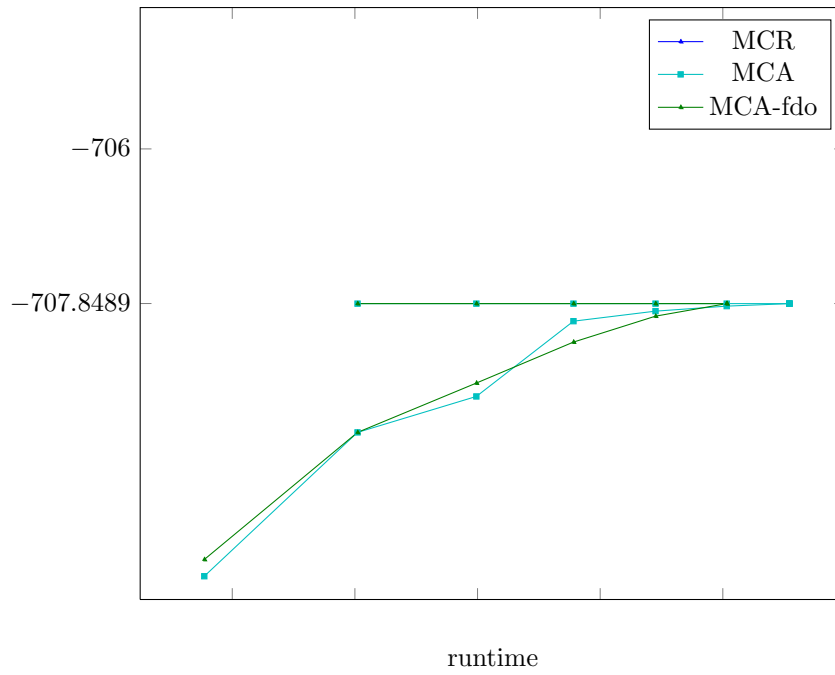


Figure 1536: Runtime results for the instance *0101463* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

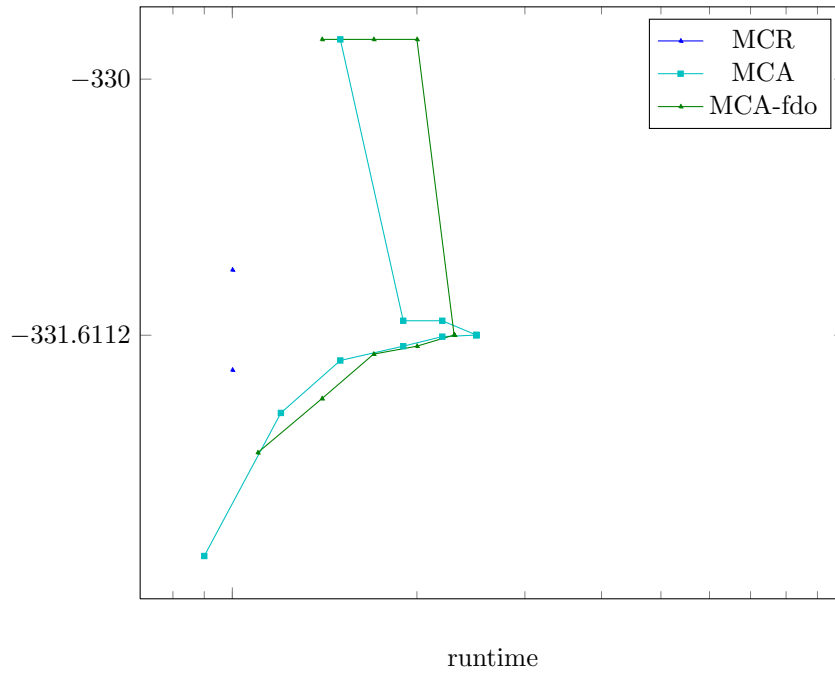


Figure 1537: Runtime results for the instance *0101488* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

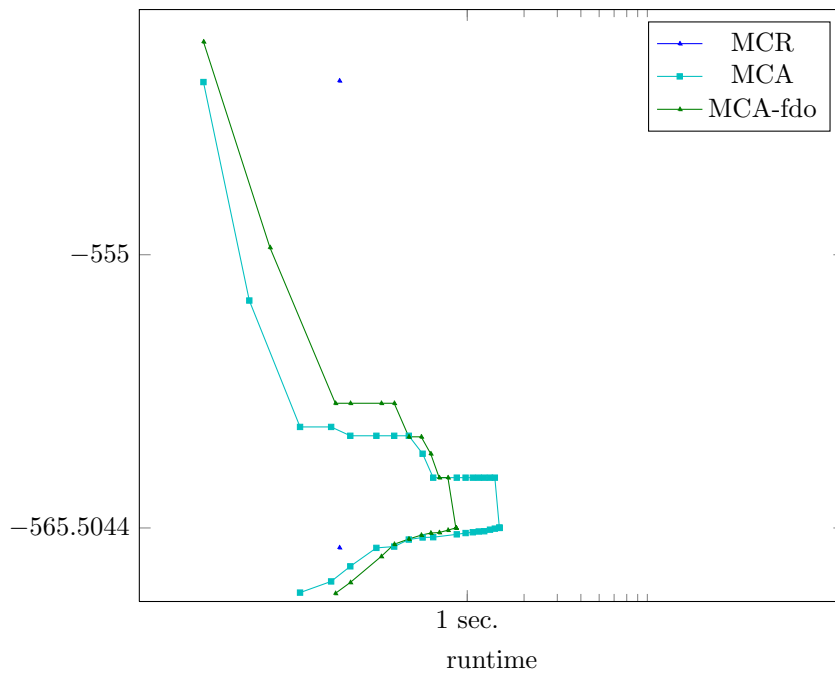


Figure 1538: Runtime results for the instance *0101492* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

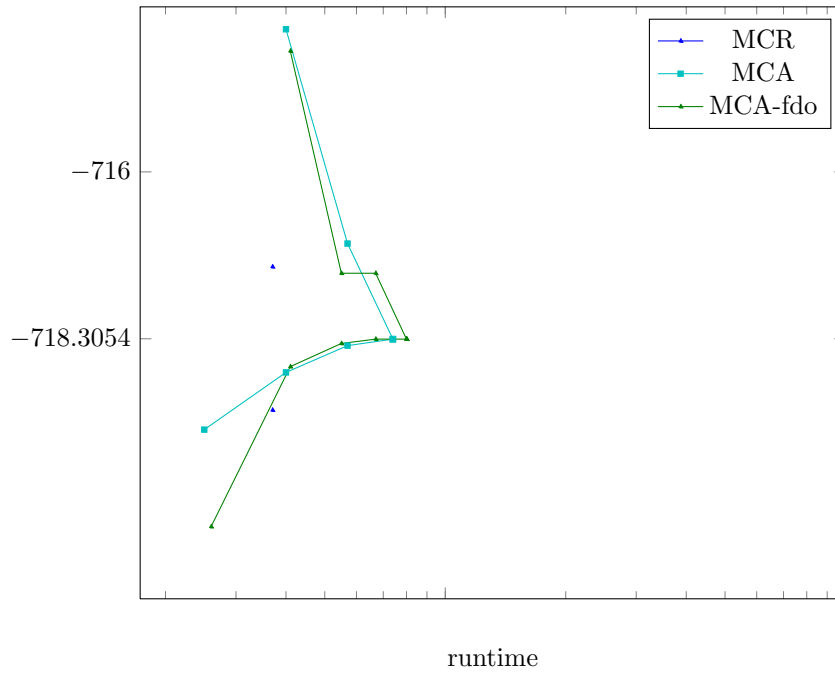


Figure 1539: Runtime results for the instance *0101801* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

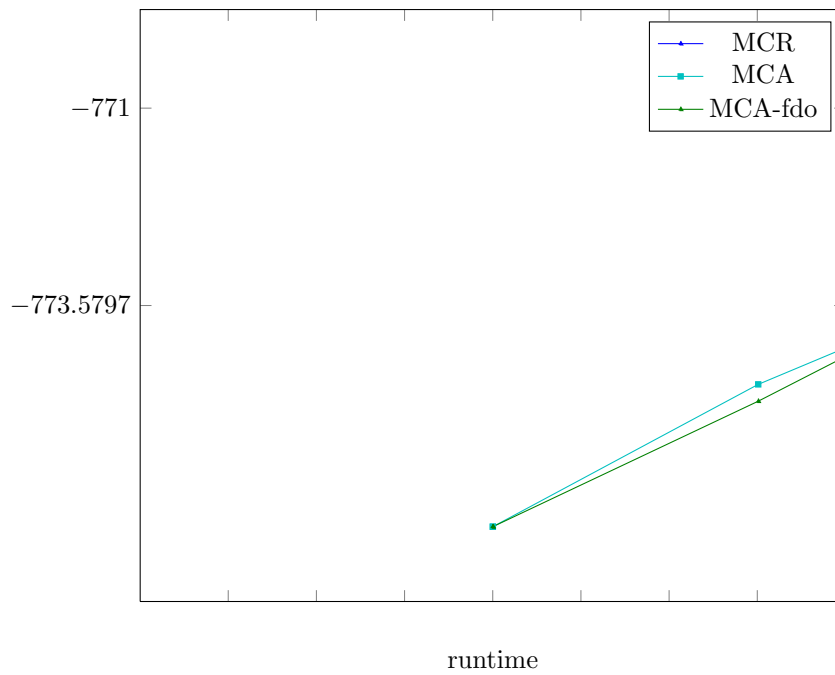


Figure 1540: Runtime results for the instance *0102039* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

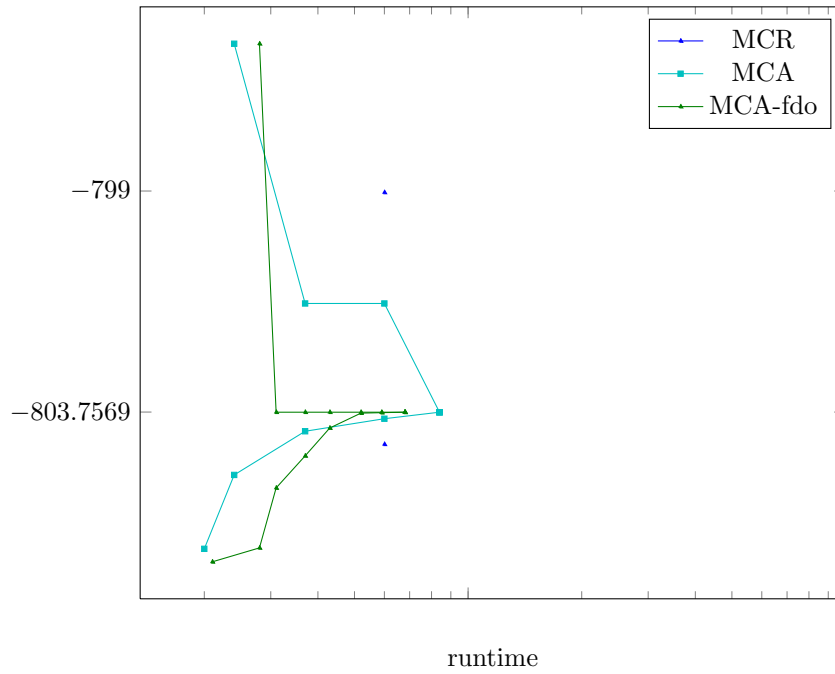


Figure 1543: Runtime results for the instance 0102403 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

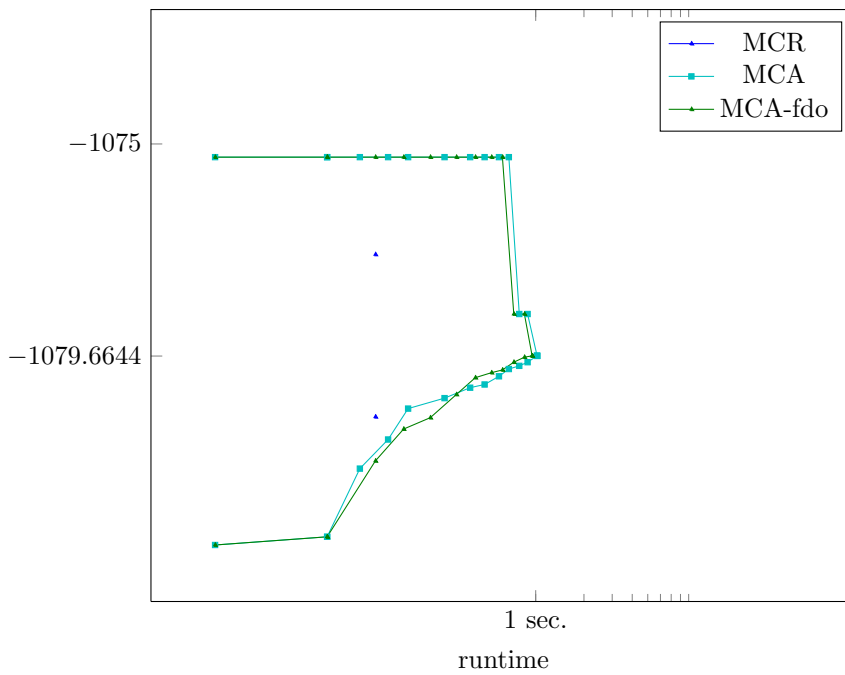


Figure 1544: Runtime results for the instance 0102435 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

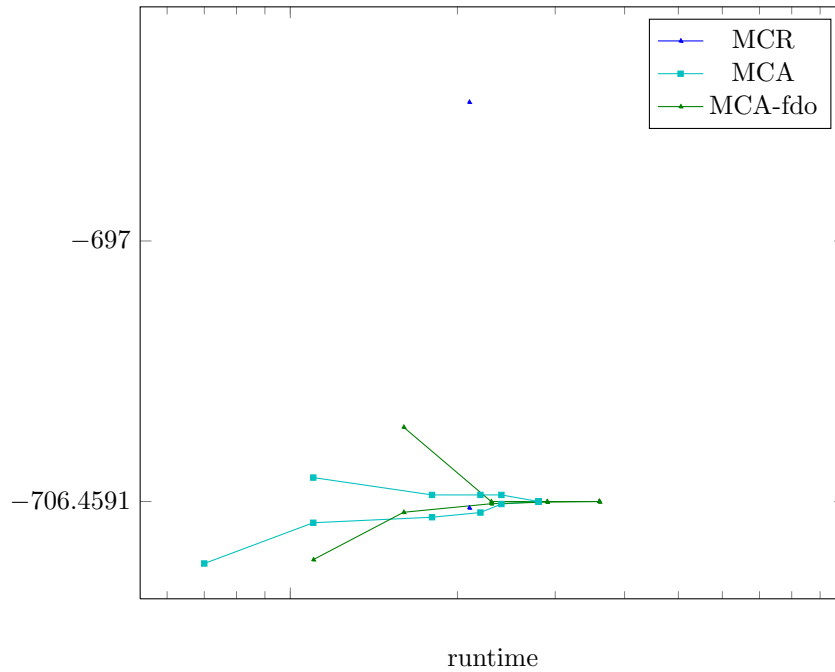


Figure 1545: Runtime results for the instance *0102436* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

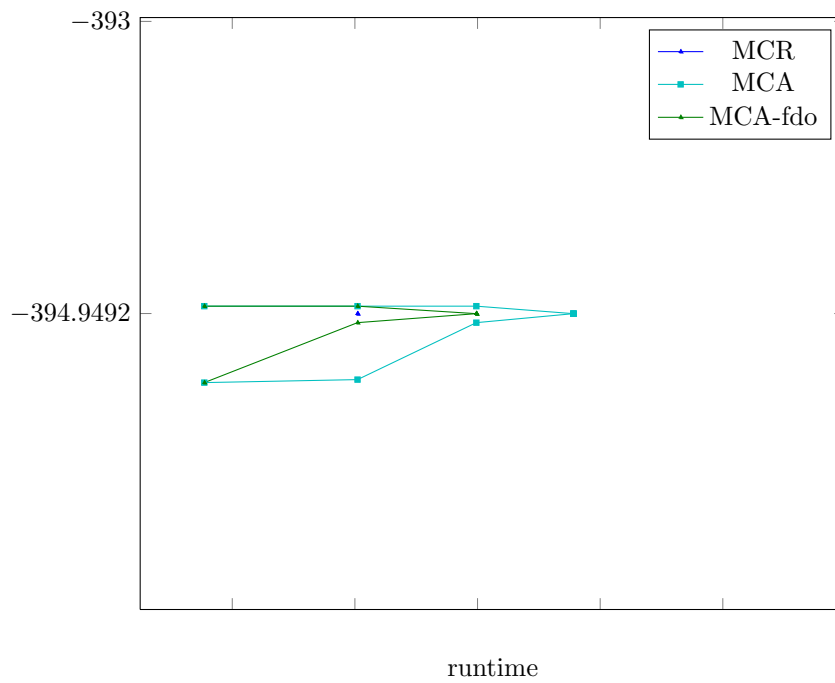


Figure 1546: Runtime results for the instance *0102534* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

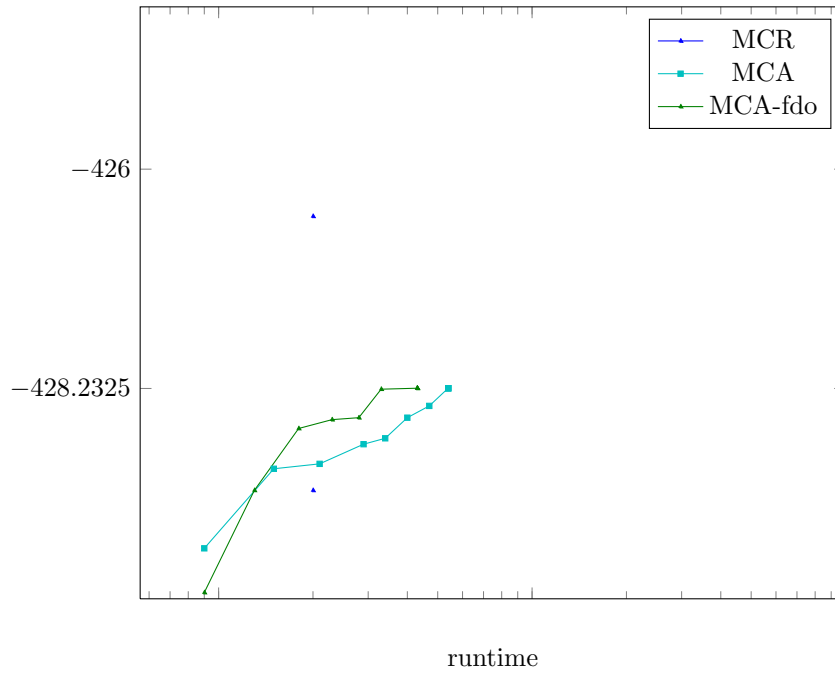


Figure 1547: Runtime results for the instance *0102544* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

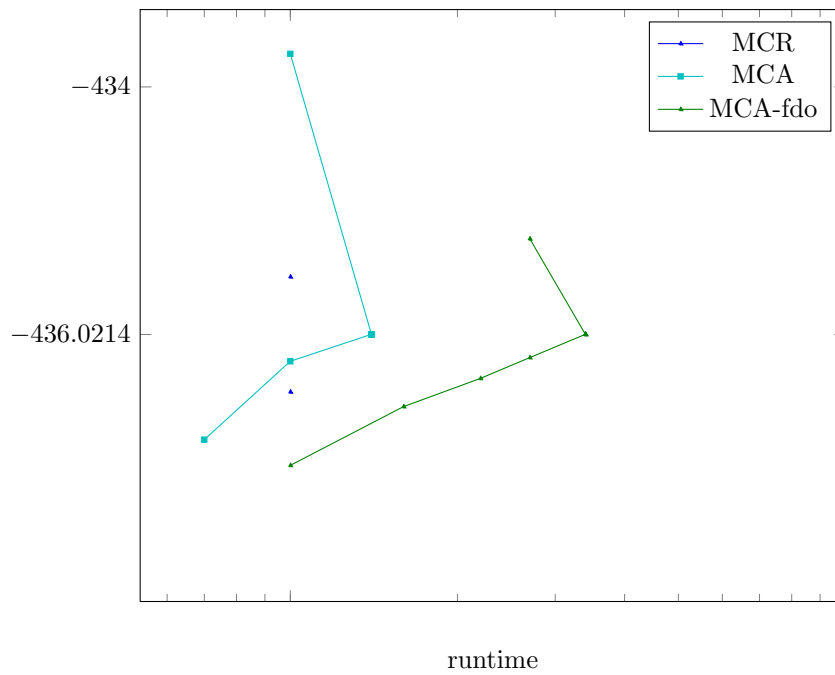


Figure 1548: Runtime results for the instance *0102566* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

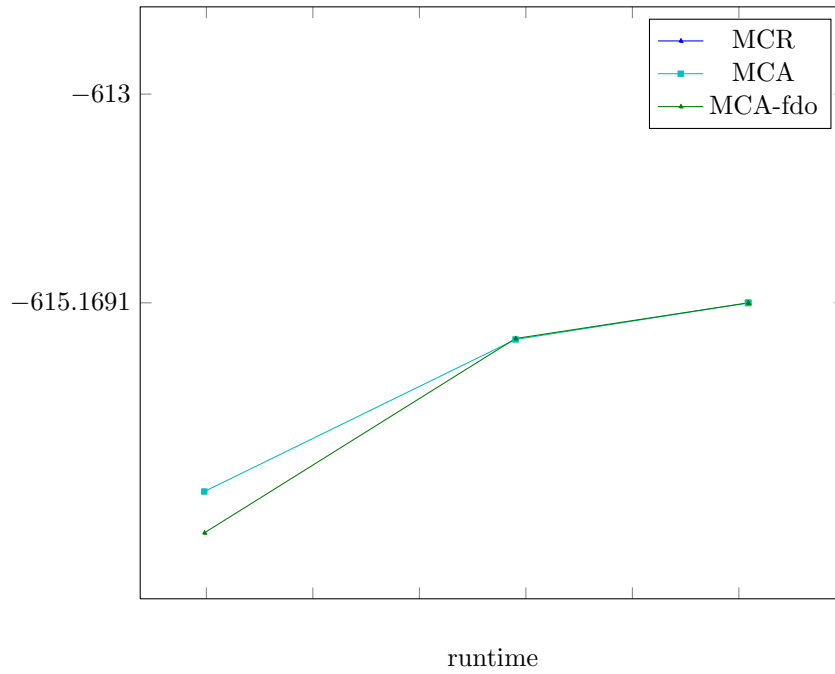


Figure 1549: Runtime results for the instance *0103256* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

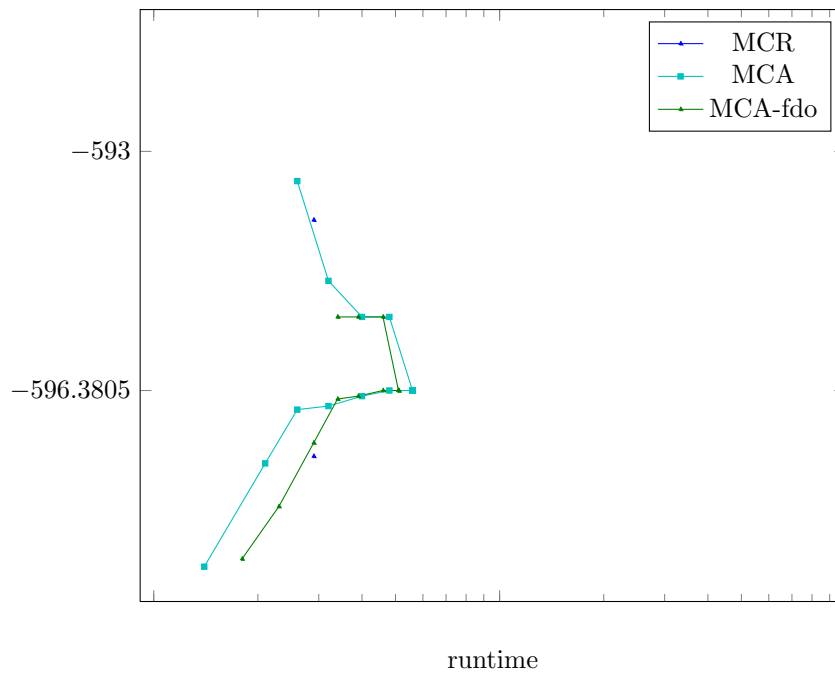


Figure 1550: Runtime results for the instance *0103344* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

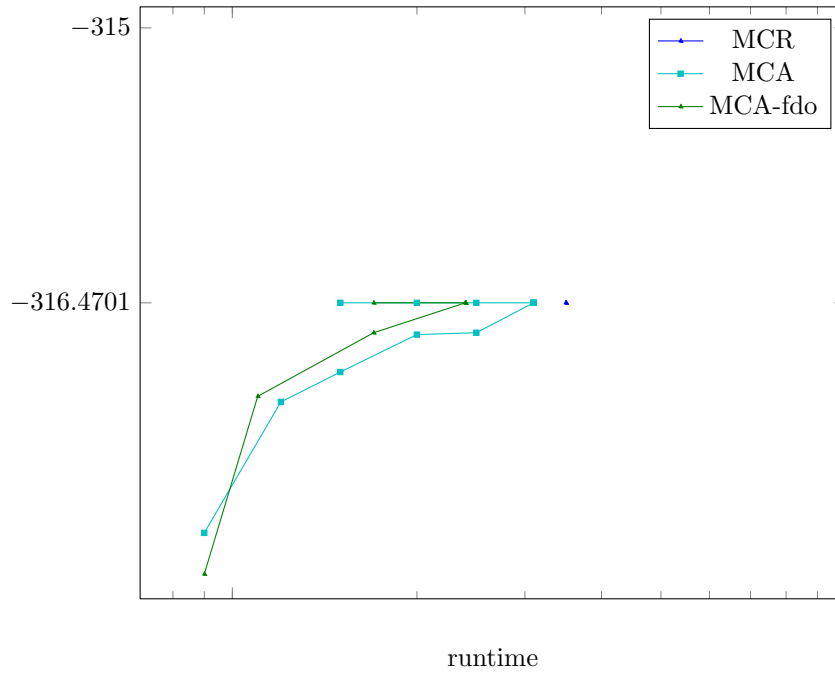


Figure 1551: Runtime results for the instance *0103420* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

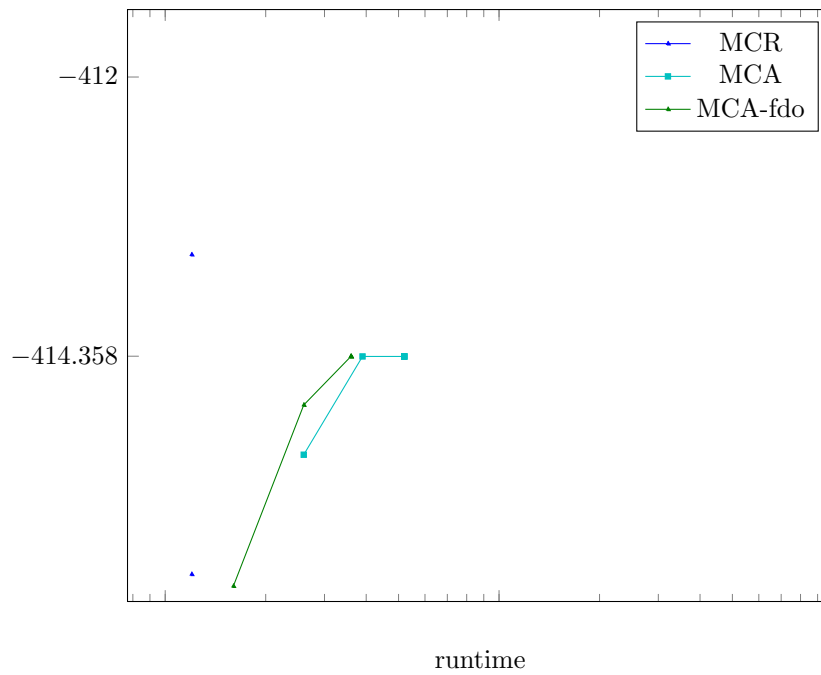


Figure 1552: Runtime results for the instance *0103468* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

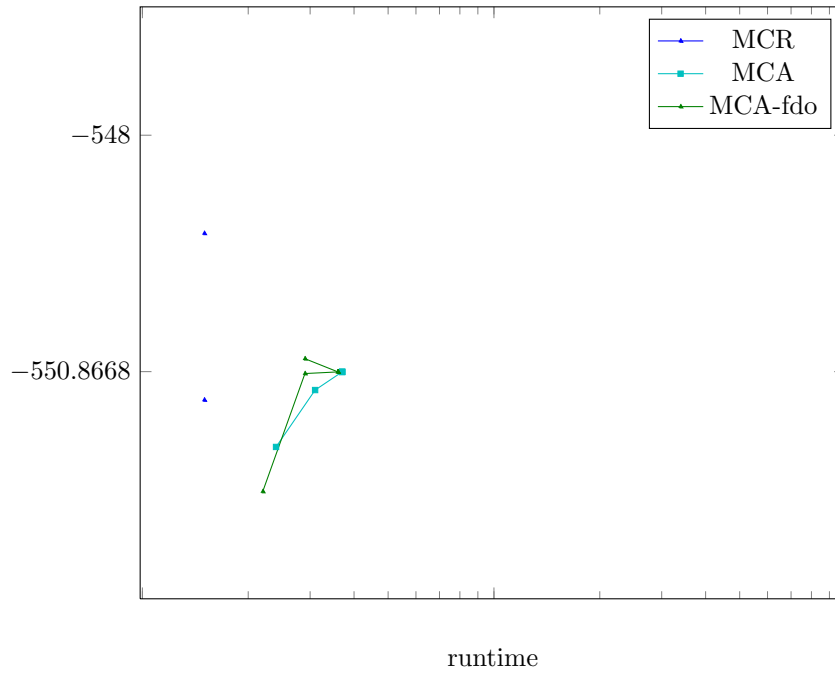


Figure 1553: Runtime results for the instance 0103740 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

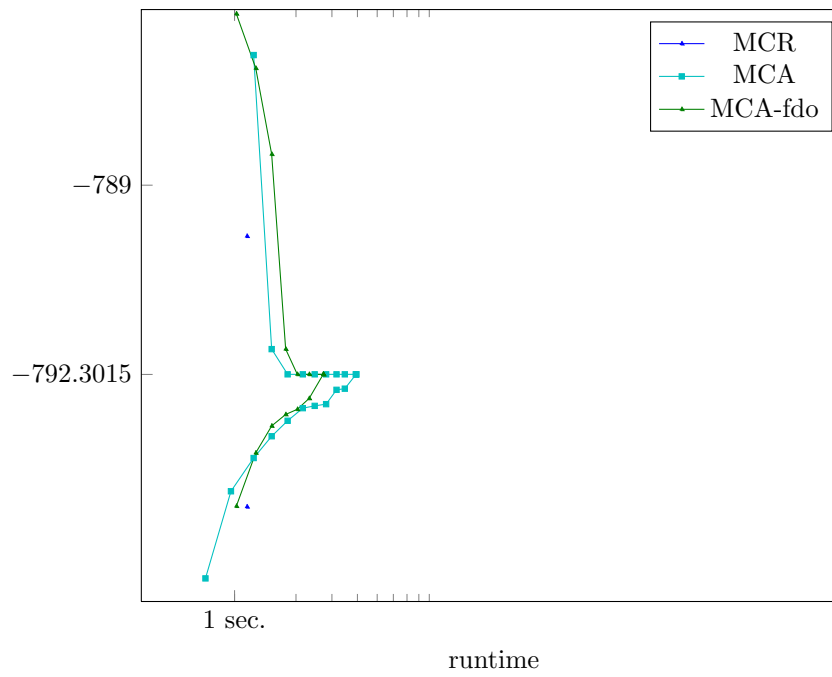


Figure 1554: Runtime results for the instance 0104019 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

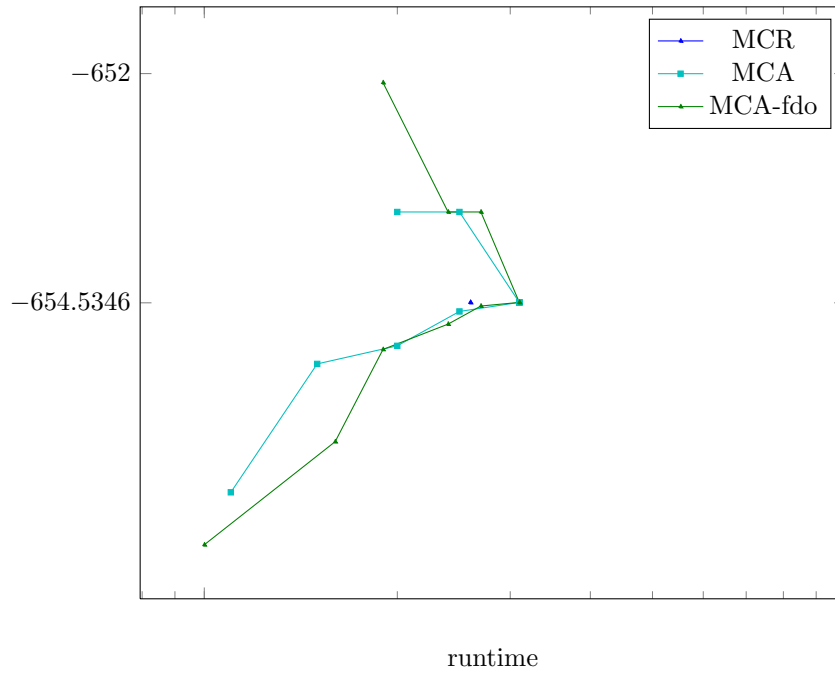


Figure 1555: Runtime results for the instance *0104194* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

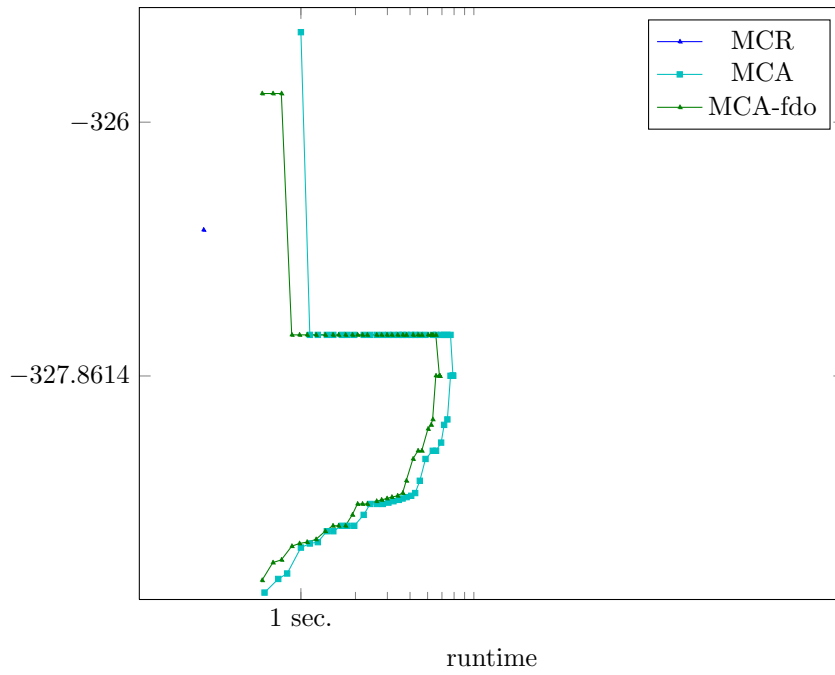


Figure 1556: Runtime results for the instance *0104439* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

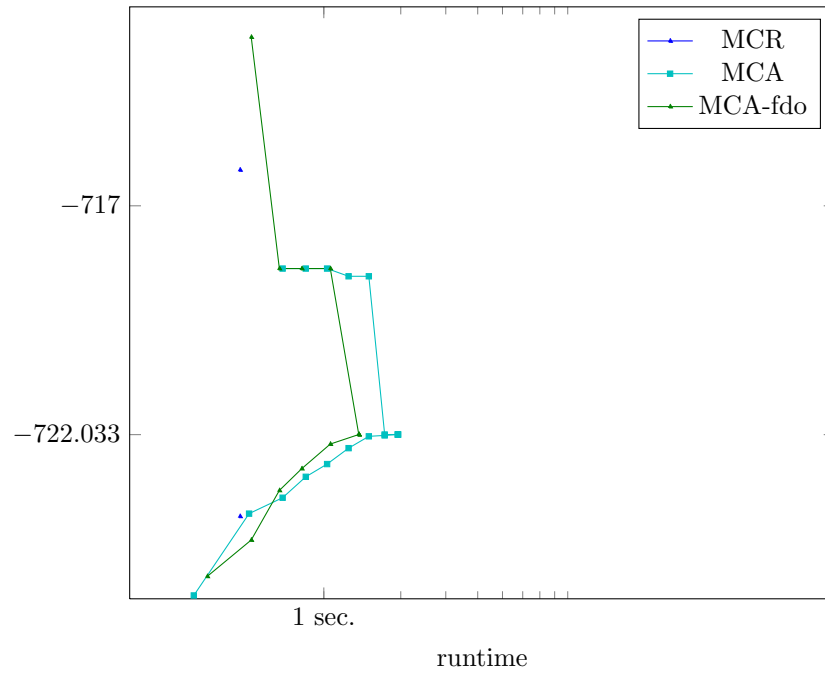


Figure 1557: Runtime results for the instance 0104463 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

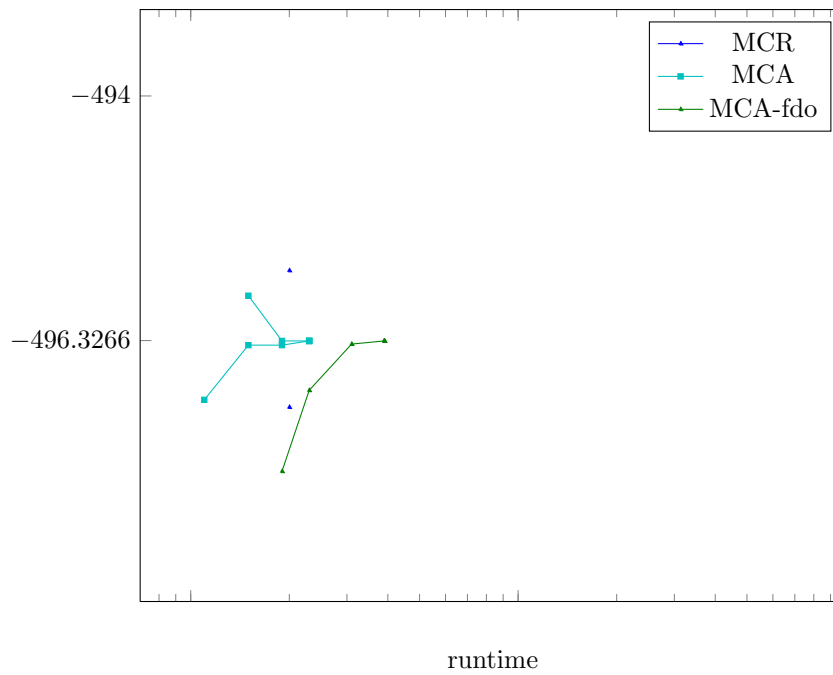


Figure 1558: Runtime results for the instance 0104552 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

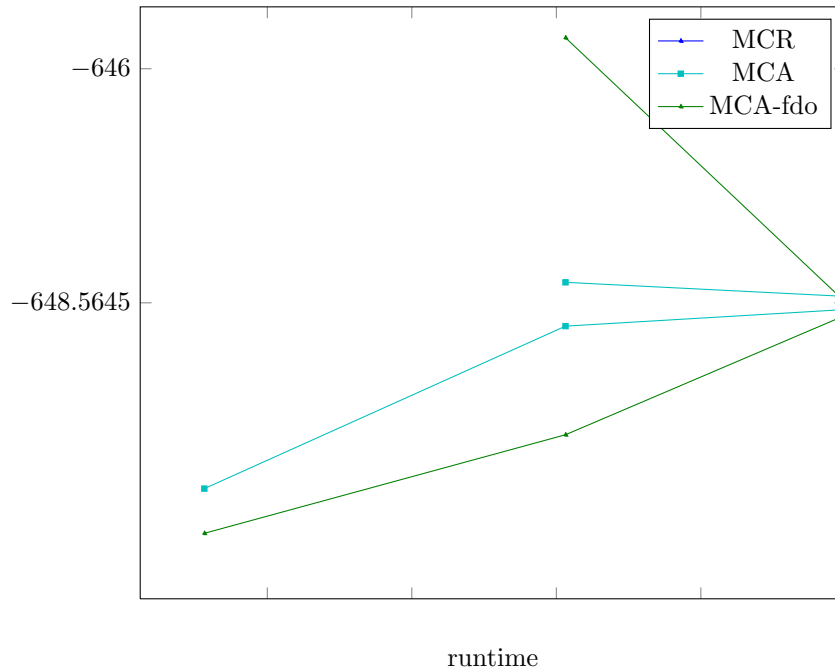


Figure 1559: Runtime results for the instance *0104808* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

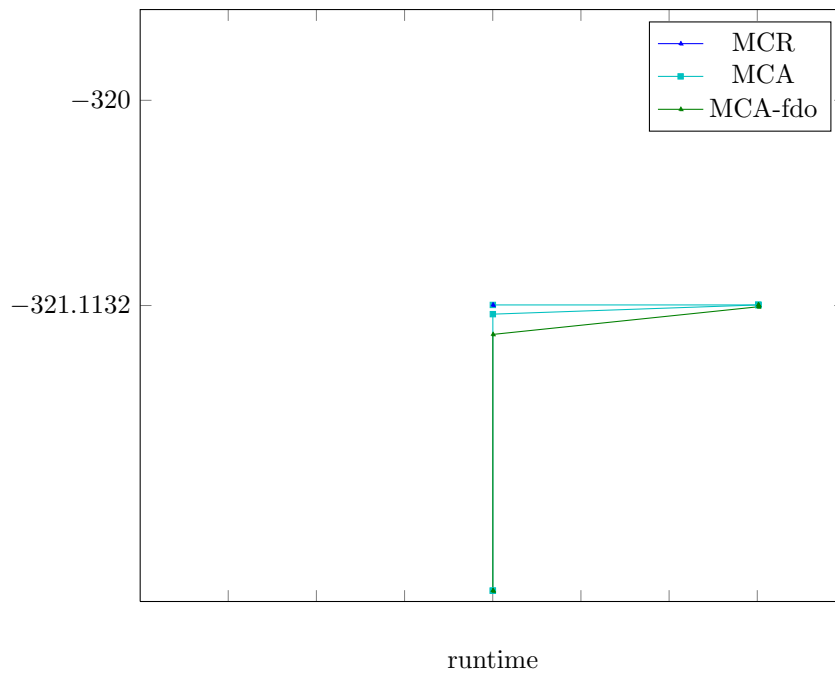


Figure 1560: Runtime results for the instance *0104958* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

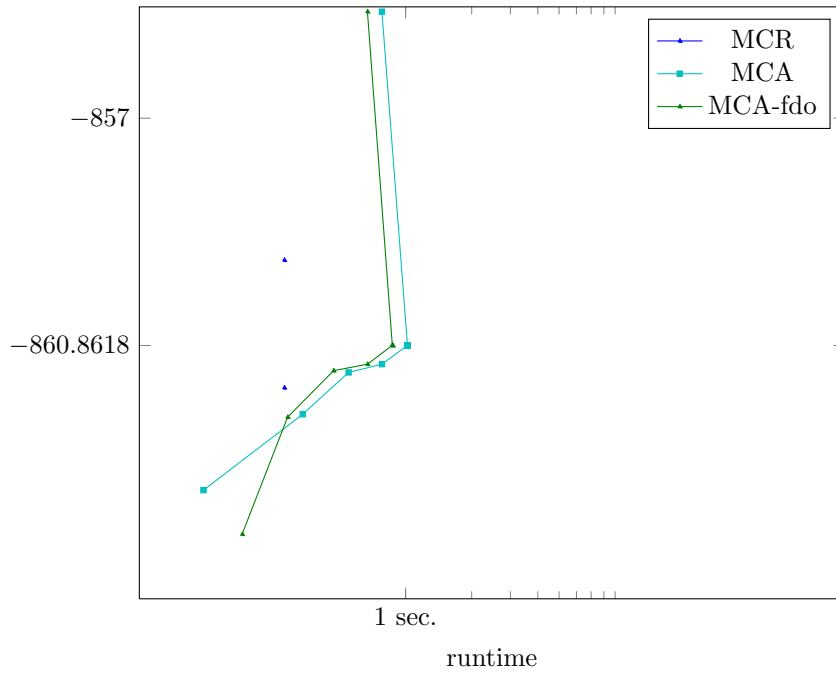


Figure 1561: Runtime results for the instance *0105003* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

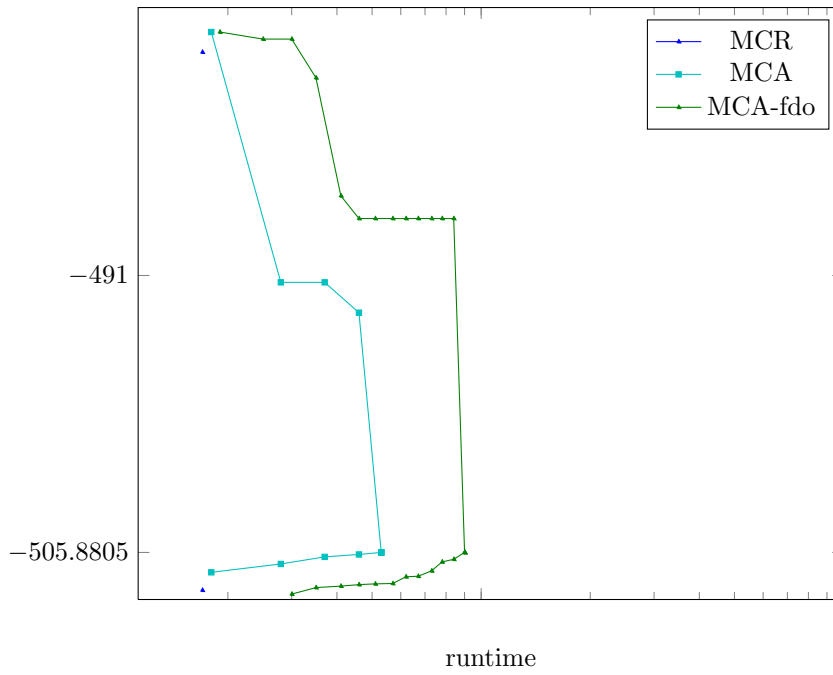


Figure 1562: Runtime results for the instance *0105064* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

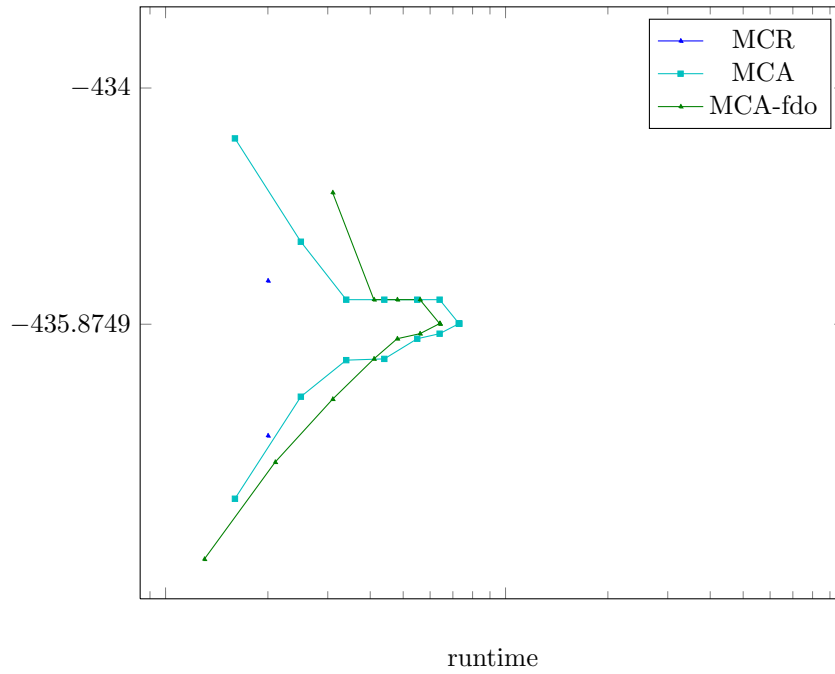


Figure 1563: Runtime results for the instance 0105146 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

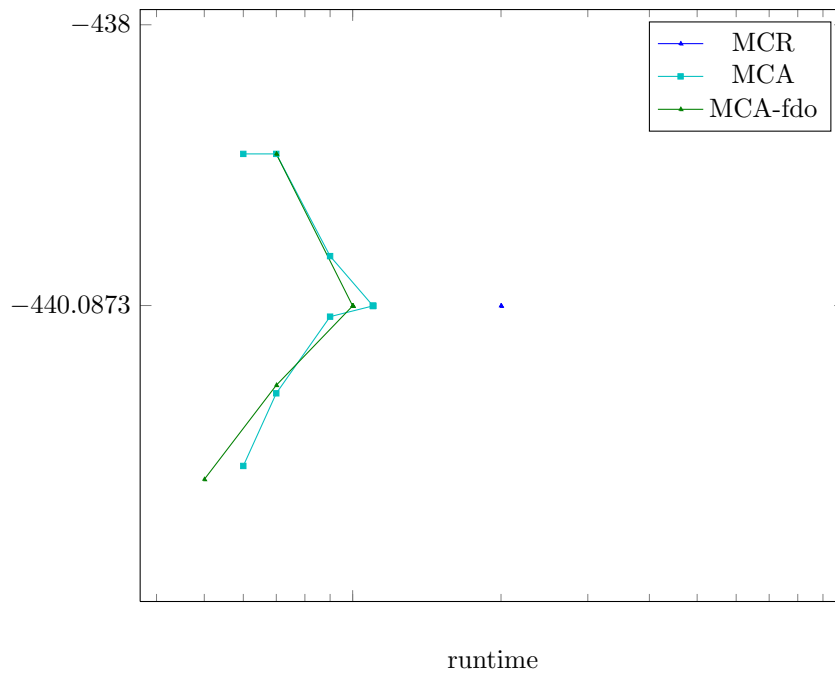


Figure 1564: Runtime results for the instance 0105159 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

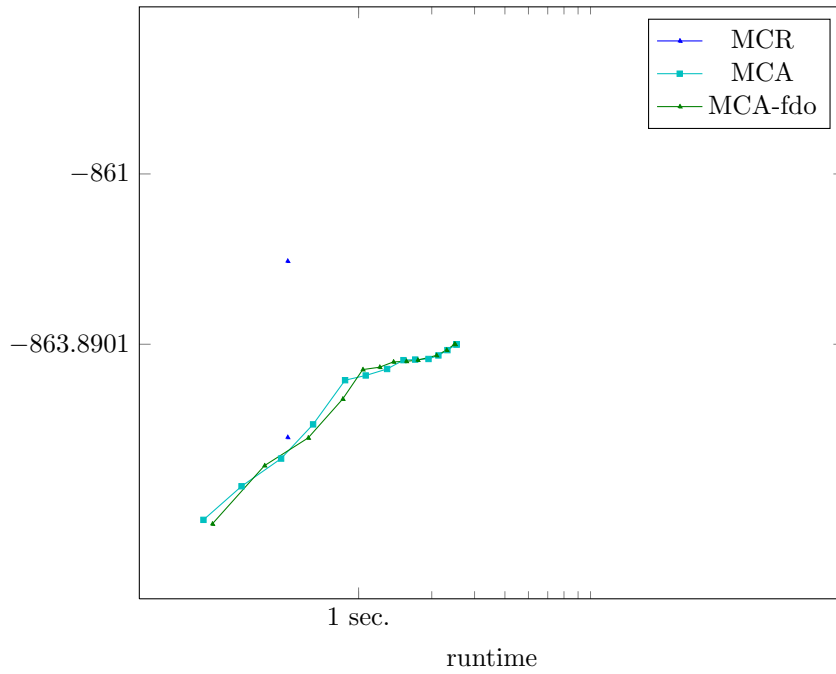


Figure 1565: Runtime results for the instance *0105305* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

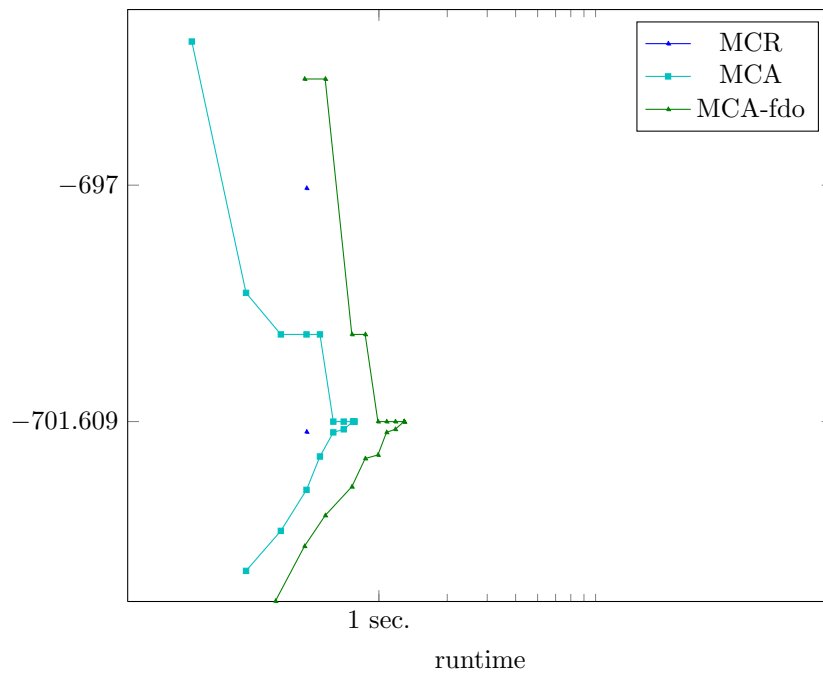


Figure 1566: Runtime results for the instance *1000061* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

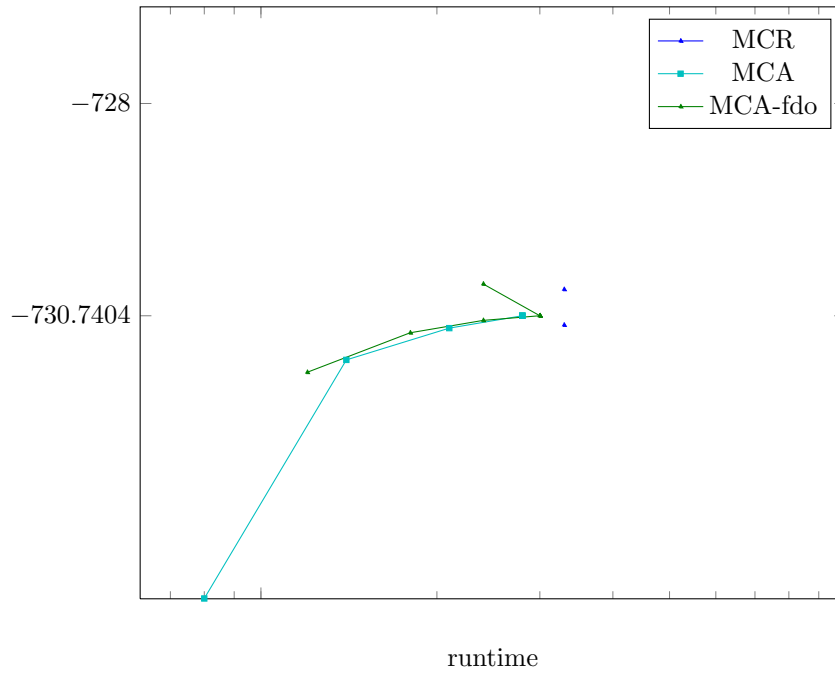


Figure 1567: Runtime results for the instance *1000063* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

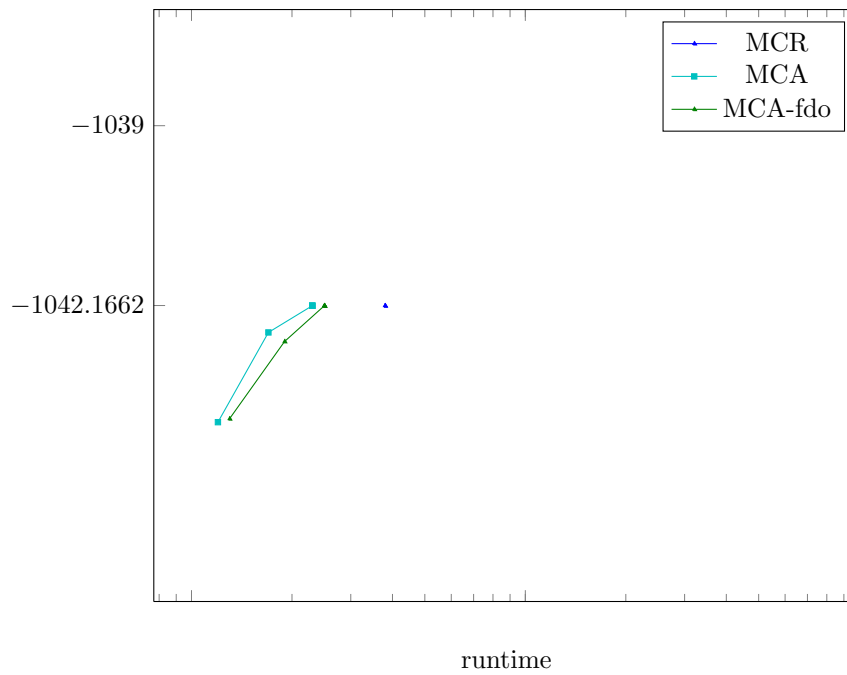


Figure 1568: Runtime results for the instance *1000097* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

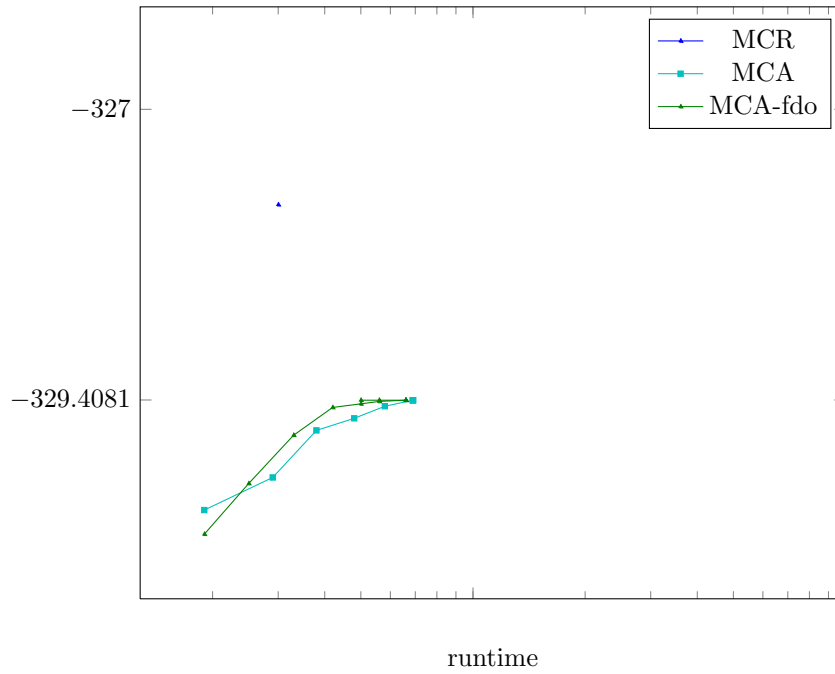


Figure 1569: Runtime results for the instance *1000105* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

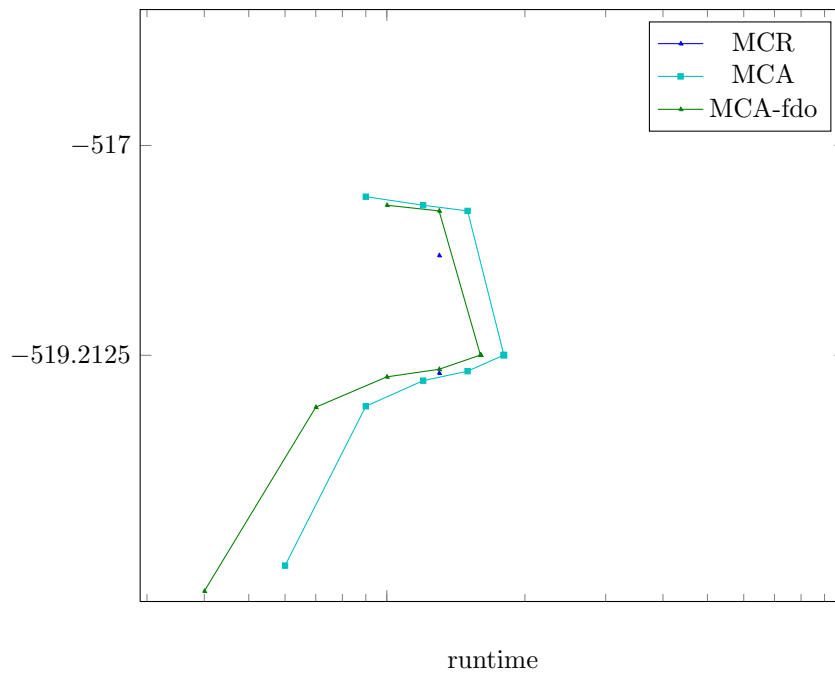


Figure 1570: Runtime results for the instance *1000288* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

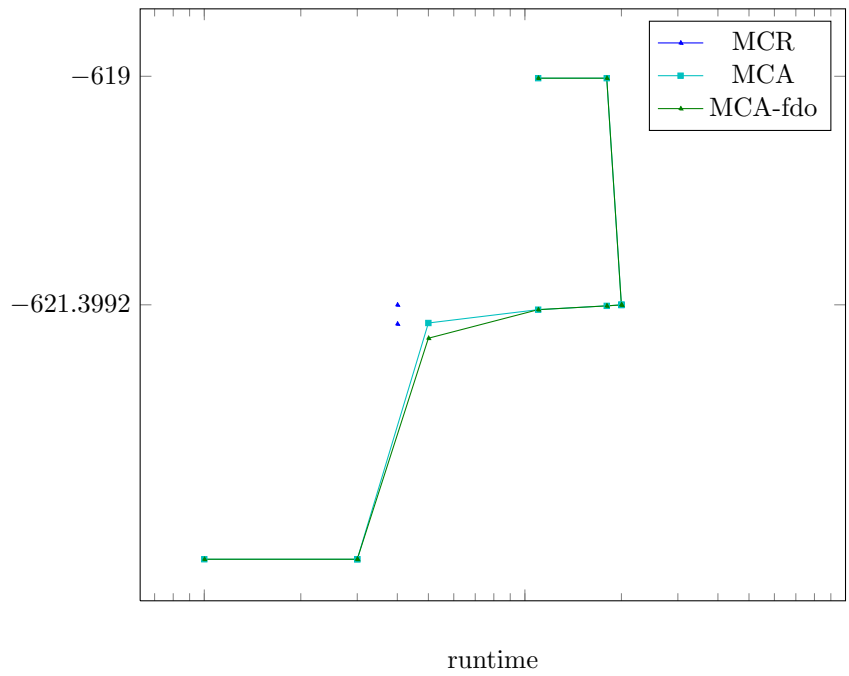


Figure 1571: Runtime results for the instance 1000351 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

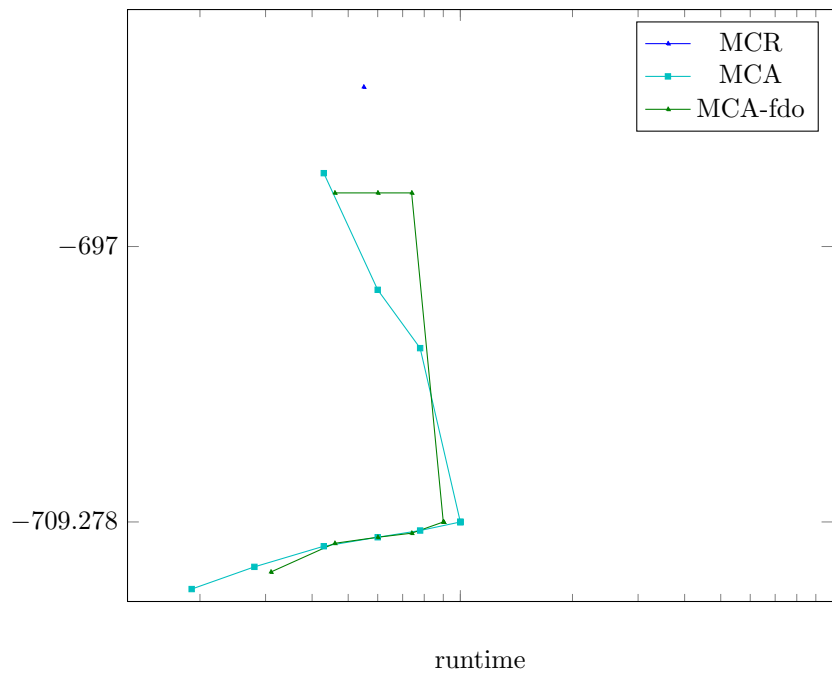


Figure 1572: Runtime results for the instance 1000413 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

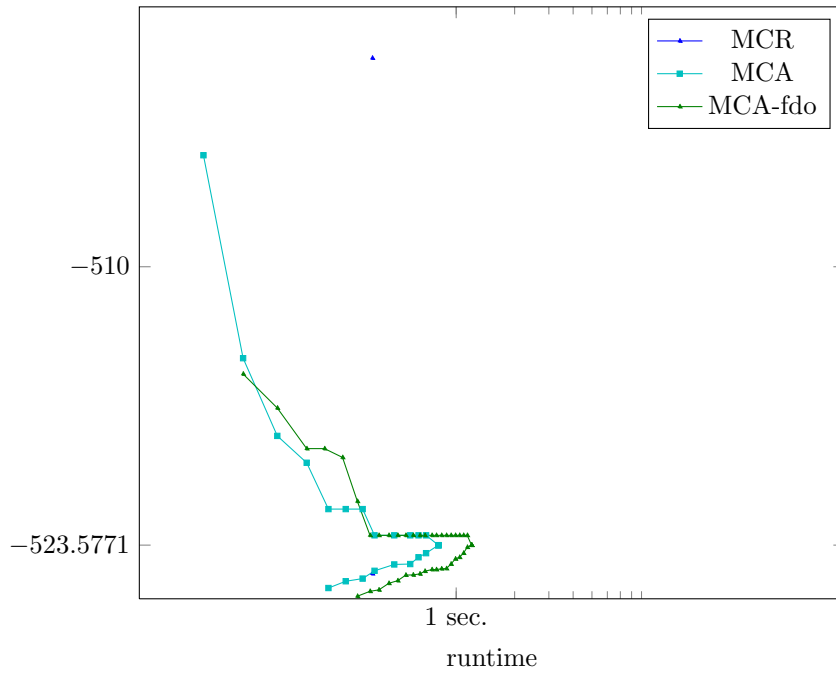


Figure 1573: Runtime results for the instance *1000505* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

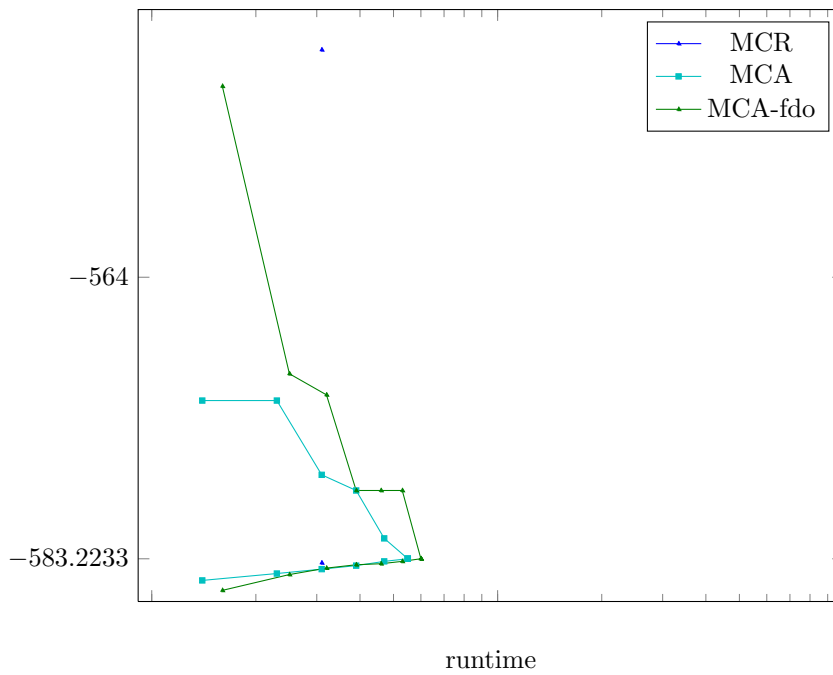


Figure 1574: Runtime results for the instance *1000580* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

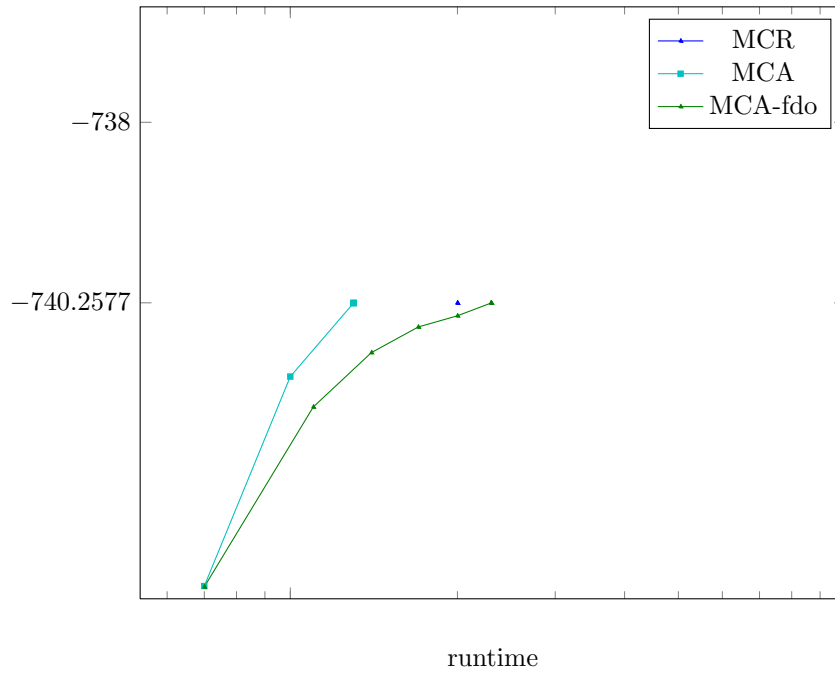


Figure 1575: Runtime results for the instance *1000615* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

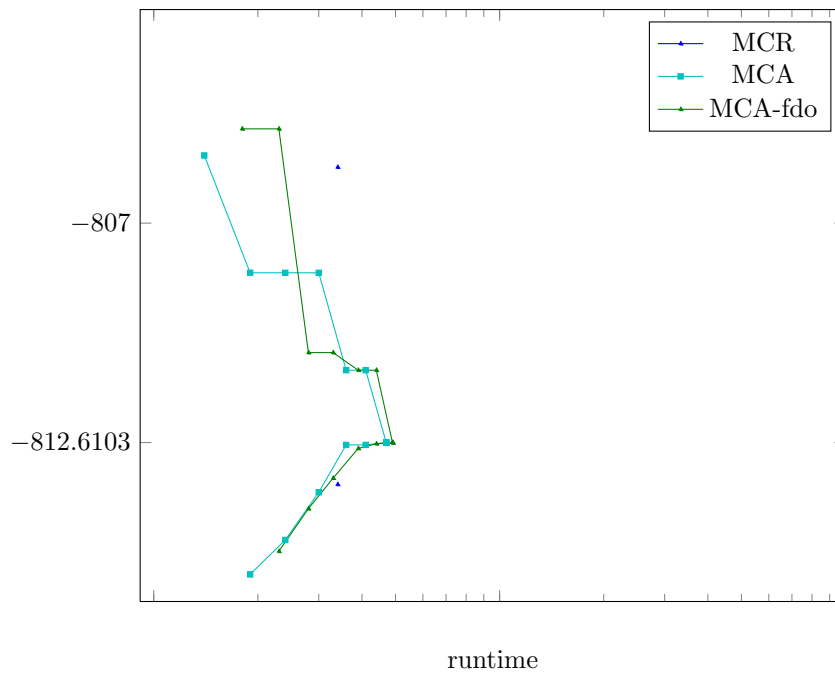


Figure 1576: Runtime results for the instance *1000731* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

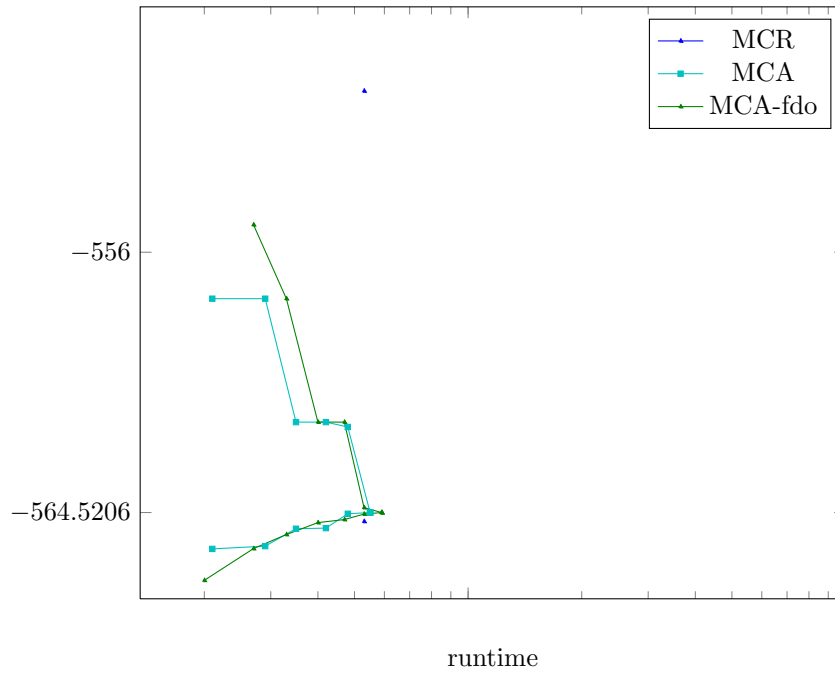


Figure 1577: Runtime results for the instance 1000875 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

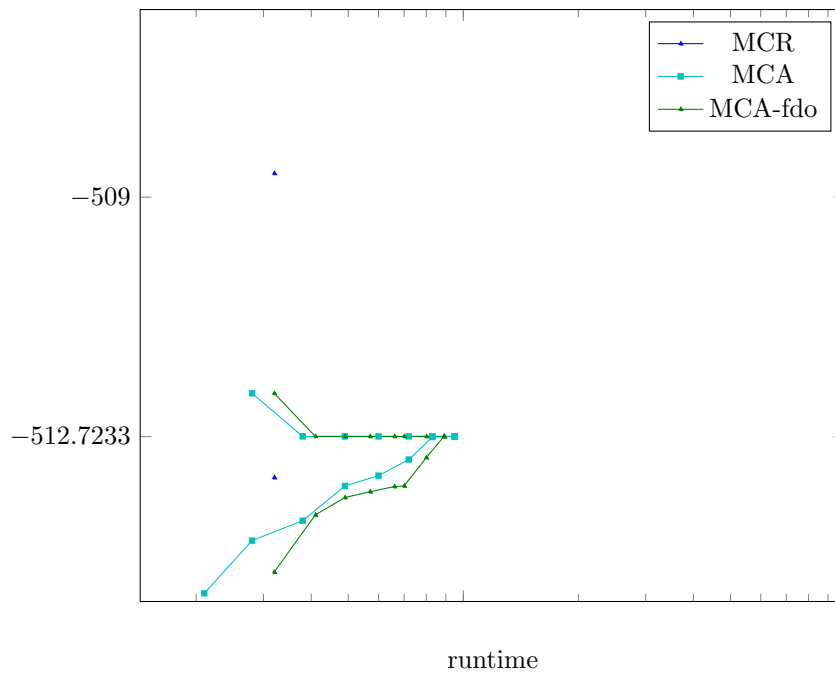


Figure 1578: Runtime results for the instance 1000882 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

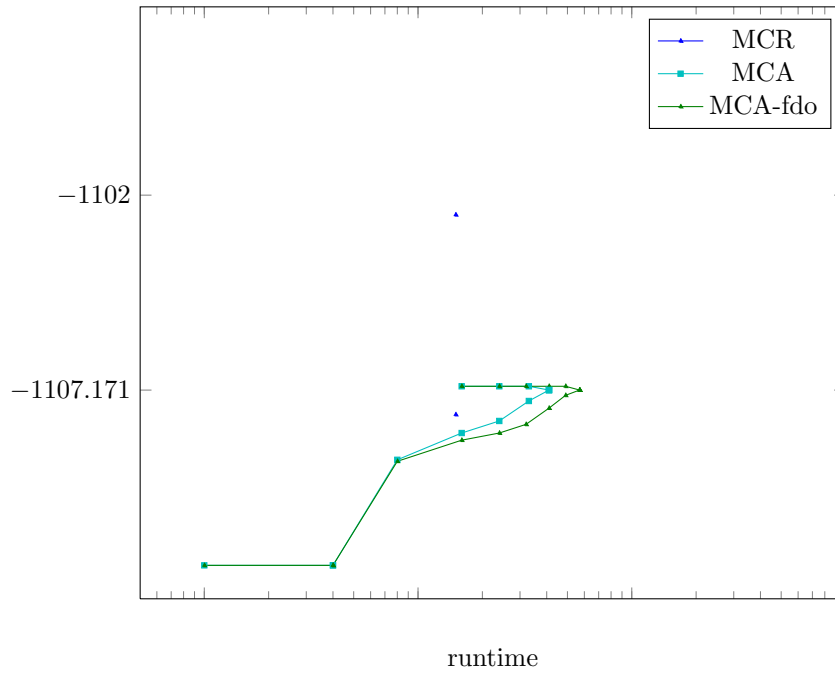


Figure 1581: Runtime results for the instance *1000993* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

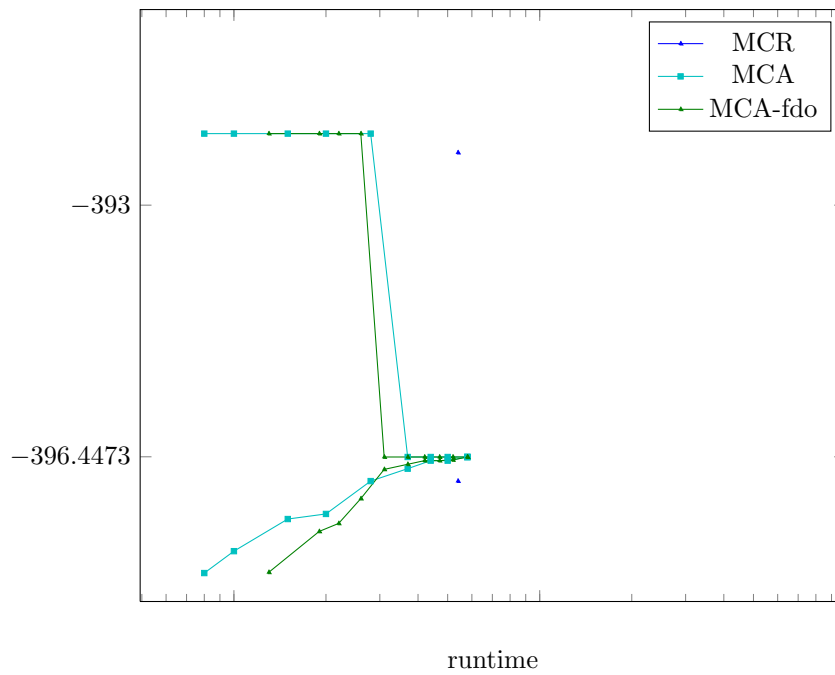


Figure 1582: Runtime results for the instance *1001184* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

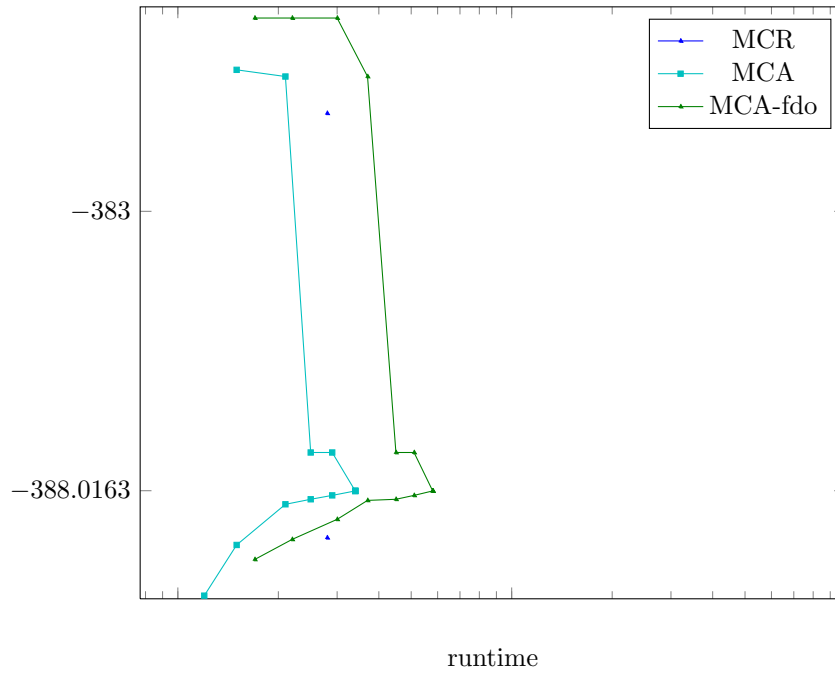


Figure 1583: Runtime results for the instance *1001195* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

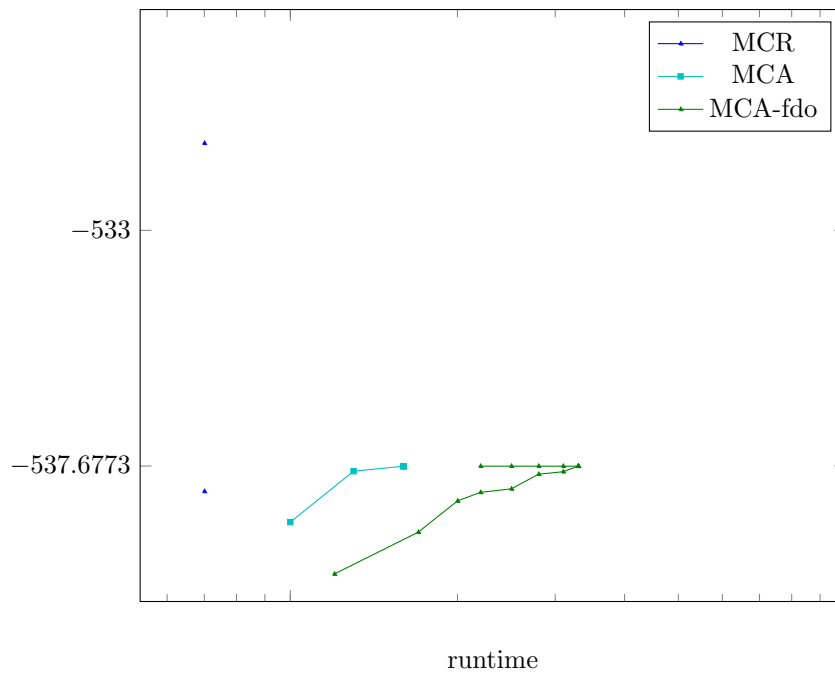


Figure 1584: Runtime results for the instance *1001252* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

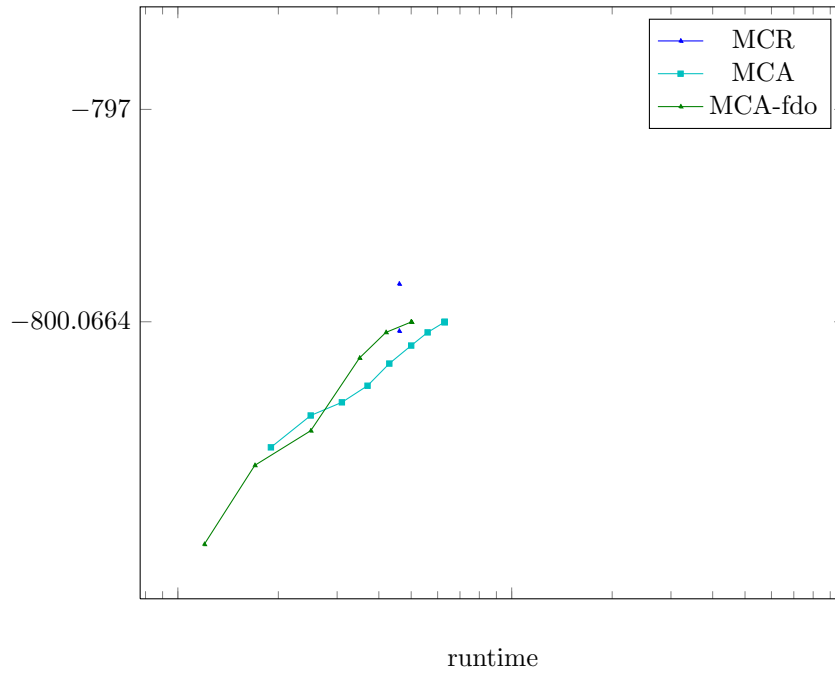


Figure 1585: Runtime results for the instance *1001685* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

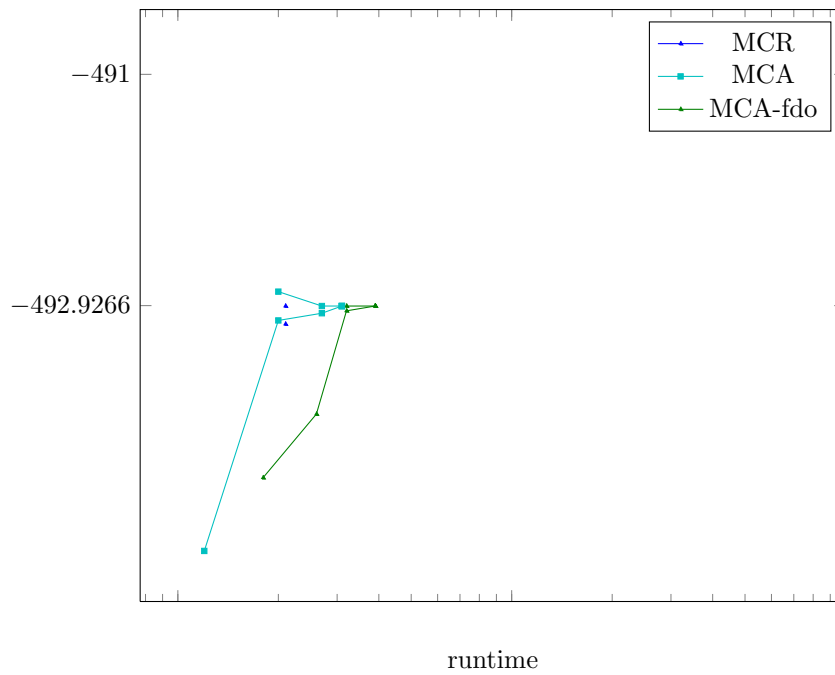


Figure 1586: Runtime results for the instance *1001688* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

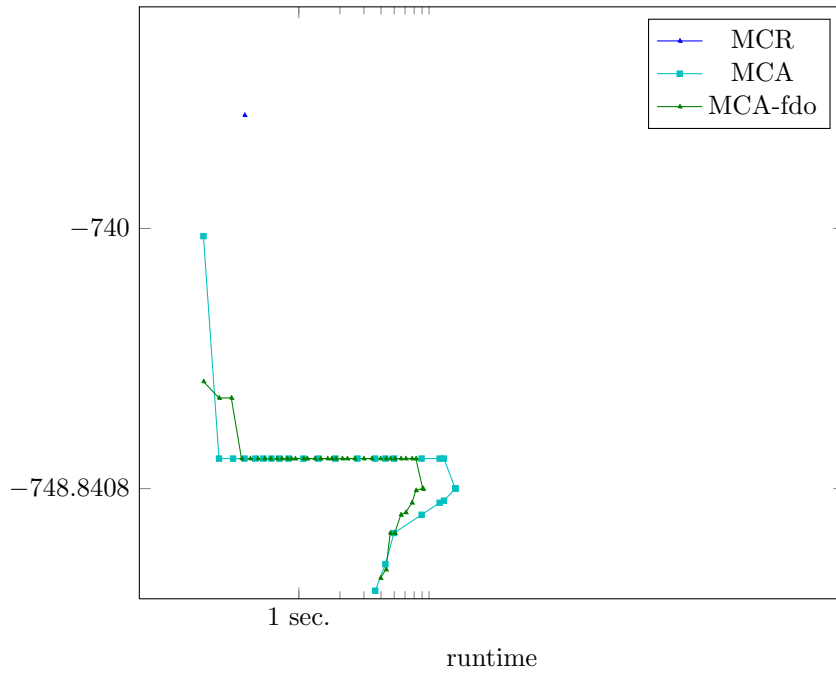


Figure 1587: Runtime results for the instance 1001770 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

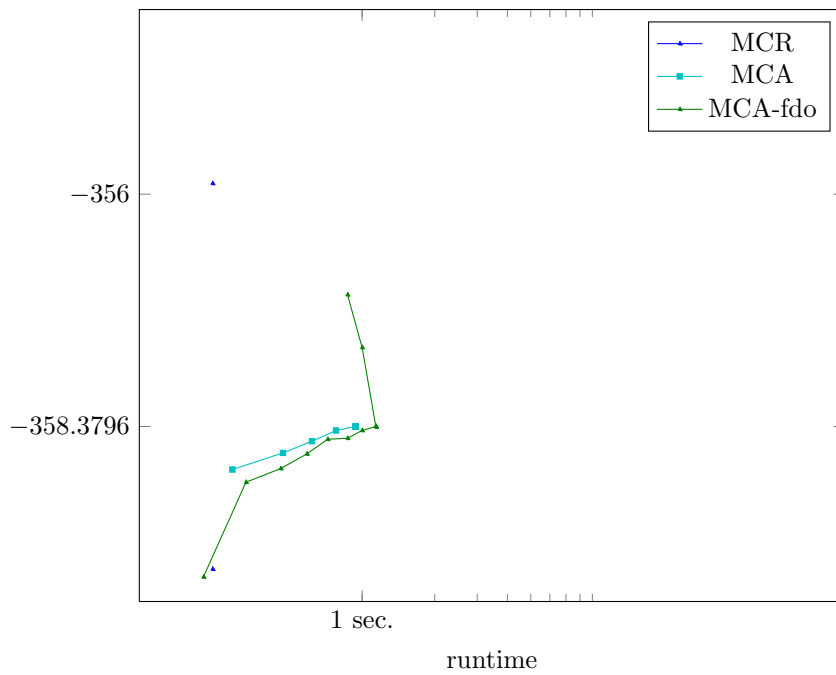


Figure 1588: Runtime results for the instance 1001794 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

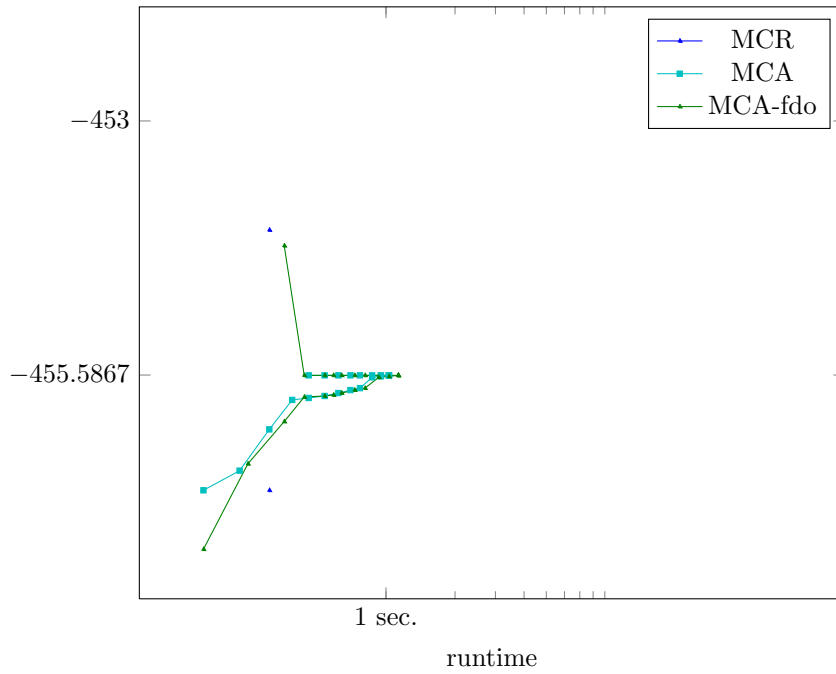


Figure 1589: Runtime results for the instance 1001875 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

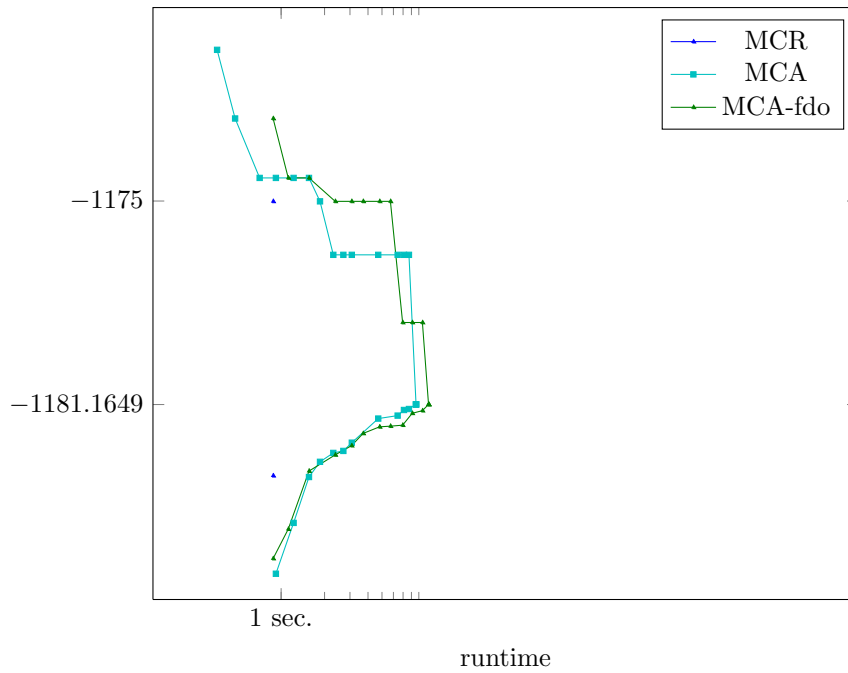


Figure 1590: Runtime results for the instance 1001944 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

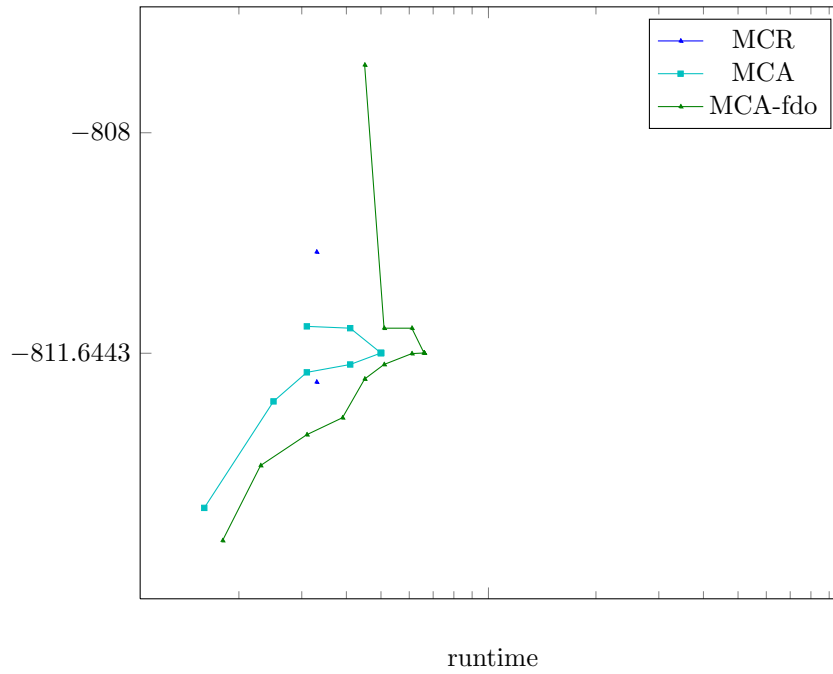


Figure 1591: Runtime results for the instance 1100001 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

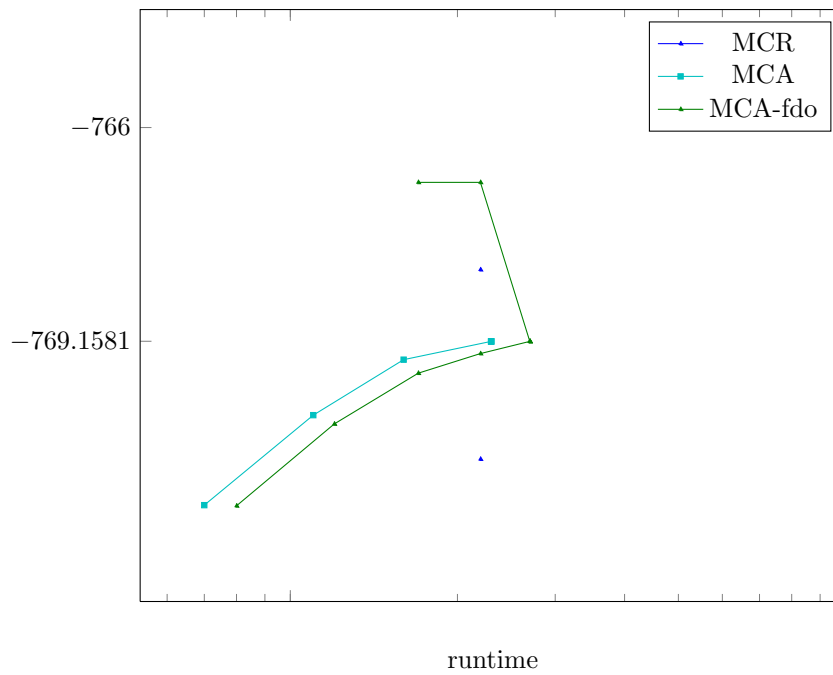


Figure 1592: Runtime results for the instance 1100002 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

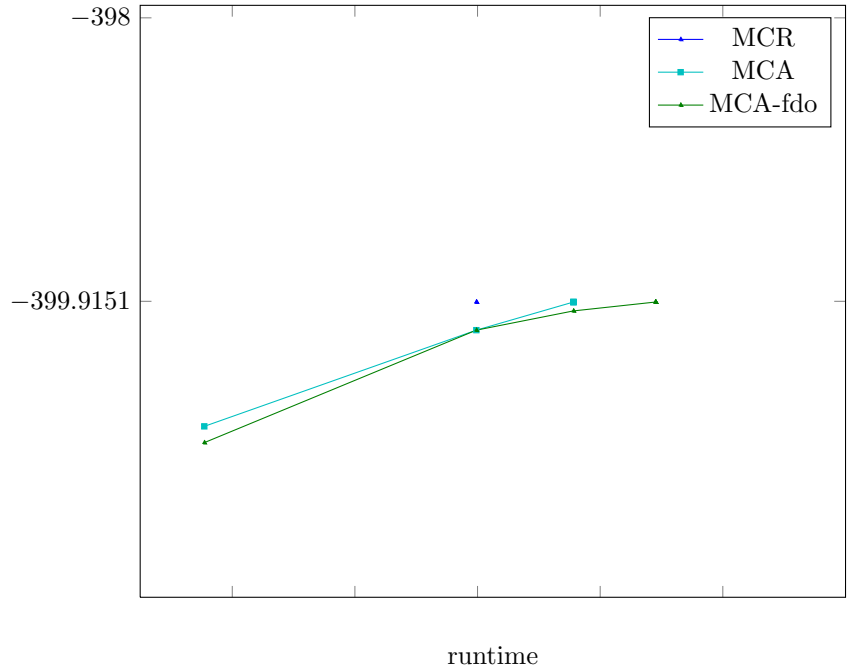


Figure 1593: Runtime results for the instance *1100003* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

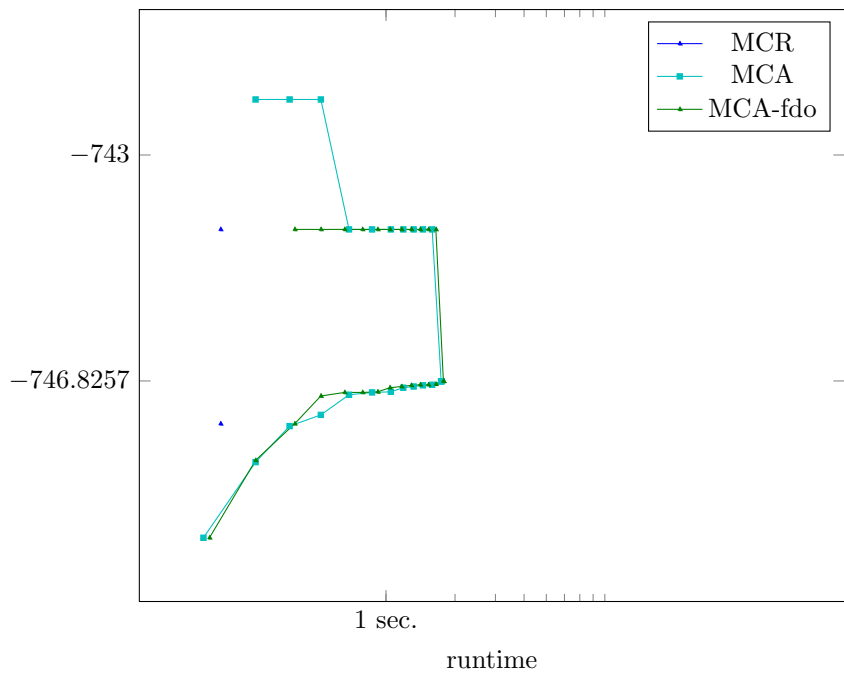
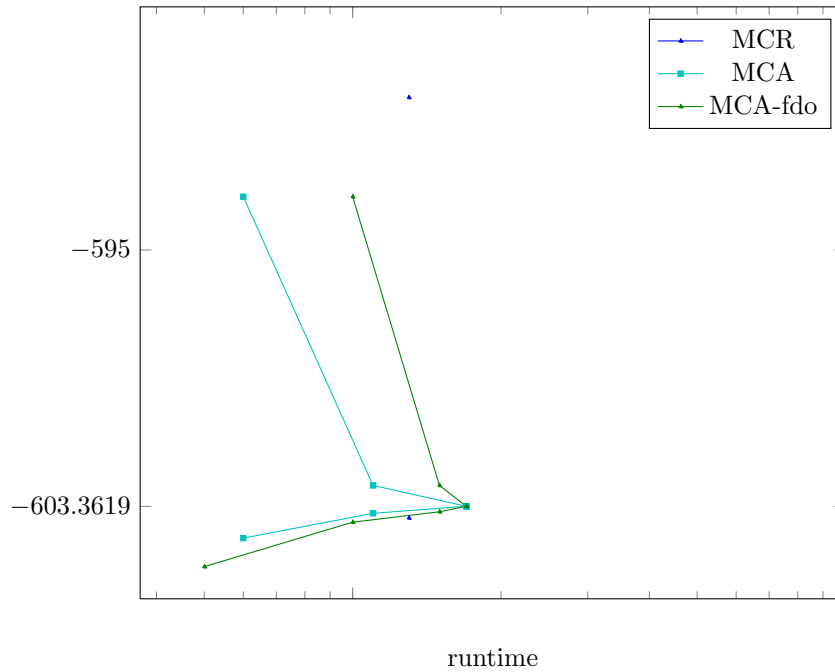


Figure 1594: Runtime results for the instance *1100004* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



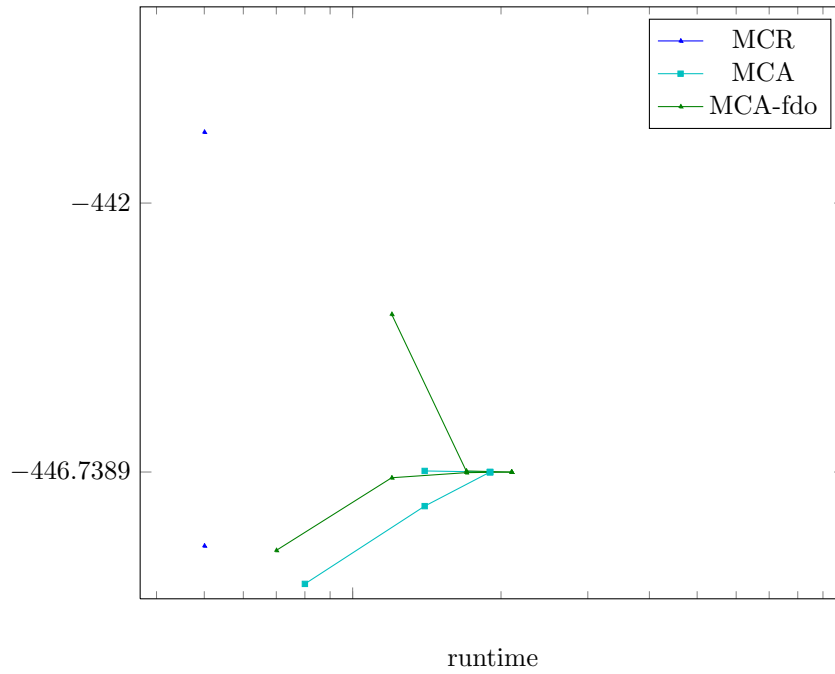


Figure 1599: Runtime results for the instance 1100009 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

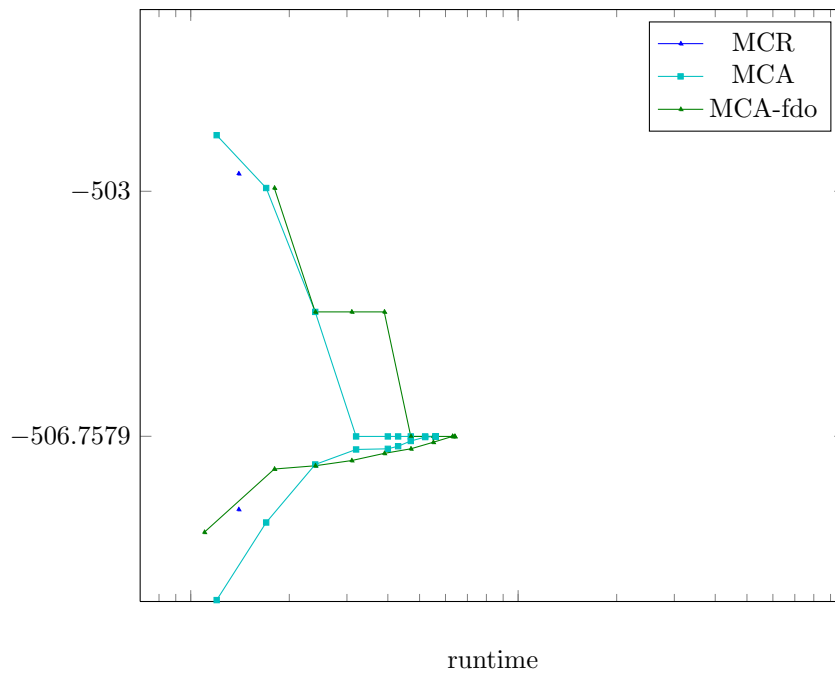


Figure 1600: Runtime results for the instance 1100011 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

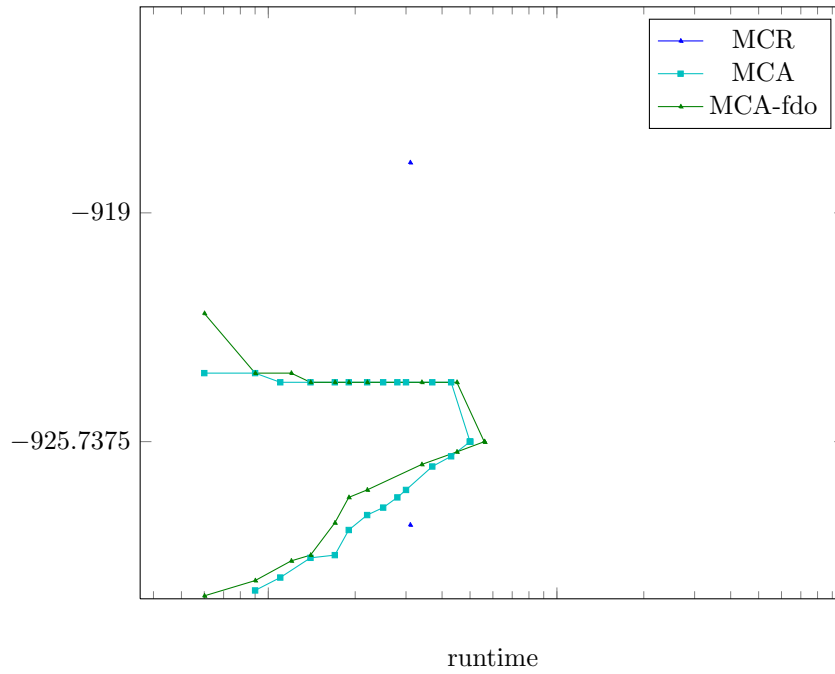


Figure 1601: Runtime results for the instance 1100013 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

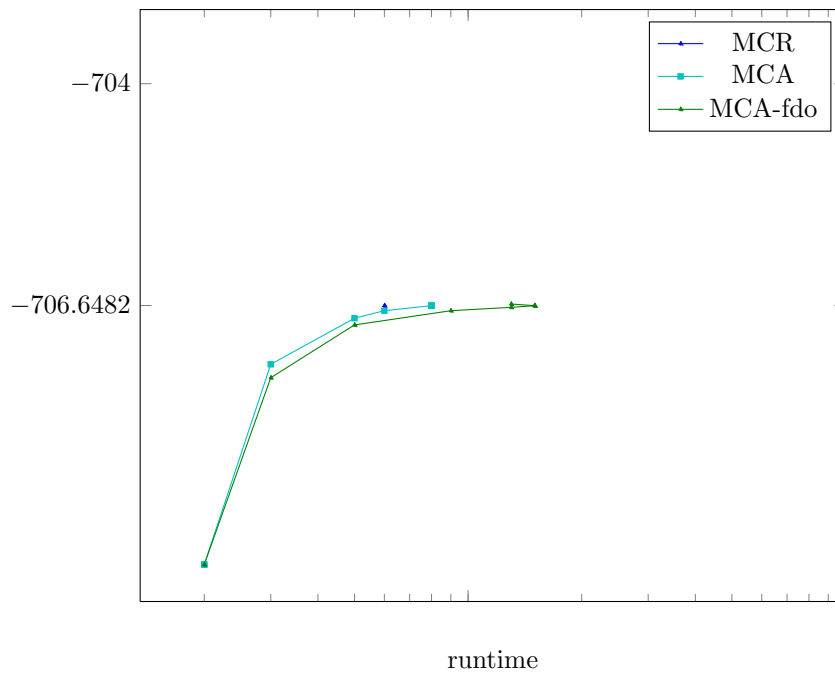


Figure 1602: Runtime results for the instance 1100014 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

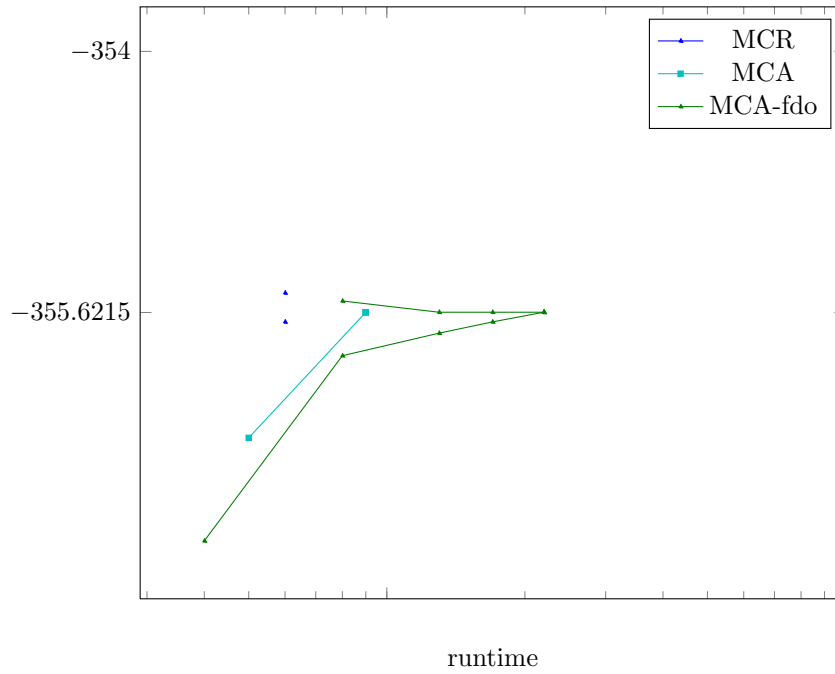


Figure 1603: Runtime results for the instance *1100015* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

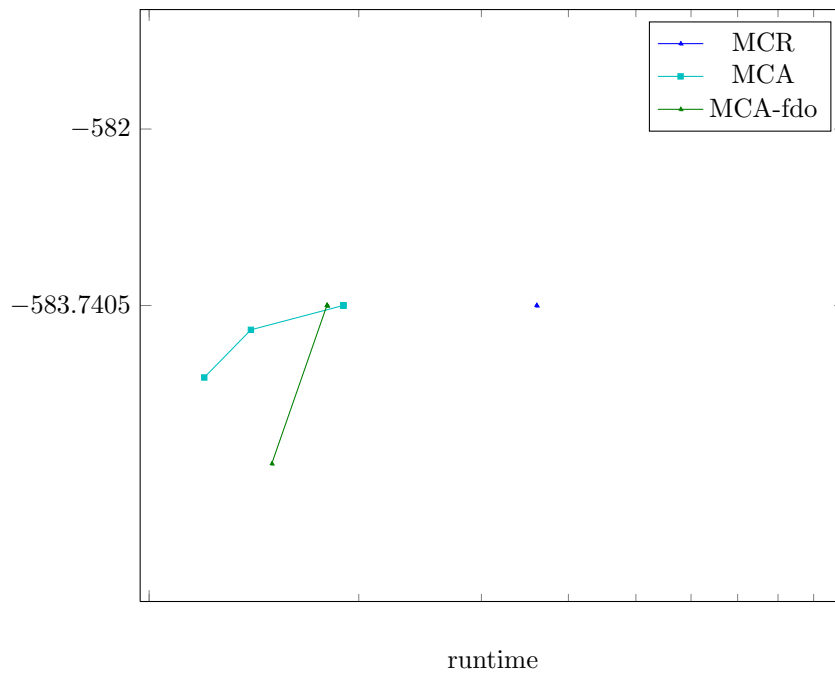
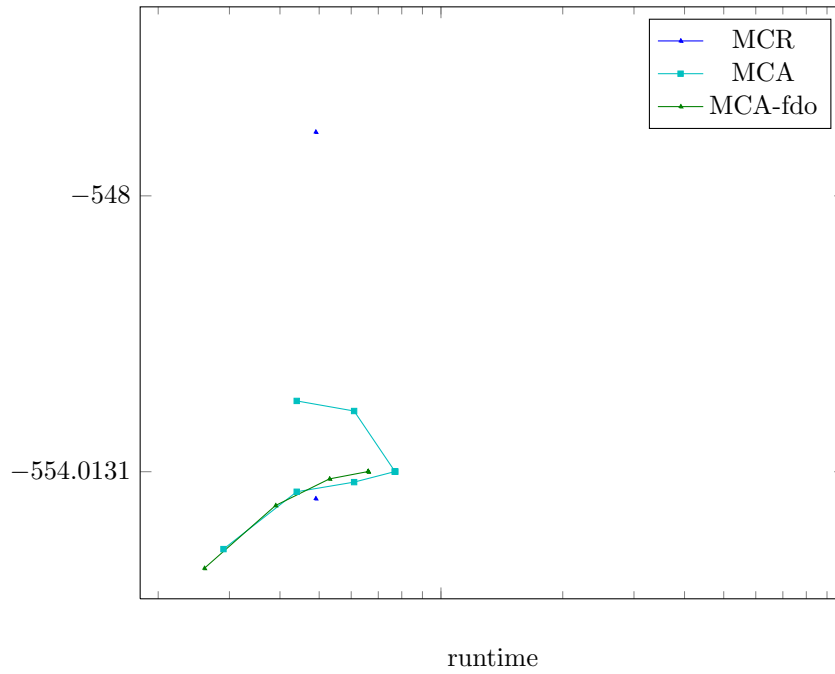


Figure 1604: Runtime results for the instance *1100016* of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



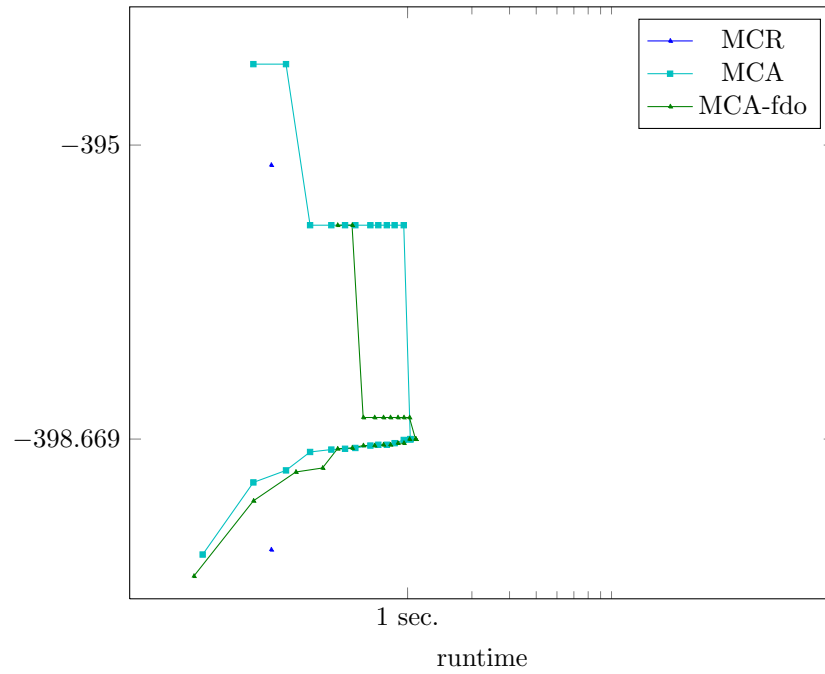


Figure 1609: Runtime results for the instance 1100029 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

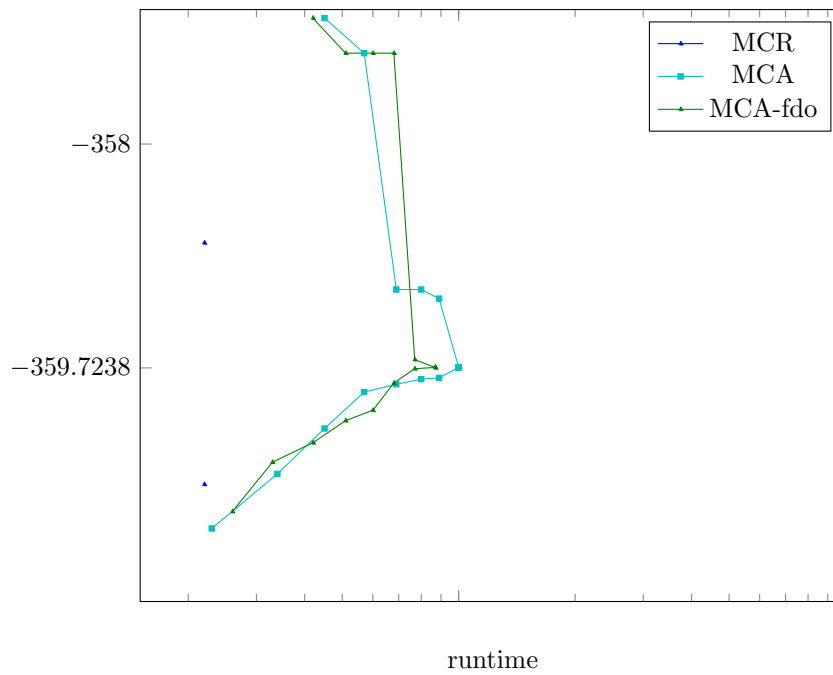


Figure 1610: Runtime results for the instance 1100030 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

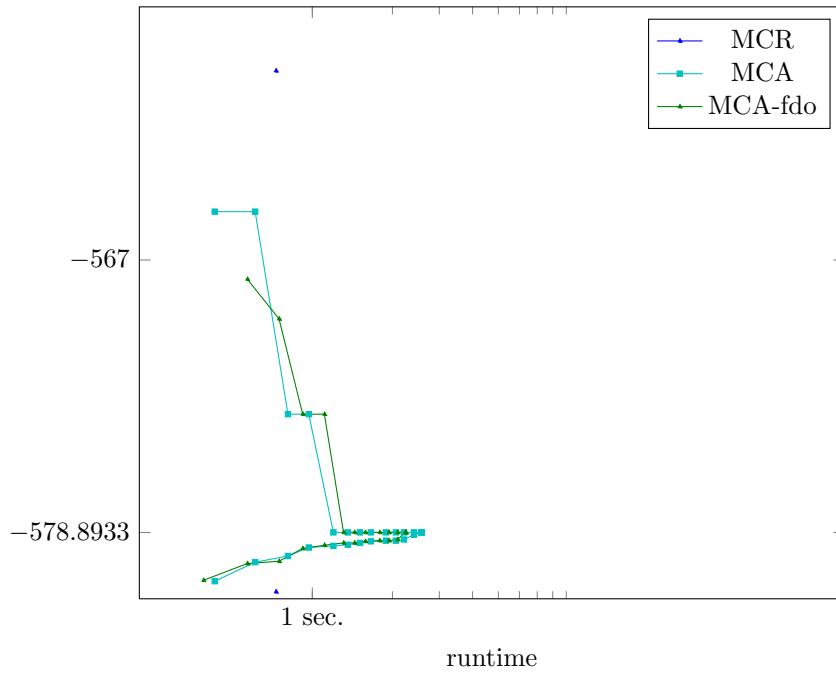


Figure 1611: Runtime results for the instance 1100031 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

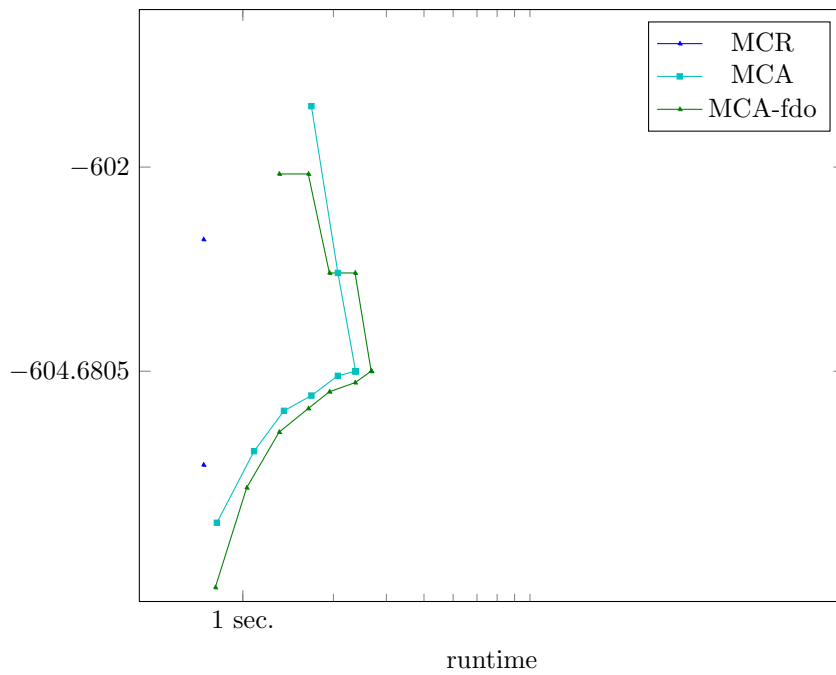


Figure 1612: Runtime results for the instance 2000001 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

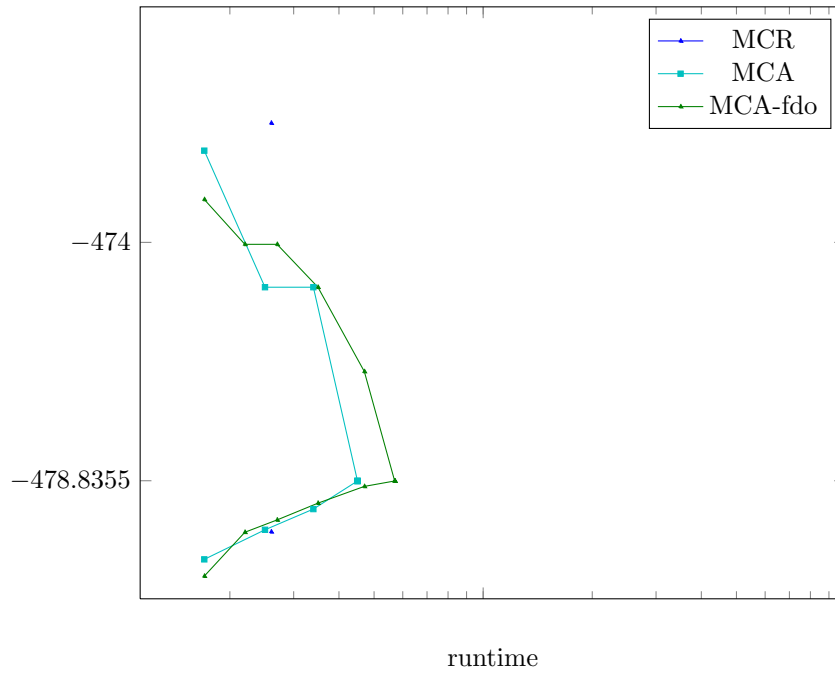


Figure 1613: Runtime results for the instance 2000002 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

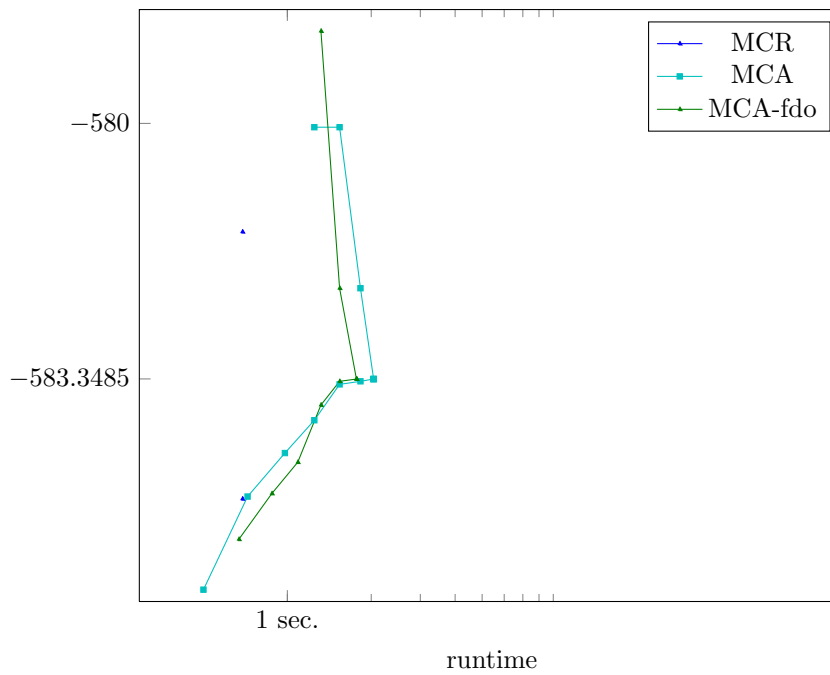


Figure 1614: Runtime results for the instance 2000003 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

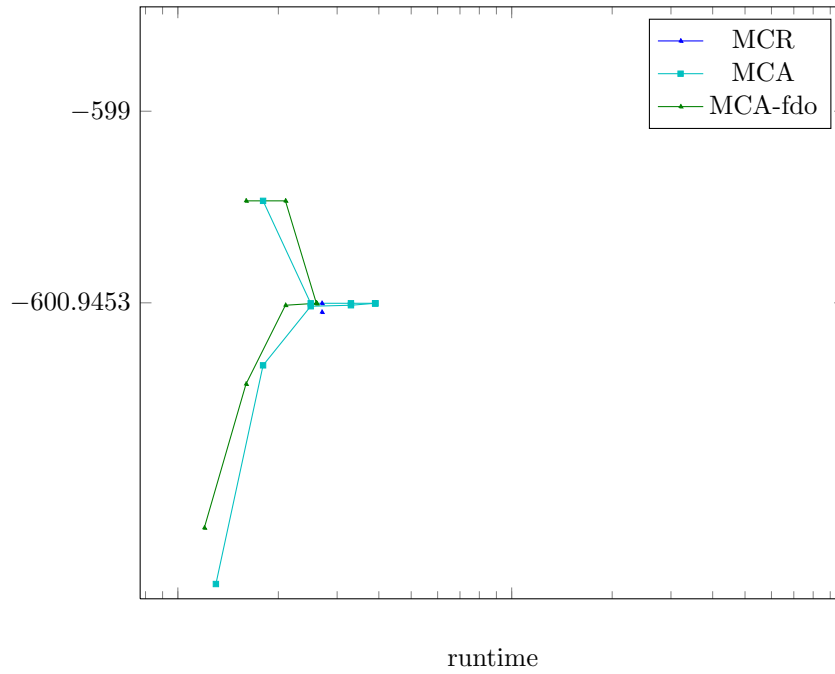


Figure 1615: Runtime results for the instance 2000004 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

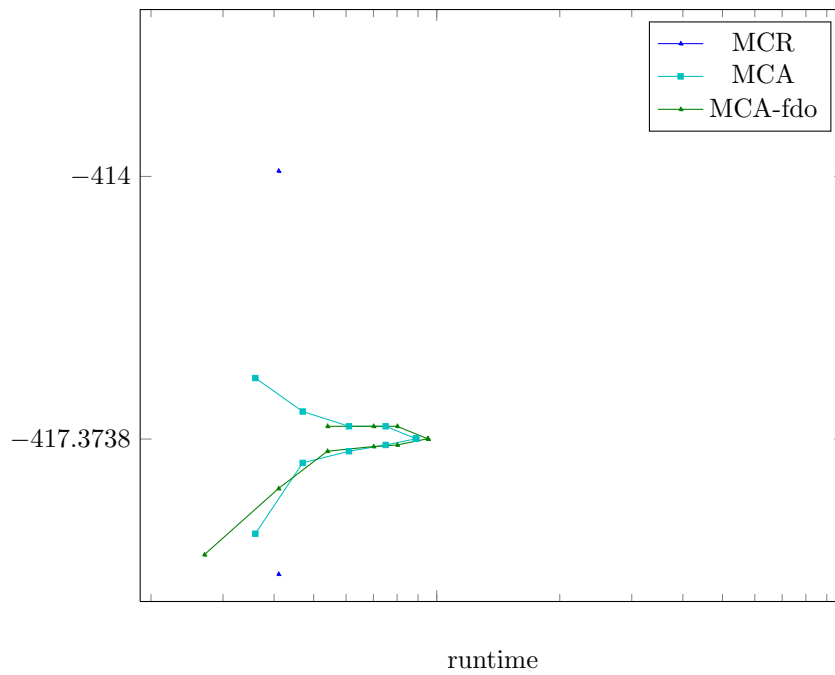


Figure 1616: Runtime results for the instance 2000008 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

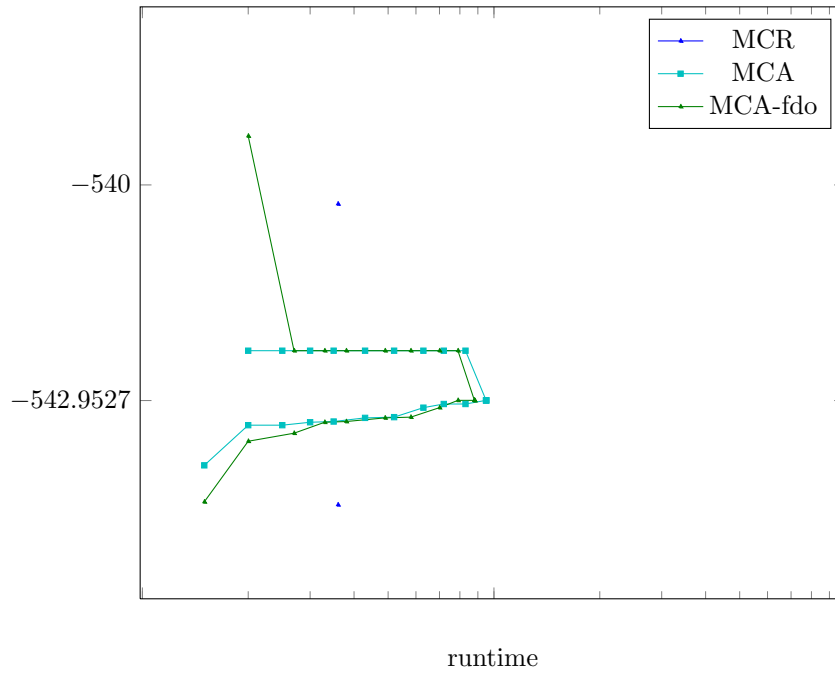


Figure 1617: Runtime results for the instance 2000012 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

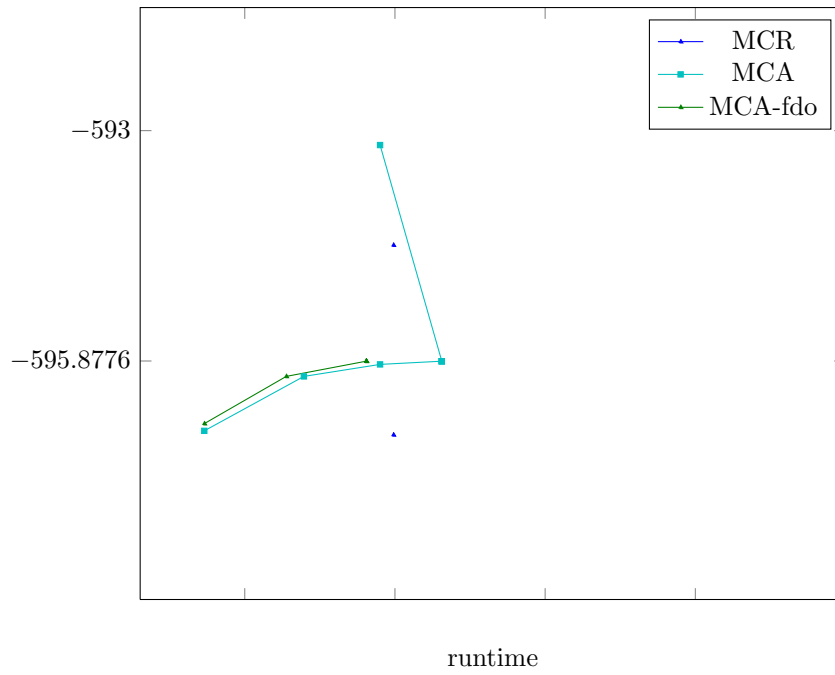


Figure 1618: Runtime results for the instance 2000019 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

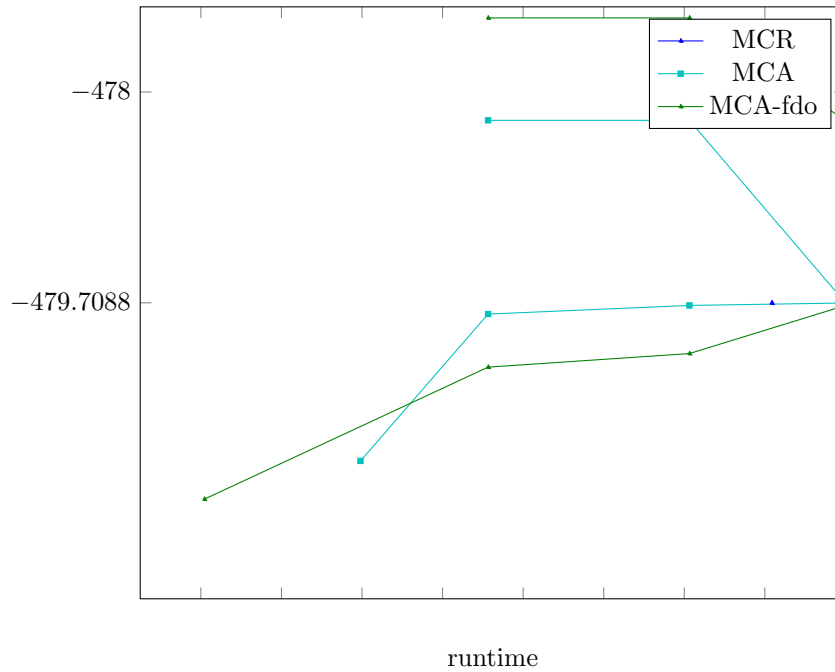


Figure 1619: Runtime results for the instance 2000022 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

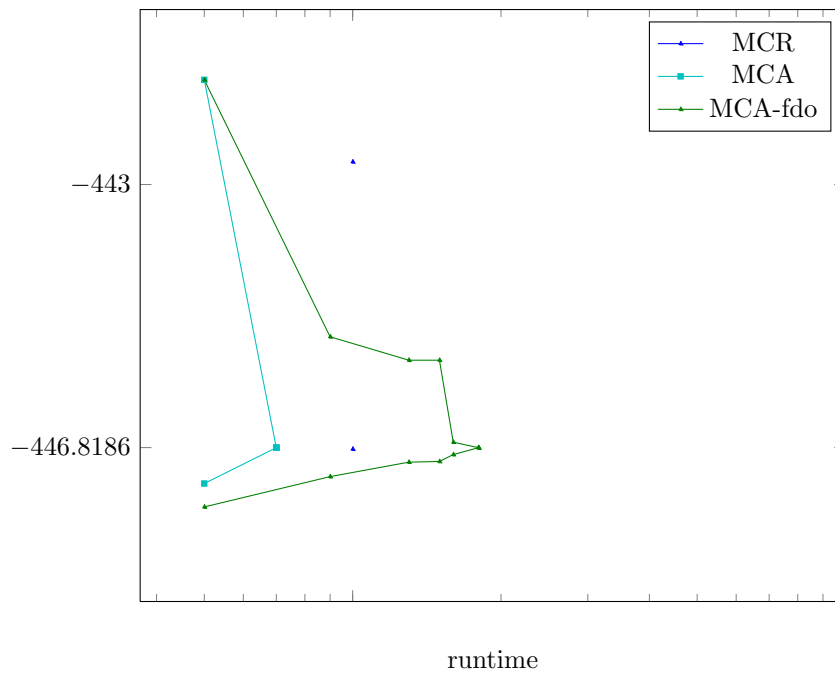


Figure 1620: Runtime results for the instance 2000023 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

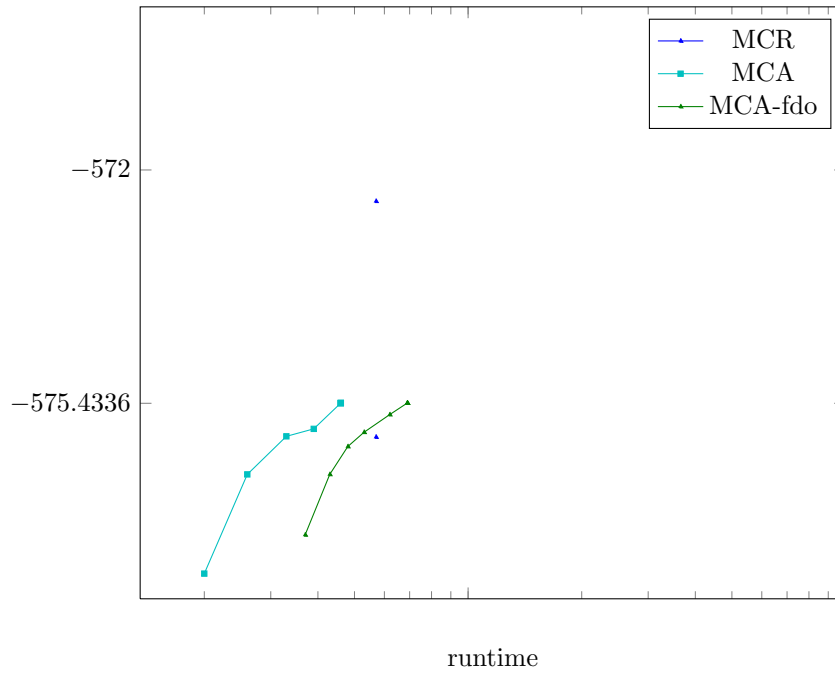


Figure 1621: Runtime results for the instance 2000025 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

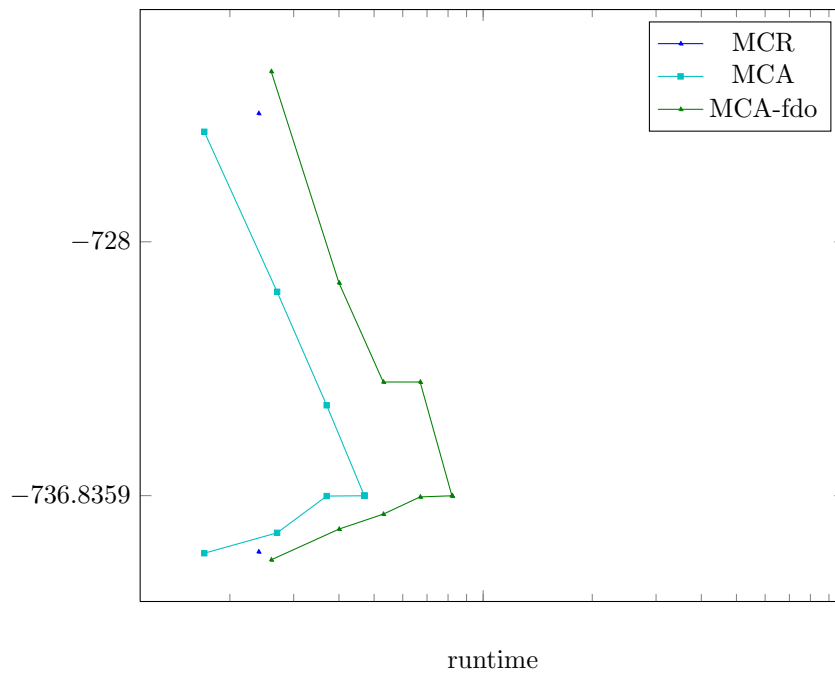


Figure 1622: Runtime results for the instance 2000028 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

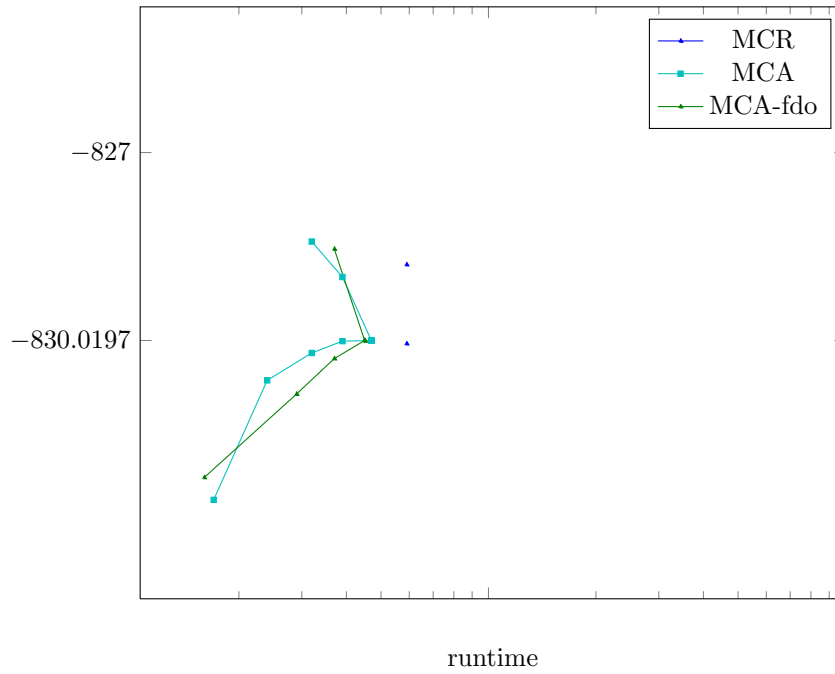


Figure 1623: Runtime results for the instance 2000030 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

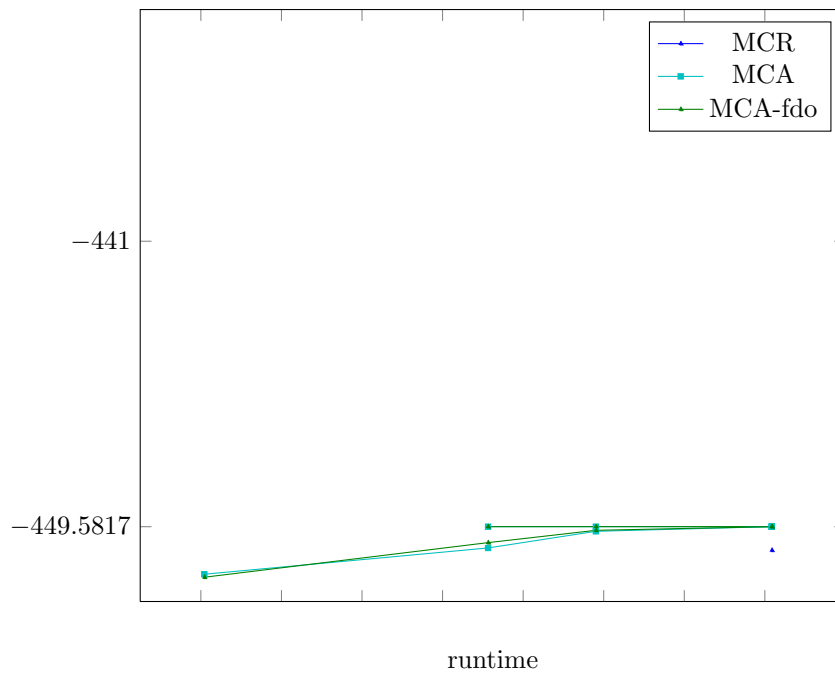


Figure 1624: Runtime results for the instance 2000031 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

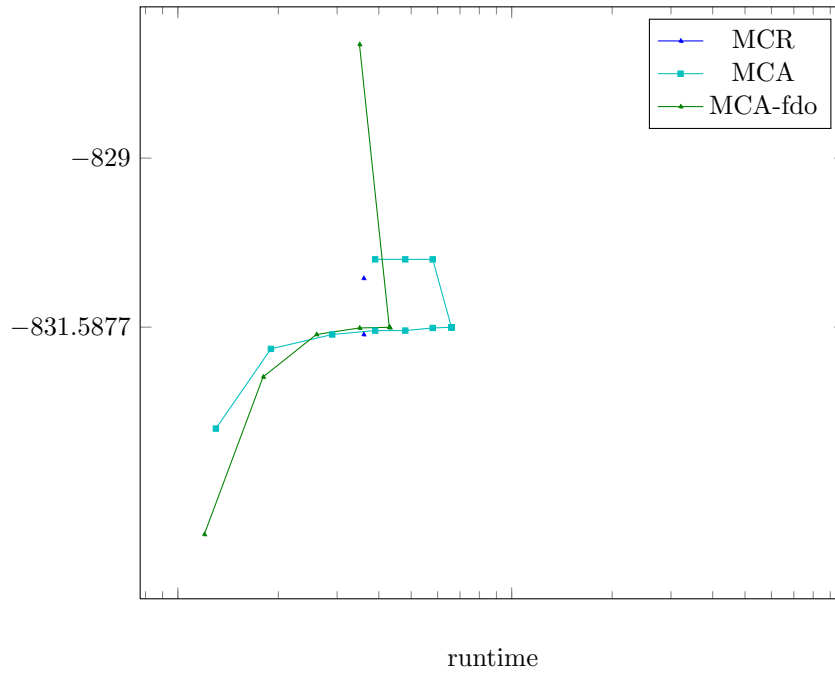


Figure 1625: Runtime results for the instance 2000032 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

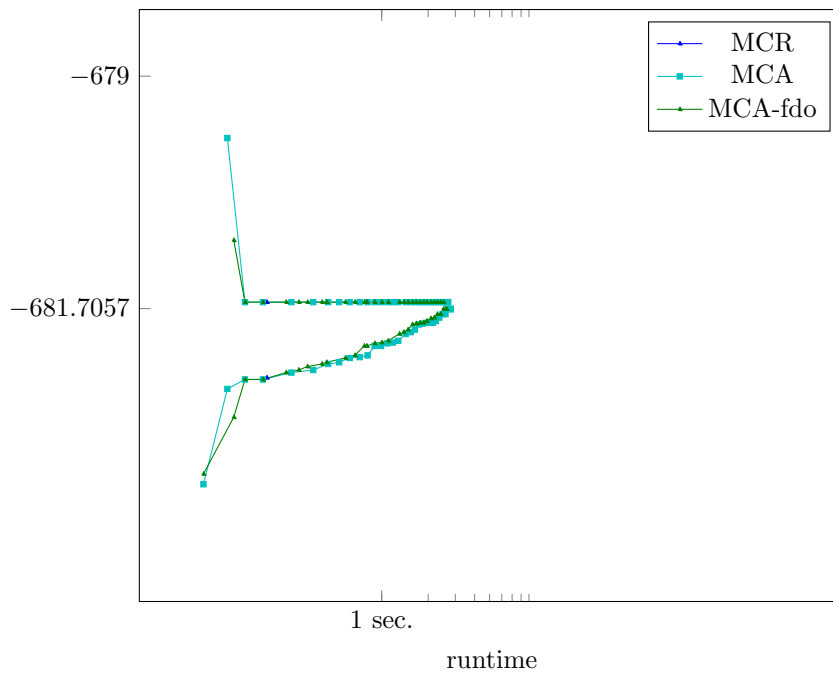


Figure 1626: Runtime results for the instance 2000033 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

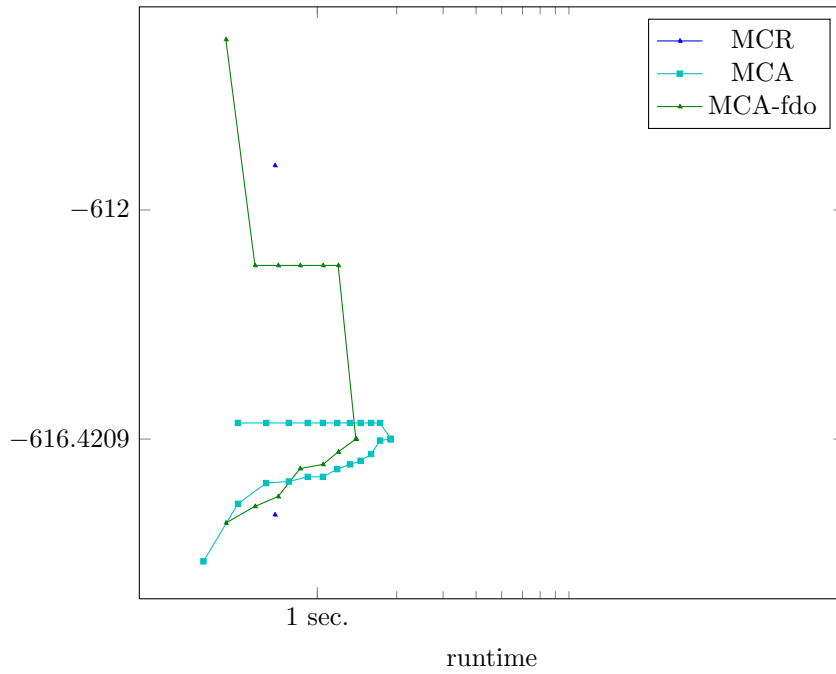


Figure 1627: Runtime results for the instance 2000034 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

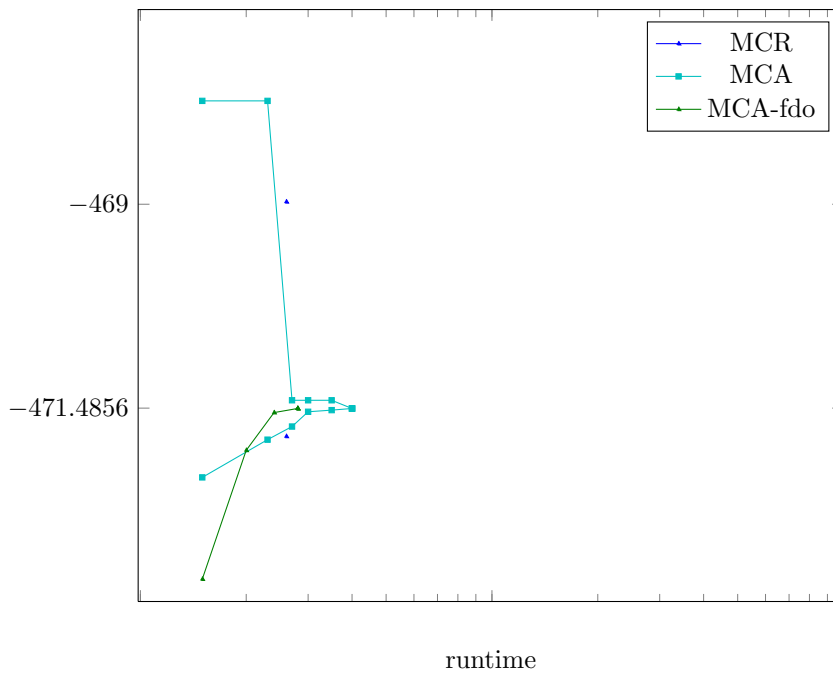


Figure 1628: Runtime results for the instance 2000035 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

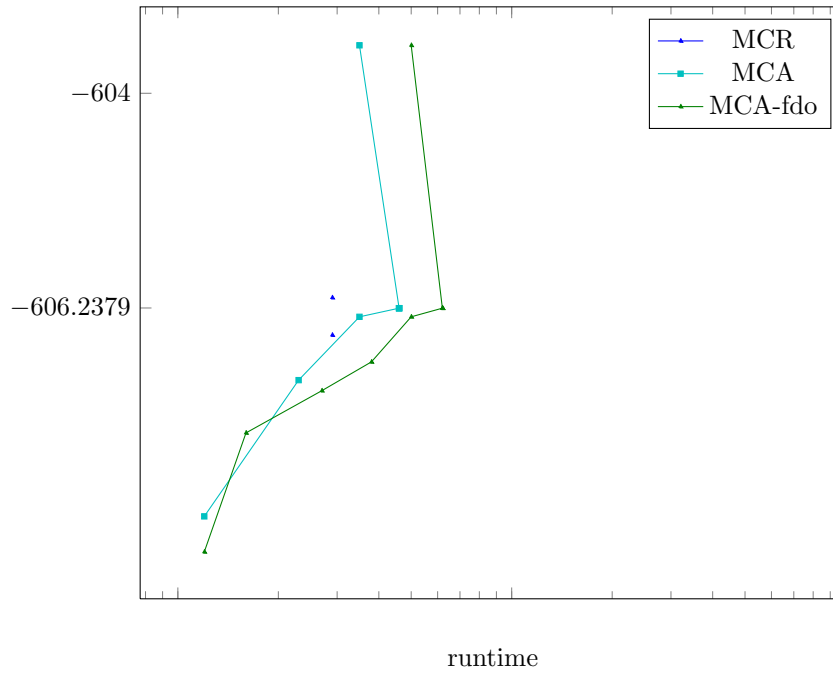


Figure 1629: Runtime results for the instance 2000036 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

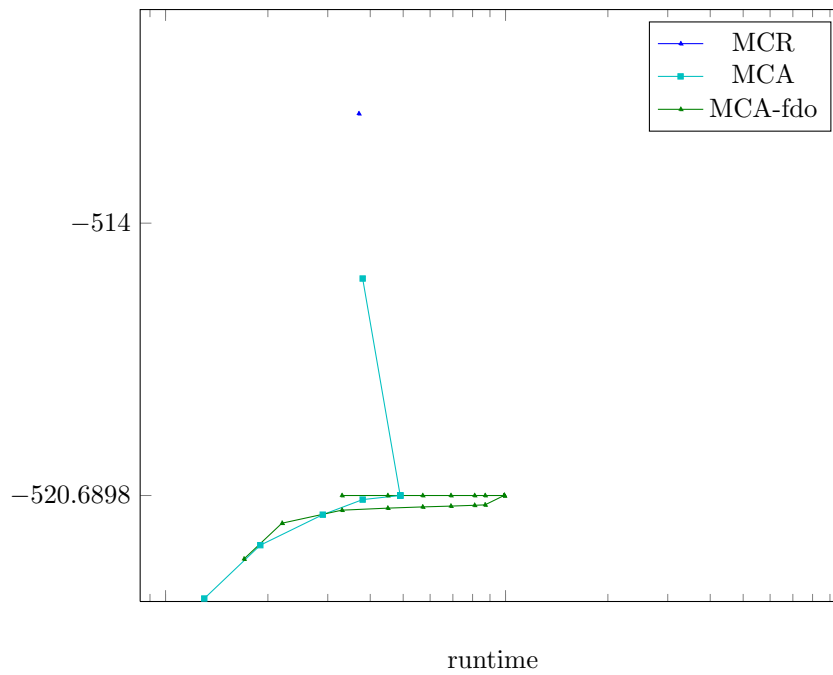


Figure 1630: Runtime results for the instance 2000037 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

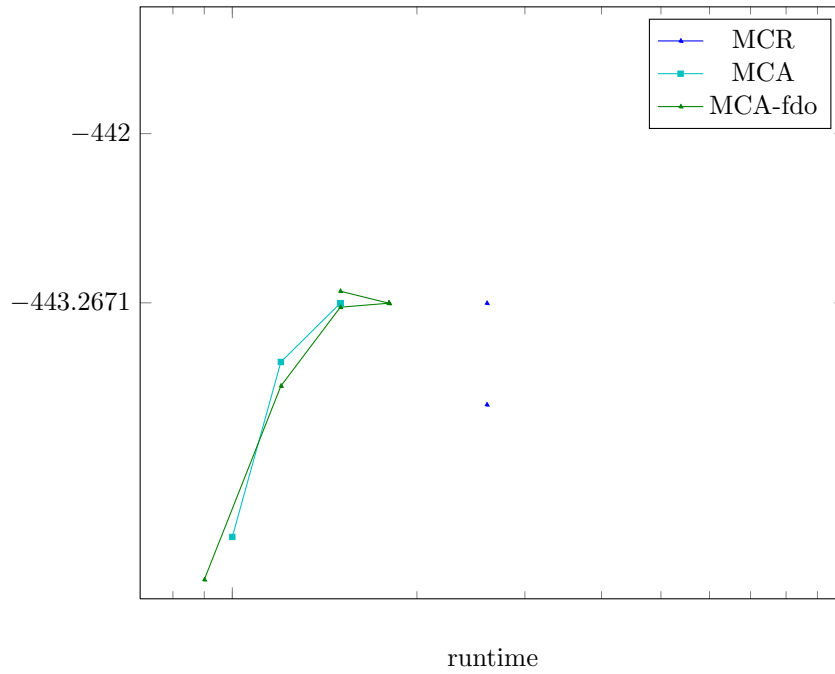
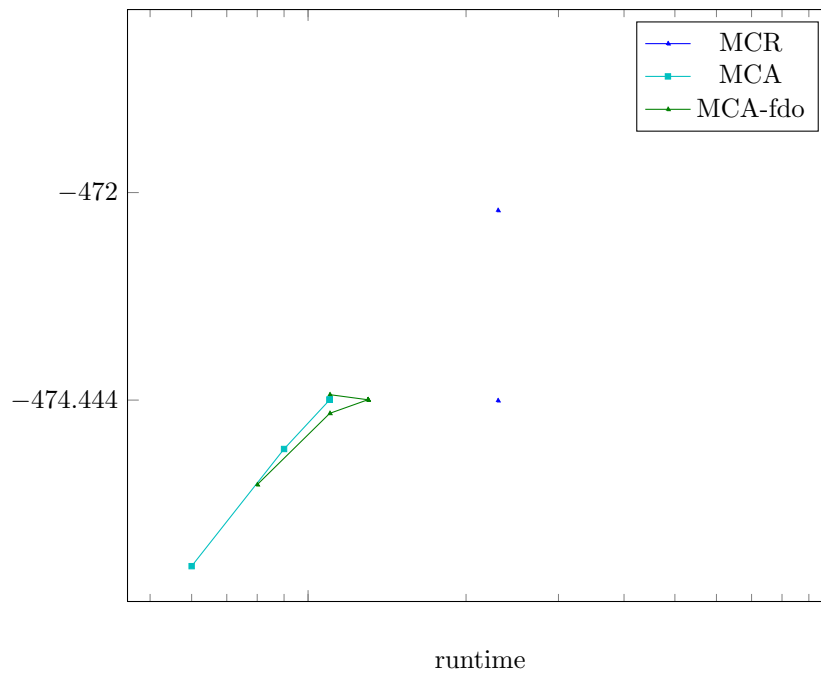


Figure 1631: Runtime results for the instance 2000039 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



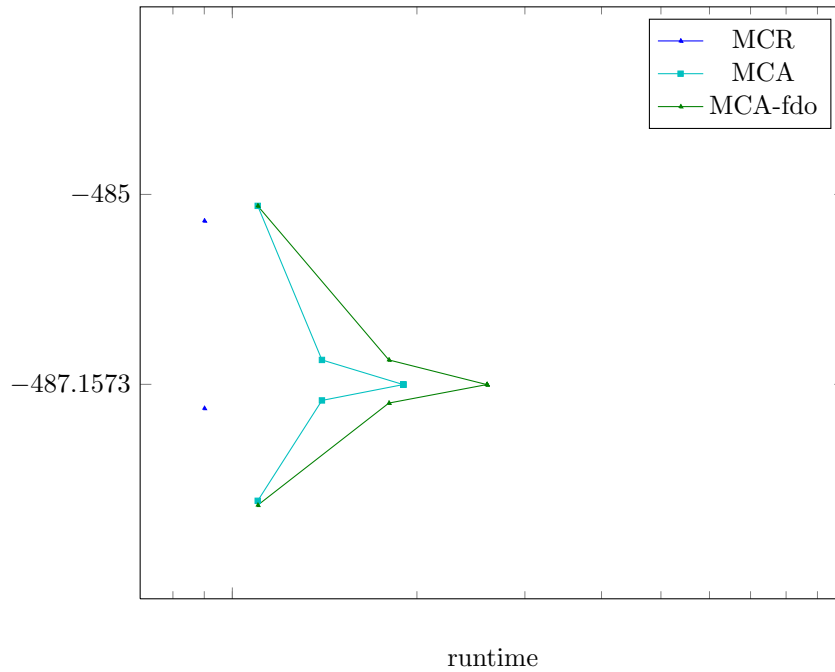


Figure 1633: Runtime results for the instance 2000042 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

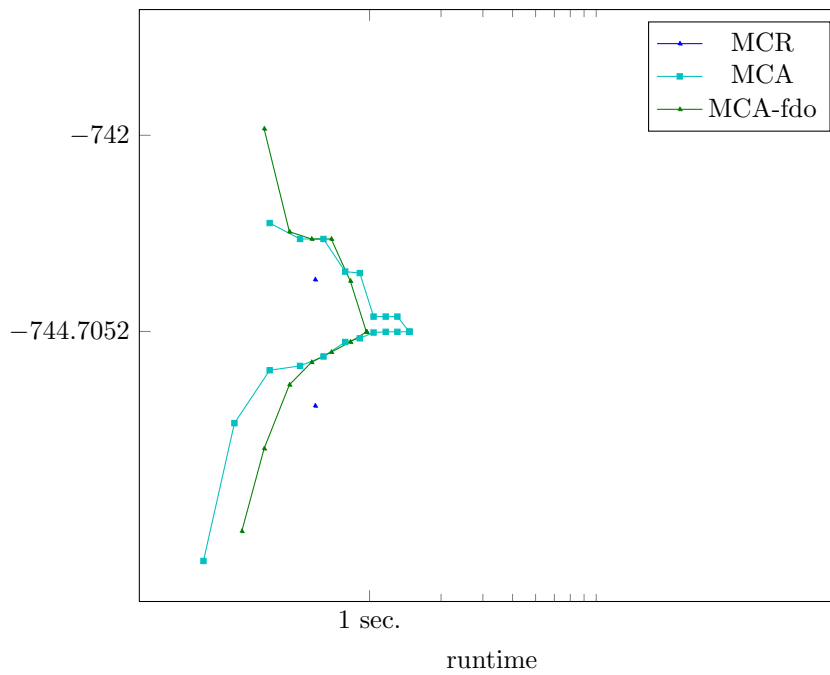


Figure 1634: Runtime results for the instance 2000043 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

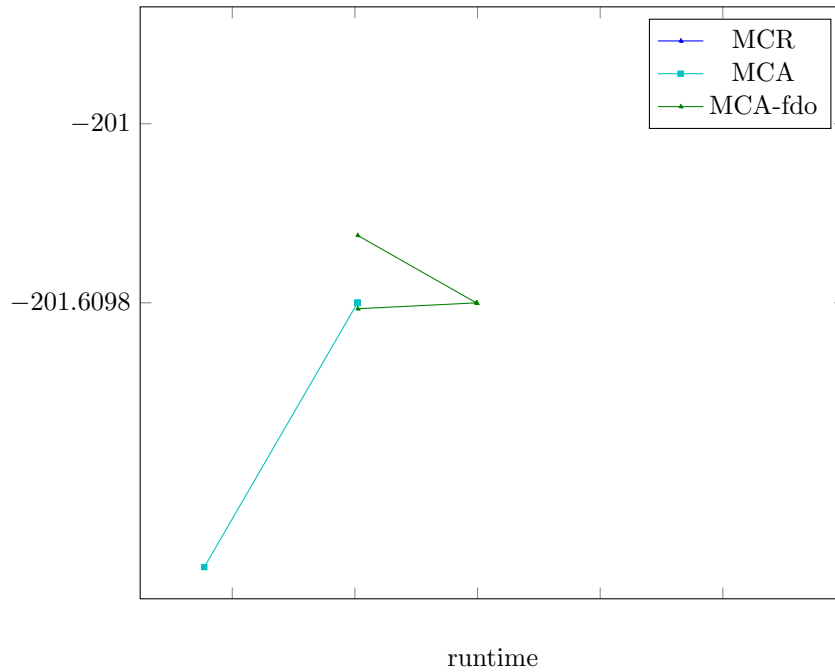


Figure 1635: Runtime results for the instance 2000044 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

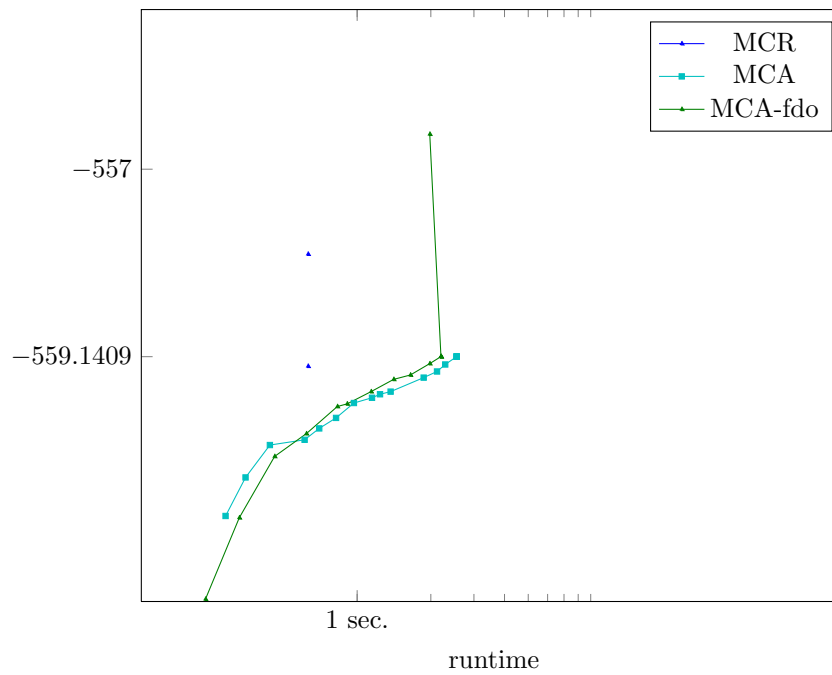


Figure 1636: Runtime results for the instance 3000072 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

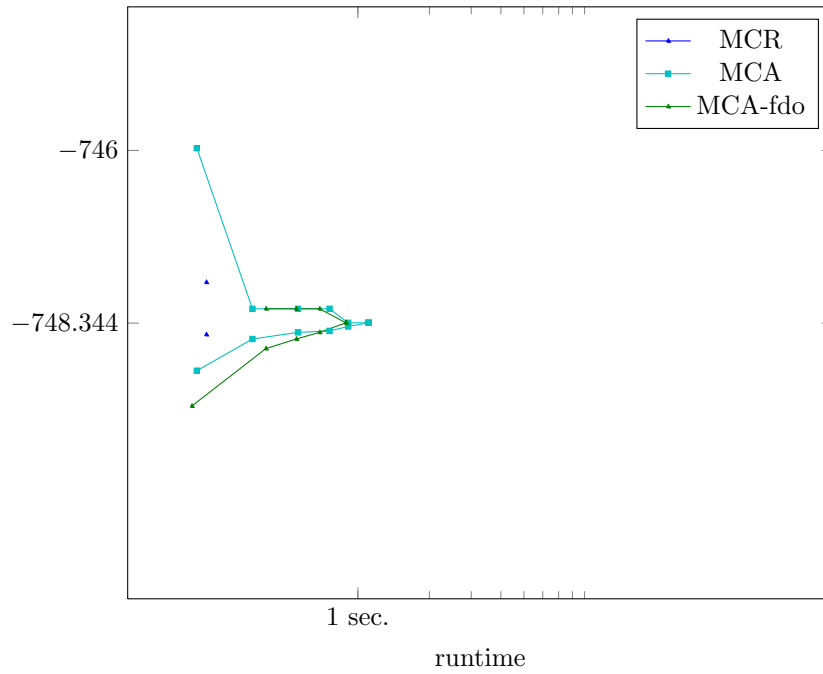


Figure 1637: Runtime results for the instance 3000076 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

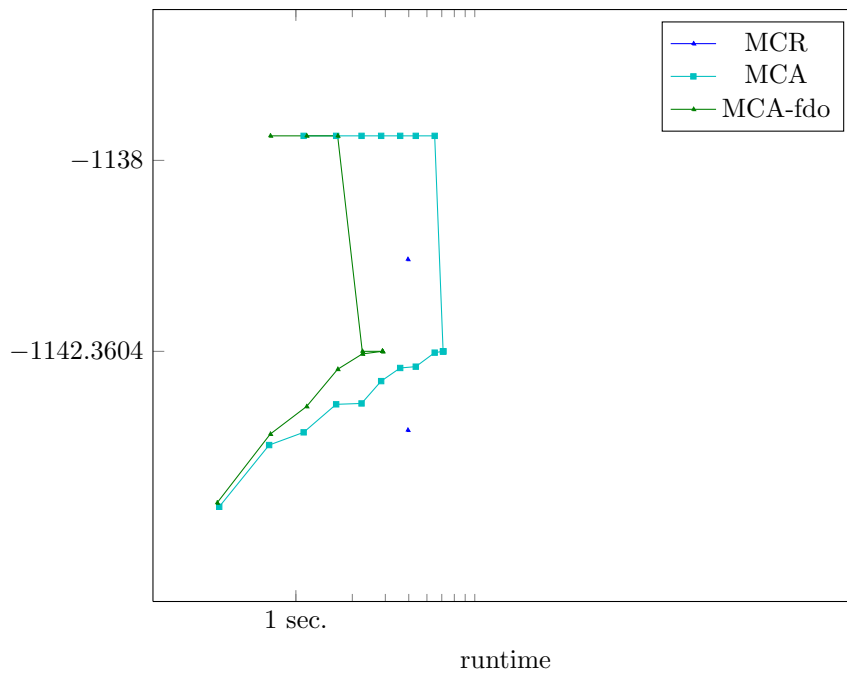


Figure 1638: Runtime results for the instance 3000099 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

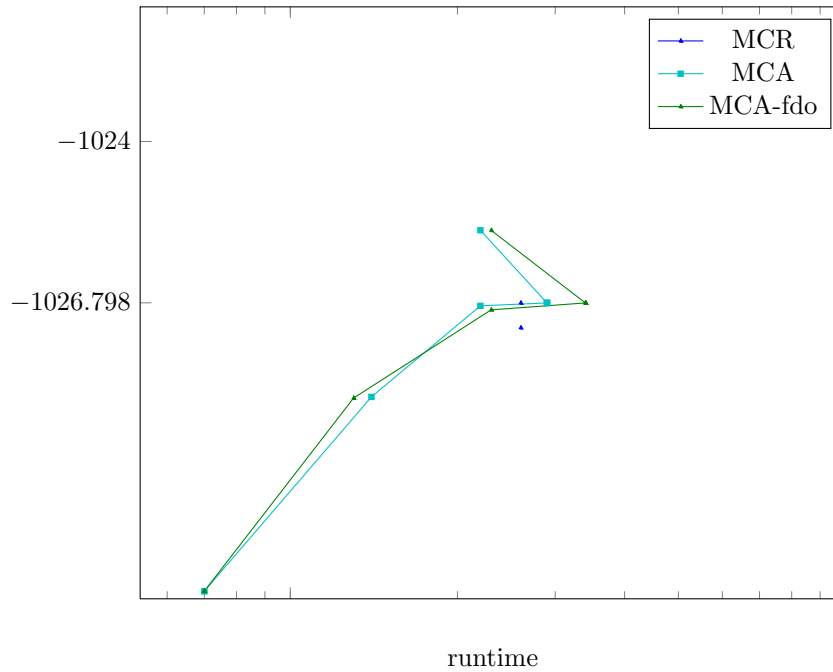


Figure 1641: Runtime results for the instance 3000299 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

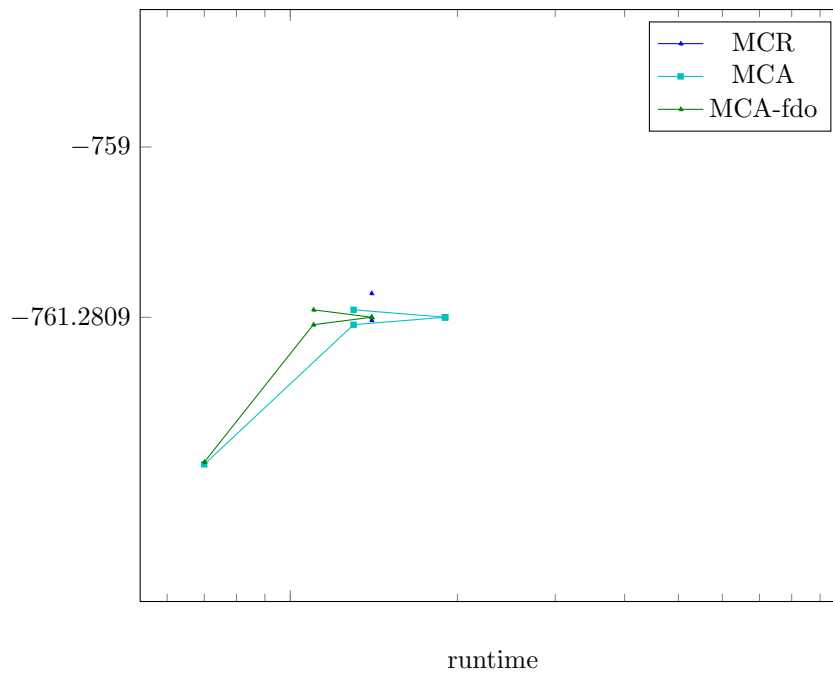


Figure 1642: Runtime results for the instance 3000323 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

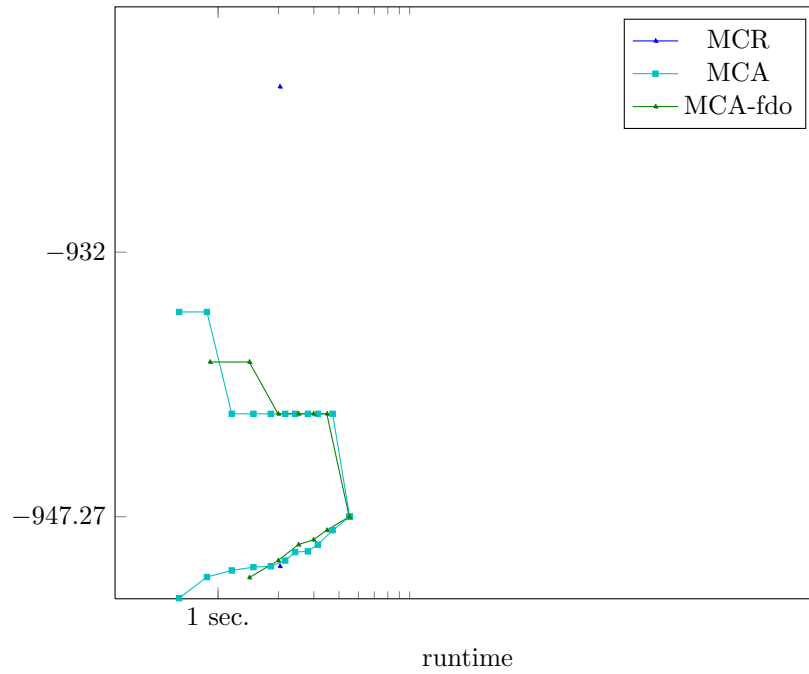


Figure 1643: Runtime results for the instance 3000454 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

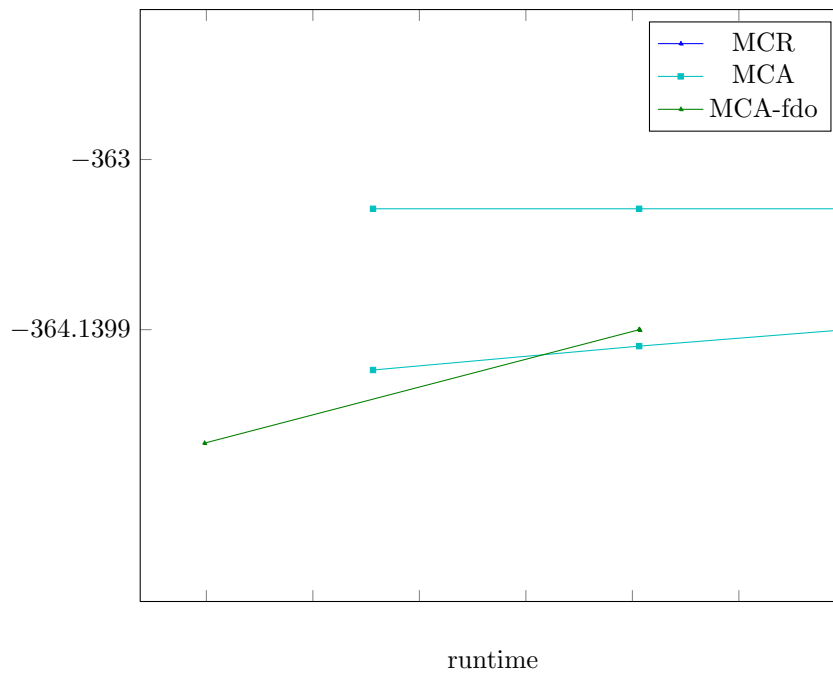


Figure 1644: Runtime results for the instance 3000469 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

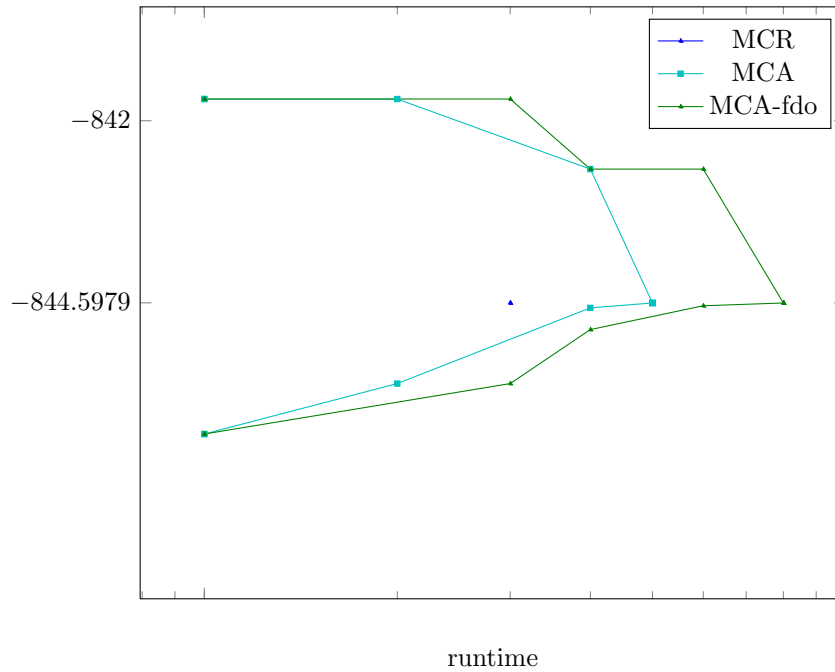


Figure 1645: Runtime results for the instance 3000676 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

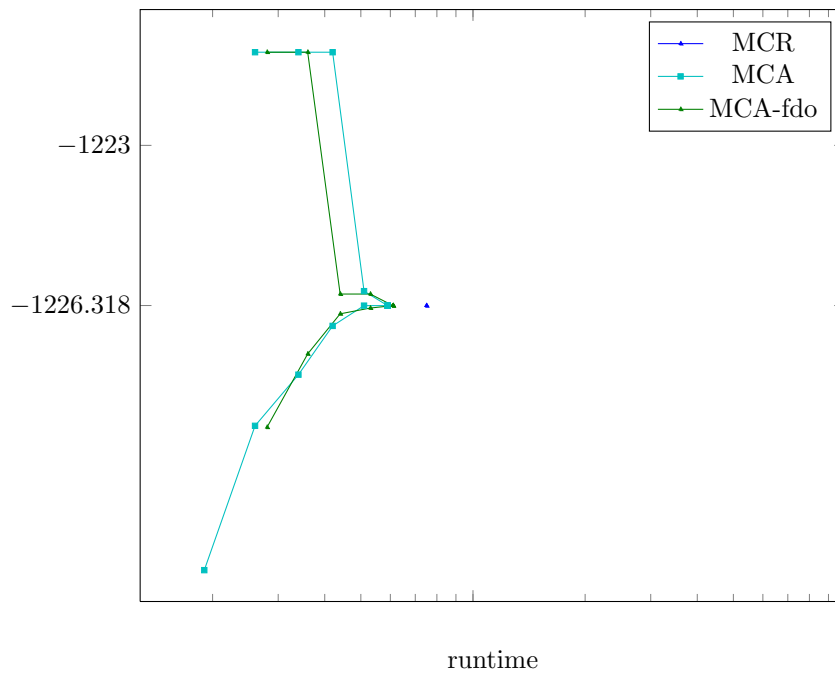


Figure 1646: Runtime results for the instance 3000716 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

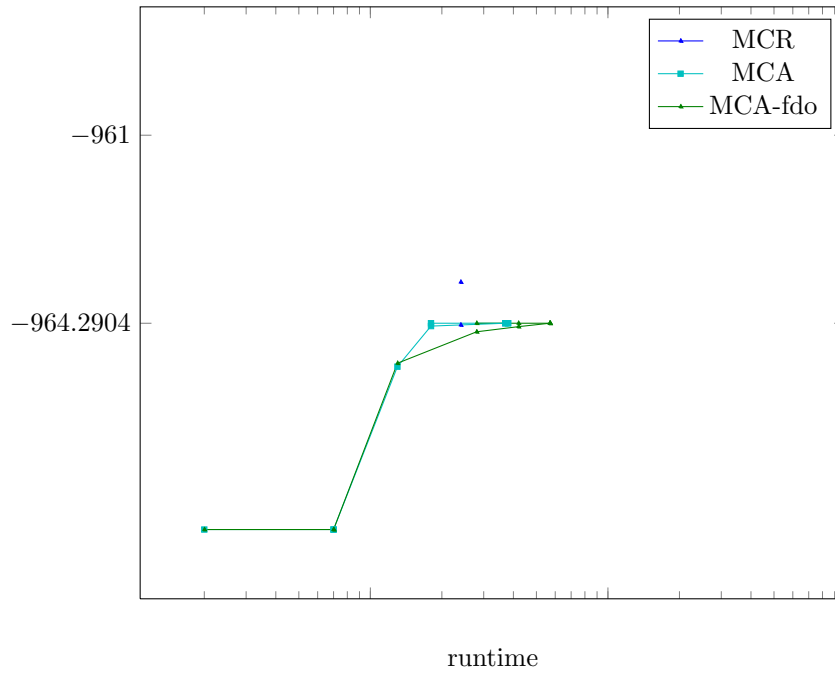


Figure 1647: Runtime results for the instance 3000759 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

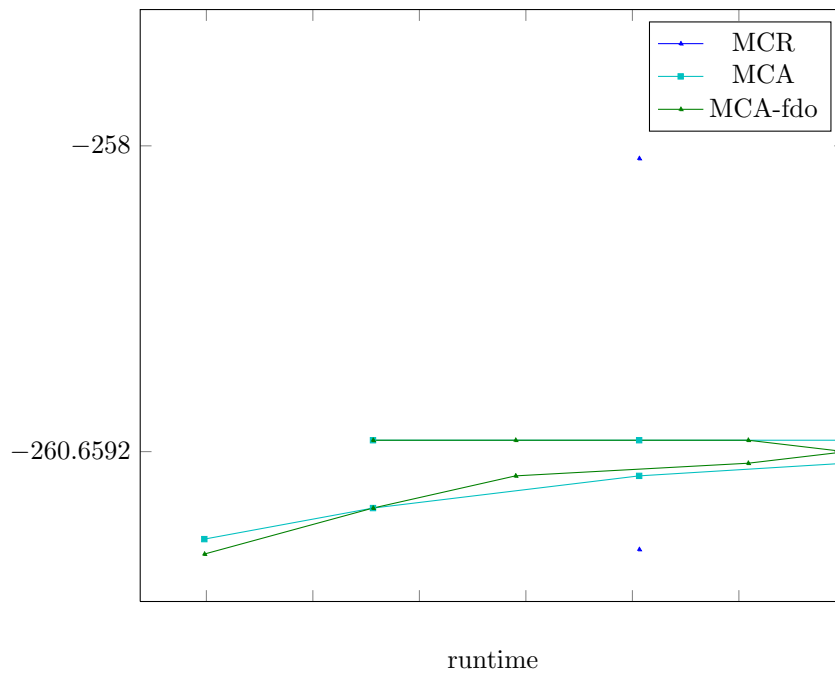


Figure 1648: Runtime results for the instance 3000945 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

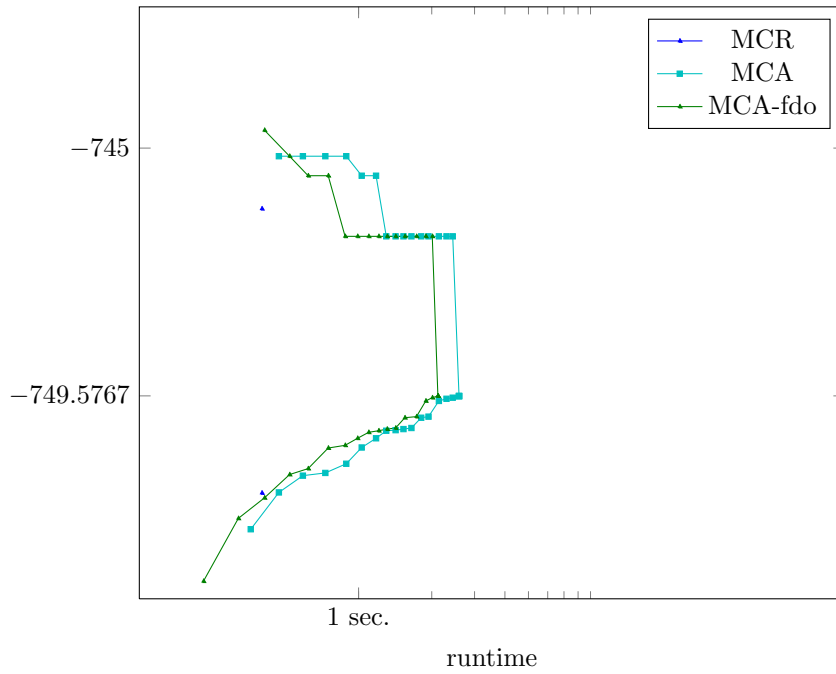


Figure 1651: Runtime results for the instance 3001061 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

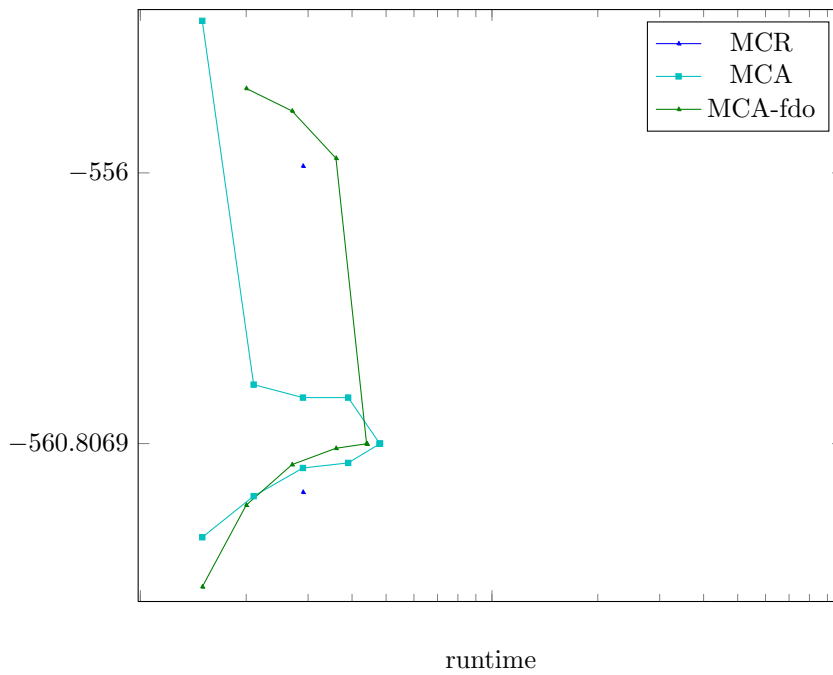


Figure 1652: Runtime results for the instance 3001131 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

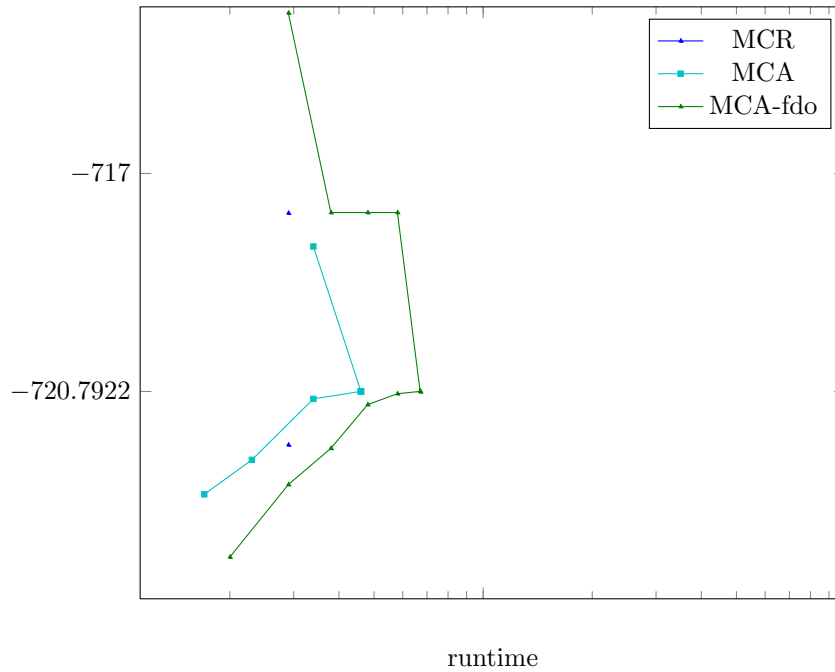


Figure 1653: Runtime results for the instance 3001230 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

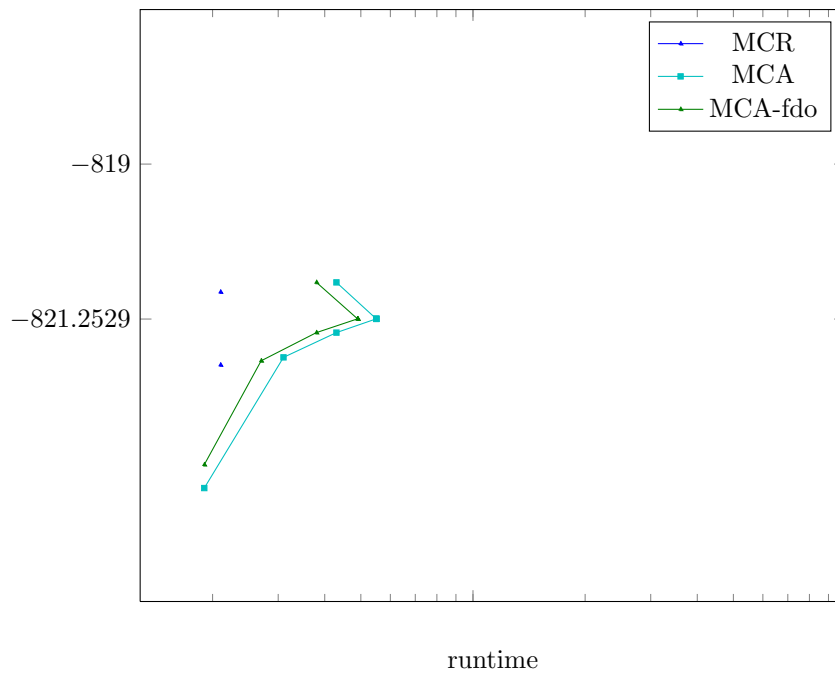


Figure 1654: Runtime results for the instance 3001319 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

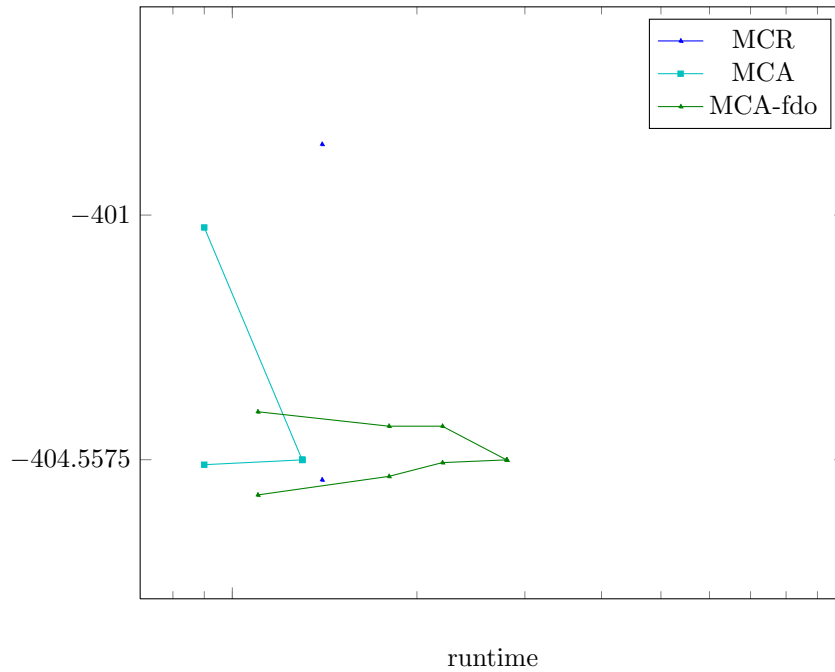


Figure 1655: Runtime results for the instance 3001336 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

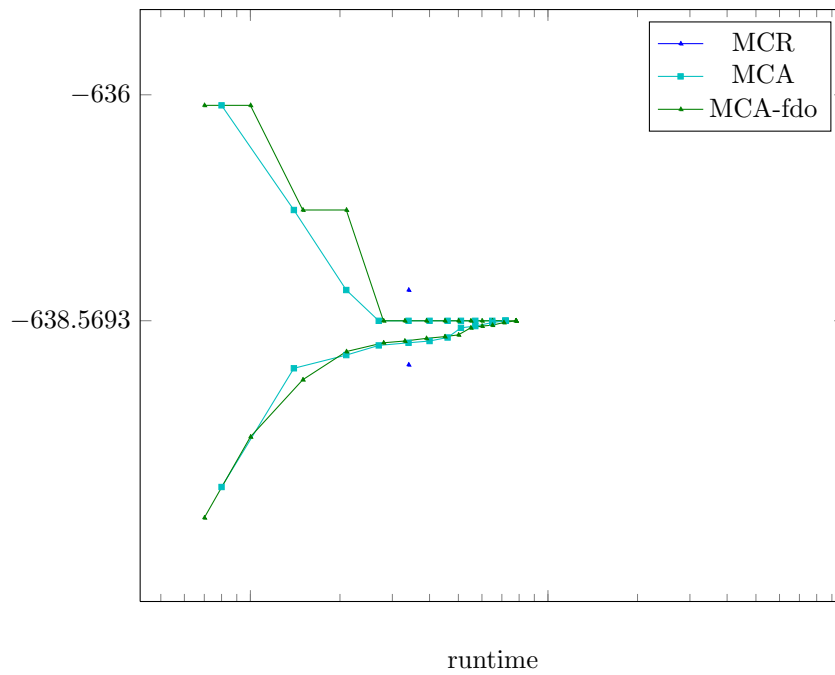


Figure 1656: Runtime results for the instance 3001421 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

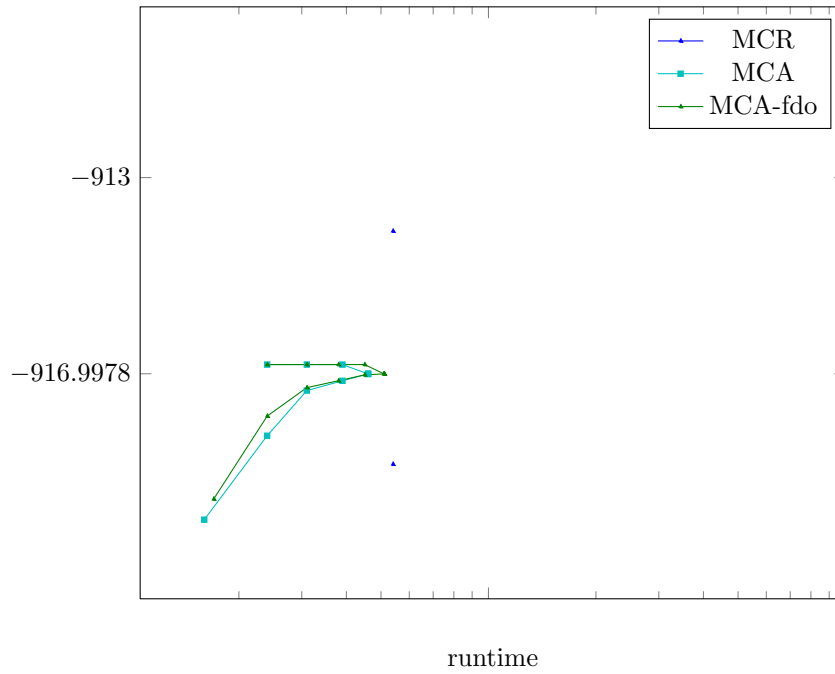


Figure 1657: Runtime results for the instance 3001460 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

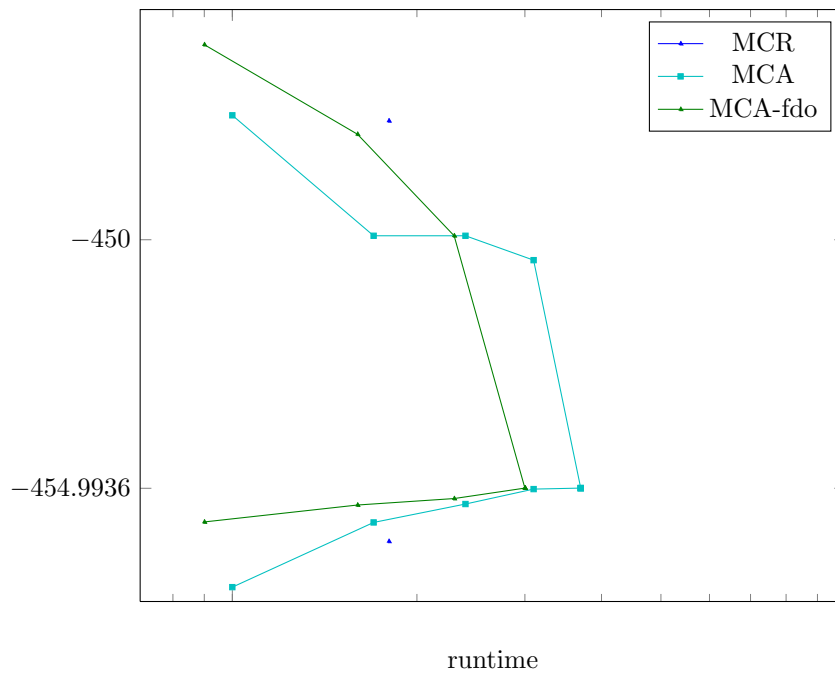


Figure 1658: Runtime results for the instance 3001555 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

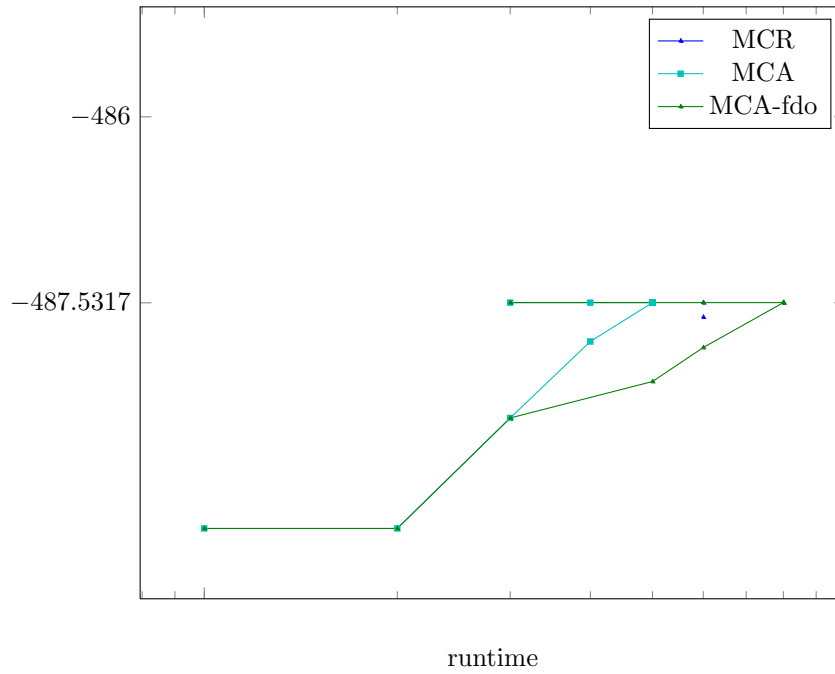


Figure 1659: Runtime results for the instance 3001569 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

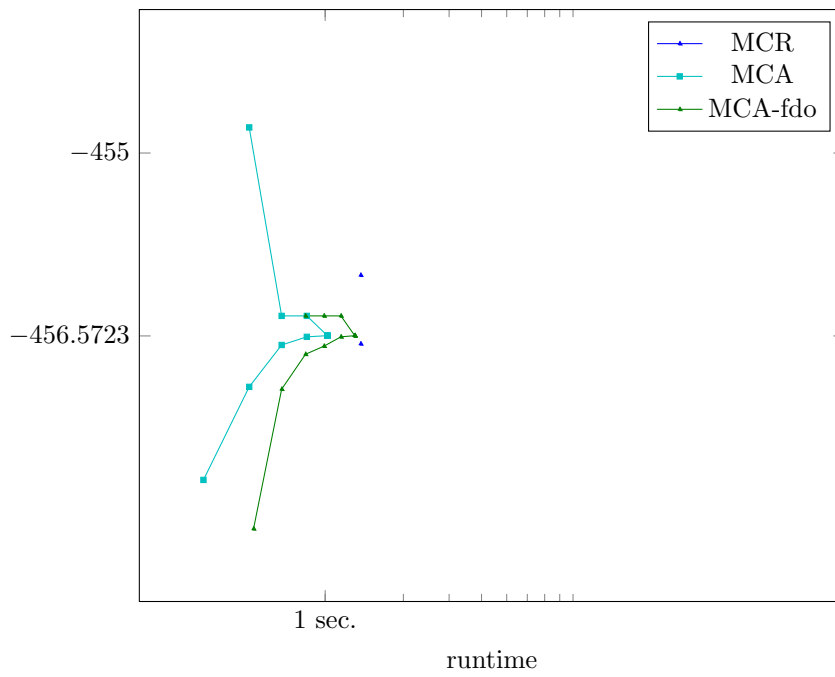


Figure 1660: Runtime results for the instance 3001667 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

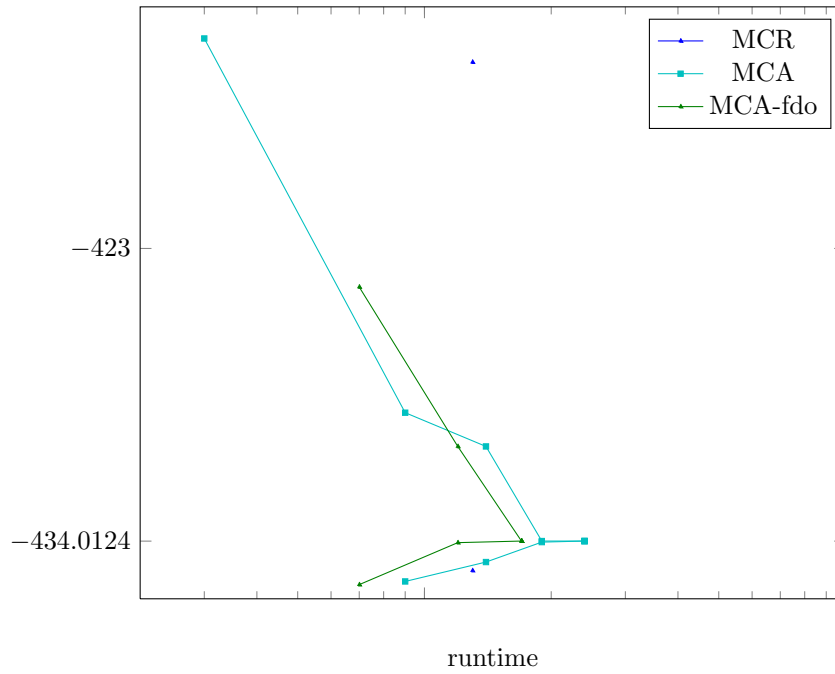


Figure 1661: Runtime results for the instance 3001751 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

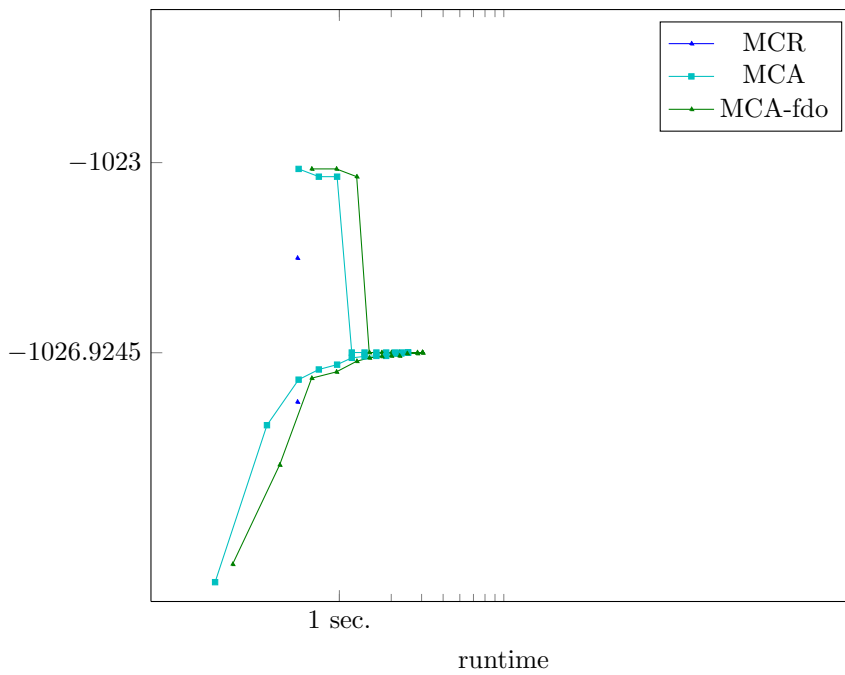


Figure 1662: Runtime results for the instance 3001767 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

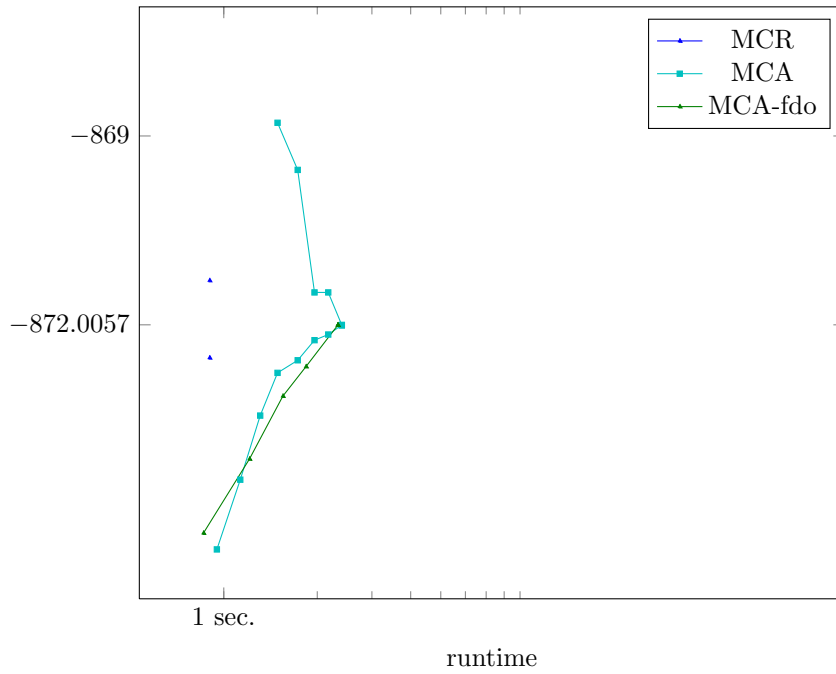


Figure 1663: Runtime results for the instance 3001826 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

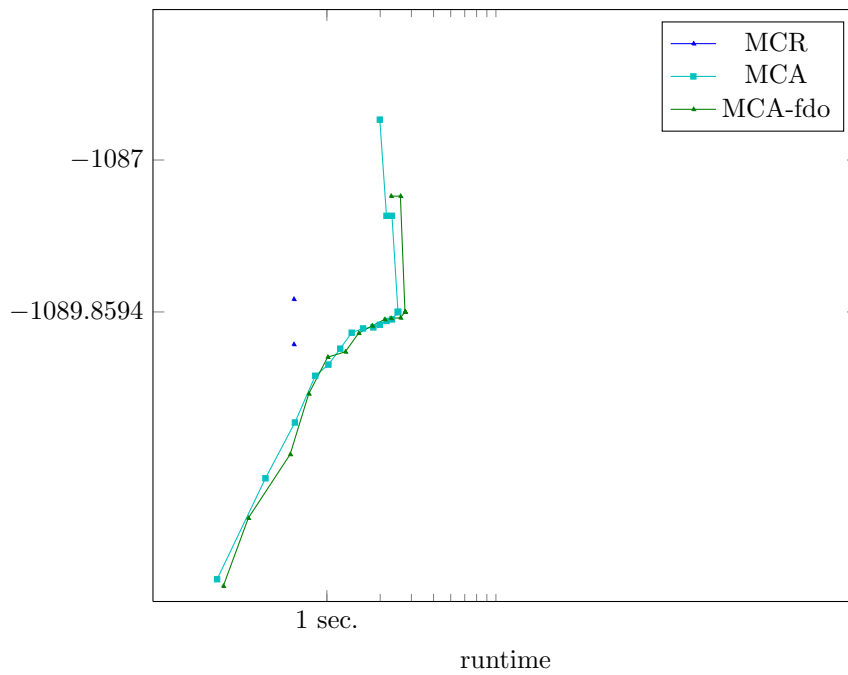


Figure 1664: Runtime results for the instance 3001891 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

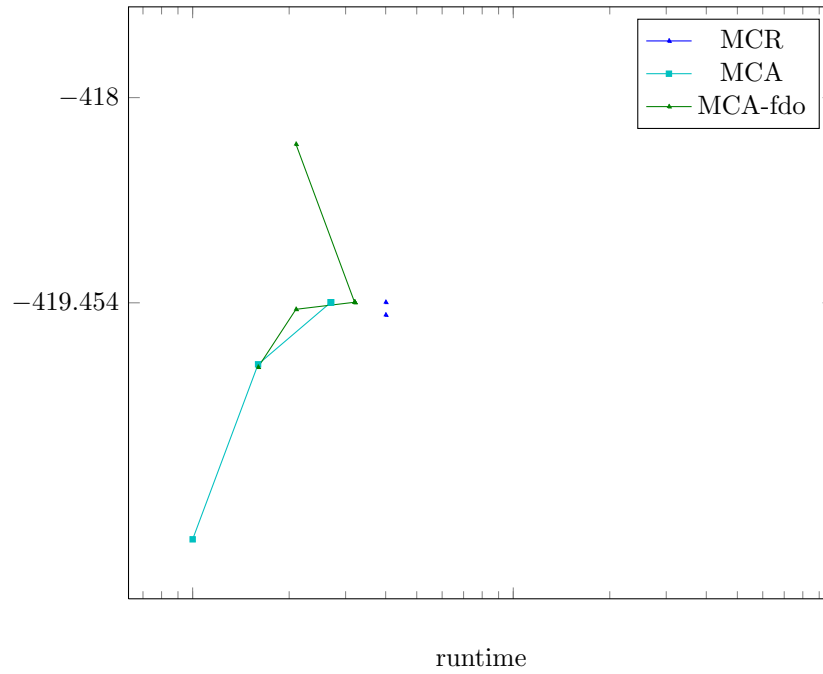


Figure 1665: Runtime results for the instance 3001976 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

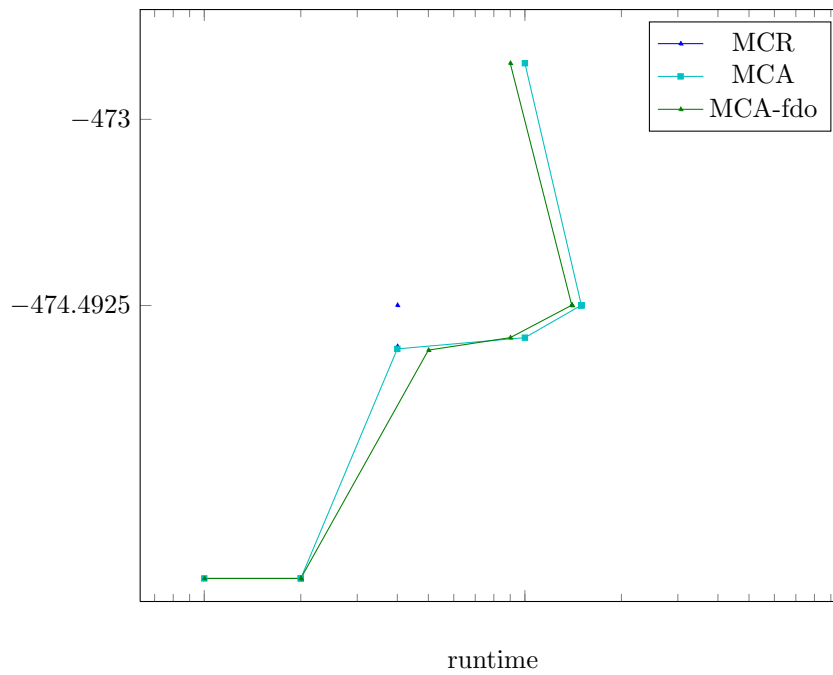


Figure 1666: Runtime results for the instance 3002020 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

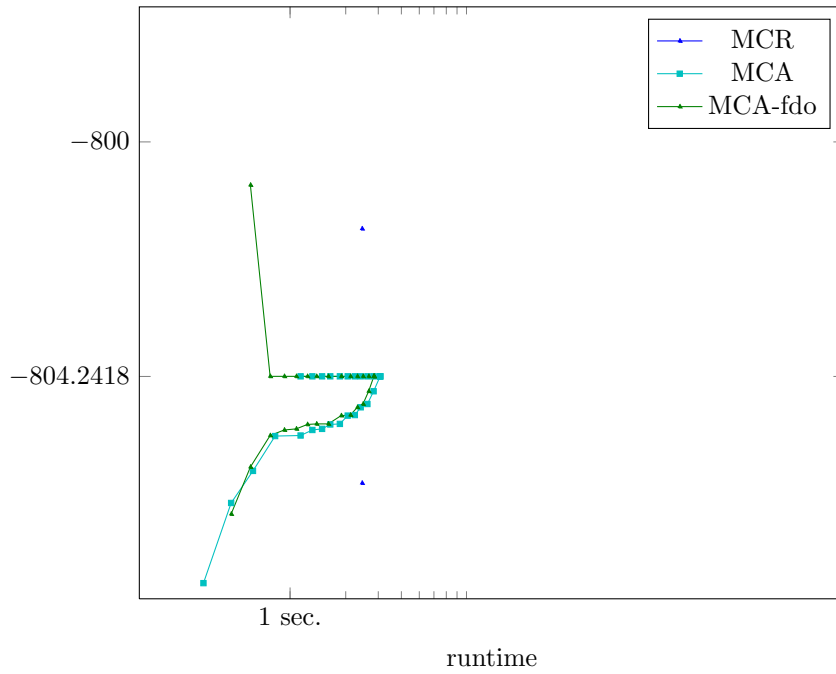


Figure 1667: Runtime results for the instance 3002059 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

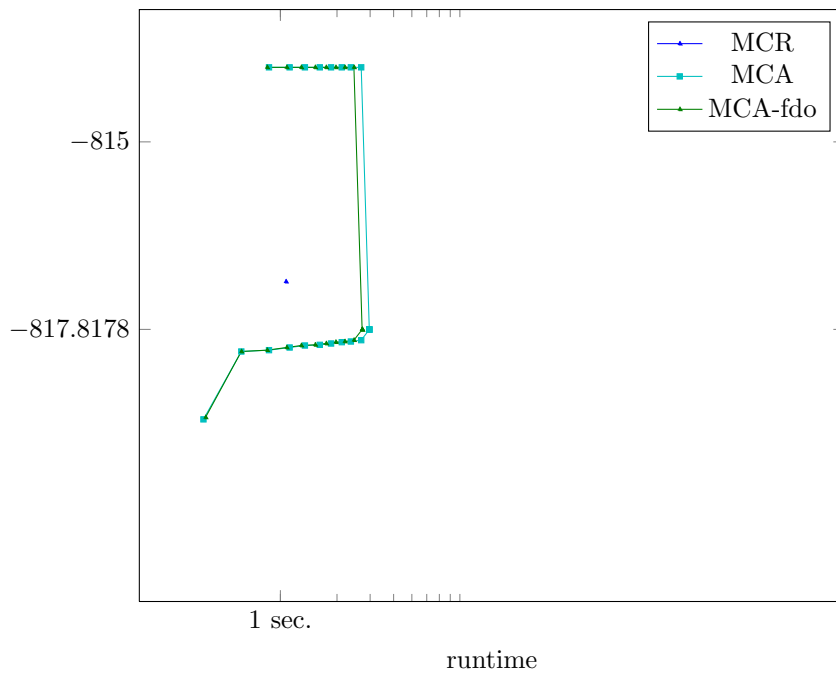


Figure 1668: Runtime results for the instance 3002082 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

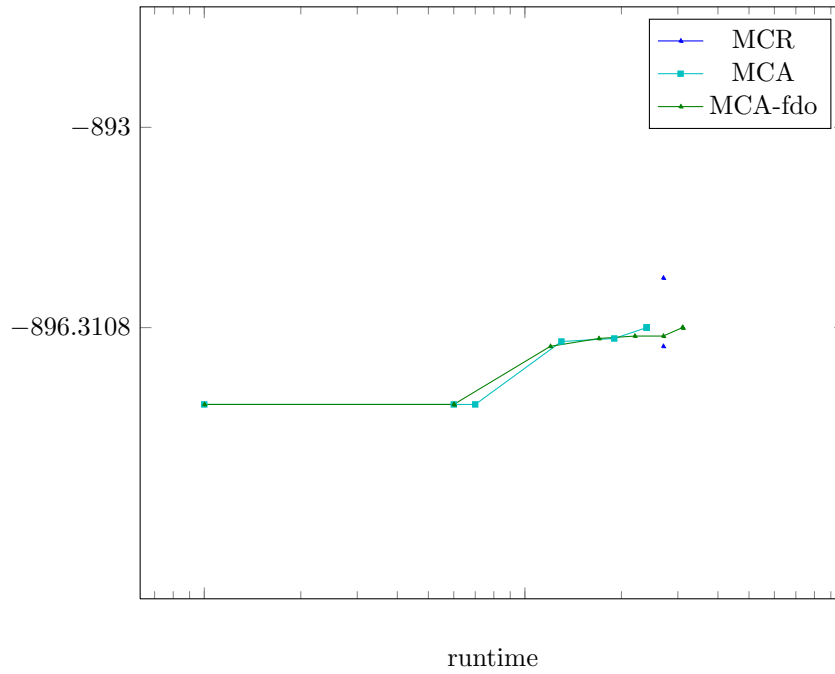


Figure 1669: Runtime results for the instance 3002154 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

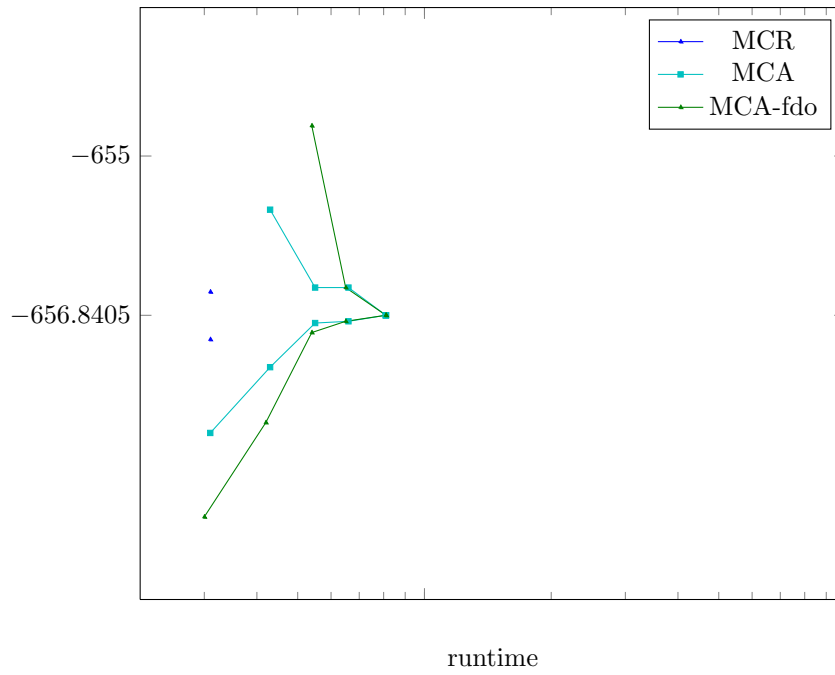


Figure 1670: Runtime results for the instance 3002206 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

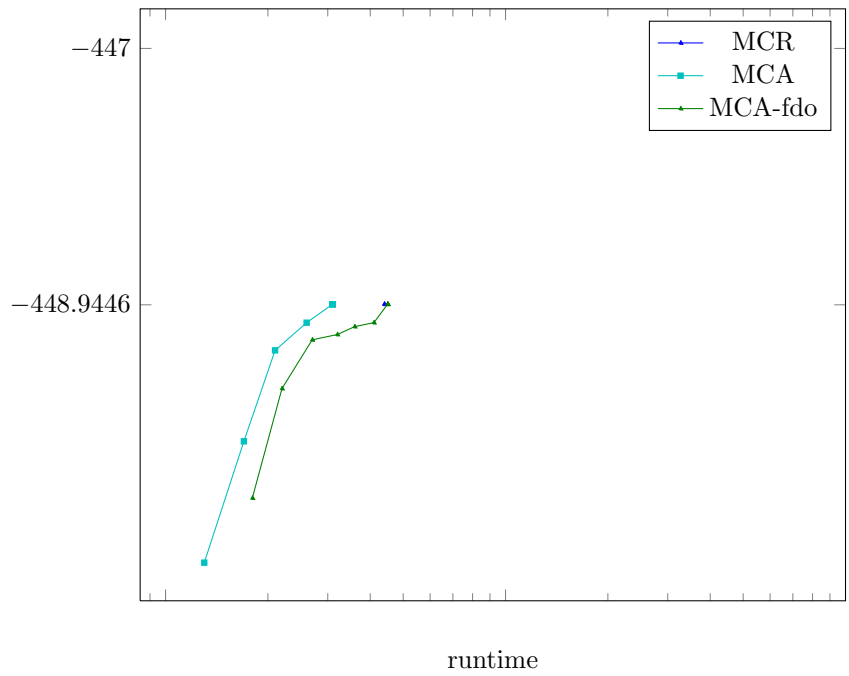


Figure 1671: Runtime results for the instance 3002221 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

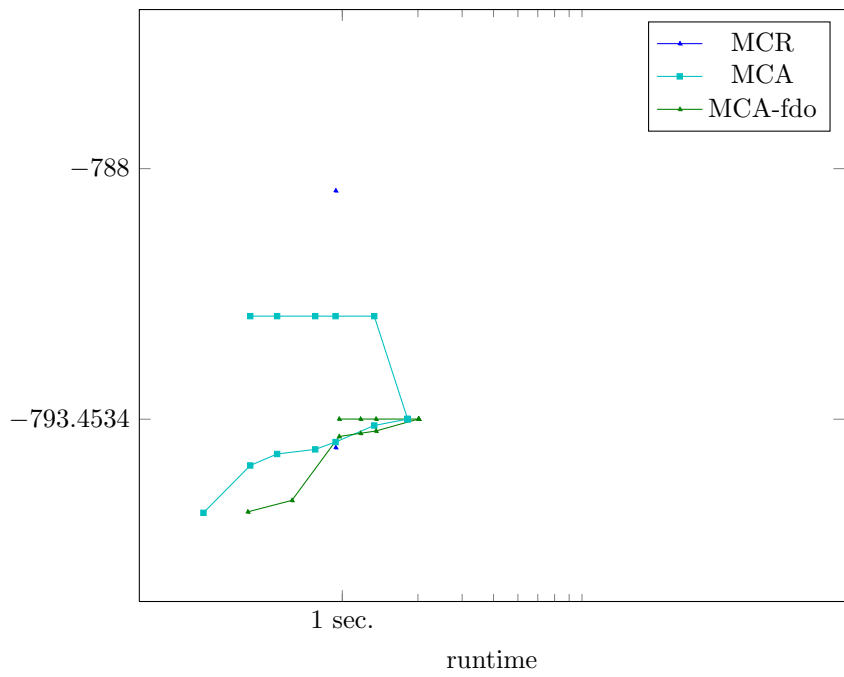


Figure 1672: Runtime results for the instance 3002340 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

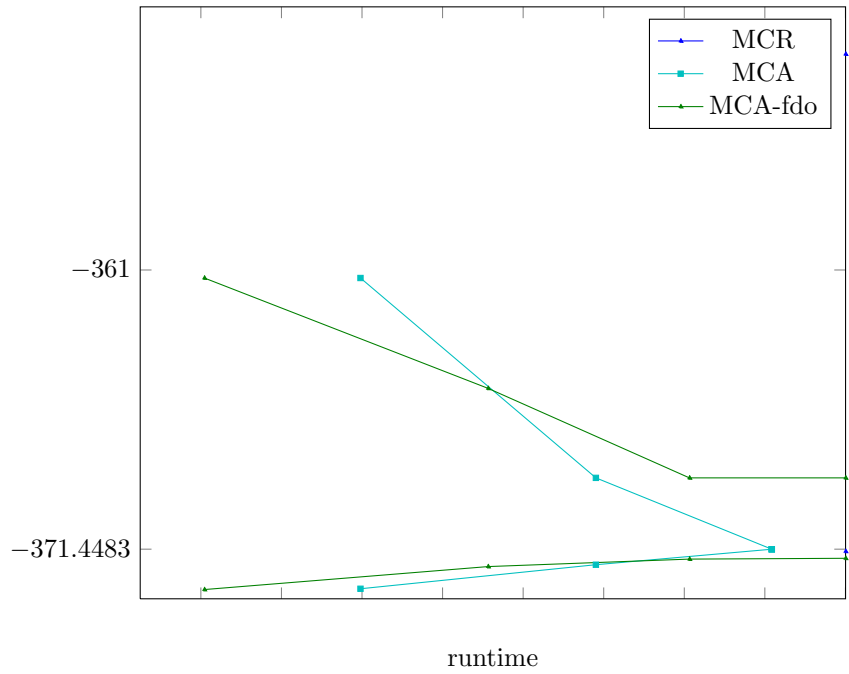
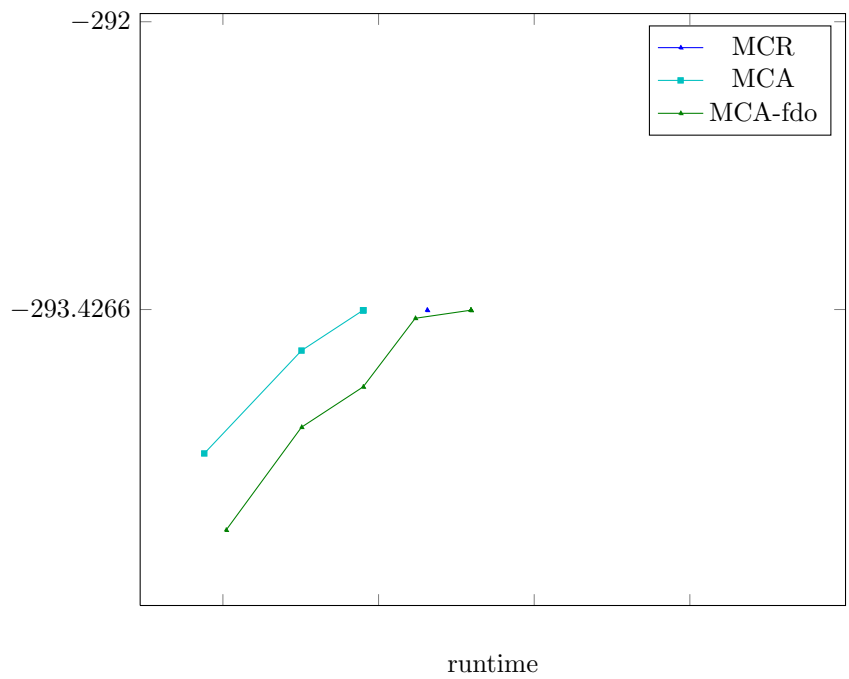


Figure 1673: Runtime results for the instance 3002366 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



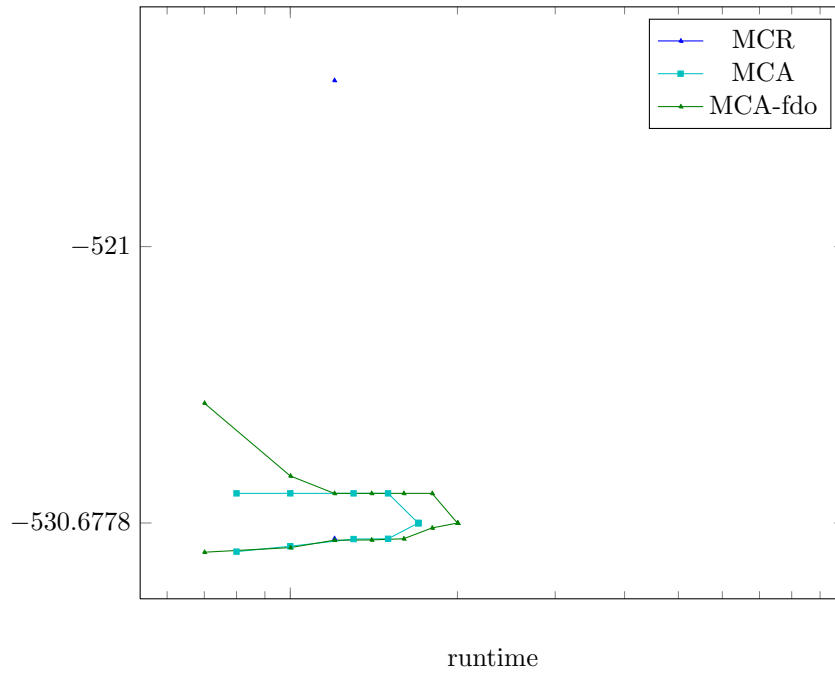


Figure 1675: Runtime results for the instance 3002594 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

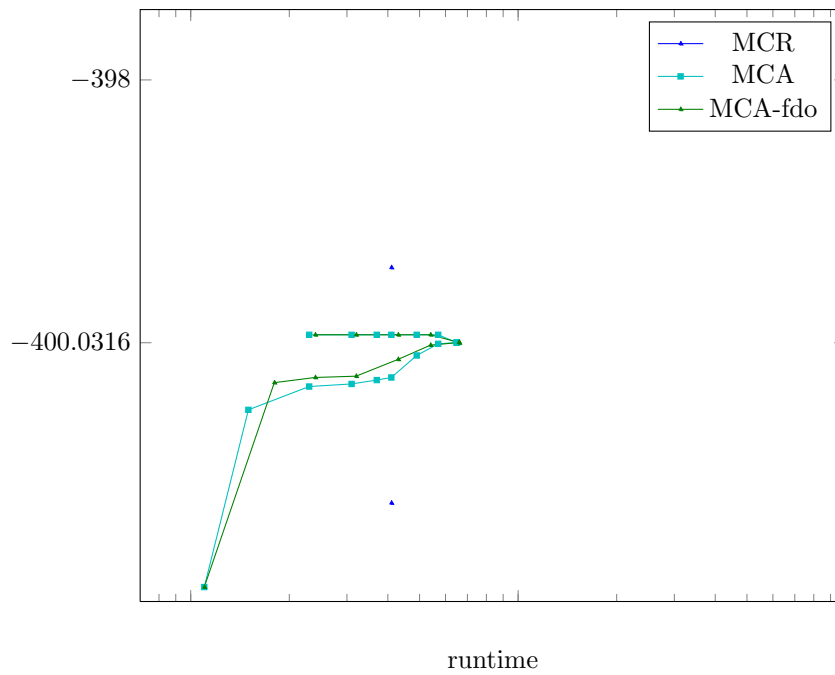


Figure 1676: Runtime results for the instance 3002905 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

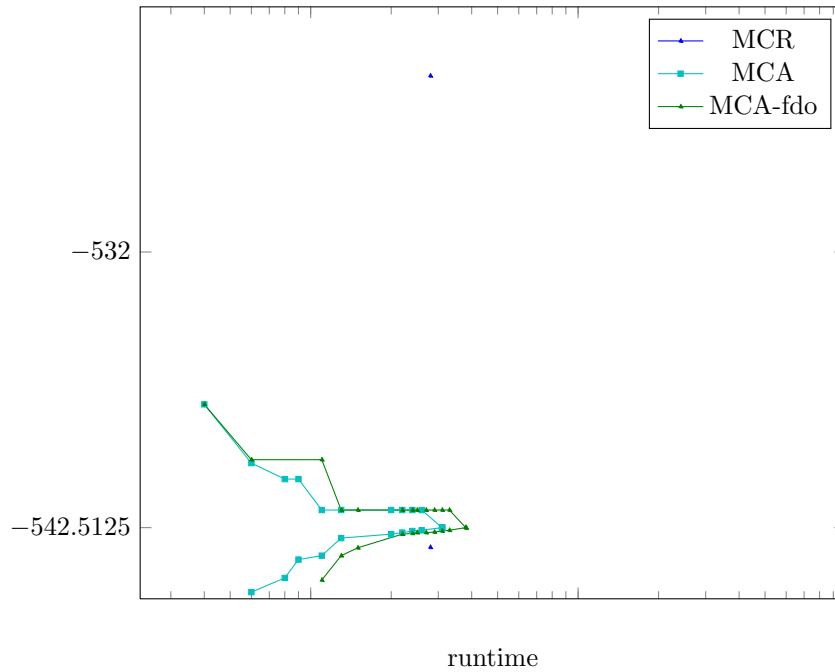


Figure 1677: Runtime results for the instance 3002909 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

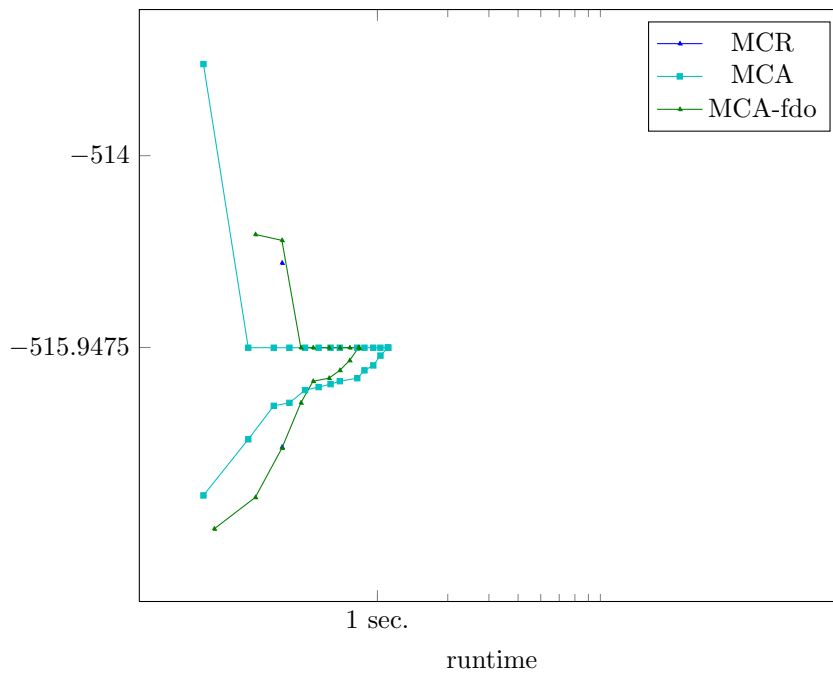


Figure 1678: Runtime results for the instance 3003122 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

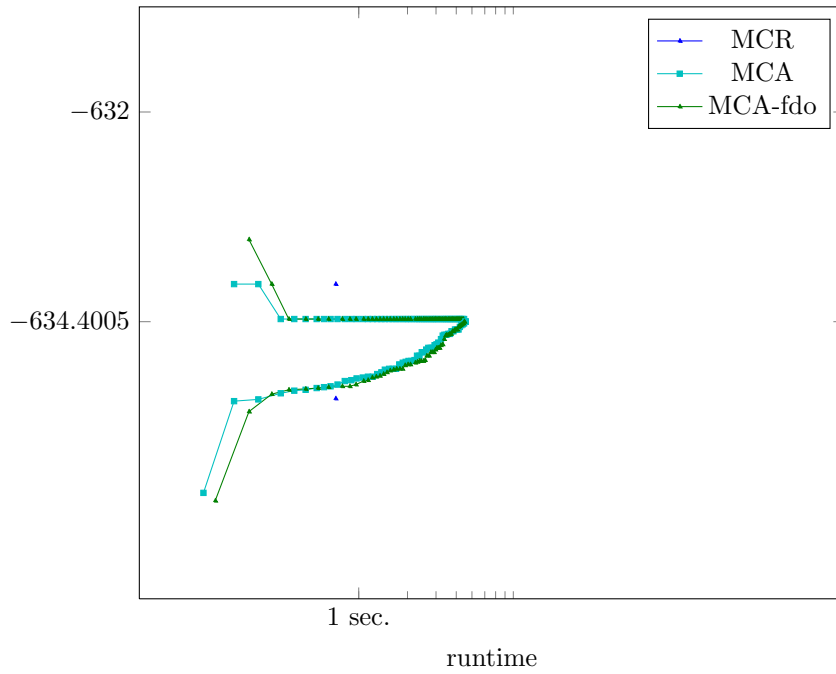


Figure 1681: Runtime results for the instance 3003356 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

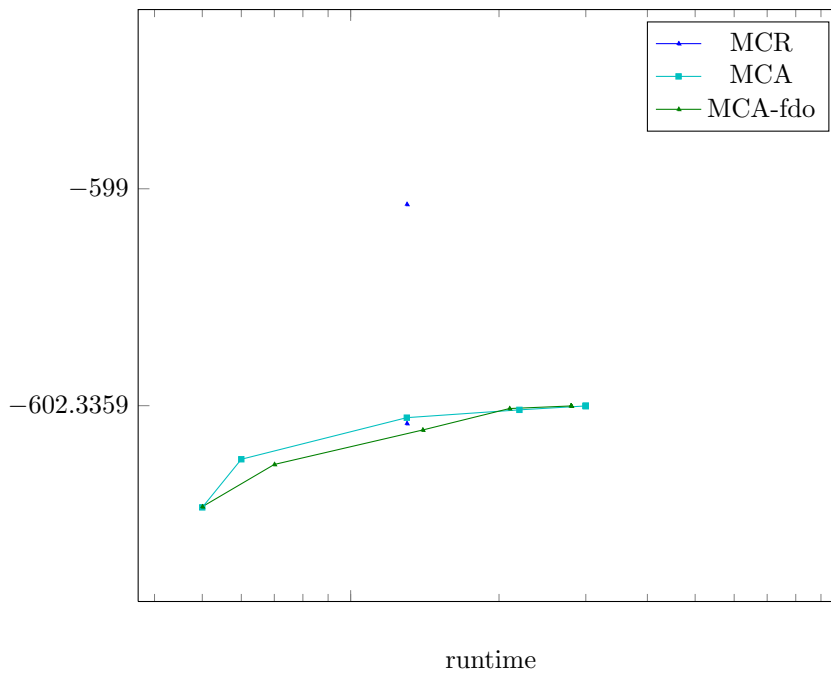


Figure 1682: Runtime results for the instance 3003448 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

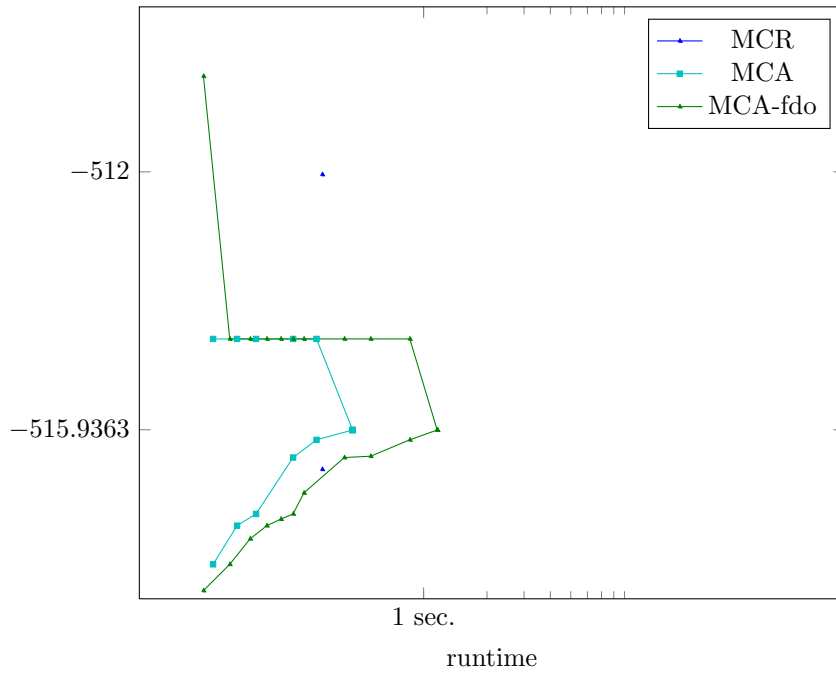


Figure 1685: Runtime results for the instance 3003817 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

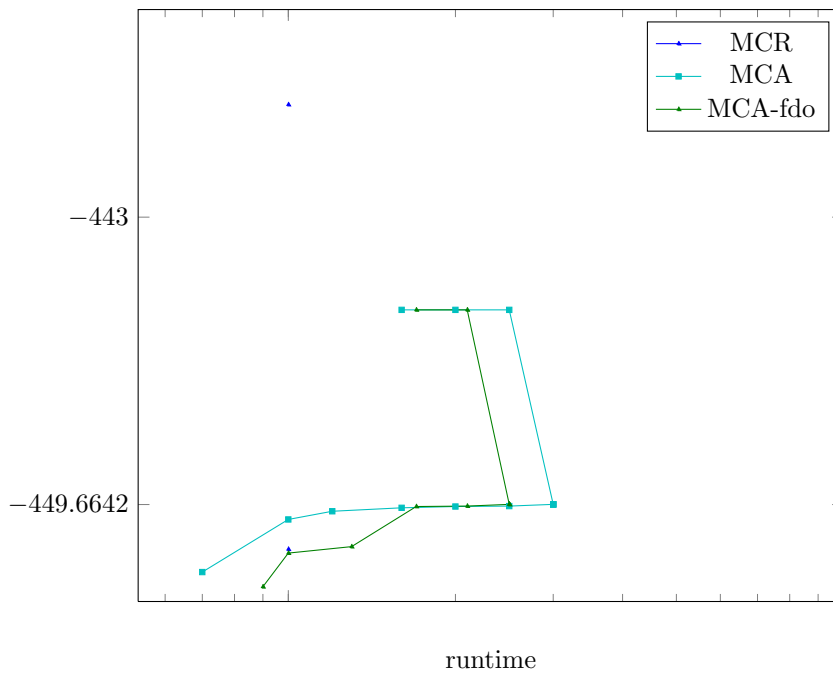


Figure 1686: Runtime results for the instance 4000066 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

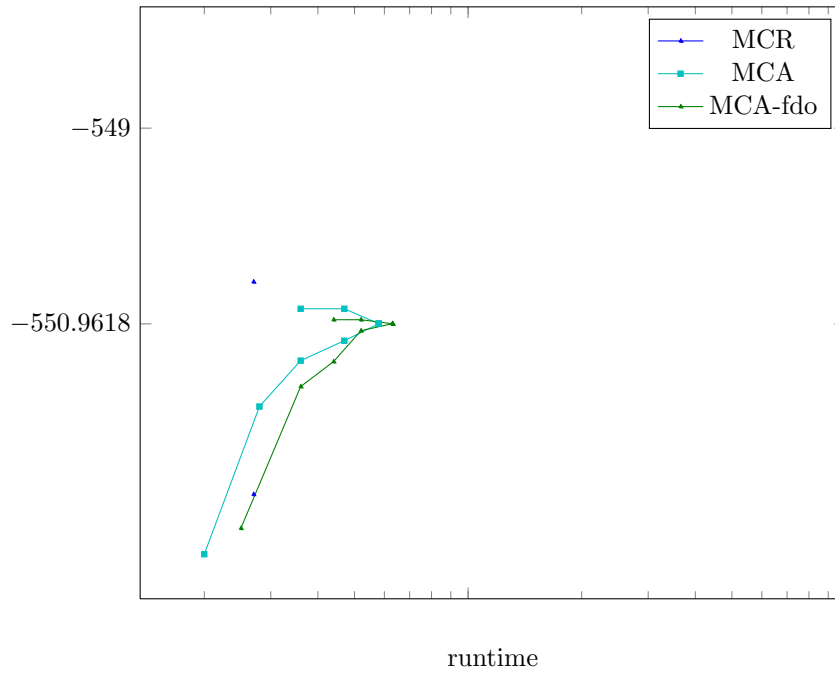


Figure 1687: Runtime results for the instance 4000086 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

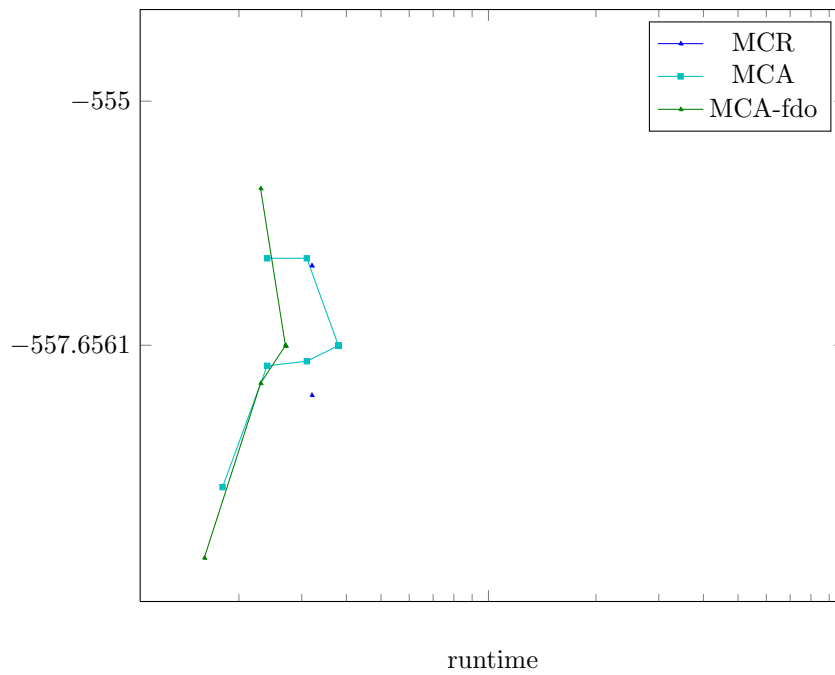


Figure 1688: Runtime results for the instance 4100066 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

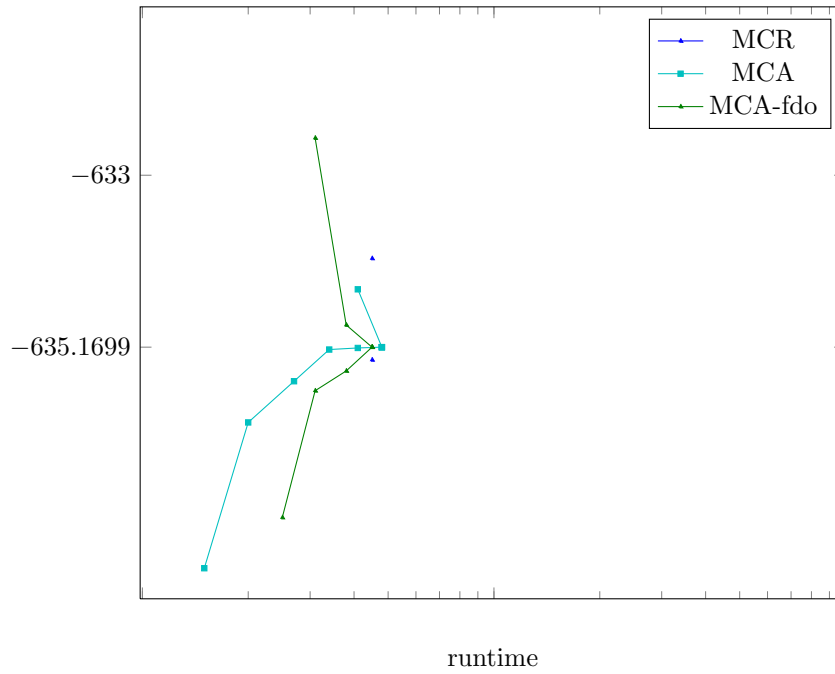


Figure 1689: Runtime results for the instance 4100246 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

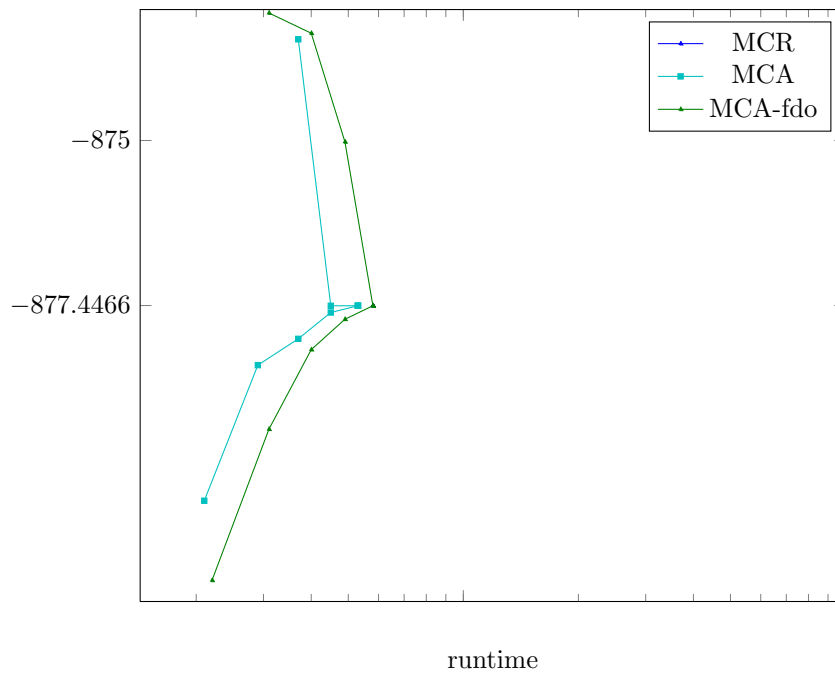


Figure 1690: Runtime results for the instance 4100280 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

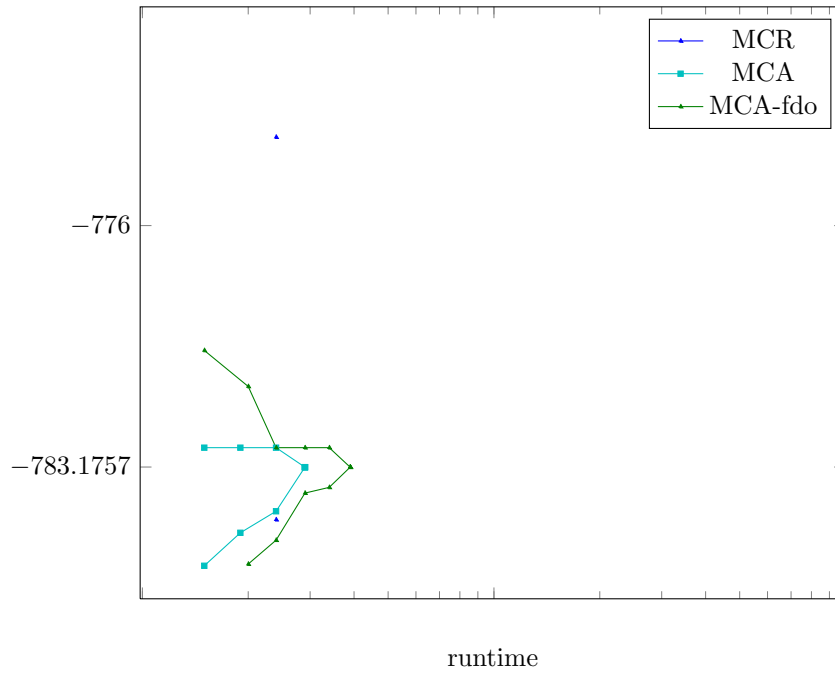


Figure 1691: Runtime results for the instance 5000016 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

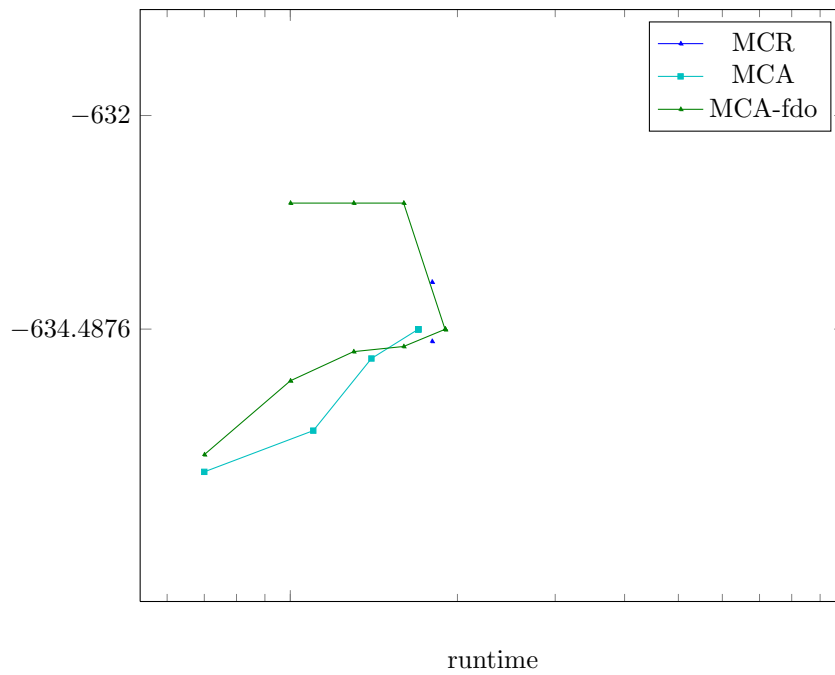


Figure 1692: Runtime results for the instance 5000119 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

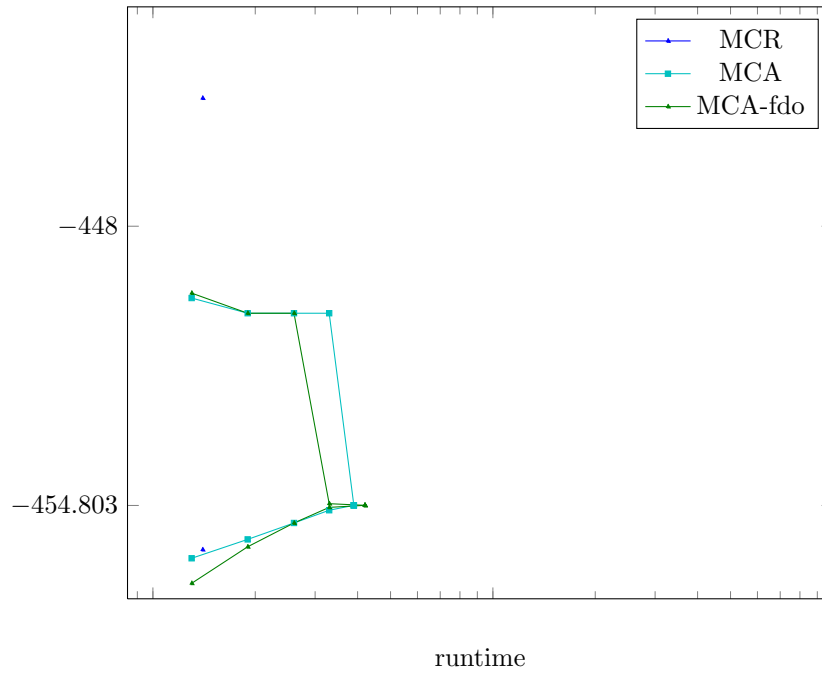


Figure 1693: Runtime results for the instance 5000120 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

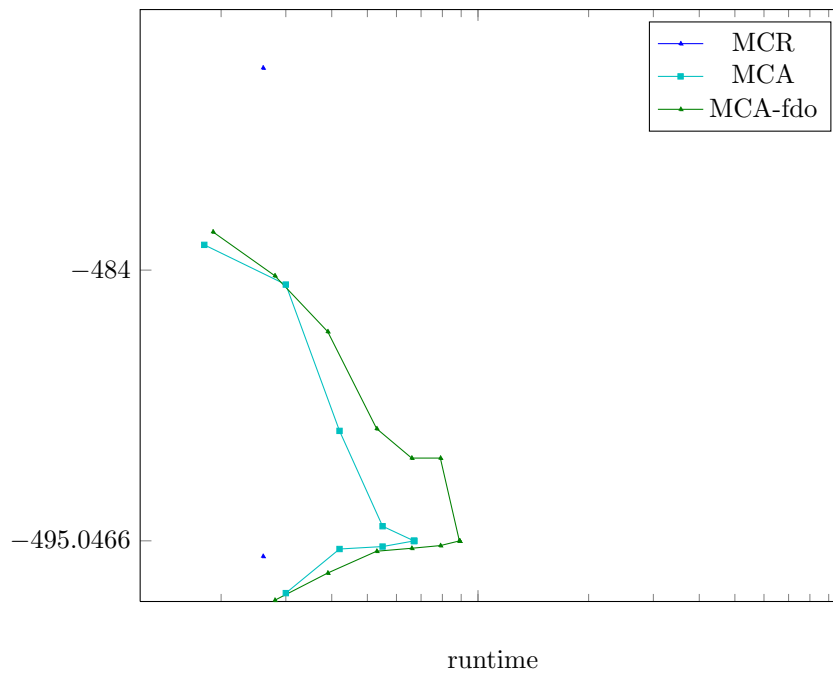


Figure 1694: Runtime results for the instance 5000121 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

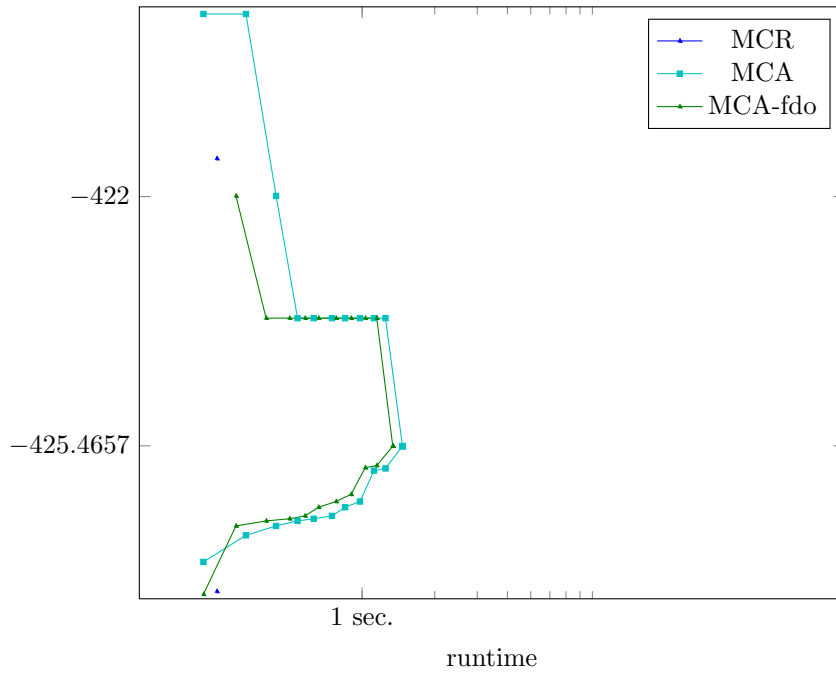


Figure 1695: Runtime results for the instance 5000122 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

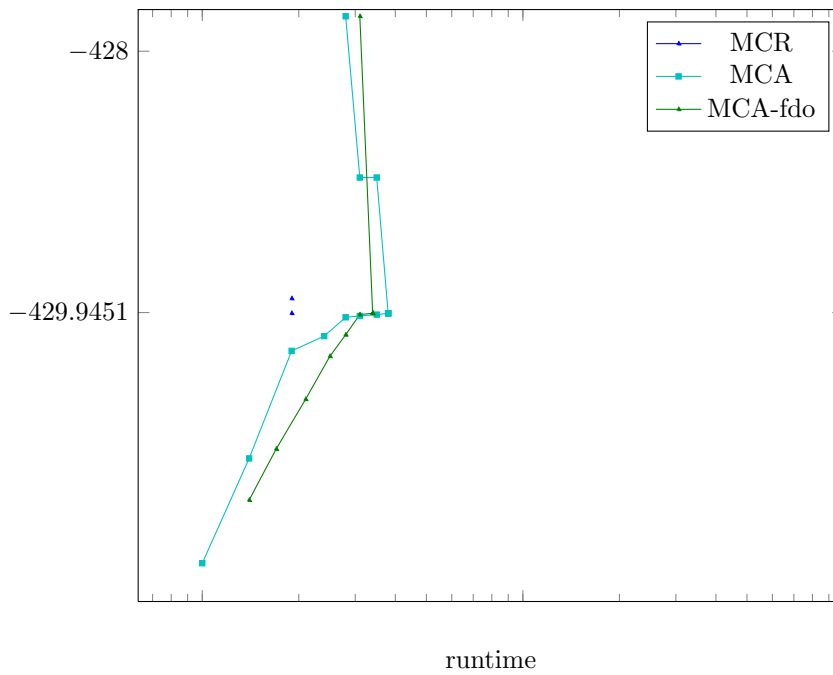


Figure 1696: Runtime results for the instance 5000123 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

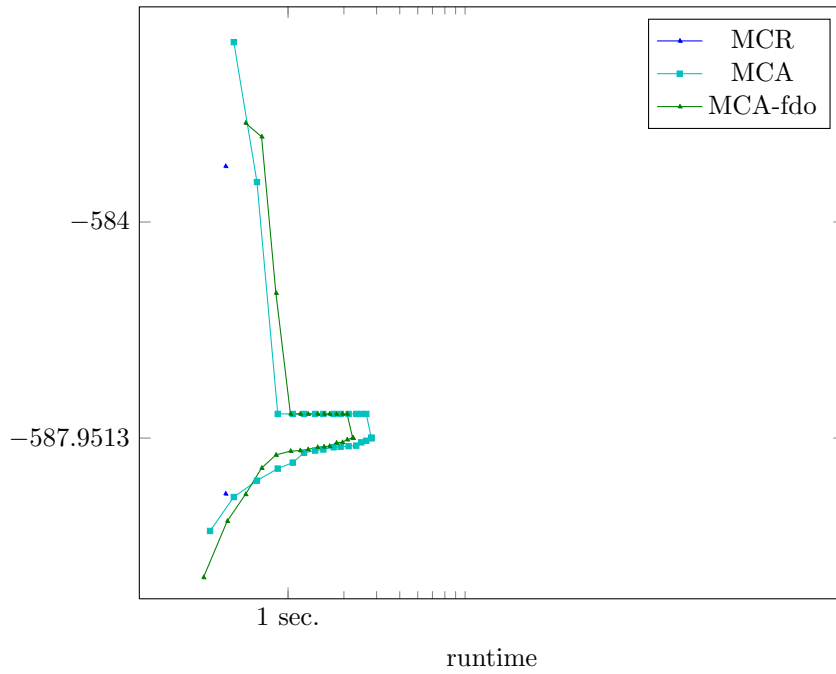


Figure 1697: Runtime results for the instance 5000124 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

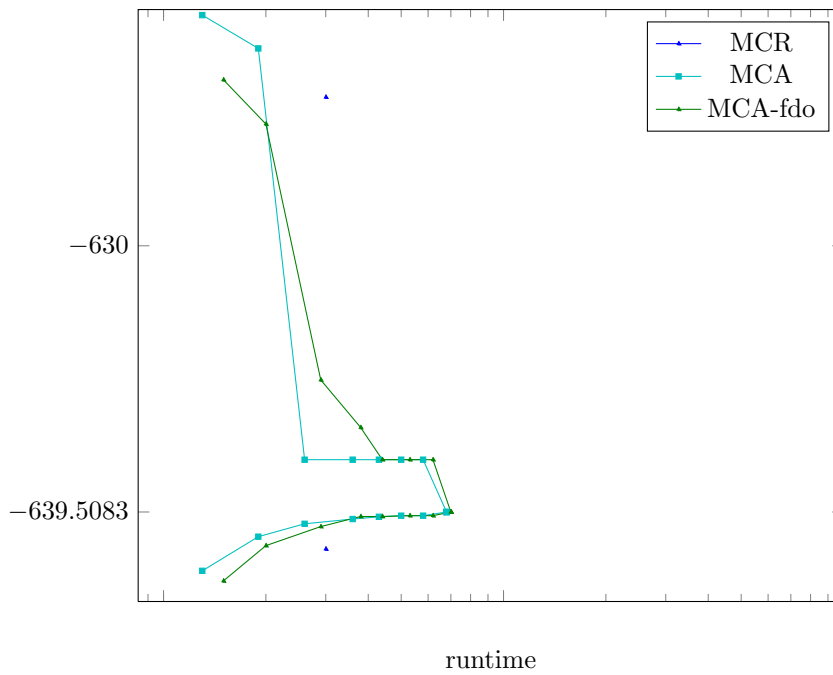


Figure 1698: Runtime results for the instance 5000125 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

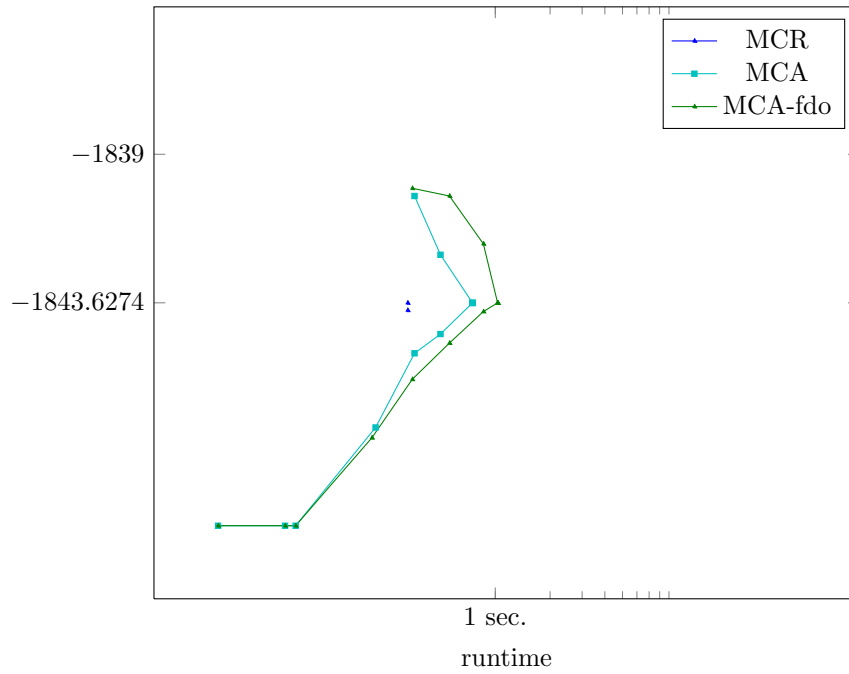


Figure 1699: Runtime results for the instance 5000126 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

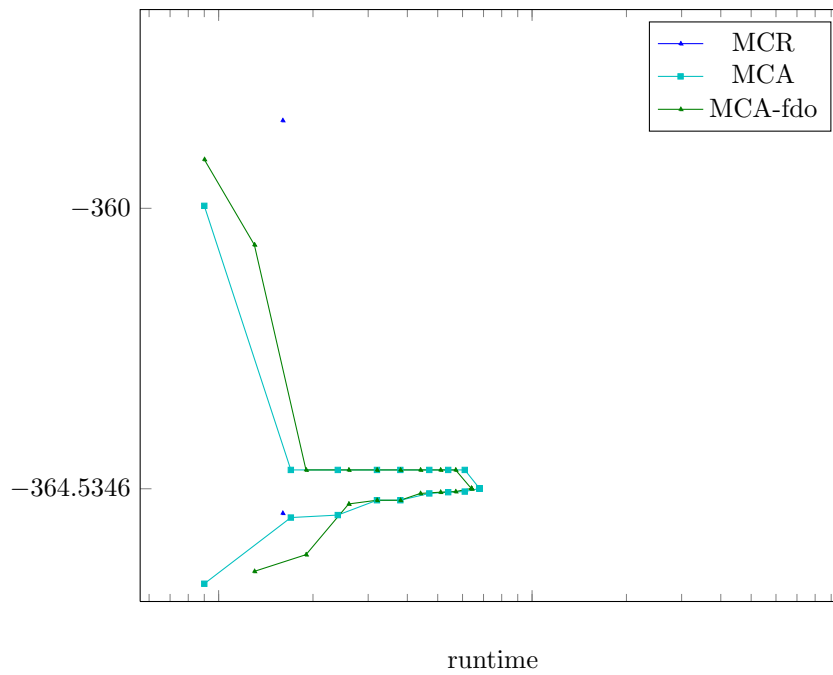


Figure 1700: Runtime results for the instance 5000127 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

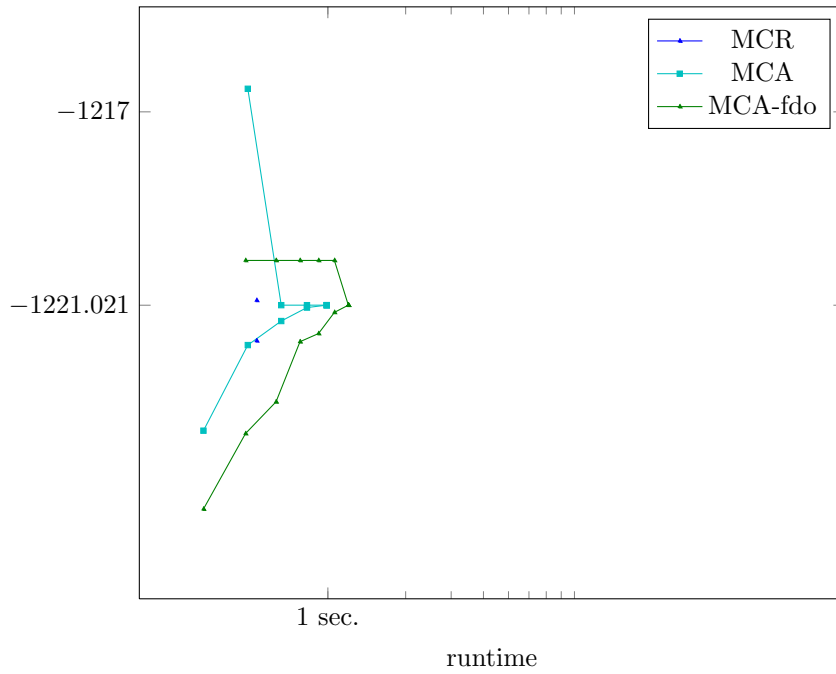


Figure 1701: Runtime results for the instance 5000128 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

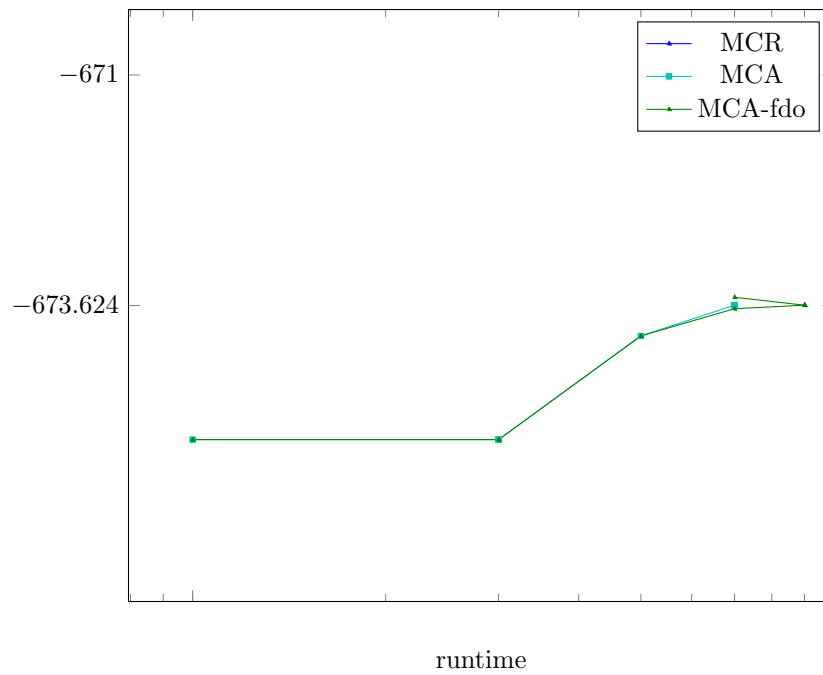


Figure 1702: Runtime results for the instance 5000129 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

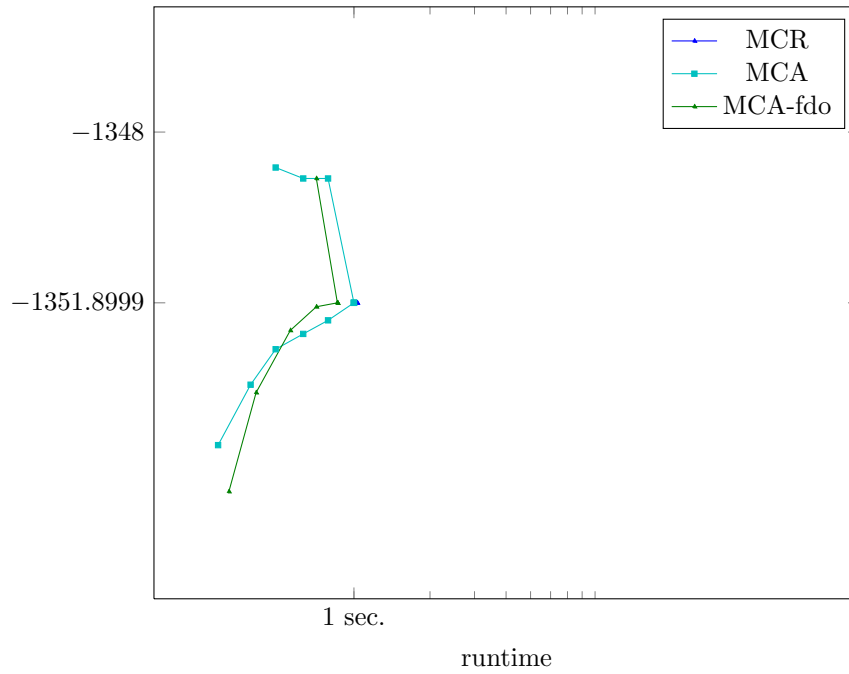


Figure 1703: Runtime results for the instance 5000130 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

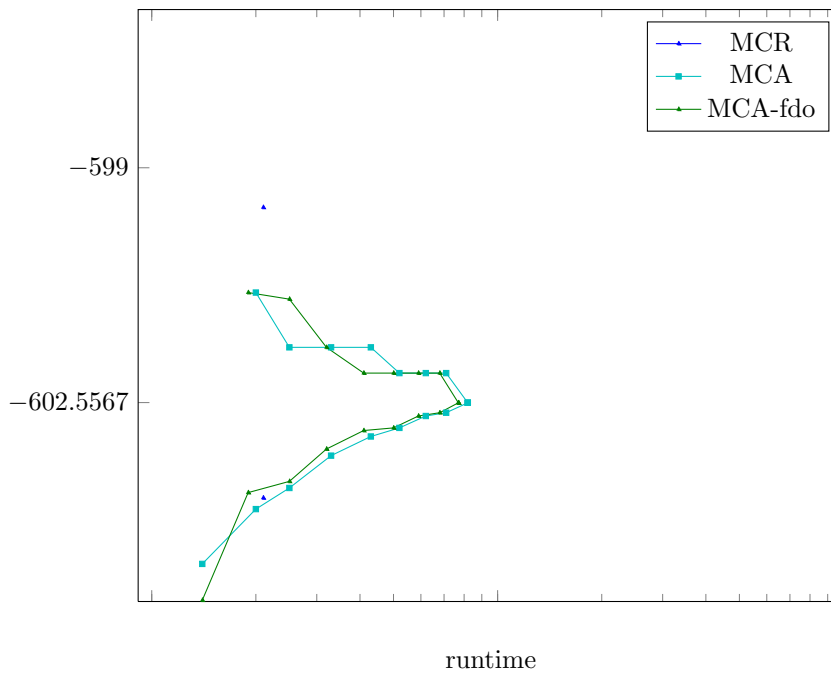


Figure 1704: Runtime results for the instance 5000131 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

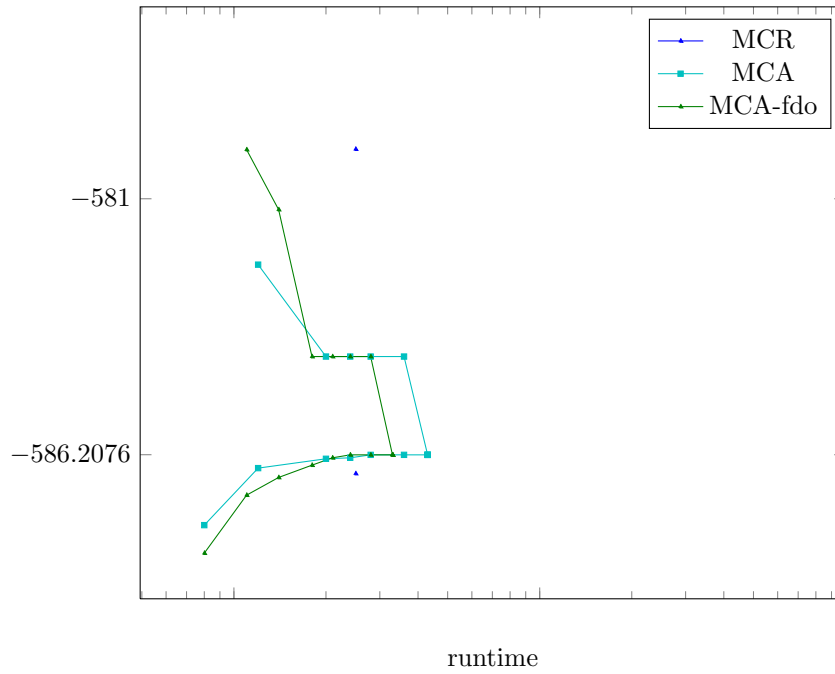


Figure 1705: Runtime results for the instance 5000132 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

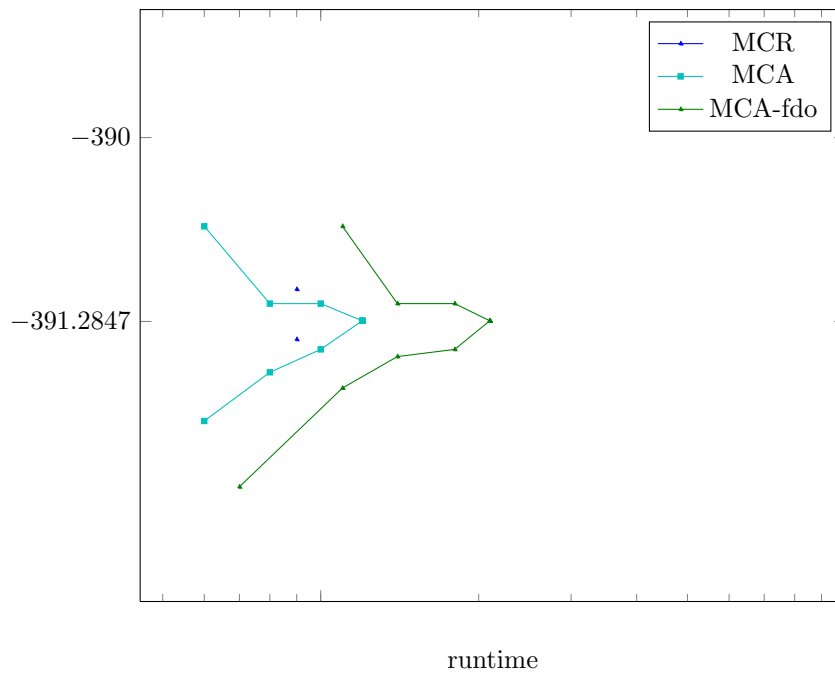


Figure 1706: Runtime results for the instance 5000133 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

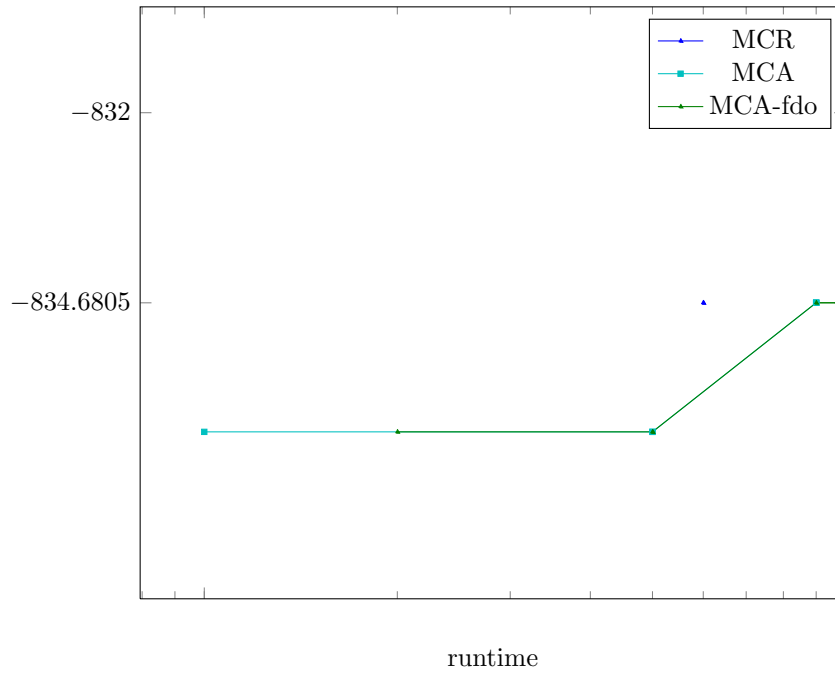


Figure 1707: Runtime results for the instance 5000137 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

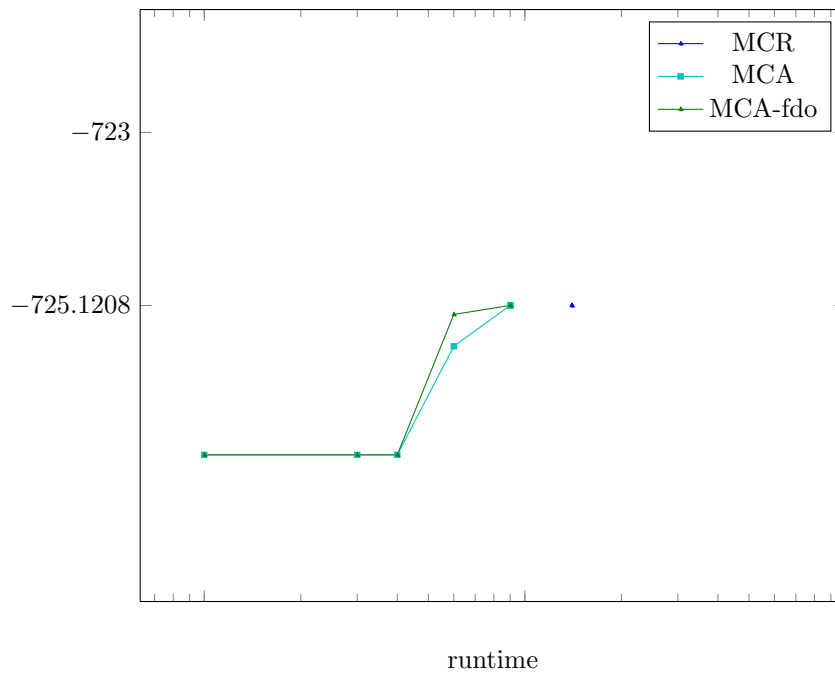


Figure 1708: Runtime results for the instance 5000144 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

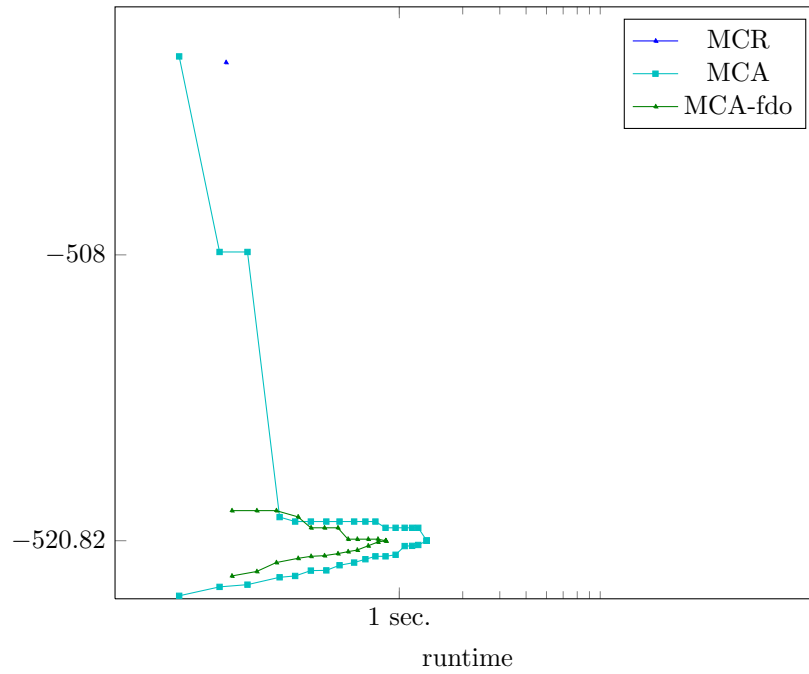


Figure 1709: Runtime results for the instance 5000147 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

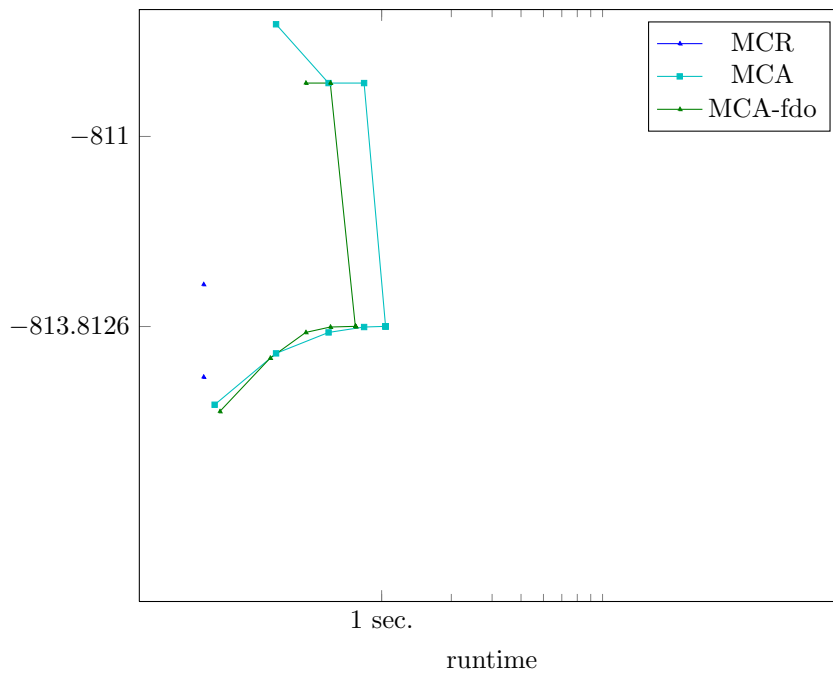


Figure 1710: Runtime results for the instance 5000149 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

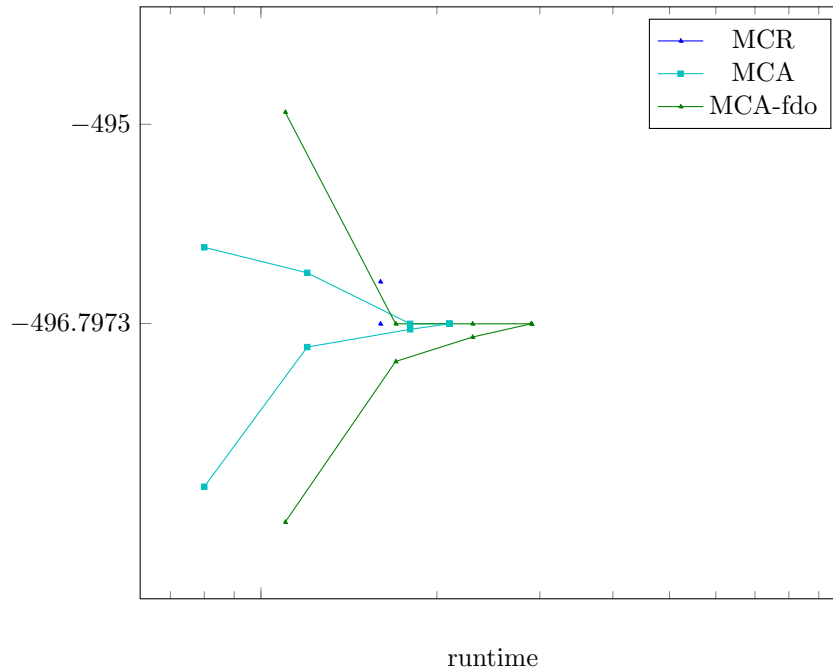


Figure 1711: Runtime results for the instance 5000150 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

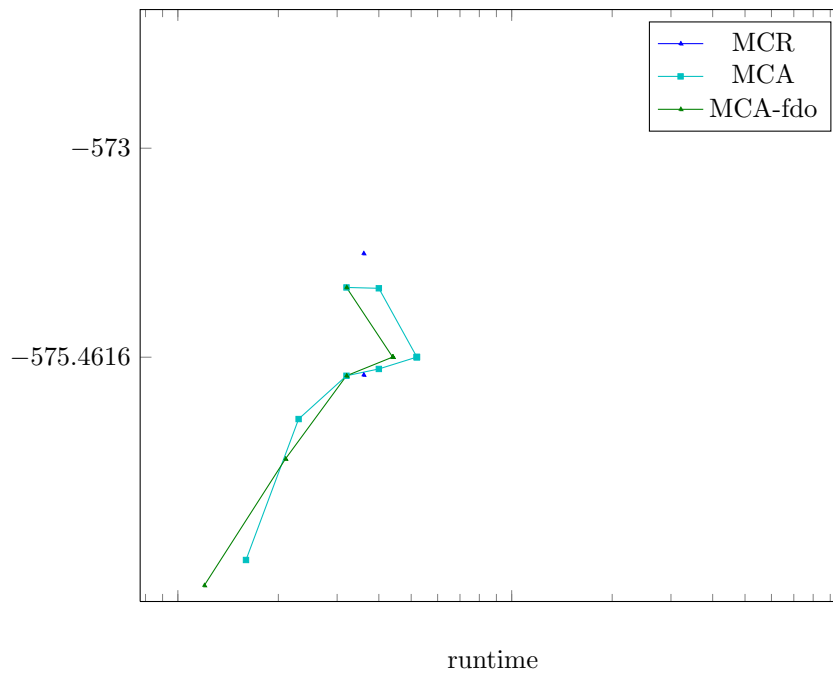


Figure 1712: Runtime results for the instance 5000162 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

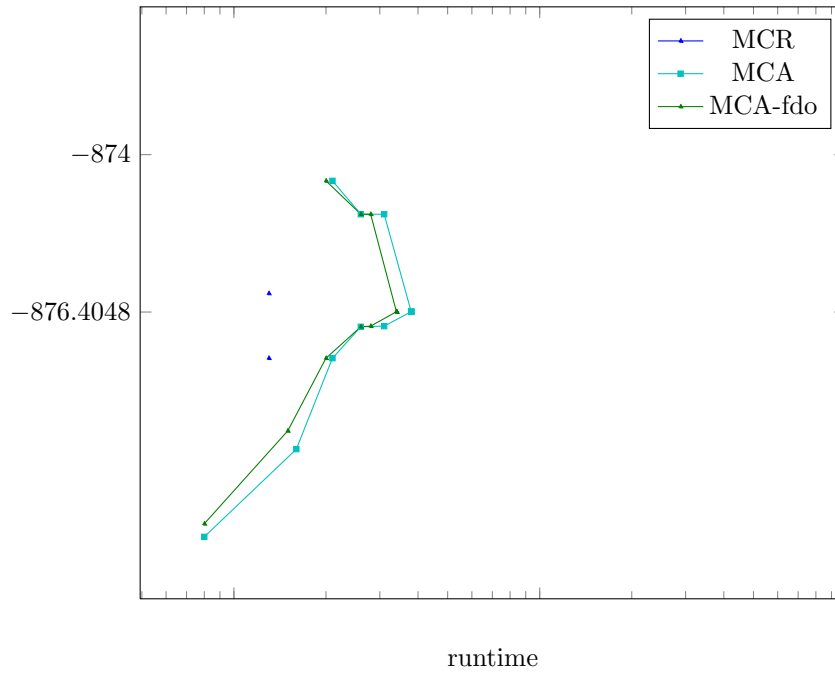


Figure 1713: Runtime results for the instance 5000163 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

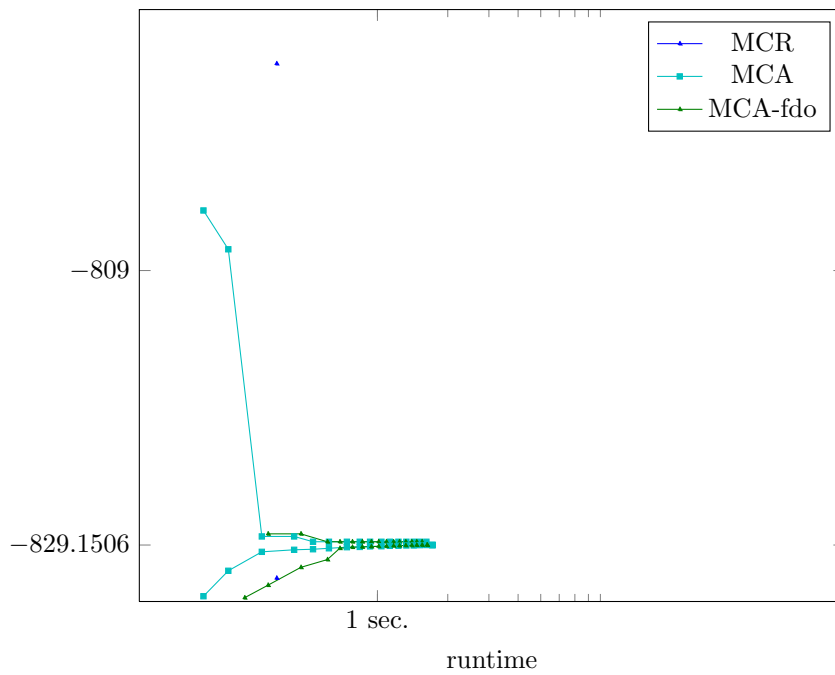


Figure 1714: Runtime results for the instance 5000164 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

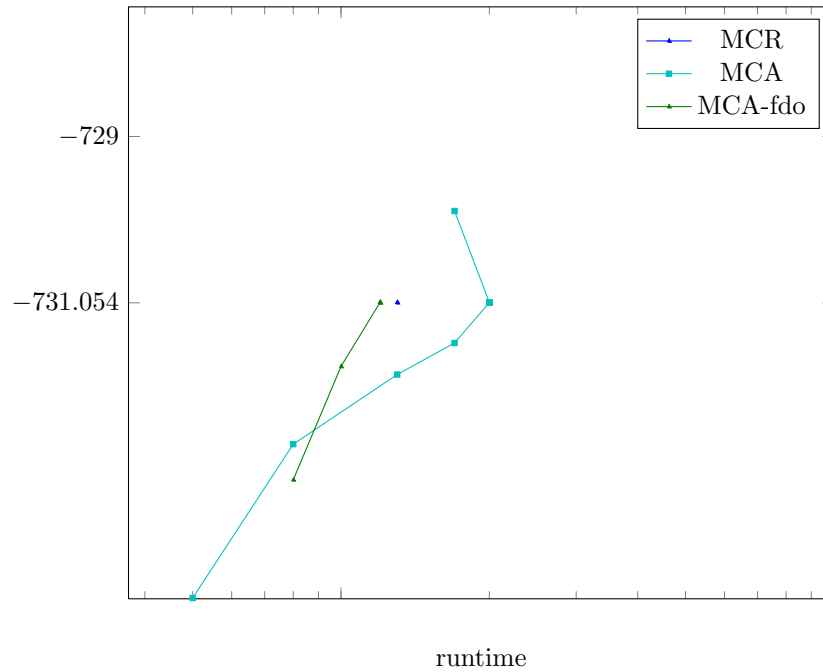
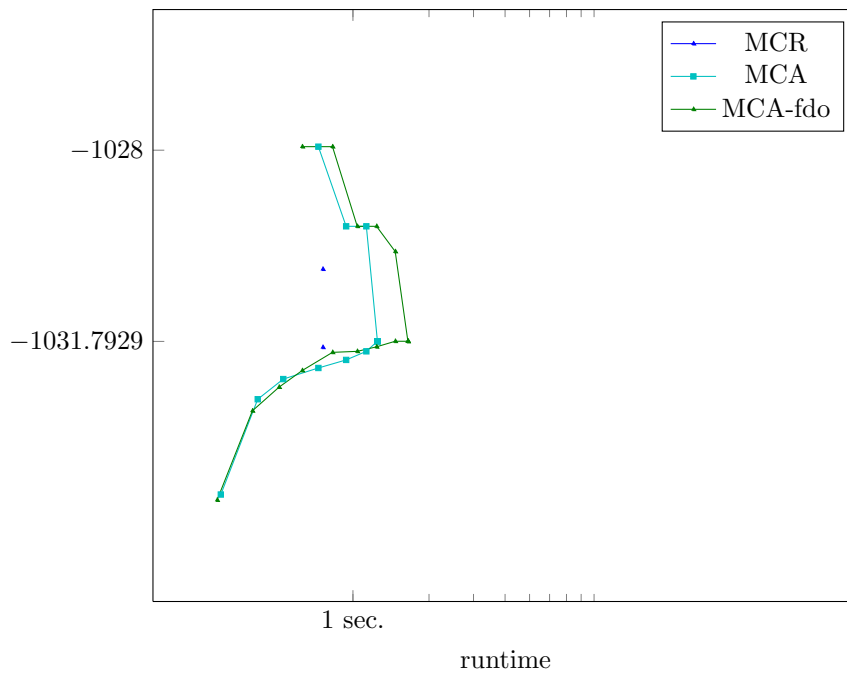


Figure 1715: Runtime results for the instance 5000165 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



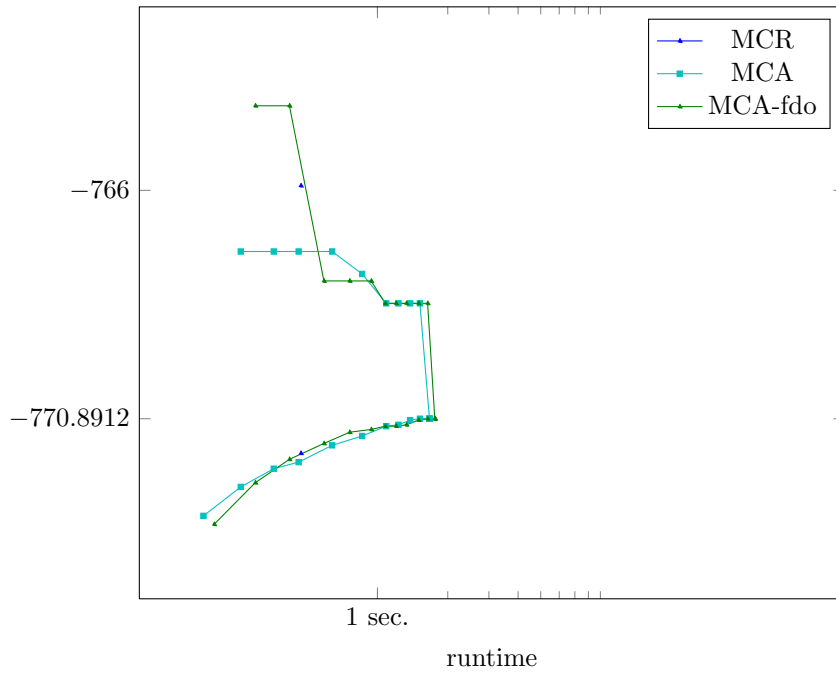


Figure 1717: Runtime results for the instance 5000168 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

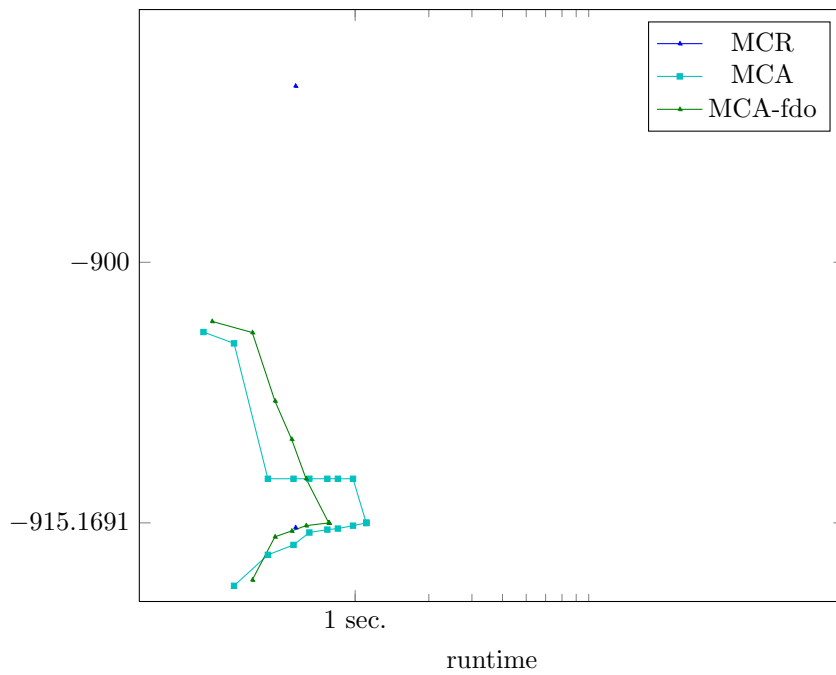


Figure 1718: Runtime results for the instance 5000172 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

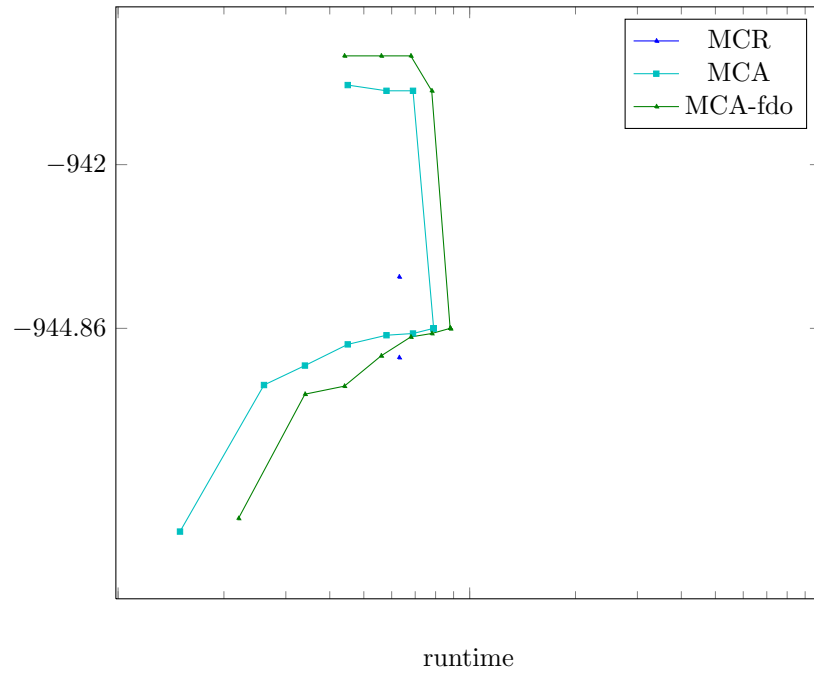


Figure 1721: Runtime results for the instance 5000175 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

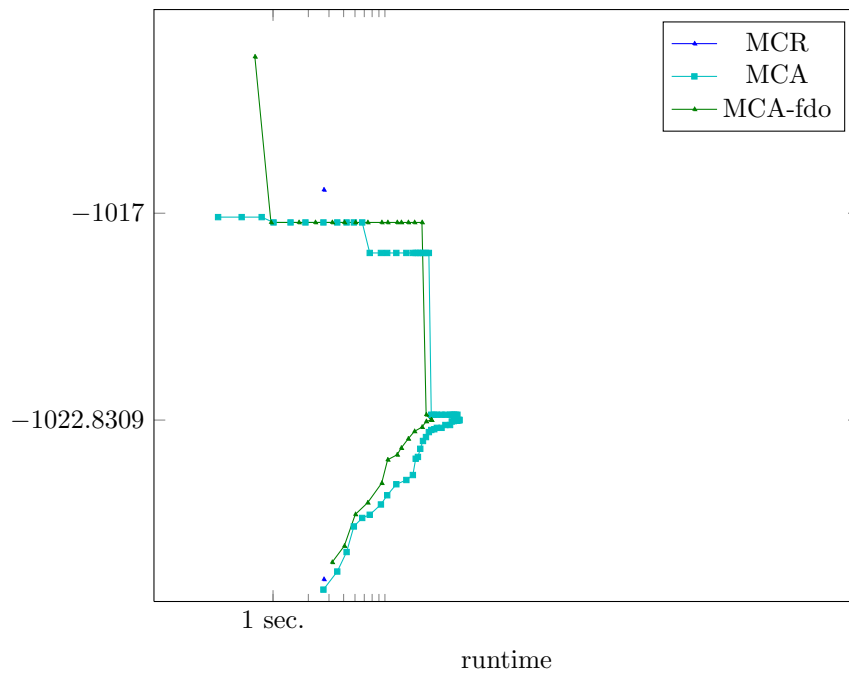


Figure 1722: Runtime results for the instance 5000176 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

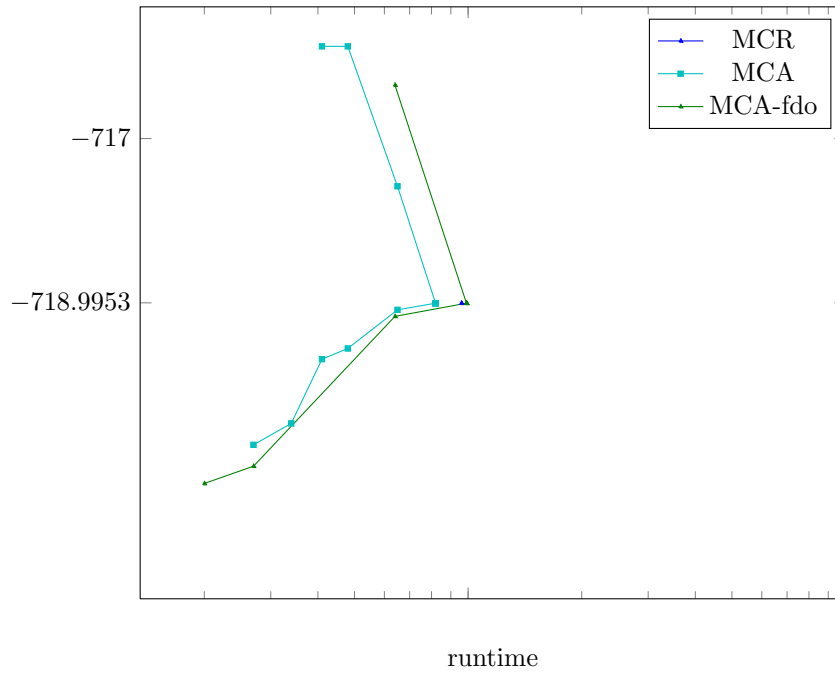
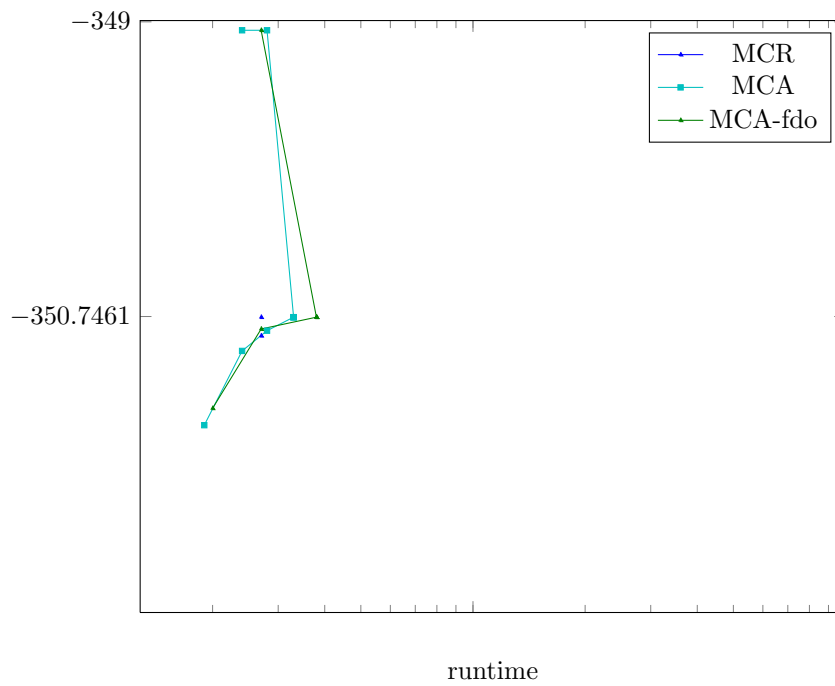


Figure 1723: Runtime results for the instance 5000180 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



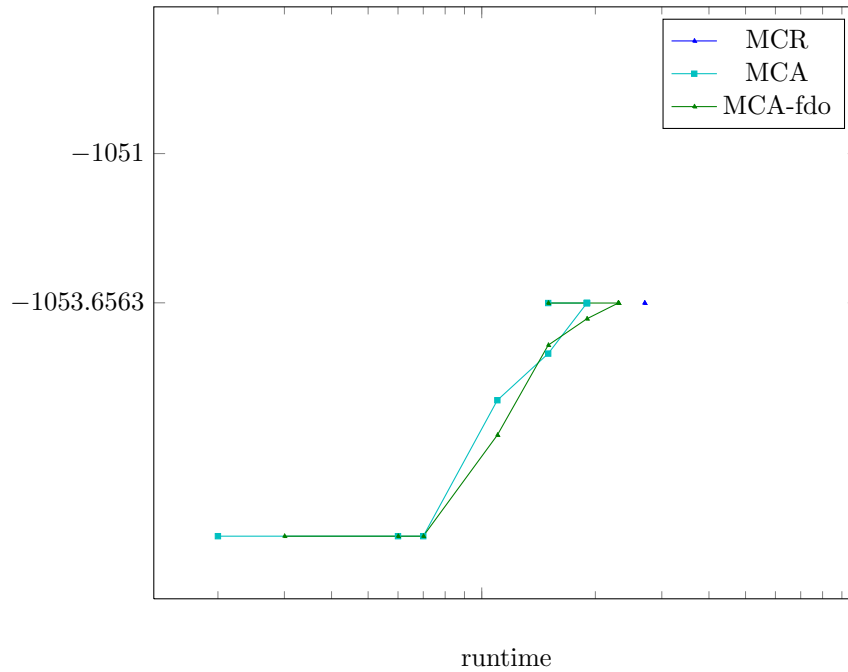
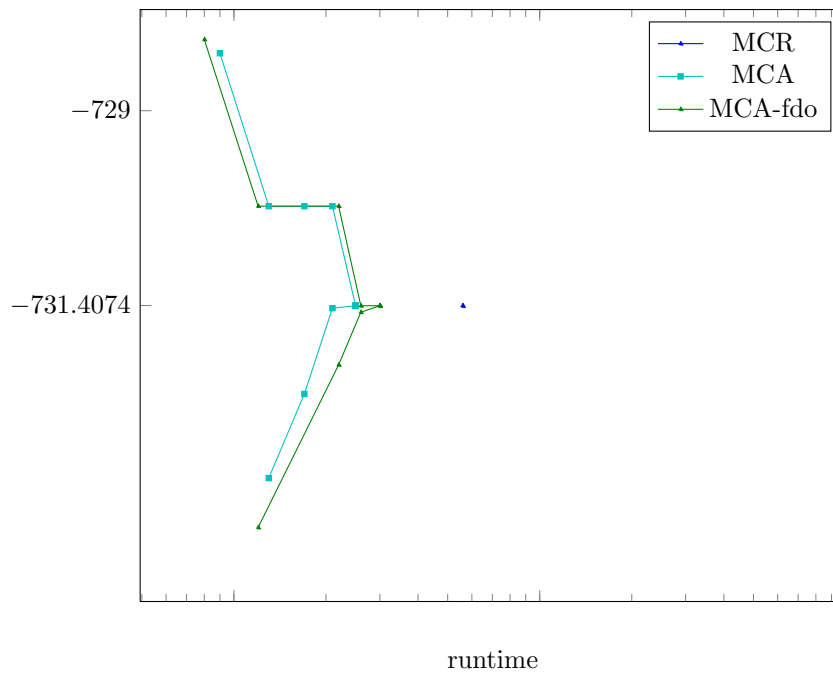


Figure 1725: Runtime results for the instance 5000182 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



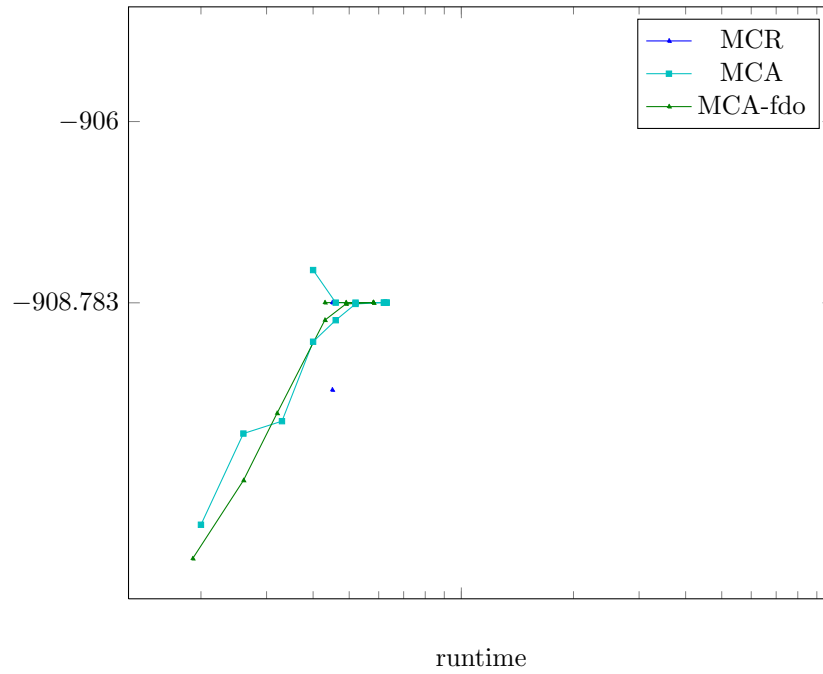


Figure 1727: Runtime results for the instance 5000184 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

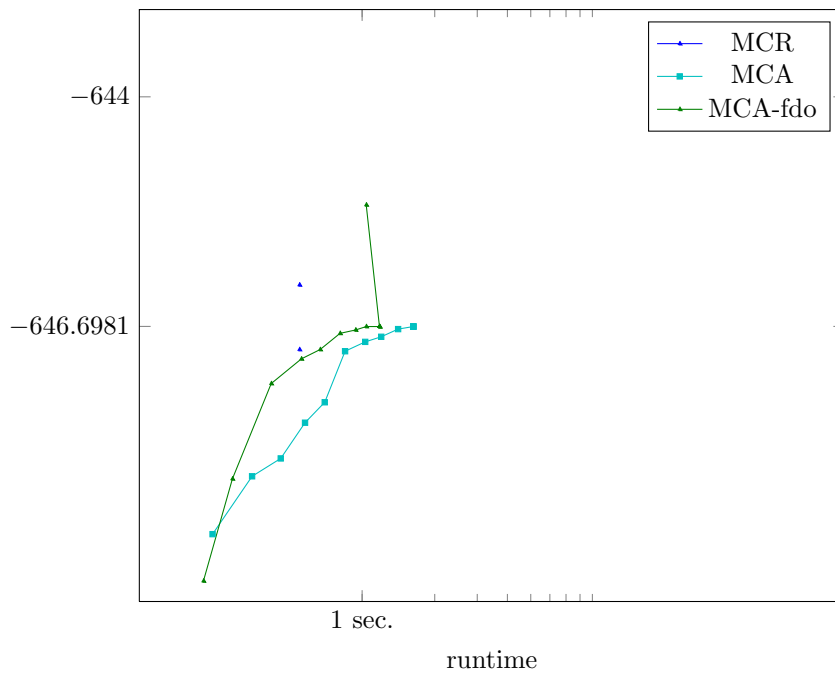


Figure 1728: Runtime results for the instance 5000188 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

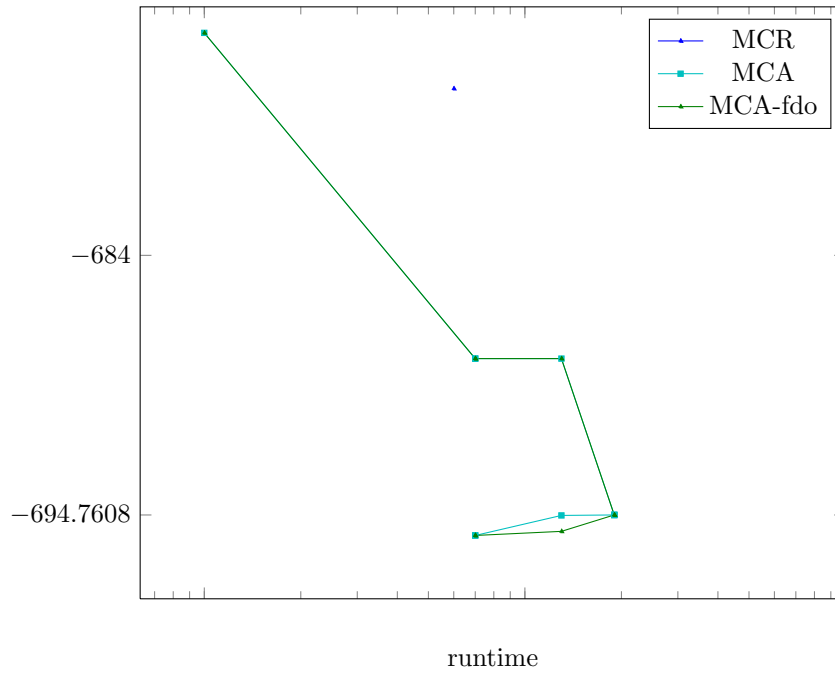


Figure 1729: Runtime results for the instance 5000190 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

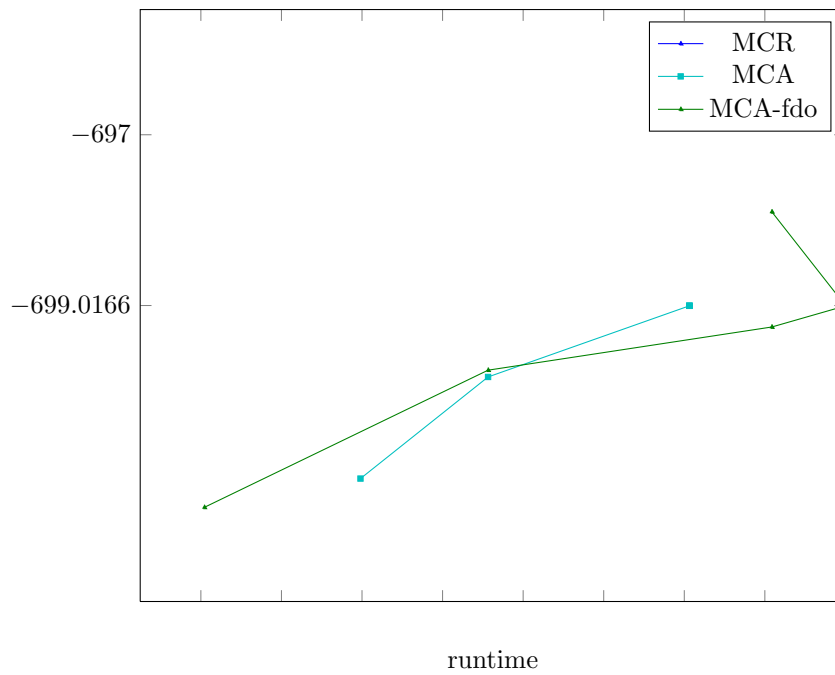


Figure 1730: Runtime results for the instance 5000191 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

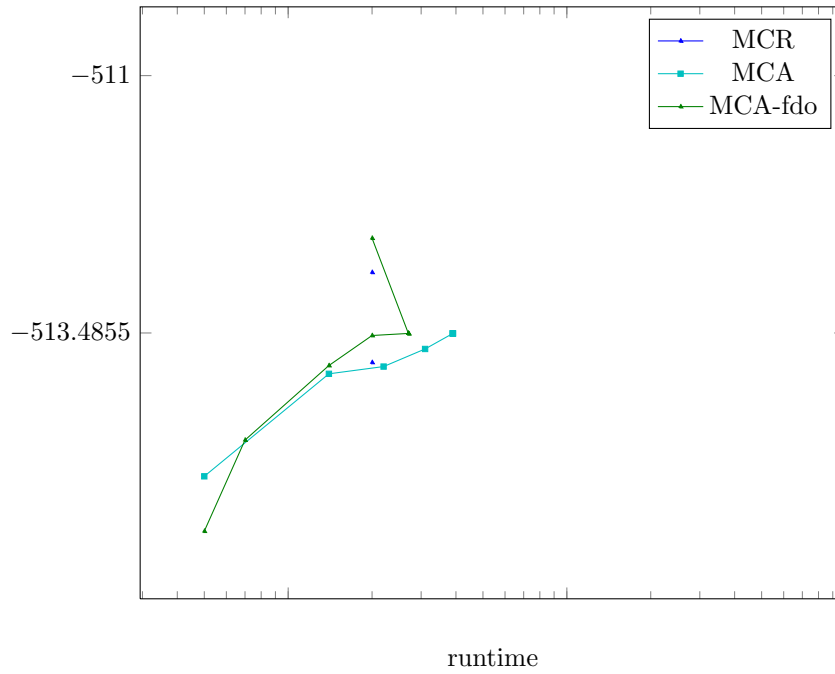


Figure 1731: Runtime results for the instance 5000192 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

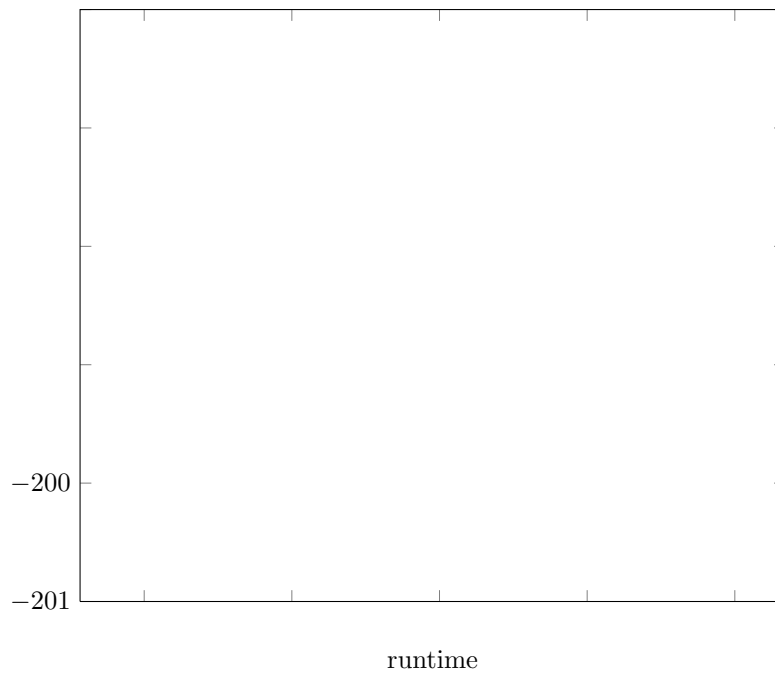


Figure 1732: Runtime results for the instance 5000194 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

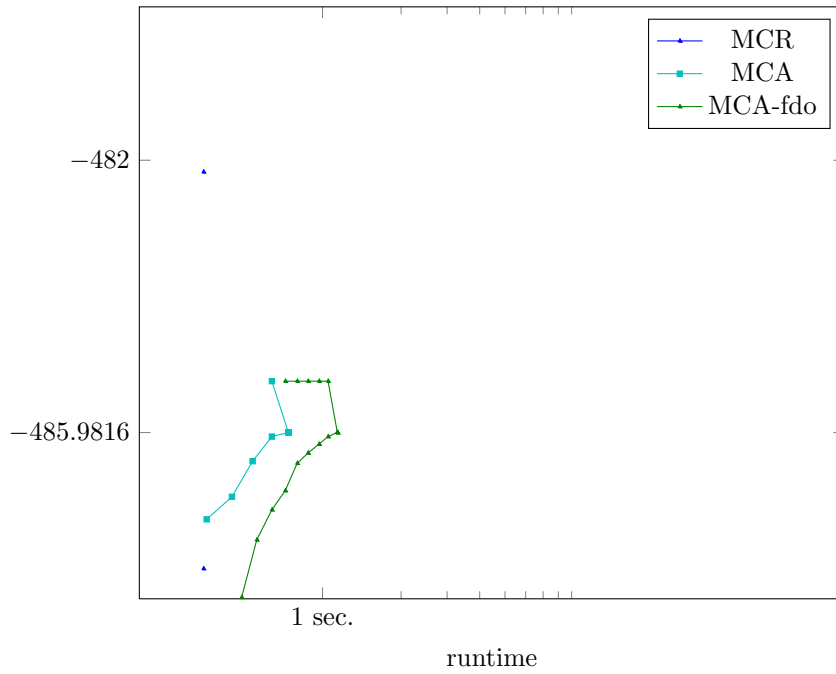


Figure 1735: Runtime results for the instance 5000197 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

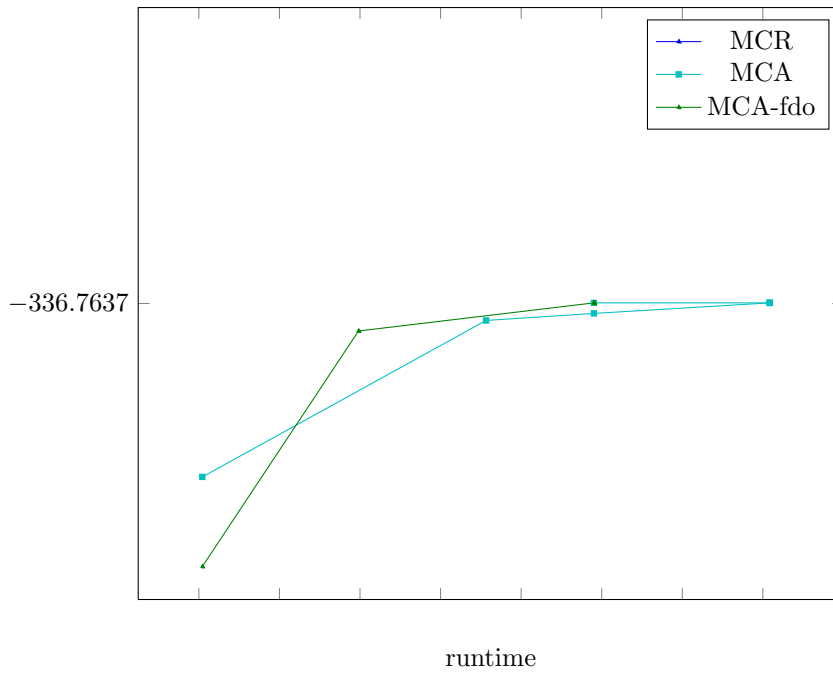


Figure 1736: Runtime results for the instance 5000198 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

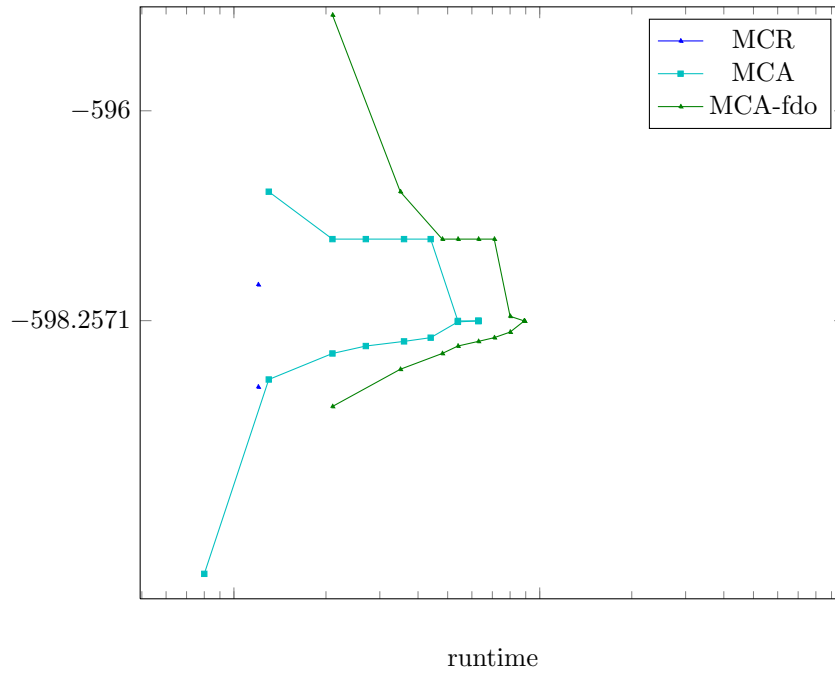


Figure 1737: Runtime results for the instance 5000199 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

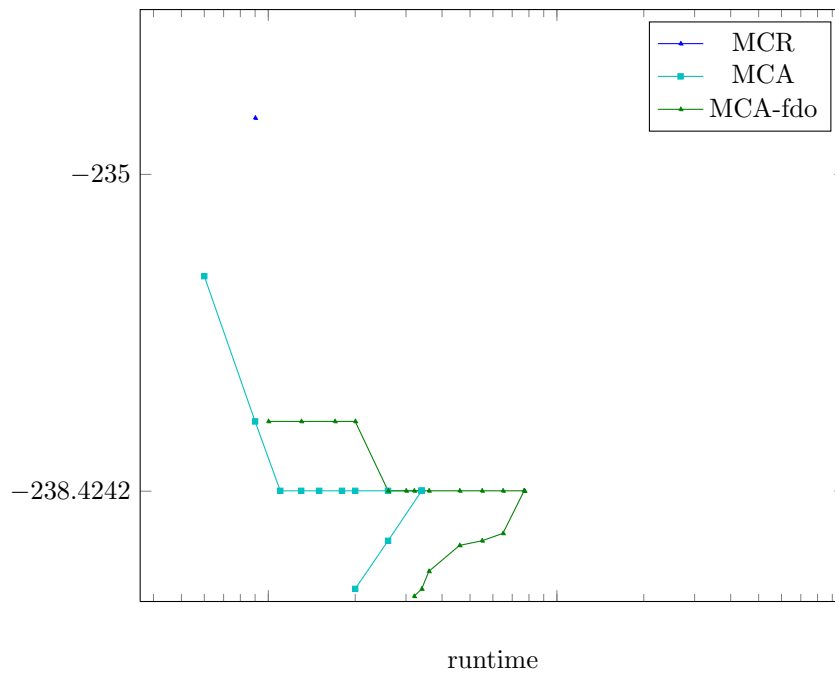


Figure 1738: Runtime results for the instance 5000200 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

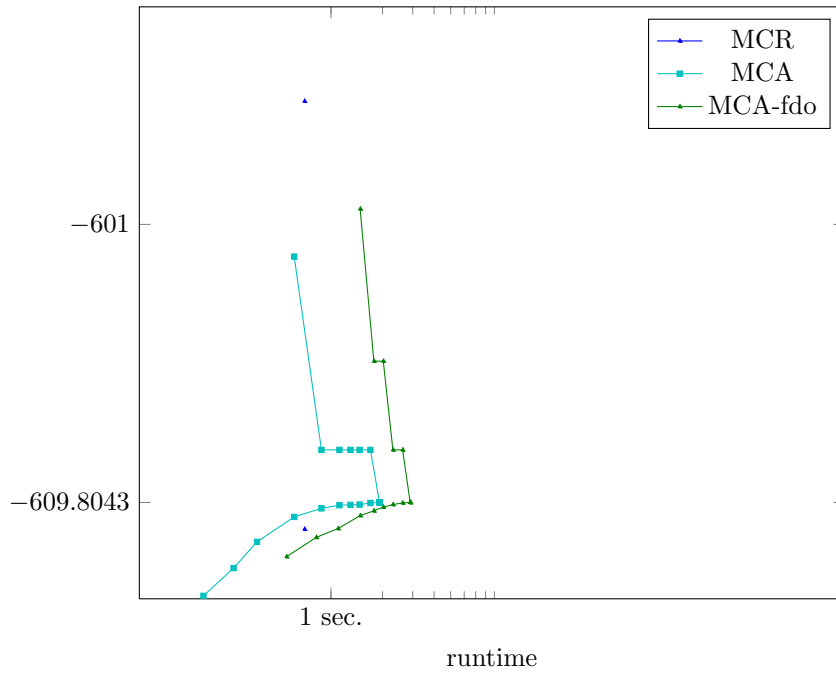


Figure 1739: Runtime results for the instance 5000201 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

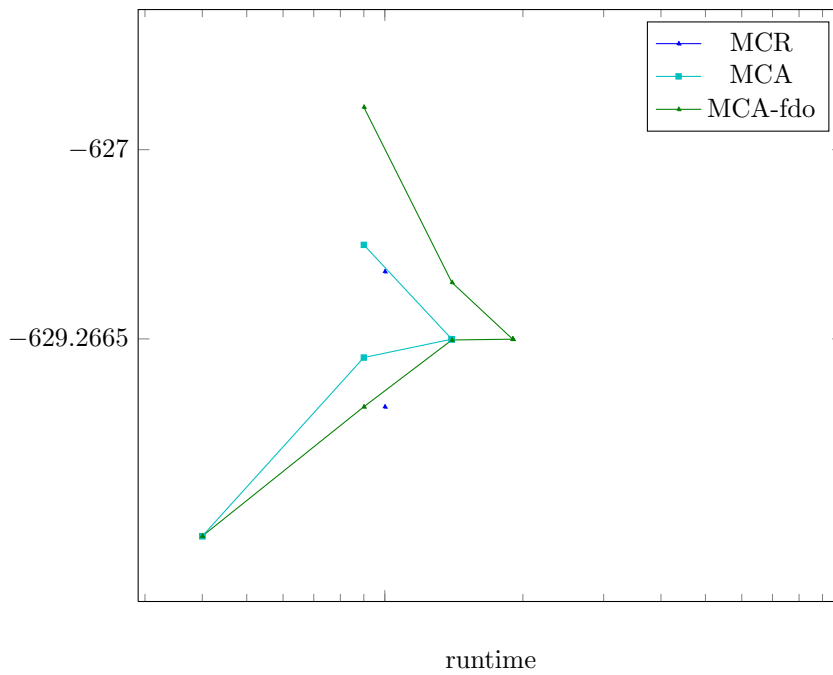


Figure 1740: Runtime results for the instance 5000202 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

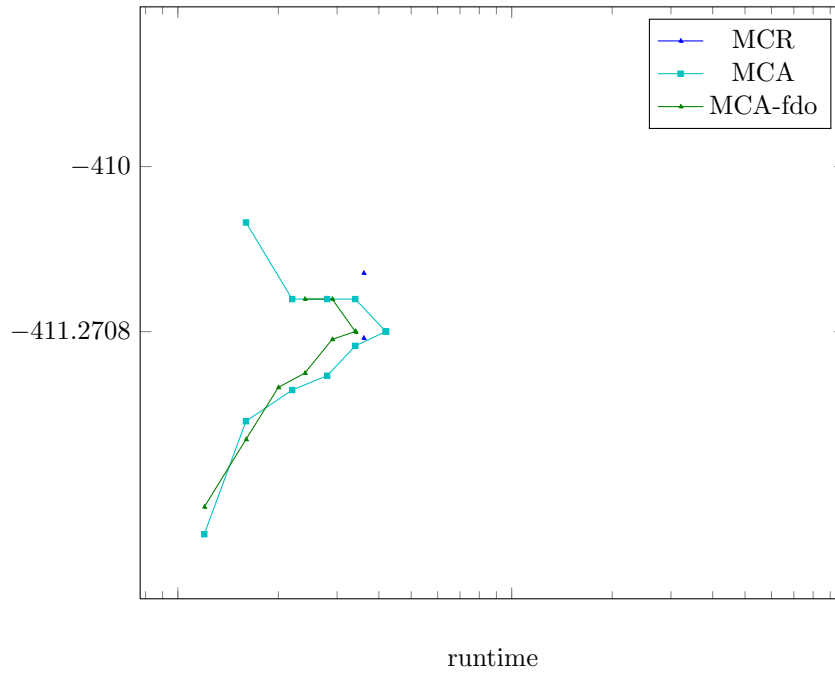


Figure 1741: Runtime results for the instance 5000203 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

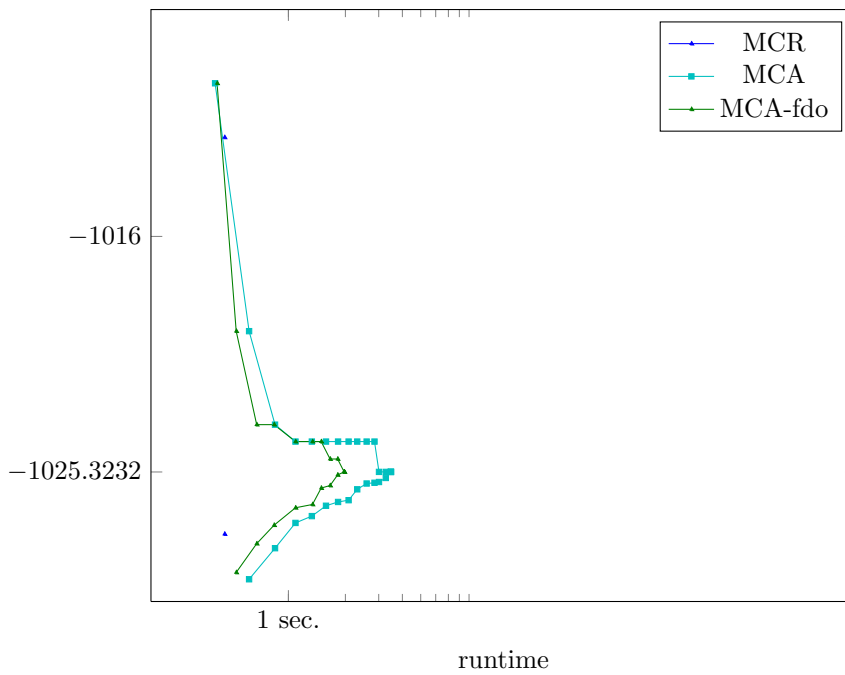


Figure 1742: Runtime results for the instance 5000204 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

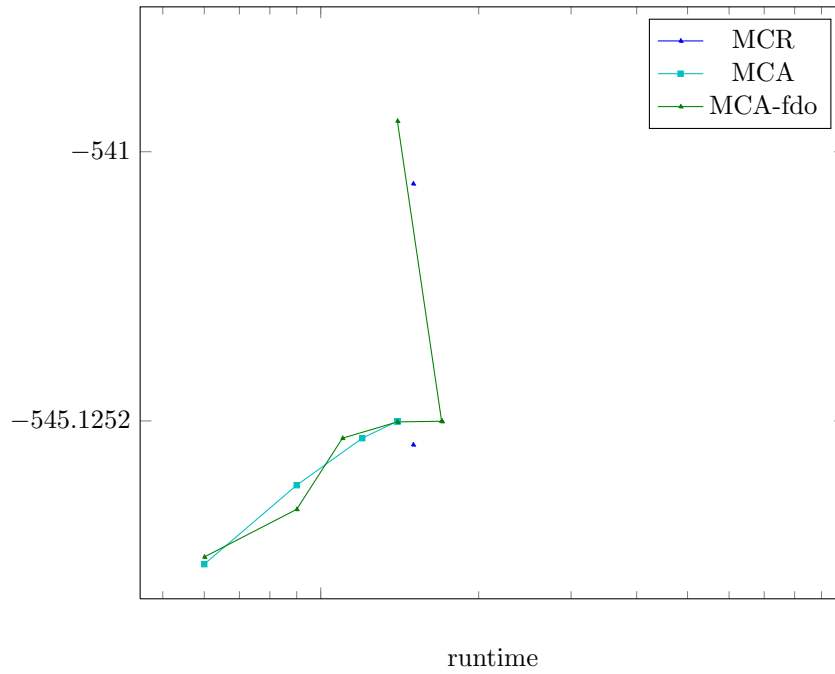


Figure 1743: Runtime results for the instance 5000205 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

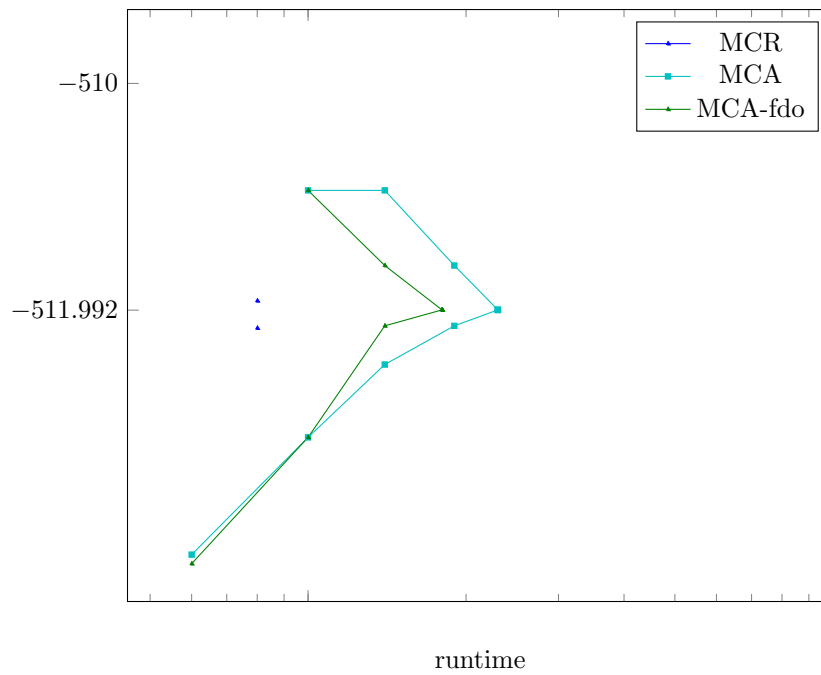


Figure 1744: Runtime results for the instance 5000226 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

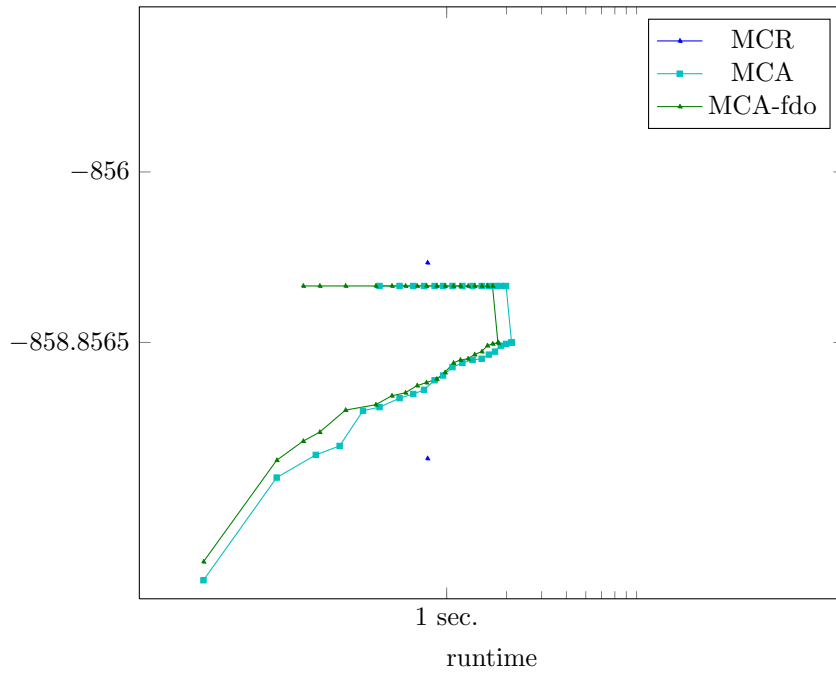


Figure 1745: Runtime results for the instance 5000234 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

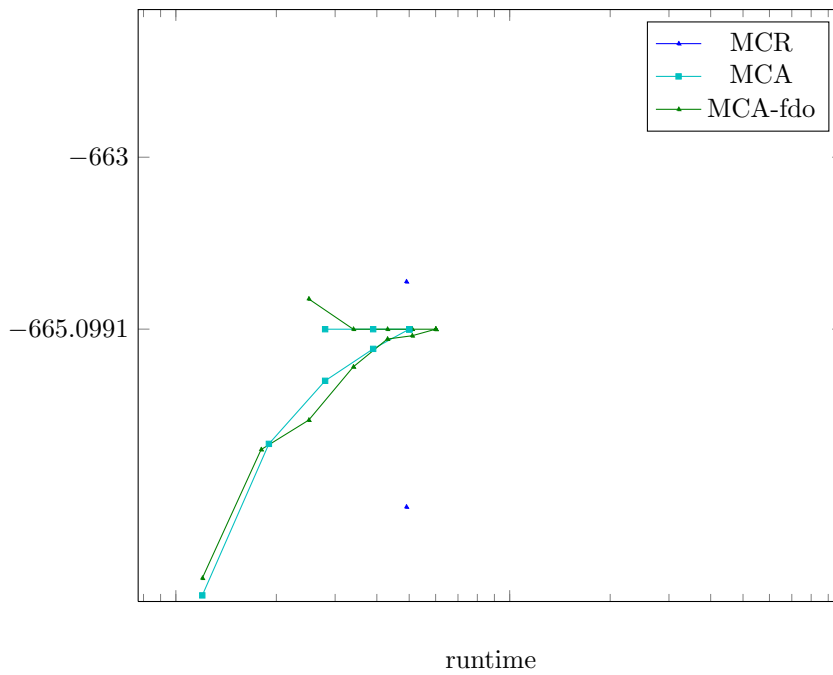


Figure 1746: Runtime results for the instance 5000257 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

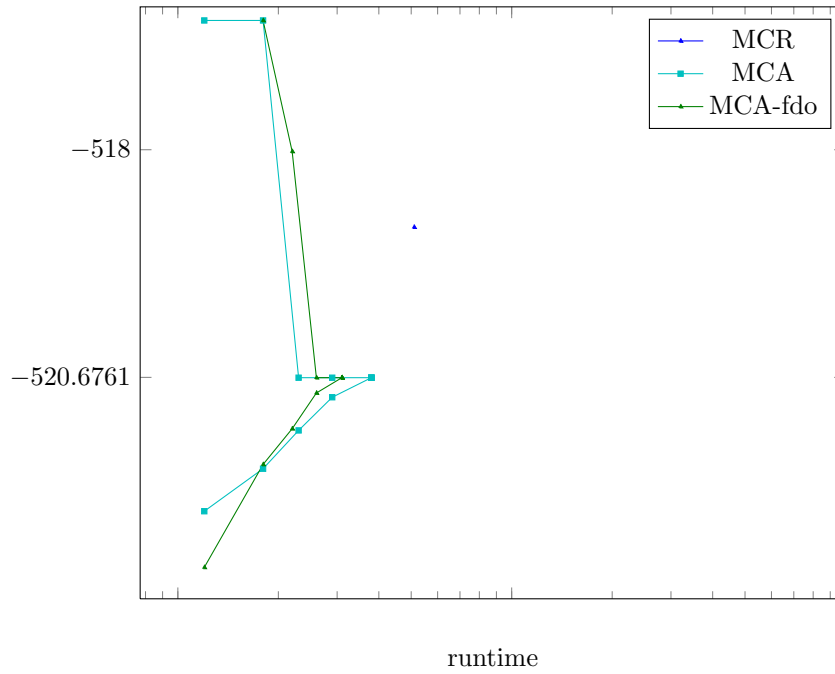


Figure 1747: Runtime results for the instance 5000264 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

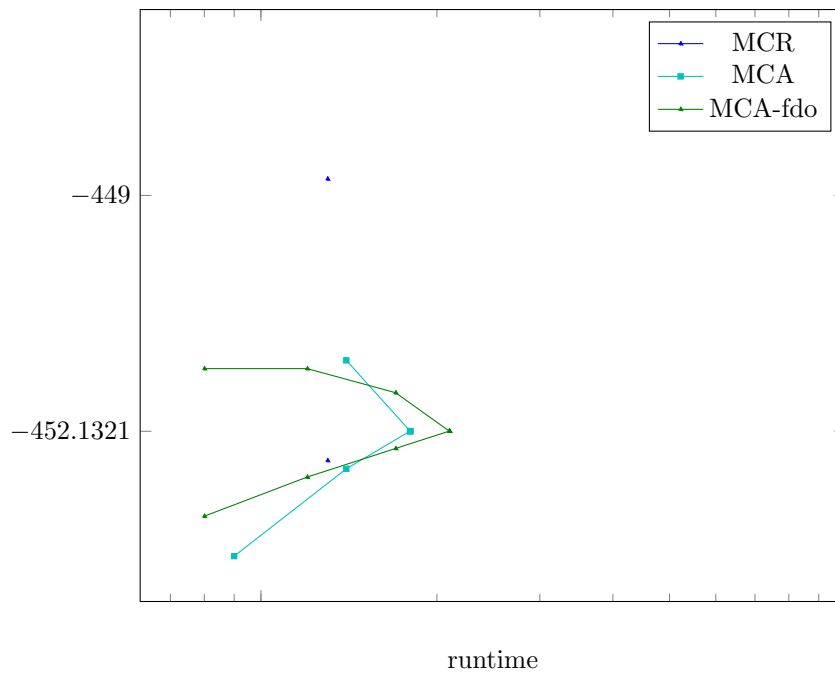


Figure 1748: Runtime results for the instance 5000265 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

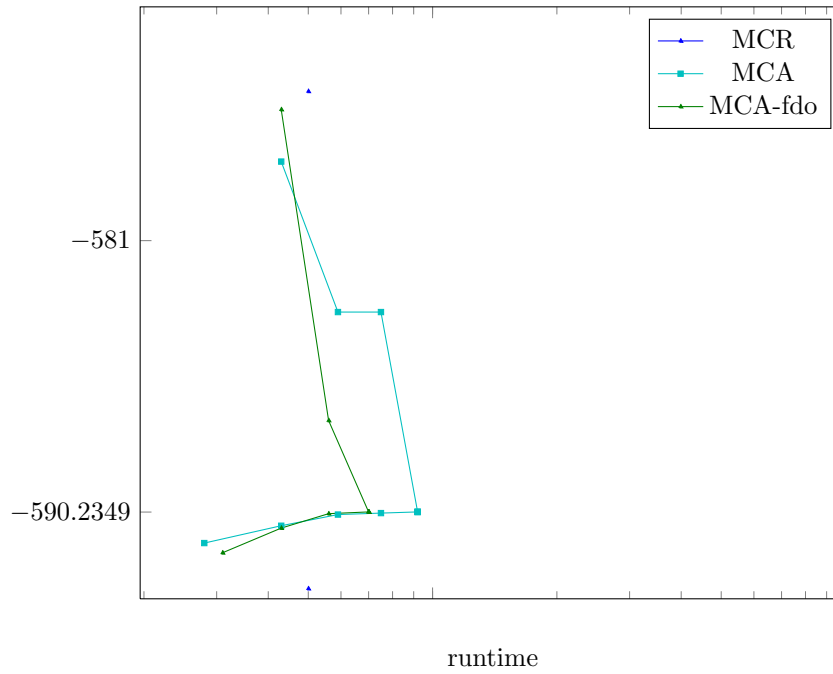


Figure 1749: Runtime results for the instance 6000000 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

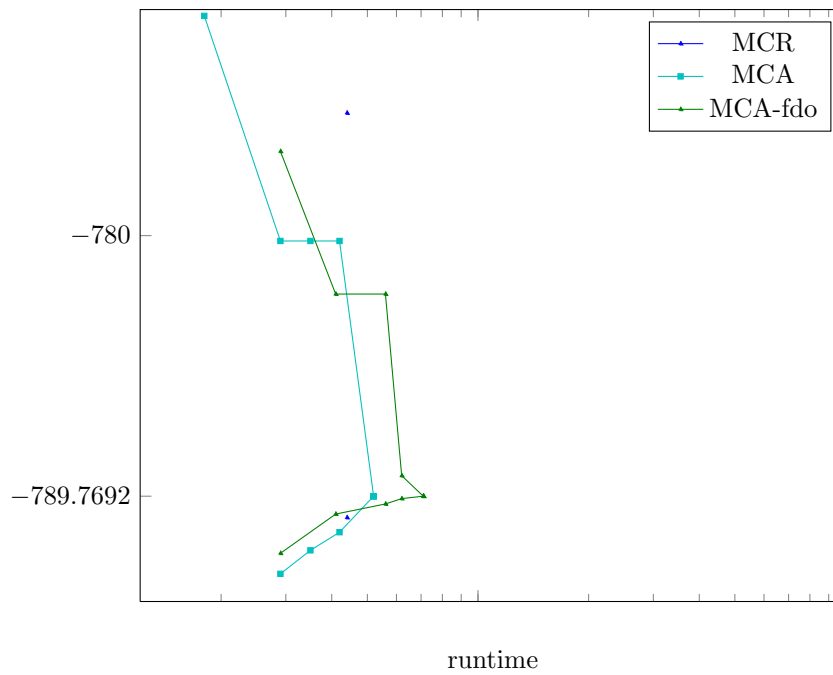


Figure 1750: Runtime results for the instance 6000001 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

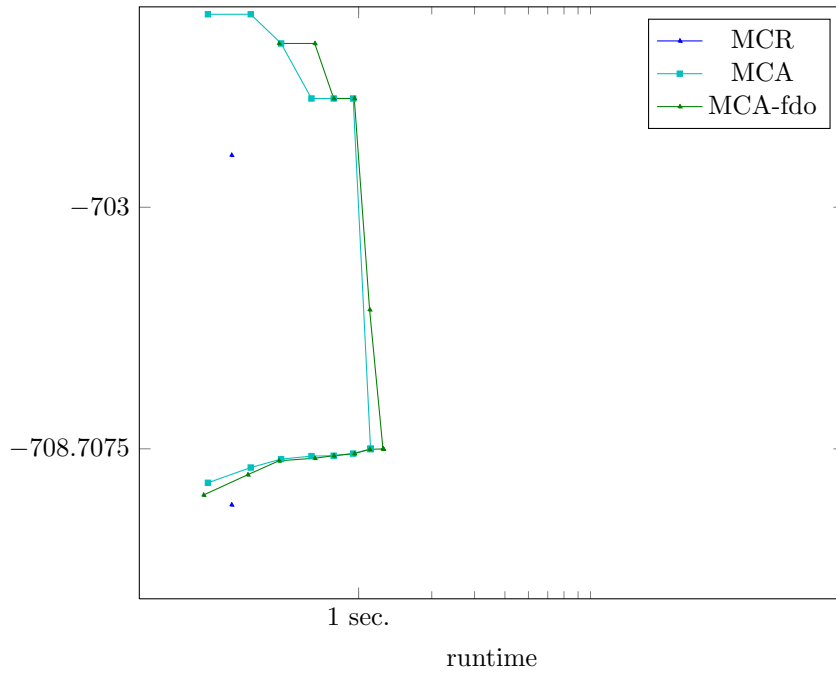


Figure 1751: Runtime results for the instance 6000002 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

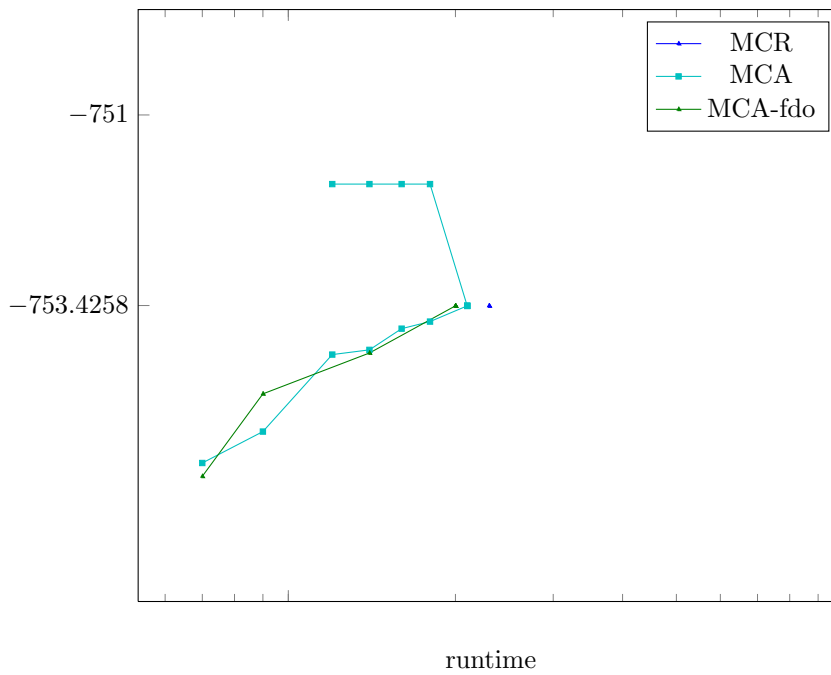


Figure 1752: Runtime results for the instance 6000003 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

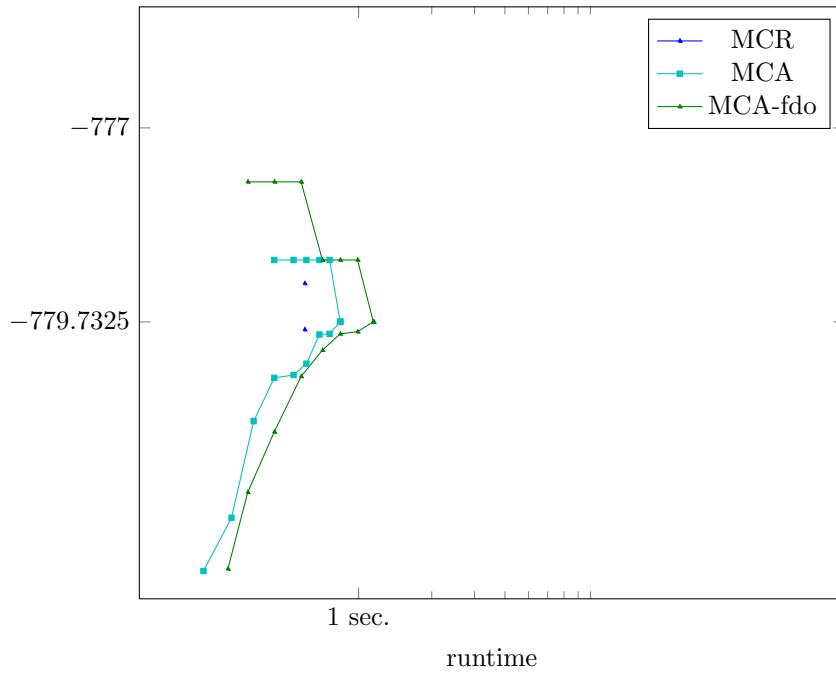


Figure 1753: Runtime results for the instance 6000004 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

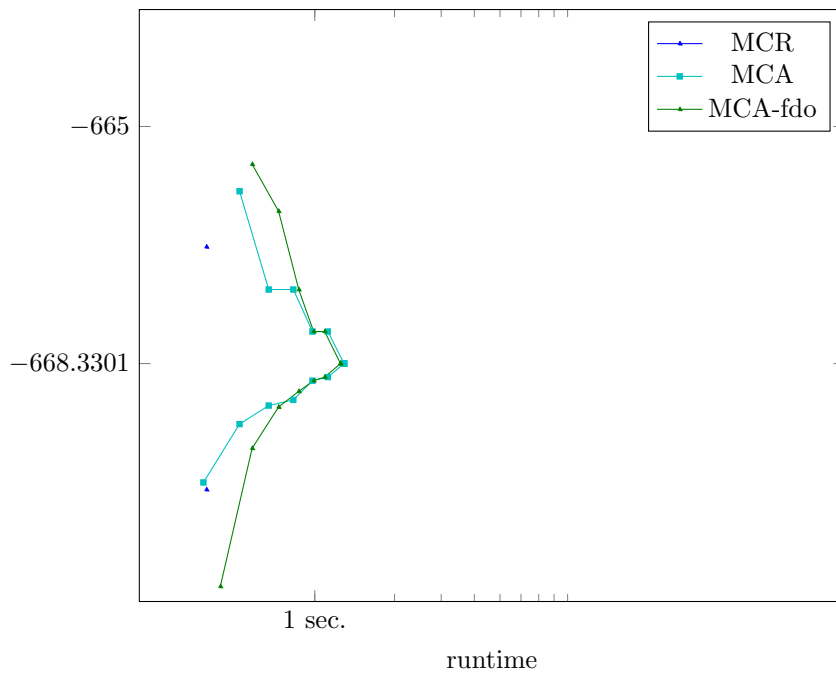


Figure 1754: Runtime results for the instance 6000005 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

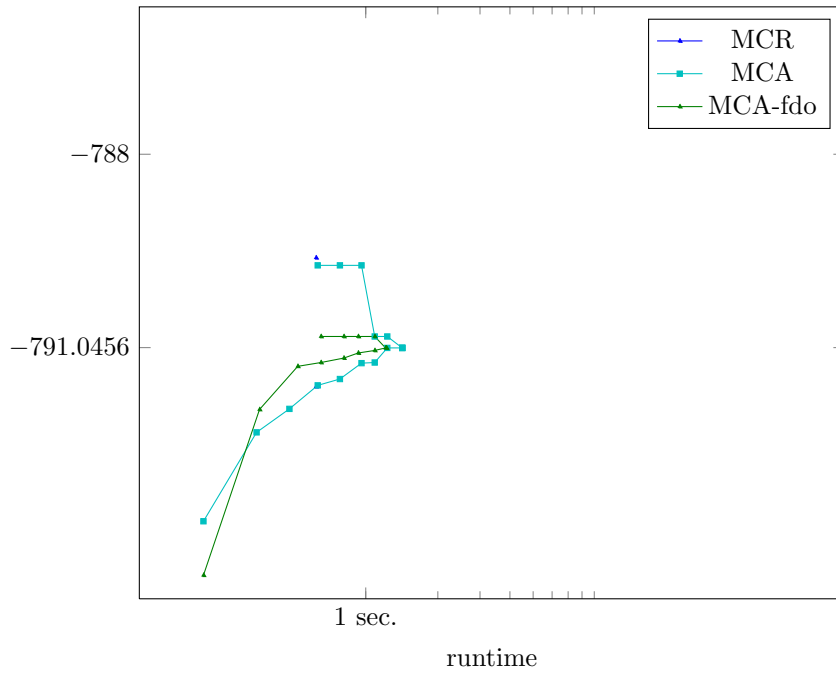


Figure 1755: Runtime results for the instance 6000006 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

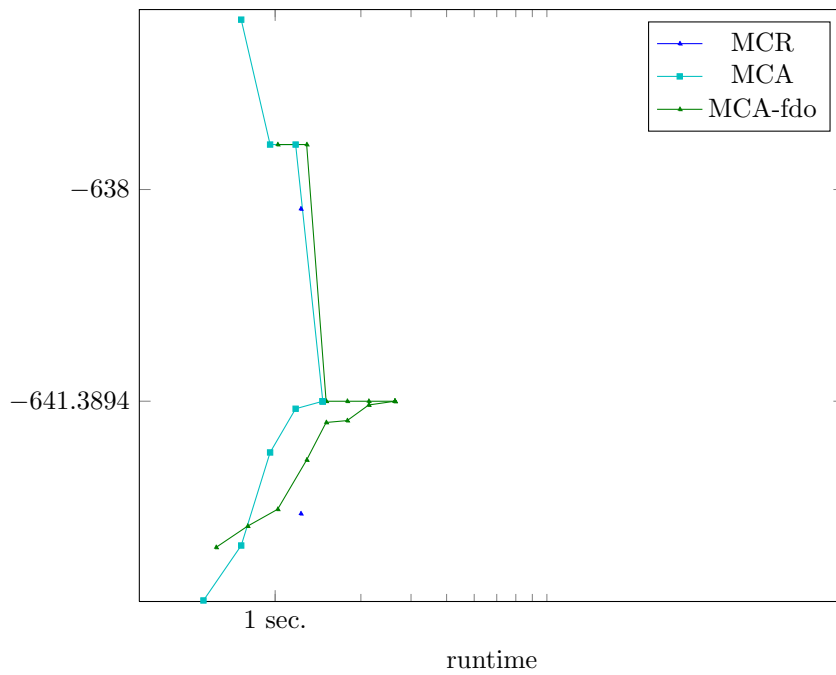


Figure 1756: Runtime results for the instance 6000007 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

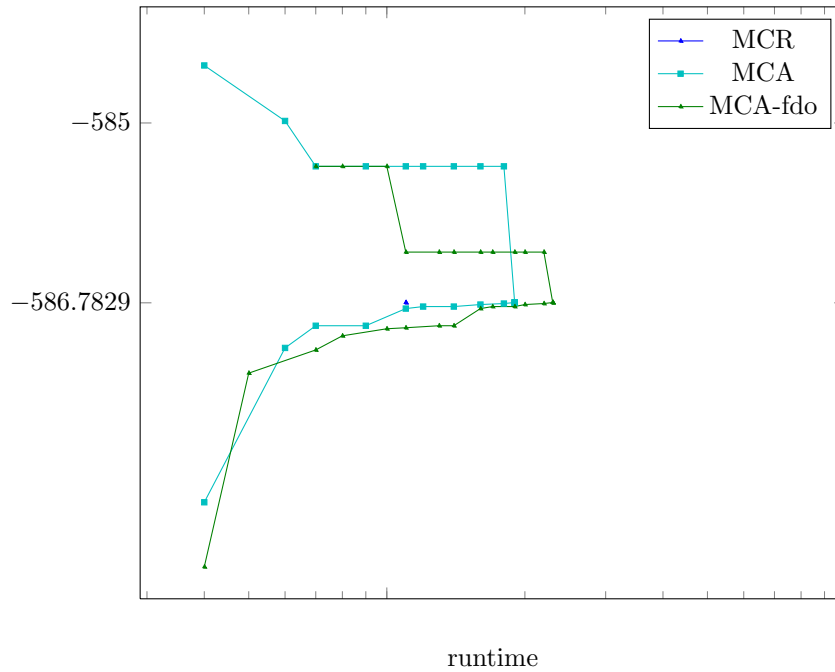


Figure 1757: Runtime results for the instance 6000008 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

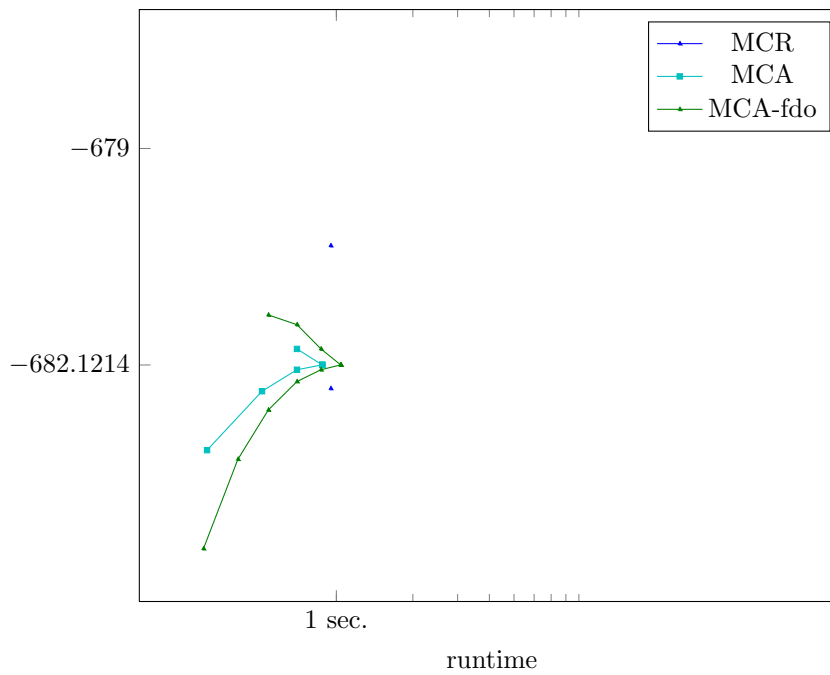


Figure 1758: Runtime results for the instance 6000009 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

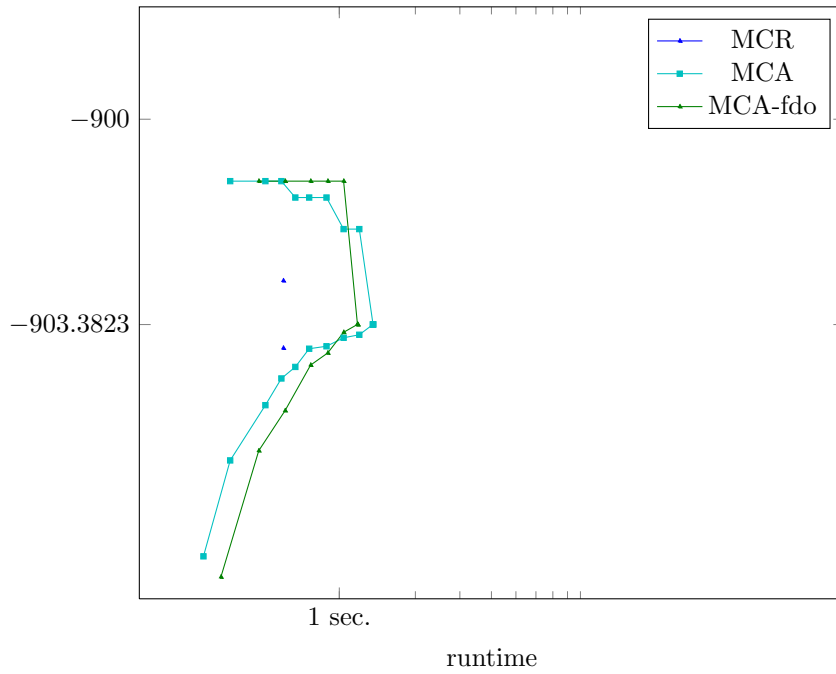


Figure 1759: Runtime results for the instance 6000010 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

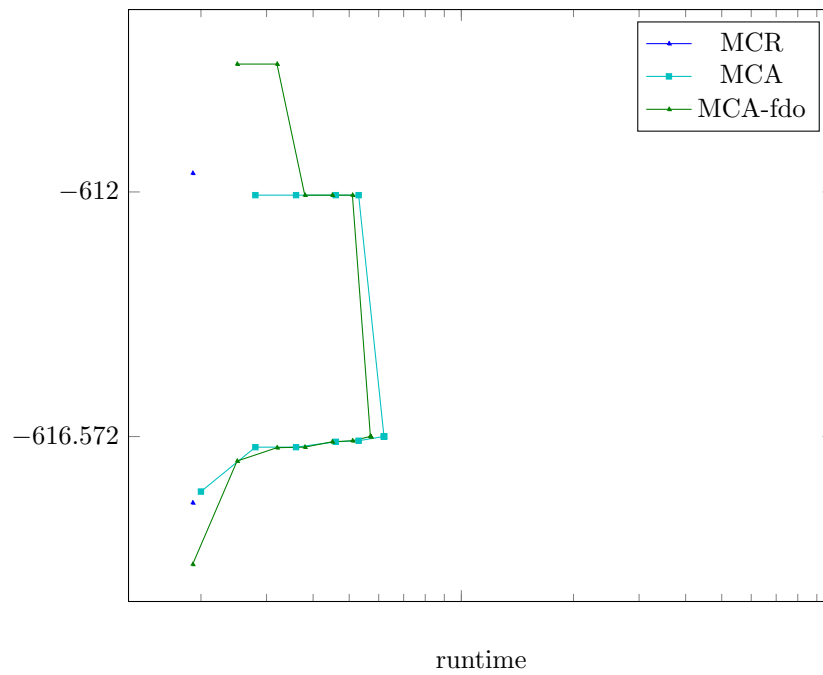


Figure 1760: Runtime results for the instance 6000011 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

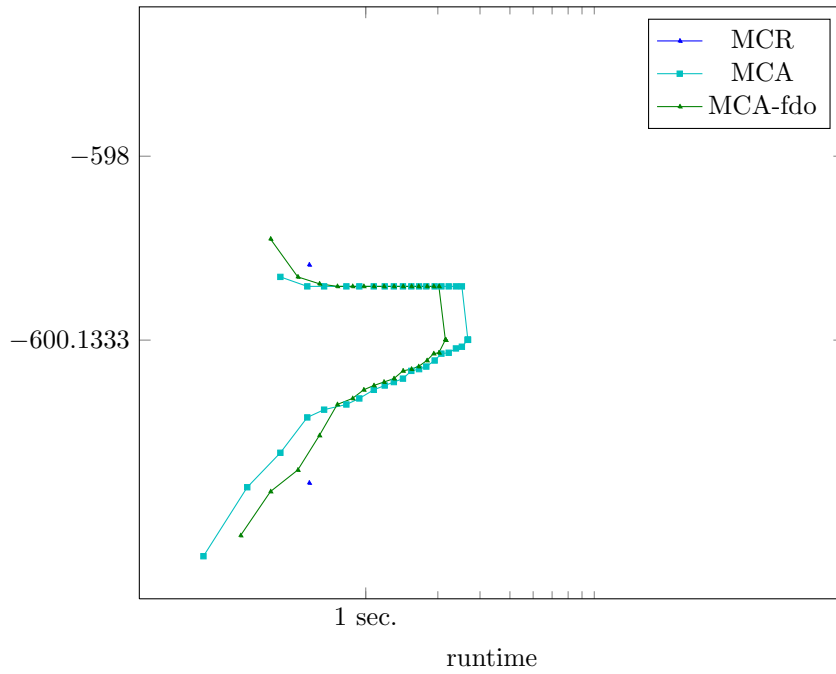


Figure 1761: Runtime results for the instance 6000012 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

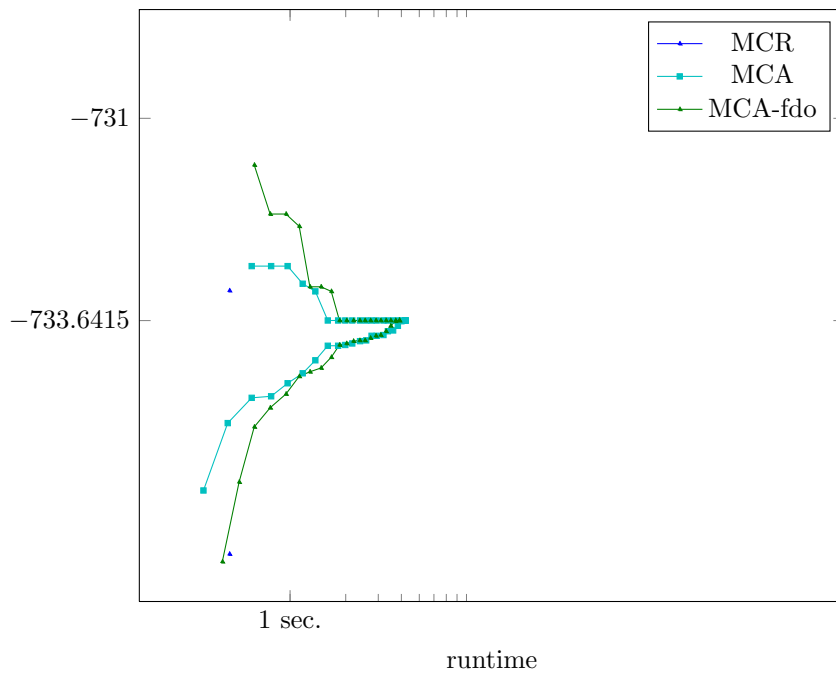


Figure 1762: Runtime results for the instance 6000013 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

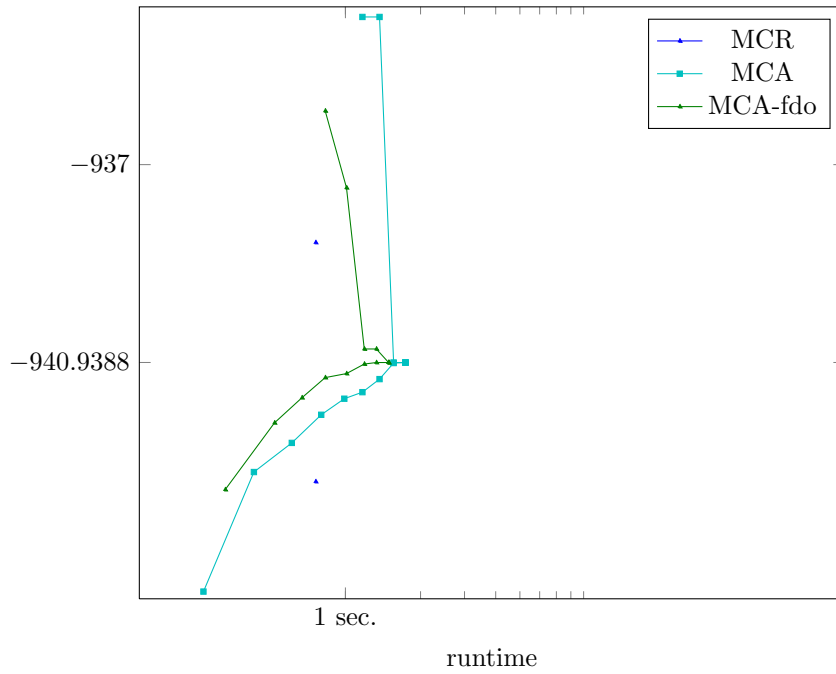


Figure 1763: Runtime results for the instance 6000014 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

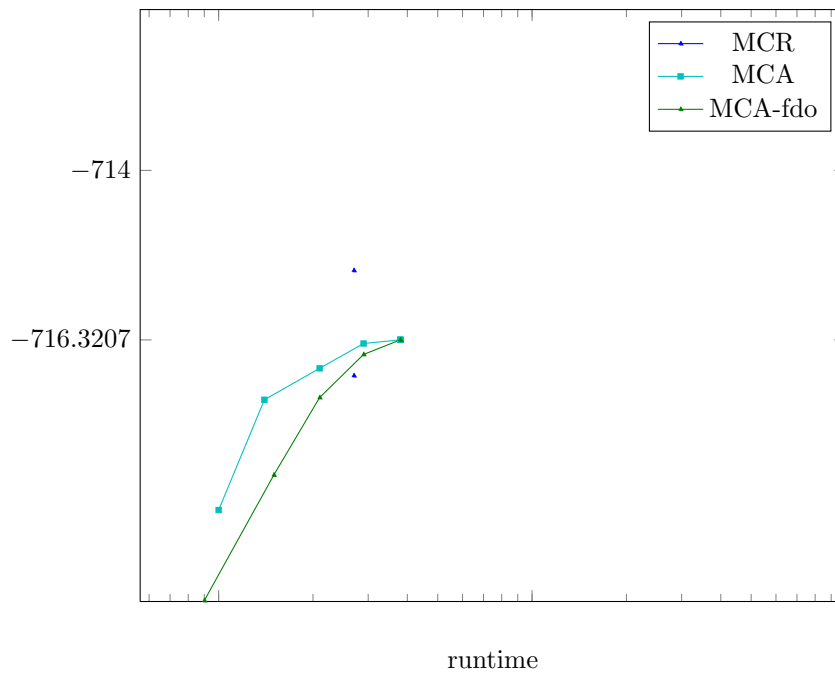


Figure 1764: Runtime results for the instance 6000015 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

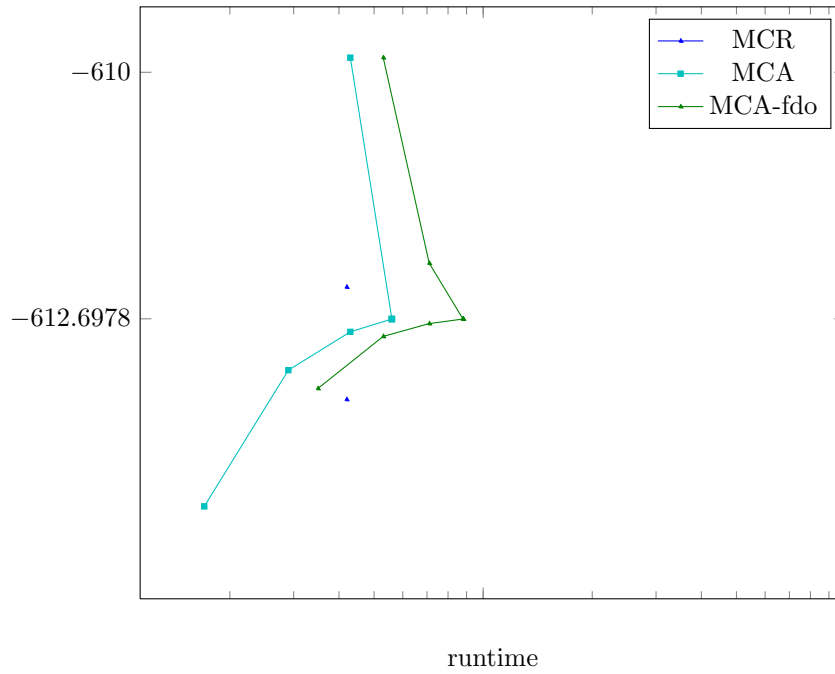
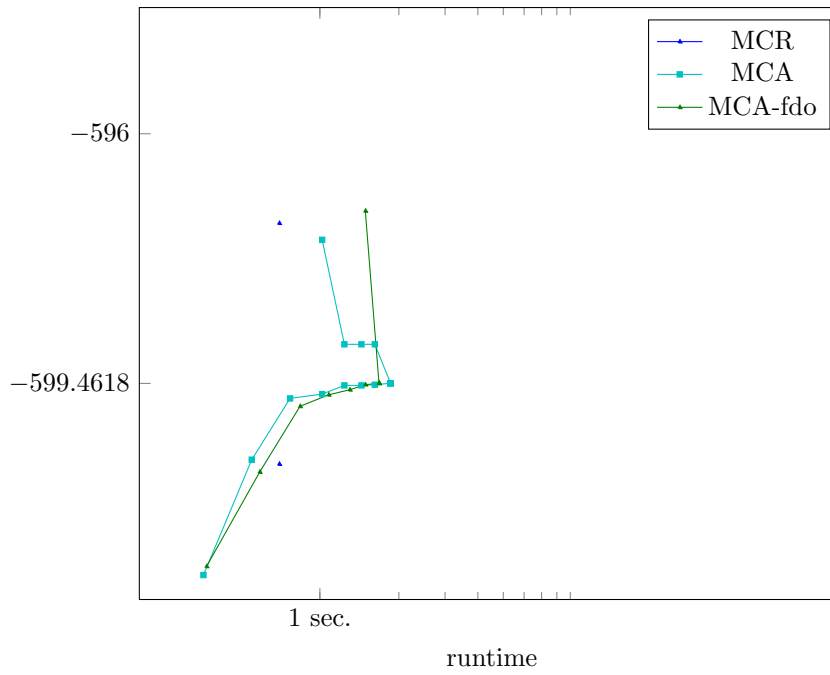
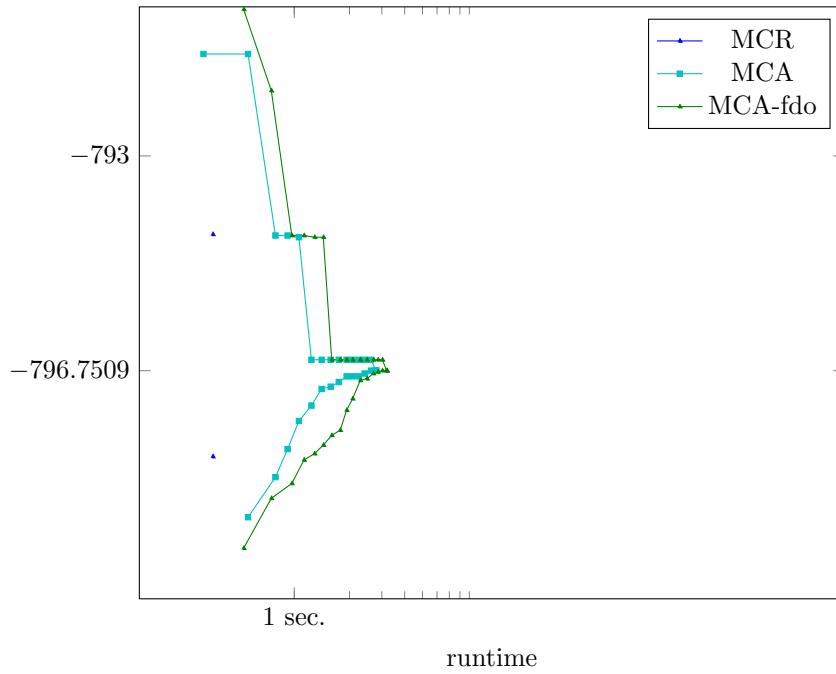


Figure 1765: Runtime results for the instance 6000016 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.





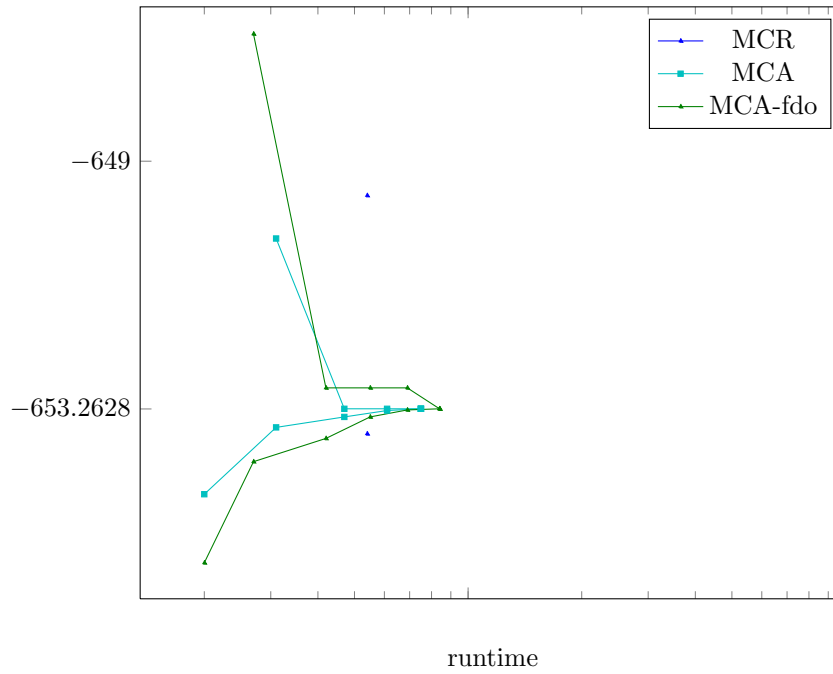


Figure 1769: Runtime results for the instance 6000020 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

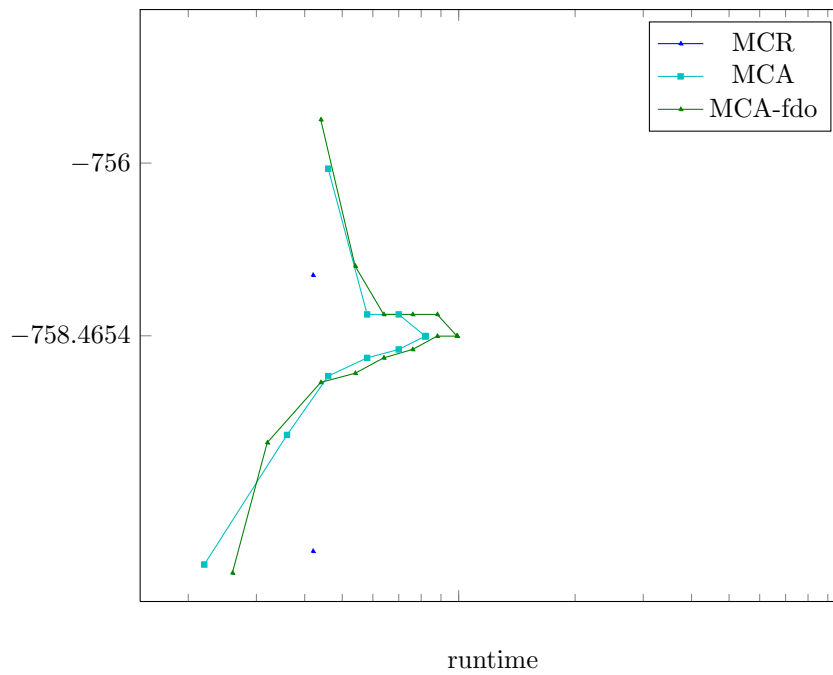


Figure 1770: Runtime results for the instance 6000021 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

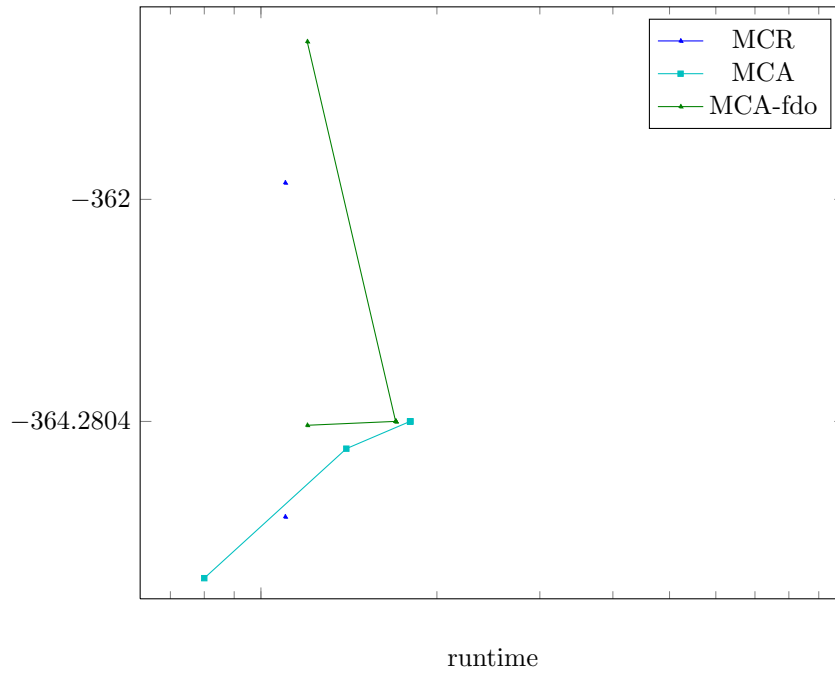


Figure 1771: Runtime results for the instance 6000022 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

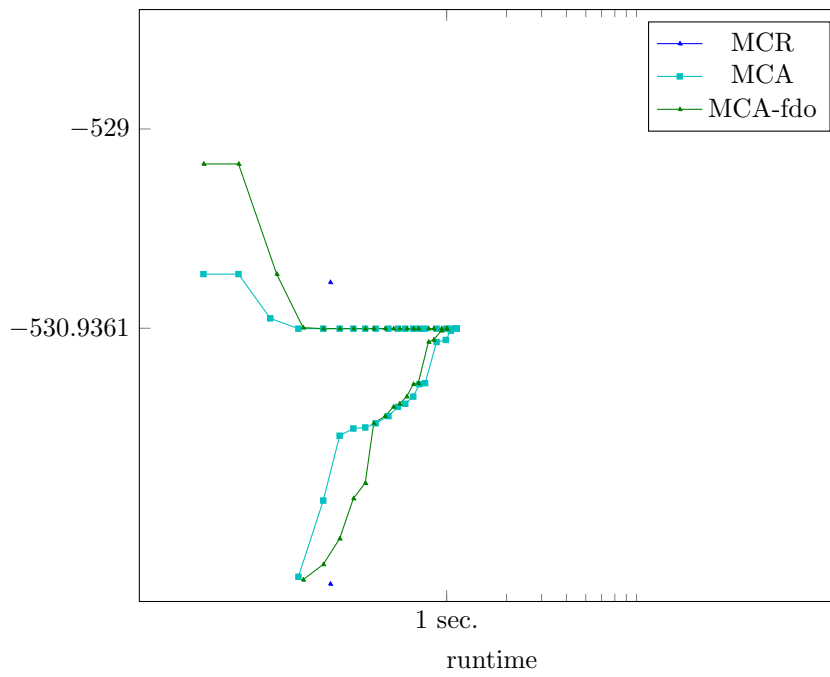


Figure 1772: Runtime results for the instance 6000023 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

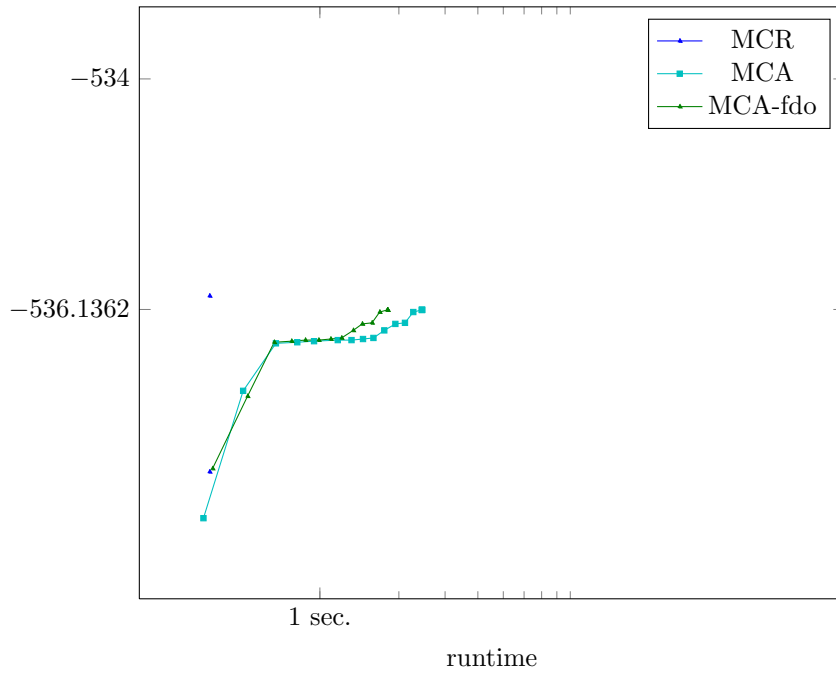


Figure 1773: Runtime results for the instance 6000024 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

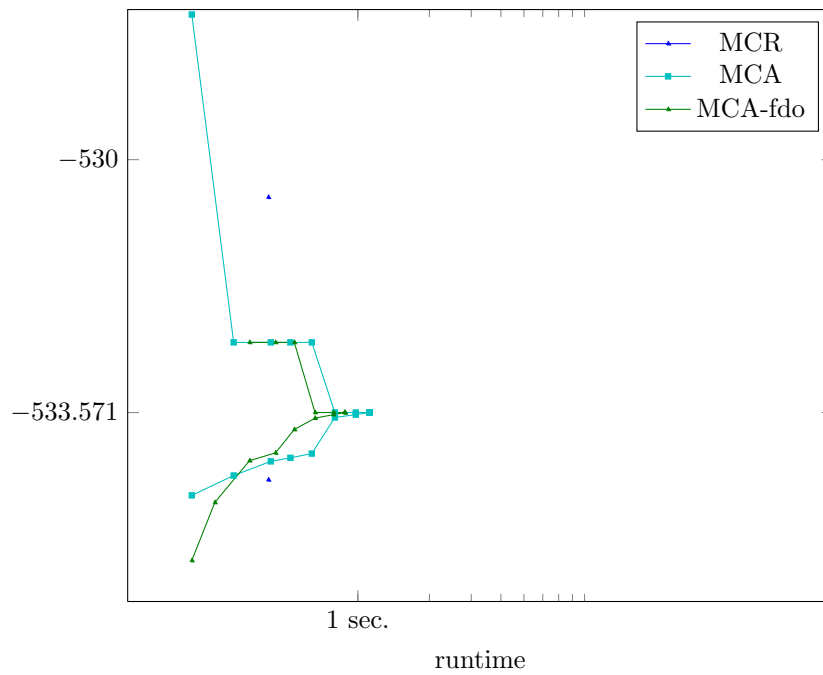


Figure 1774: Runtime results for the instance 6000025 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

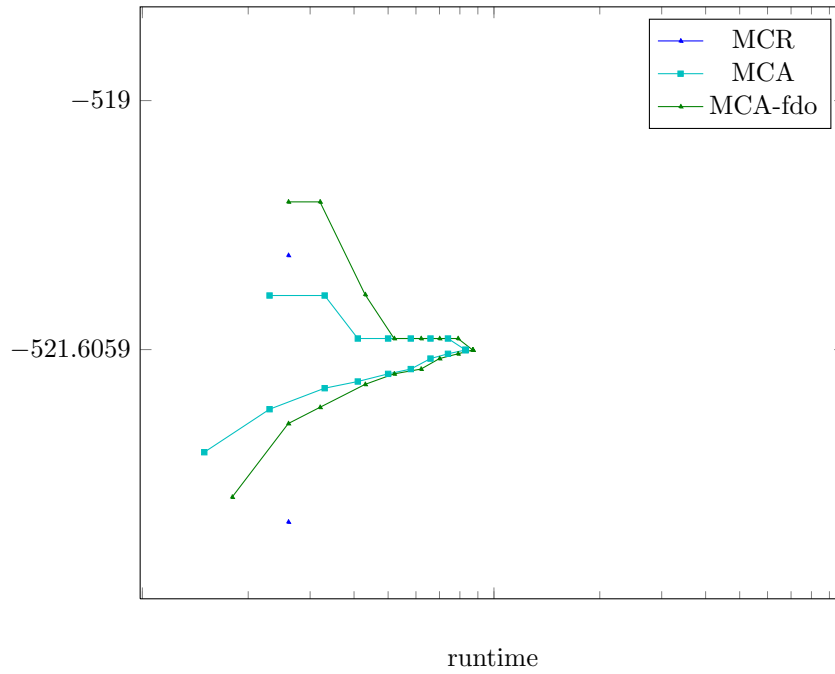


Figure 1775: Runtime results for the instance 6000026 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

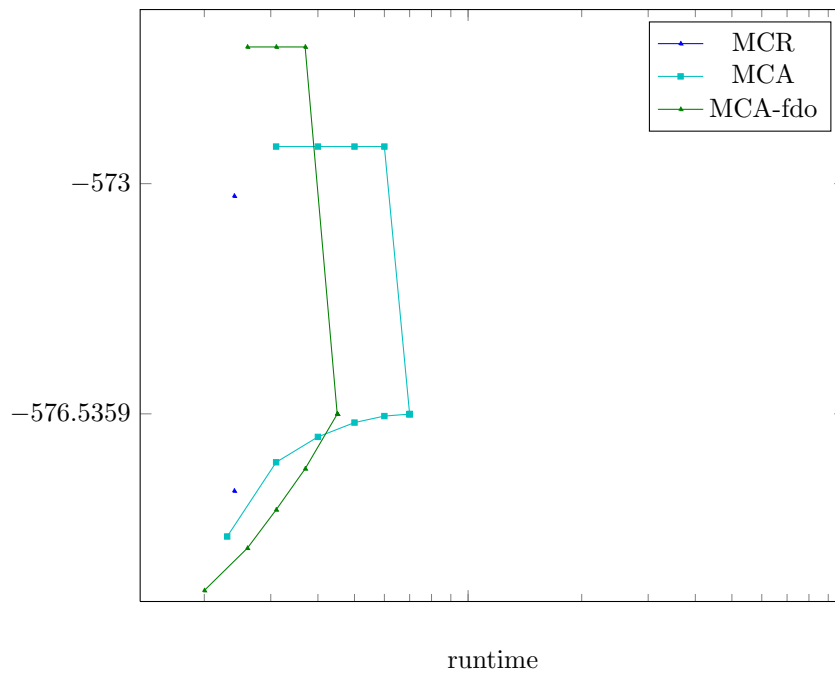


Figure 1776: Runtime results for the instance 6000027 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

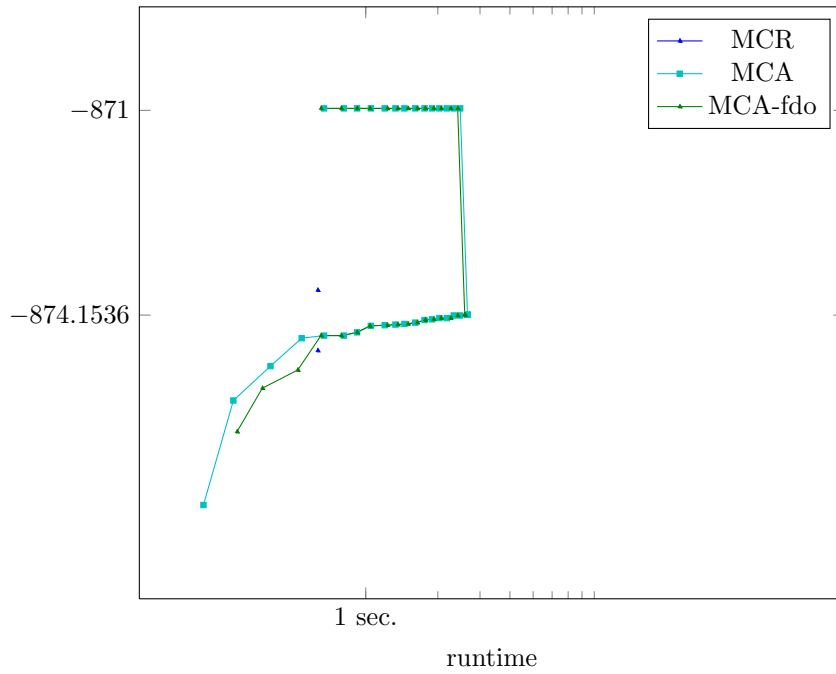


Figure 1777: Runtime results for the instance 6000028 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

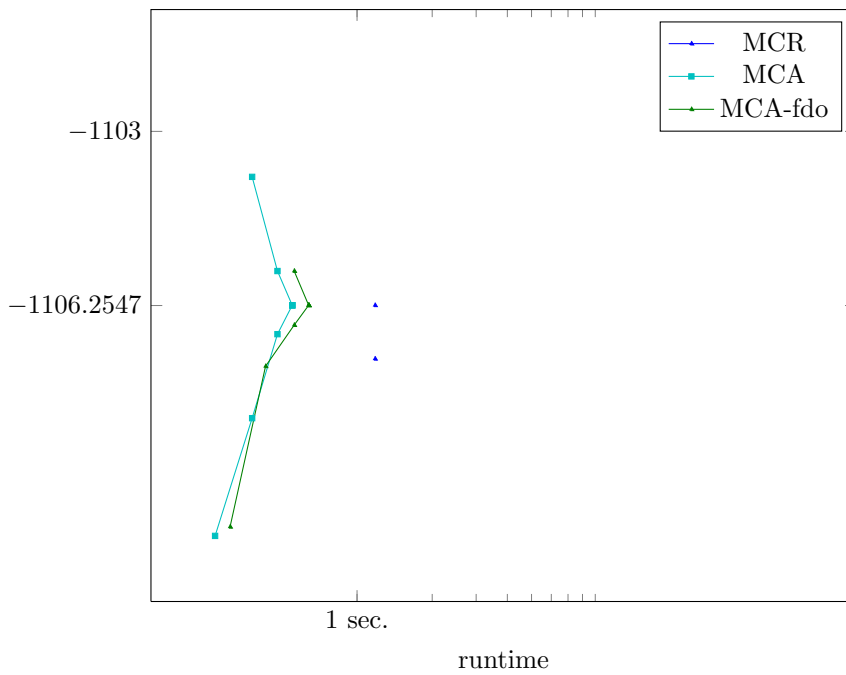


Figure 1778: Runtime results for the instance 6000029 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

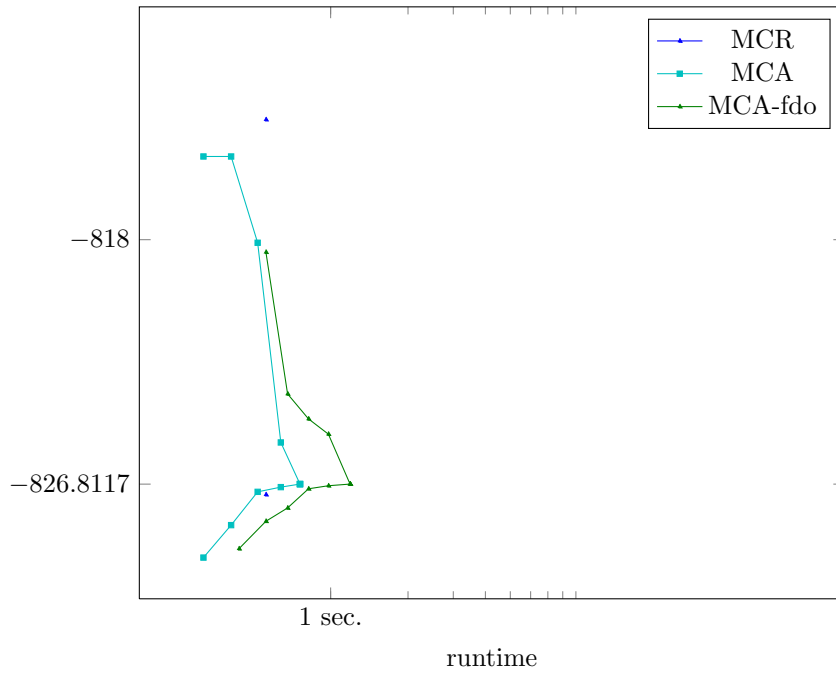


Figure 1781: Runtime results for the instance 6000032 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

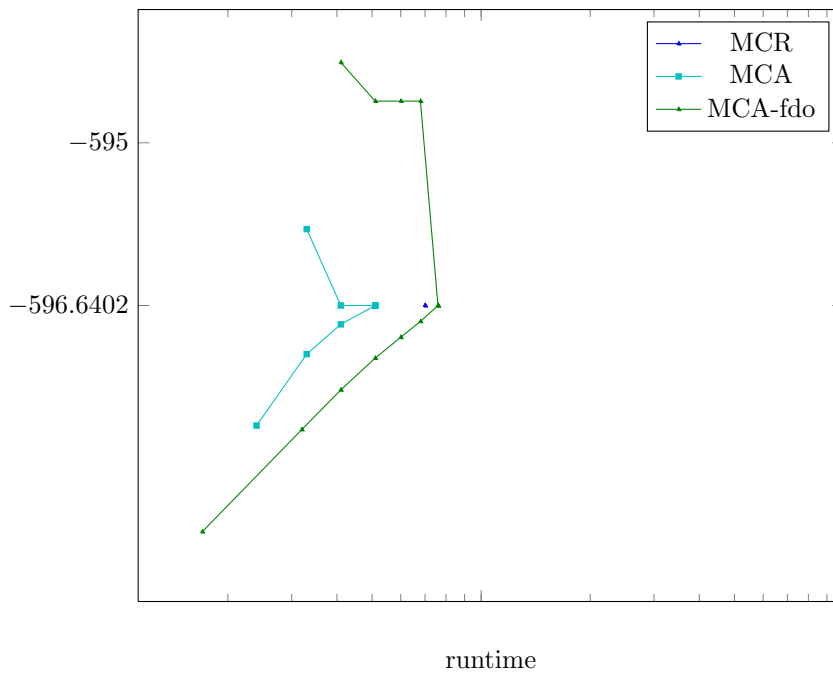


Figure 1782: Runtime results for the instance 6000033 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

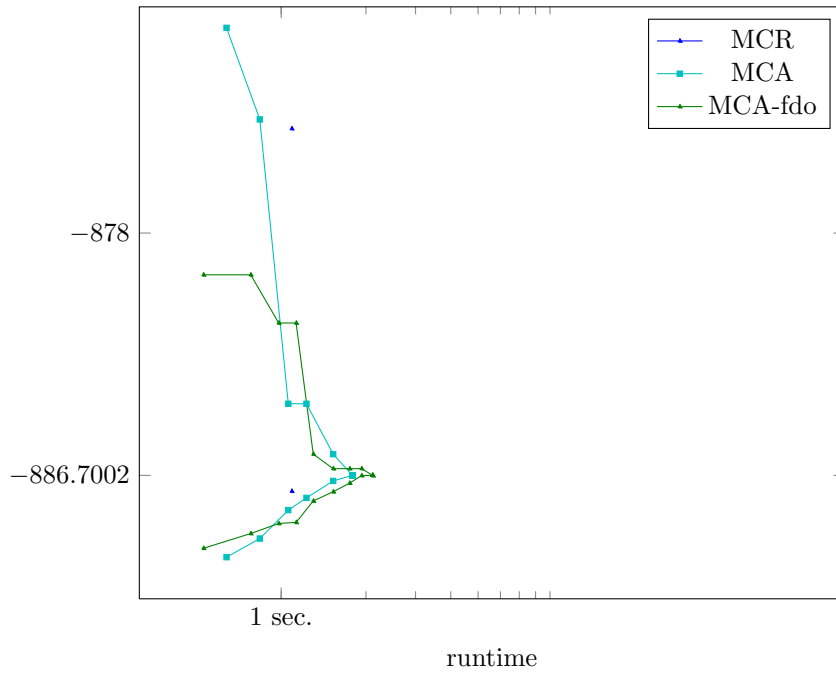


Figure 1783: Runtime results for the instance 6000034 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

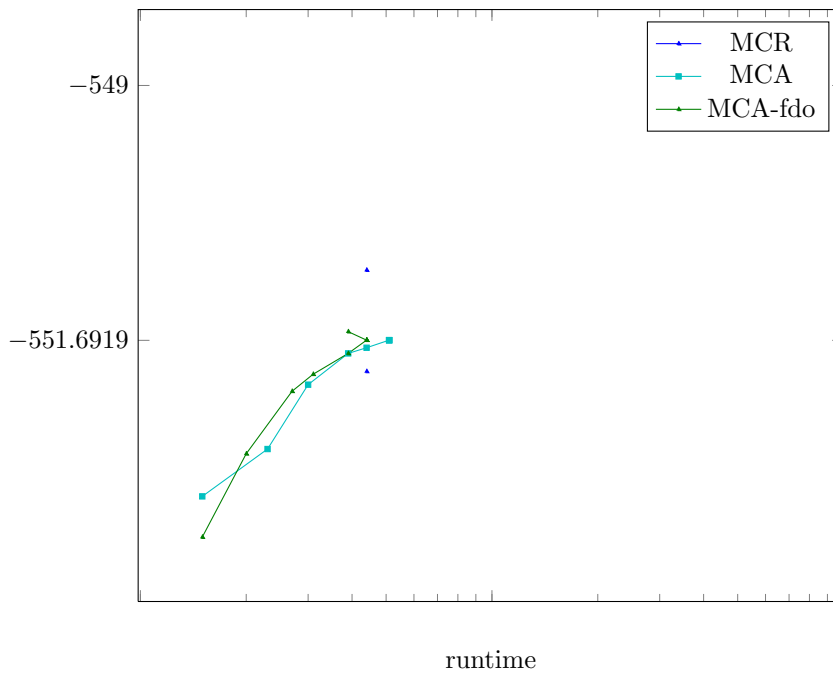


Figure 1784: Runtime results for the instance 6000035 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

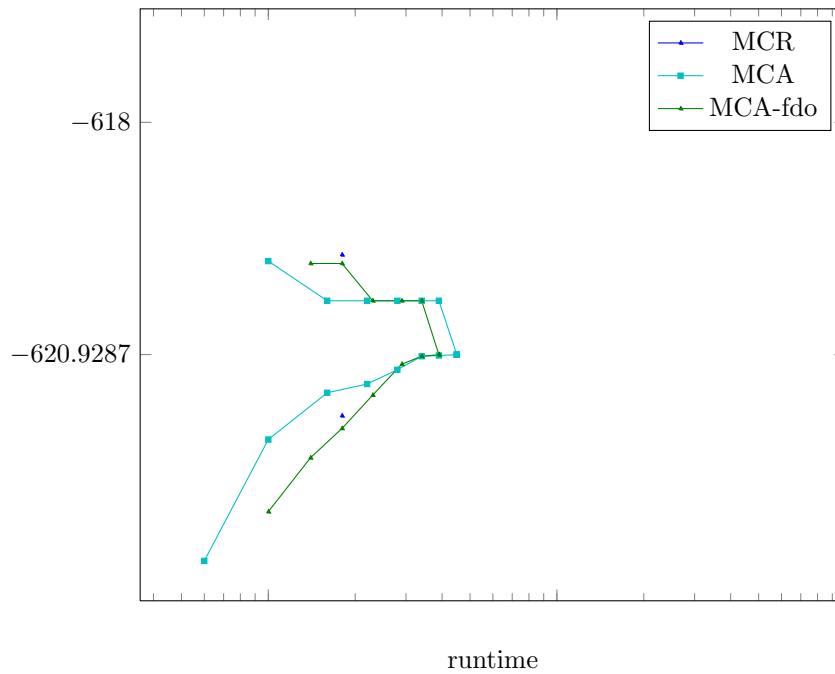


Figure 1785: Runtime results for the instance 6000036 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

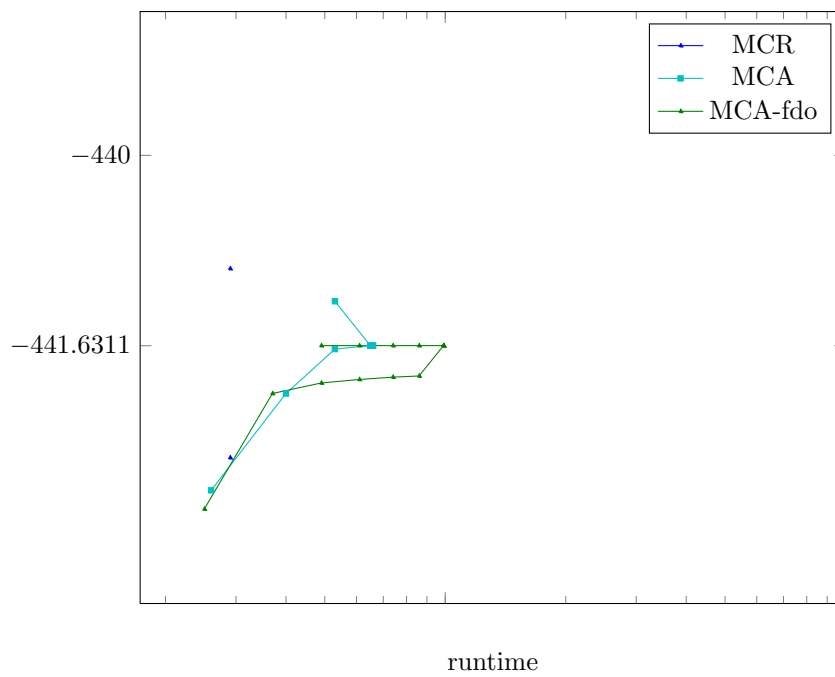


Figure 1786: Runtime results for the instance 6000037 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

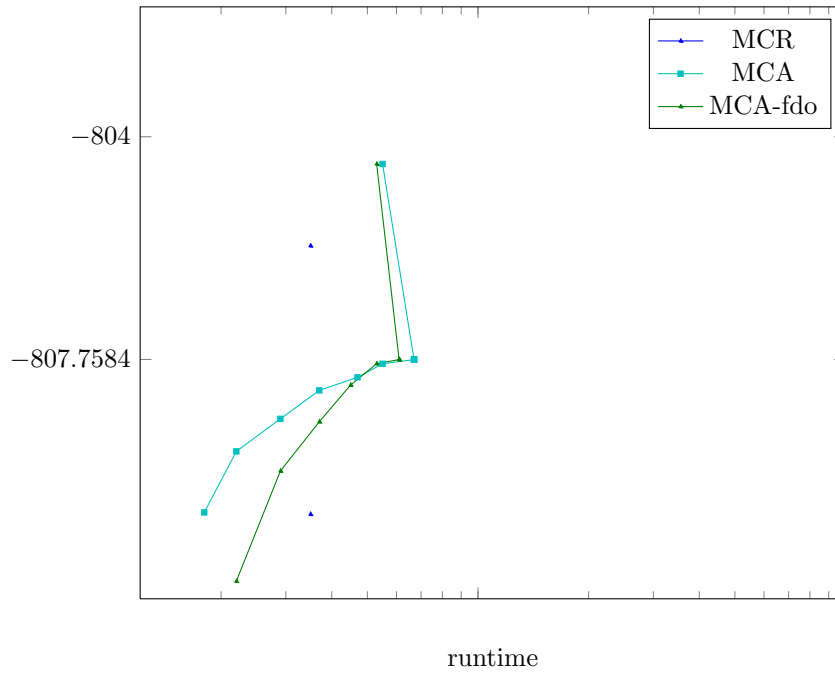


Figure 1787: Runtime results for the instance 6000038 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

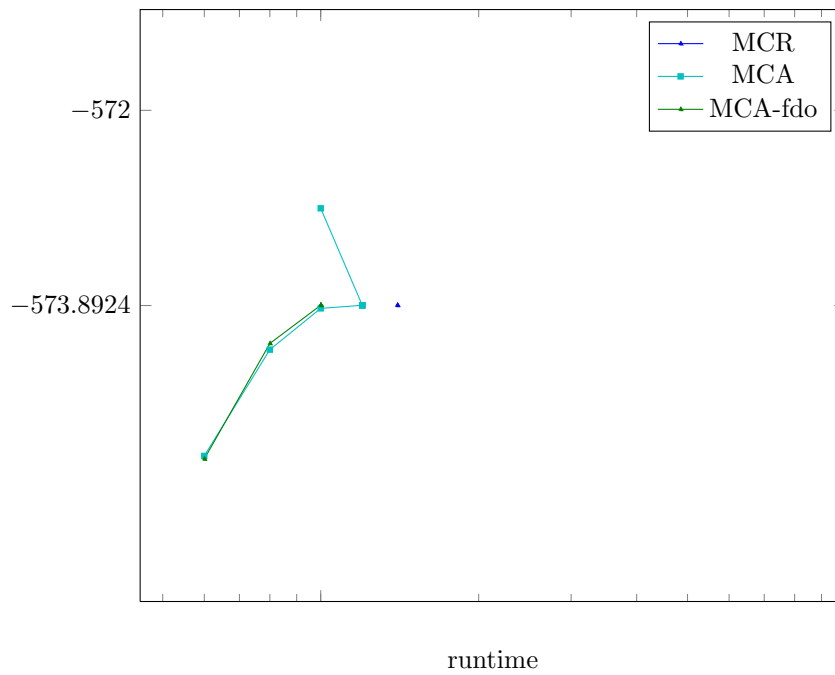


Figure 1788: Runtime results for the instance 6000039 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

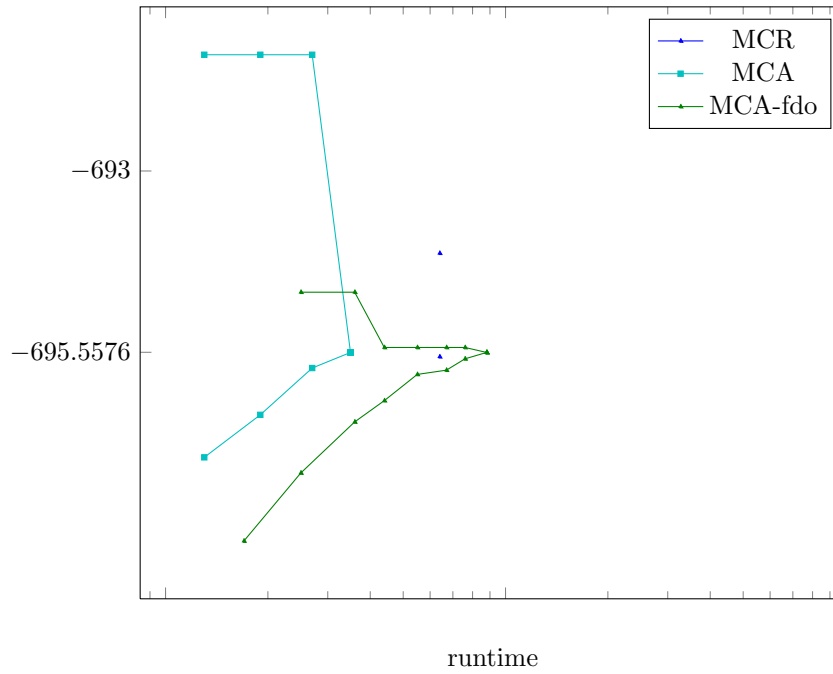


Figure 1789: Runtime results for the instance 6000040 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

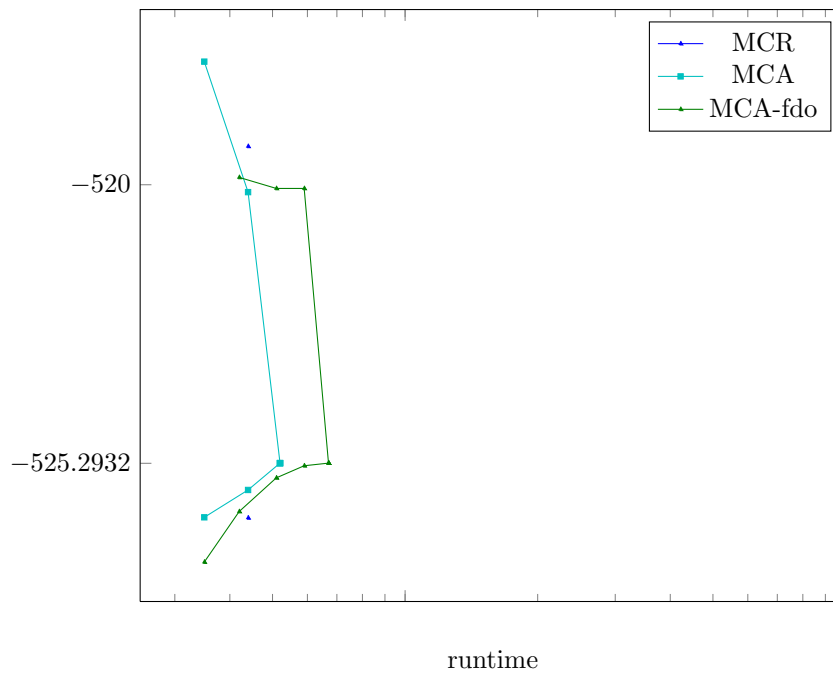


Figure 1790: Runtime results for the instance 6000041 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

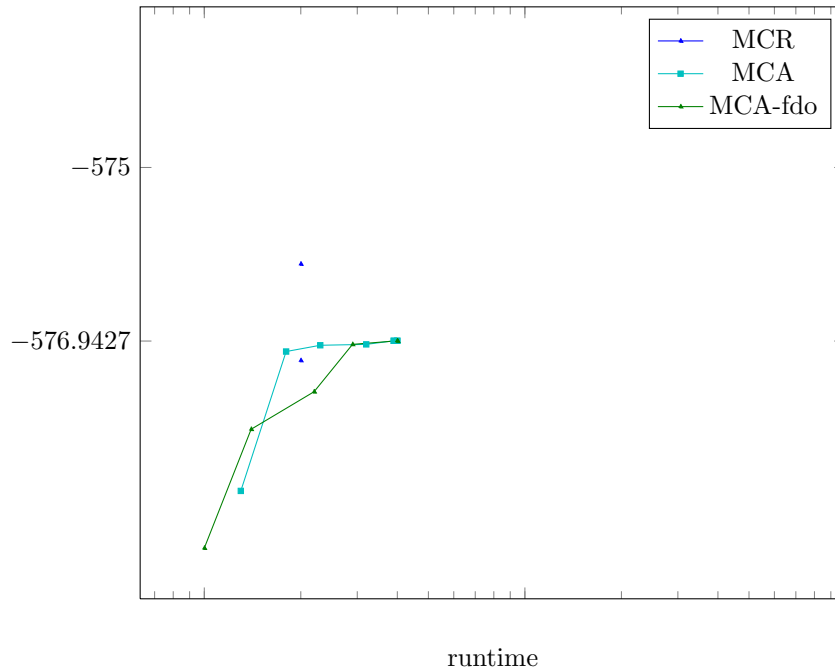


Figure 1791: Runtime results for the instance 6000042 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

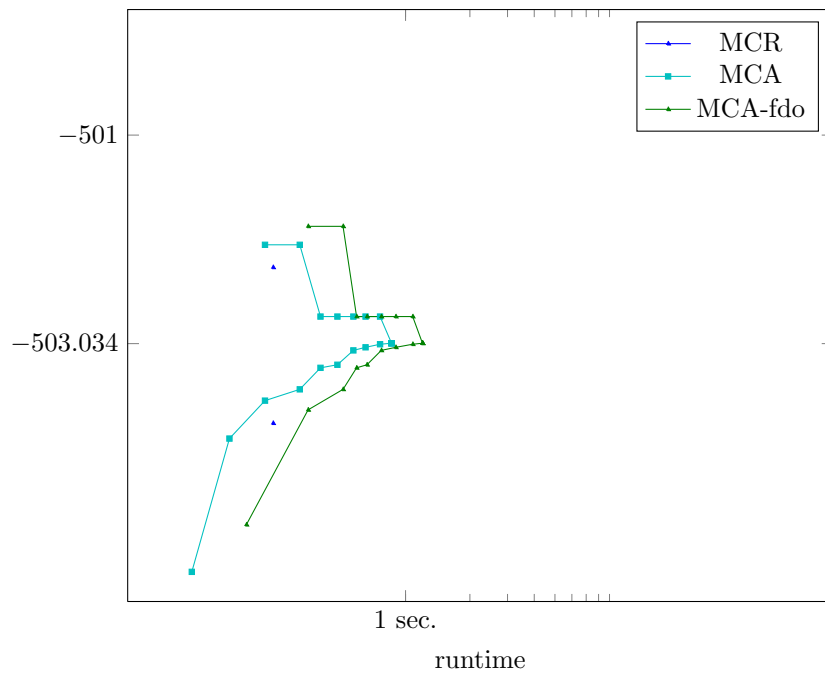


Figure 1792: Runtime results for the instance 6000043 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

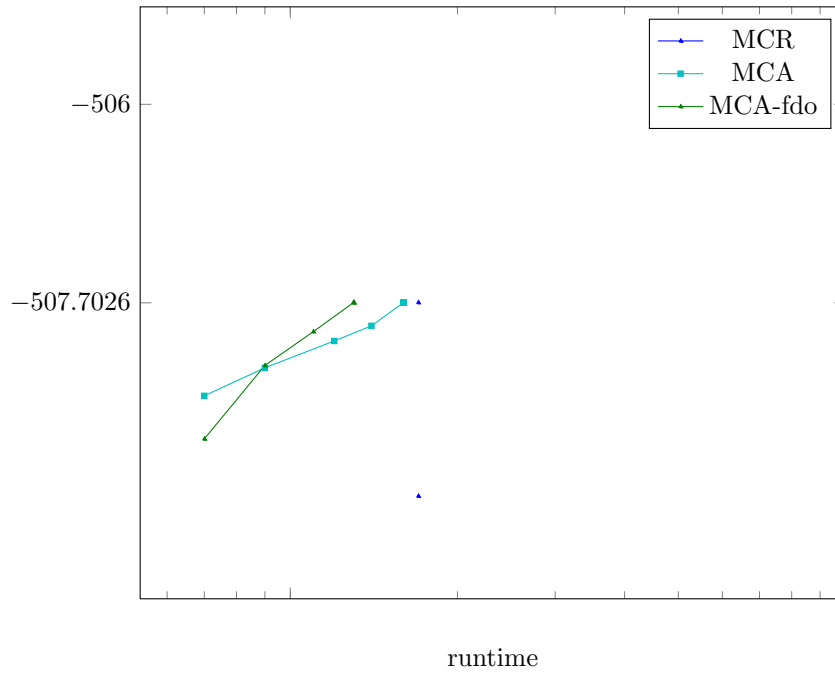


Figure 1793: Runtime results for the instance 6000044 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

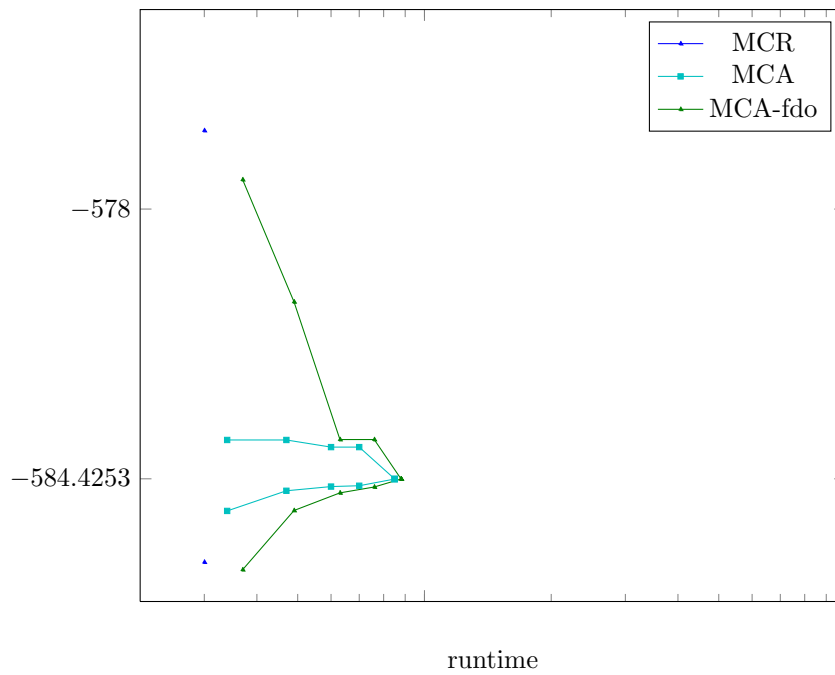


Figure 1794: Runtime results for the instance 6000045 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

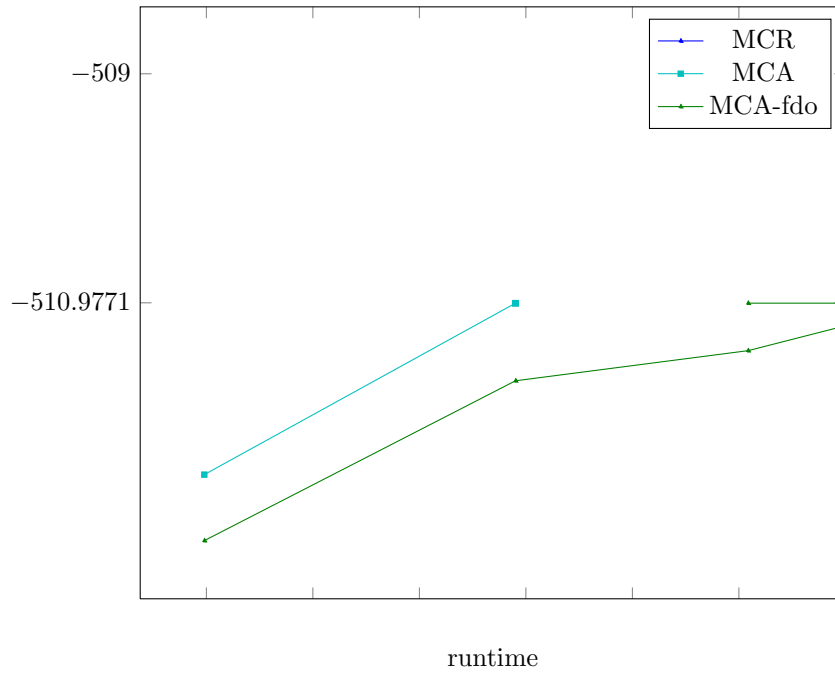


Figure 1795: Runtime results for the instance 6000046 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

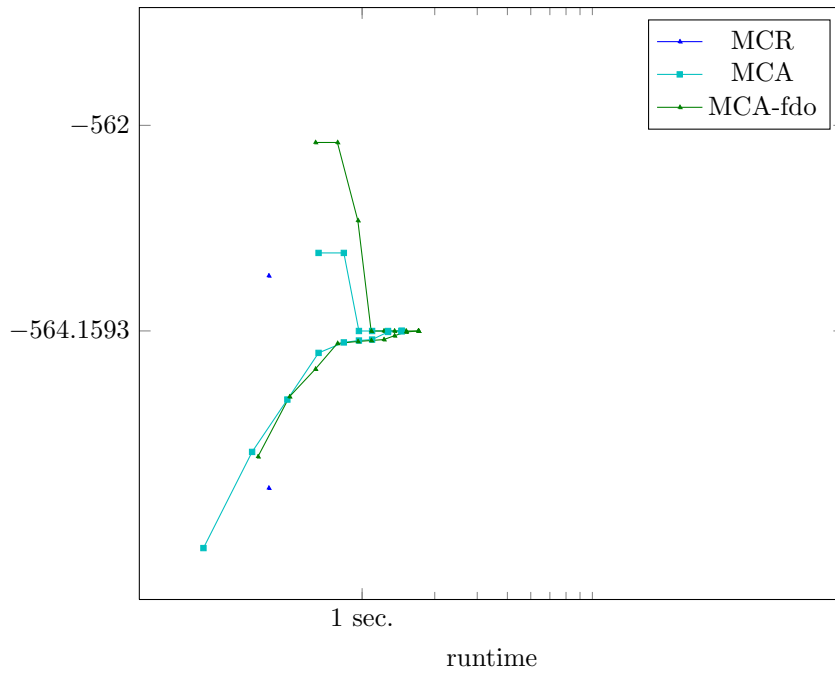


Figure 1796: Runtime results for the instance 6000047 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

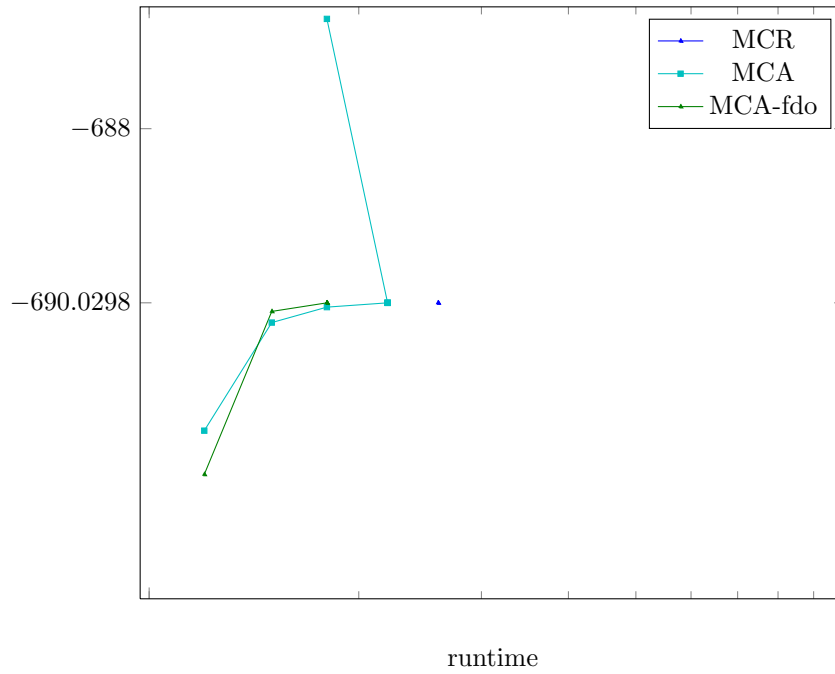


Figure 1797: Runtime results for the instance 6000048 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

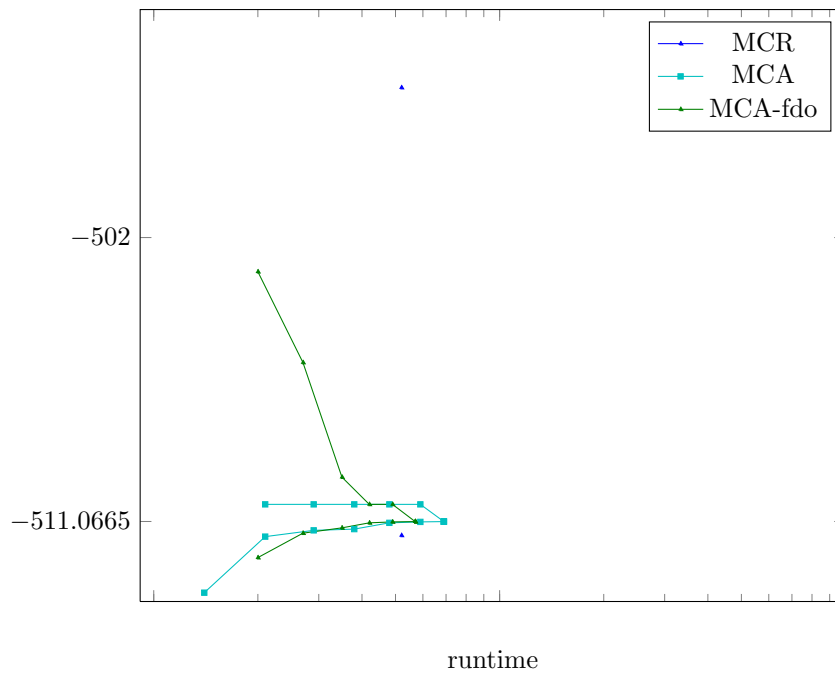


Figure 1798: Runtime results for the instance 6000049 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

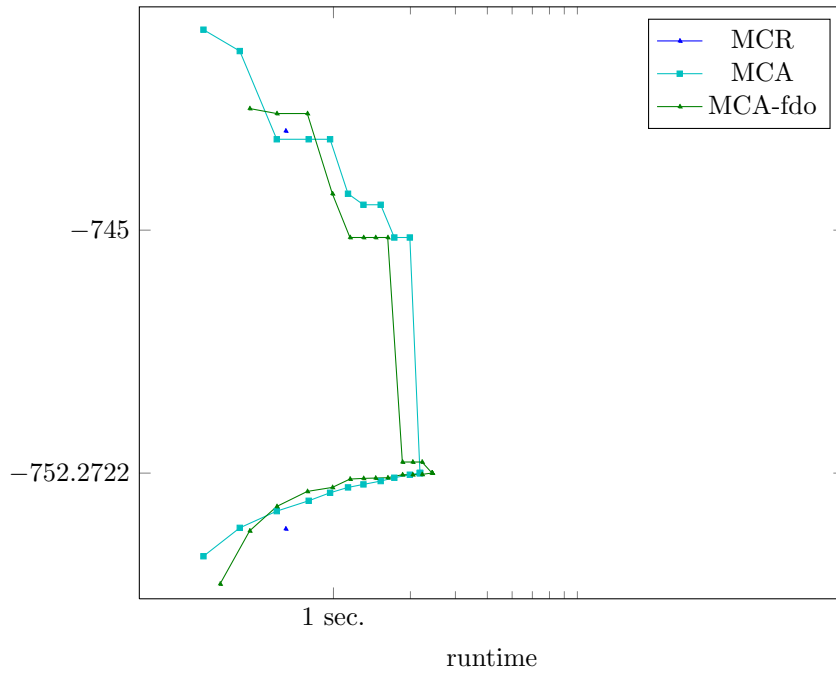


Figure 1799: Runtime results for the instance 6000050 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

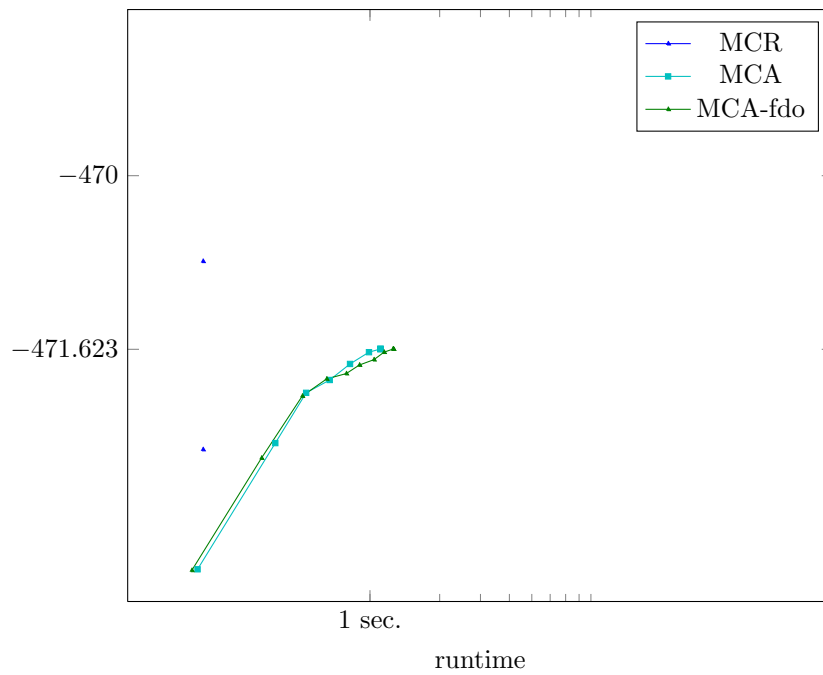


Figure 1800: Runtime results for the instance 6000051 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

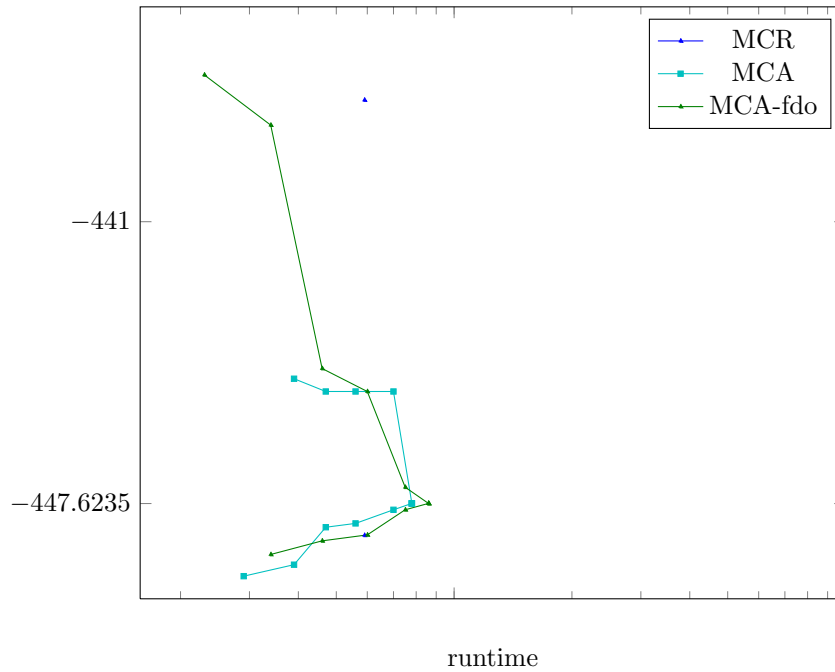


Figure 1801: Runtime results for the instance 6000052 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

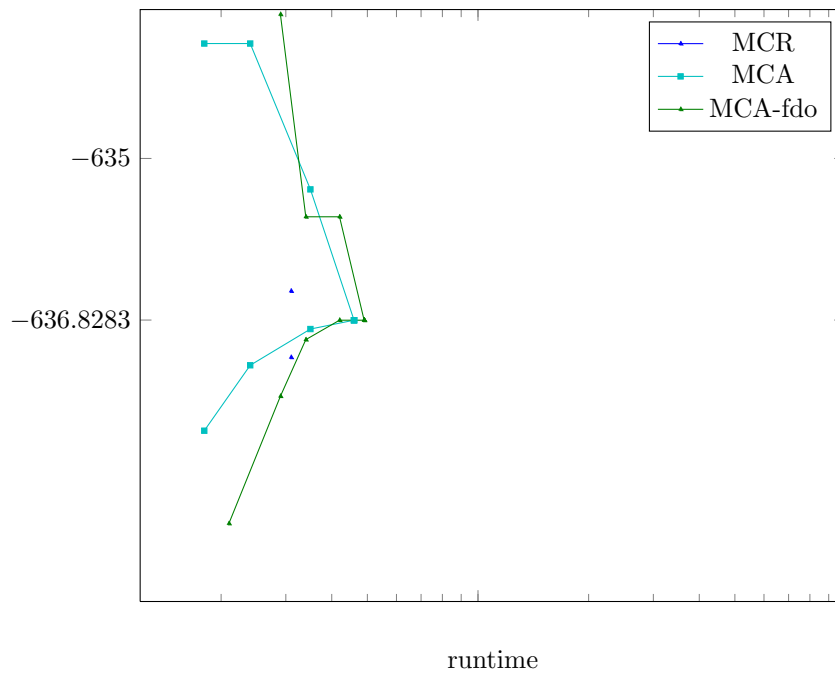


Figure 1802: Runtime results for the instance 6000053 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

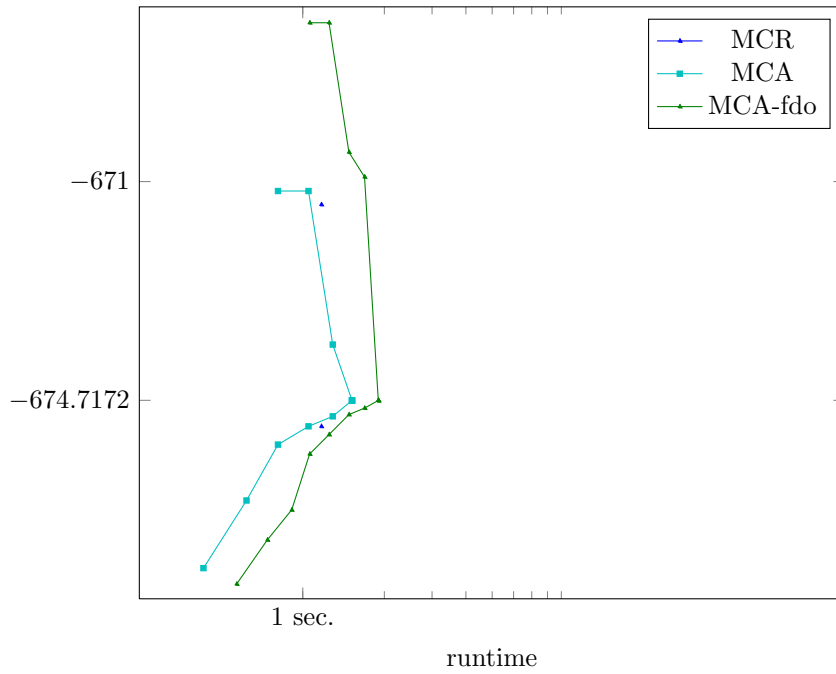


Figure 1803: Runtime results for the instance 6000054 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

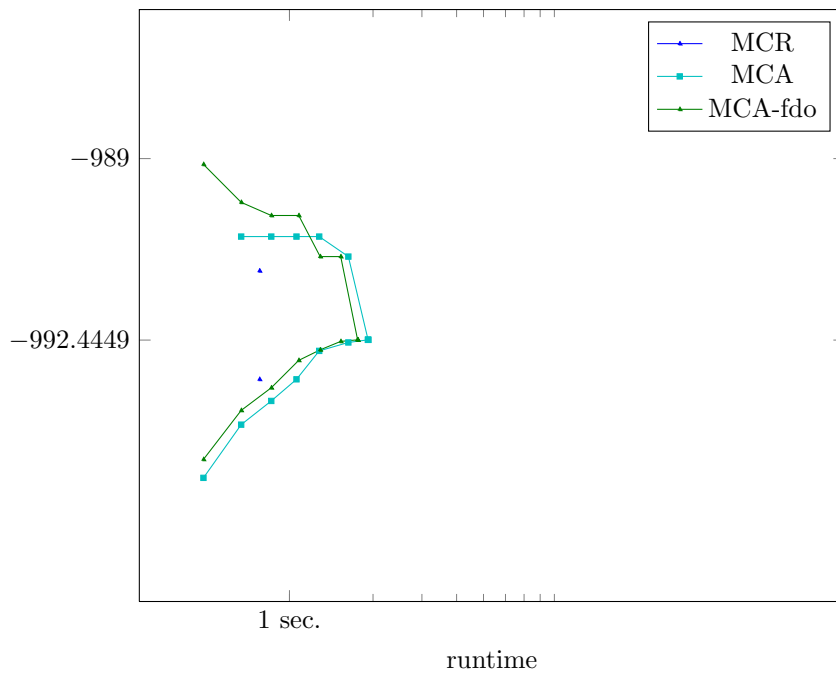


Figure 1804: Runtime results for the instance 6000055 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

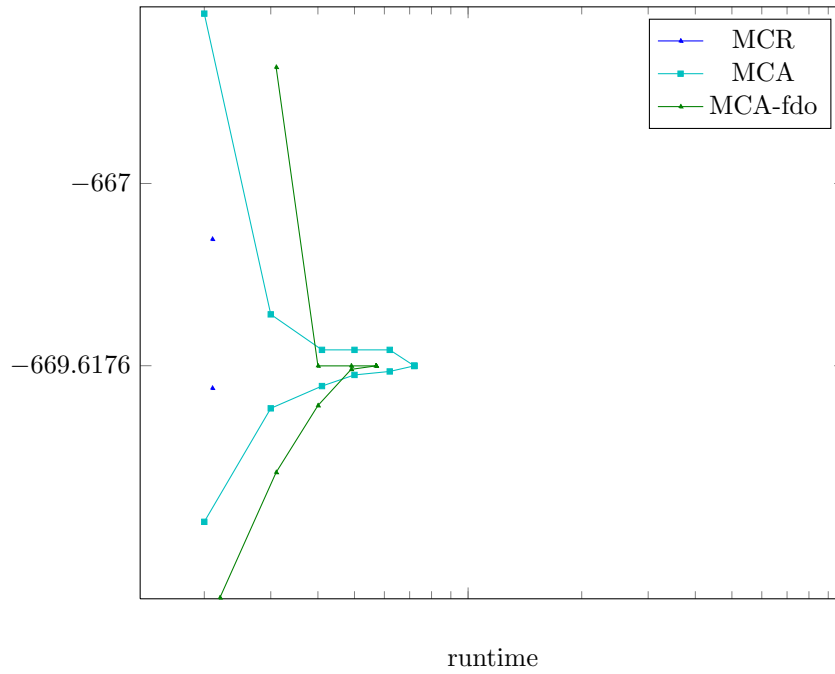


Figure 1805: Runtime results for the instance 6000056 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

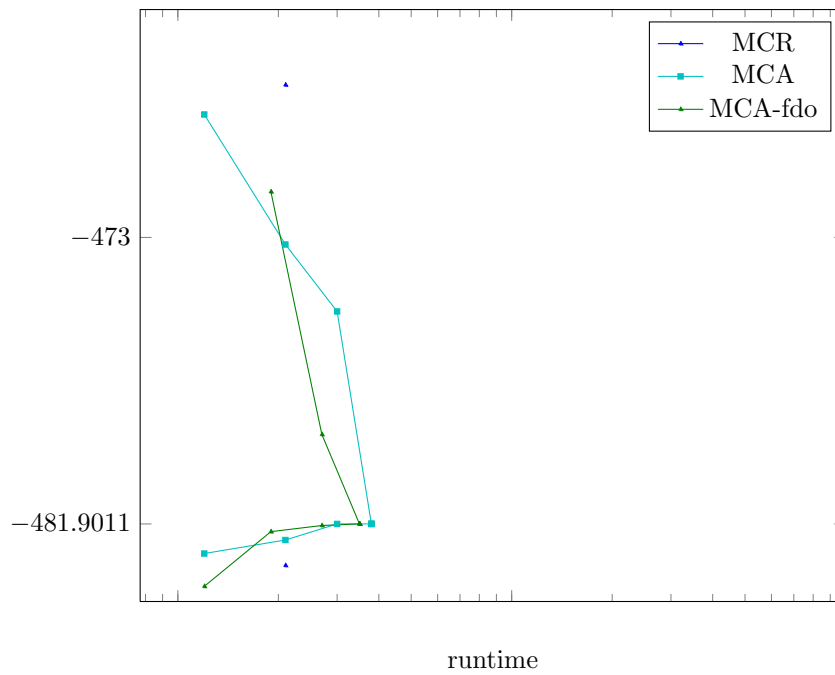


Figure 1806: Runtime results for the instance 6000057 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

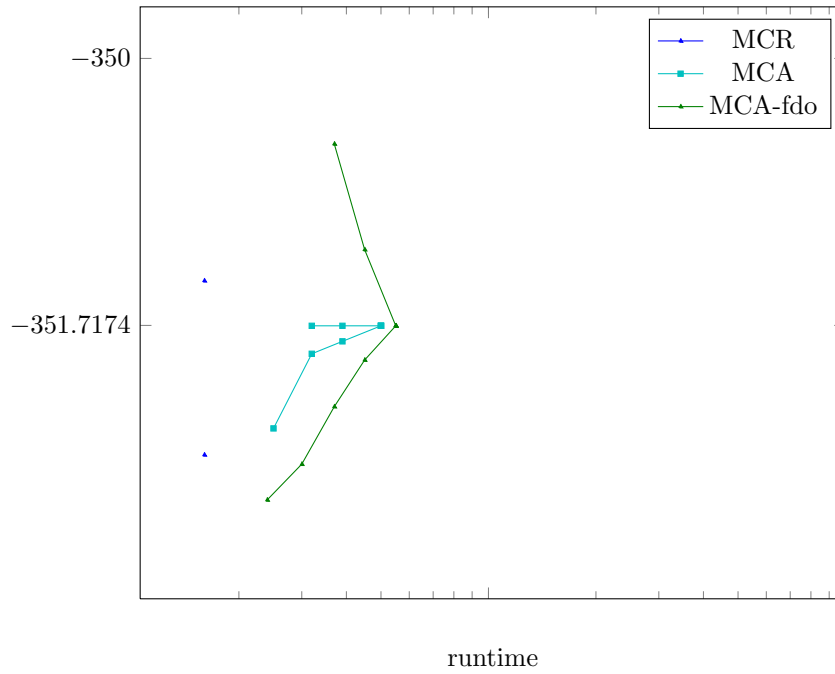


Figure 1807: Runtime results for the instance 6000058 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

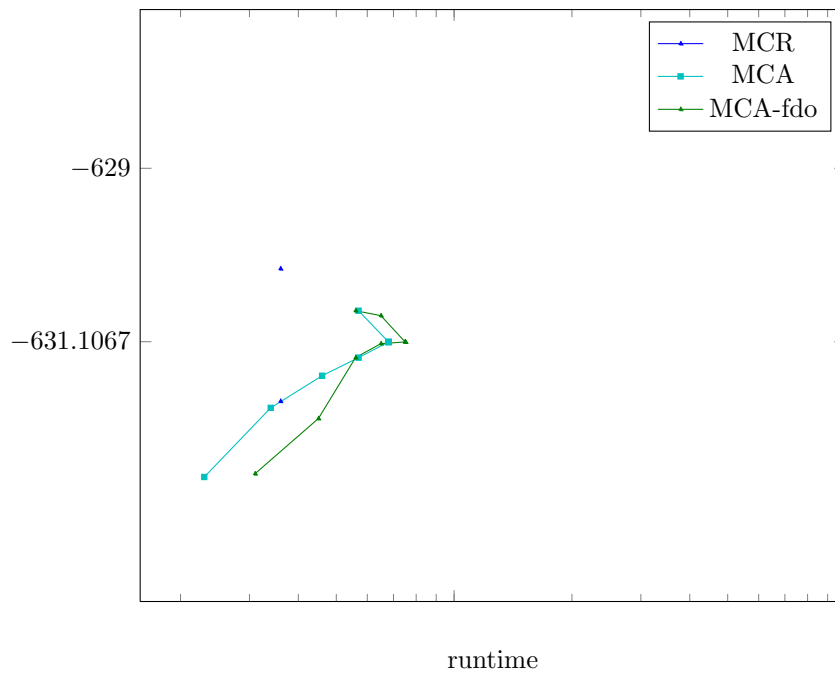


Figure 1808: Runtime results for the instance 6000059 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

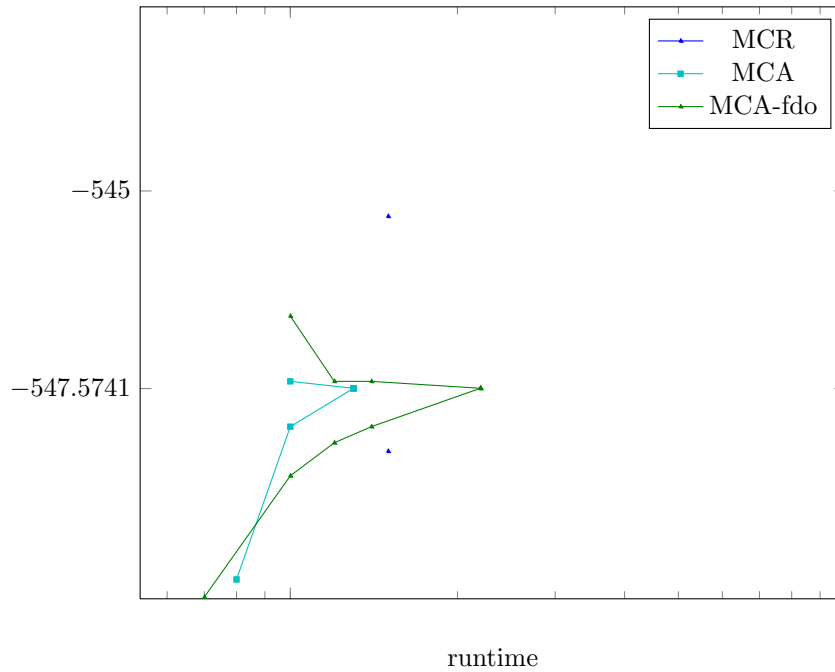


Figure 1809: Runtime results for the instance 6000060 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

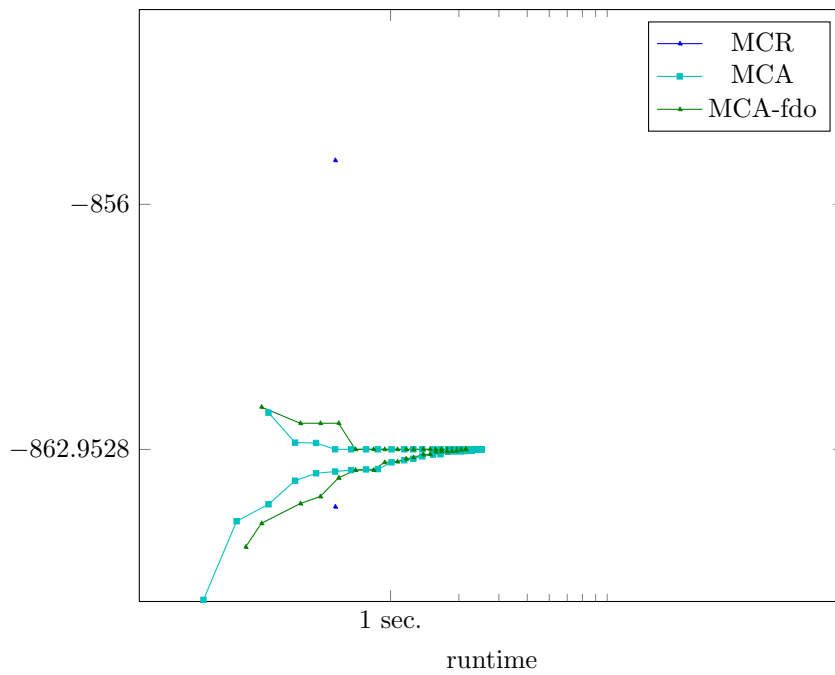


Figure 1810: Runtime results for the instance 6000061 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

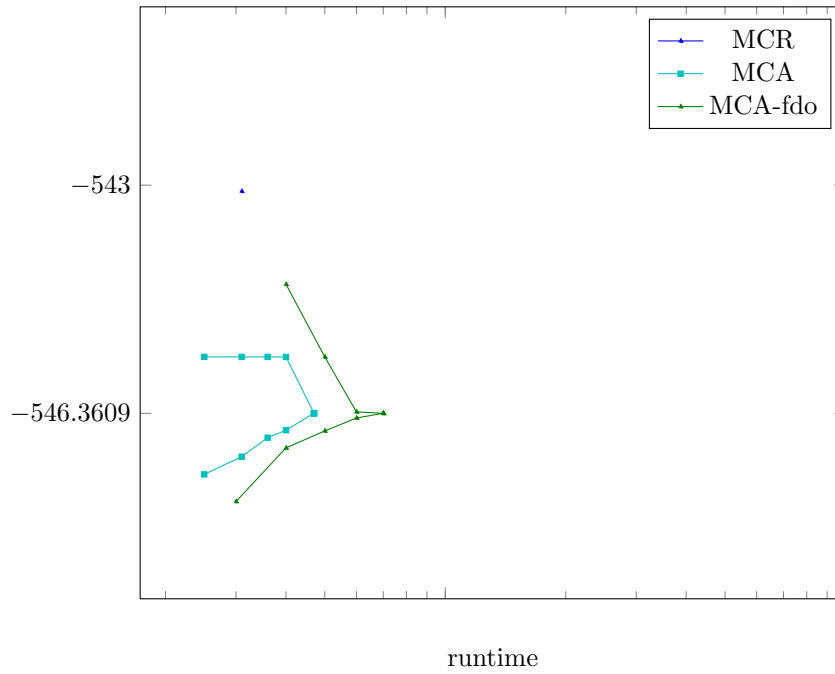


Figure 1811: Runtime results for the instance 6000062 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

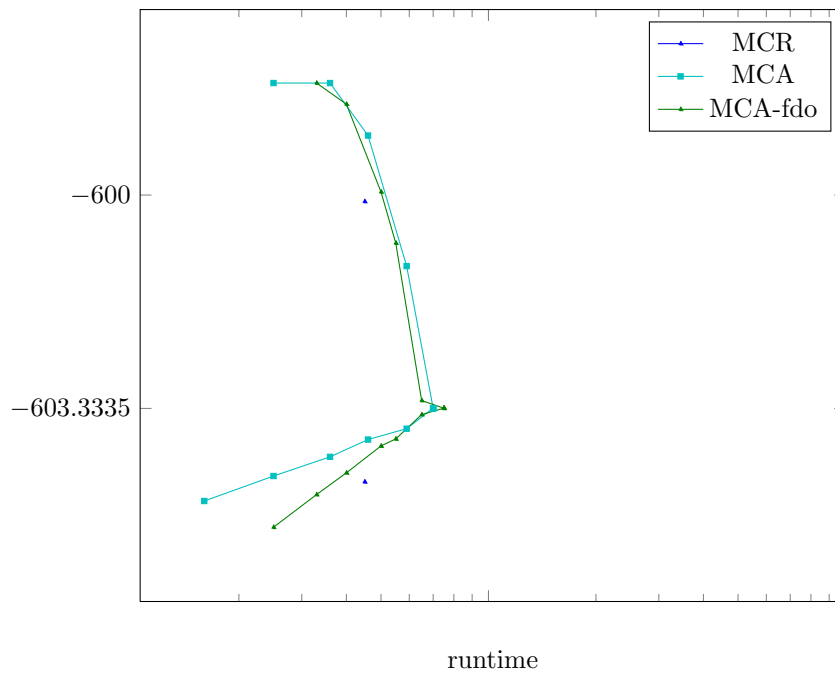


Figure 1812: Runtime results for the instance 6000063 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

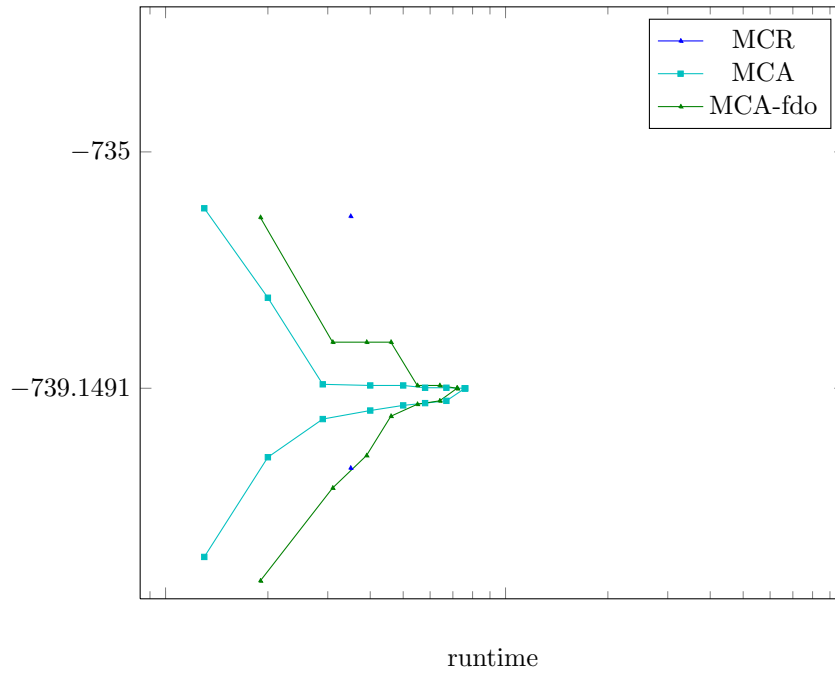


Figure 1813: Runtime results for the instance 6000064 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

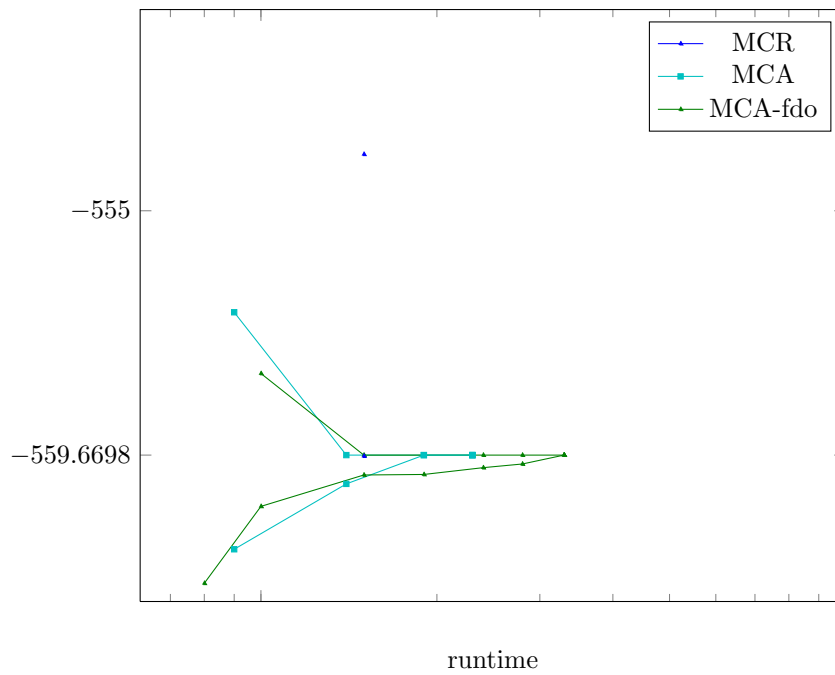


Figure 1814: Runtime results for the instance 6000065 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

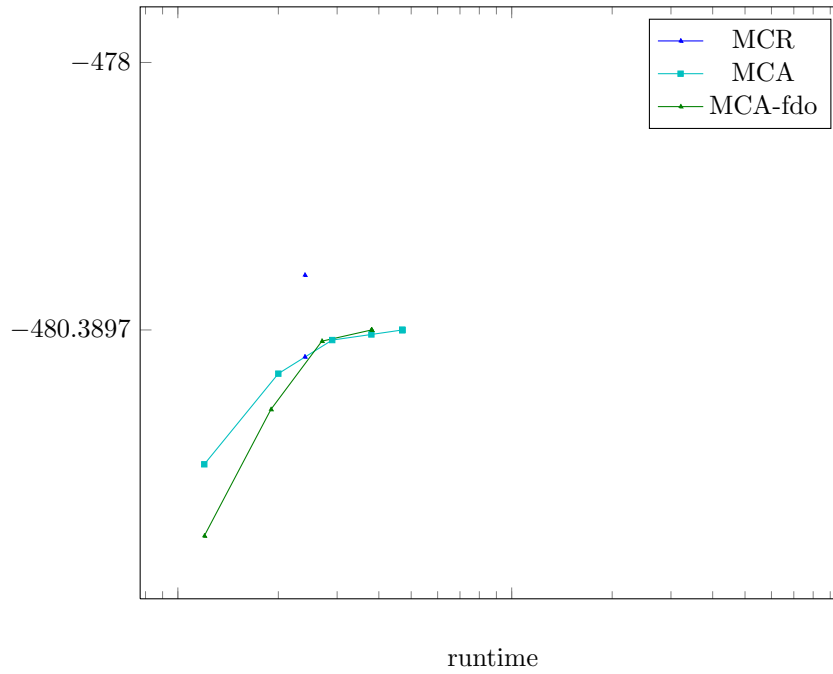


Figure 1815: Runtime results for the instance 6000066 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

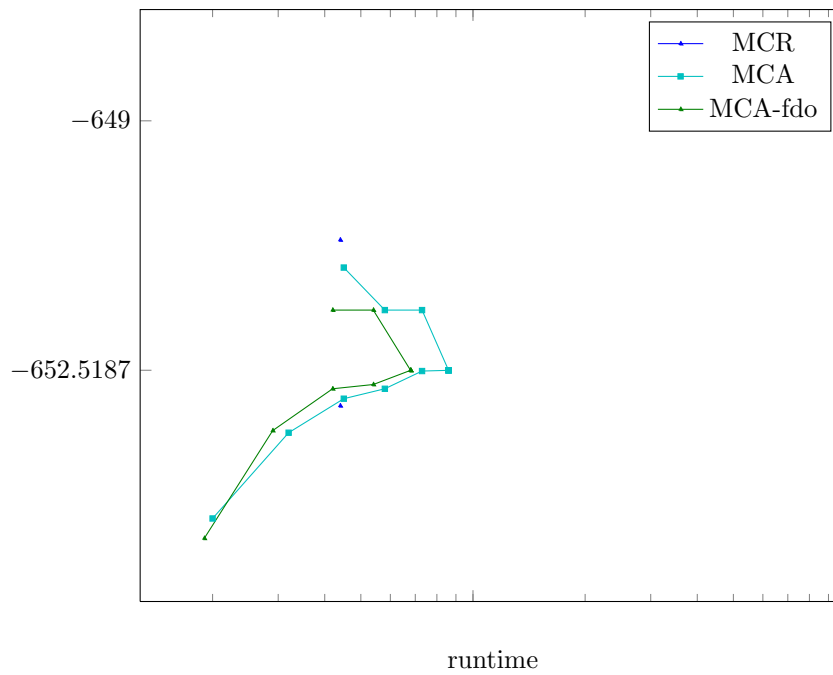


Figure 1816: Runtime results for the instance 6000067 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

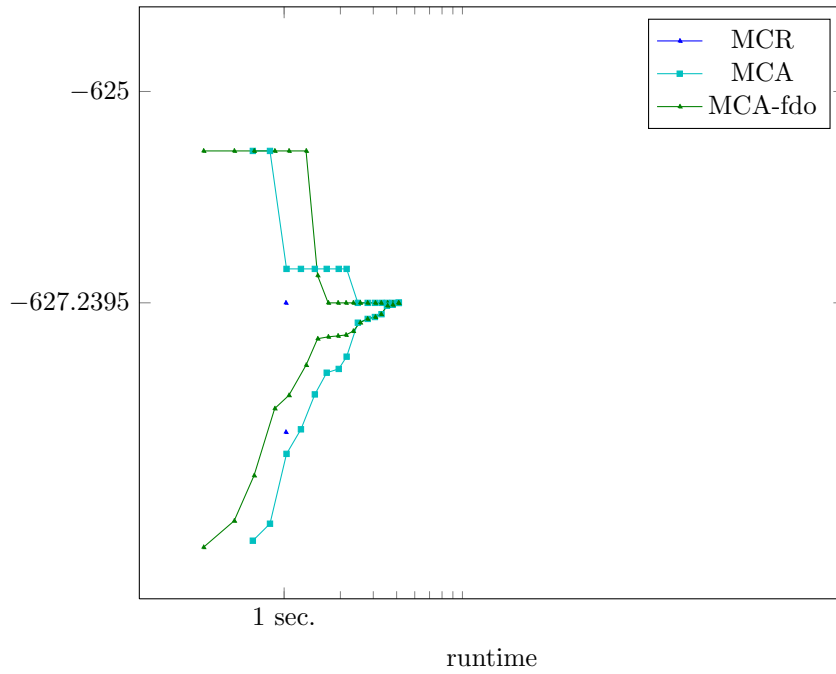


Figure 1817: Runtime results for the instance 6000068 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

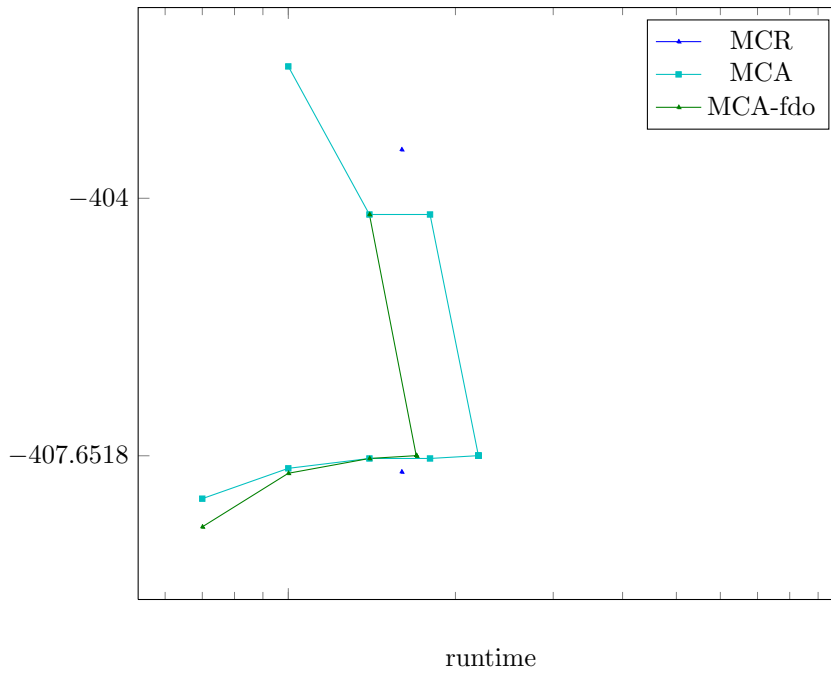


Figure 1818: Runtime results for the instance 6000069 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

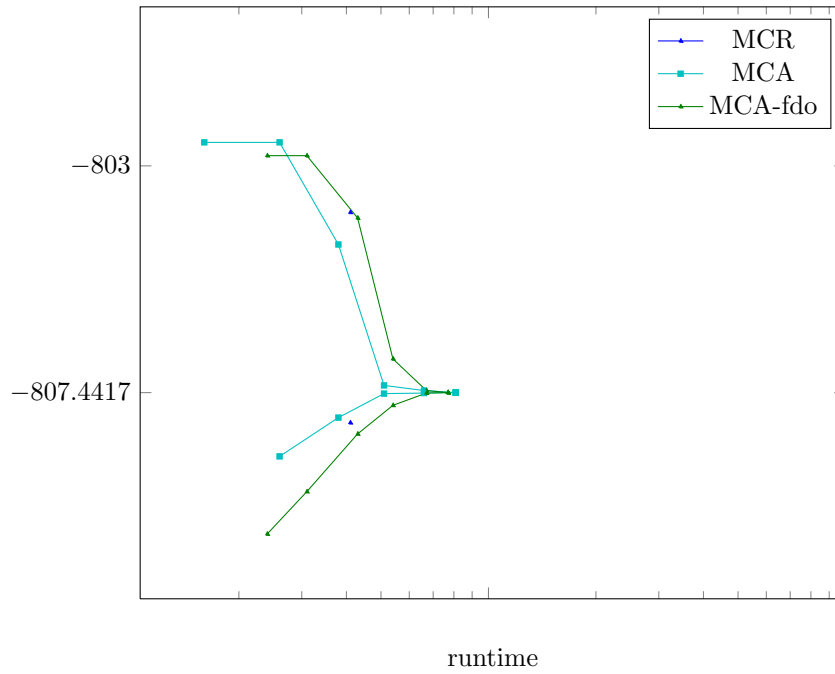


Figure 1819: Runtime results for the instance 6000070 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

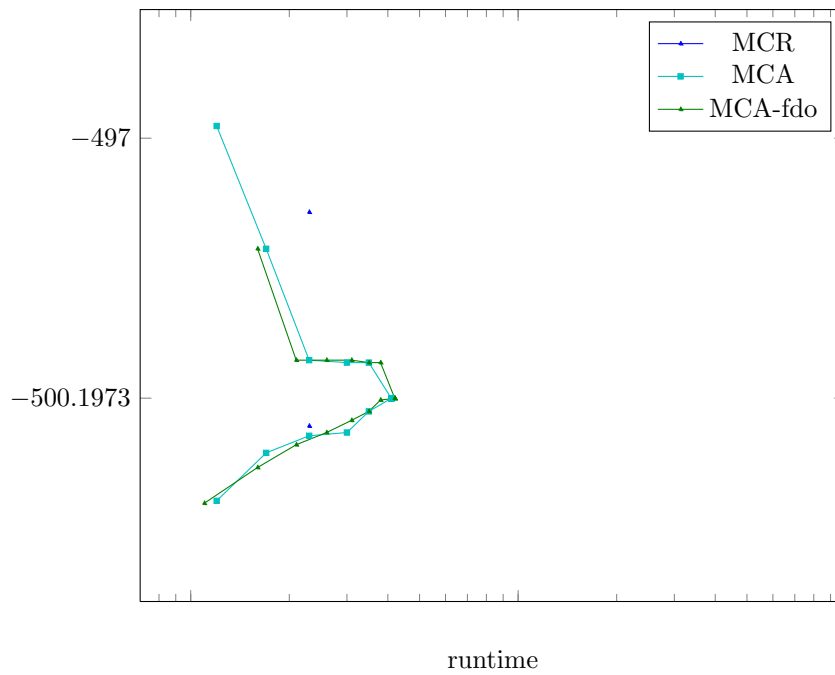


Figure 1820: Runtime results for the instance 6000071 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

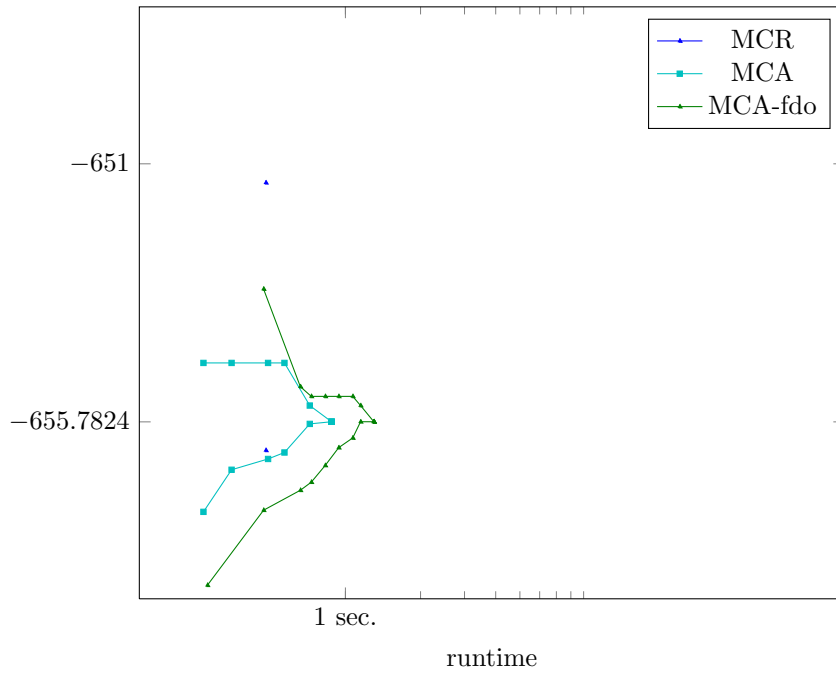


Figure 1821: Runtime results for the instance 6000072 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

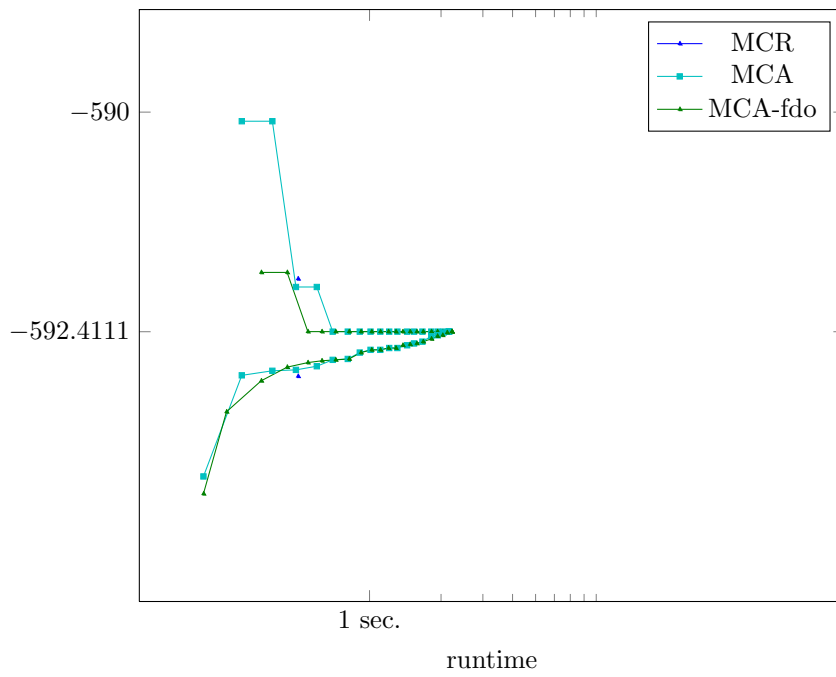


Figure 1822: Runtime results for the instance 6000073 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

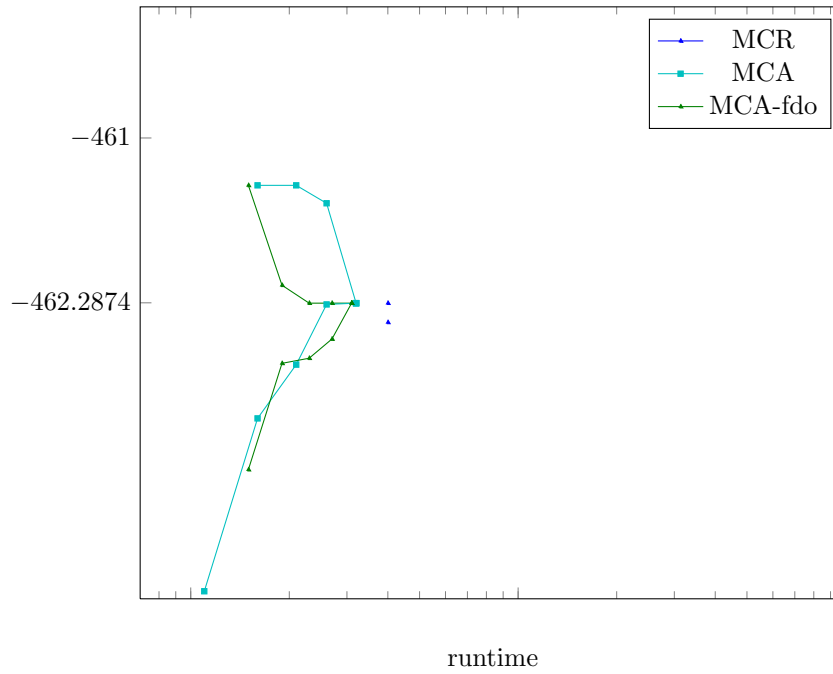


Figure 1823: Runtime results for the instance 6000074 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

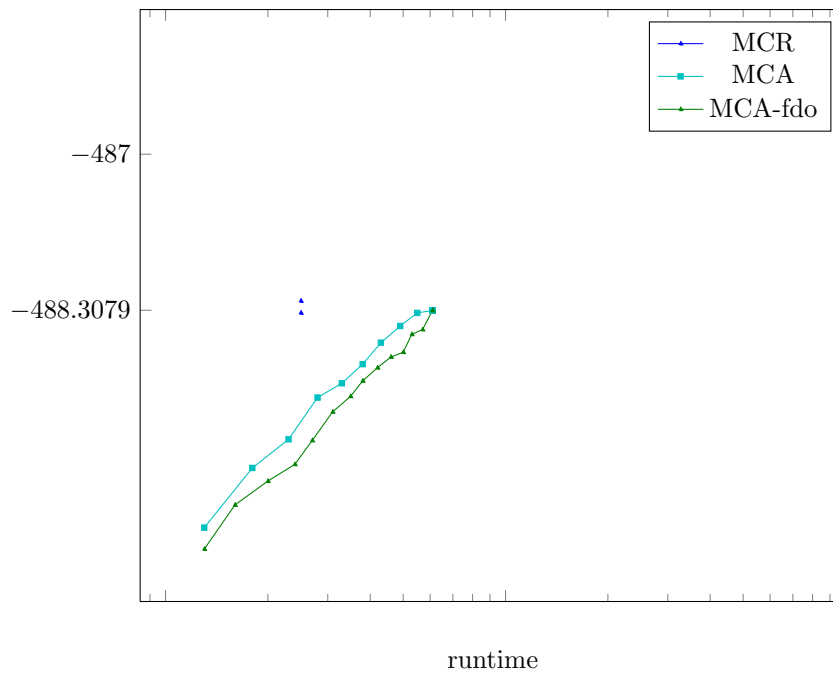


Figure 1824: Runtime results for the instance 6000075 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

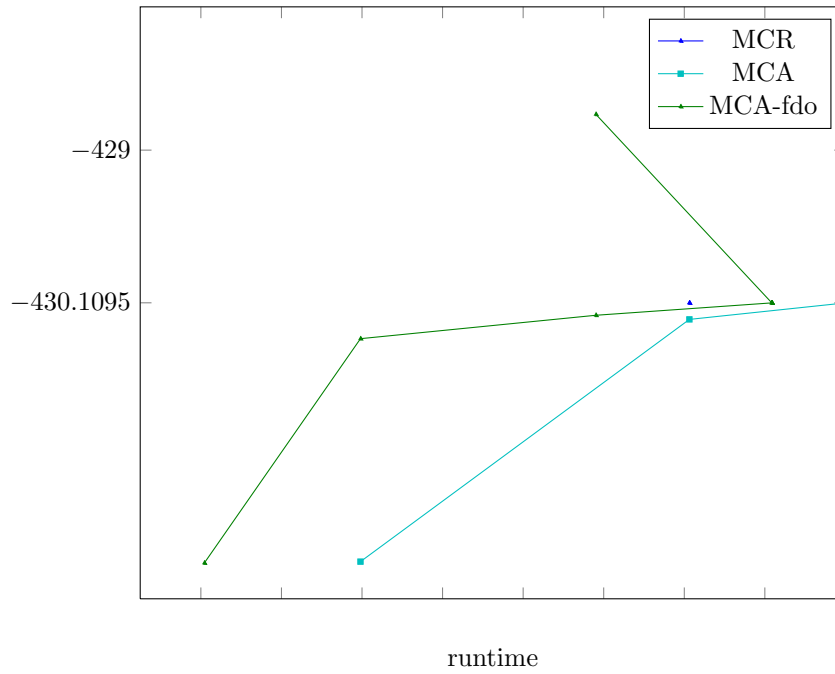


Figure 1825: Runtime results for the instance 6000076 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

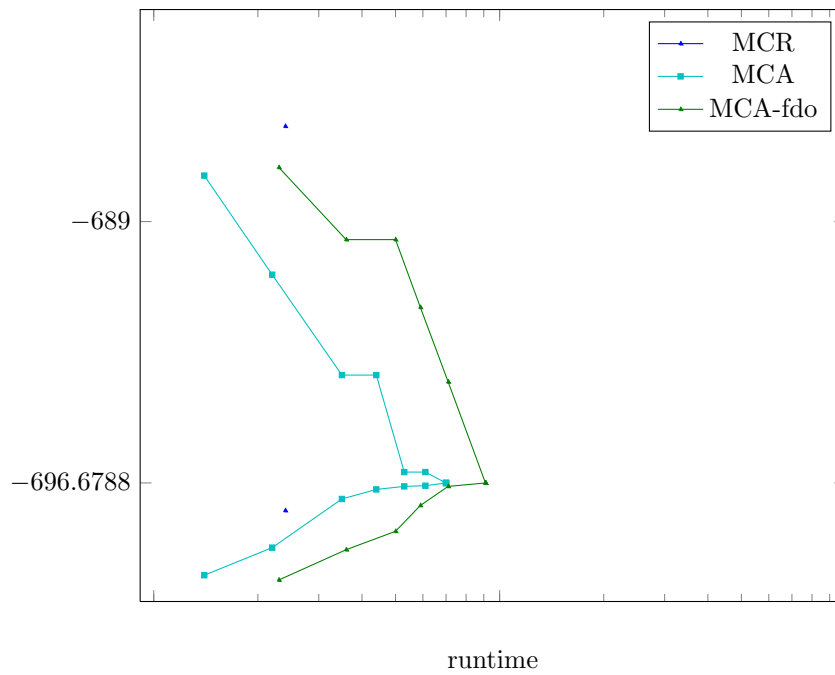


Figure 1826: Runtime results for the instance 6000077 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

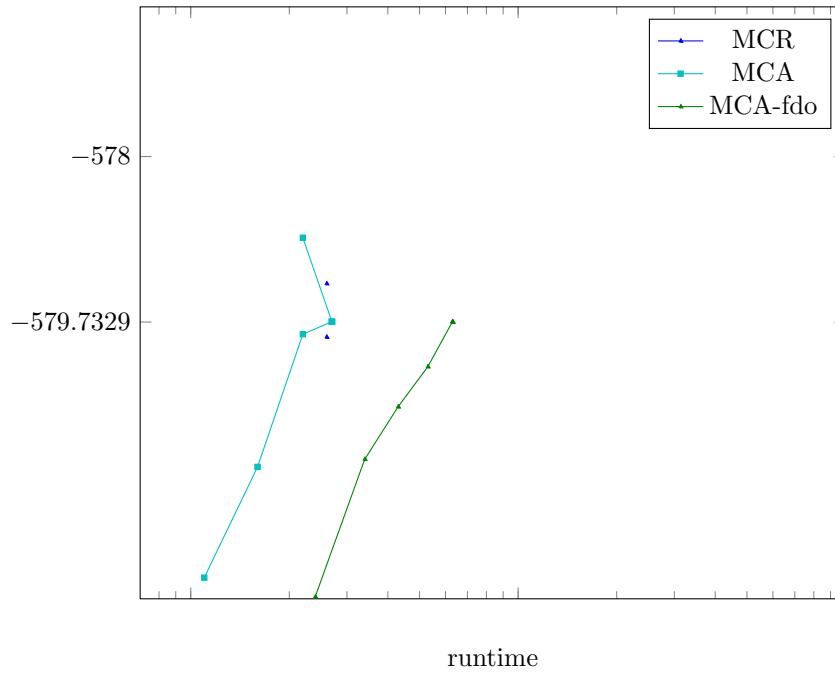


Figure 1827: Runtime results for the instance 6000078 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

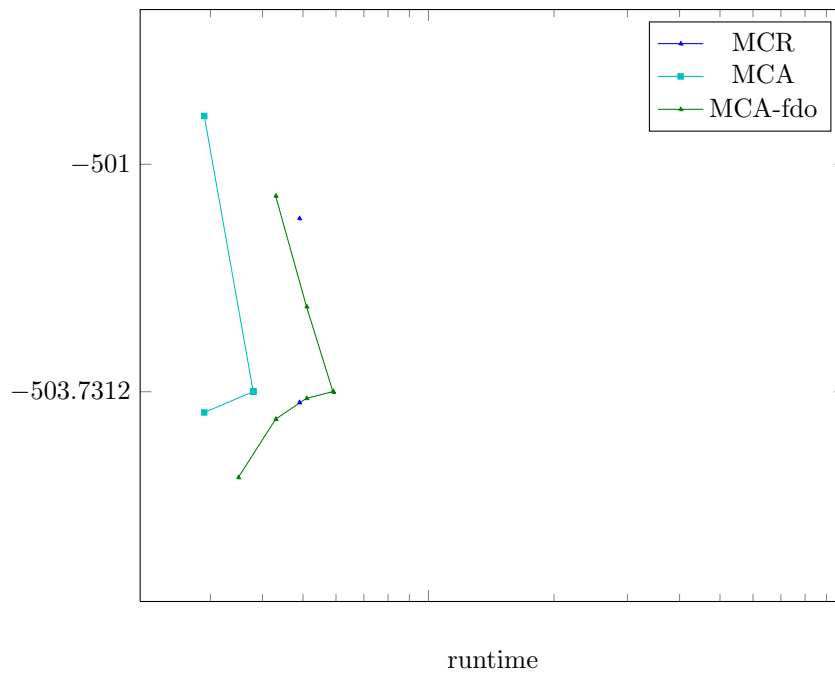


Figure 1828: Runtime results for the instance 6000079 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

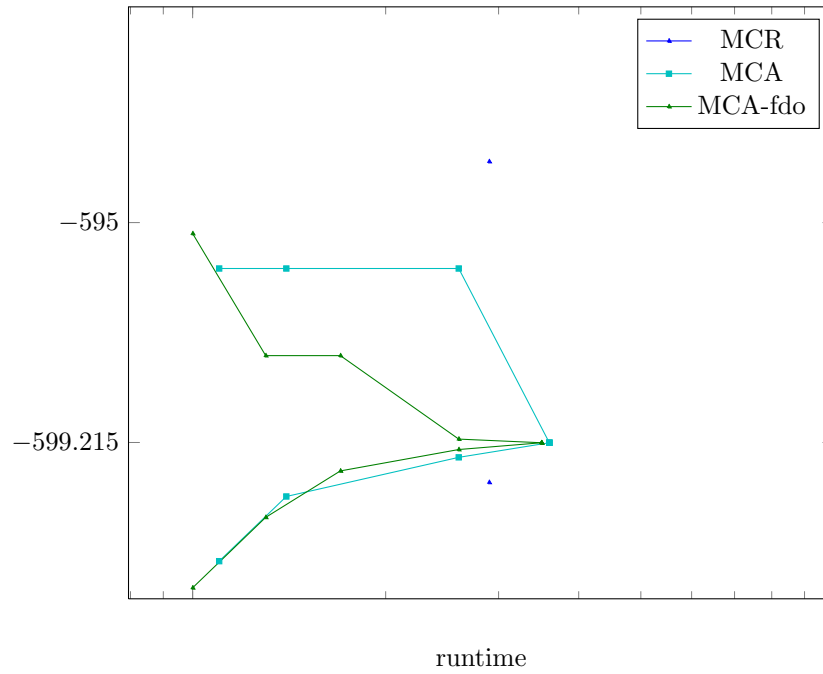


Figure 1829: Runtime results for the instance 6000080 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

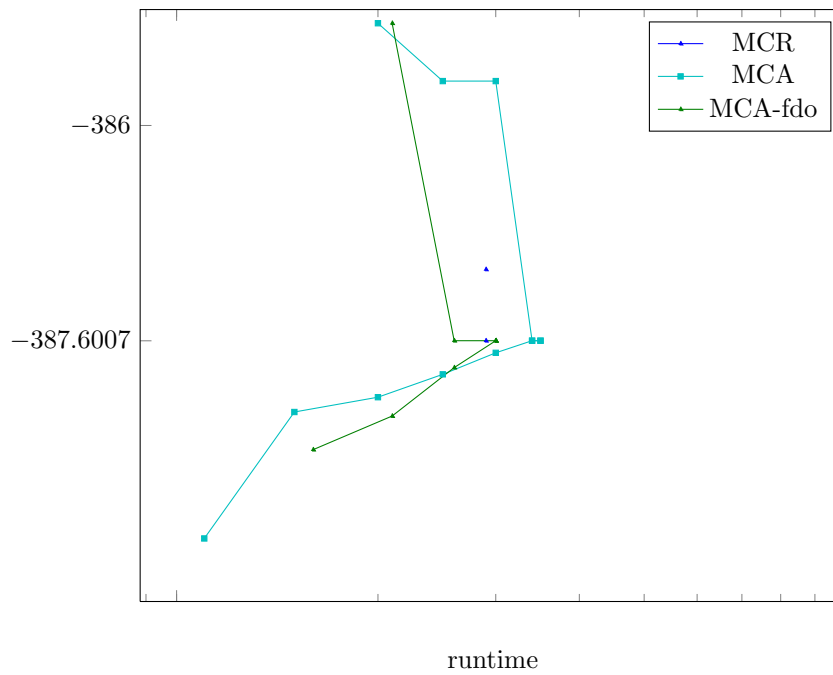


Figure 1830: Runtime results for the instance 6000081 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

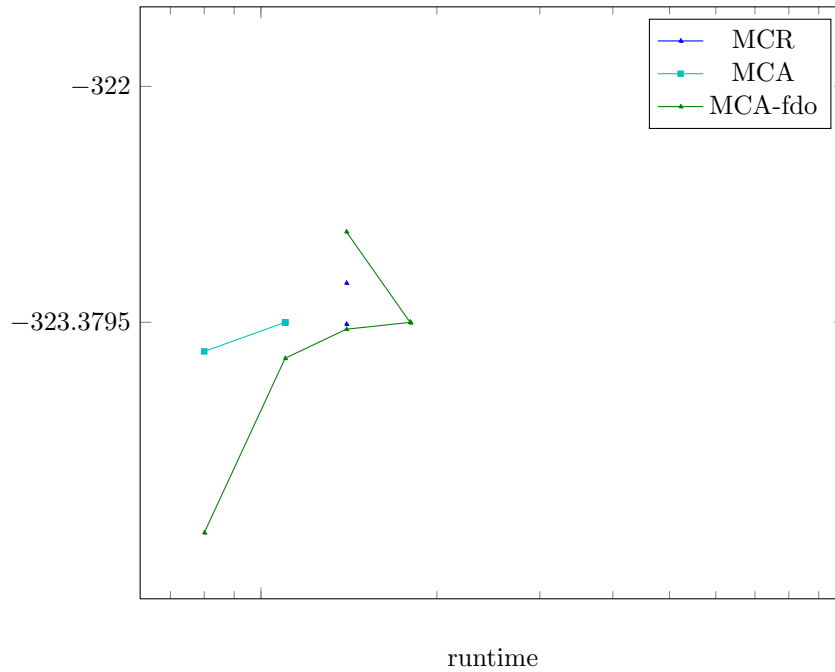
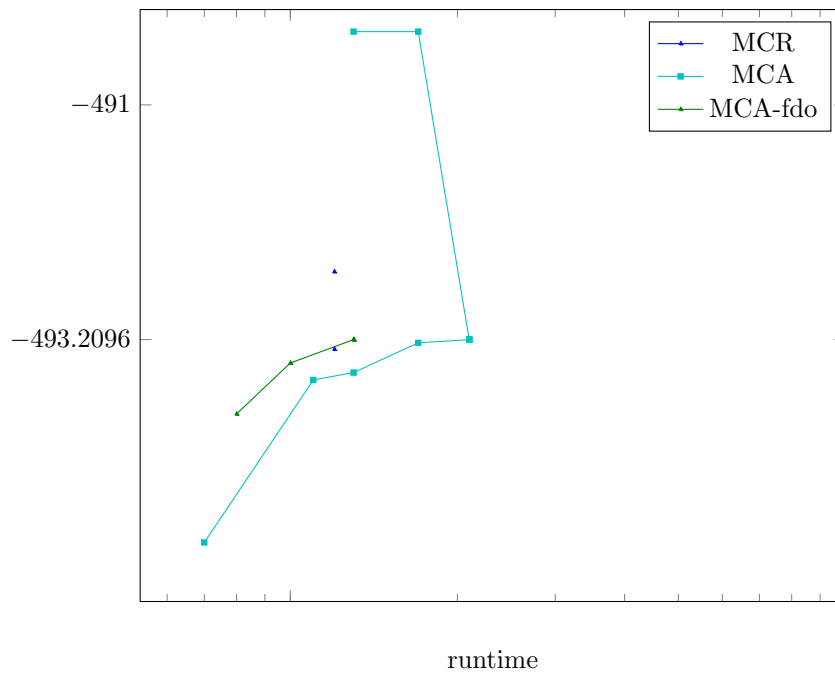


Figure 1831: Runtime results for the instance 6000082 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



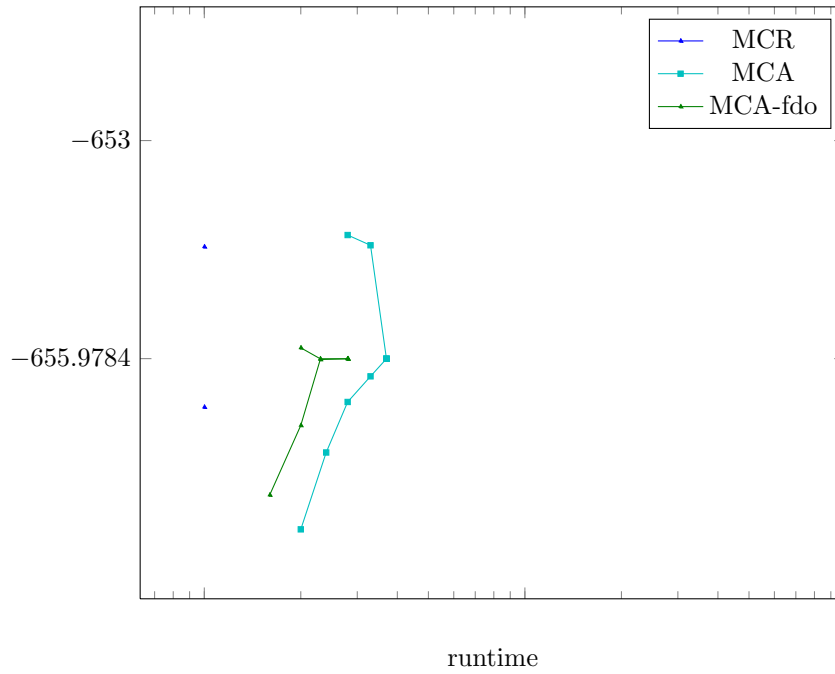


Figure 1833: Runtime results for the instance 6000084 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

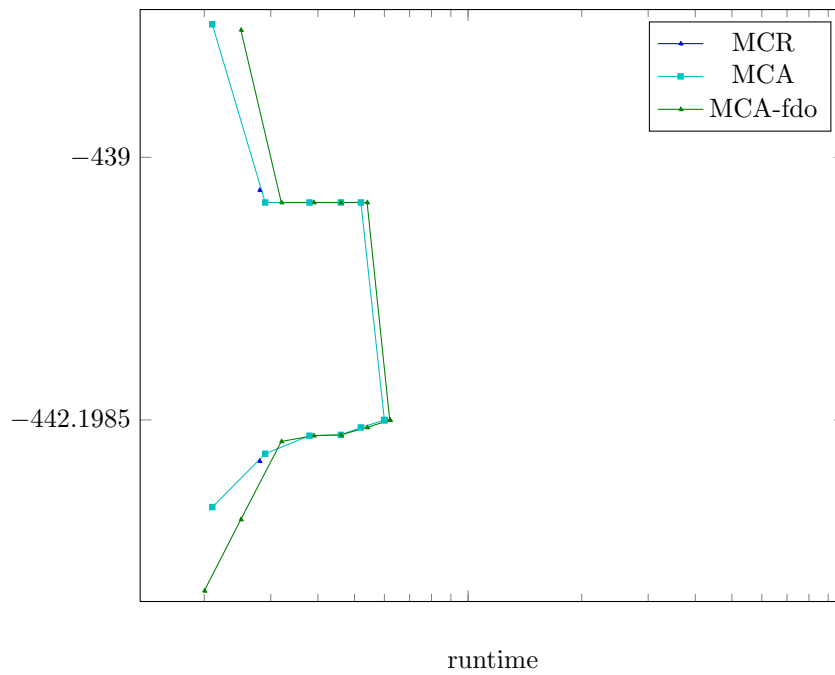


Figure 1834: Runtime results for the instance 6000085 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

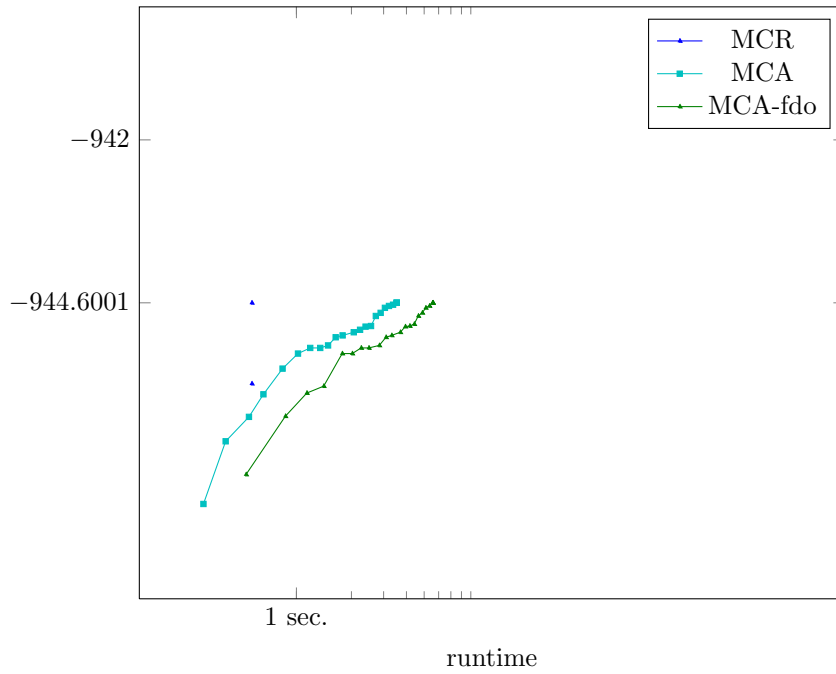


Figure 1835: Runtime results for the instance 6000086 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

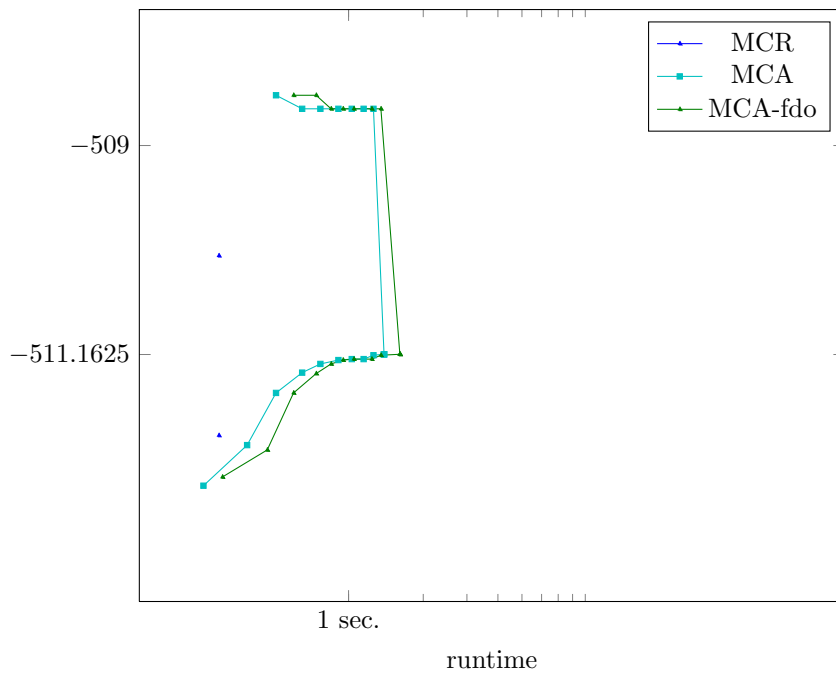


Figure 1836: Runtime results for the instance 6000087 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

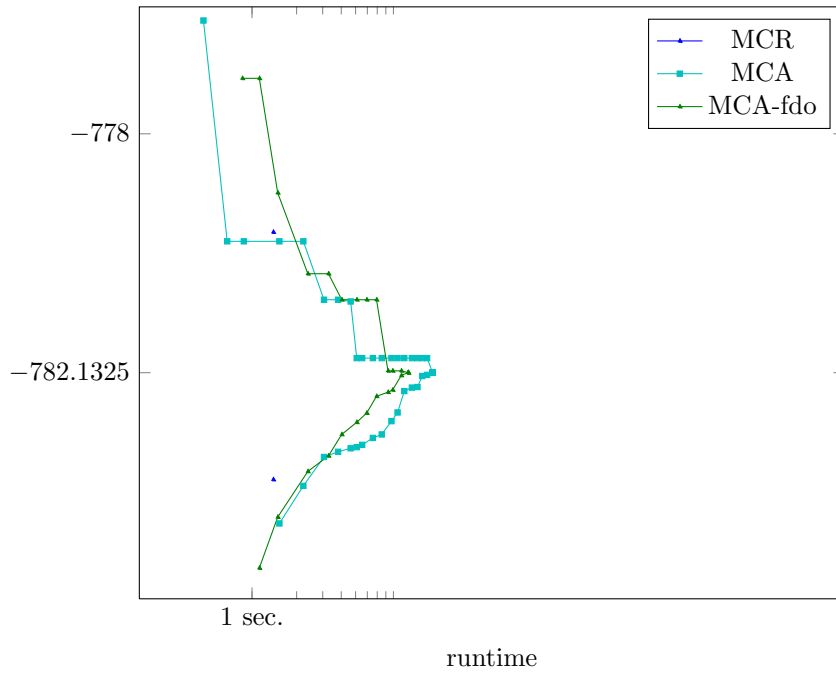


Figure 1837: Runtime results for the instance 6000088 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

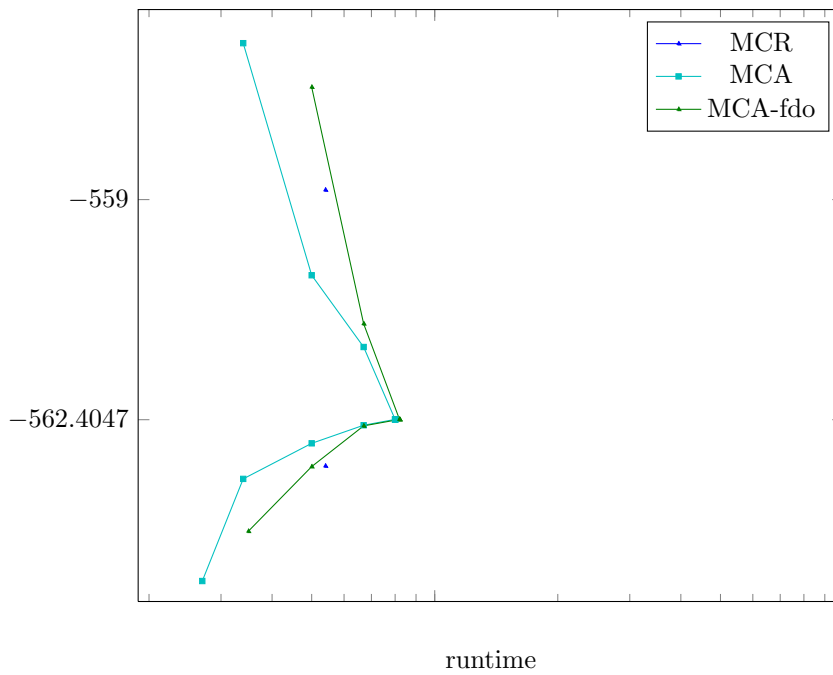
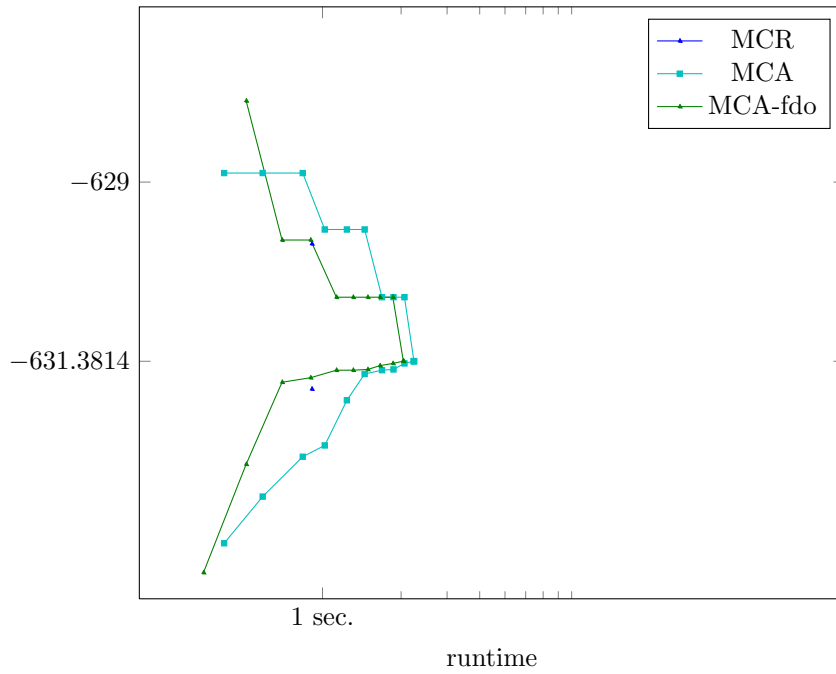


Figure 1838: Runtime results for the instance 6000089 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



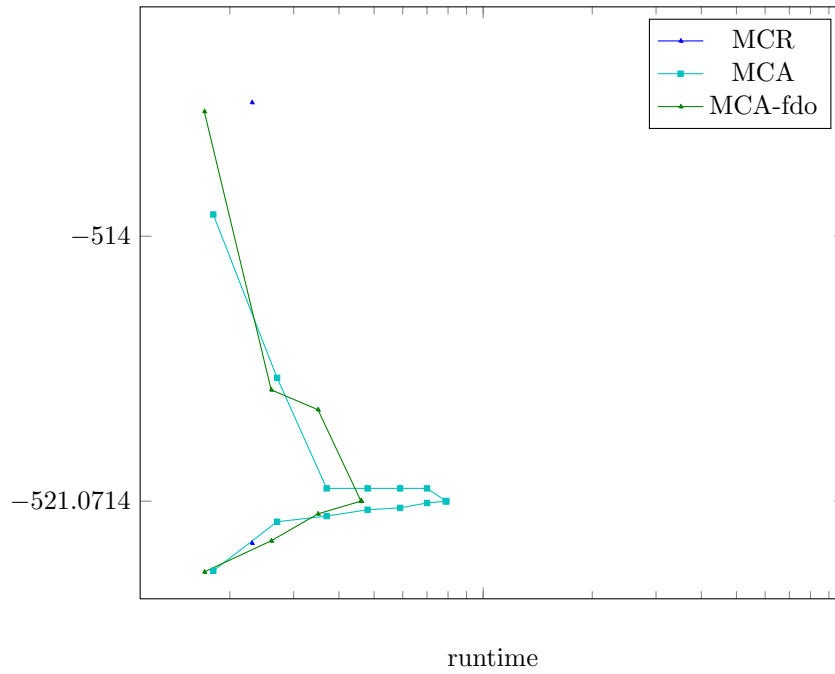


Figure 1841: Runtime results for the instance 6000092 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

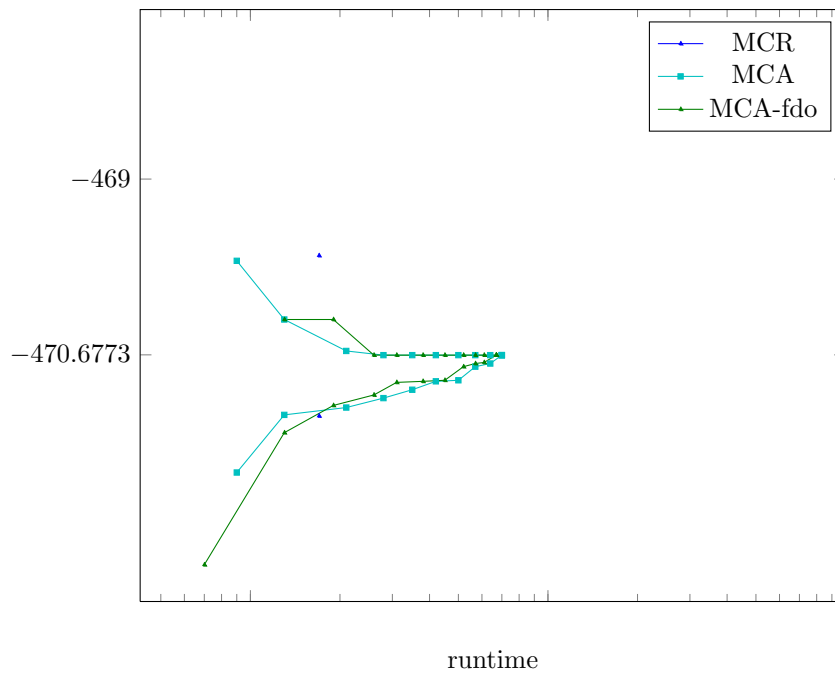


Figure 1842: Runtime results for the instance 6000093 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

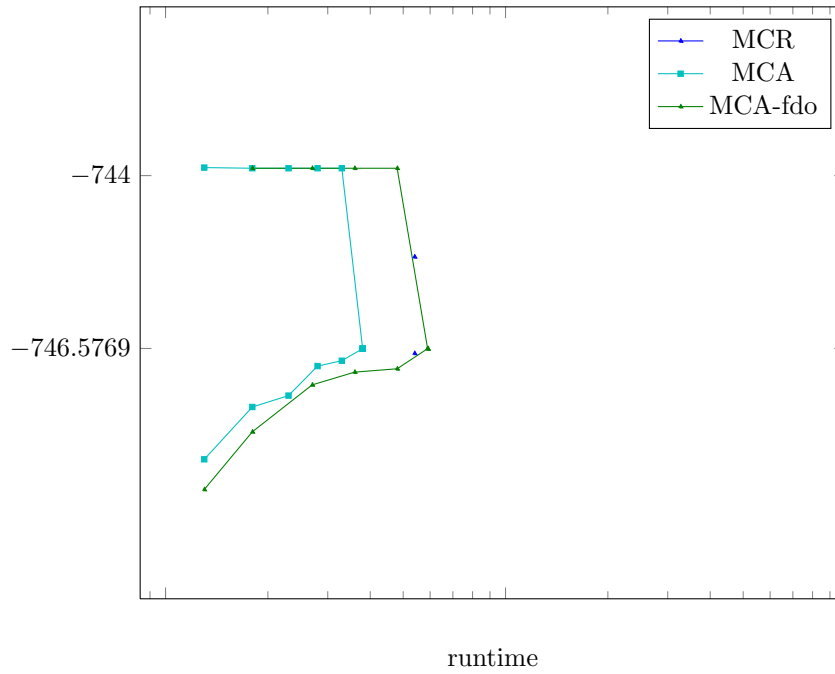


Figure 1845: Runtime results for the instance 6000096 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

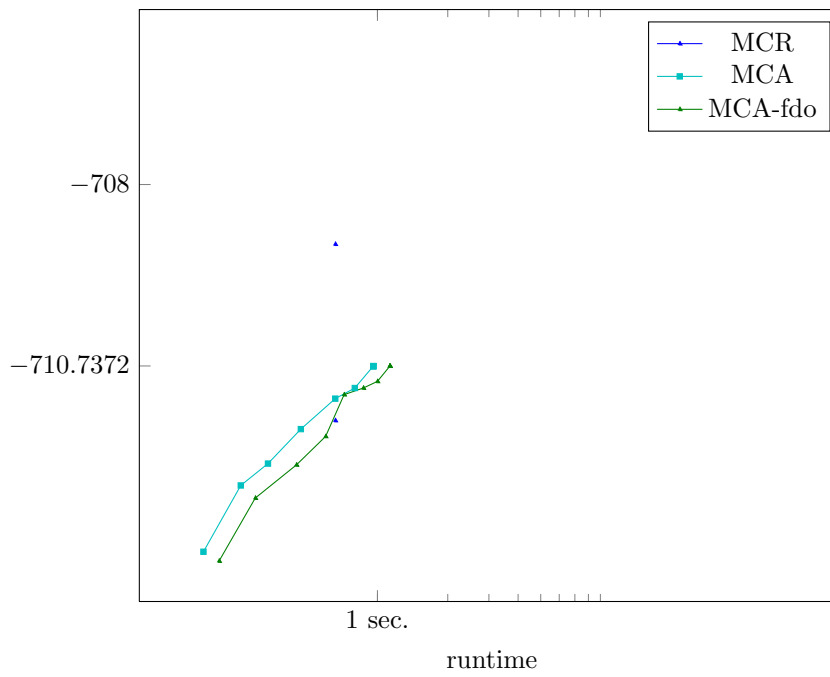


Figure 1846: Runtime results for the instance 6000097 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

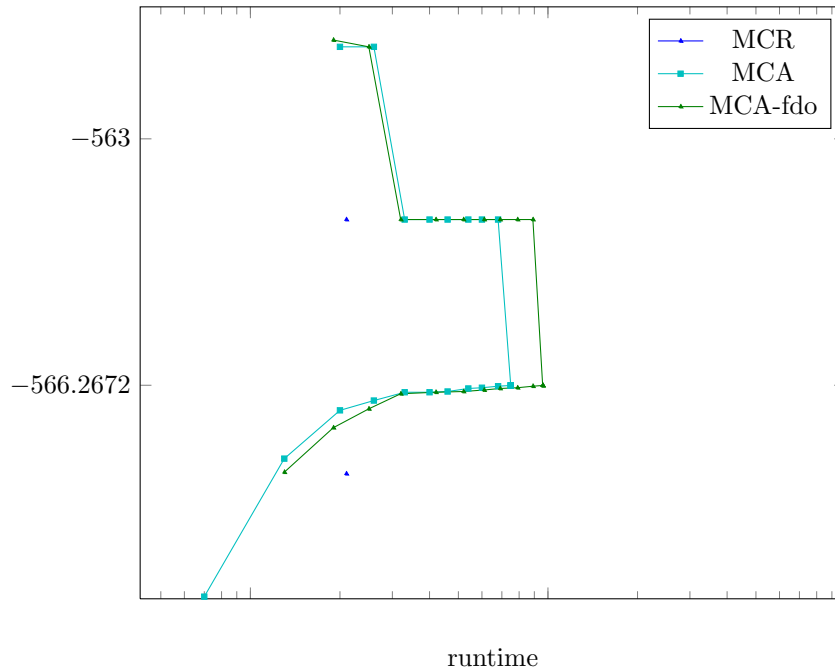


Figure 1847: Runtime results for the instance 6000098 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

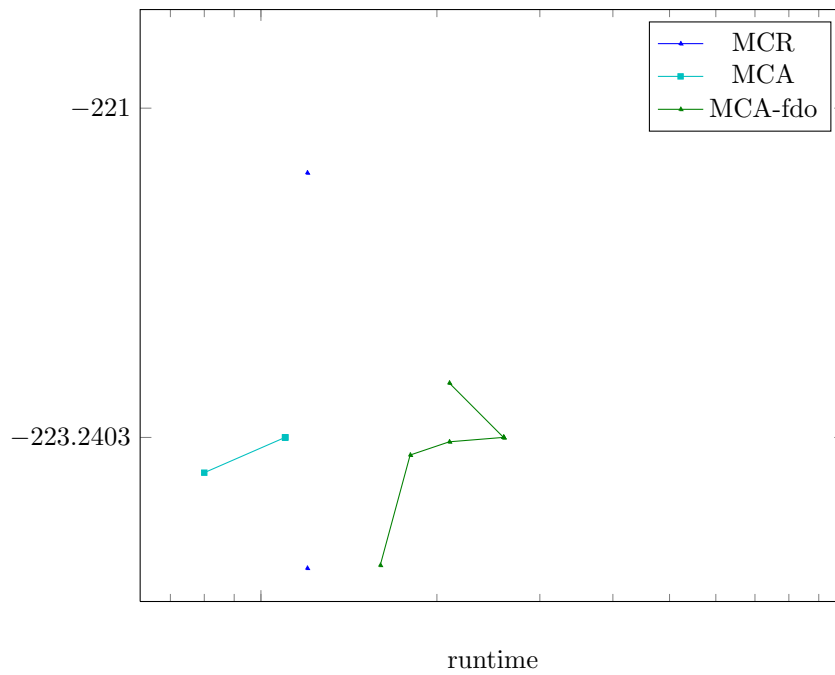


Figure 1848: Runtime results for the instance 6000099 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

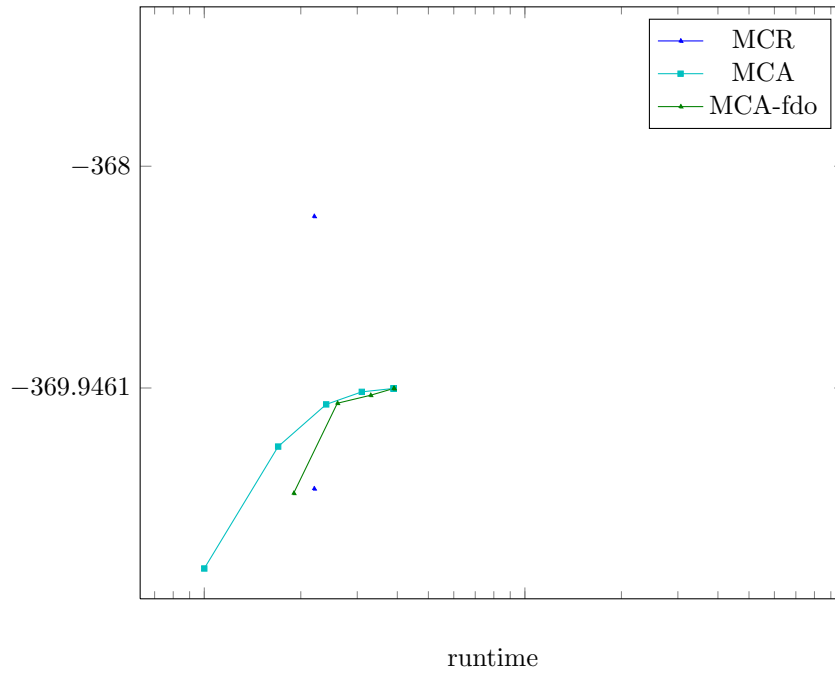


Figure 1849: Runtime results for the instance 6000100 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

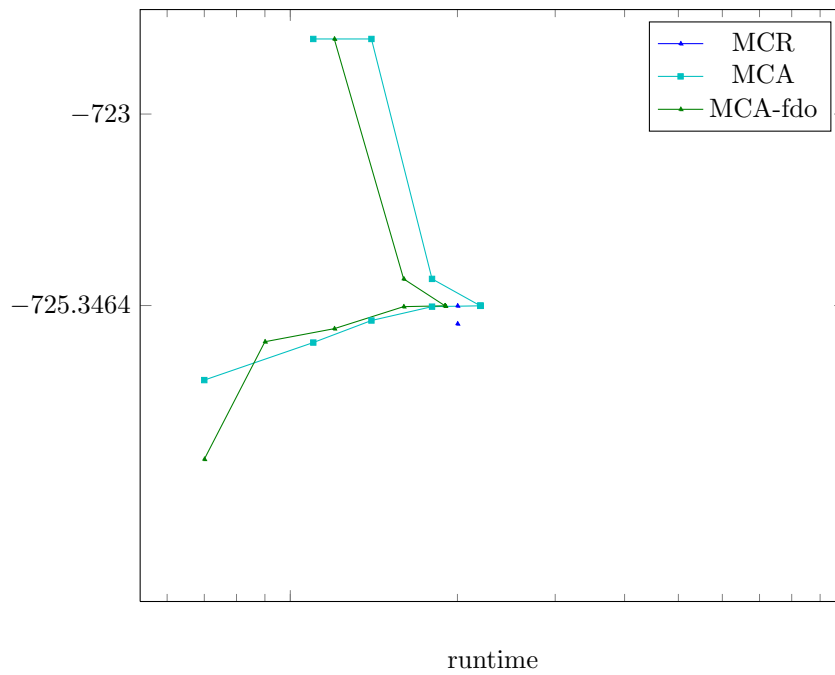


Figure 1850: Runtime results for the instance 6000101 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

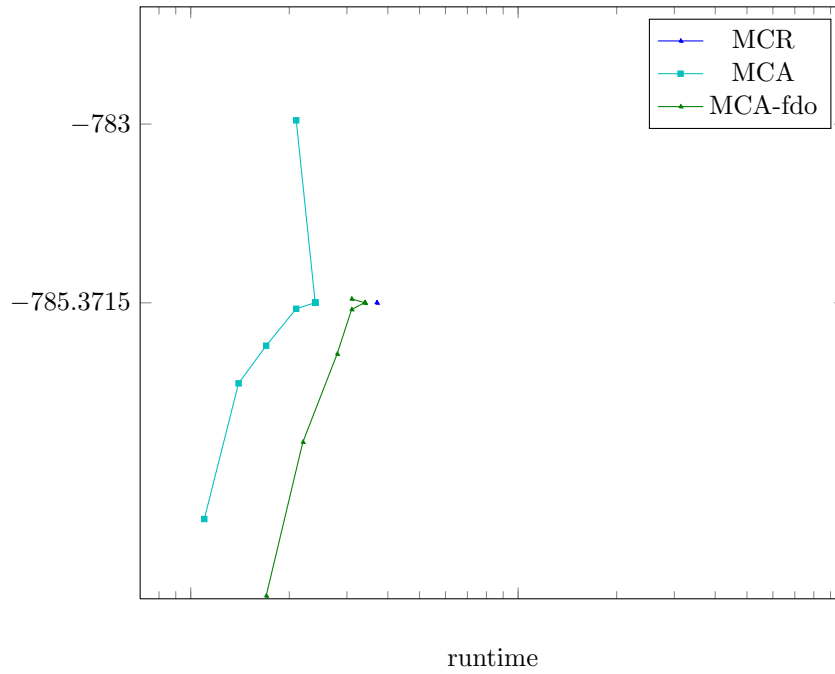


Figure 1851: Runtime results for the instance 6000102 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

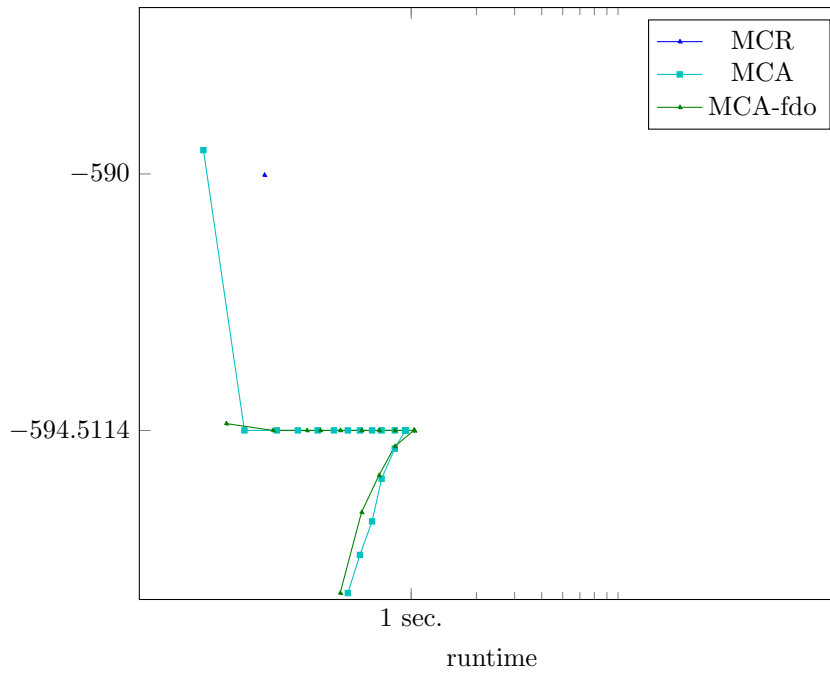


Figure 1852: Runtime results for the instance 6000103 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

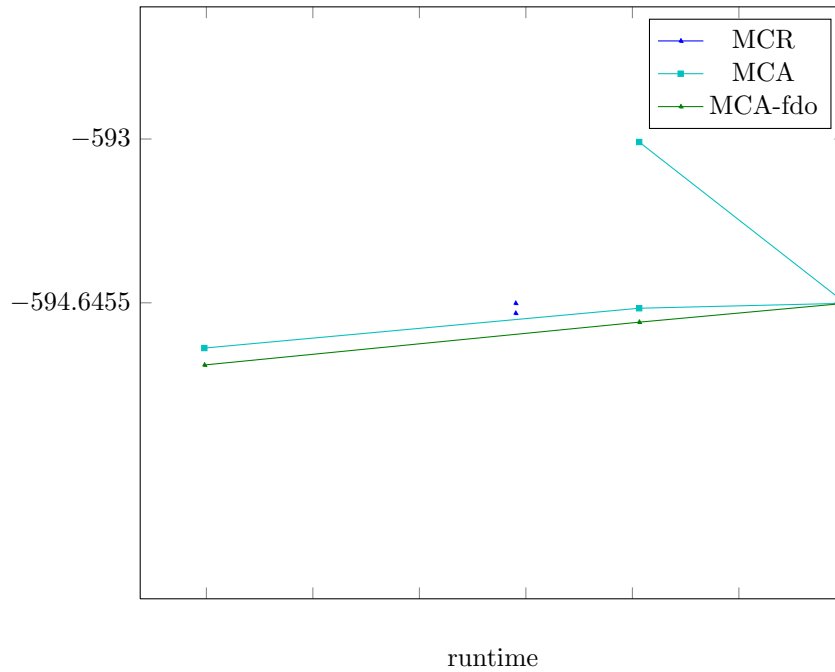


Figure 1853: Runtime results for the instance 6000104 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

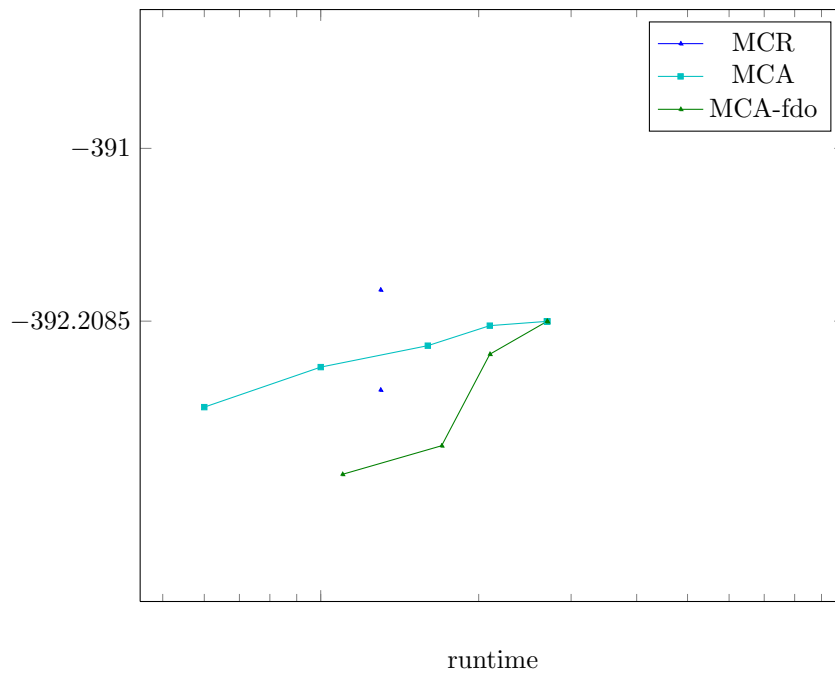


Figure 1854: Runtime results for the instance 6000105 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

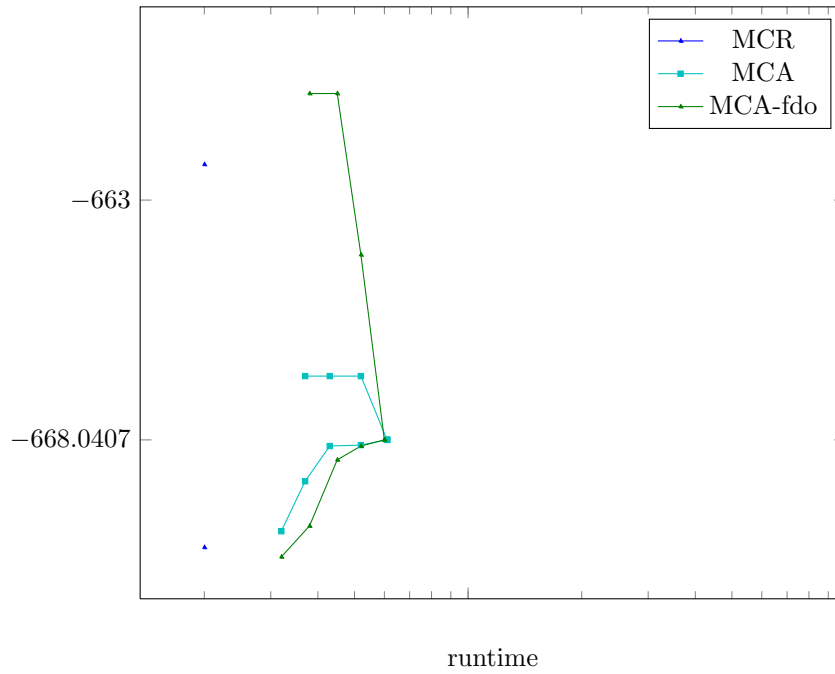


Figure 1855: Runtime results for the instance 6000106 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

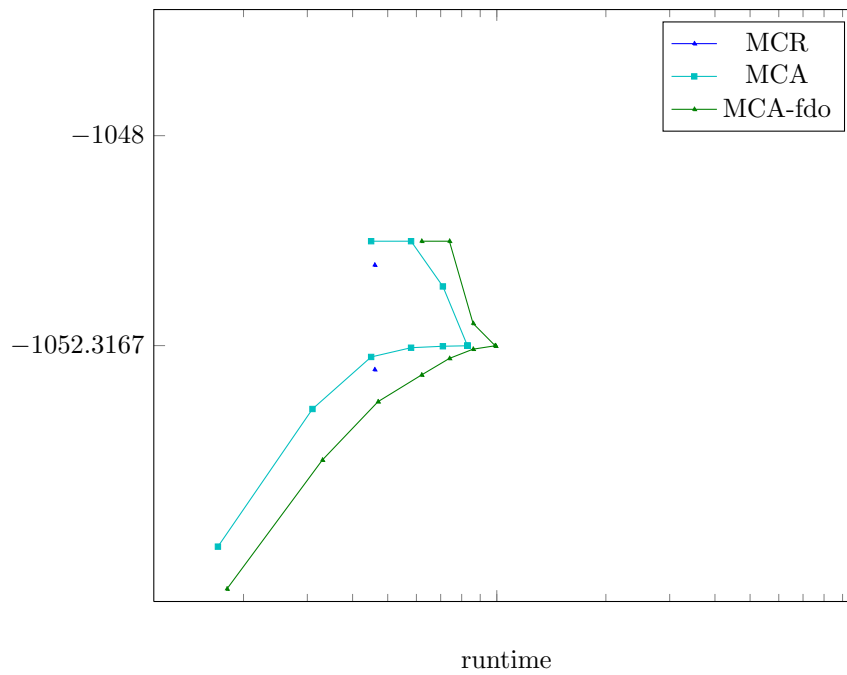


Figure 1856: Runtime results for the instance 6000107 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

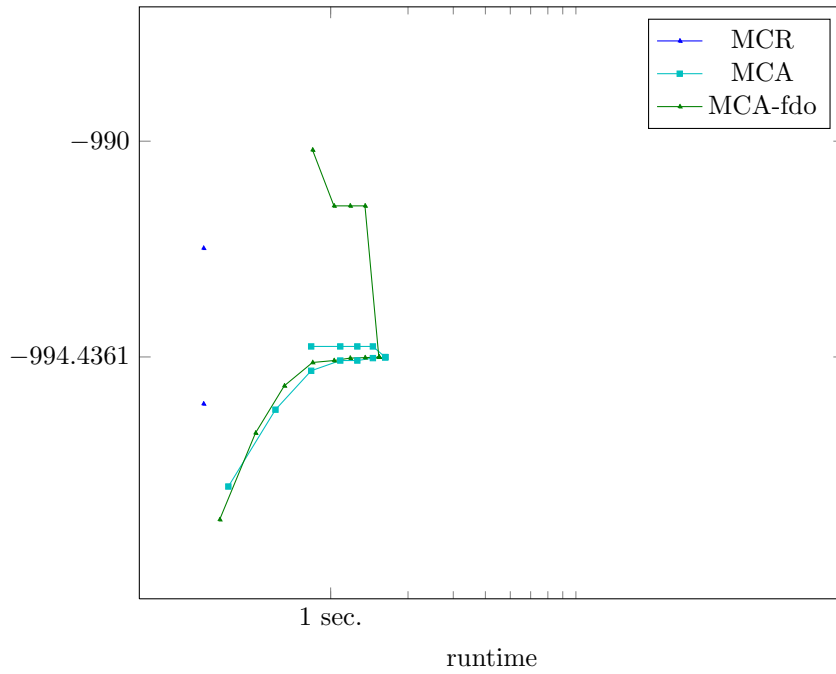


Figure 1857: Runtime results for the instance 6000108 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

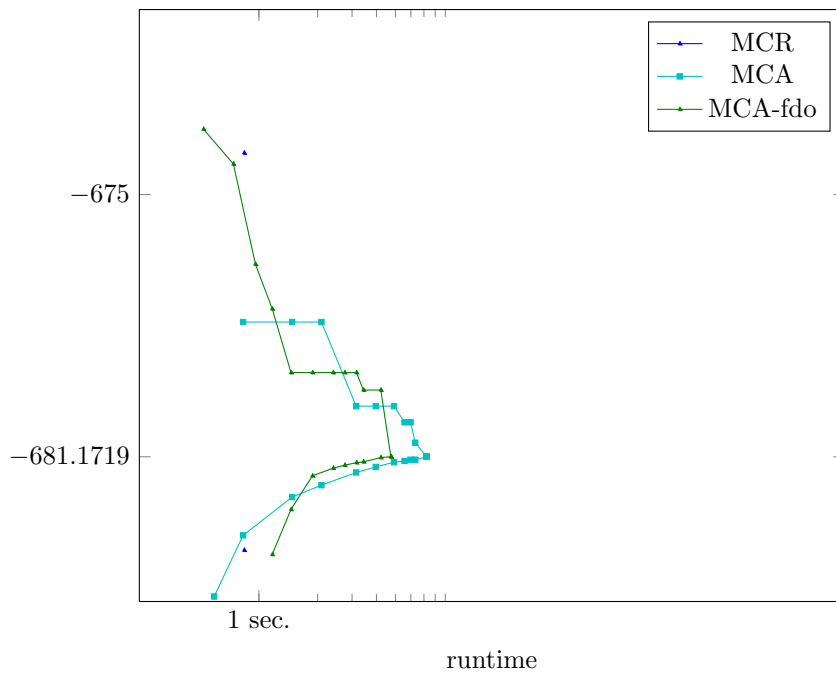


Figure 1858: Runtime results for the instance 6000109 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

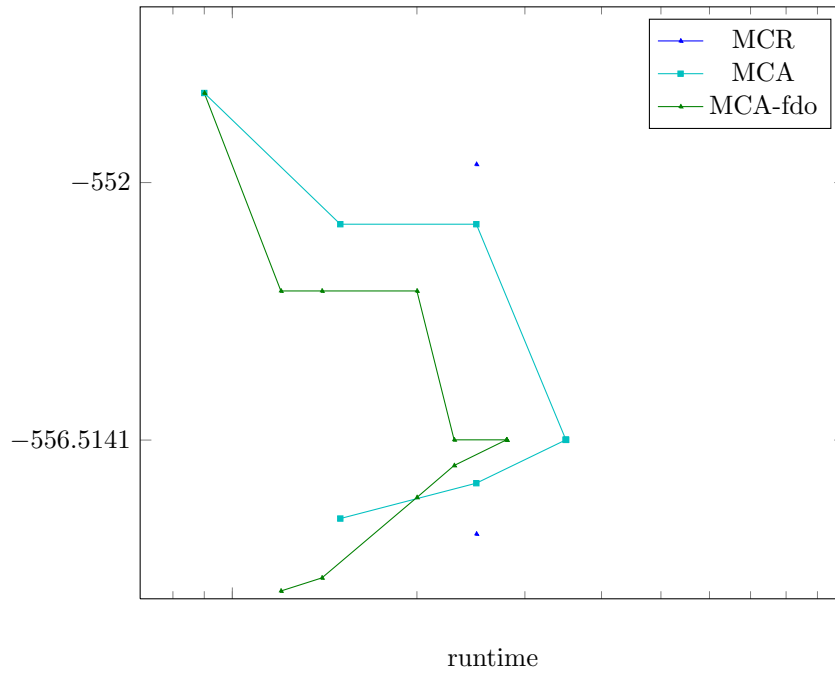


Figure 1859: Runtime results for the instance 6000110 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

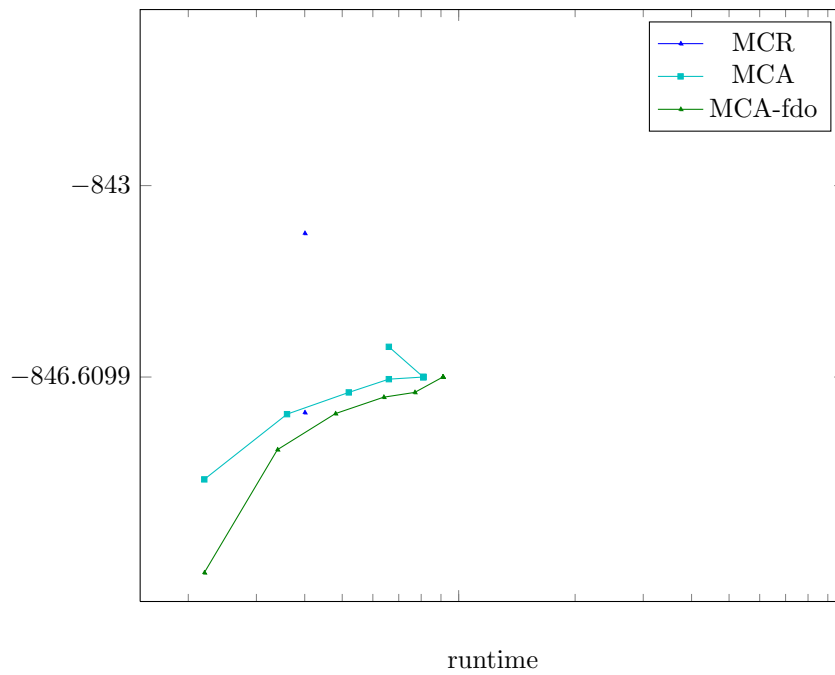


Figure 1860: Runtime results for the instance 6000111 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

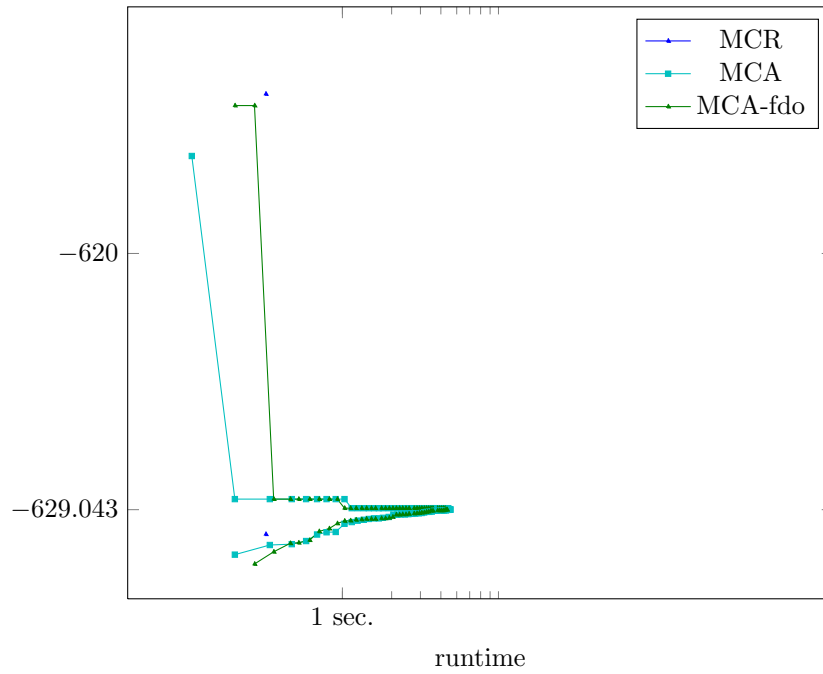


Figure 1861: Runtime results for the instance 6000112 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

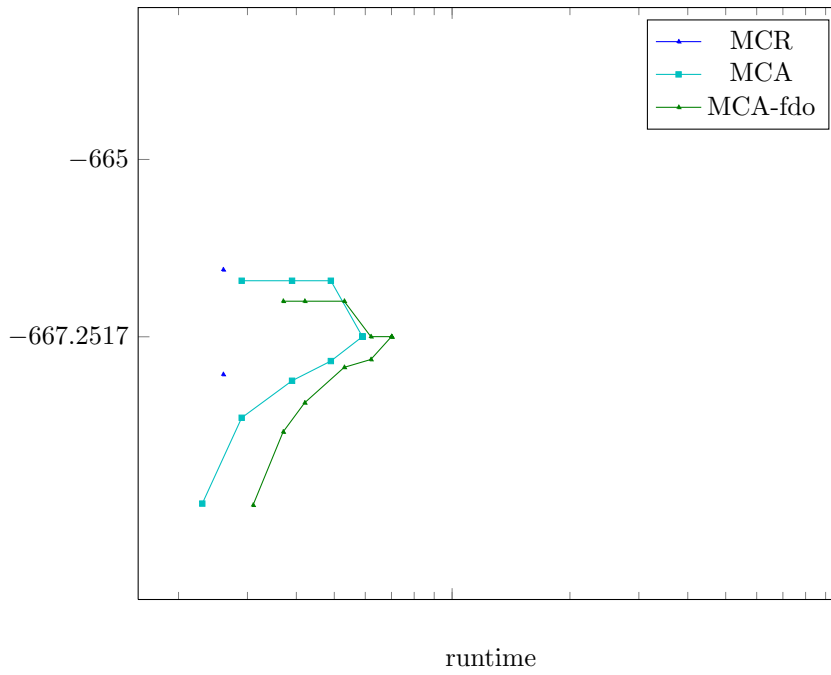


Figure 1862: Runtime results for the instance 6000113 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

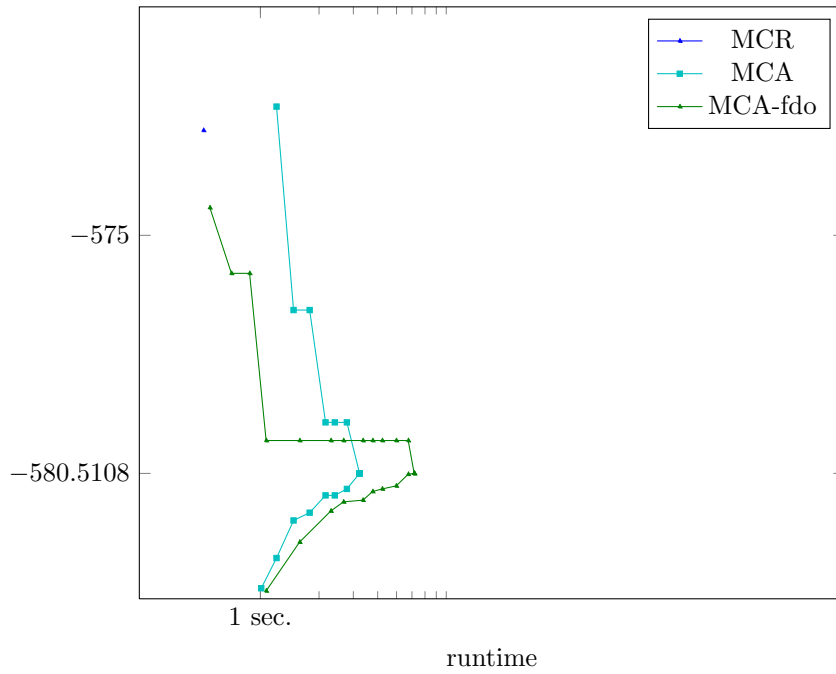


Figure 1863: Runtime results for the instance 6000114 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

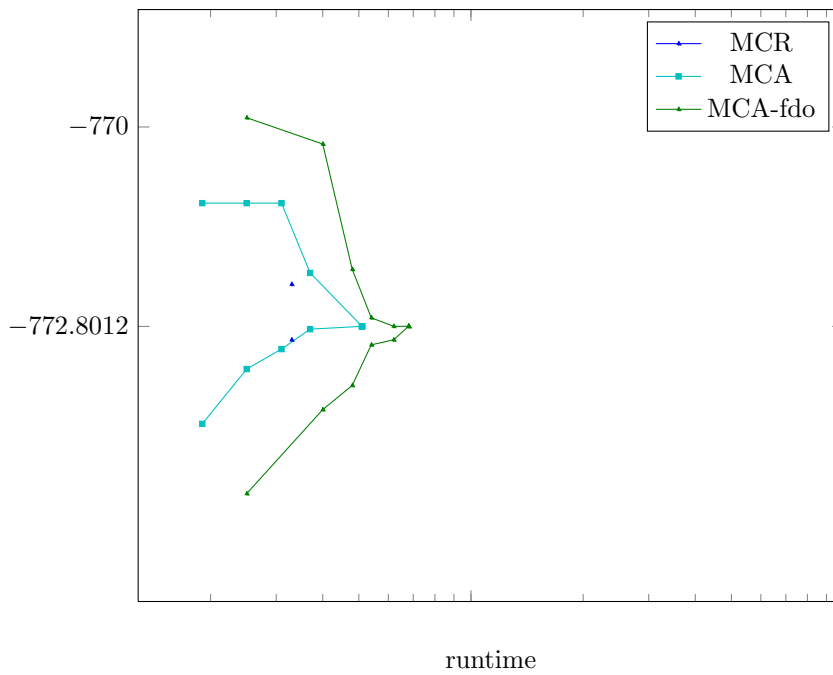


Figure 1864: Runtime results for the instance 6000115 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

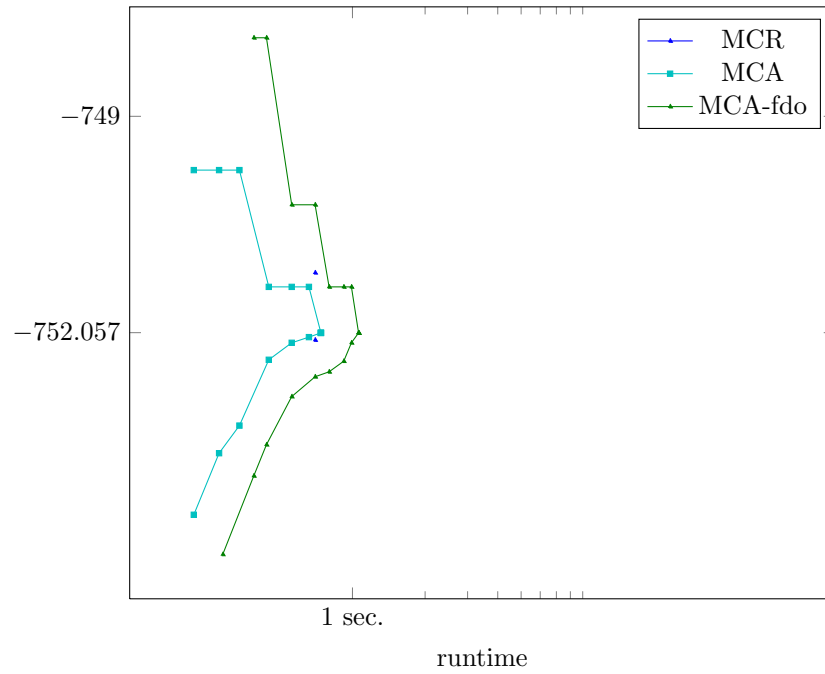


Figure 1865: Runtime results for the instance 6000116 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

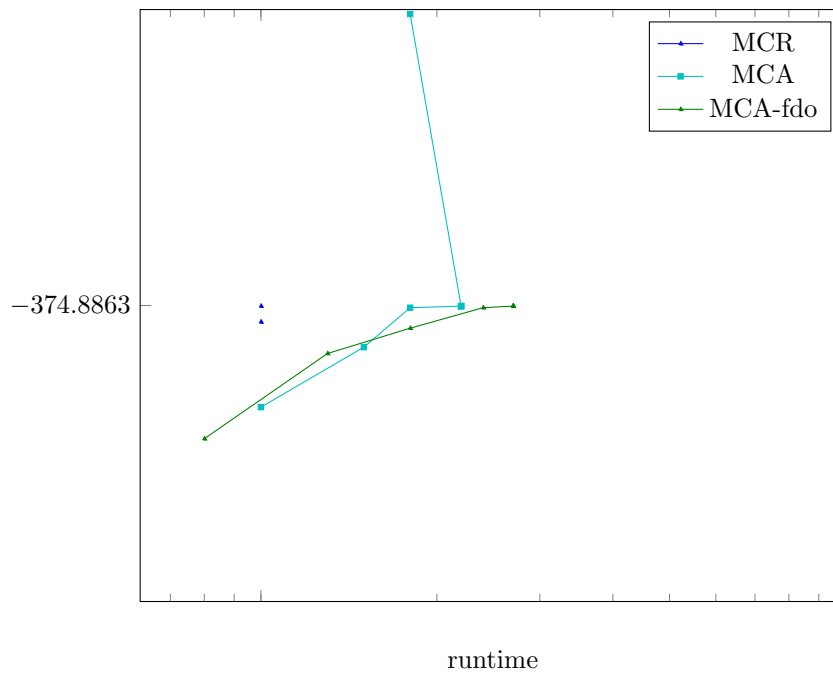


Figure 1866: Runtime results for the instance 6000117 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

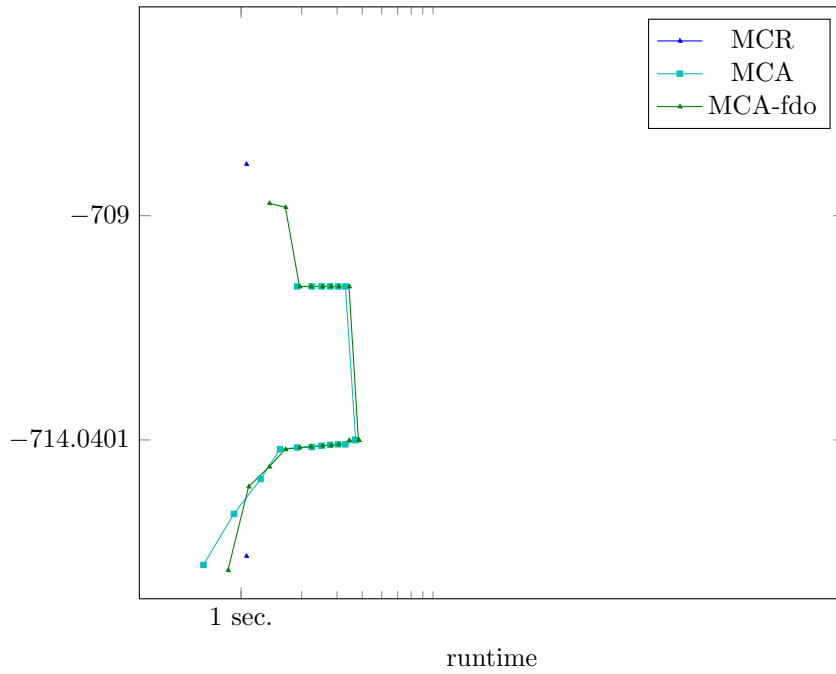


Figure 1867: Runtime results for the instance 6000118 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

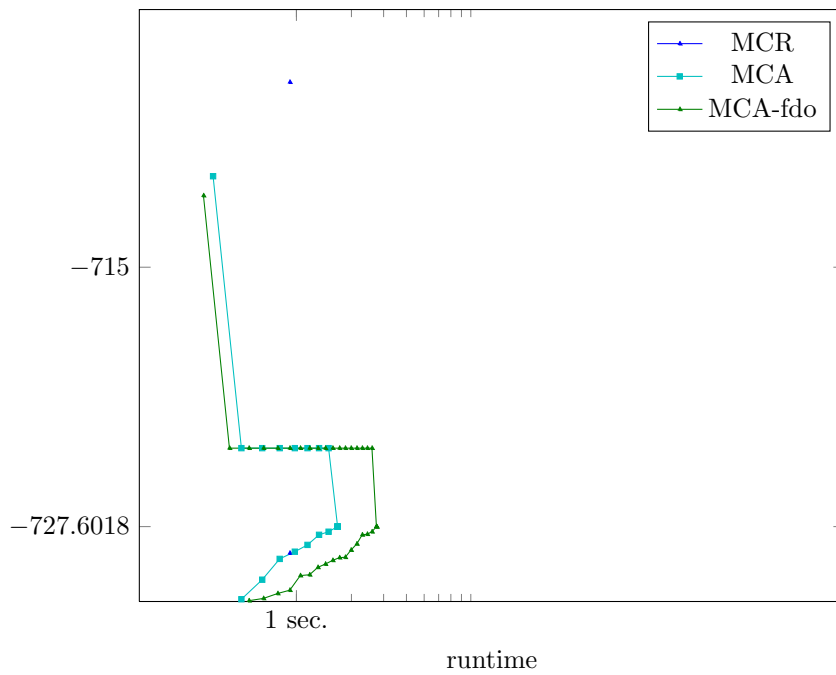


Figure 1868: Runtime results for the instance 6000119 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

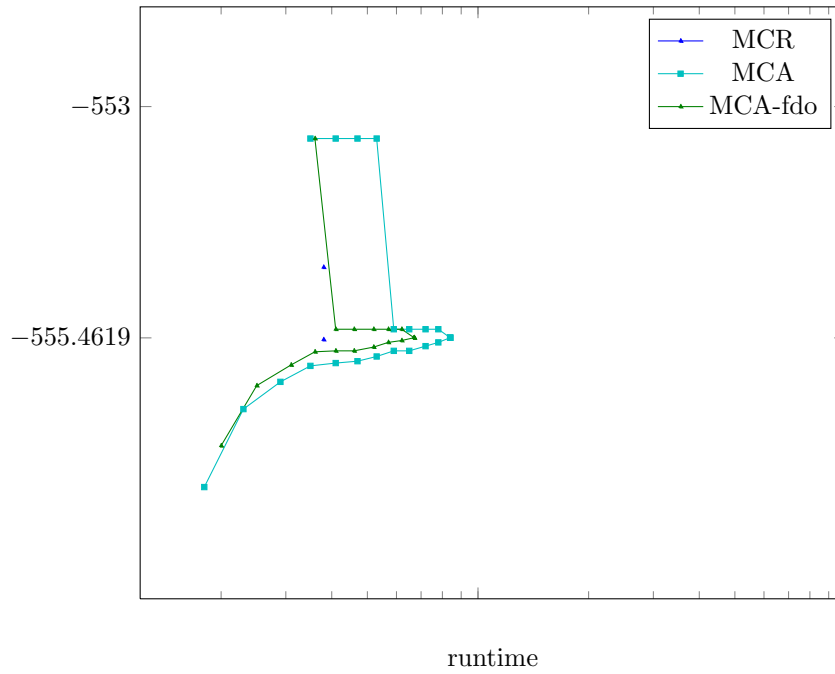


Figure 1869: Runtime results for the instance 6000120 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

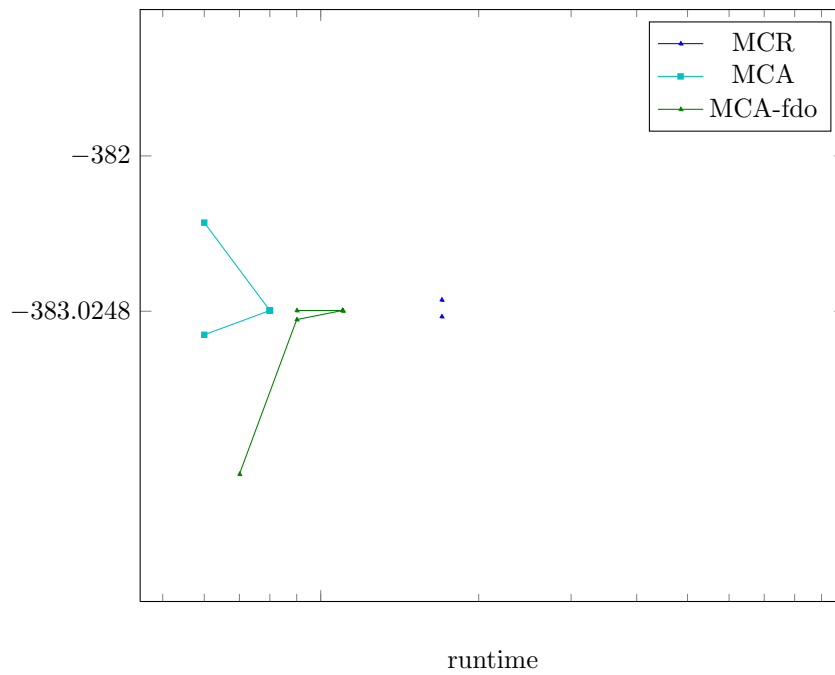


Figure 1870: Runtime results for the instance 6000121 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

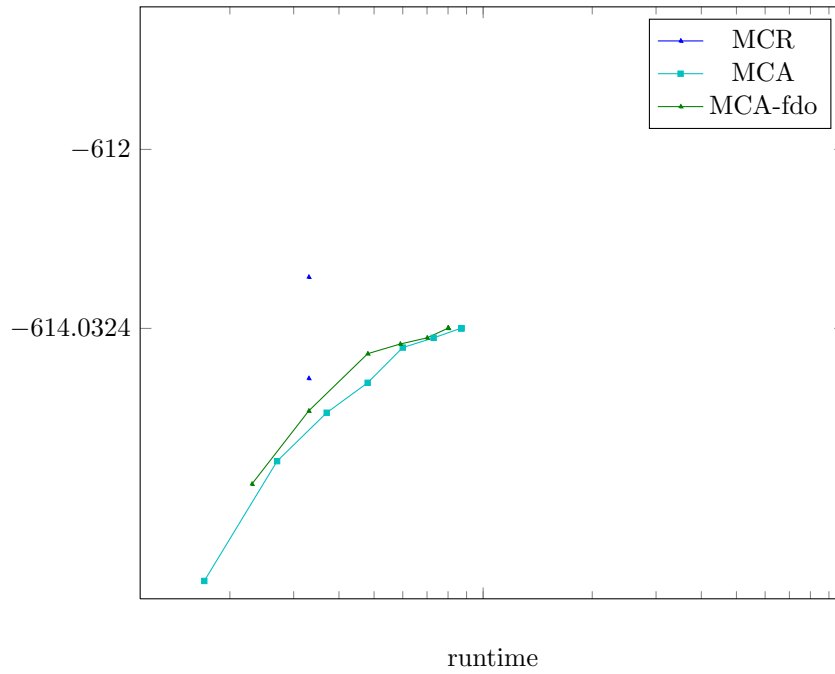


Figure 1871: Runtime results for the instance 6000122 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

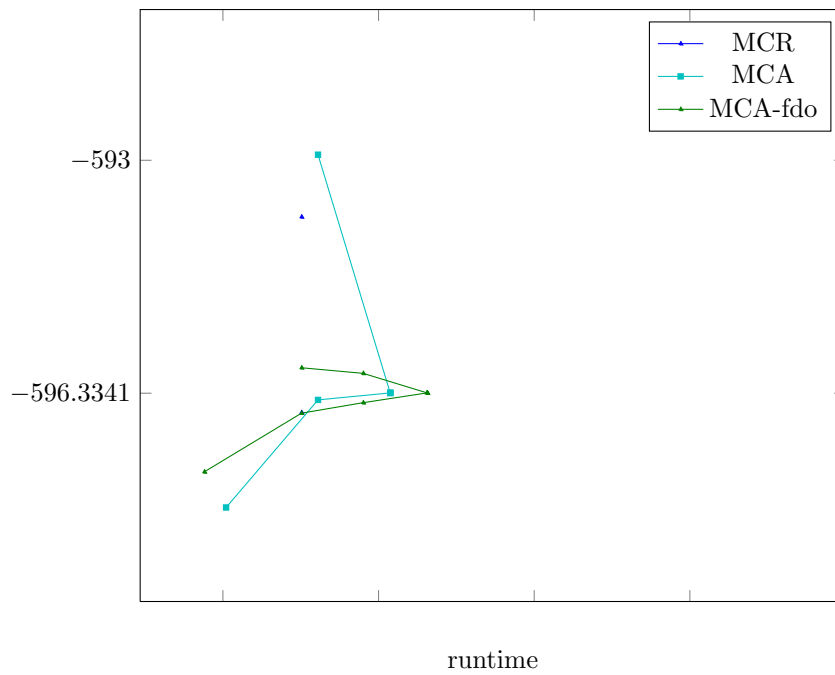


Figure 1872: Runtime results for the instance 6000123 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

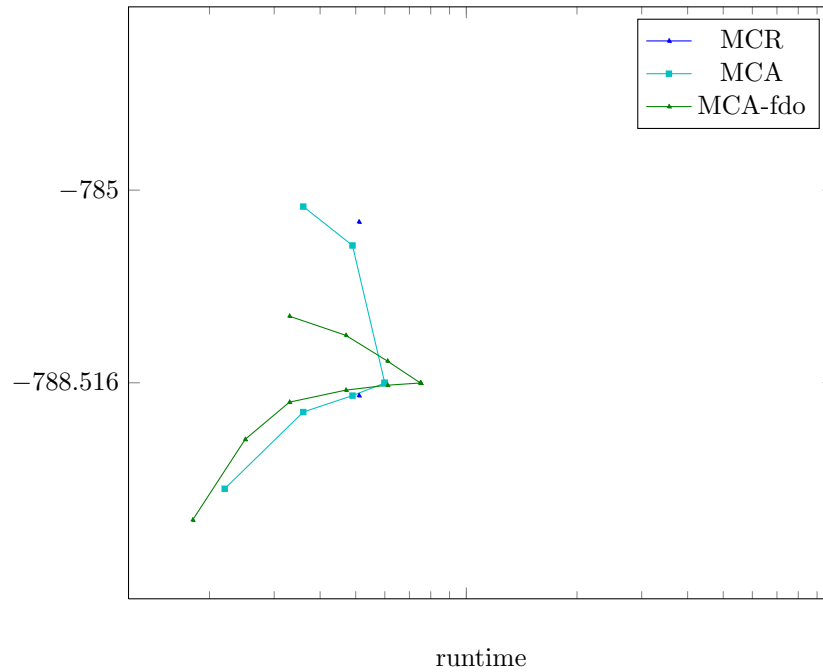


Figure 1873: Runtime results for the instance 6000124 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

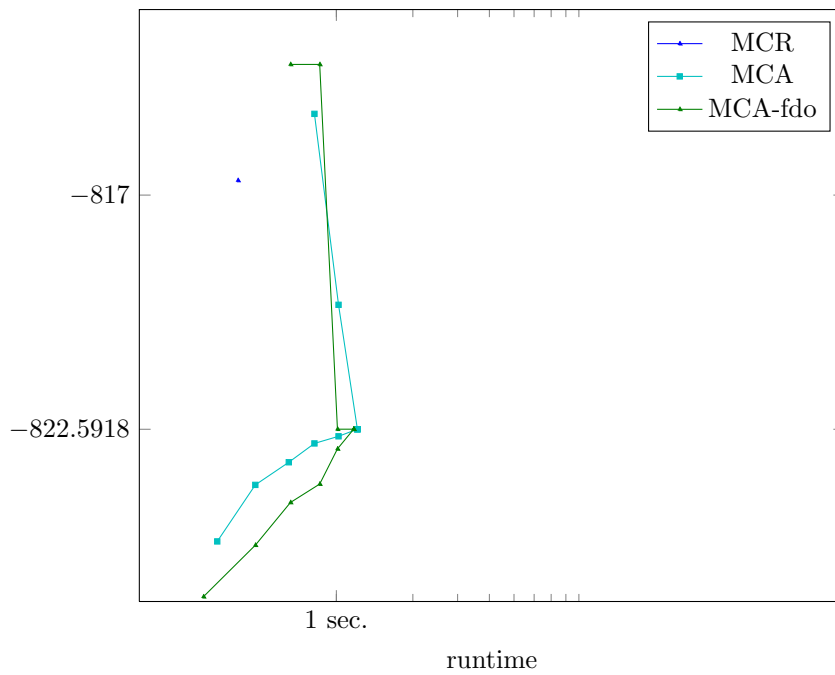


Figure 1874: Runtime results for the instance 6000125 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

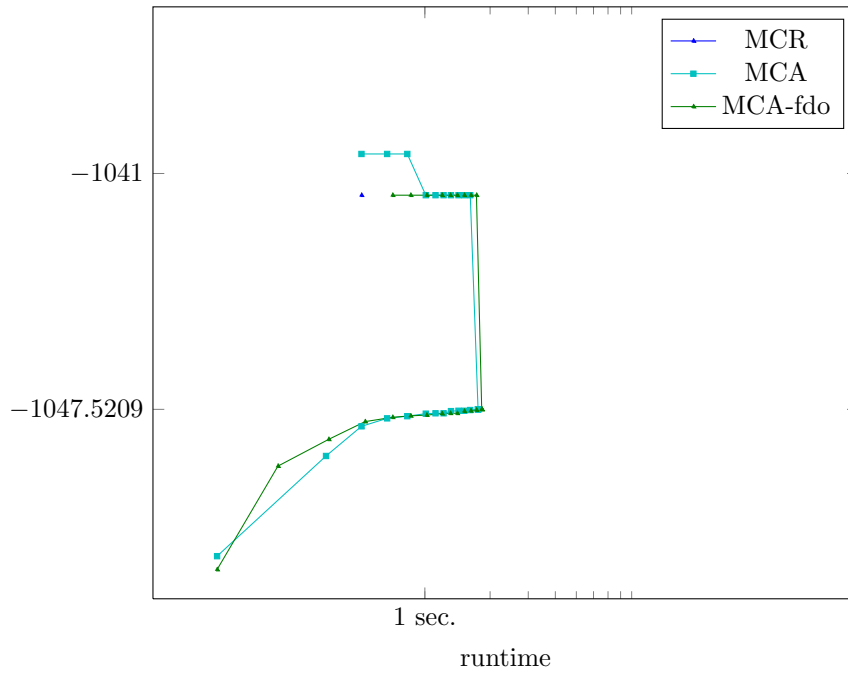


Figure 1875: Runtime results for the instance 6000126 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

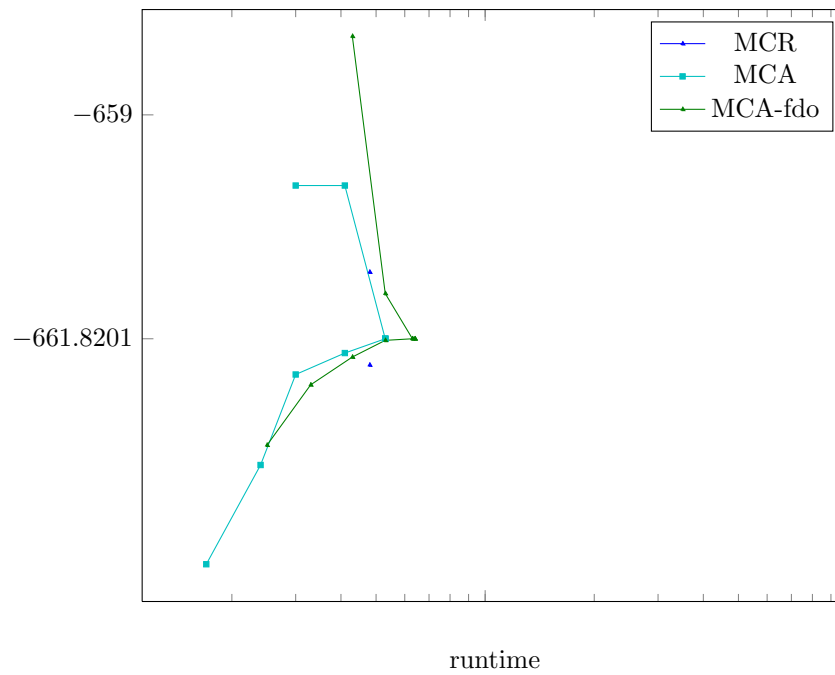


Figure 1876: Runtime results for the instance 6000127 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

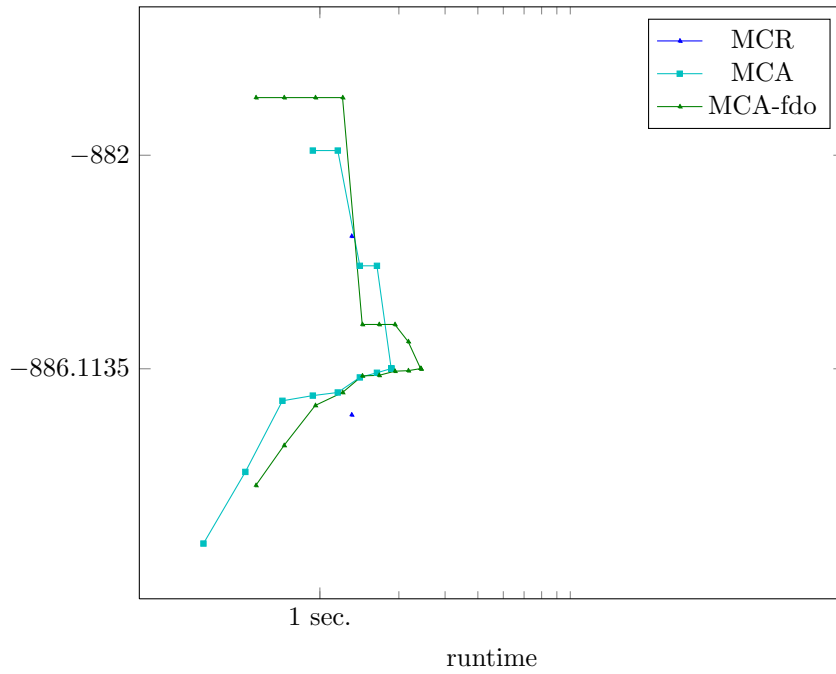


Figure 1877: Runtime results for the instance 6000128 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

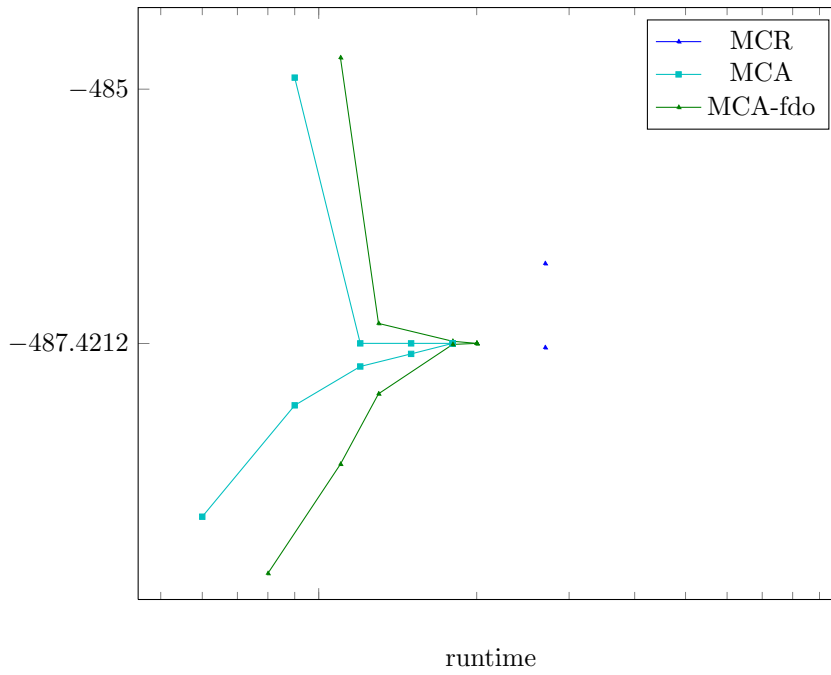
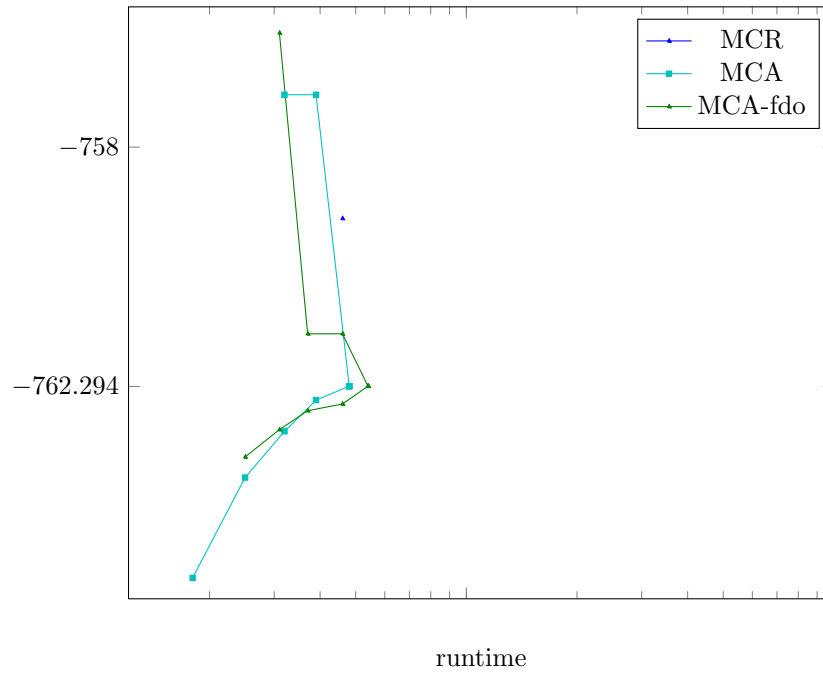


Figure 1878: Runtime results for the instance 6000129 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



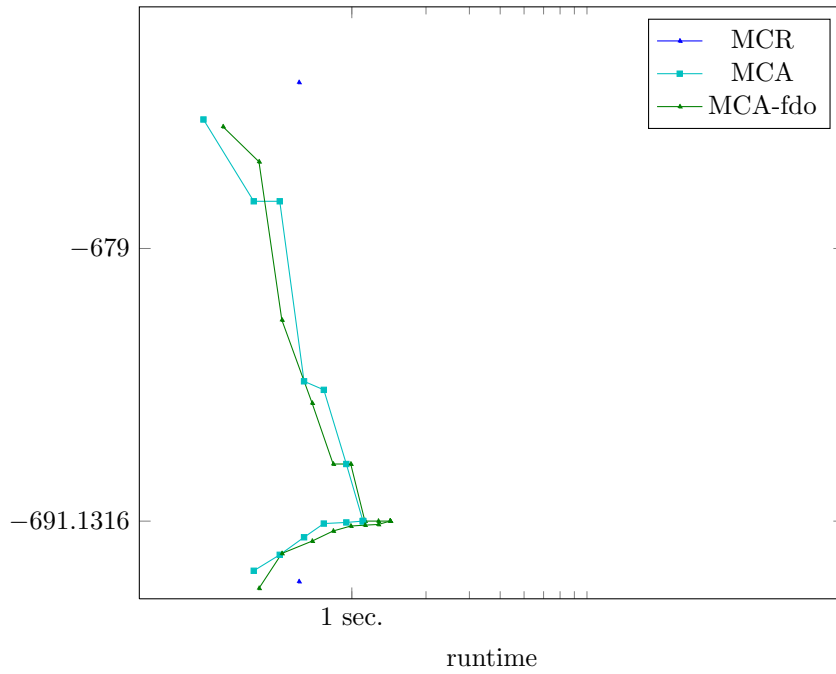


Figure 1883: Runtime results for the instance 6000134 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

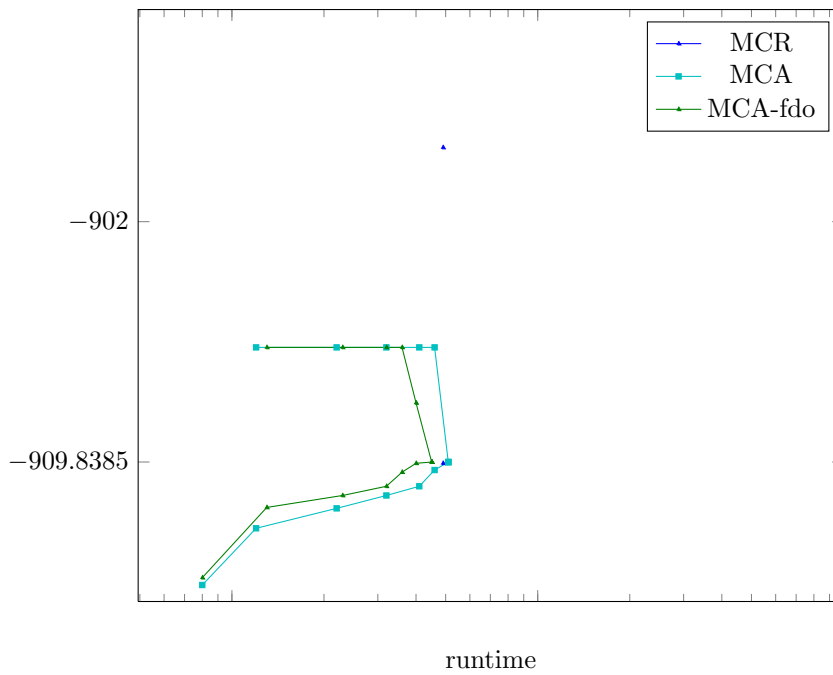


Figure 1884: Runtime results for the instance 6000135 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

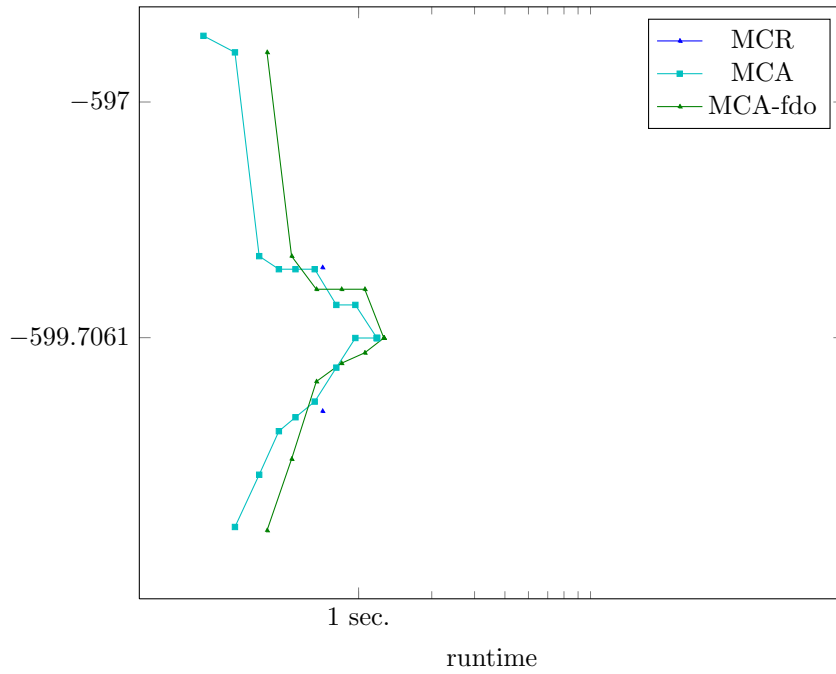


Figure 1885: Runtime results for the instance 6000136 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

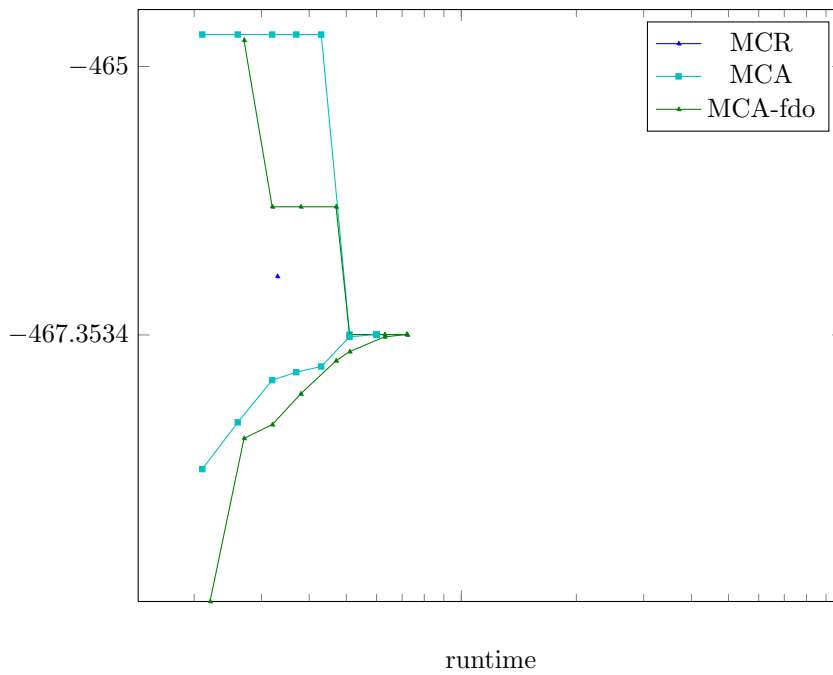


Figure 1886: Runtime results for the instance 6000137 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

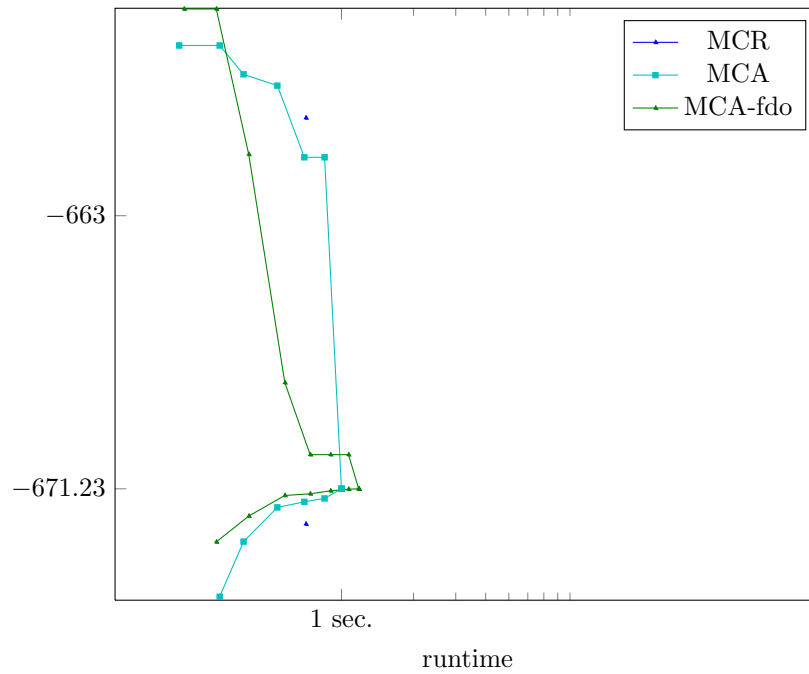


Figure 1887: Runtime results for the instance 6000138 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

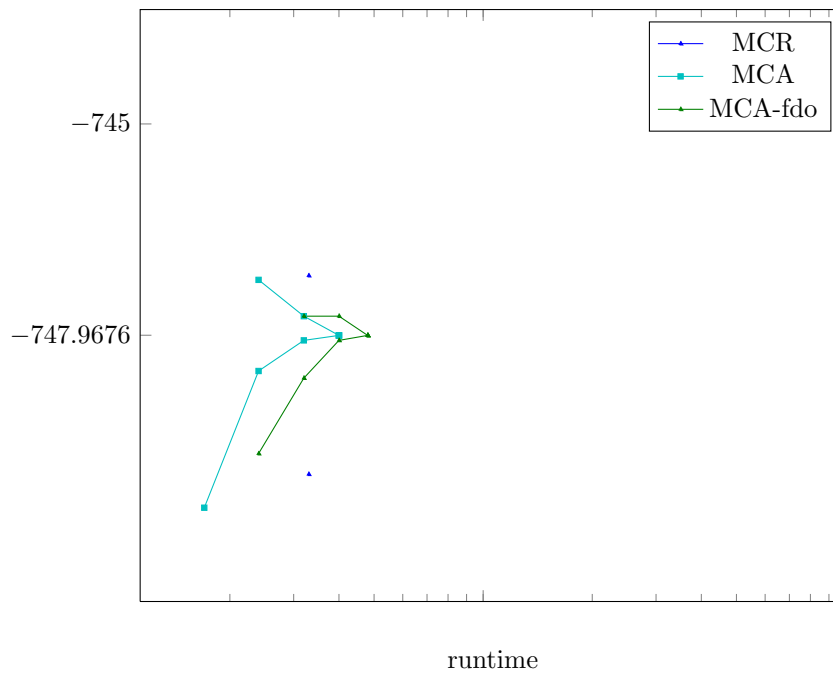


Figure 1888: Runtime results for the instance 6000139 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

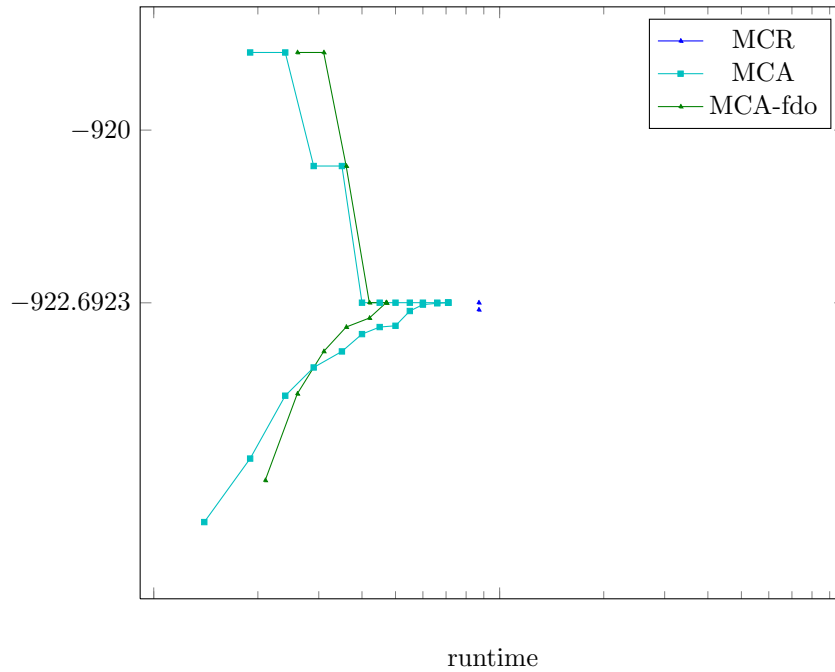


Figure 1889: Runtime results for the instance 6000140 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

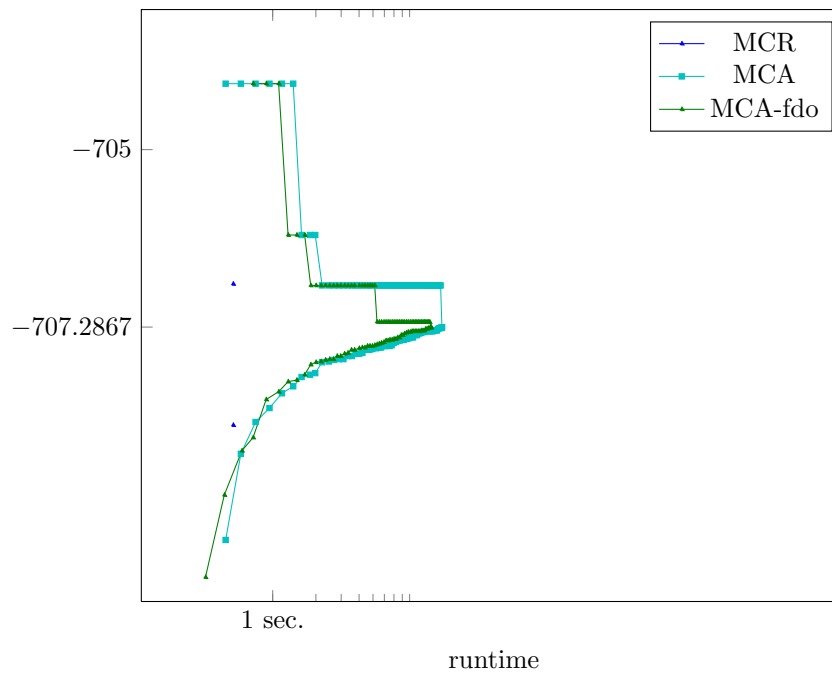


Figure 1890: Runtime results for the instance 6000141 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

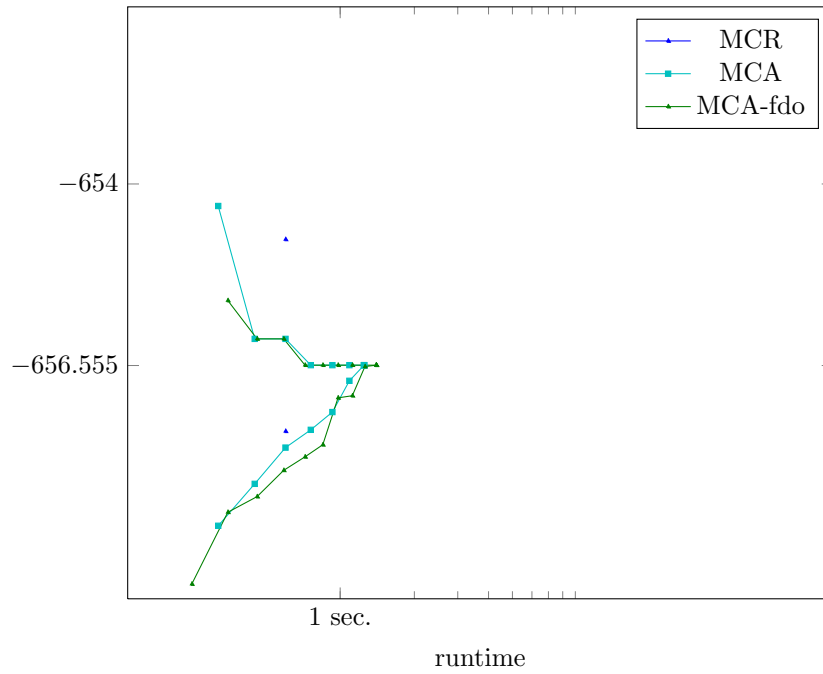


Figure 1891: Runtime results for the instance 6000142 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

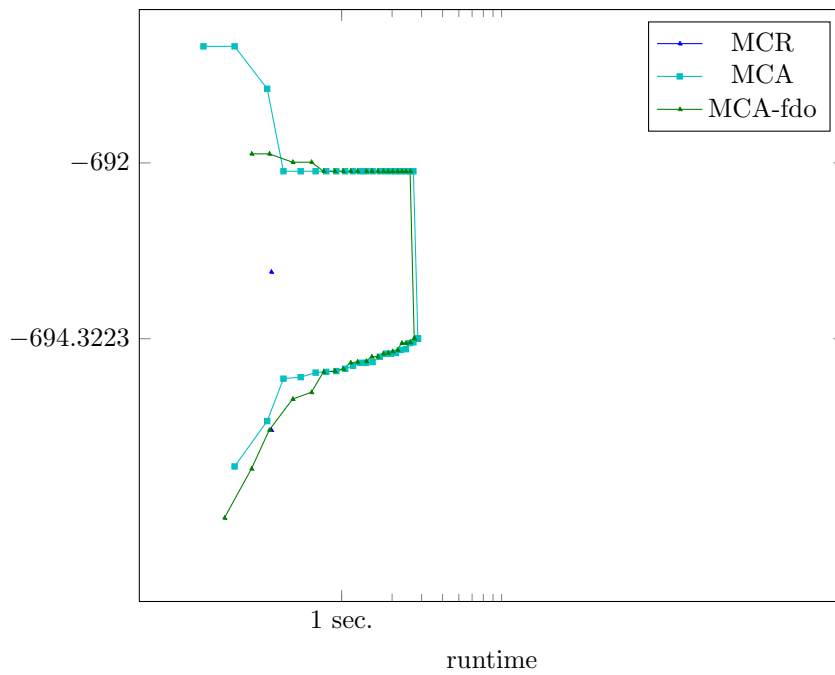


Figure 1892: Runtime results for the instance 6000143 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

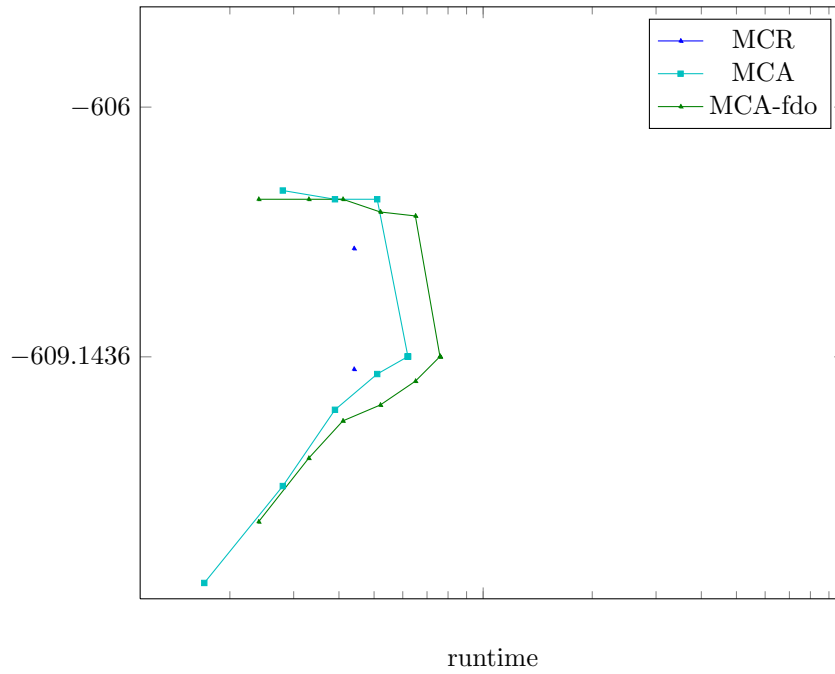


Figure 1893: Runtime results for the instance 6000144 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

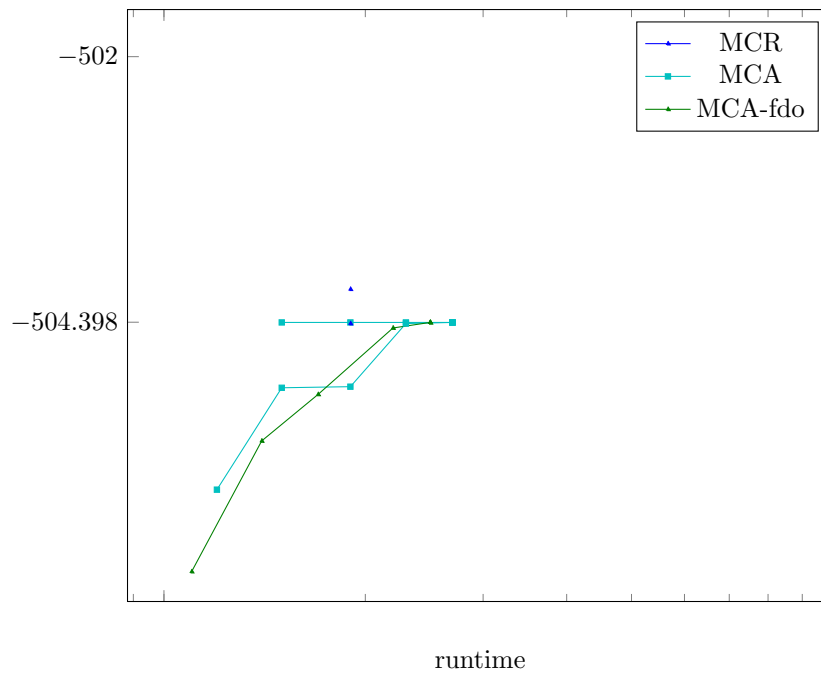


Figure 1894: Runtime results for the instance 6000145 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

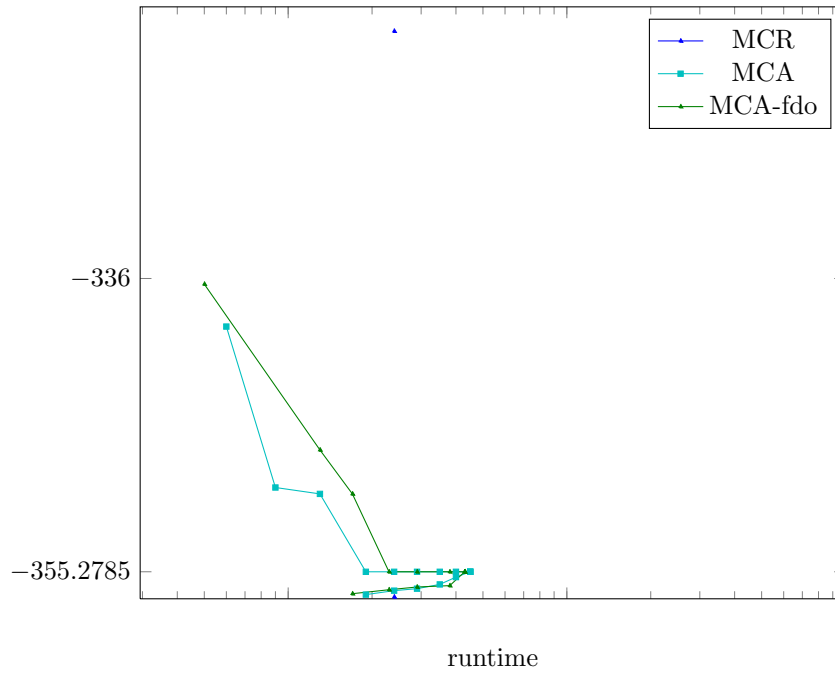


Figure 1895: Runtime results for the instance 6000146 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

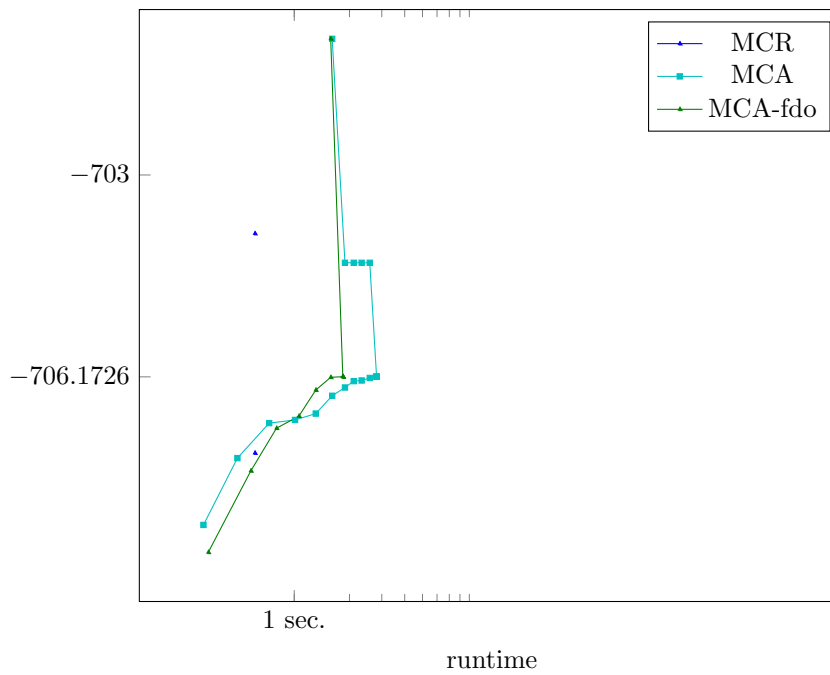


Figure 1896: Runtime results for the instance 6000147 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

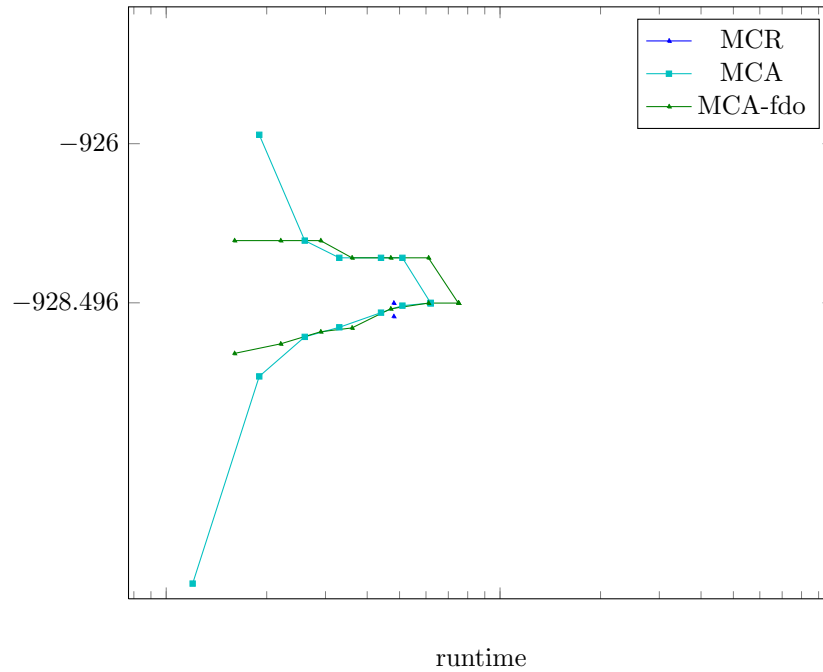


Figure 1897: Runtime results for the instance 6000148 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

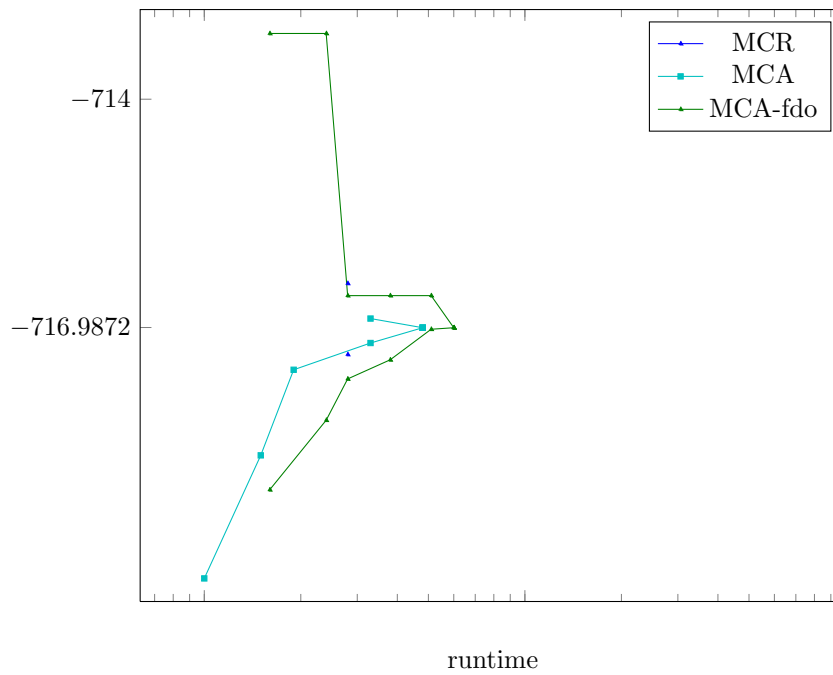


Figure 1898: Runtime results for the instance 6000149 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

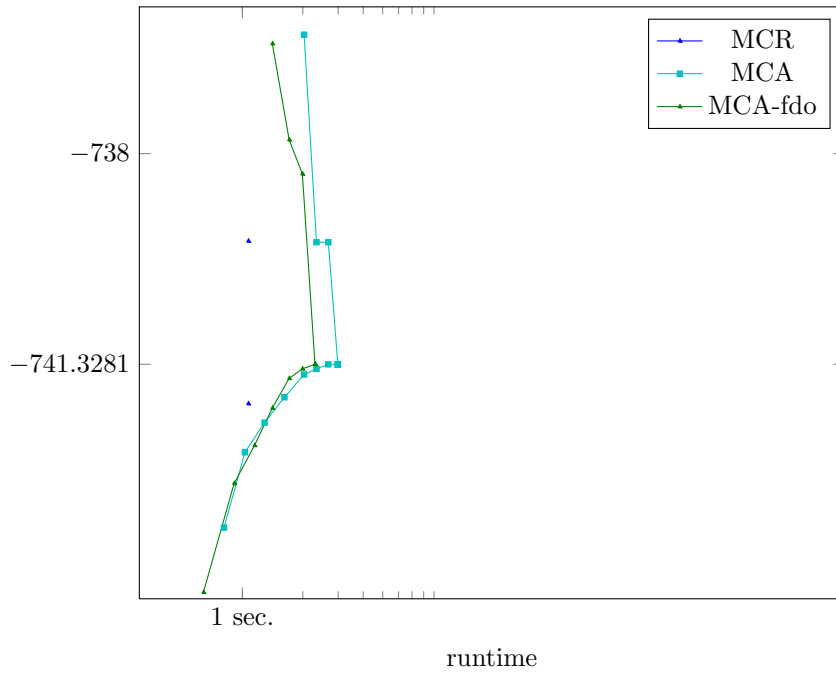


Figure 1899: Runtime results for the instance 6000150 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

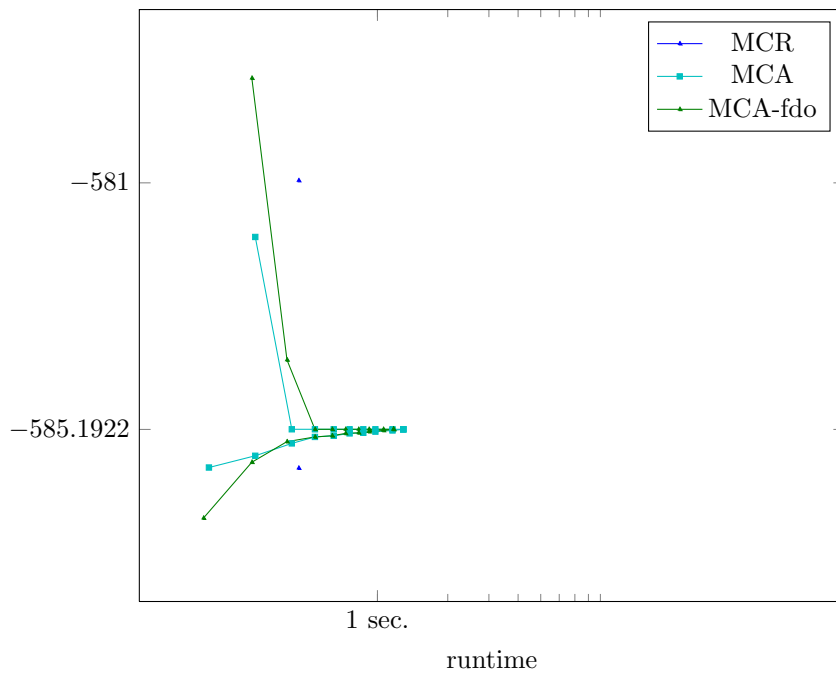


Figure 1900: Runtime results for the instance 6000151 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

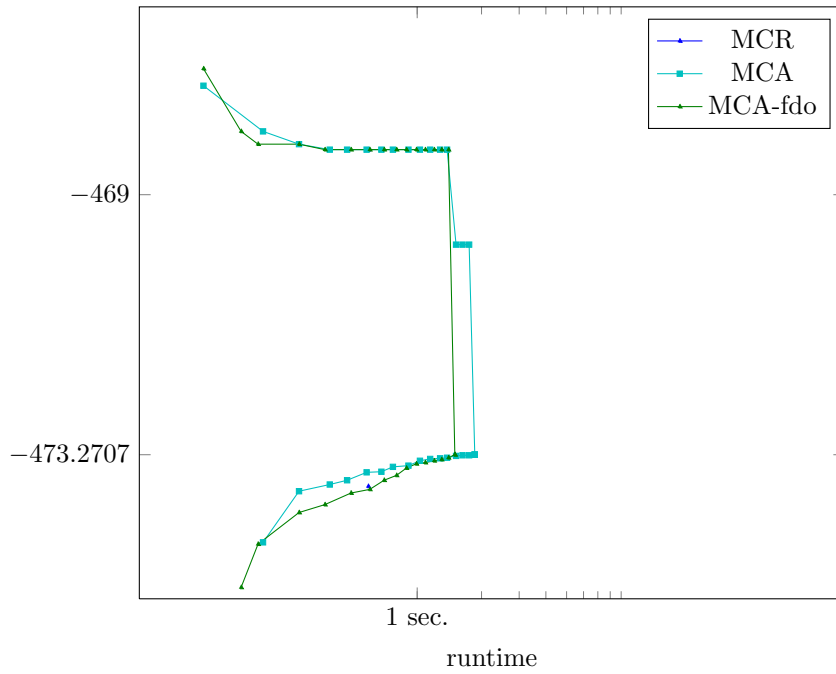


Figure 1901: Runtime results for the instance 6000152 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

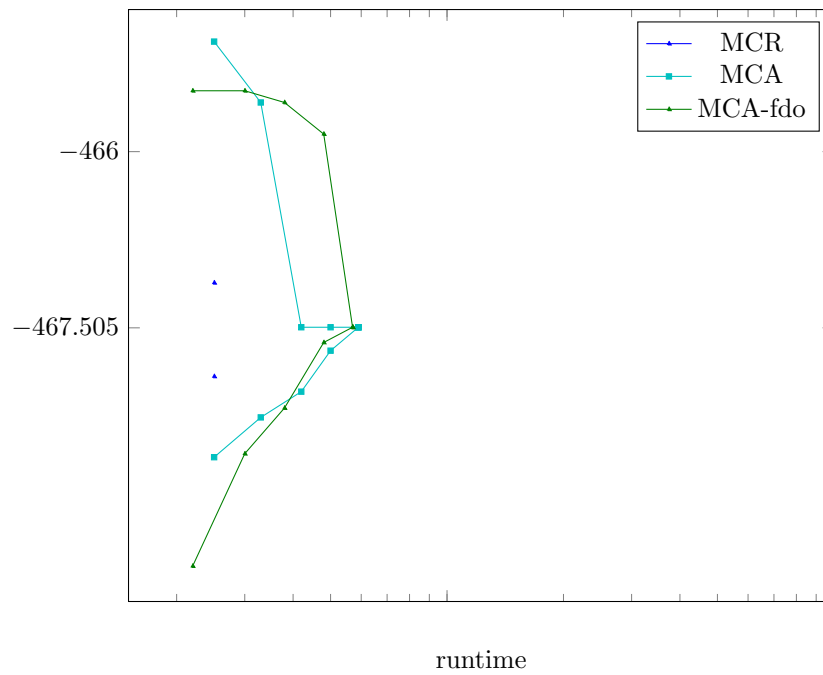


Figure 1902: Runtime results for the instance 6000153 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

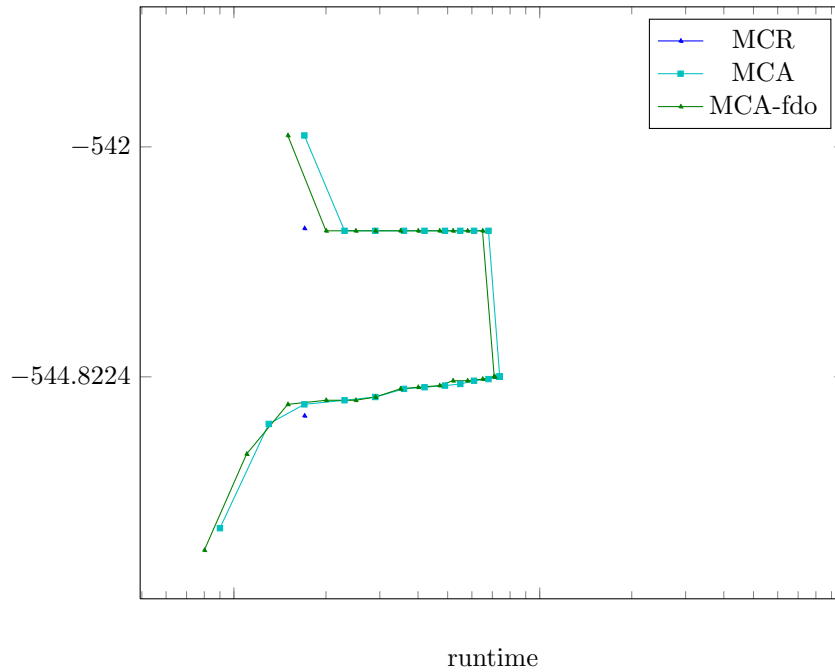


Figure 1903: Runtime results for the instance 6000154 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

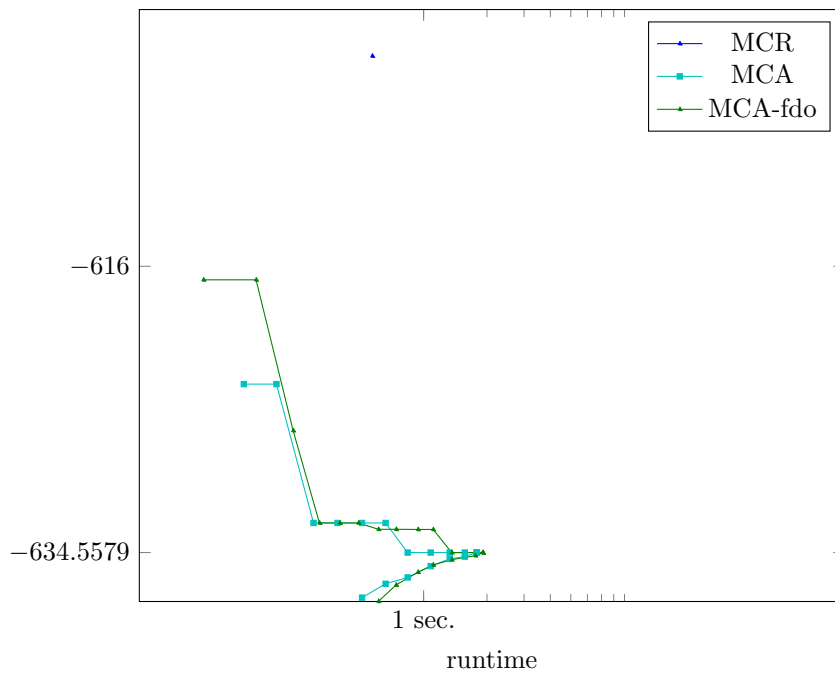


Figure 1904: Runtime results for the instance 6000155 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

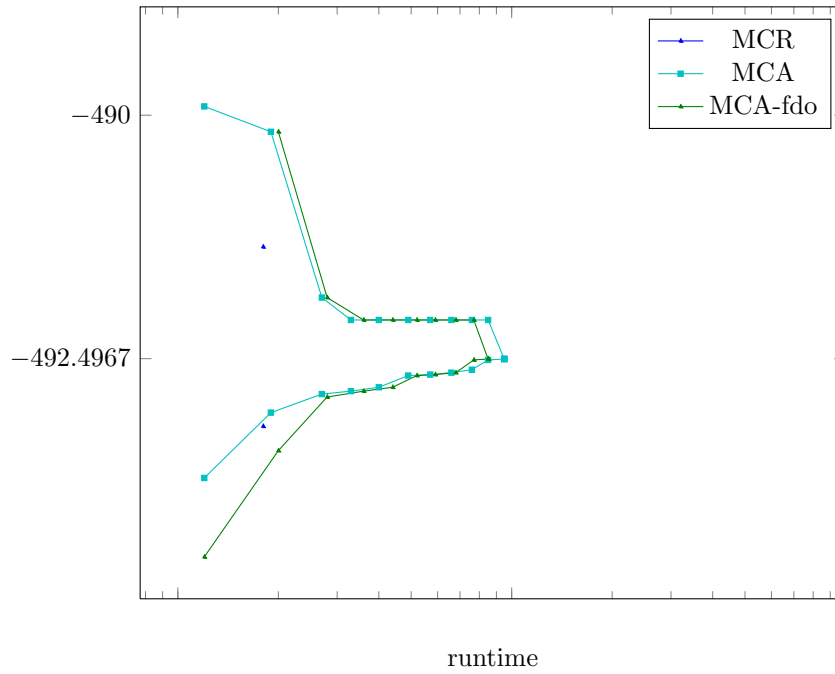


Figure 1907: Runtime results for the instance 6000158 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

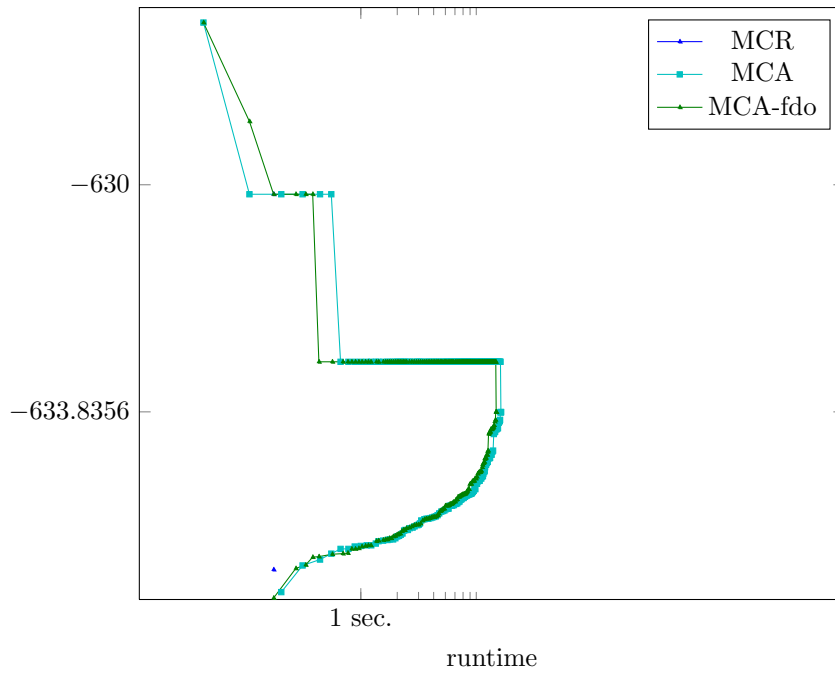


Figure 1908: Runtime results for the instance 6000159 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

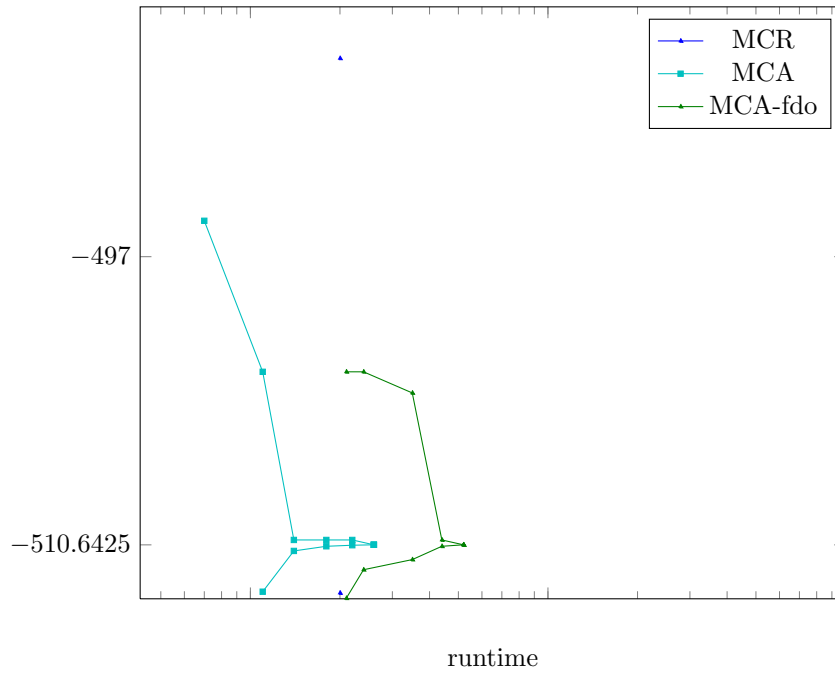


Figure 1909: Runtime results for the instance 6000160 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

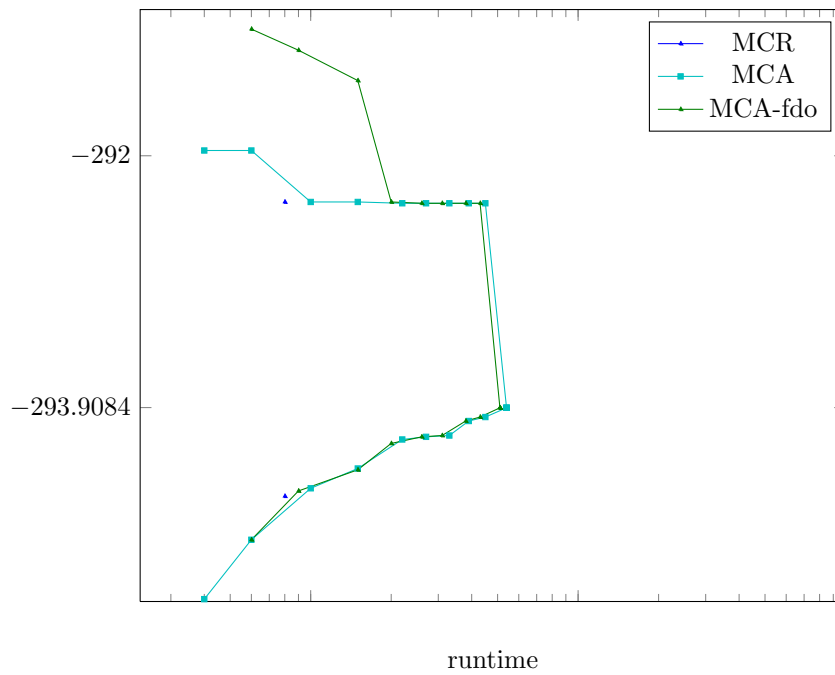


Figure 1910: Runtime results for the instance 6000161 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

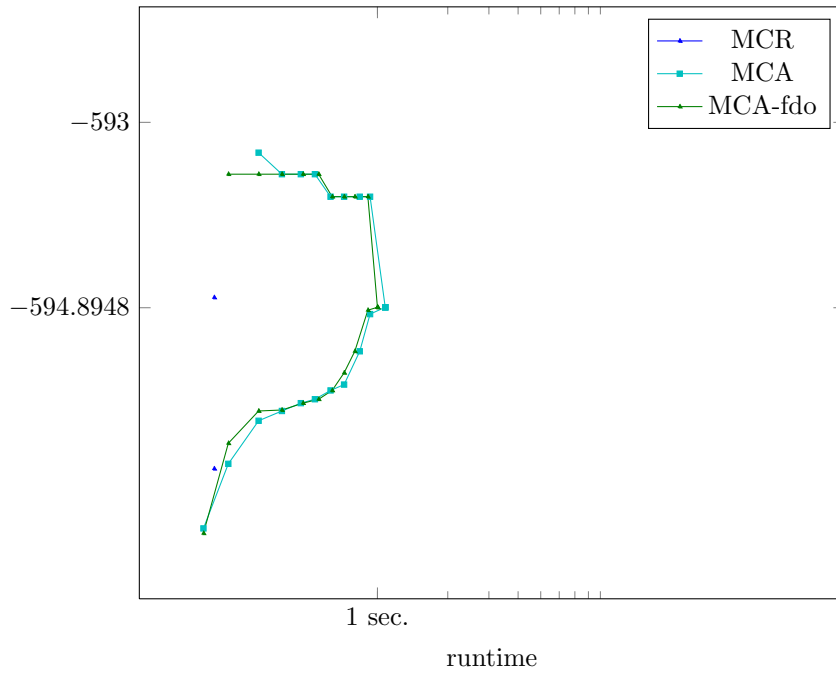


Figure 1911: Runtime results for the instance 6000162 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

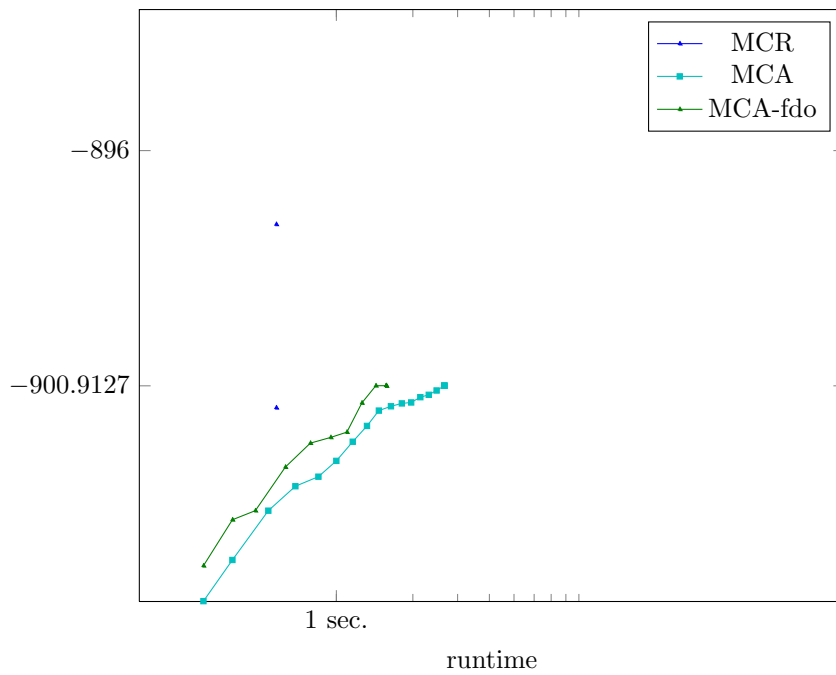


Figure 1912: Runtime results for the instance 6000163 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

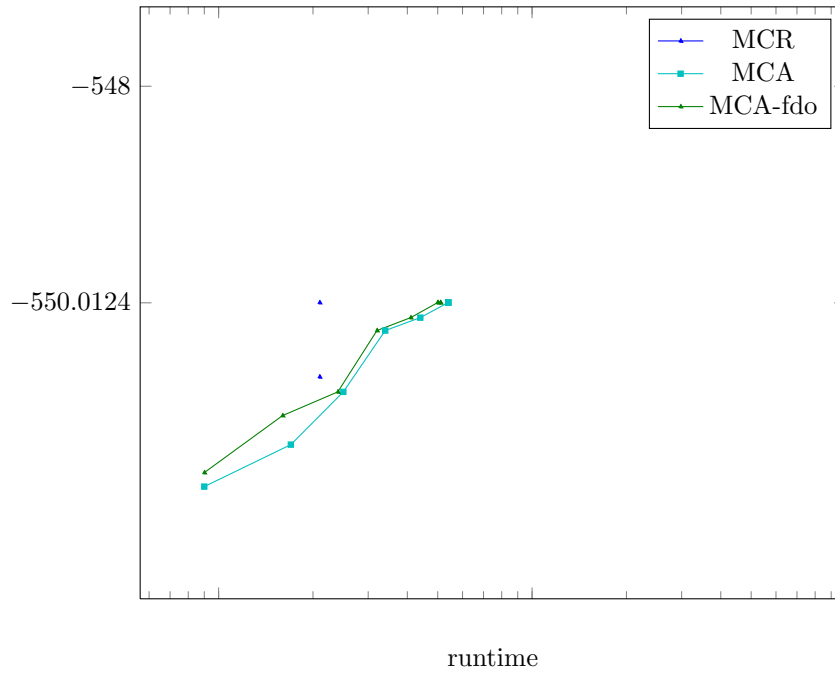


Figure 1913: Runtime results for the instance 6000164 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

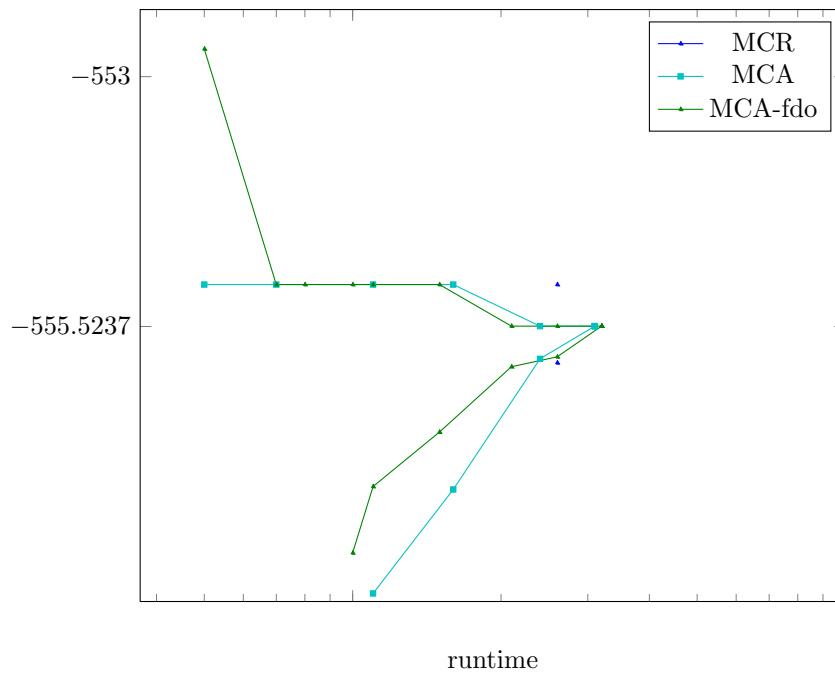


Figure 1914: Runtime results for the instance 6000165 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

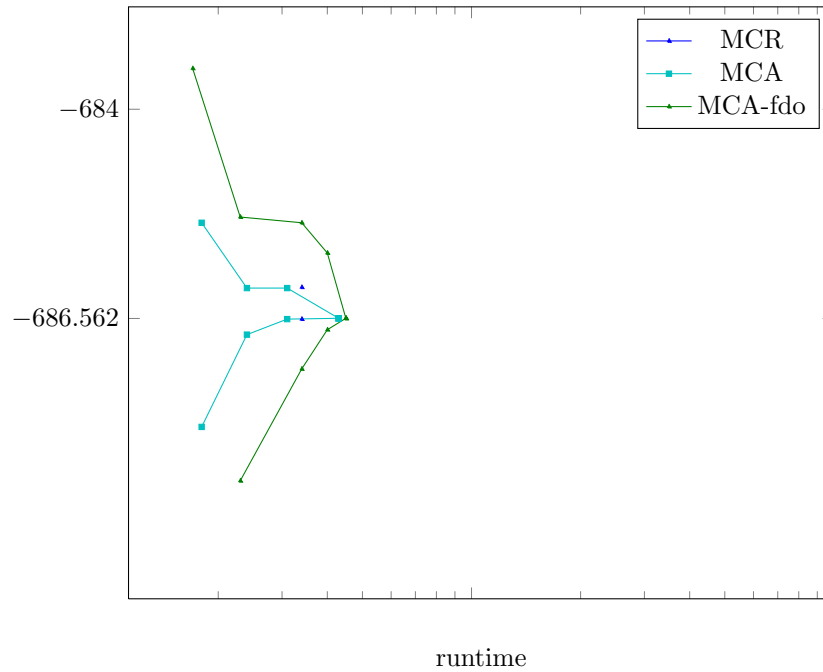


Figure 1915: Runtime results for the instance 6000166 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

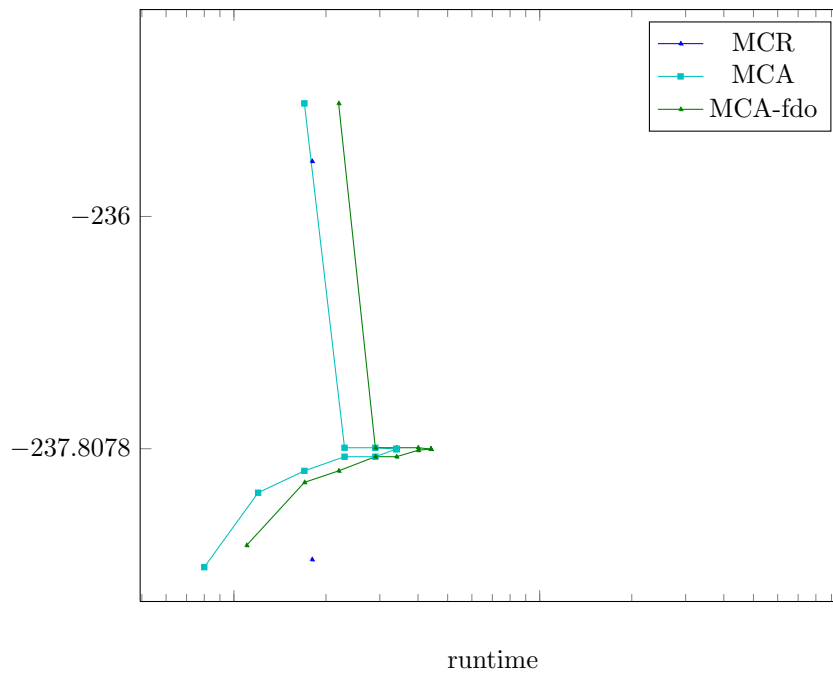


Figure 1916: Runtime results for the instance 6000167 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

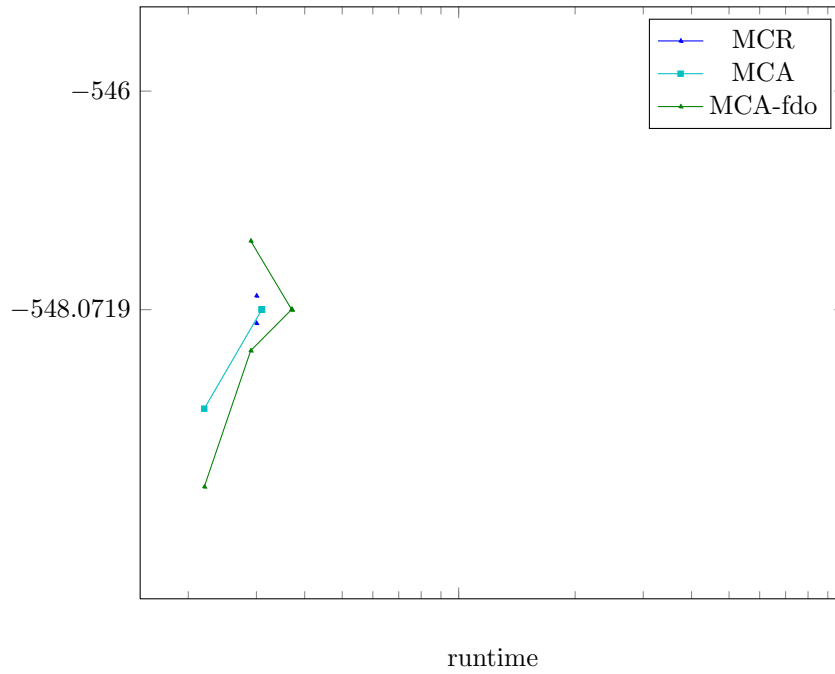


Figure 1917: Runtime results for the instance 6000168 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

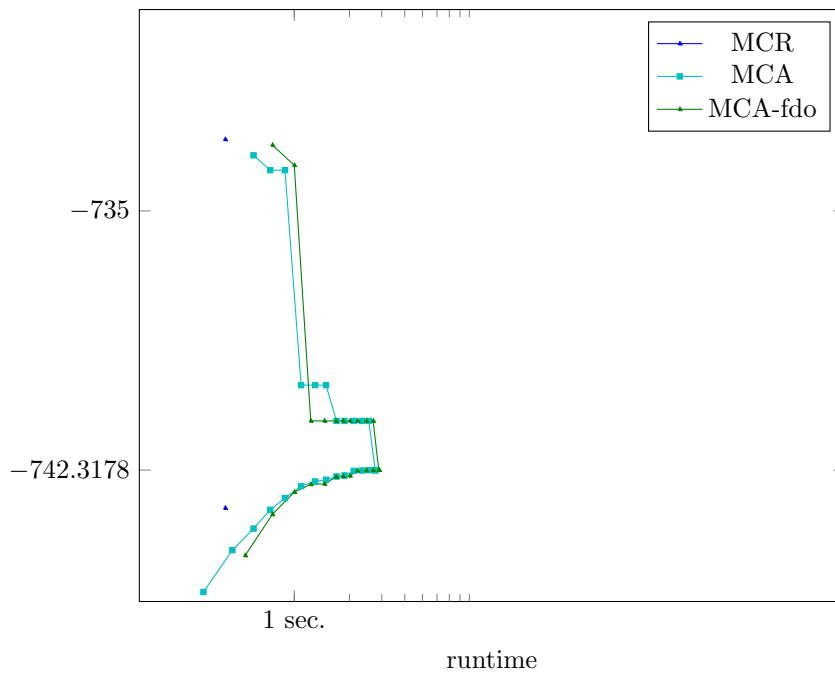


Figure 1918: Runtime results for the instance 6000169 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

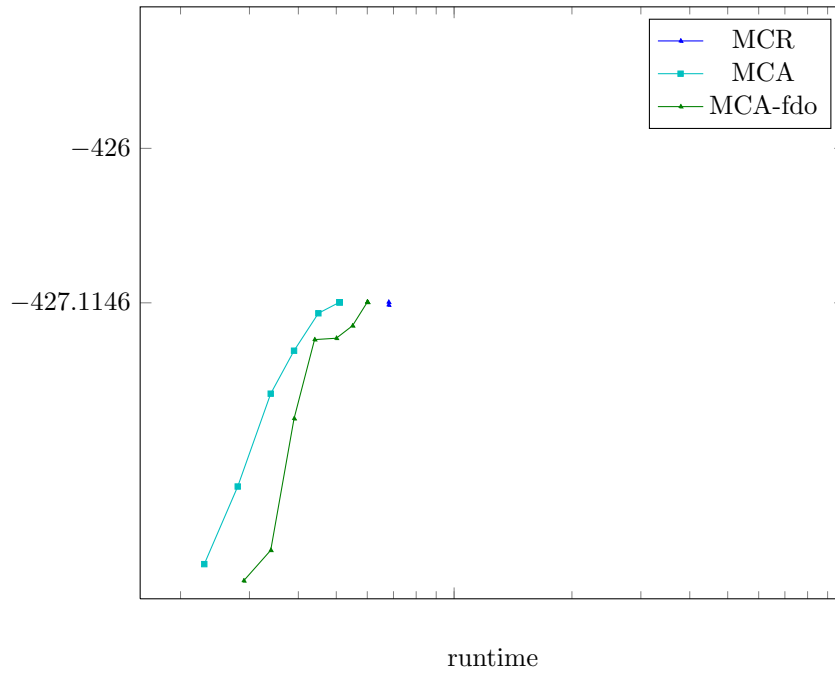


Figure 1919: Runtime results for the instance 6000170 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

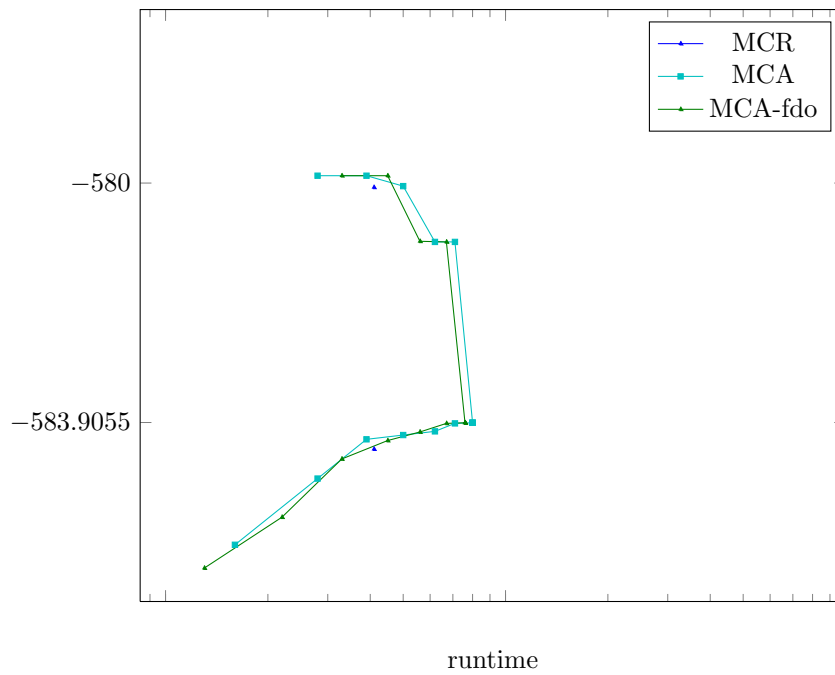


Figure 1920: Runtime results for the instance 6000171 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

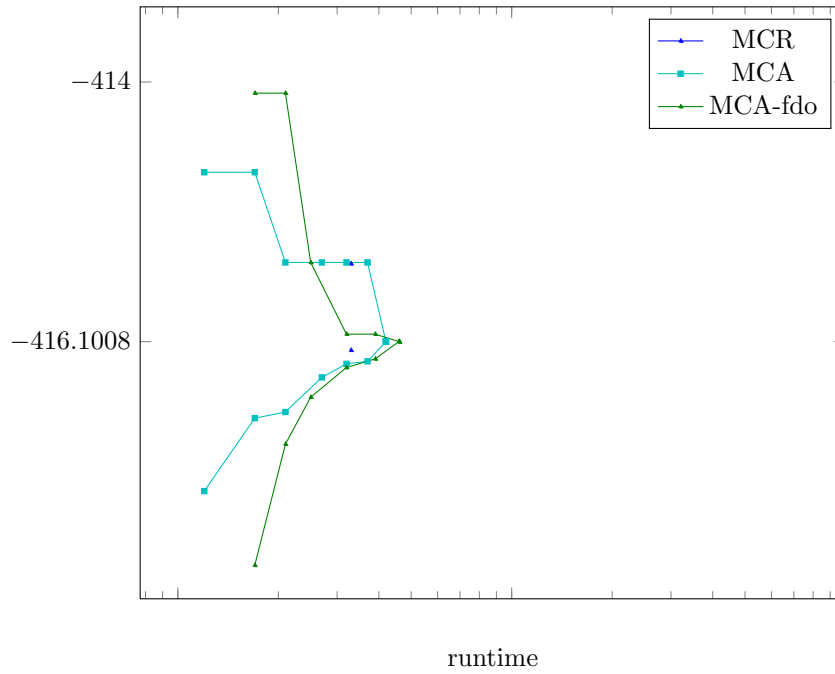


Figure 1921: Runtime results for the instance 6000172 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

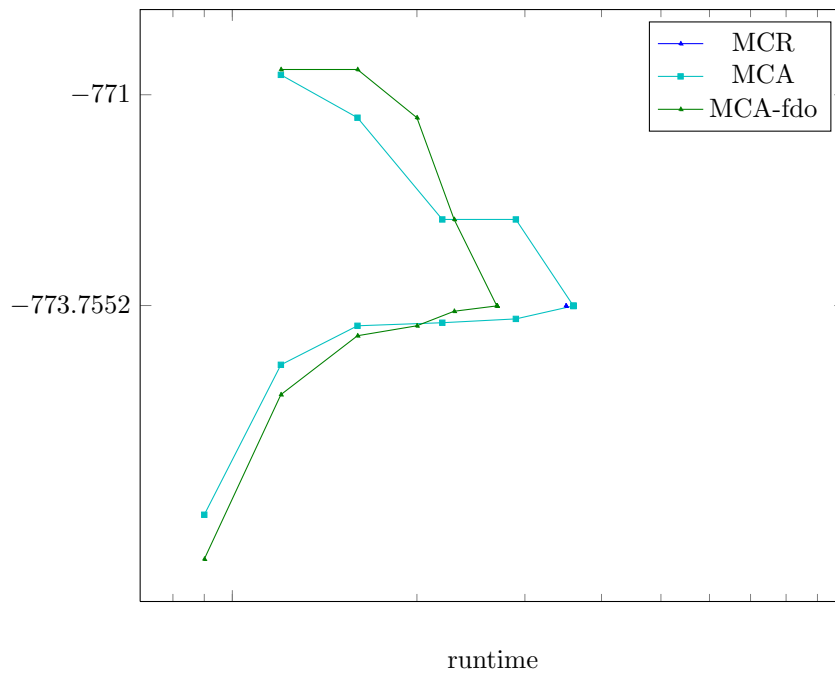


Figure 1922: Runtime results for the instance 6000173 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

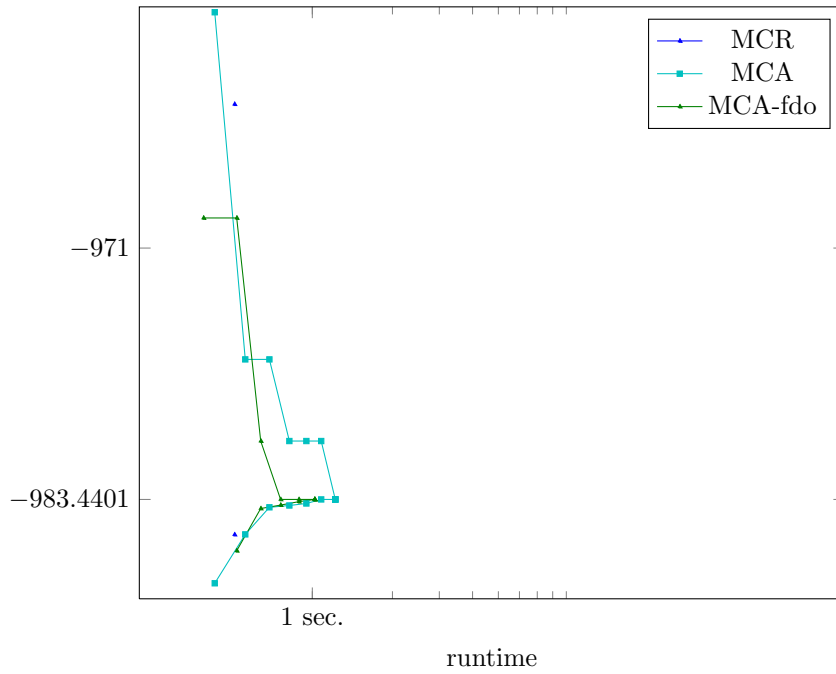


Figure 1923: Runtime results for the instance 6000174 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

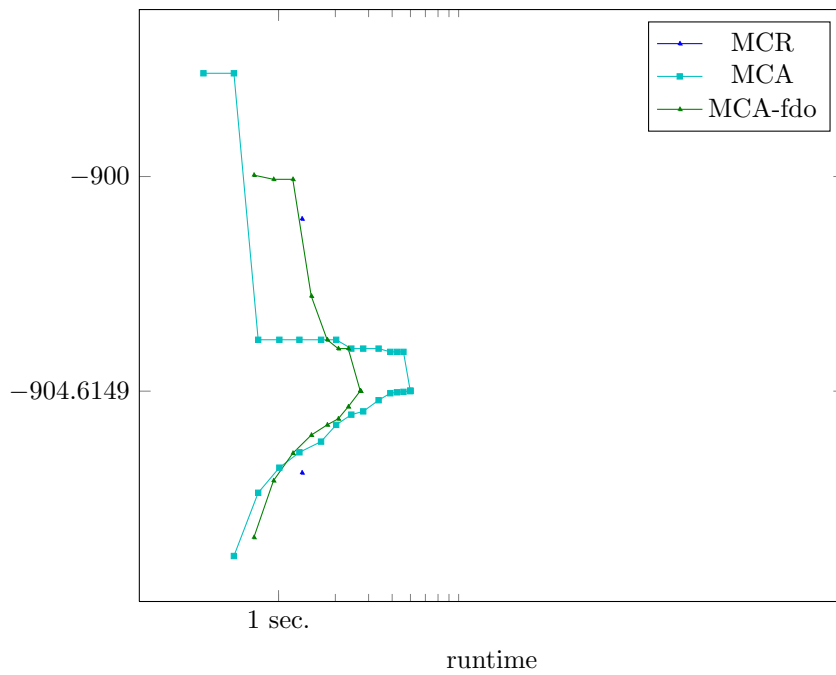


Figure 1924: Runtime results for the instance 6000175 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

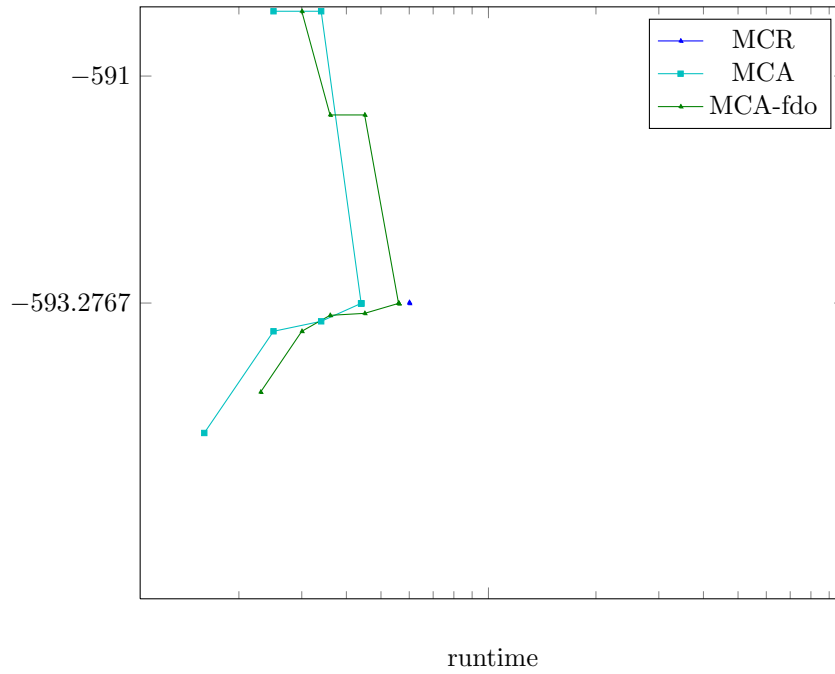


Figure 1925: Runtime results for the instance 6000176 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

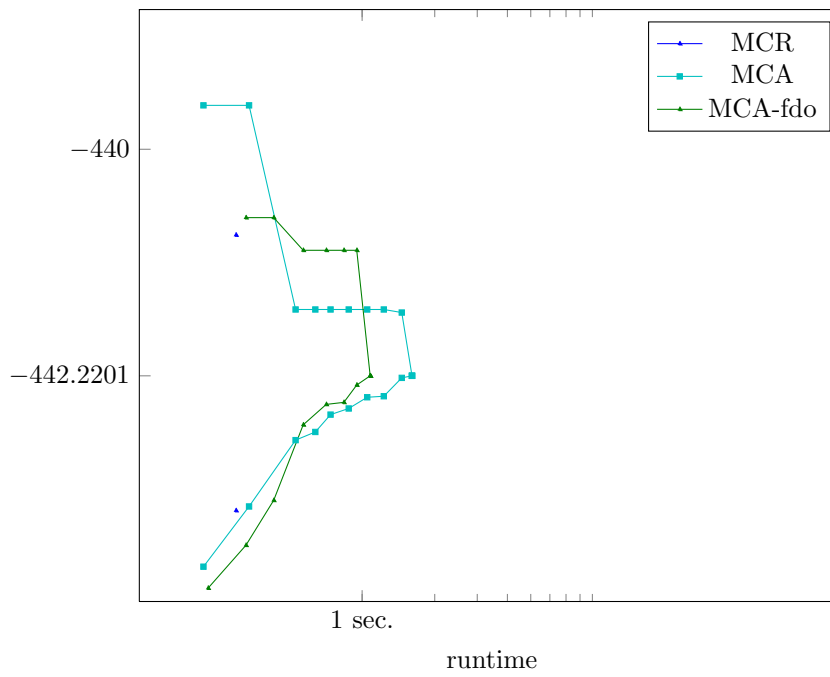


Figure 1926: Runtime results for the instance 6000177 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

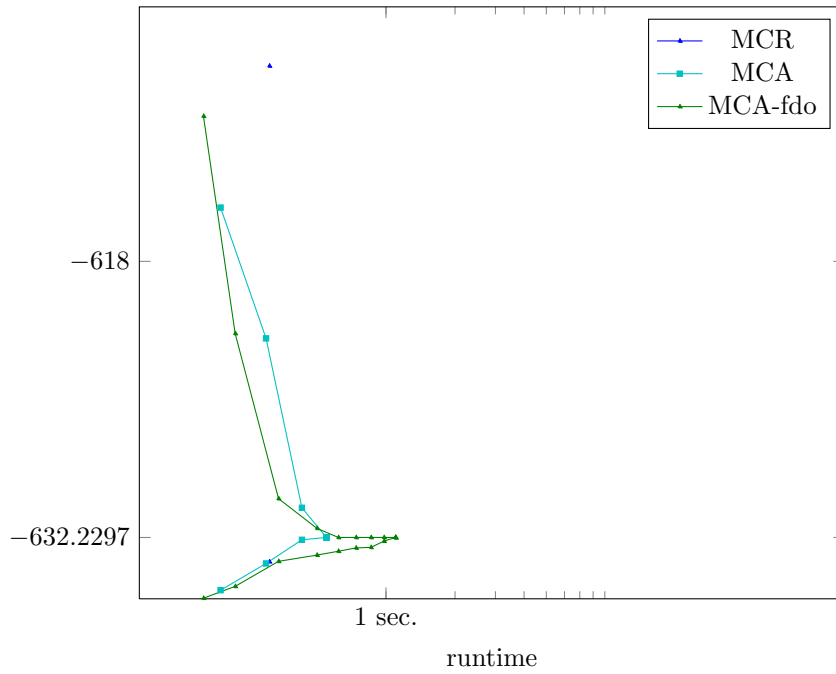


Figure 1927: Runtime results for the instance 6000178 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

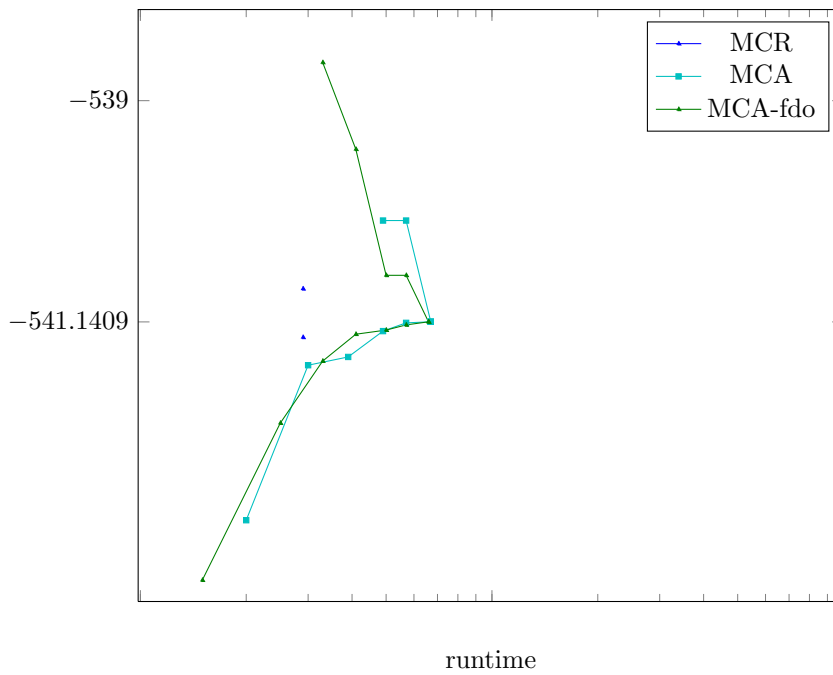


Figure 1928: Runtime results for the instance 6000179 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

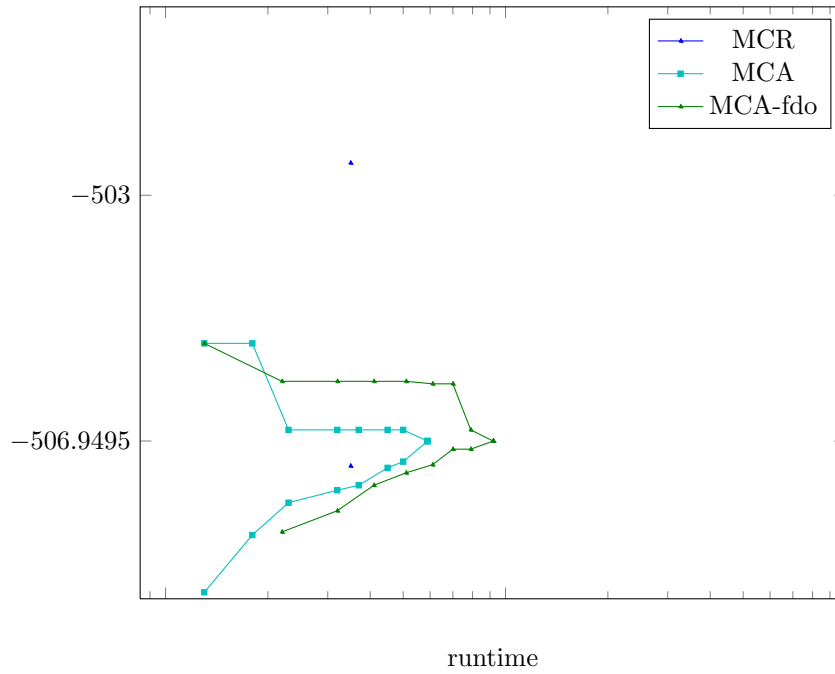


Figure 1929: Runtime results for the instance 6000180 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

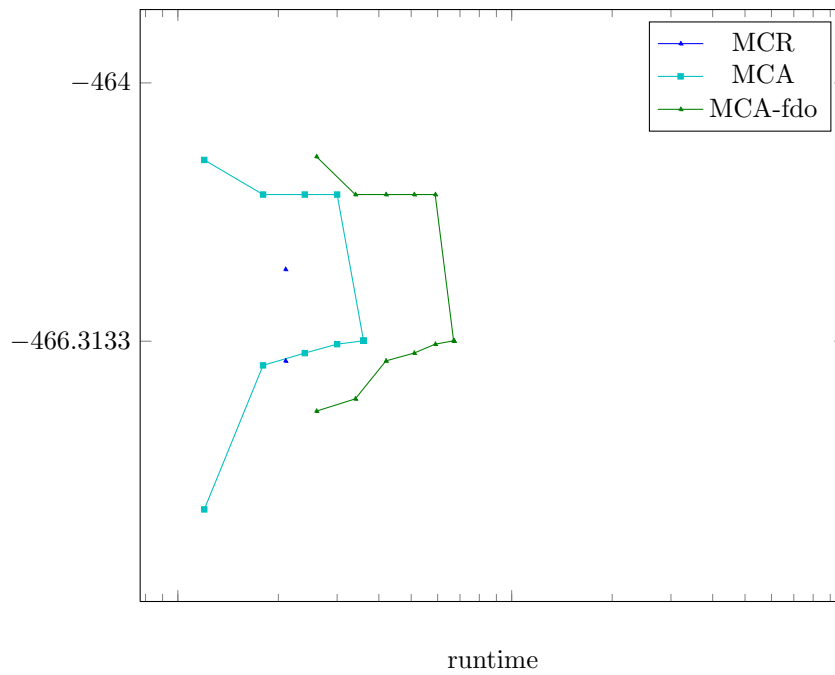


Figure 1930: Runtime results for the instance 6000181 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

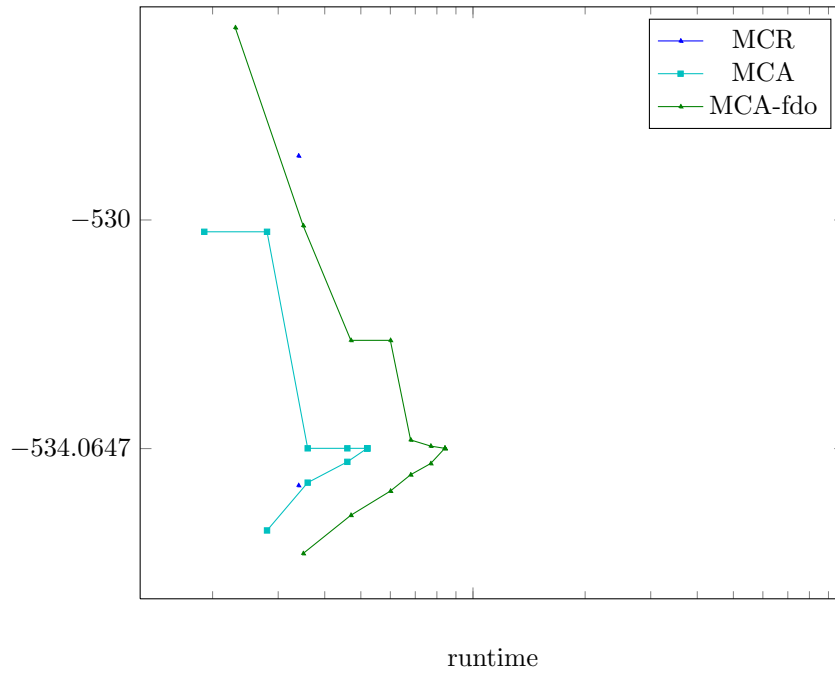


Figure 1931: Runtime results for the instance 6000182 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

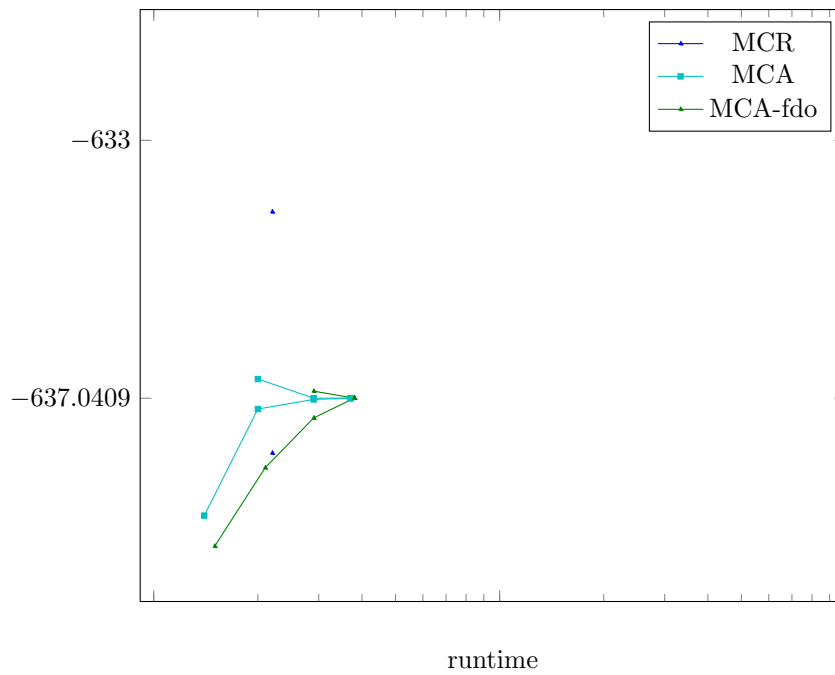


Figure 1932: Runtime results for the instance 6000183 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

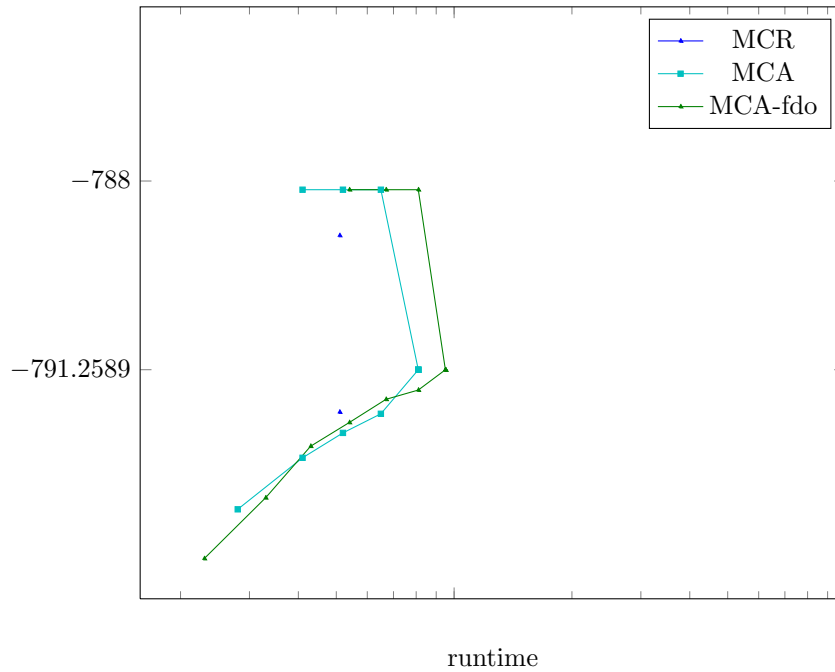


Figure 1933: Runtime results for the instance 6000184 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

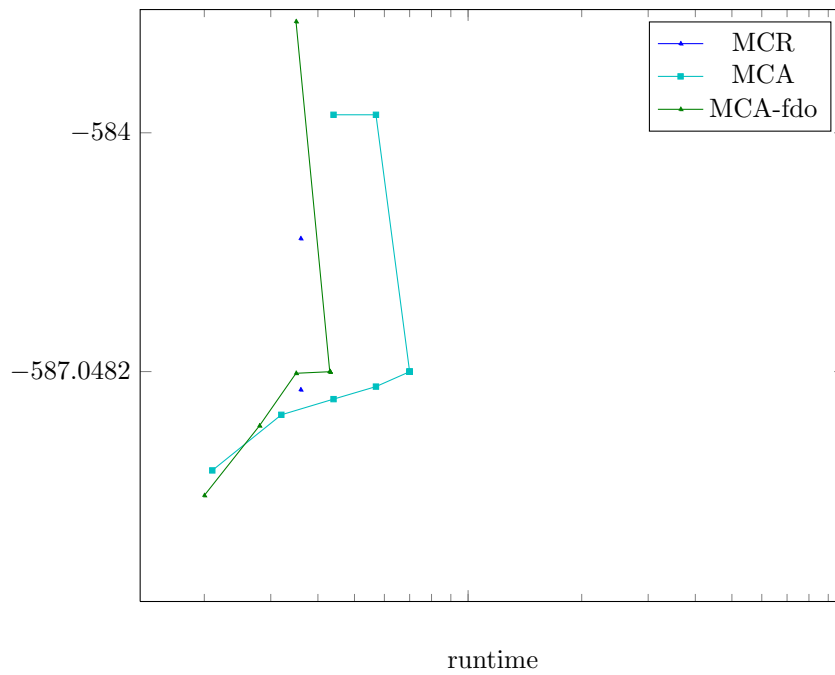


Figure 1934: Runtime results for the instance 6000185 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

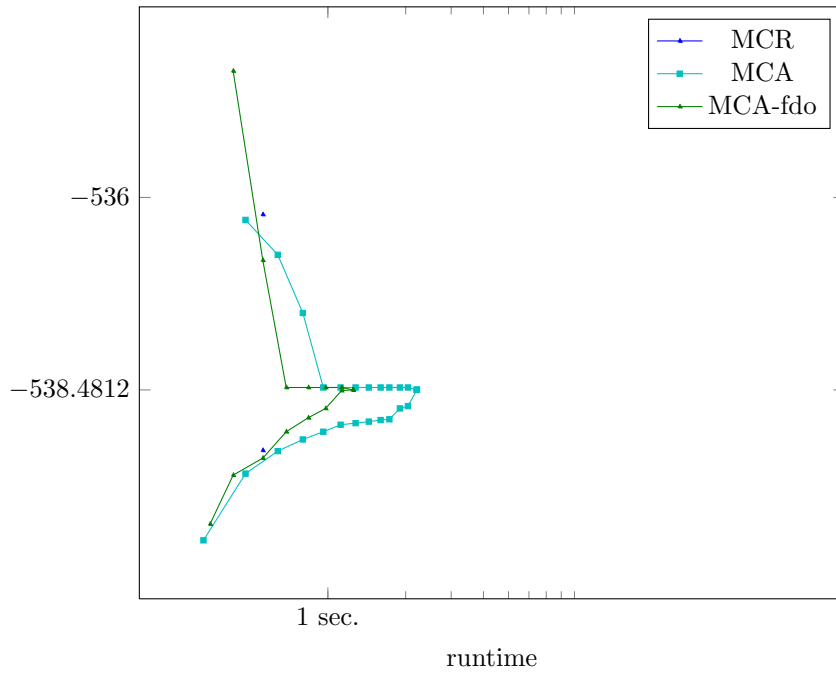


Figure 1935: Runtime results for the instance 6000186 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

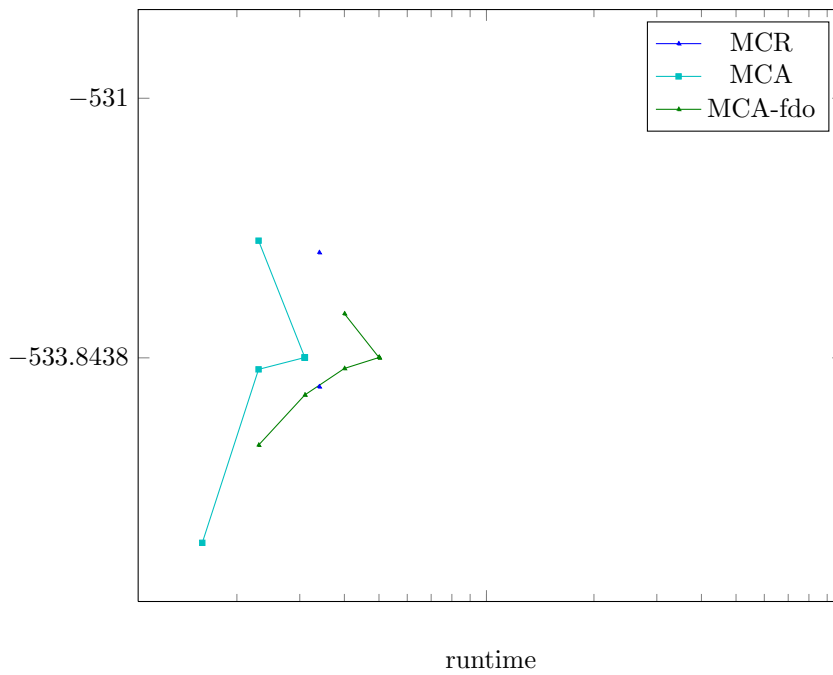


Figure 1936: Runtime results for the instance 6000187 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

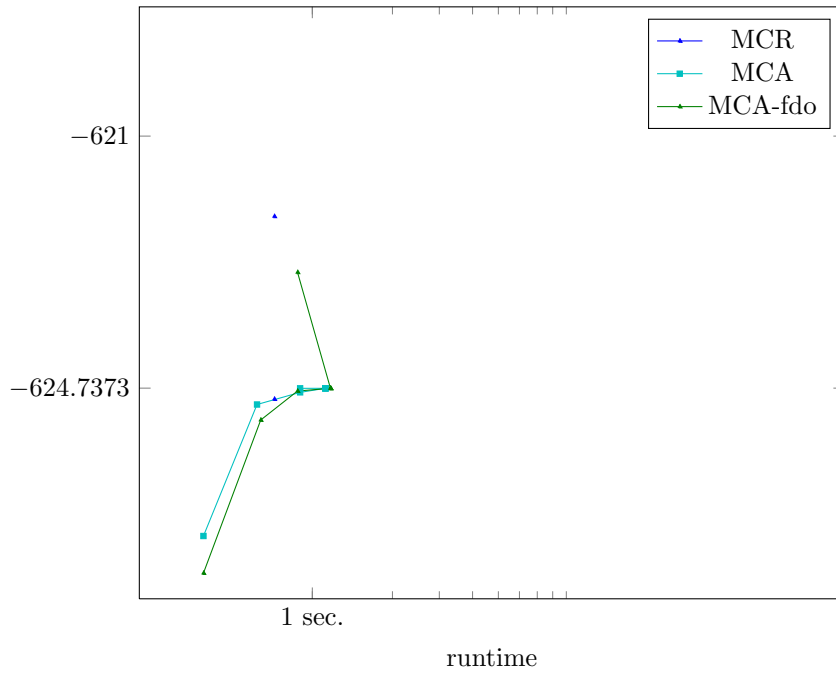


Figure 1937: Runtime results for the instance 6000188 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

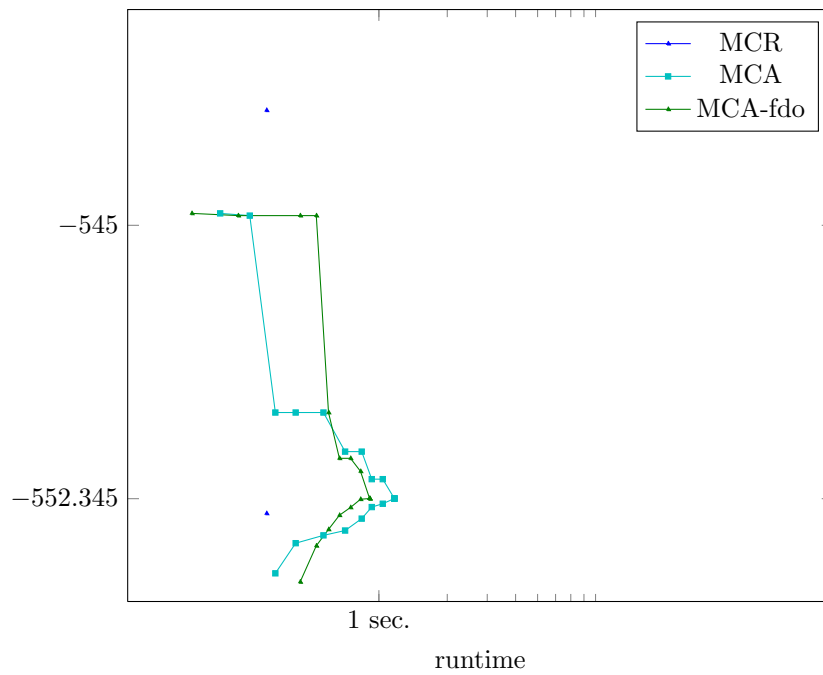


Figure 1938: Runtime results for the instance 6000189 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

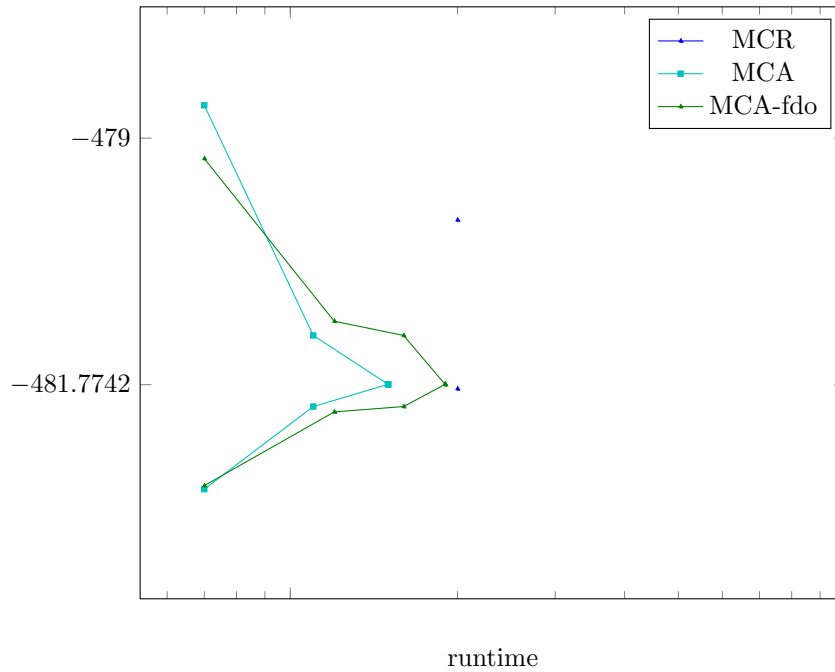


Figure 1939: Runtime results for the instance 6000190 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

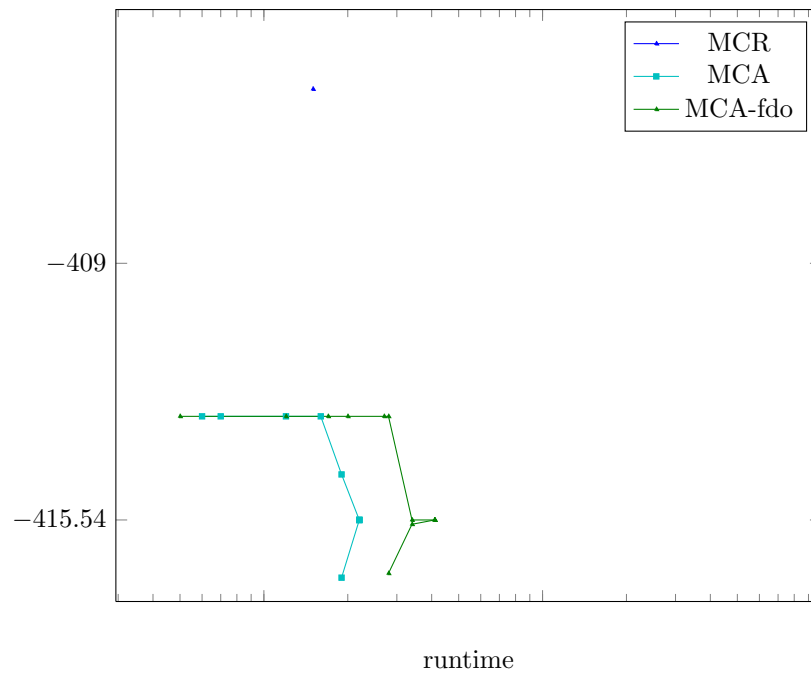


Figure 1940: Runtime results for the instance 6000191 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

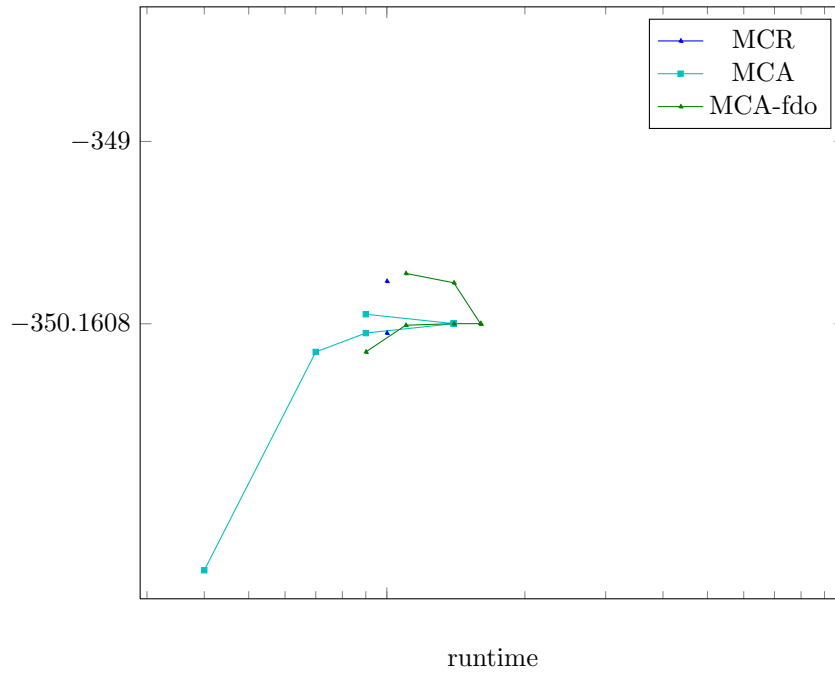


Figure 1941: Runtime results for the instance 6000192 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

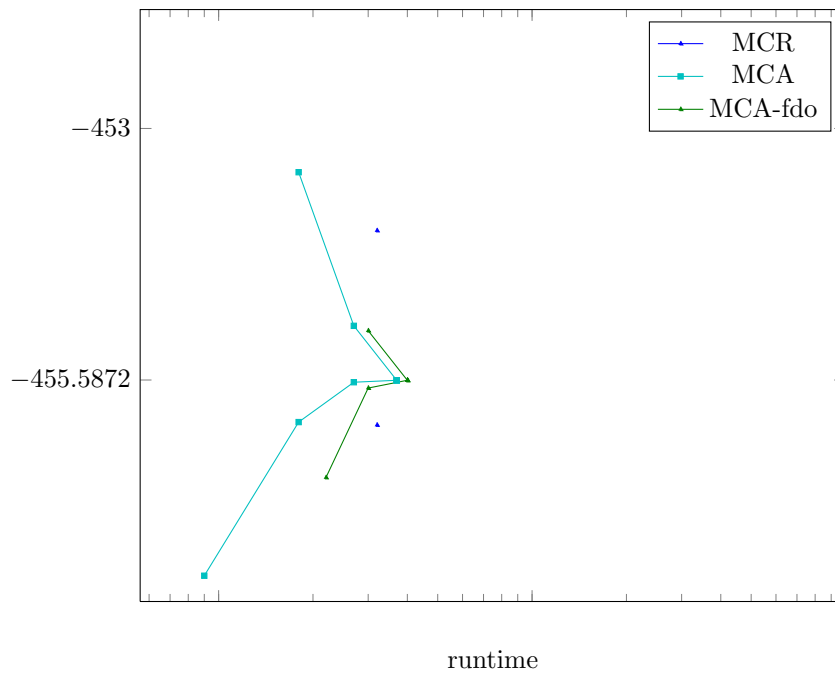
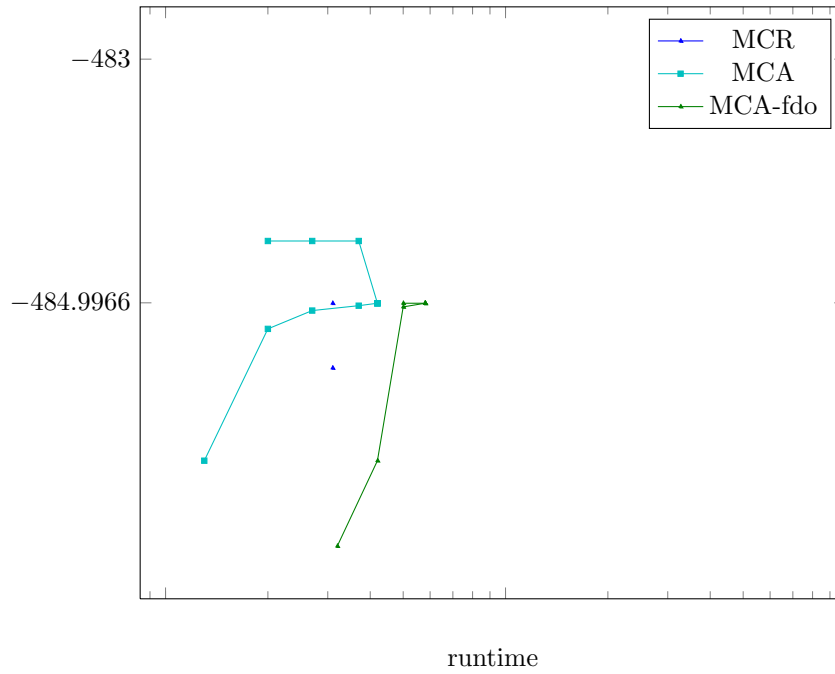


Figure 1942: Runtime results for the instance 6000193 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



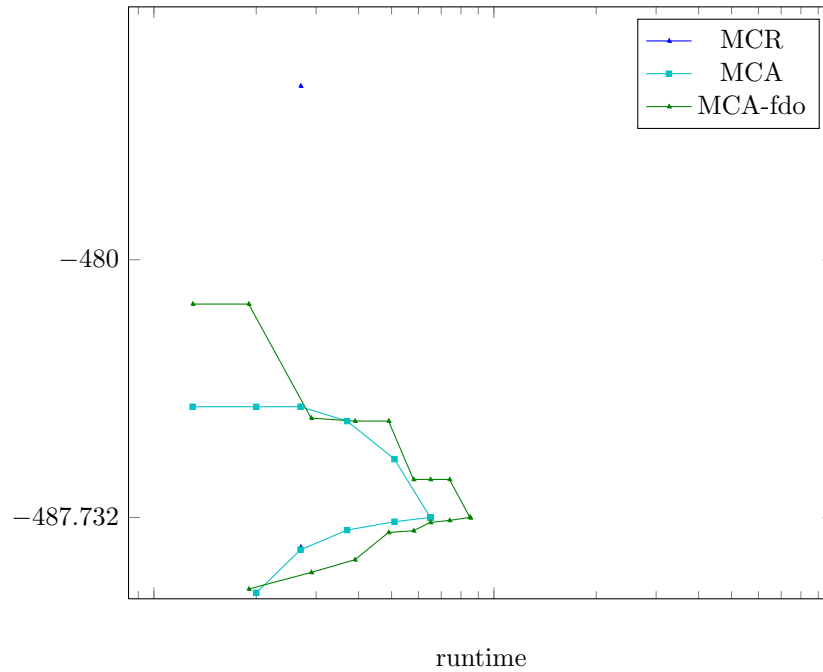


Figure 1945: Runtime results for the instance 6000196 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

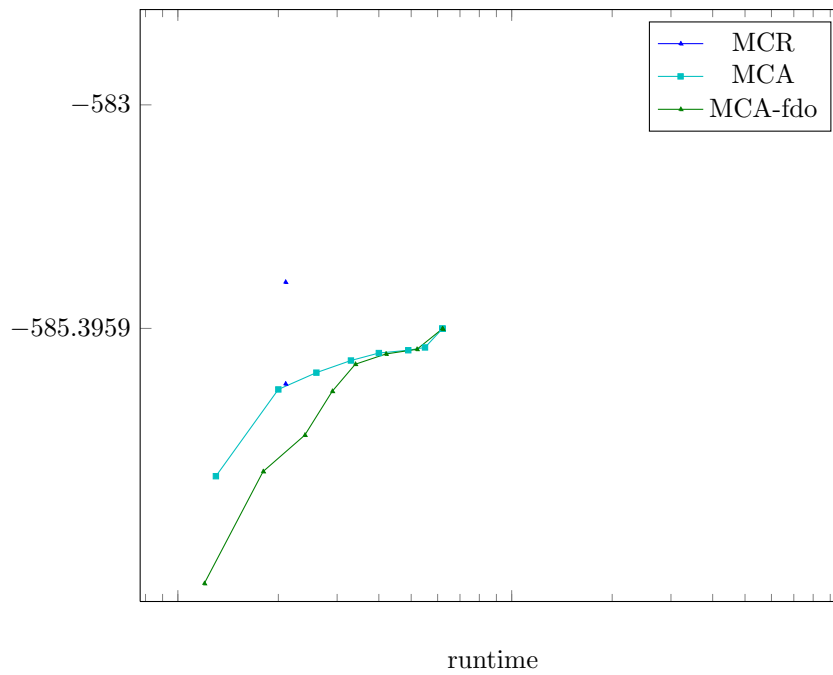


Figure 1946: Runtime results for the instance 6000197 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

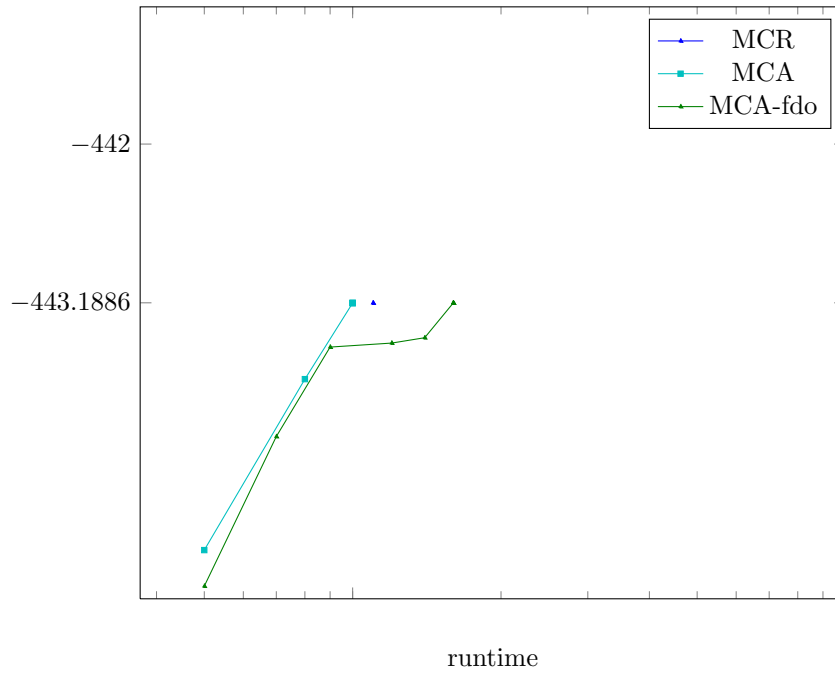


Figure 1947: Runtime results for the instance 6000198 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

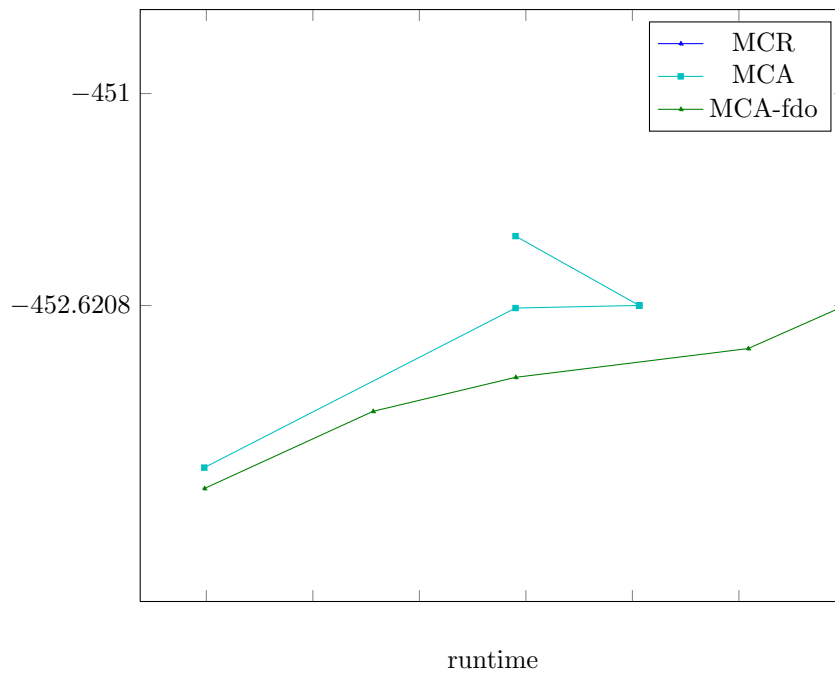


Figure 1948: Runtime results for the instance 6000199 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

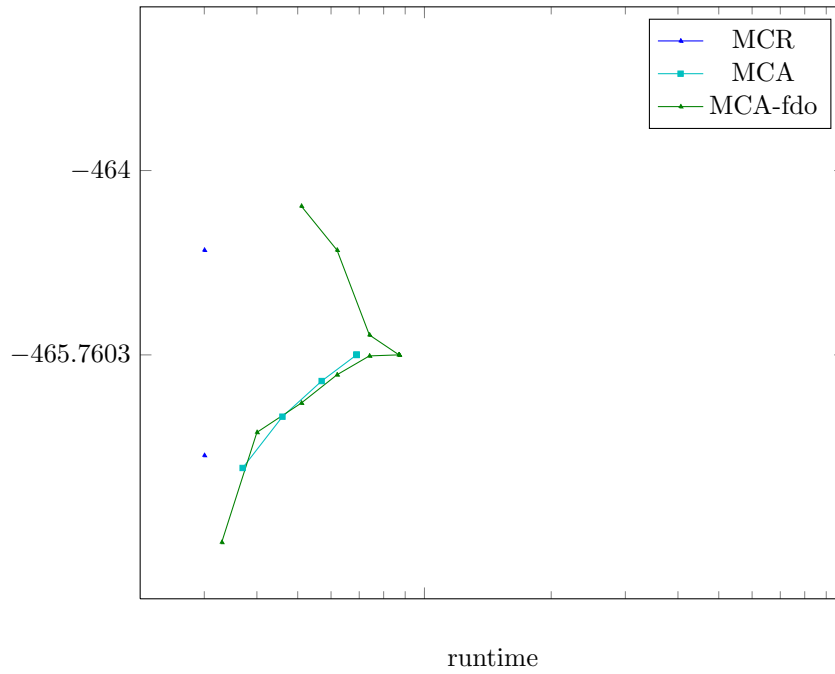


Figure 1949: Runtime results for the instance 6000200 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

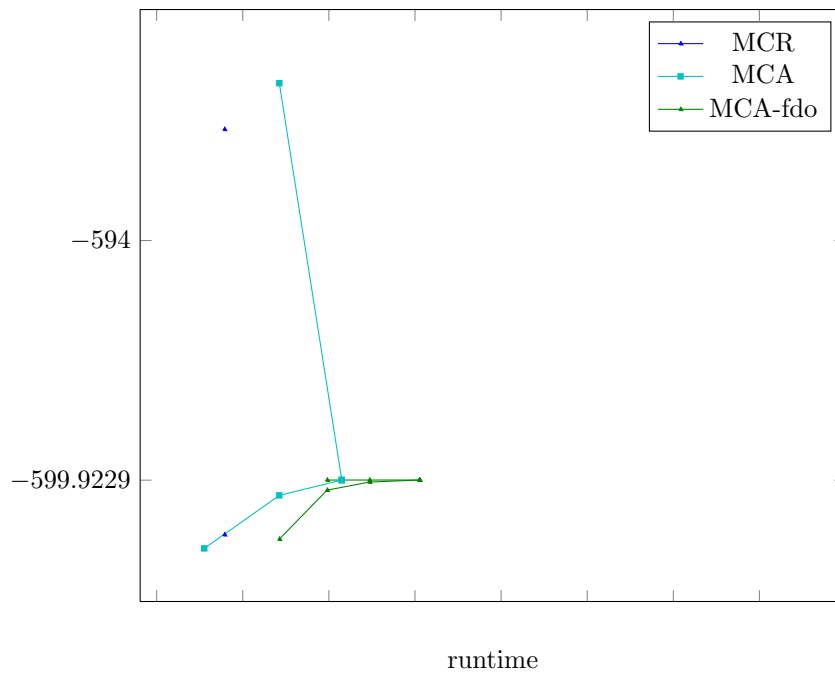


Figure 1950: Runtime results for the instance 6000201 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

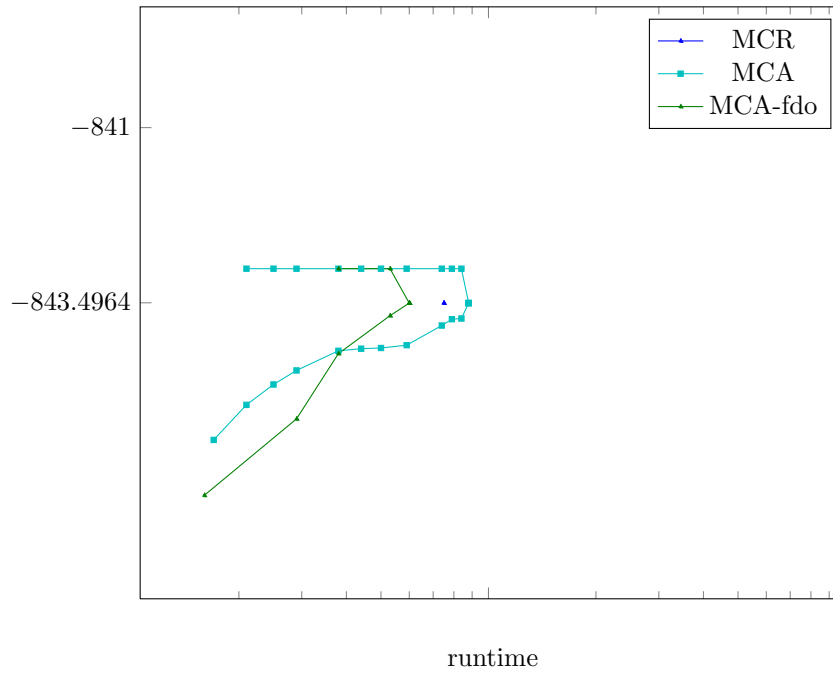


Figure 1951: Runtime results for the instance 6000202 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

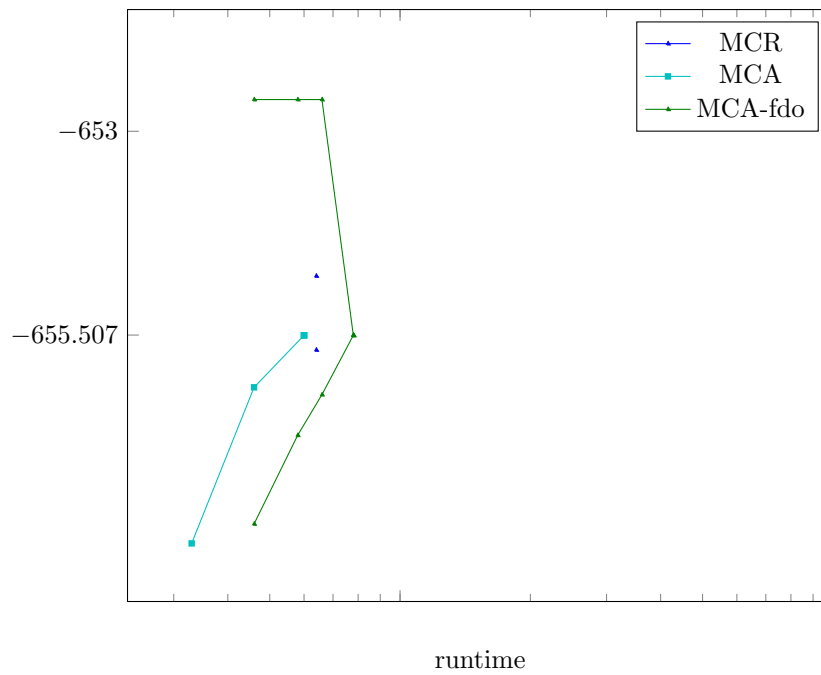


Figure 1952: Runtime results for the instance 6000203 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

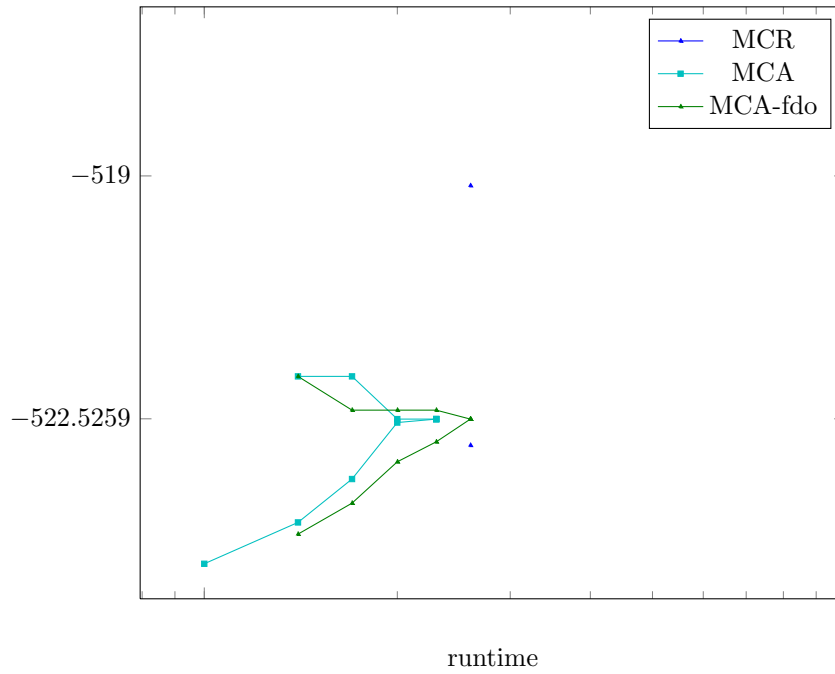


Figure 1953: Runtime results for the instance 6000204 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

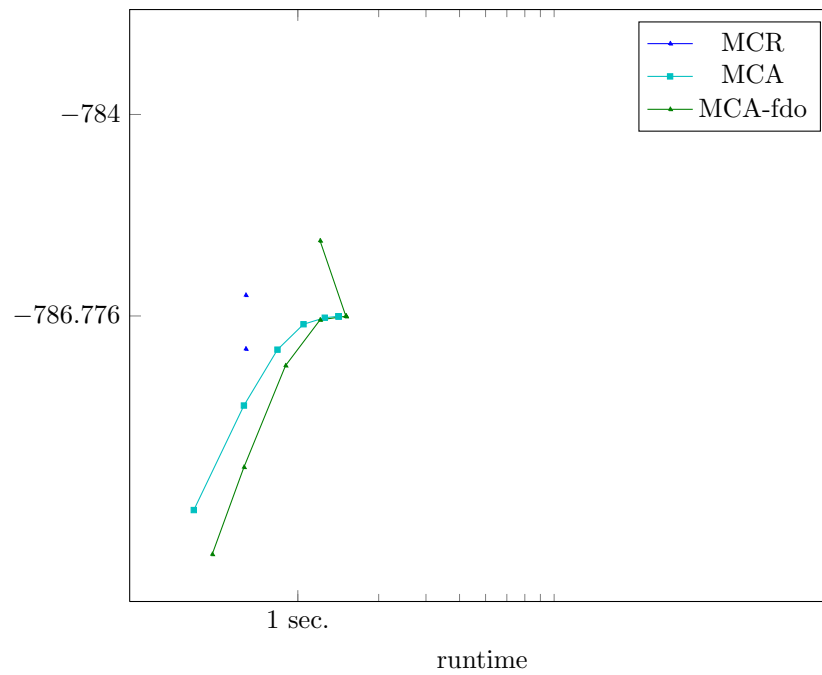


Figure 1954: Runtime results for the instance 6000205 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

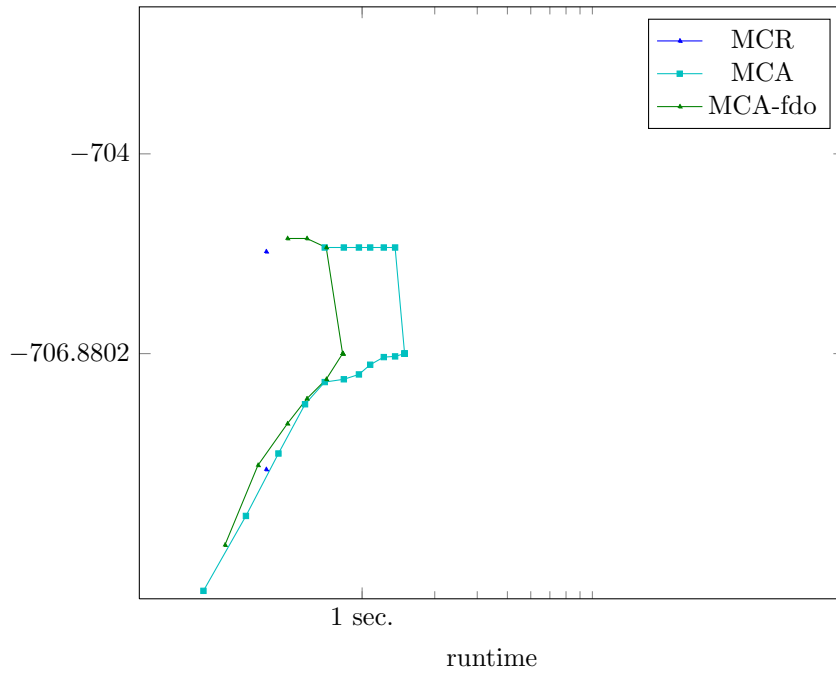


Figure 1955: Runtime results for the instance 6000206 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

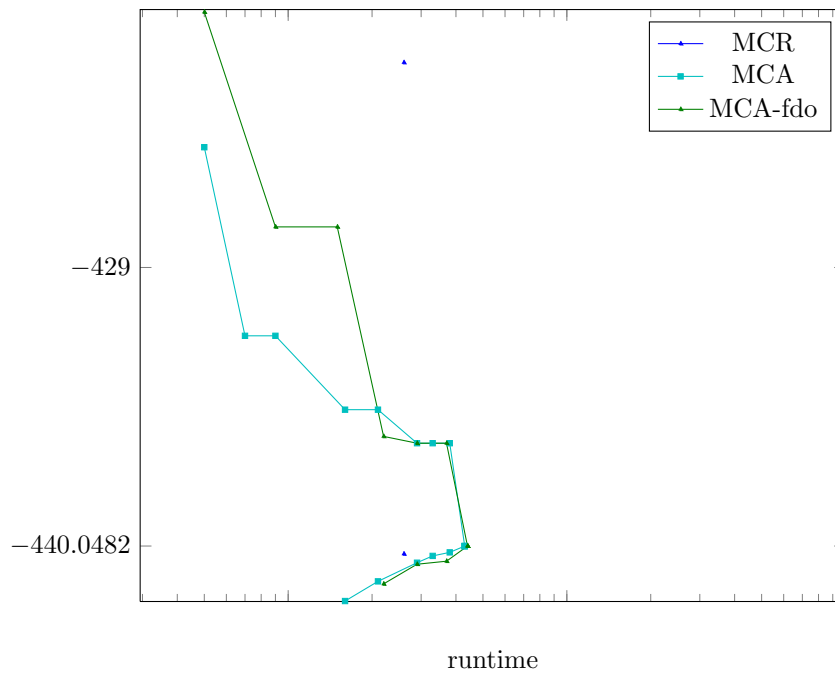


Figure 1956: Runtime results for the instance 6000207 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

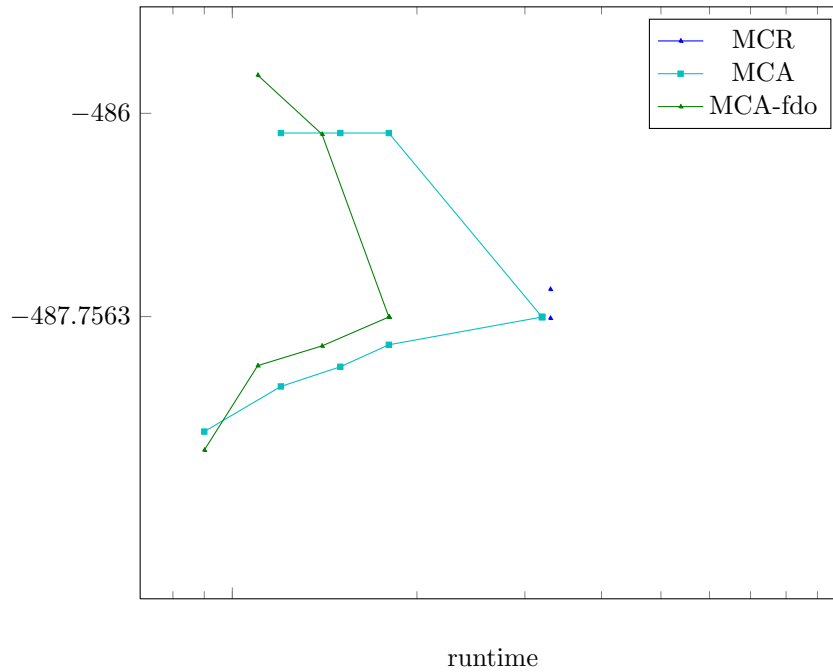


Figure 1957: Runtime results for the instance 6000208 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

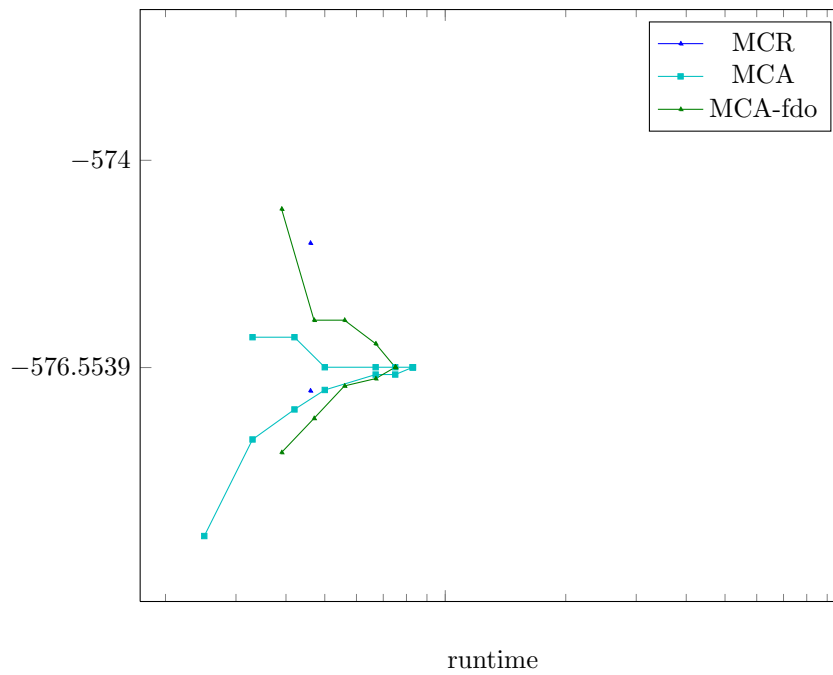


Figure 1958: Runtime results for the instance 6000209 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

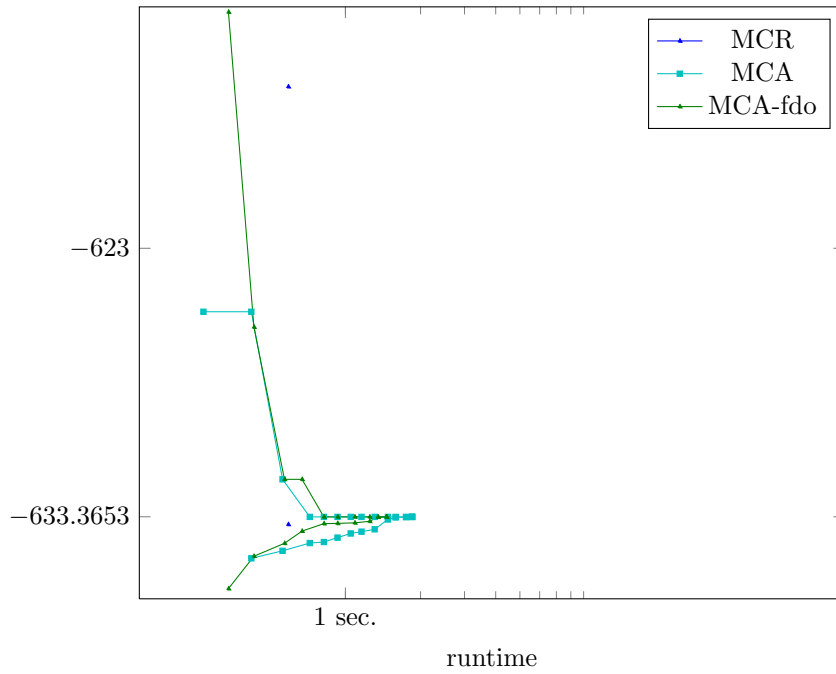


Figure 1959: Runtime results for the instance 6000210 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

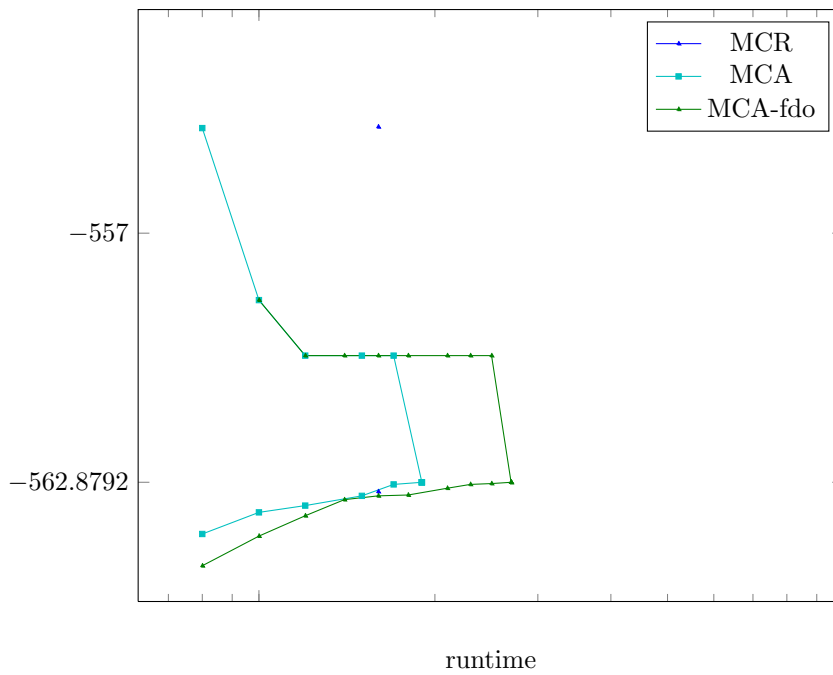


Figure 1960: Runtime results for the instance 6000211 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

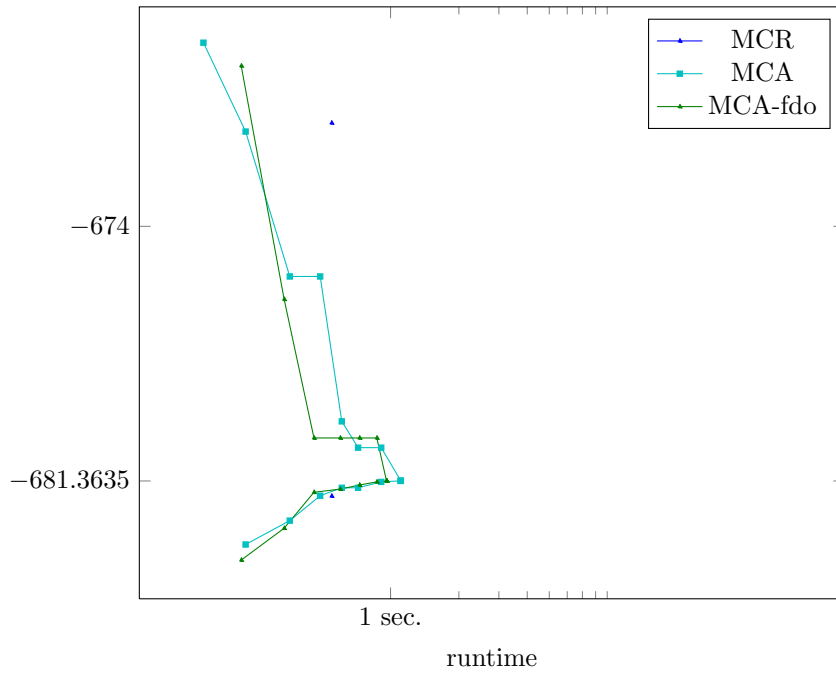


Figure 1961: Runtime results for the instance 6000212 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

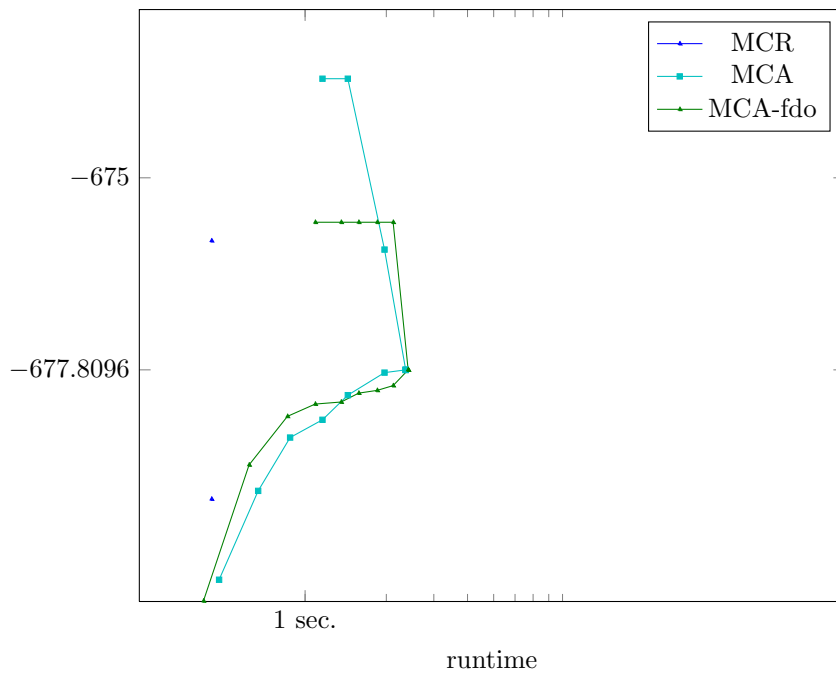


Figure 1962: Runtime results for the instance 6000213 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

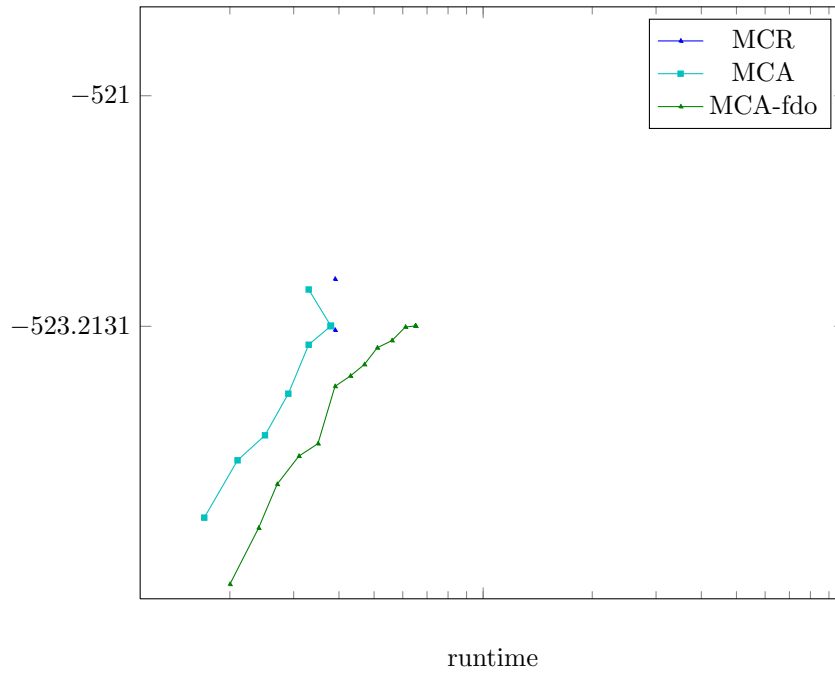


Figure 1963: Runtime results for the instance 6000214 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

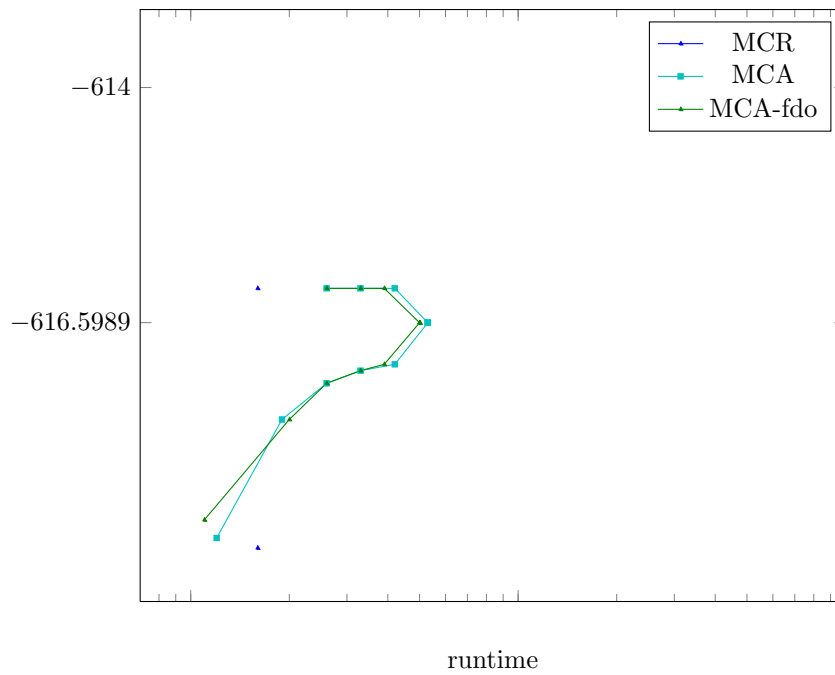


Figure 1964: Runtime results for the instance 6000215 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

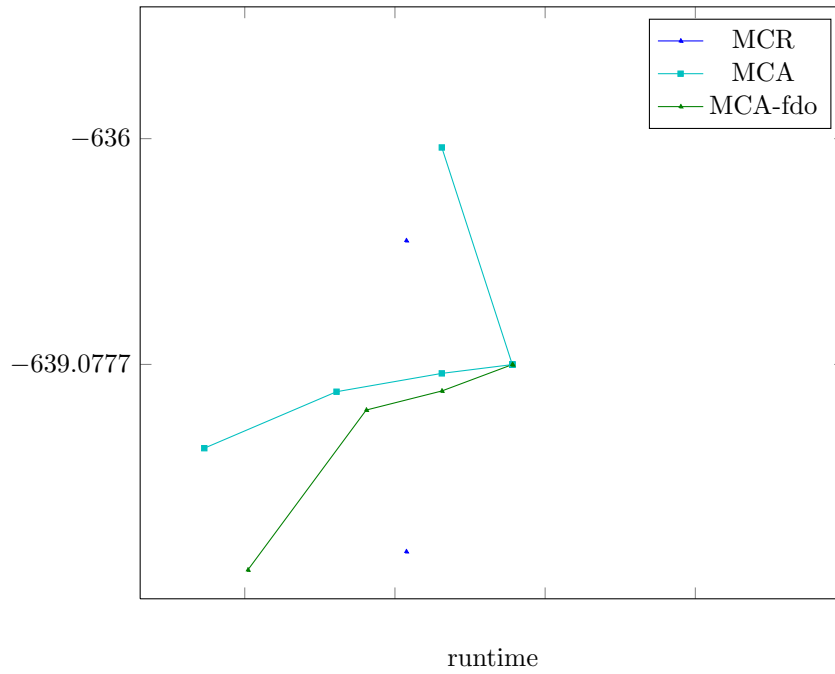


Figure 1965: Runtime results for the instance 6000216 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

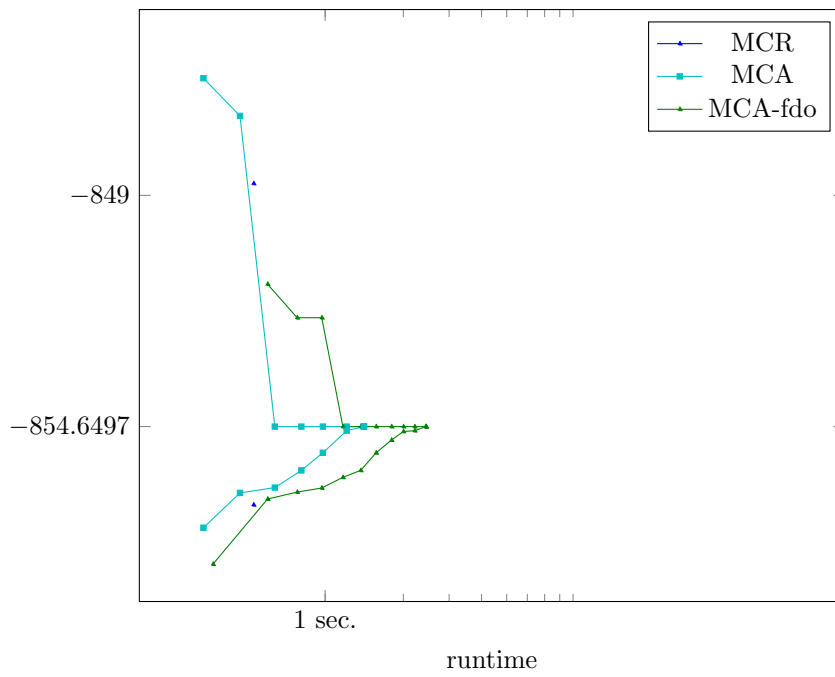


Figure 1966: Runtime results for the instance 6000217 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

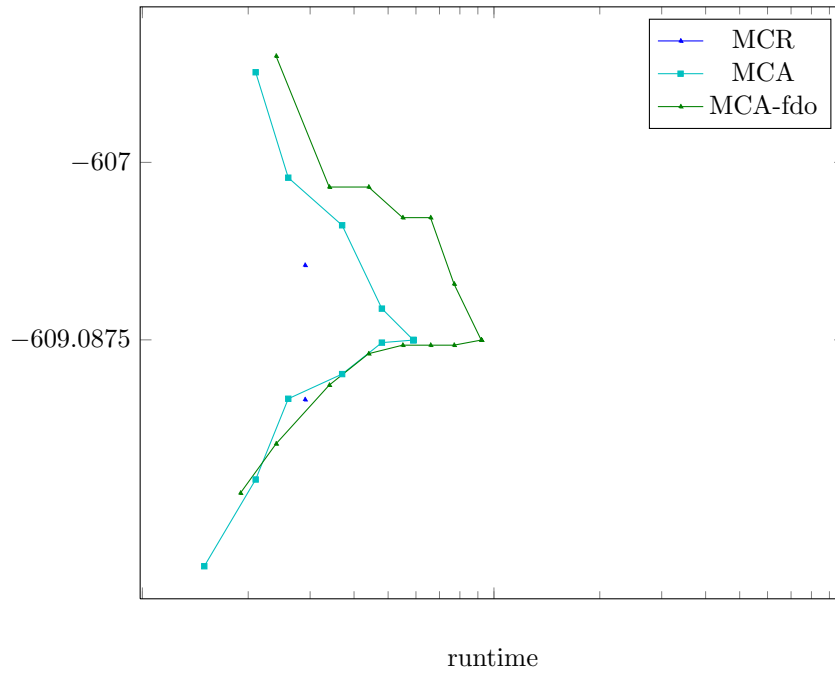


Figure 1967: Runtime results for the instance 6000218 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

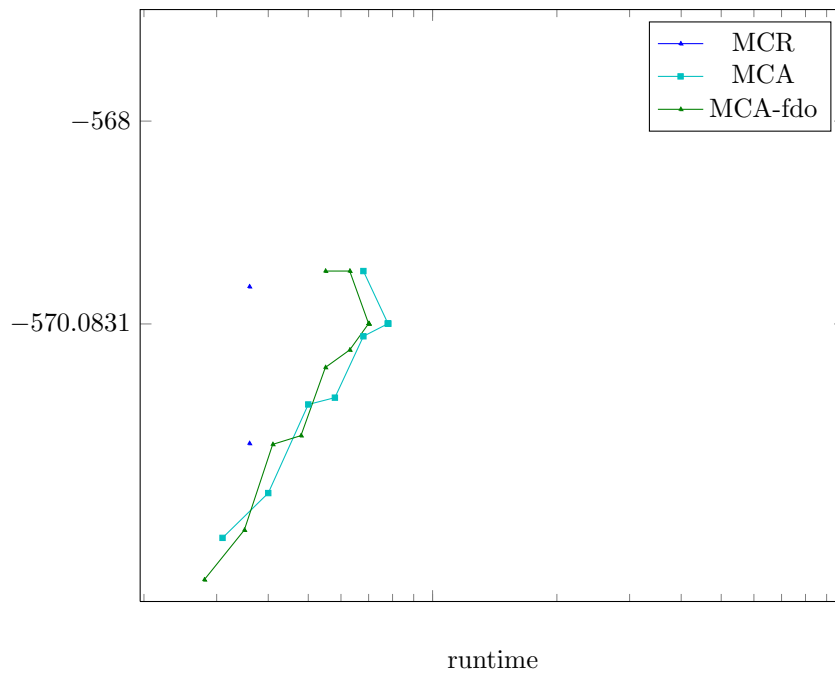


Figure 1968: Runtime results for the instance 6000219 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

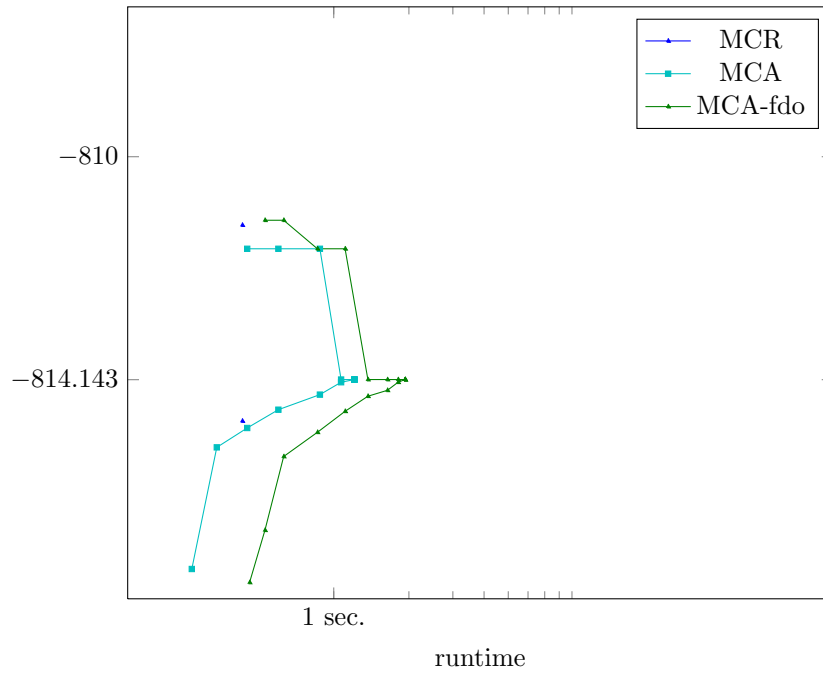


Figure 1969: Runtime results for the instance 6000220 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

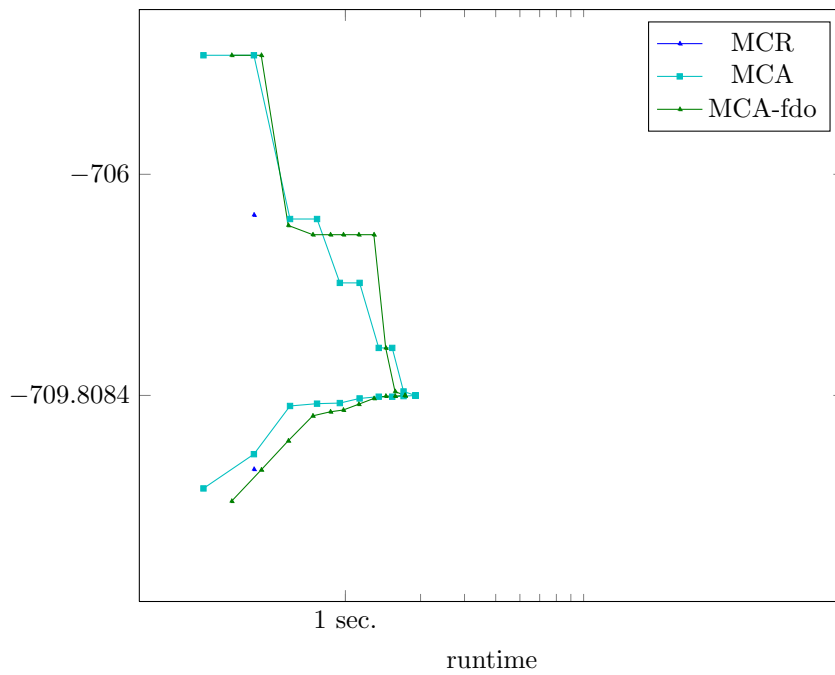


Figure 1970: Runtime results for the instance 6000221 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

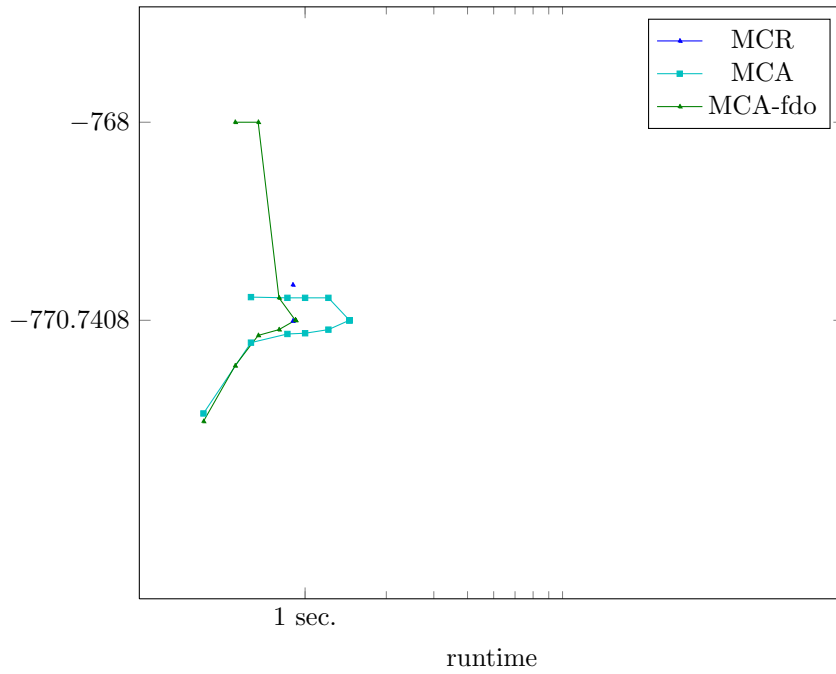


Figure 1971: Runtime results for the instance 6000222 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

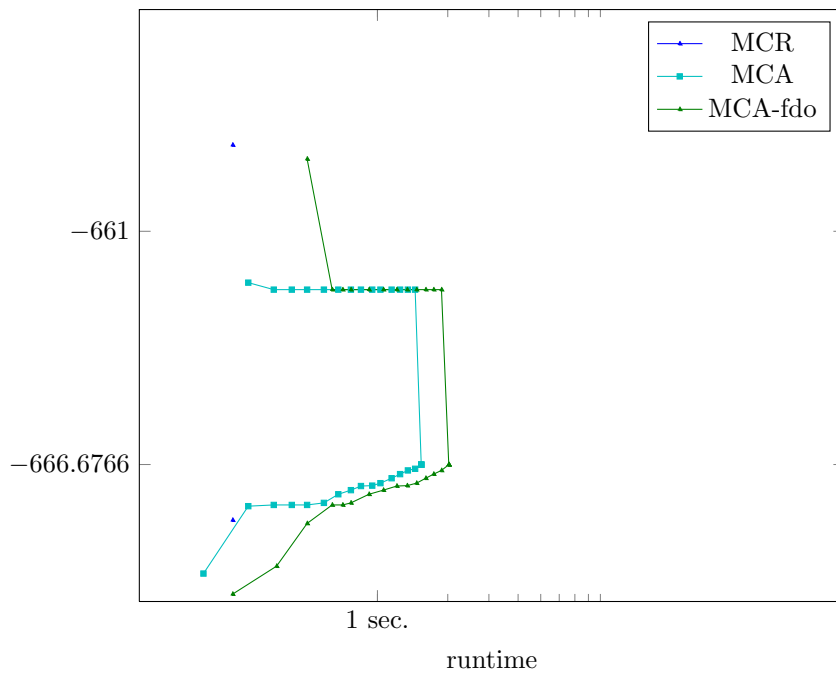


Figure 1972: Runtime results for the instance 6000223 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

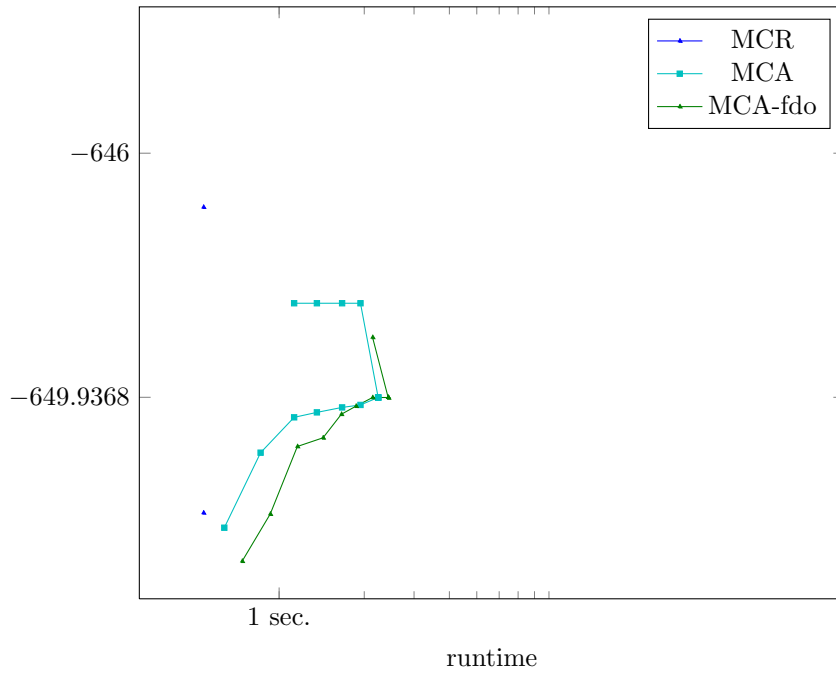


Figure 1973: Runtime results for the instance 6000224 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

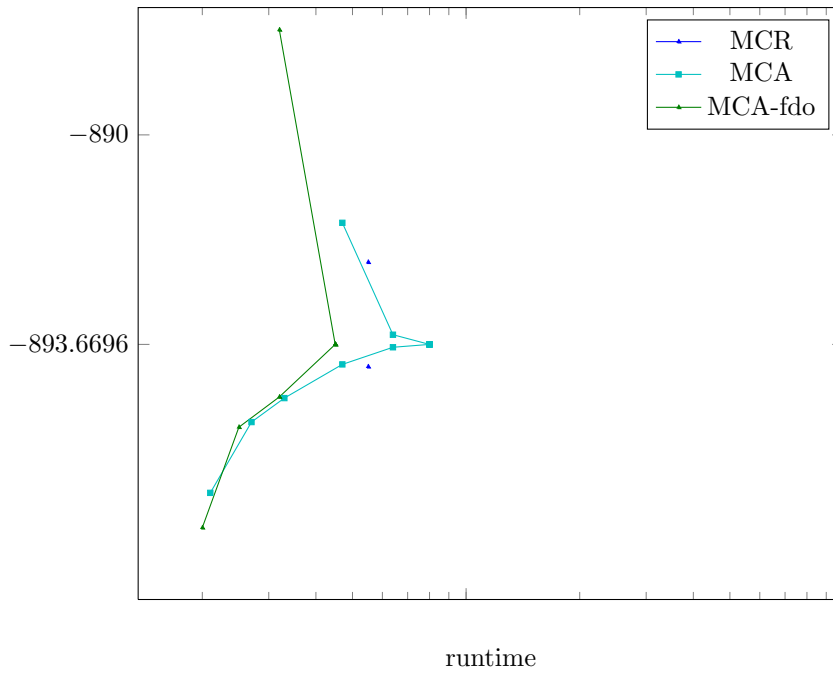


Figure 1974: Runtime results for the instance 6000225 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

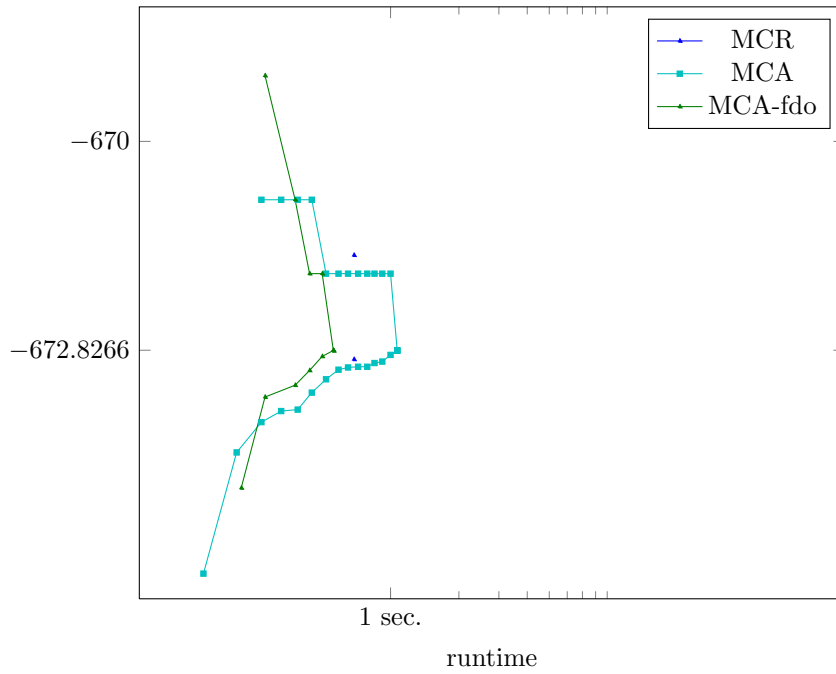


Figure 1975: Runtime results for the instance 6000226 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

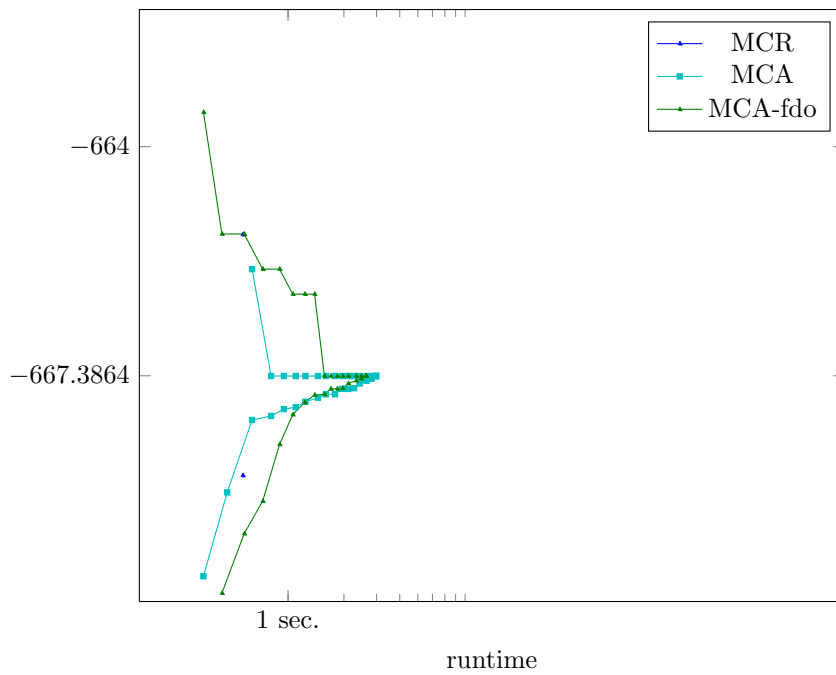


Figure 1976: Runtime results for the instance 6000227 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

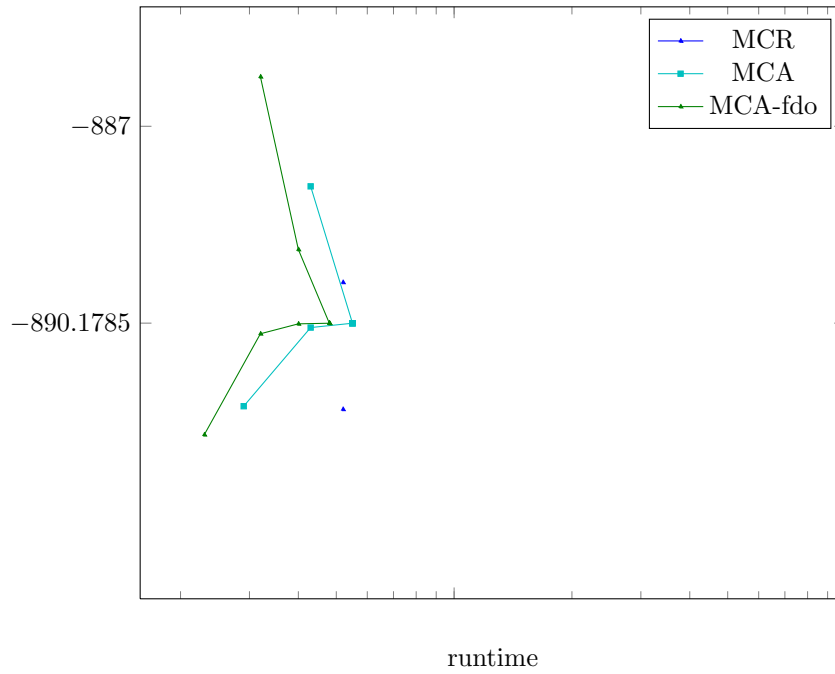


Figure 1977: Runtime results for the instance 6000228 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

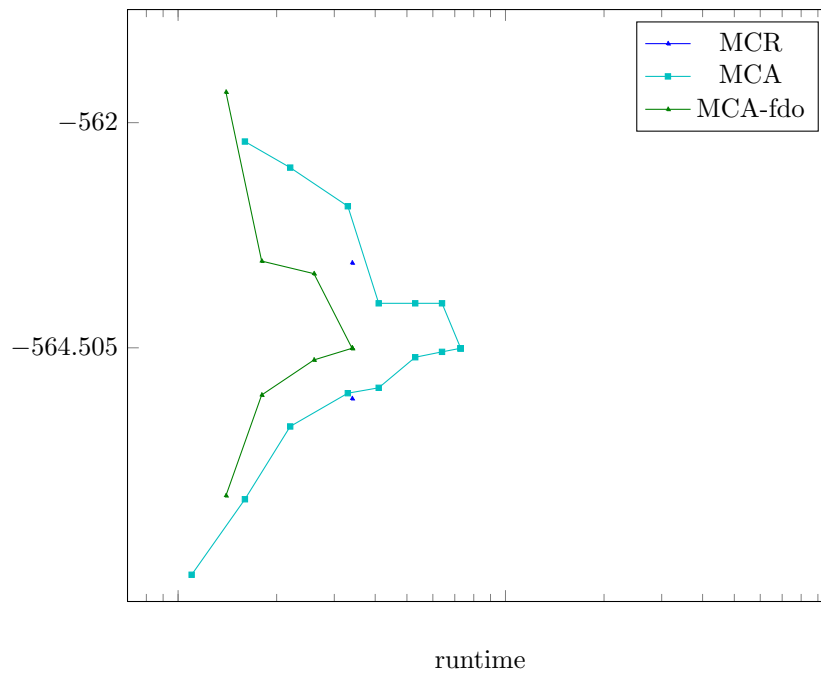


Figure 1978: Runtime results for the instance 6000229 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

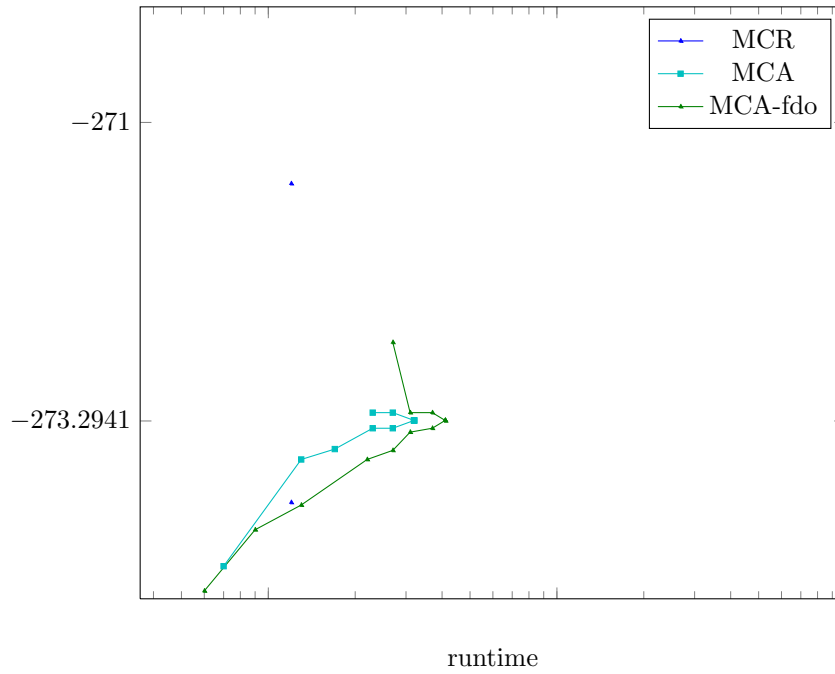


Figure 1981: Runtime results for the instance 6000232 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

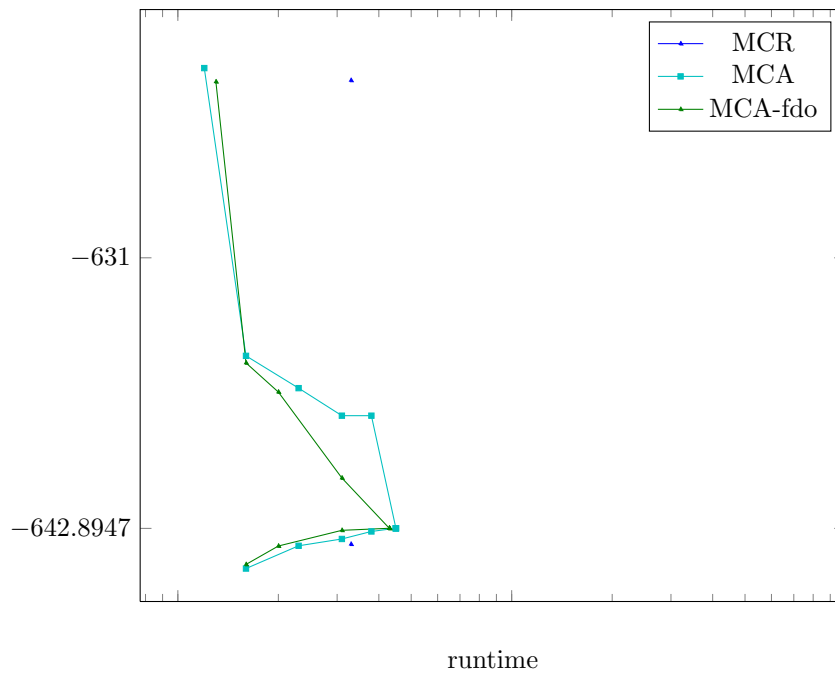


Figure 1982: Runtime results for the instance 6000233 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

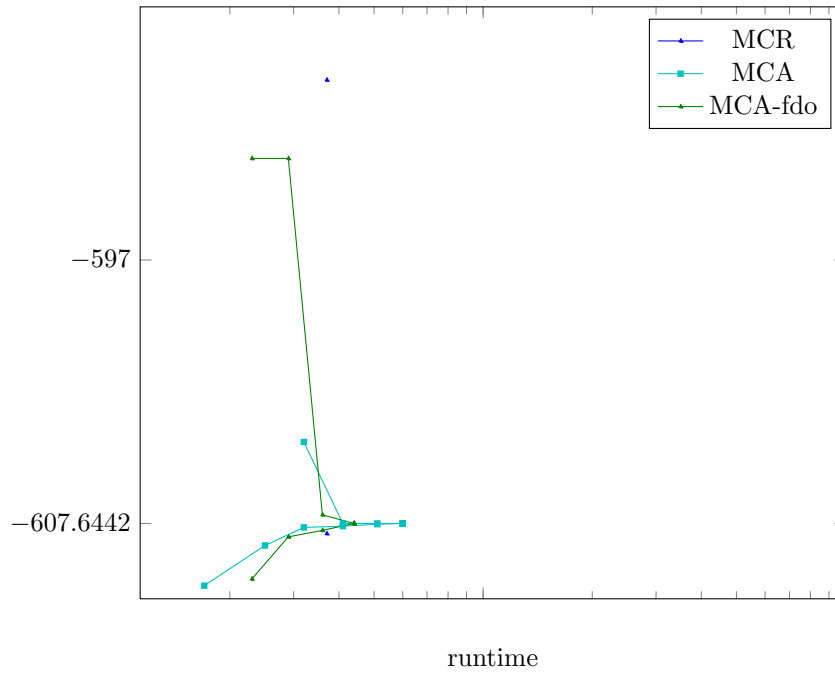


Figure 1983: Runtime results for the instance 6000234 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

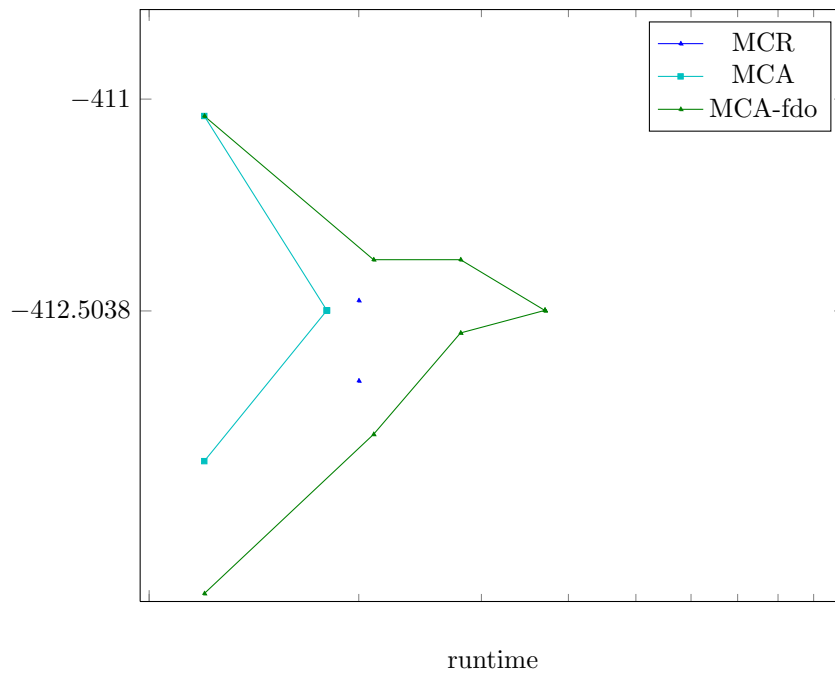
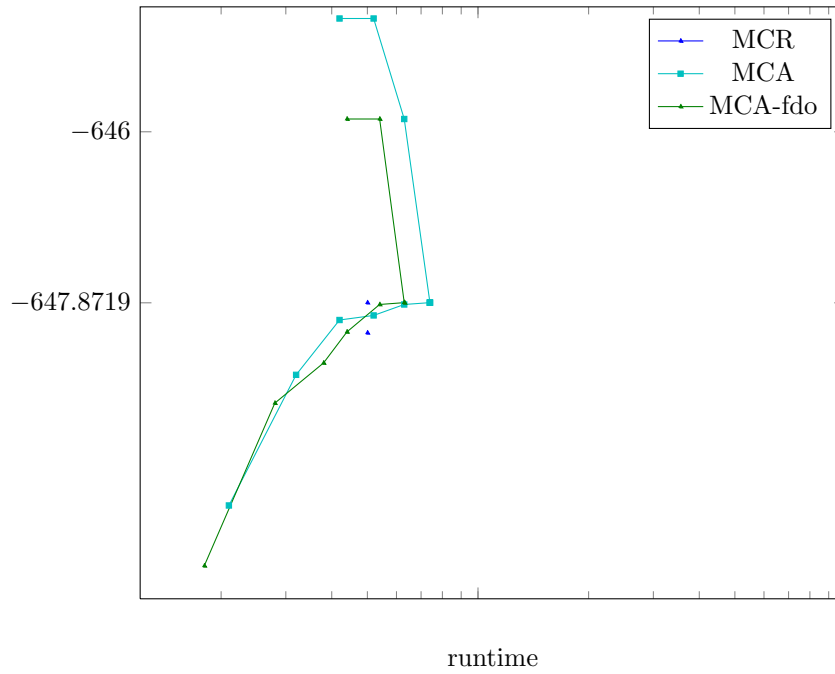


Figure 1984: Runtime results for the instance 6000235 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



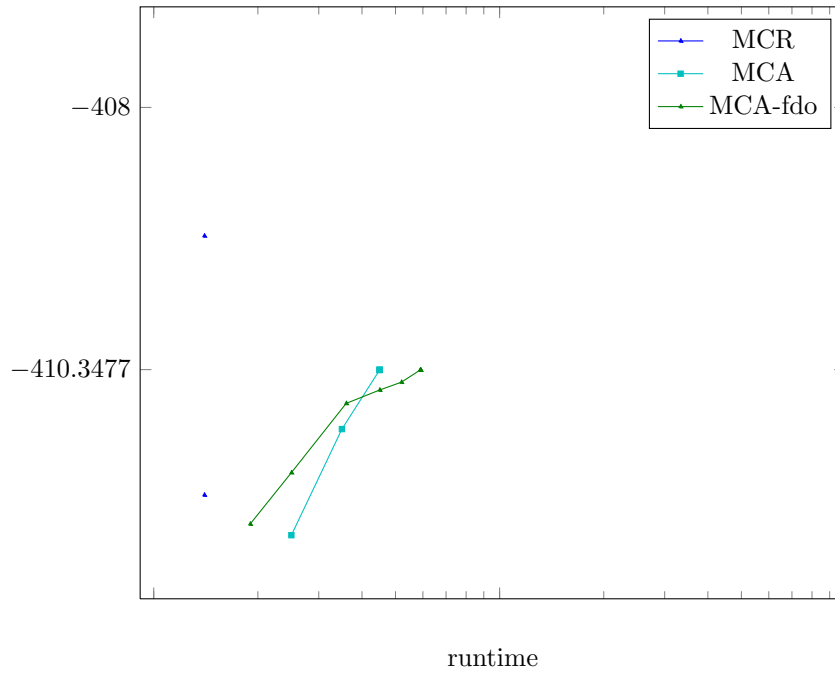


Figure 1987: Runtime results for the instance 6000238 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

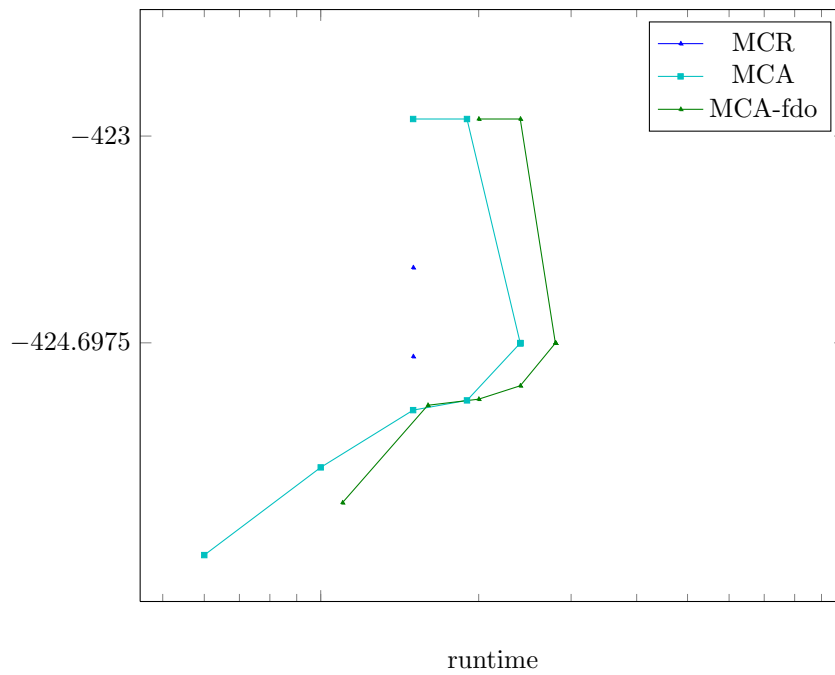


Figure 1988: Runtime results for the instance 6000239 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

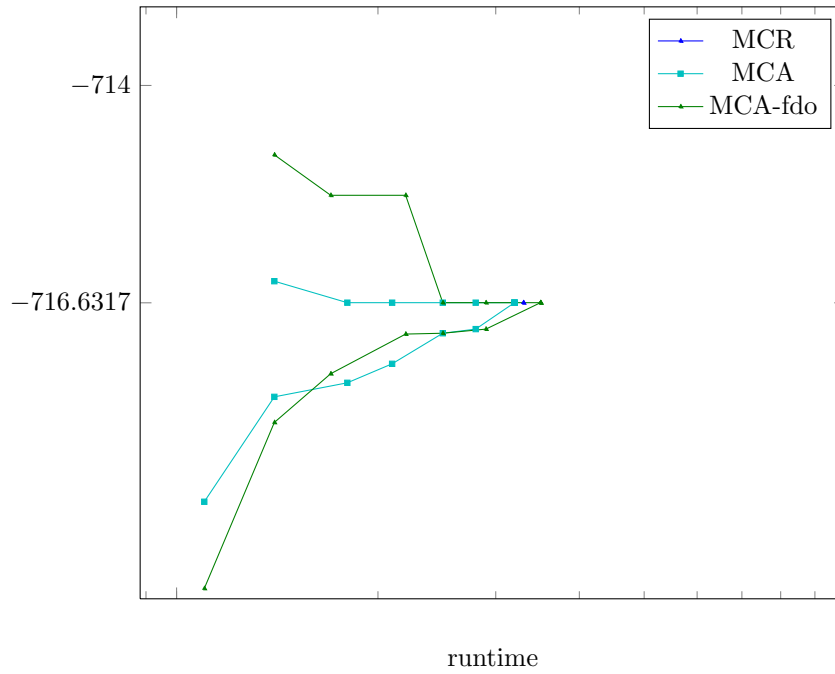


Figure 1989: Runtime results for the instance 6000240 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

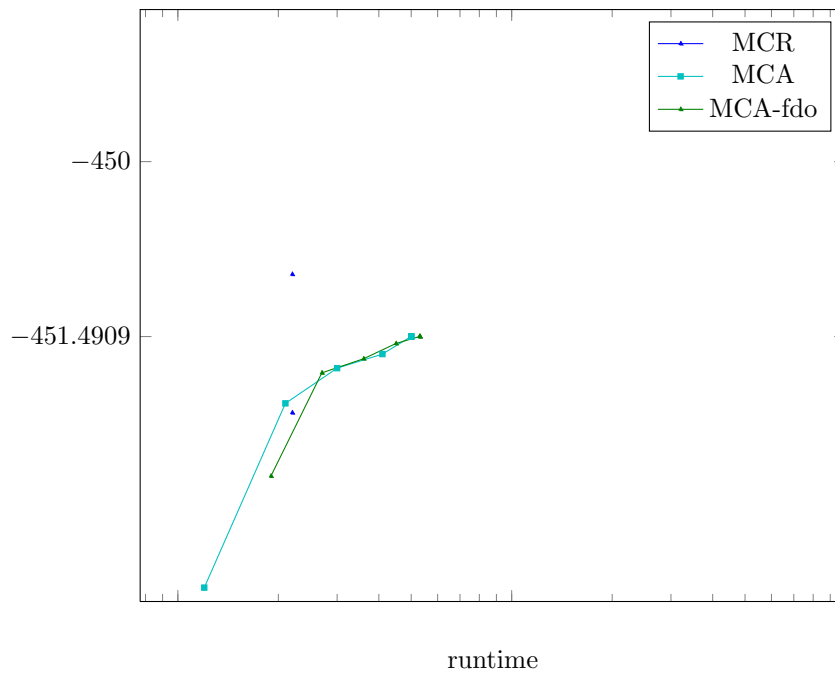
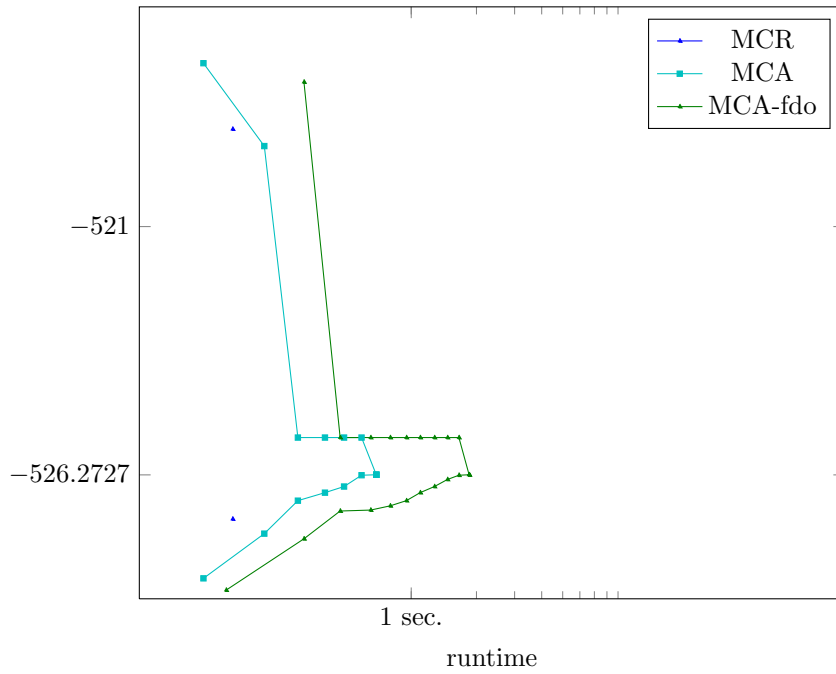


Figure 1990: Runtime results for the instance 6000241 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



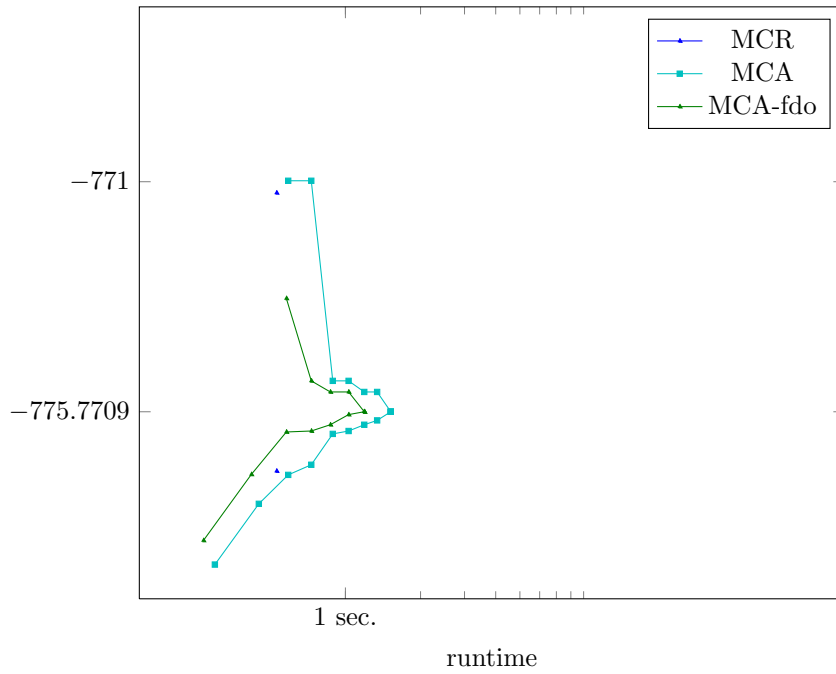


Figure 1993: Runtime results for the instance 6000244 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

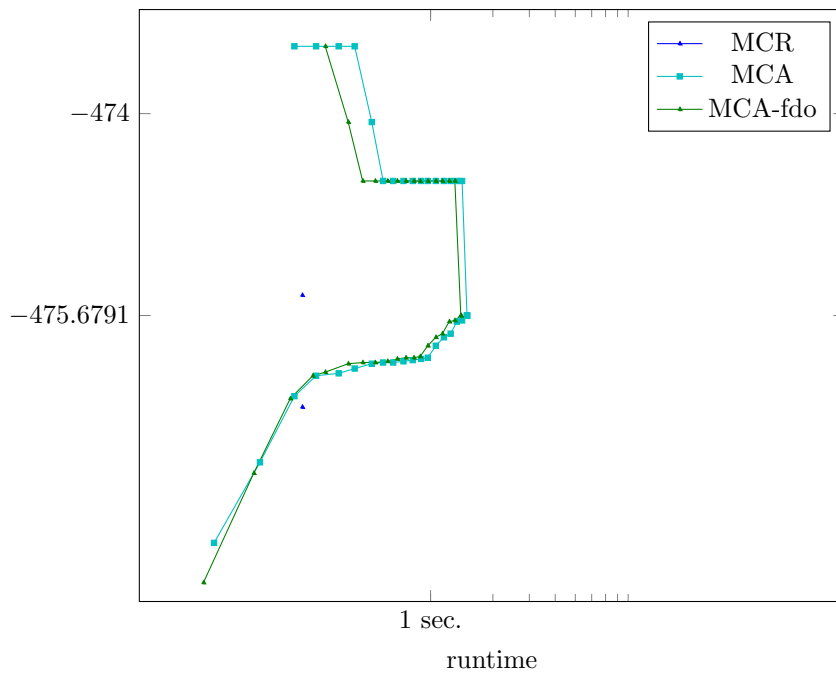


Figure 1994: Runtime results for the instance 6000245 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

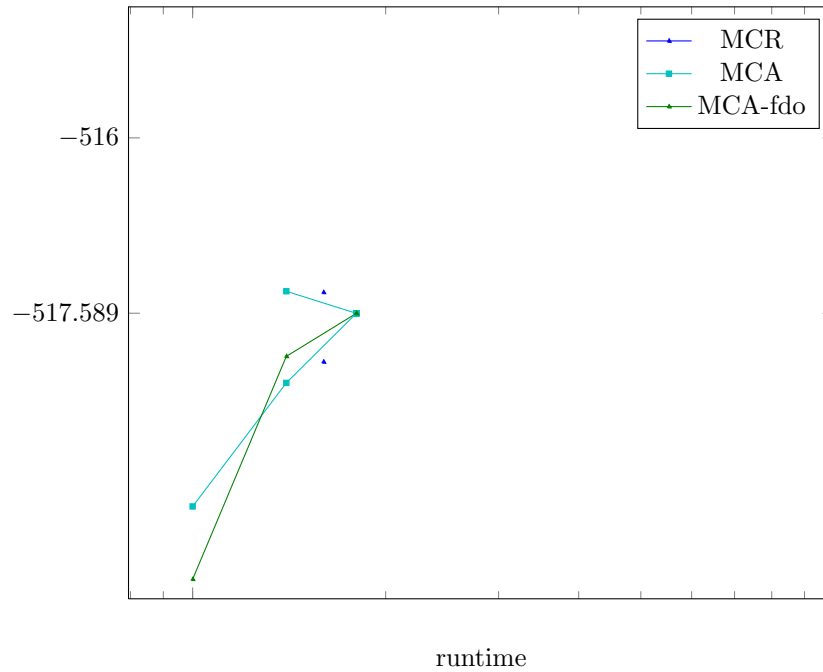


Figure 1995: Runtime results for the instance 6000246 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

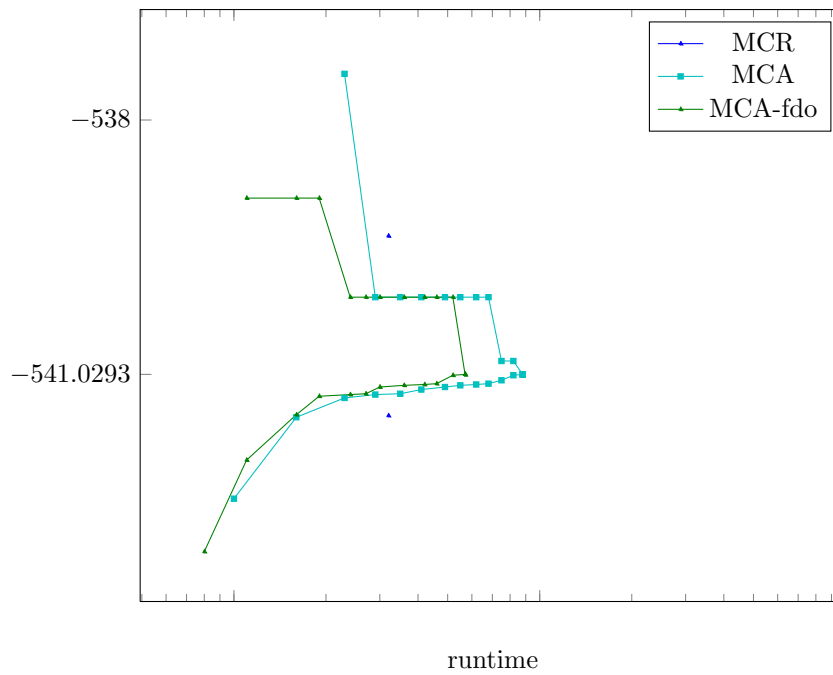


Figure 1996: Runtime results for the instance 6000247 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

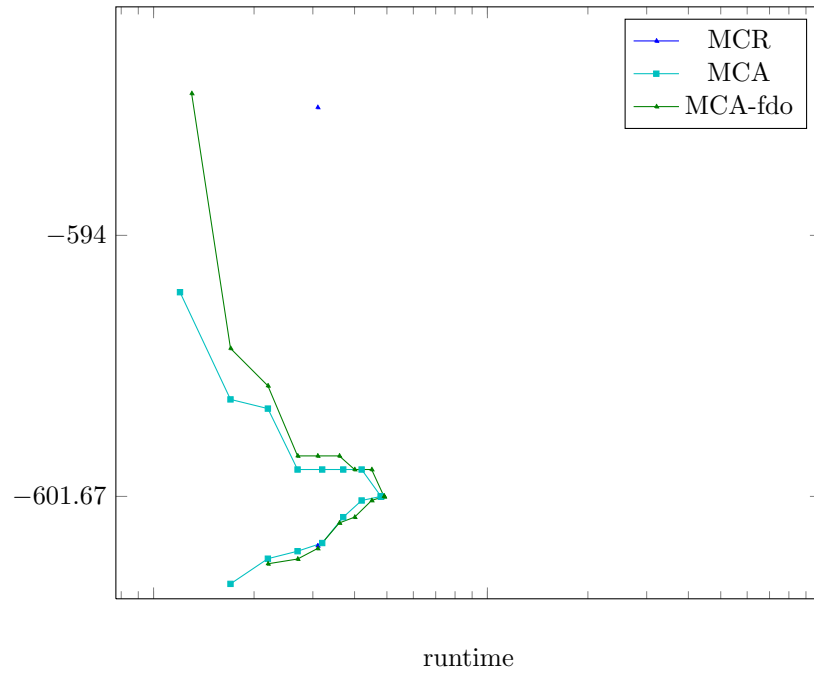


Figure 1997: Runtime results for the instance 6000248 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

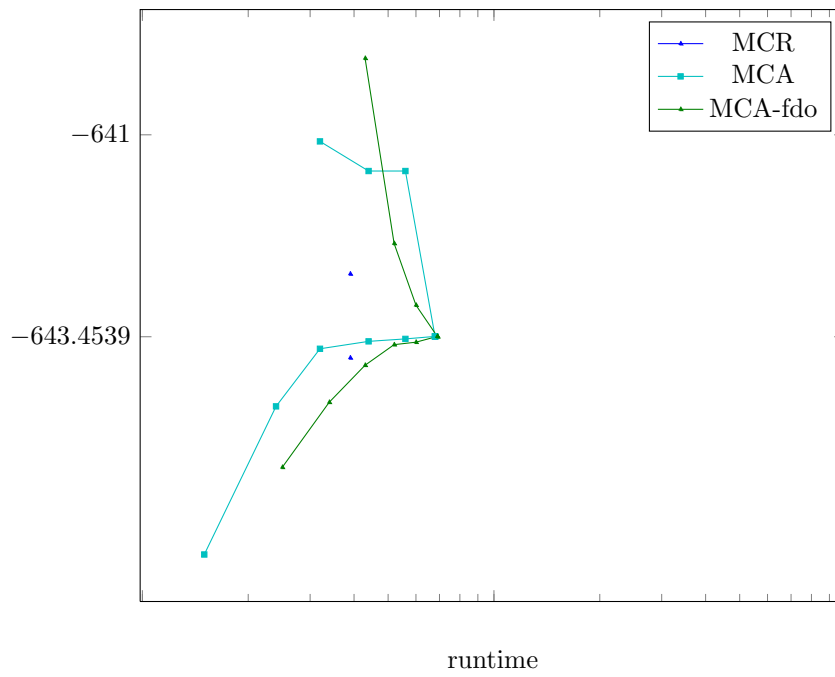


Figure 1998: Runtime results for the instance 6000249 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

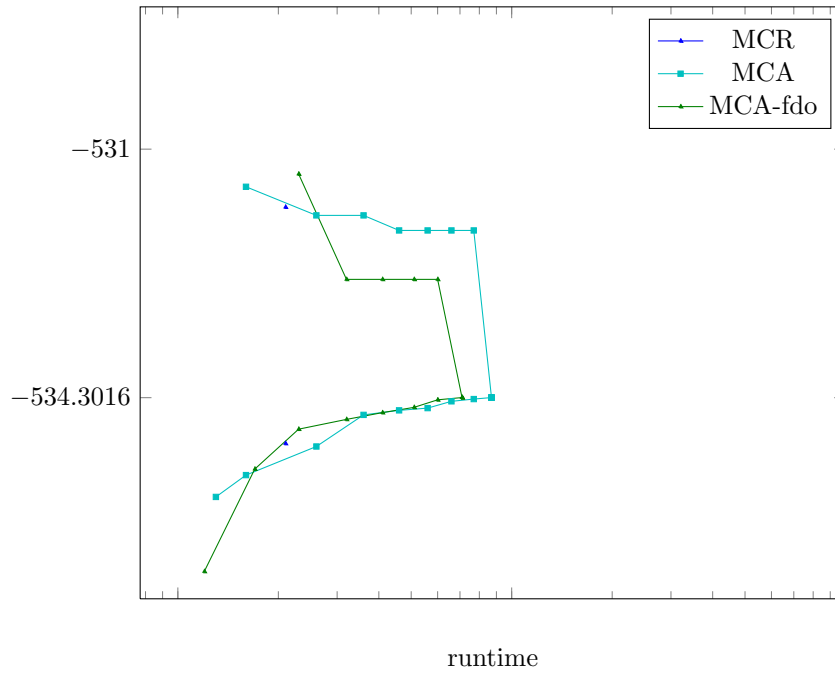


Figure 1999: Runtime results for the instance 6000250 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

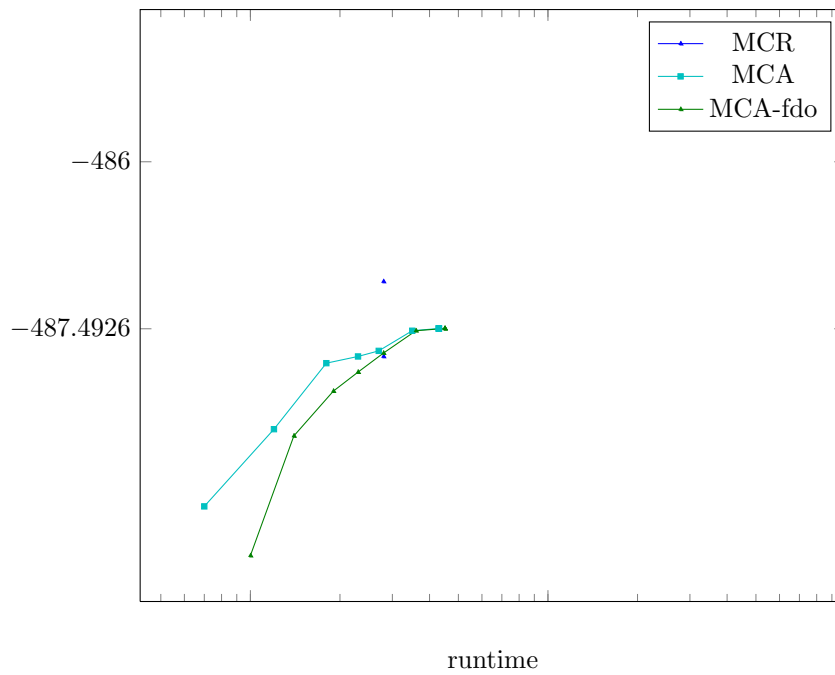


Figure 2000: Runtime results for the instance 6000251 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

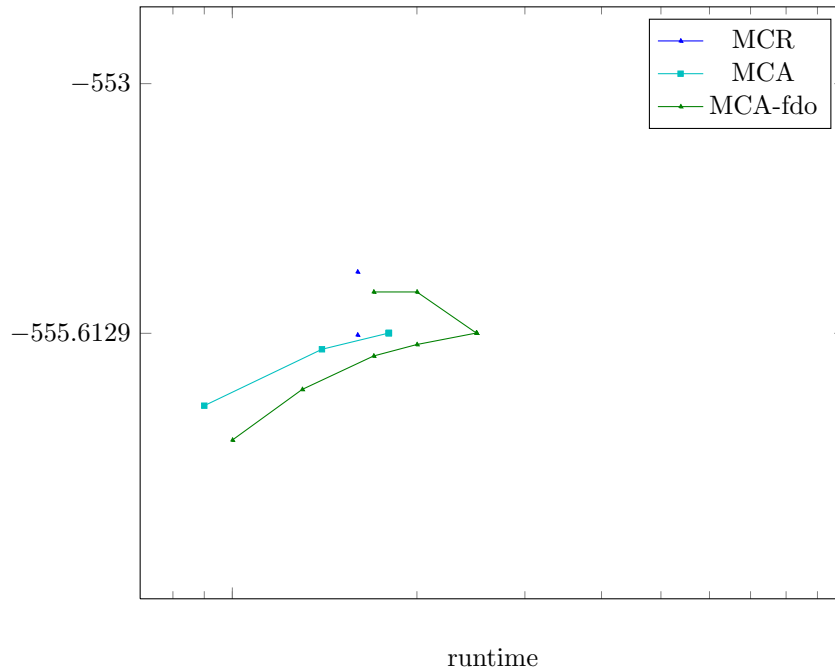


Figure 2001: Runtime results for the instance 6000252 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

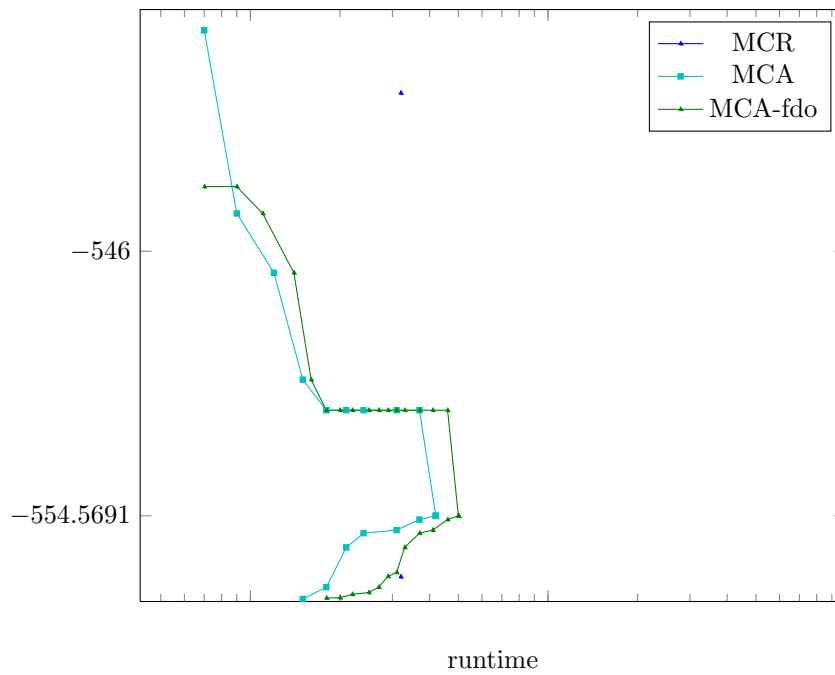


Figure 2002: Runtime results for the instance 6000253 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

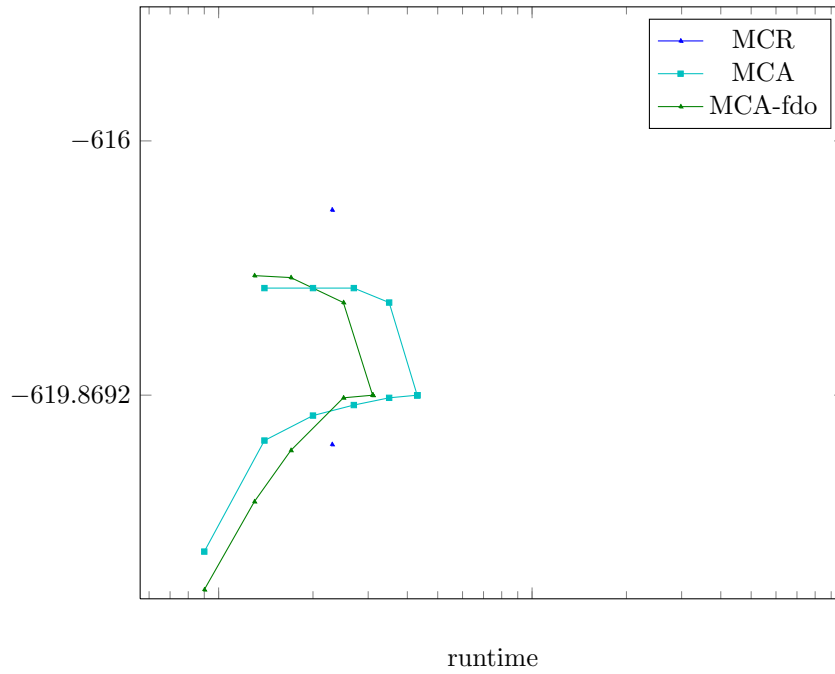


Figure 2003: Runtime results for the instance 6000254 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

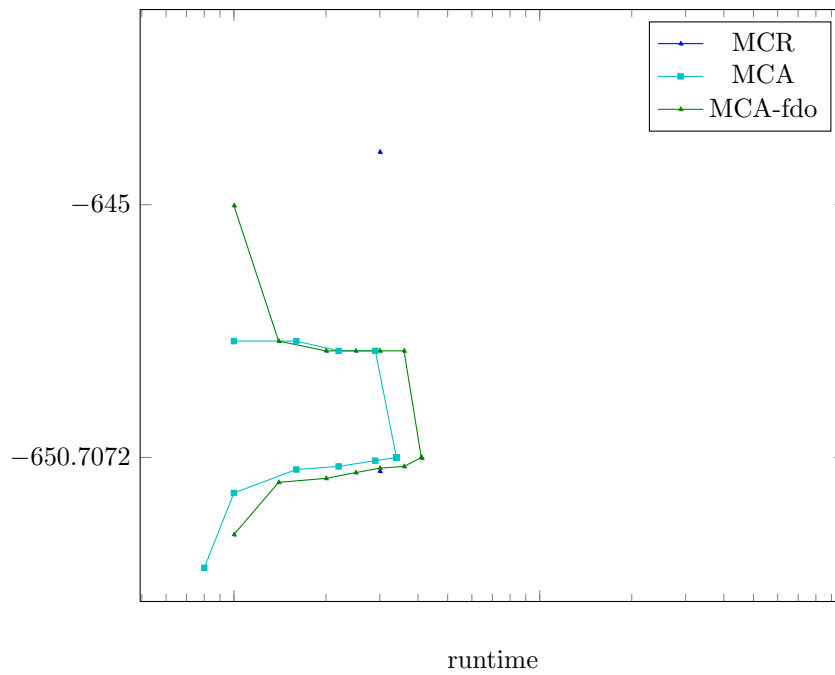


Figure 2004: Runtime results for the instance 6000255 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

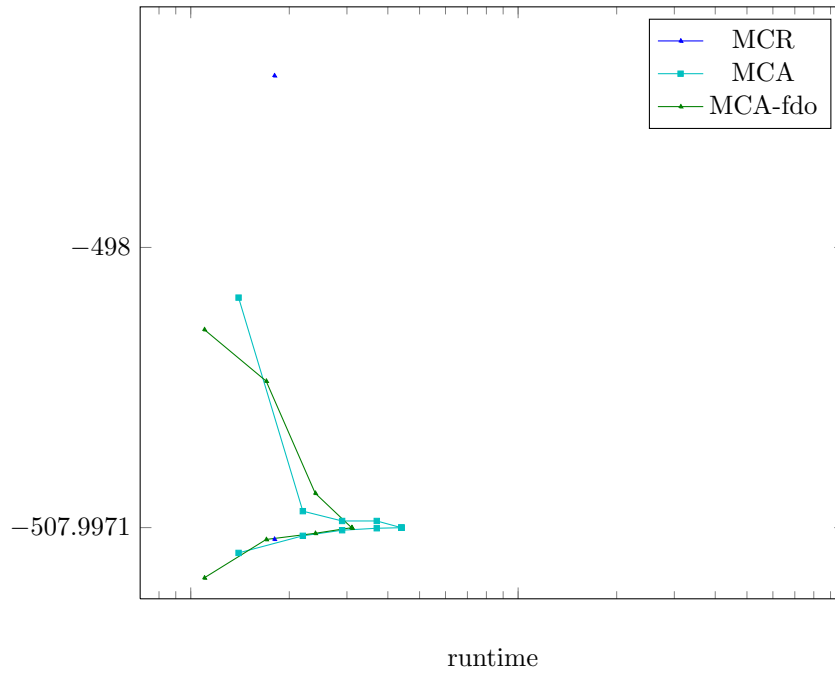


Figure 2005: Runtime results for the instance 6000256 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

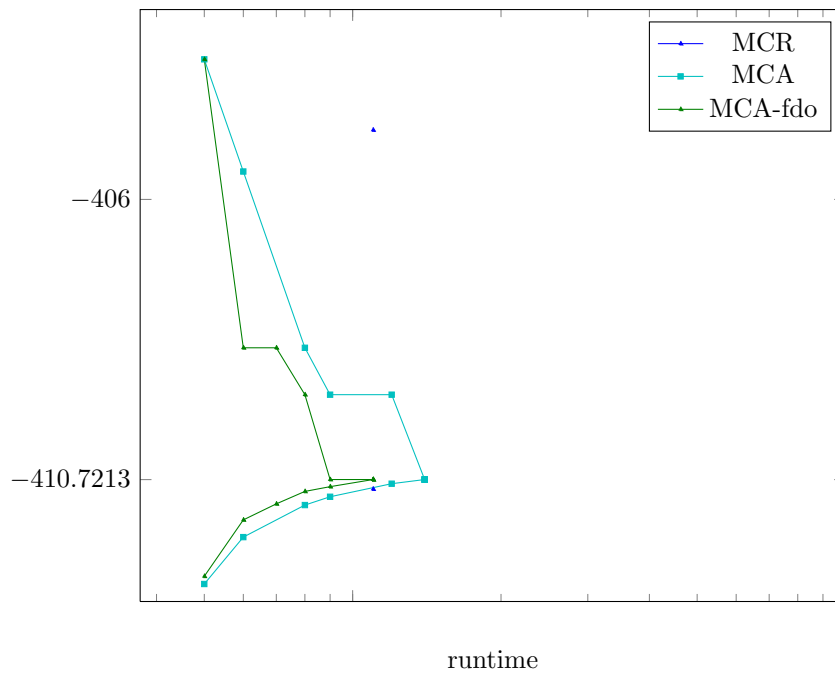


Figure 2006: Runtime results for the instance 6000257 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

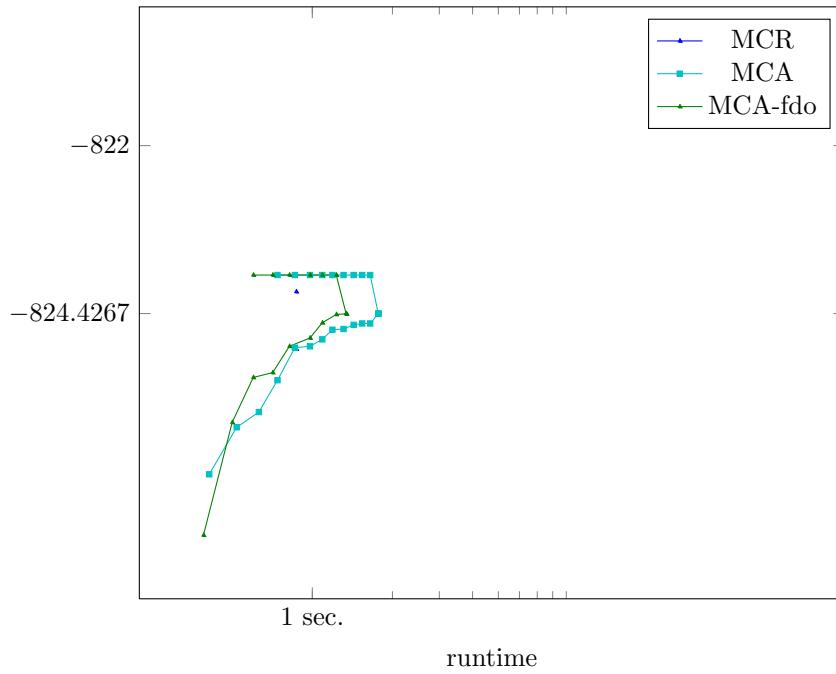


Figure 2007: Runtime results for the instance 6000258 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

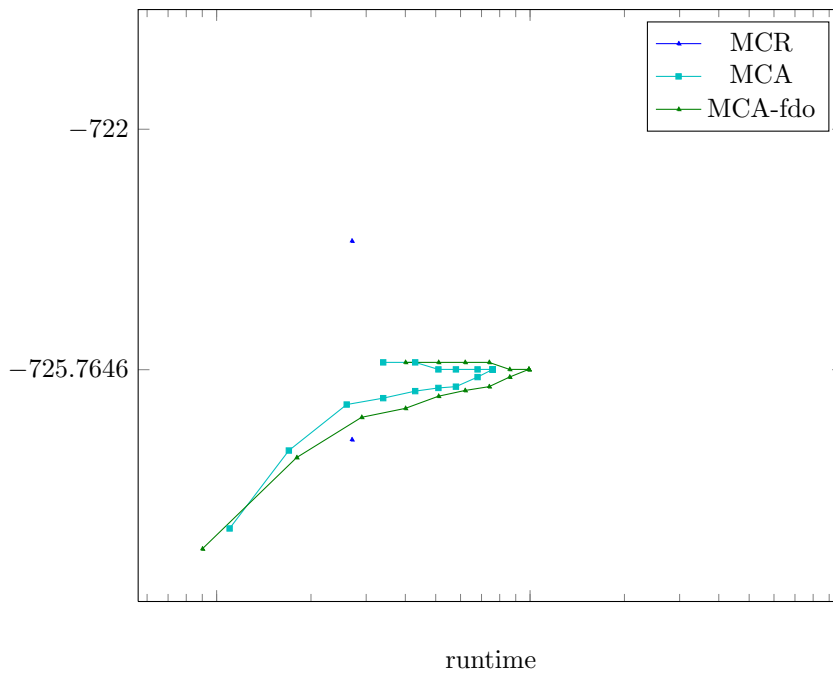


Figure 2008: Runtime results for the instance 6000259 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

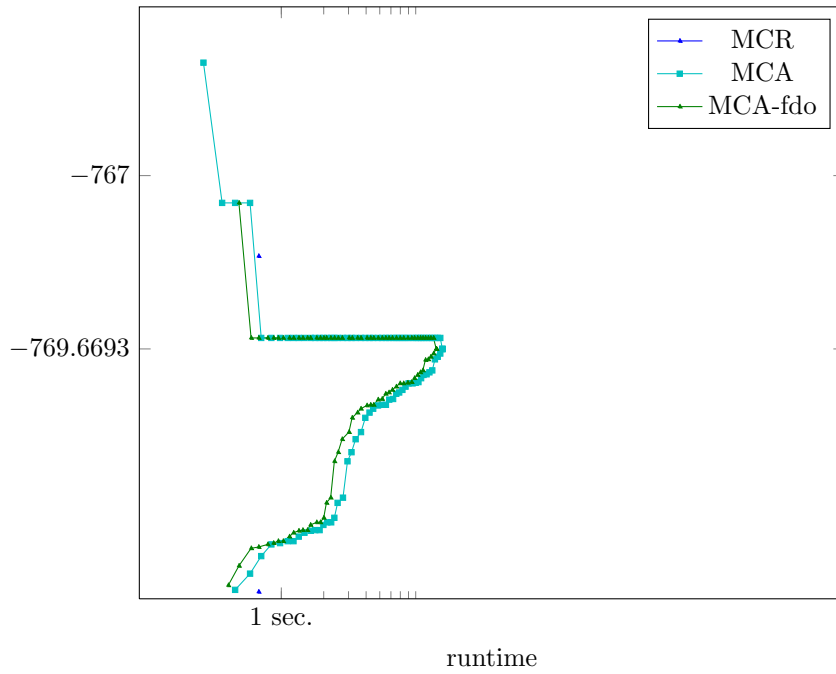


Figure 2011: Runtime results for the instance 6000262 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

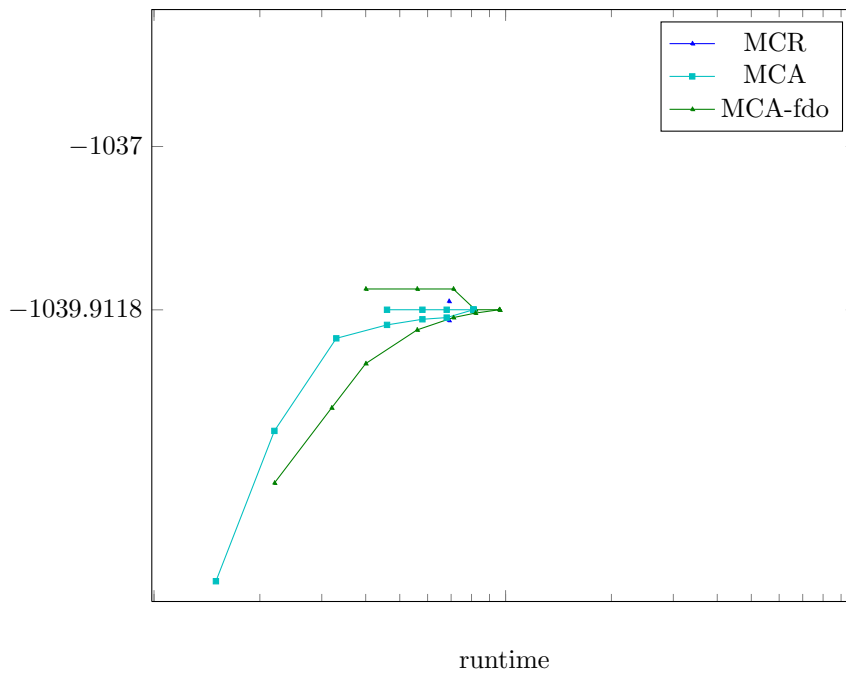


Figure 2012: Runtime results for the instance 6000263 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

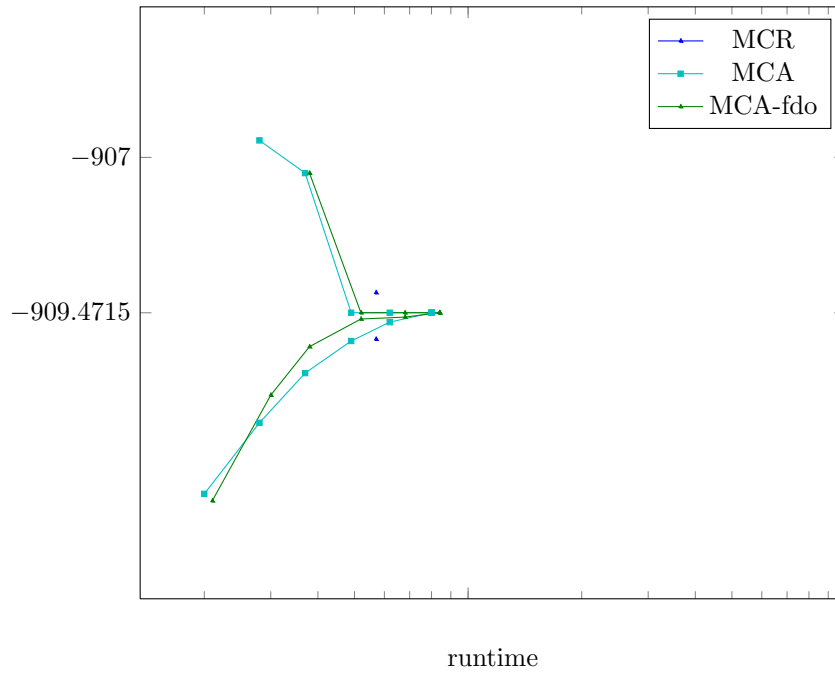


Figure 2013: Runtime results for the instance 6000264 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

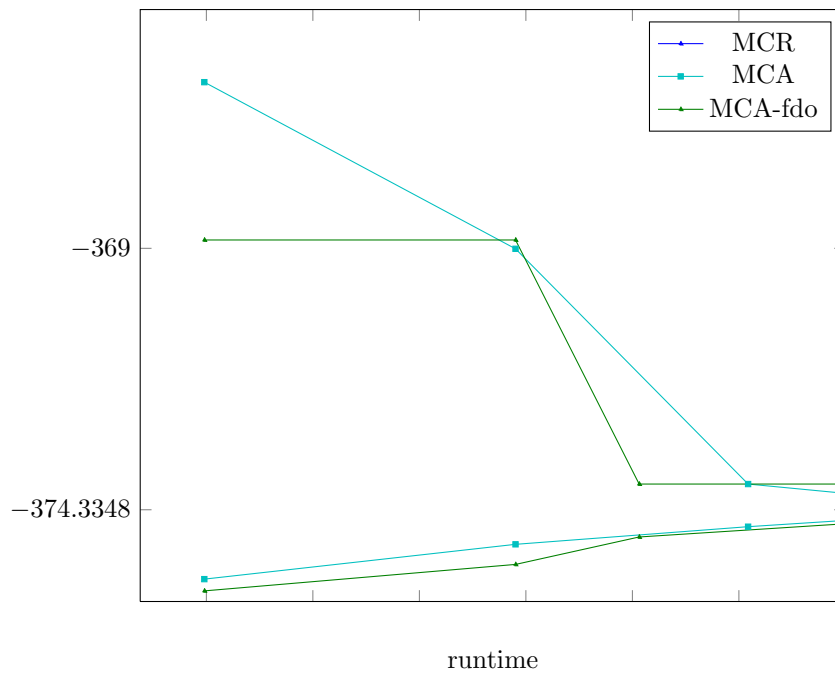


Figure 2014: Runtime results for the instance 6000265 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

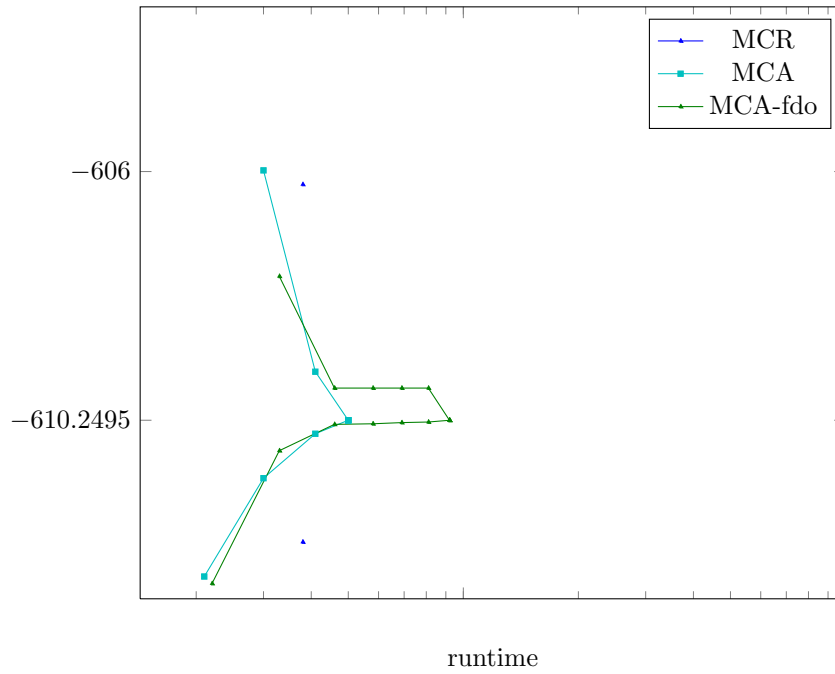


Figure 2015: Runtime results for the instance 6000266 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

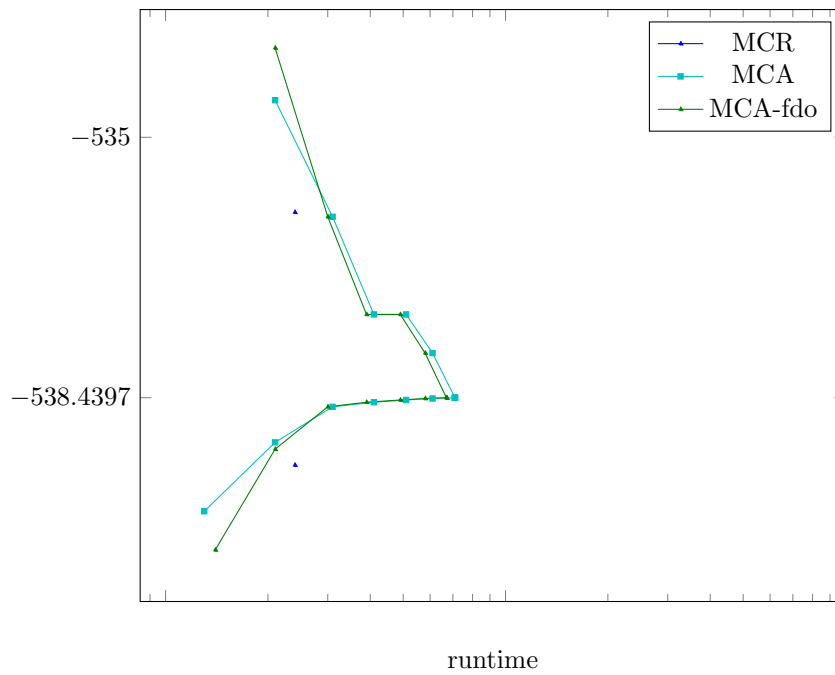


Figure 2016: Runtime results for the instance 6000267 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

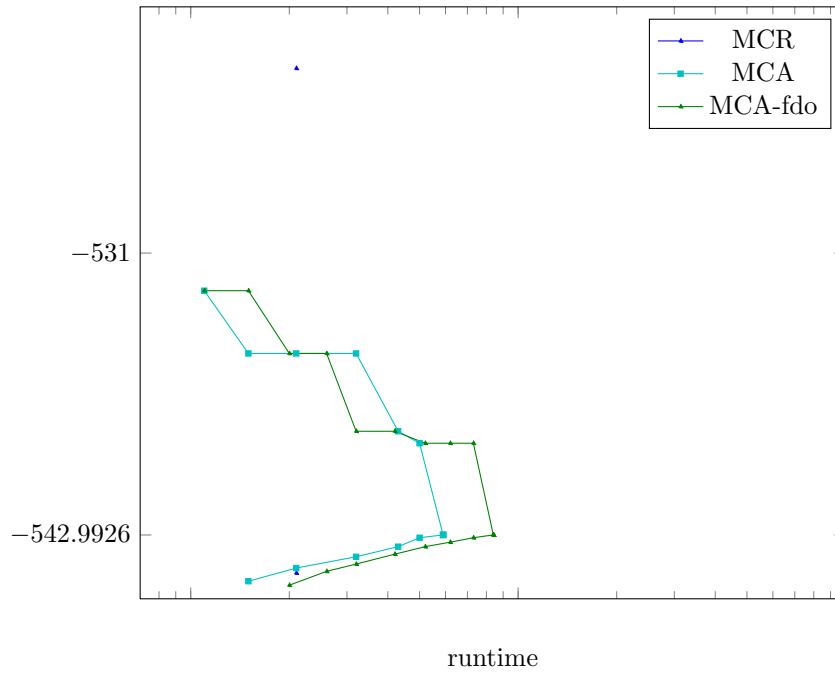


Figure 2017: Runtime results for the instance 6000268 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

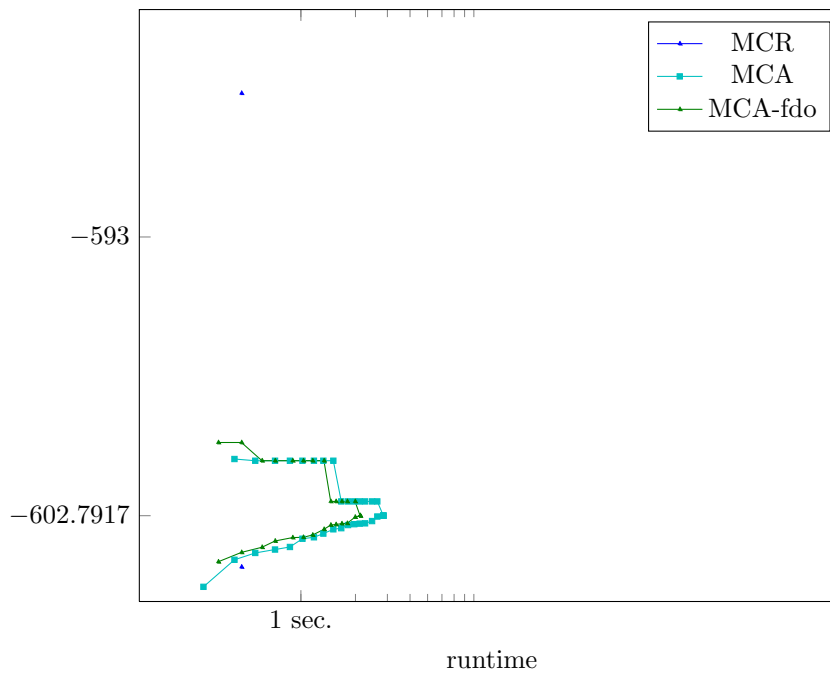


Figure 2018: Runtime results for the instance 6000269 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

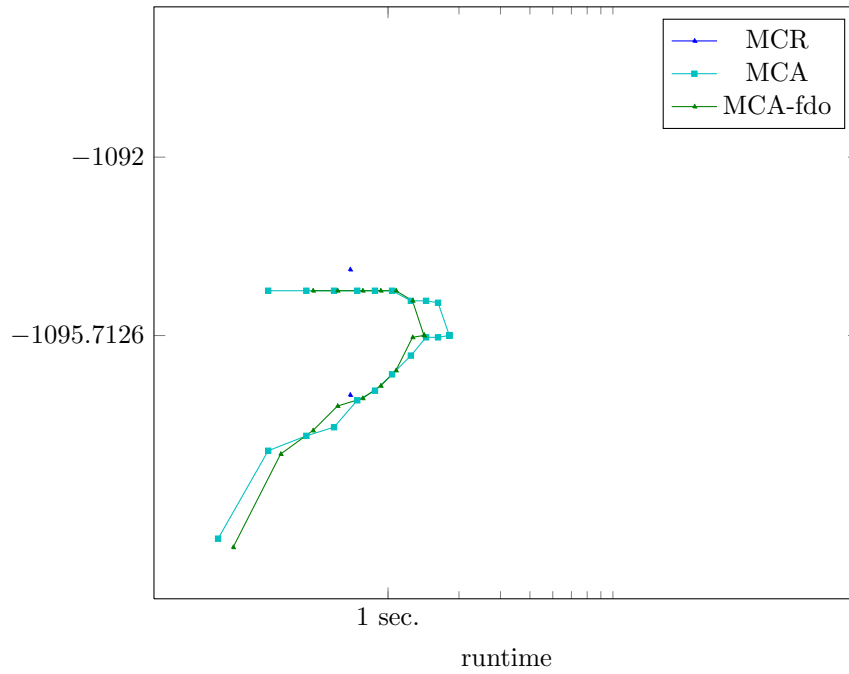


Figure 2019: Runtime results for the instance 6000270 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

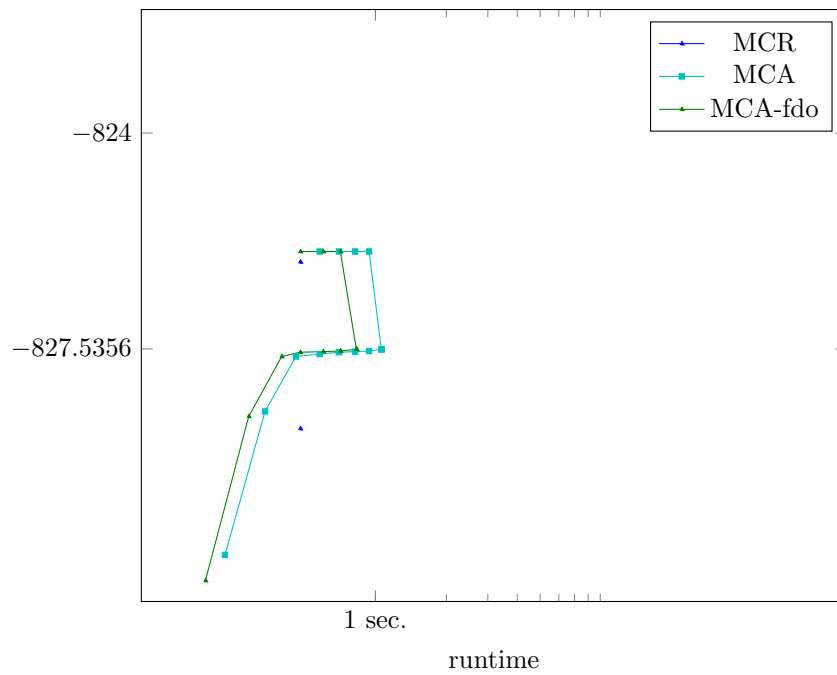


Figure 2020: Runtime results for the instance 6000271 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

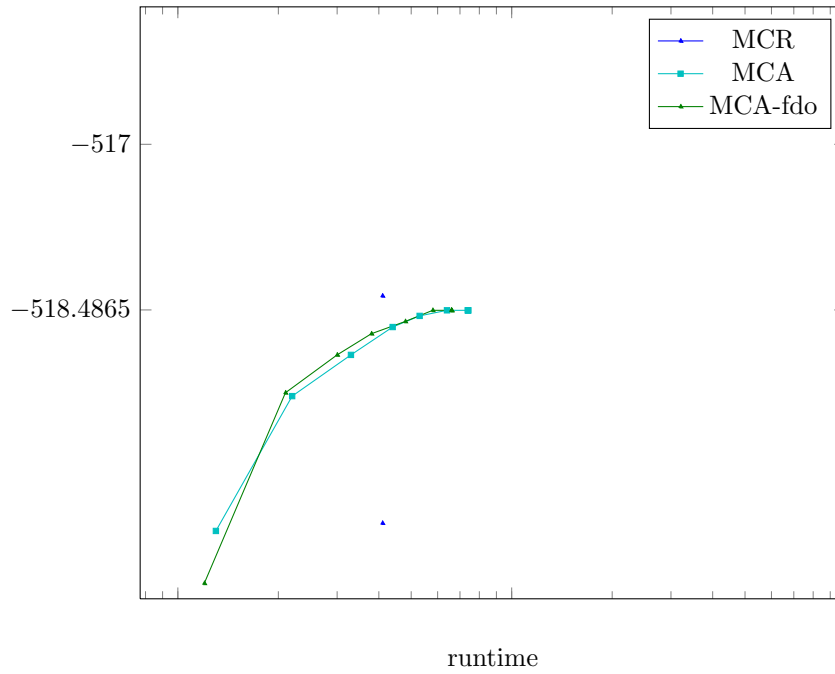


Figure 2021: Runtime results for the instance 6000272 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

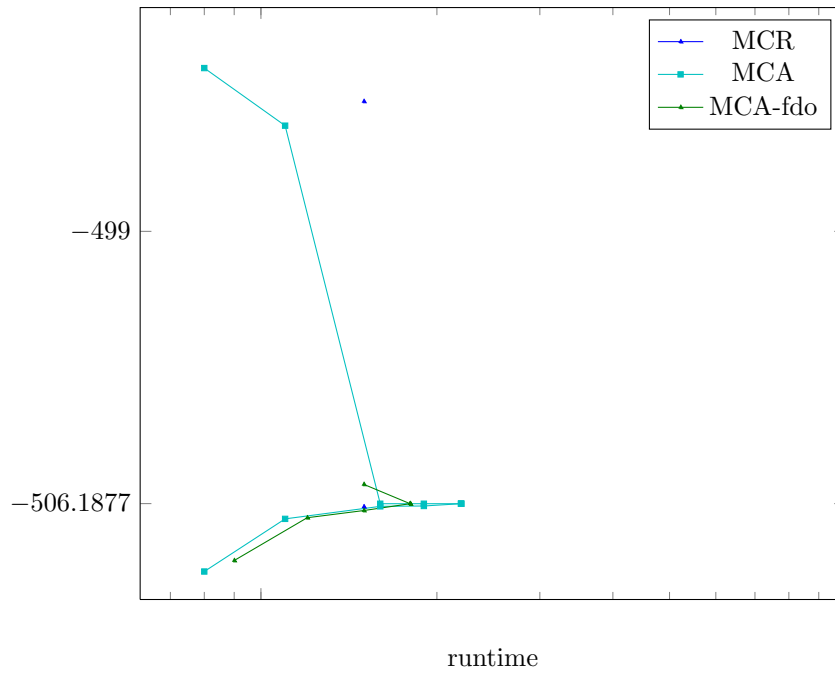


Figure 2022: Runtime results for the instance 6000273 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

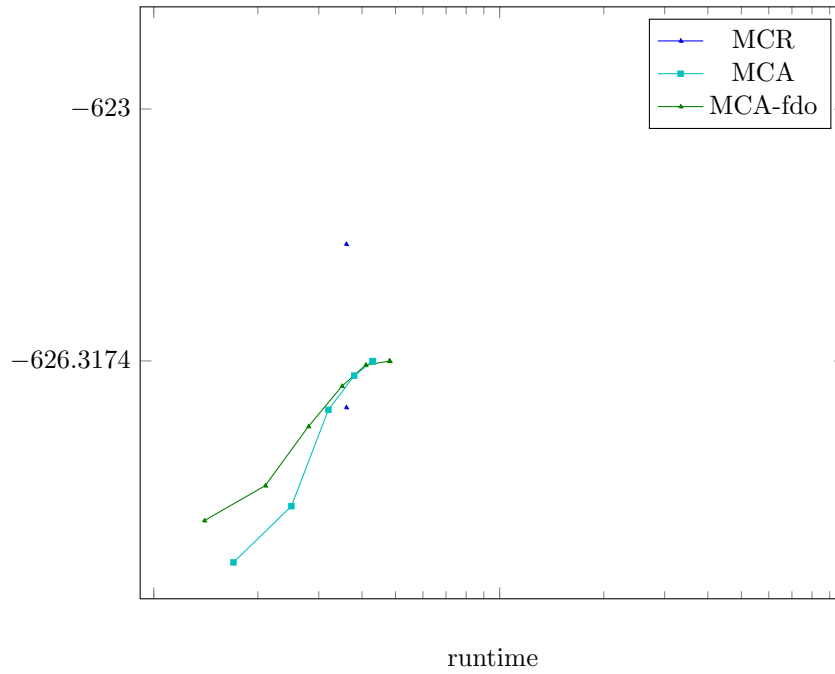


Figure 2023: Runtime results for the instance 6000274 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

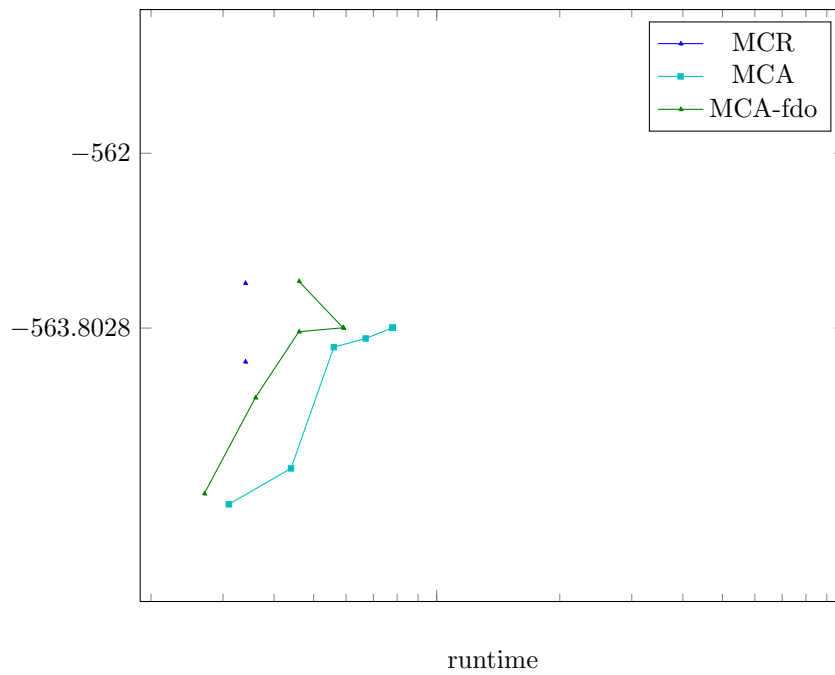


Figure 2024: Runtime results for the instance 6000275 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

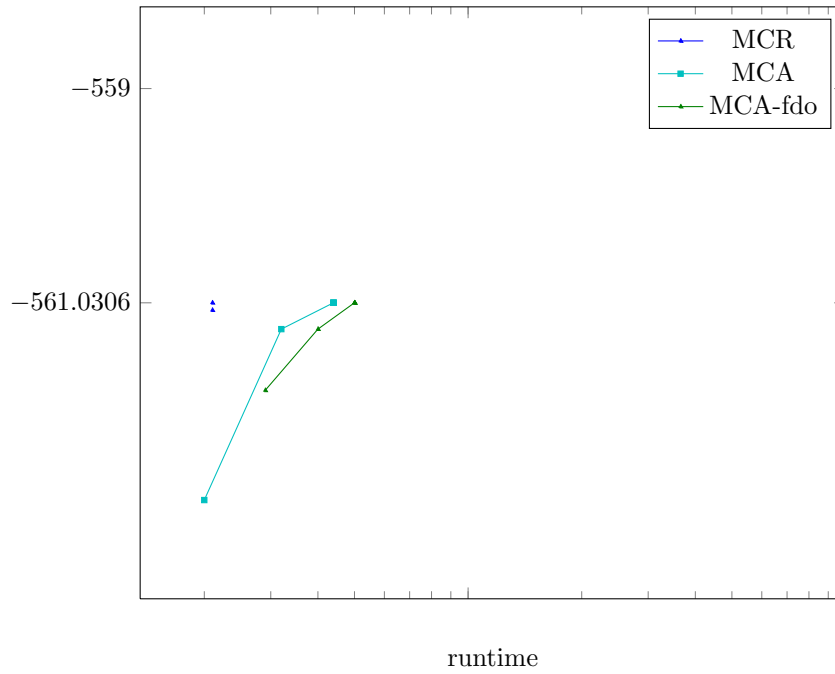


Figure 2025: Runtime results for the instance 6000276 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

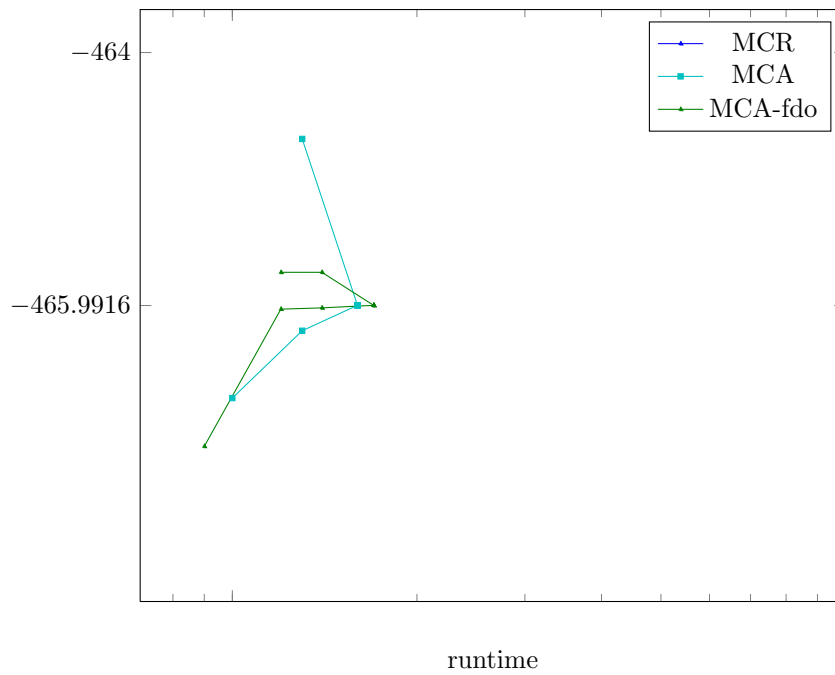
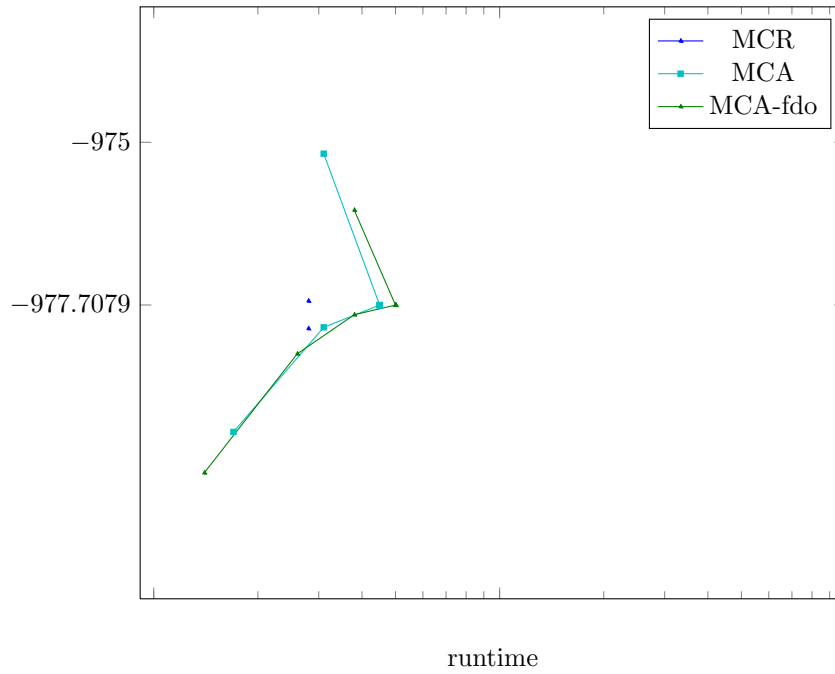


Figure 2026: Runtime results for the instance 6000277 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



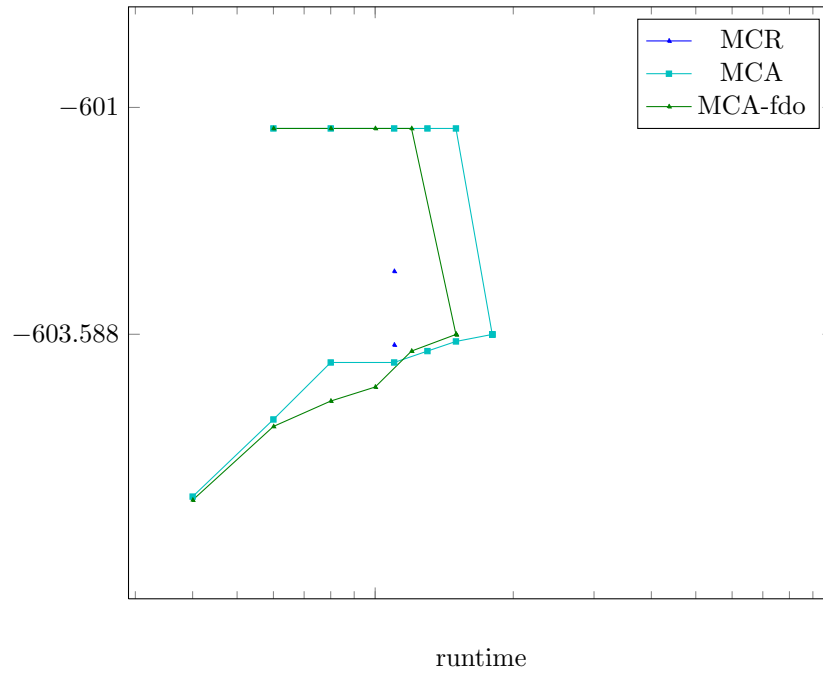


Figure 2029: Runtime results for the instance 6000280 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

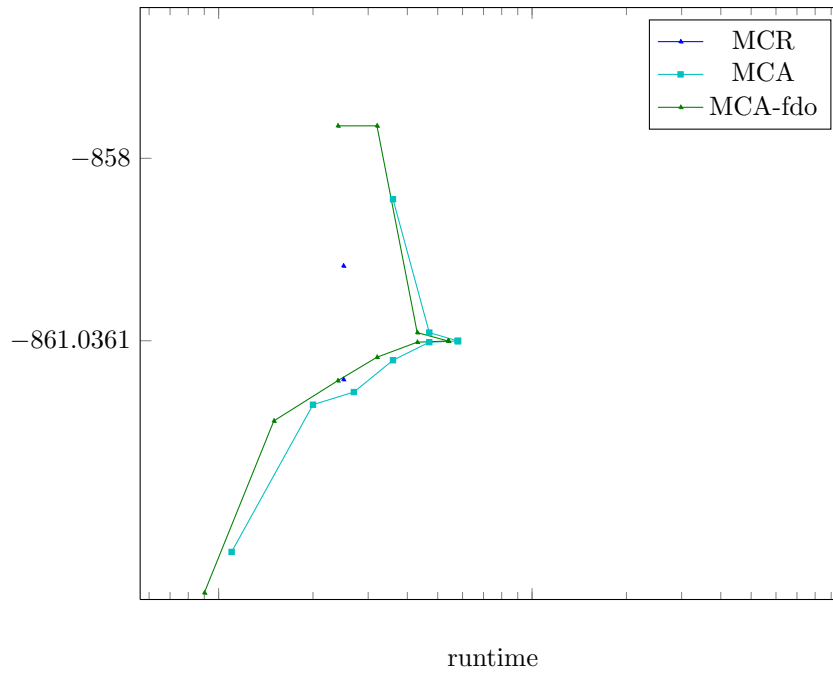


Figure 2030: Runtime results for the instance 6000281 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

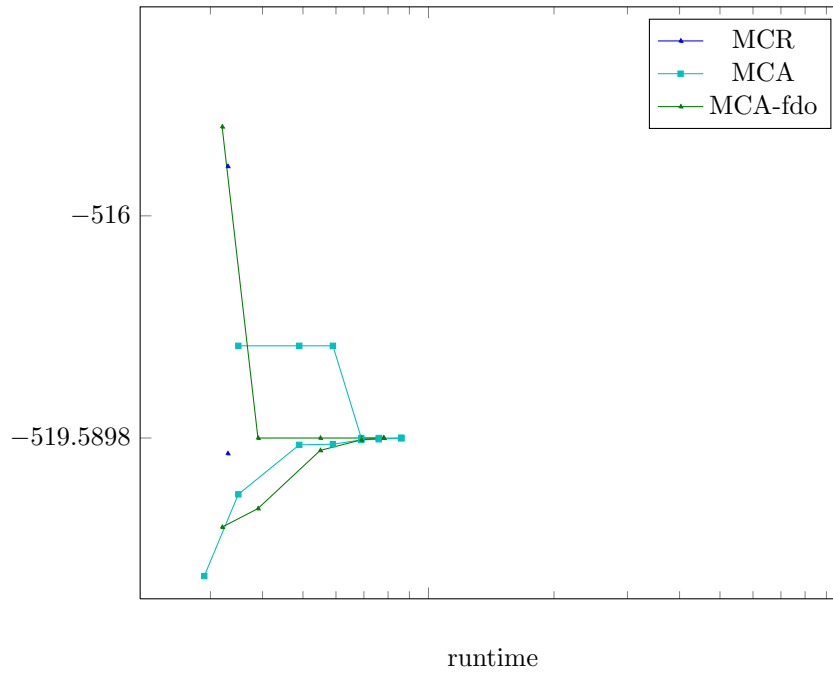


Figure 2031: Runtime results for the instance 6000282 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

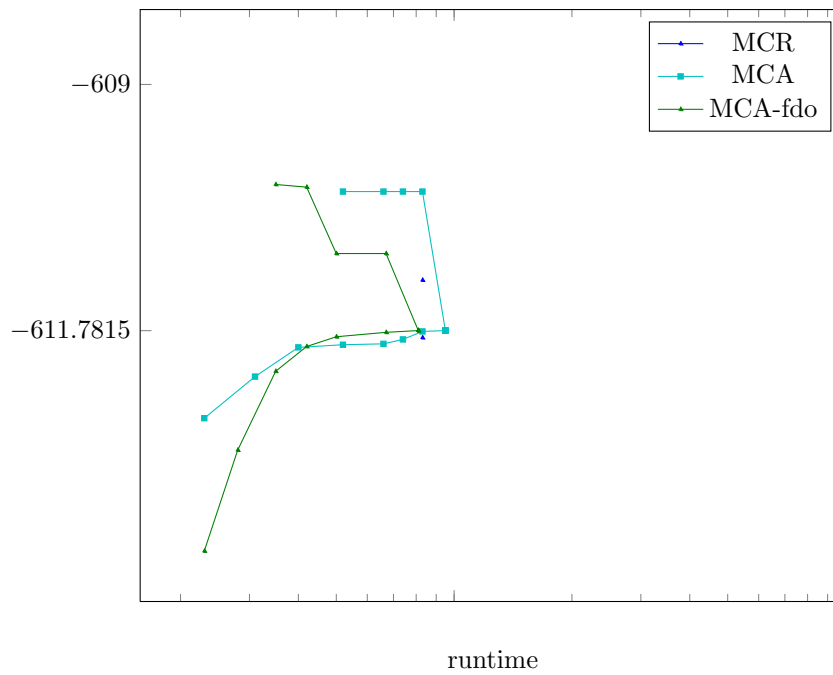


Figure 2032: Runtime results for the instance 6000283 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

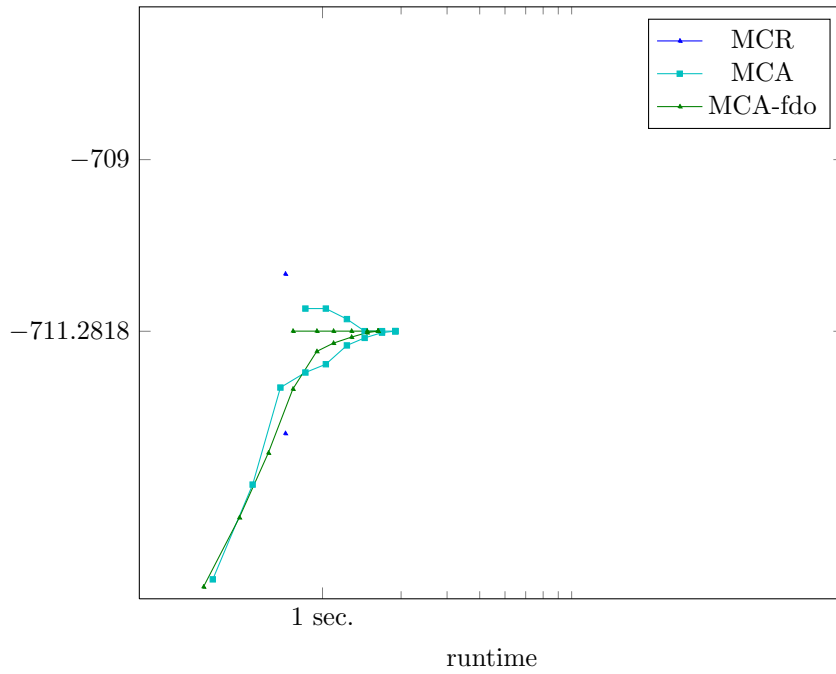


Figure 2033: Runtime results for the instance 6000284 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

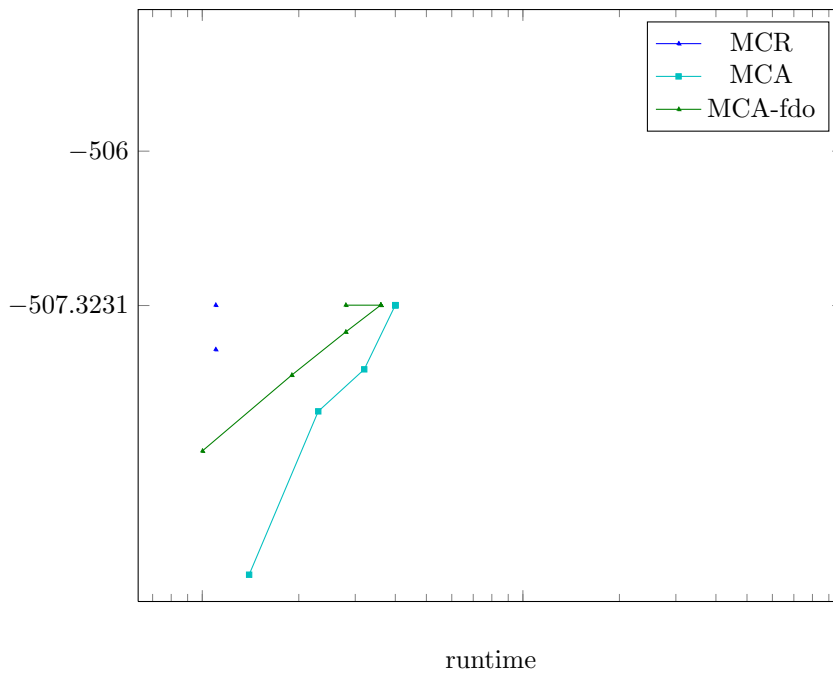


Figure 2034: Runtime results for the instance 6000285 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

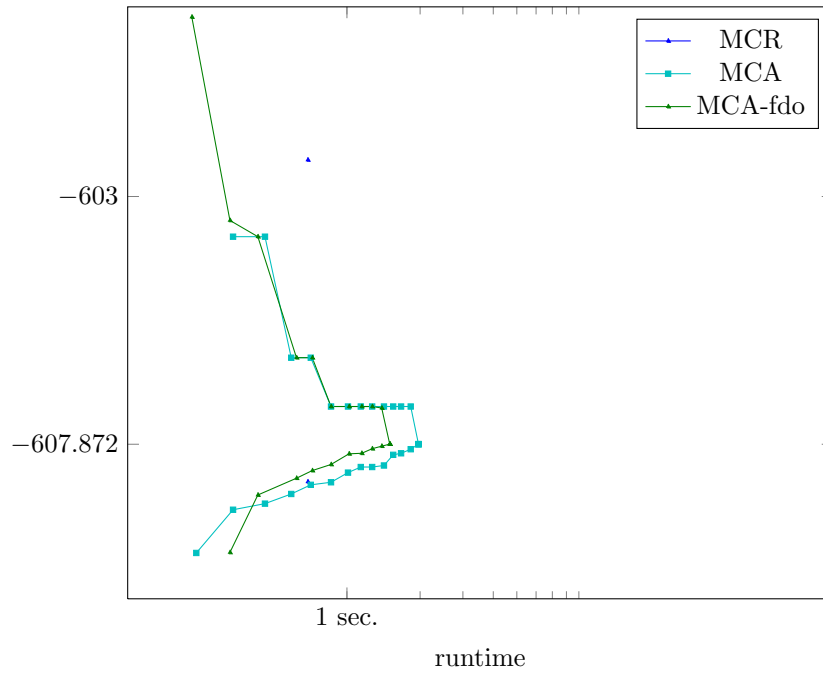


Figure 2035: Runtime results for the instance 6000286 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

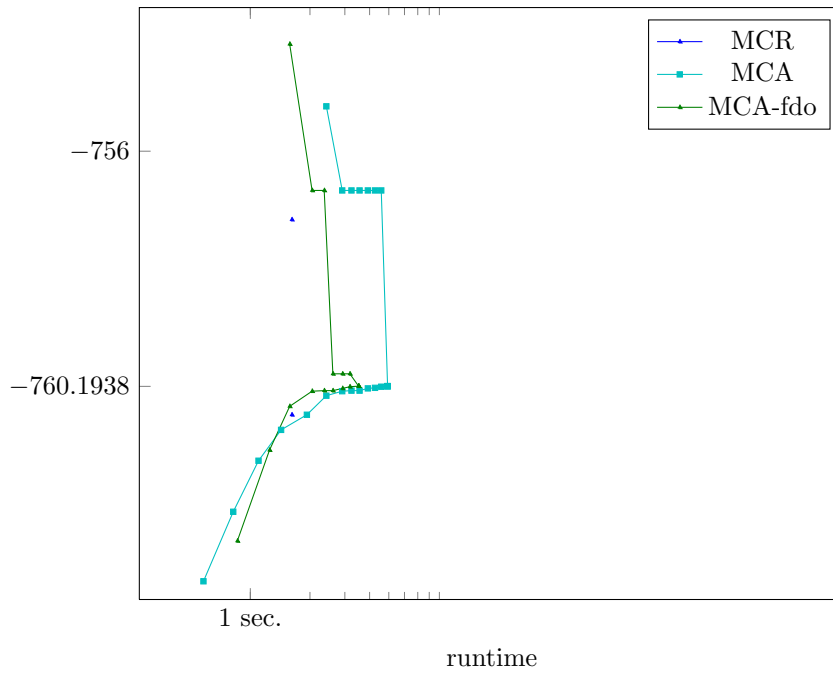


Figure 2036: Runtime results for the instance 6000287 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

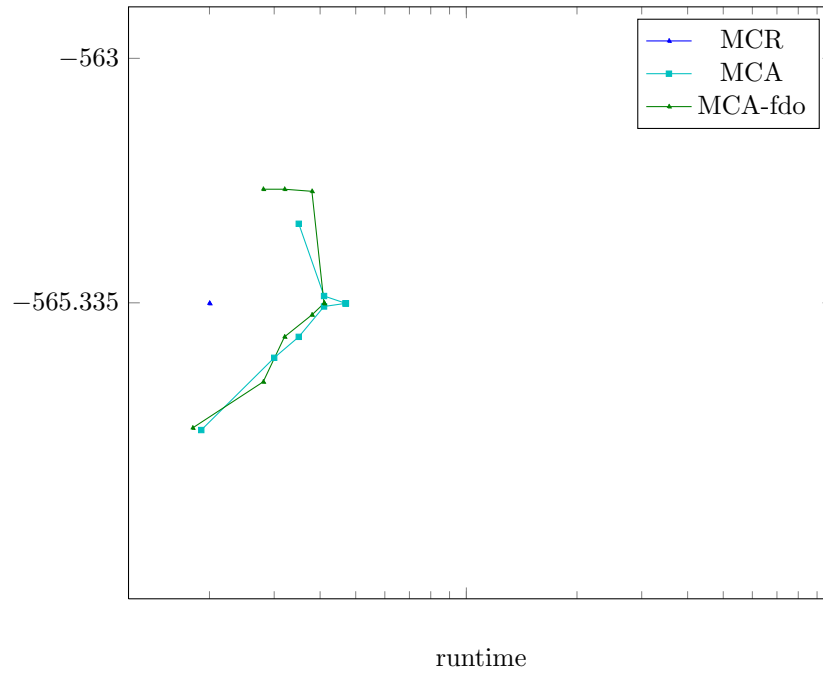


Figure 2037: Runtime results for the instance 6000288 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

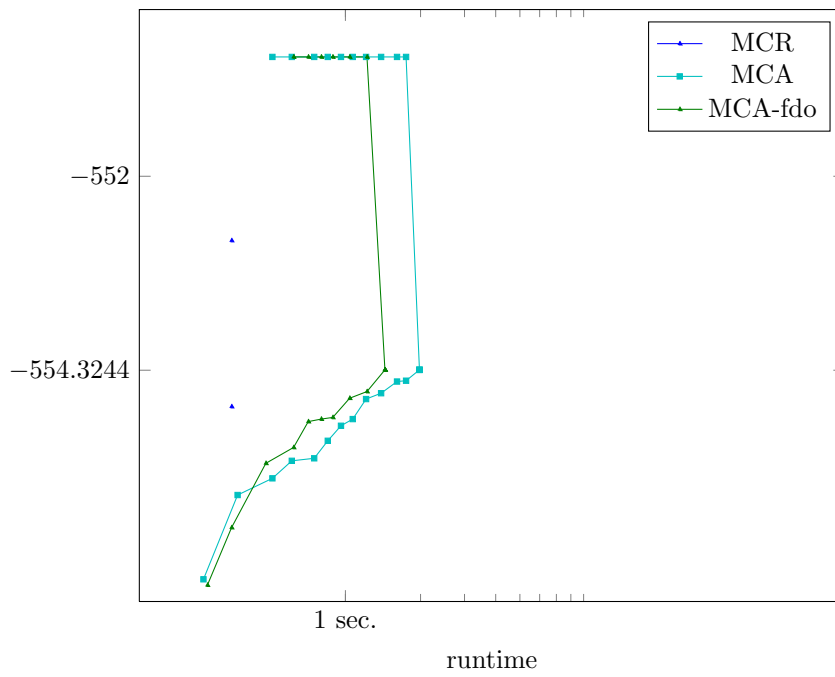


Figure 2038: Runtime results for the instance 6000289 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

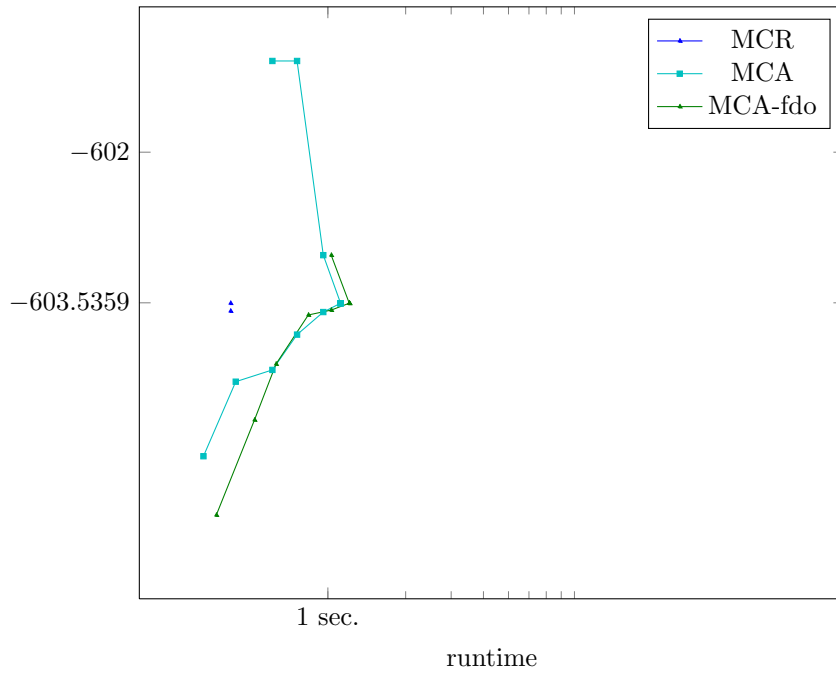


Figure 2039: Runtime results for the instance 6000290 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

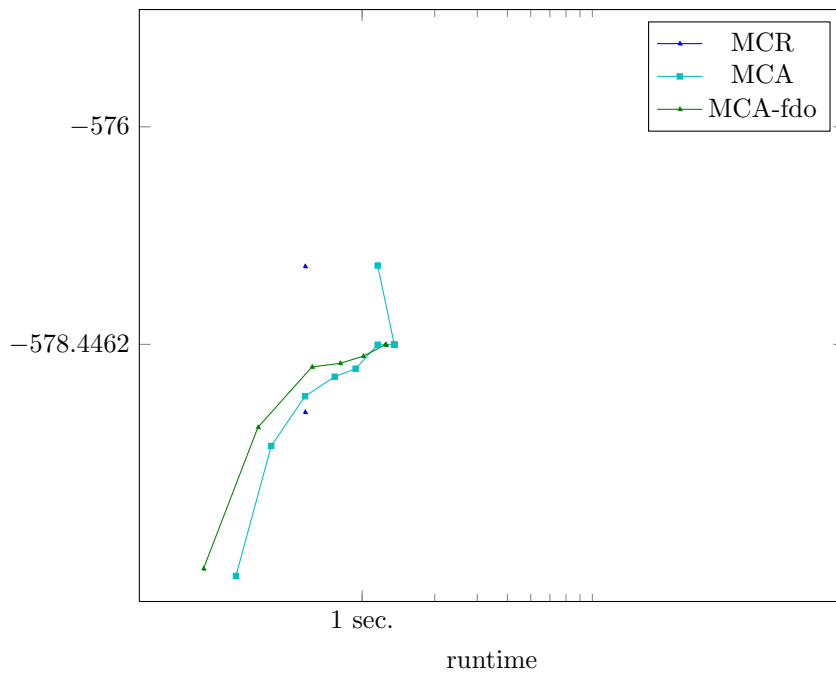


Figure 2040: Runtime results for the instance 6000291 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

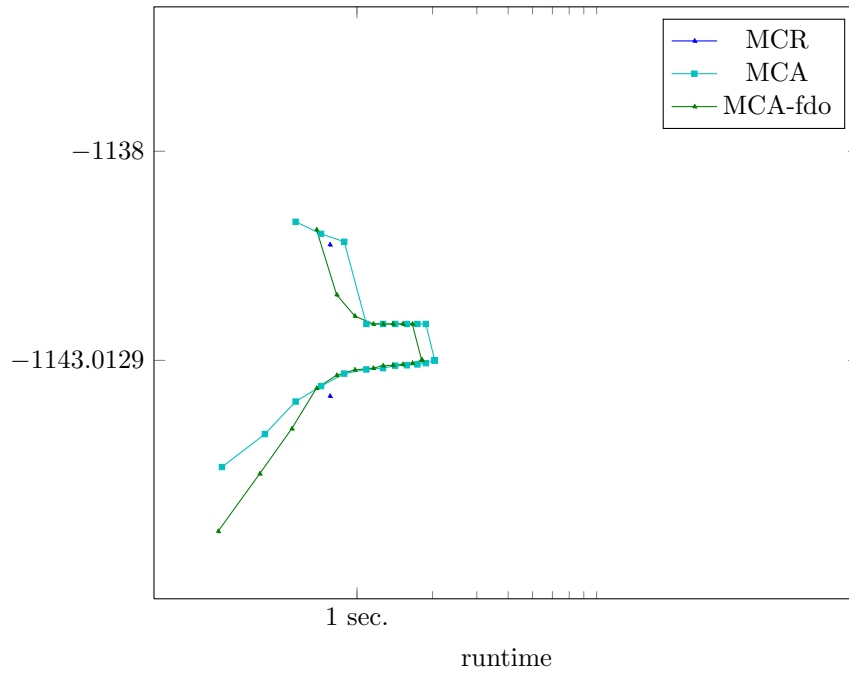


Figure 2041: Runtime results for the instance 6000292 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

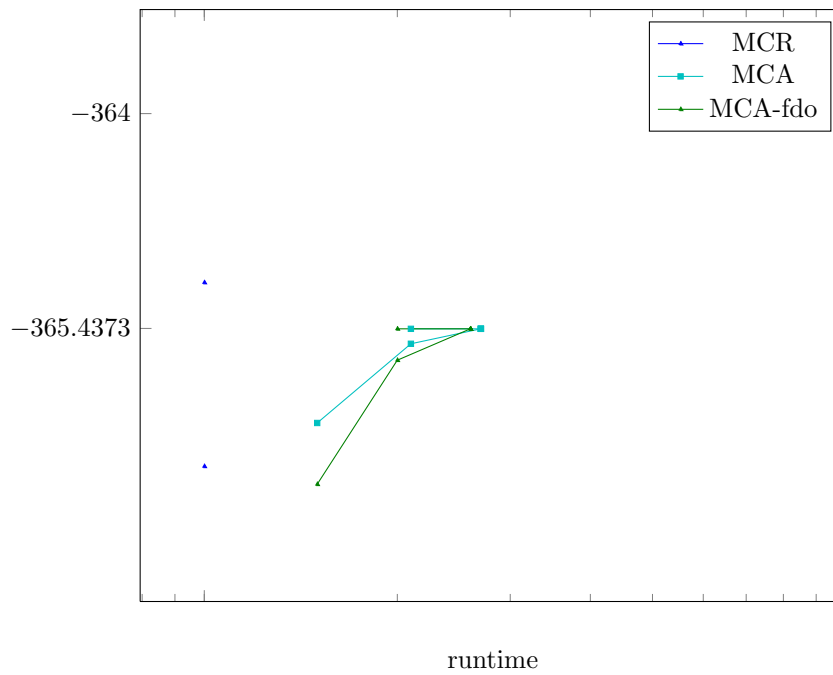


Figure 2042: Runtime results for the instance 6000293 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

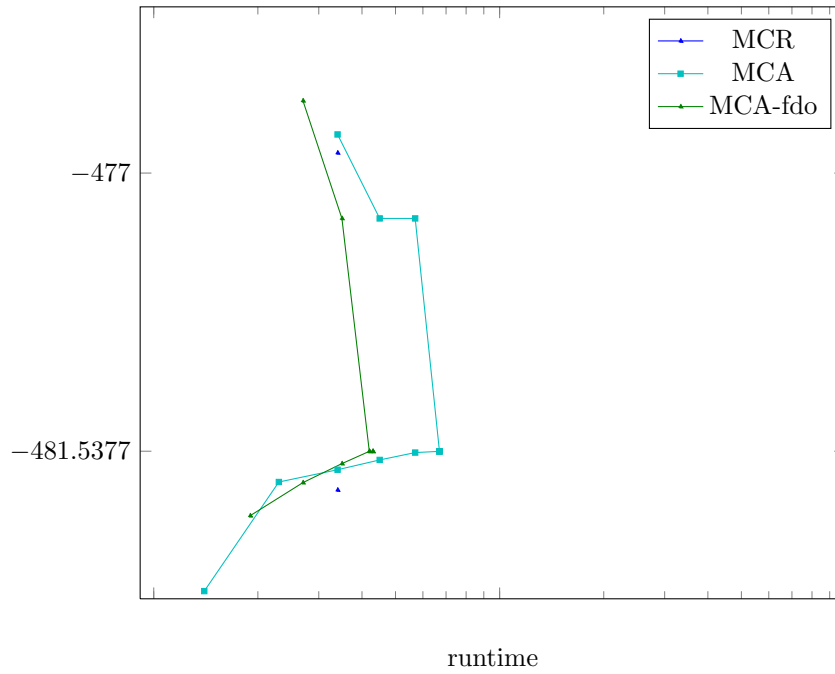
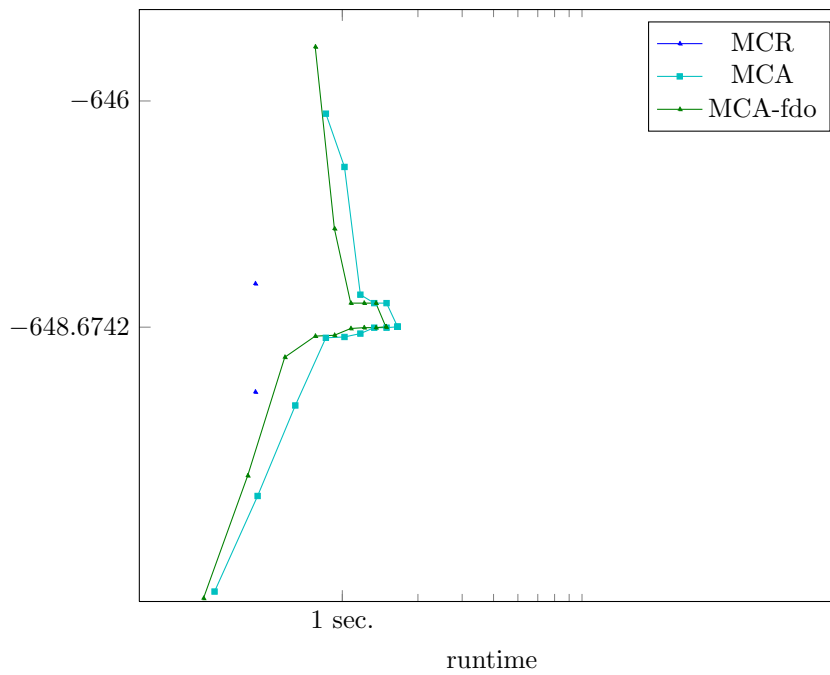


Figure 2043: Runtime results for the instance 6000294 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



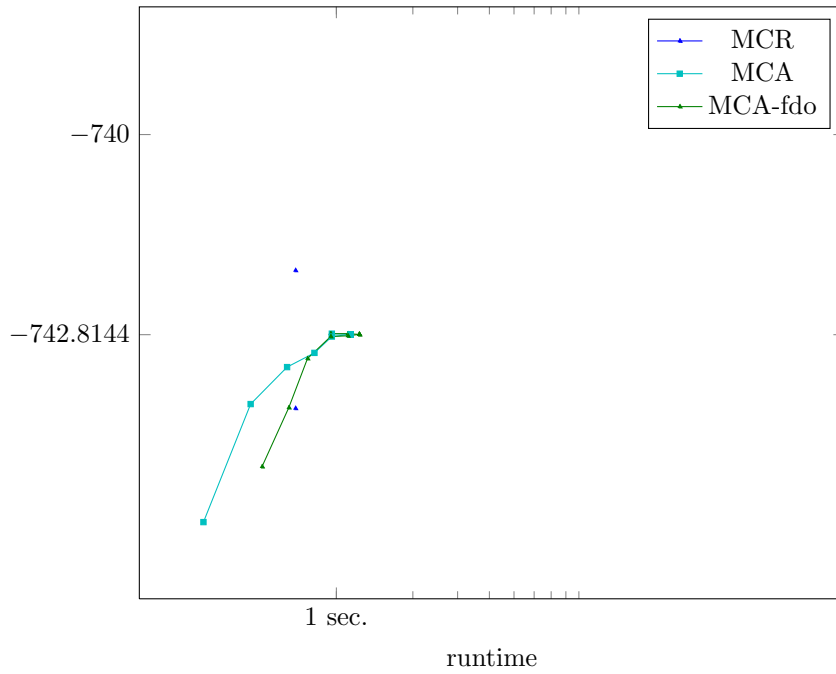


Figure 2045: Runtime results for the instance 6000296 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

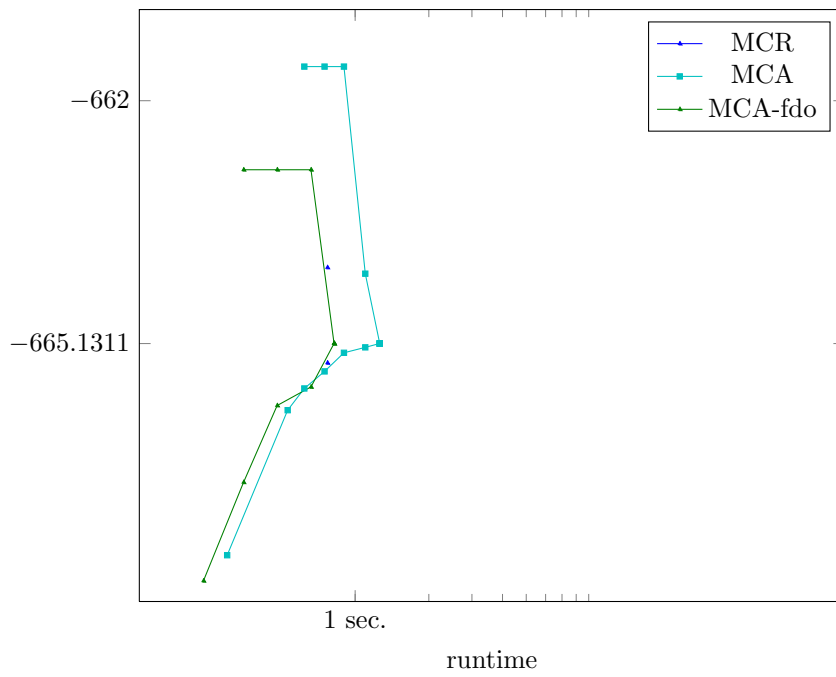


Figure 2046: Runtime results for the instance 6000297 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

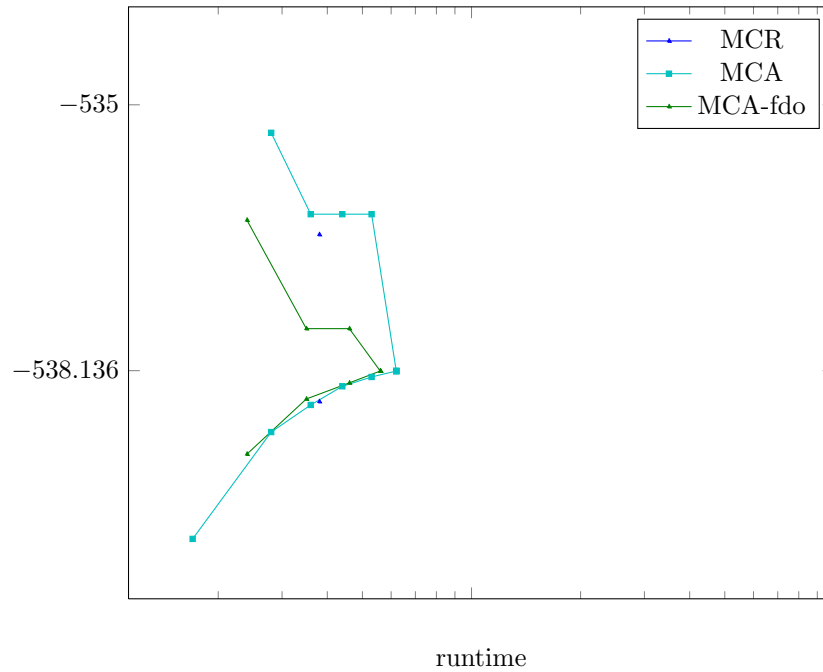


Figure 2047: Runtime results for the instance 6000298 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

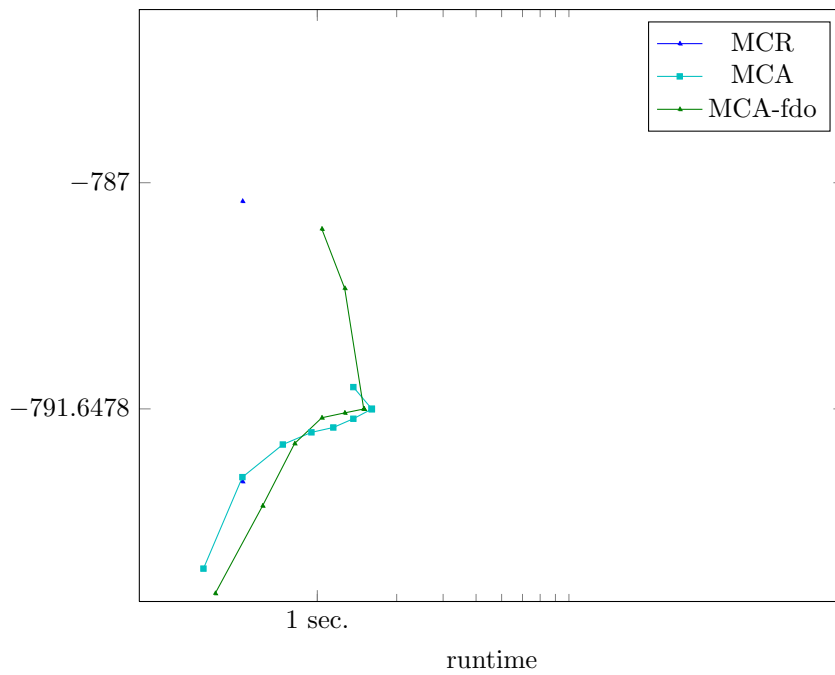


Figure 2048: Runtime results for the instance 6000299 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

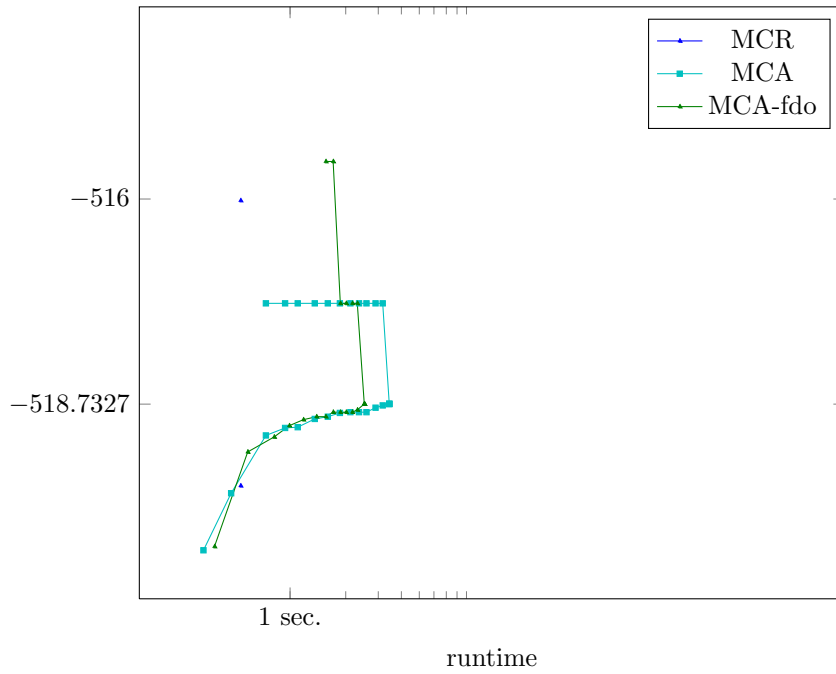


Figure 2049: Runtime results for the instance 6000300 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

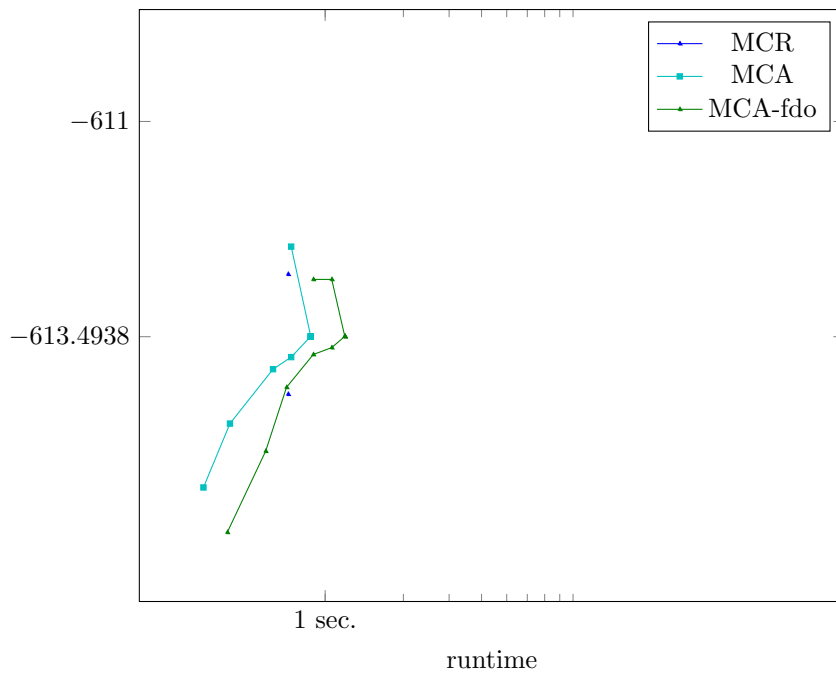


Figure 2050: Runtime results for the instance 6000301 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

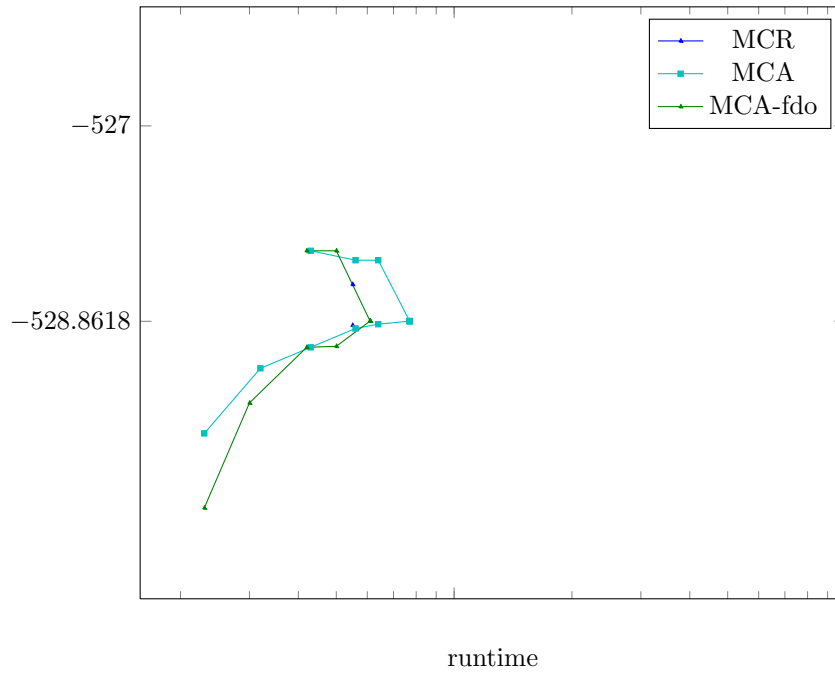


Figure 2053: Runtime results for the instance 6000304 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

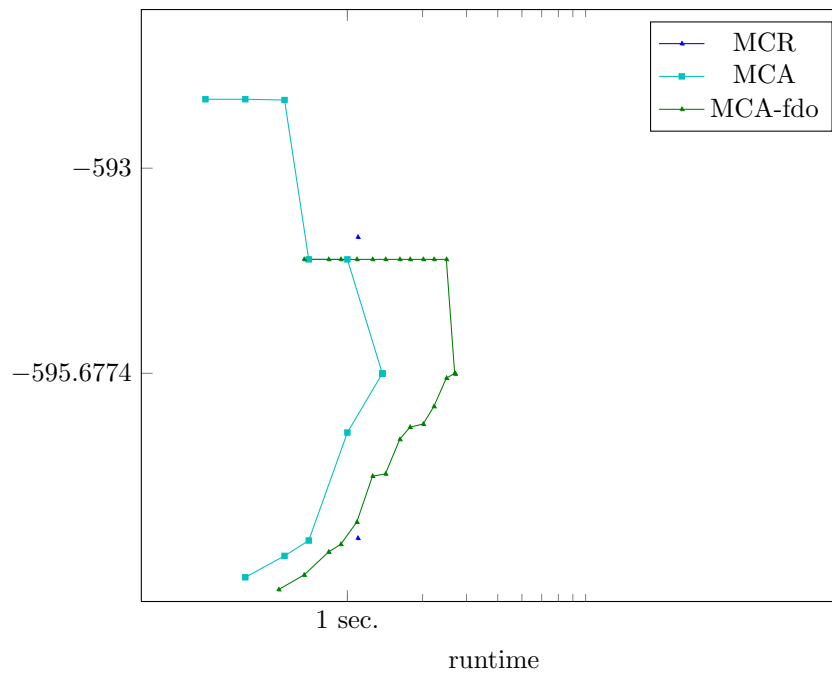


Figure 2054: Runtime results for the instance 6000305 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

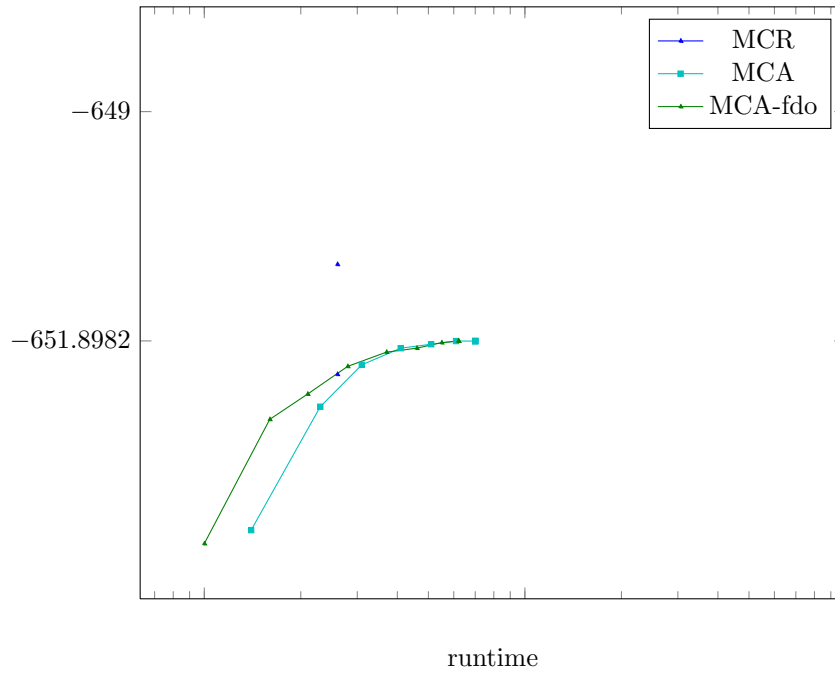


Figure 2055: Runtime results for the instance 6000306 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

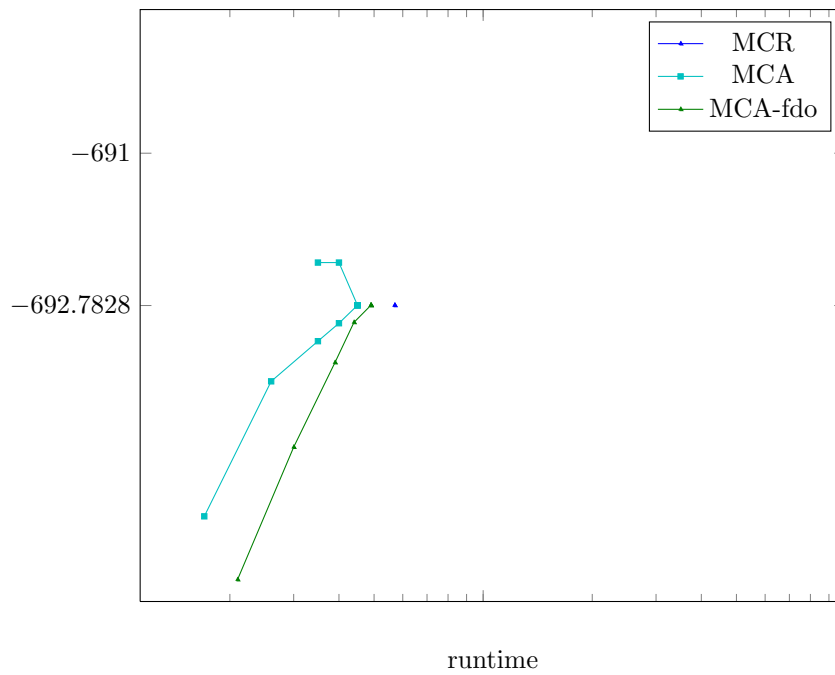


Figure 2056: Runtime results for the instance 6000307 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

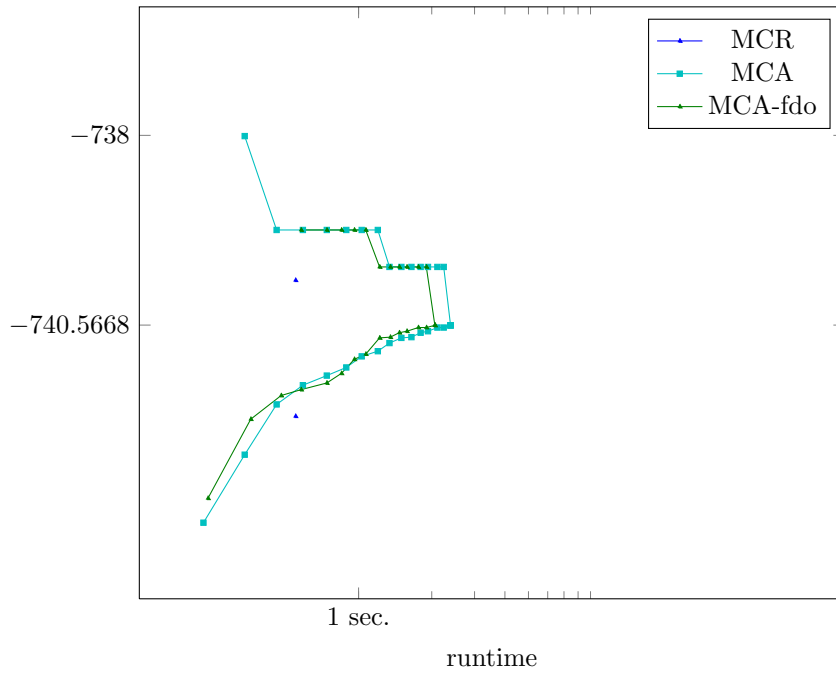
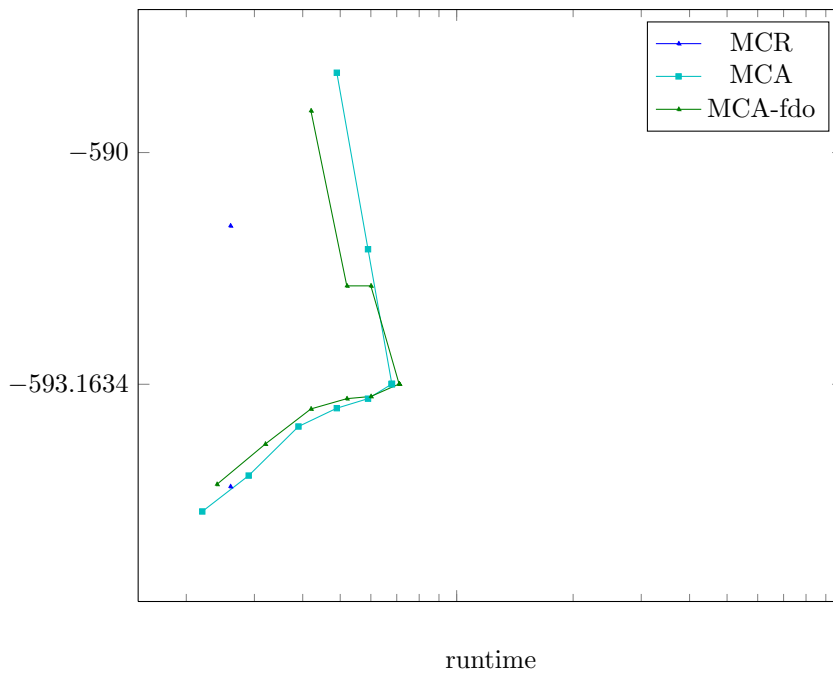


Figure 2057: Runtime results for the instance 6000308 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



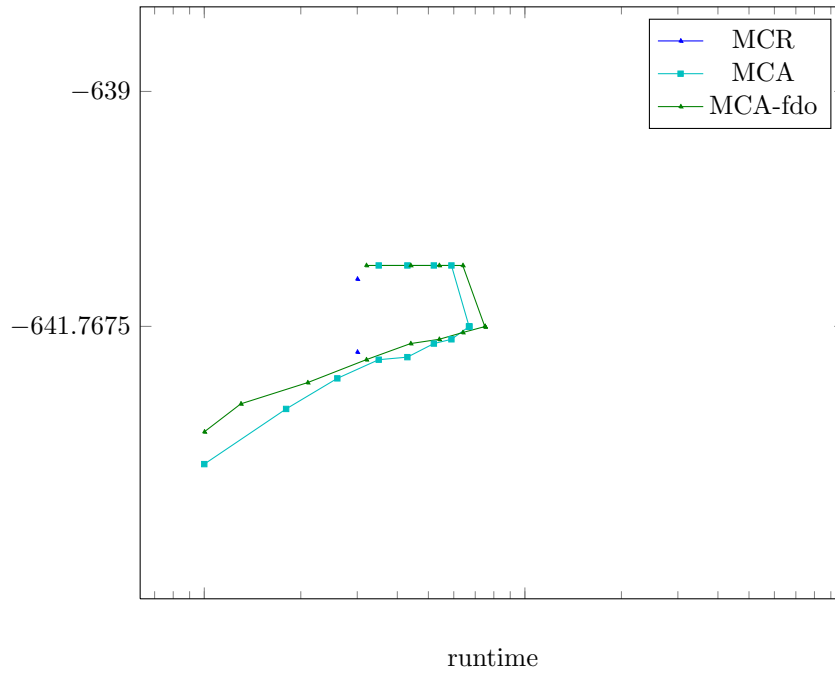


Figure 2059: Runtime results for the instance 6000310 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

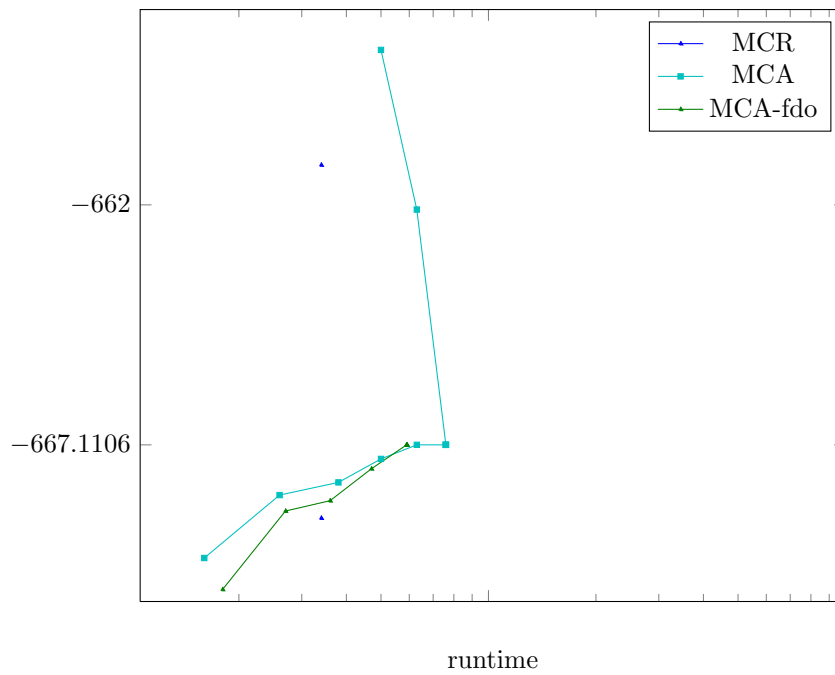


Figure 2060: Runtime results for the instance 6000311 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

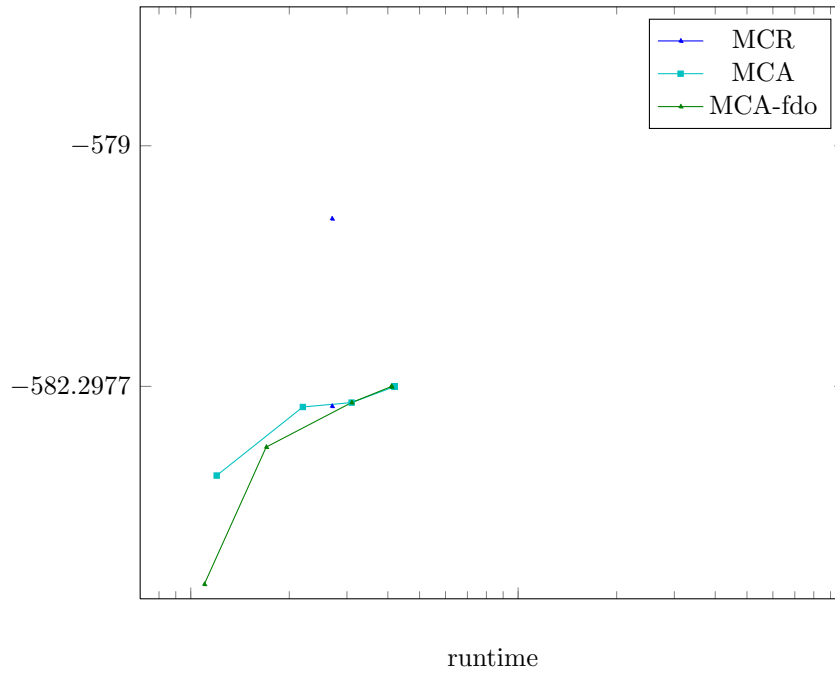


Figure 2061: Runtime results for the instance 6000312 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

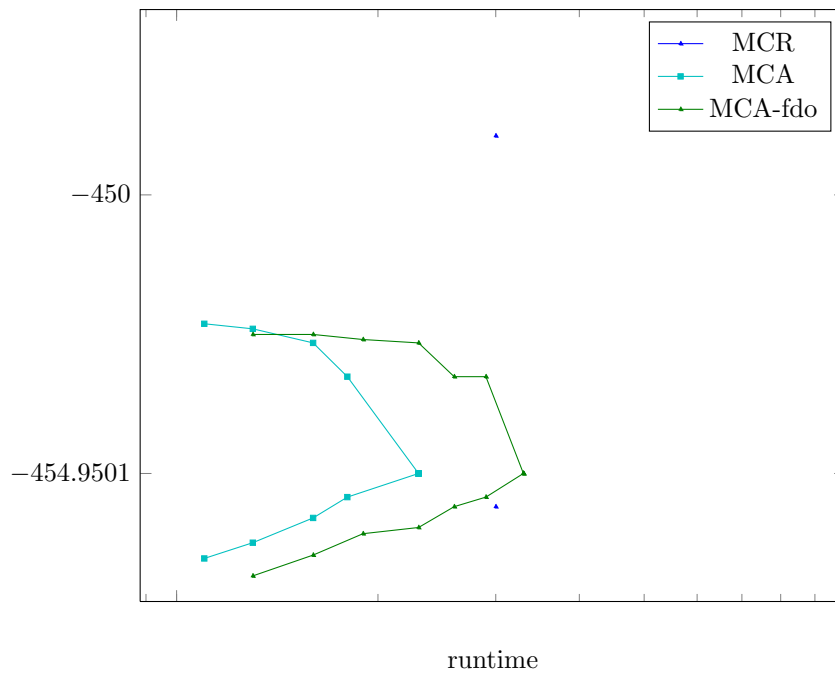


Figure 2062: Runtime results for the instance 6000313 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

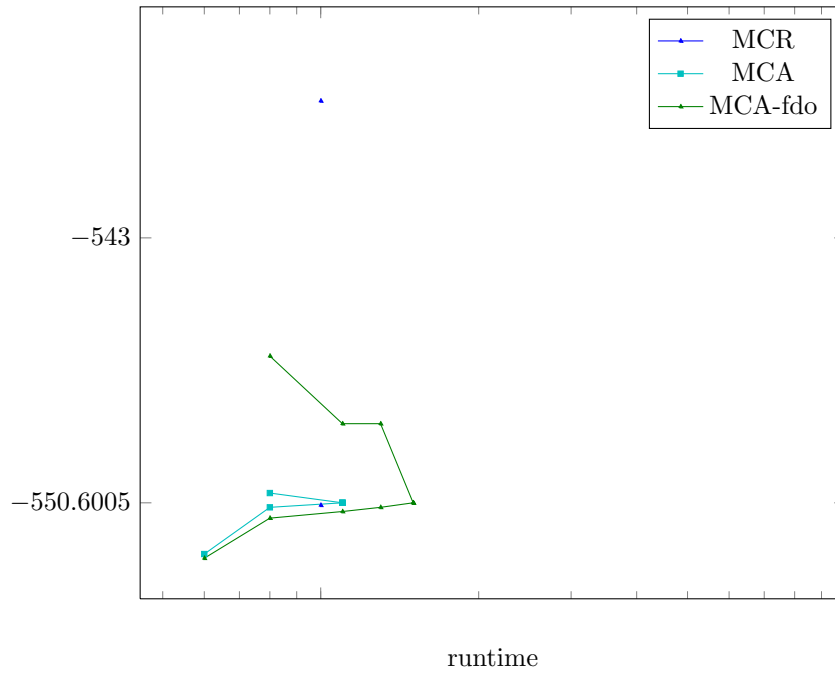


Figure 2063: Runtime results for the instance 6000314 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

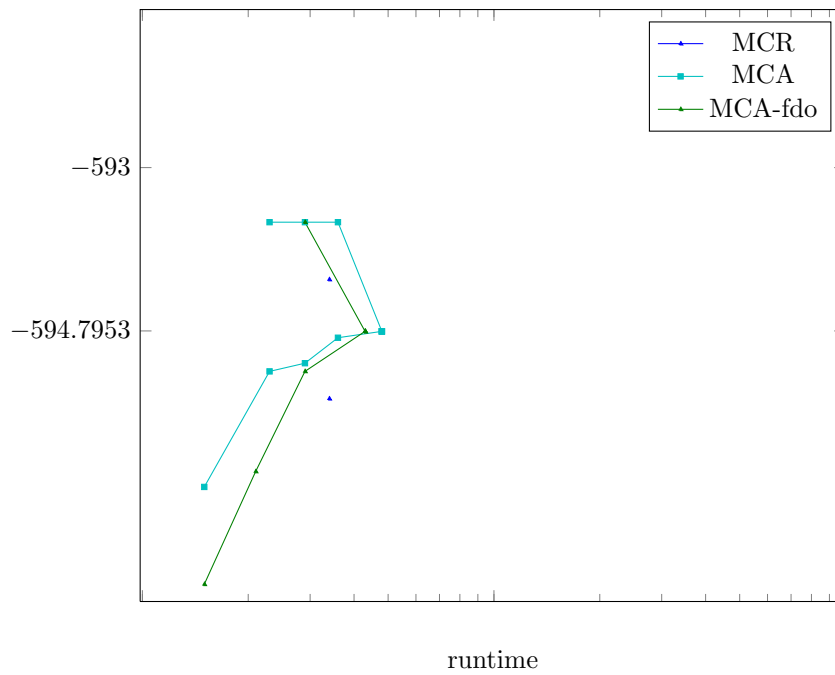


Figure 2064: Runtime results for the instance 6000315 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

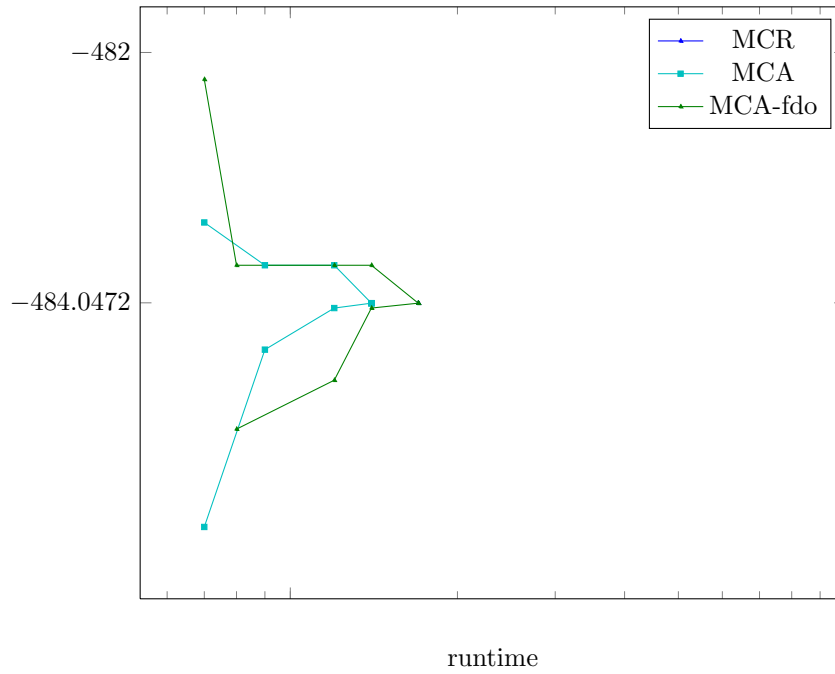


Figure 2065: Runtime results for the instance 6000316 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

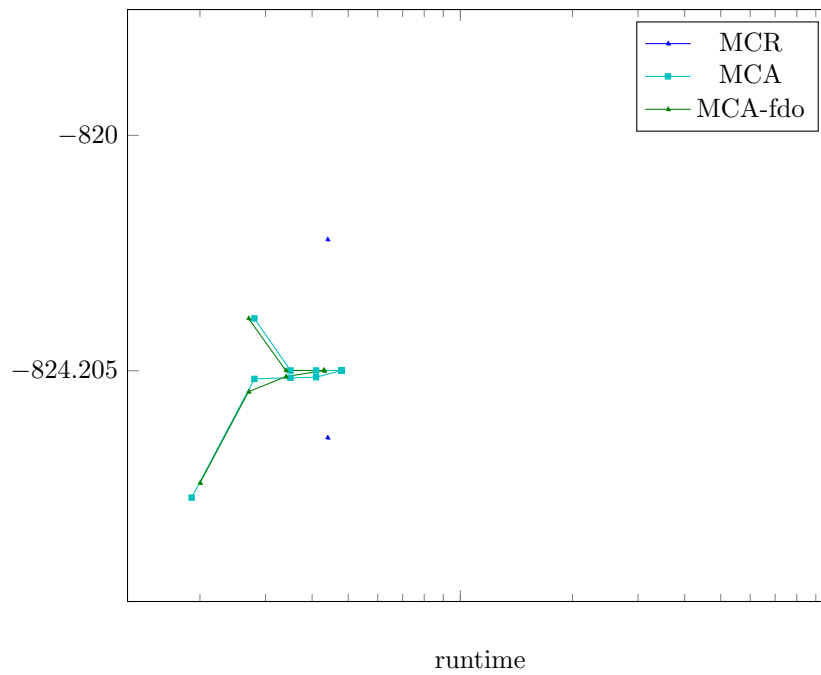
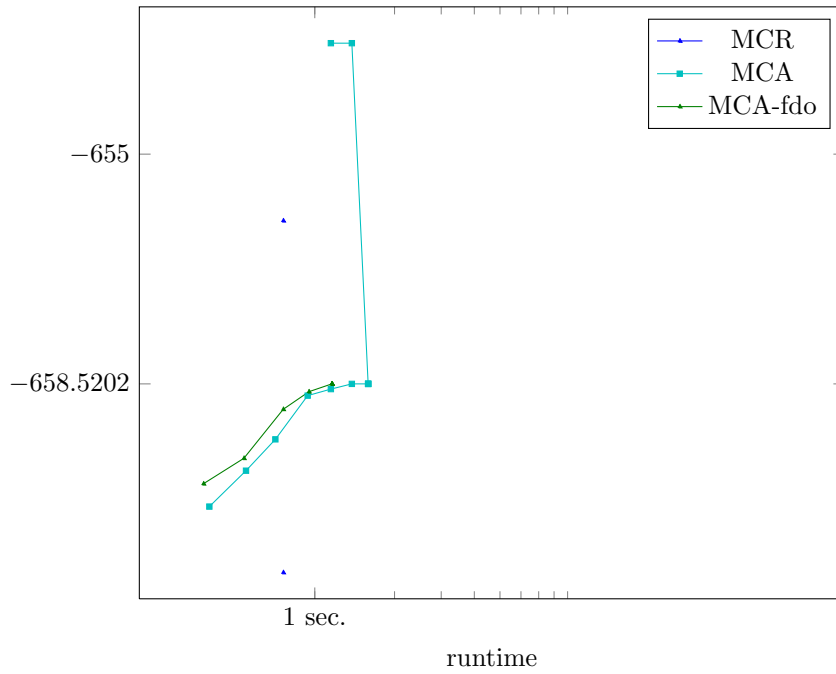


Figure 2066: Runtime results for the instance 6000317 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



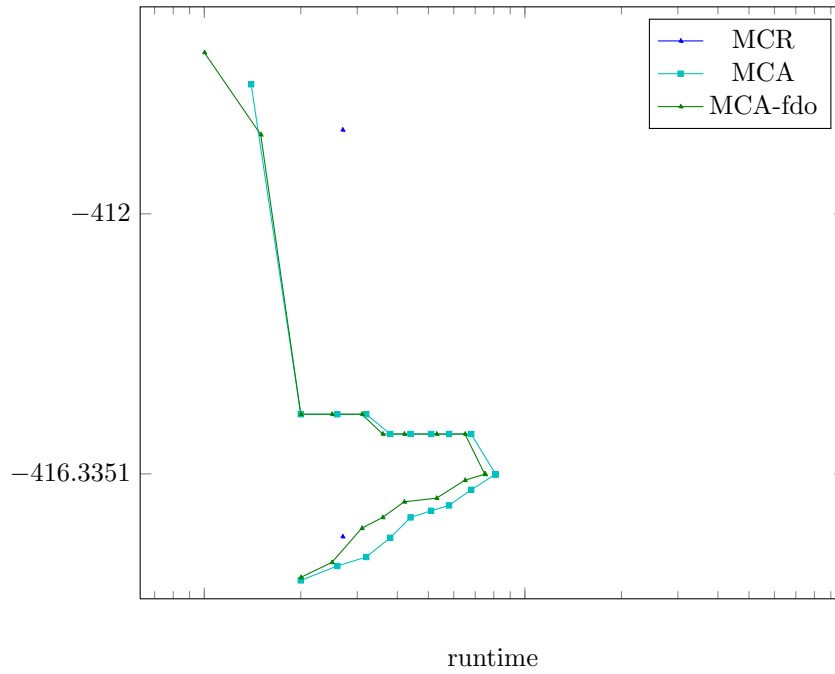


Figure 2069: Runtime results for the instance 6000320 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

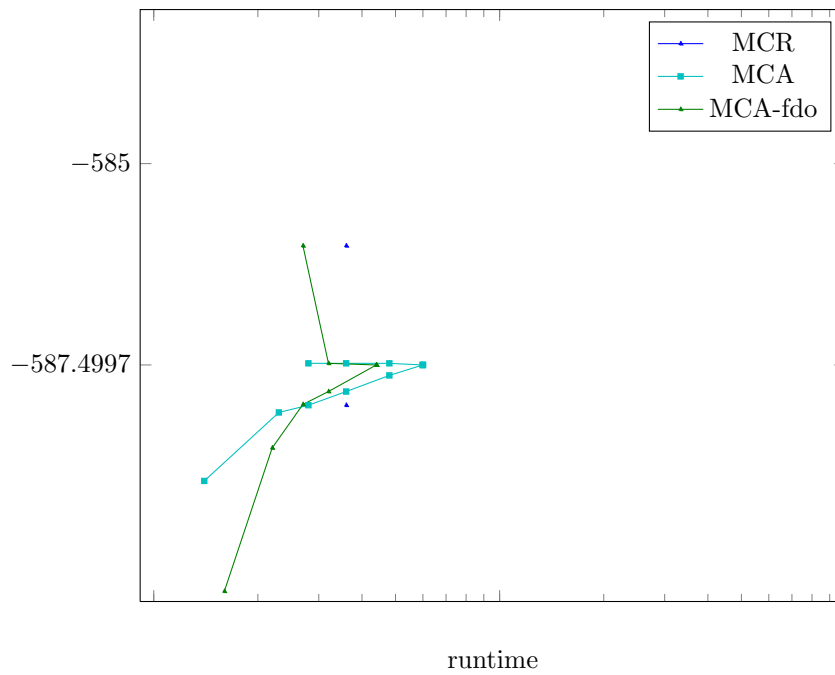


Figure 2070: Runtime results for the instance 6000321 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

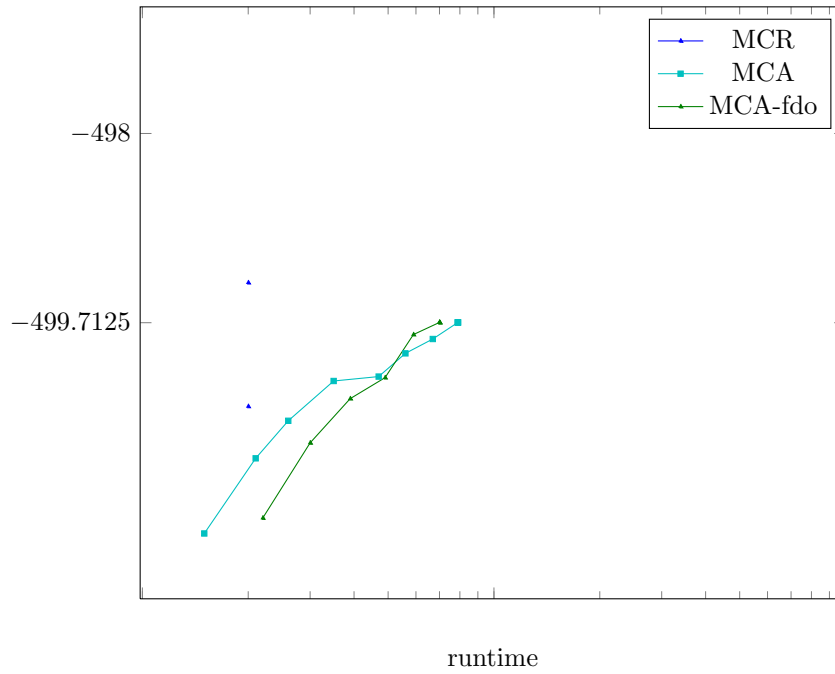


Figure 2071: Runtime results for the instance 6000322 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

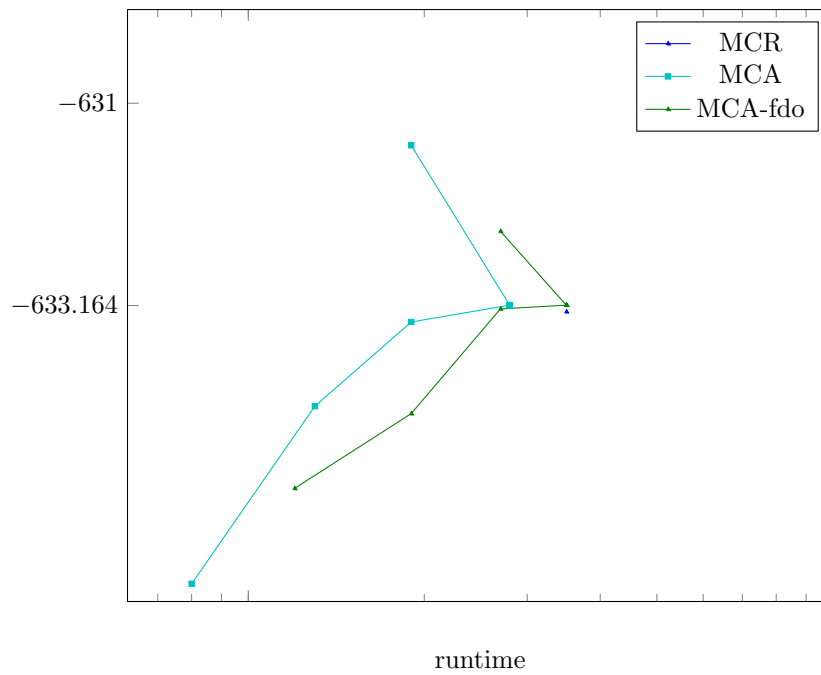


Figure 2072: Runtime results for the instance 6000323 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

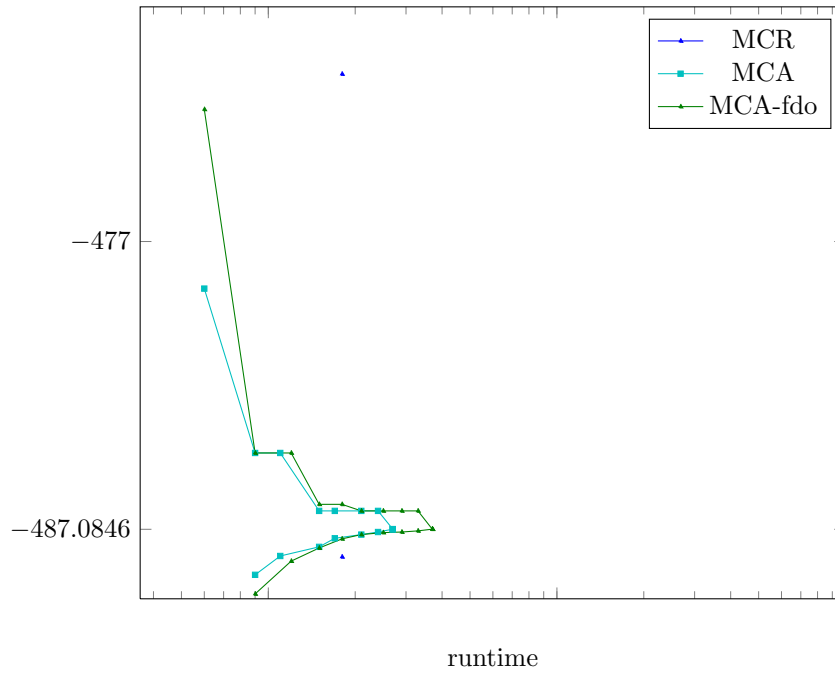


Figure 2075: Runtime results for the instance 6000326 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

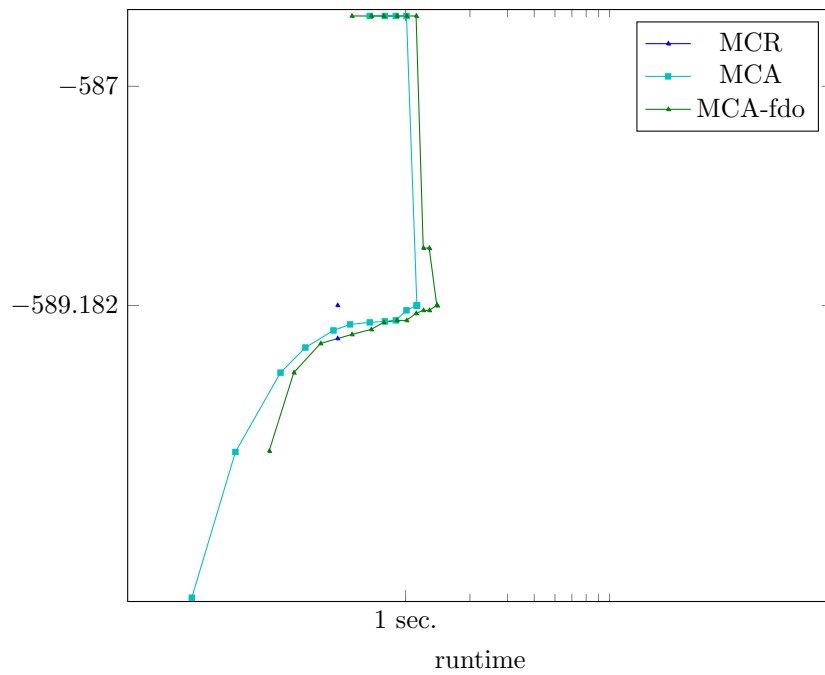


Figure 2076: Runtime results for the instance 6000327 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

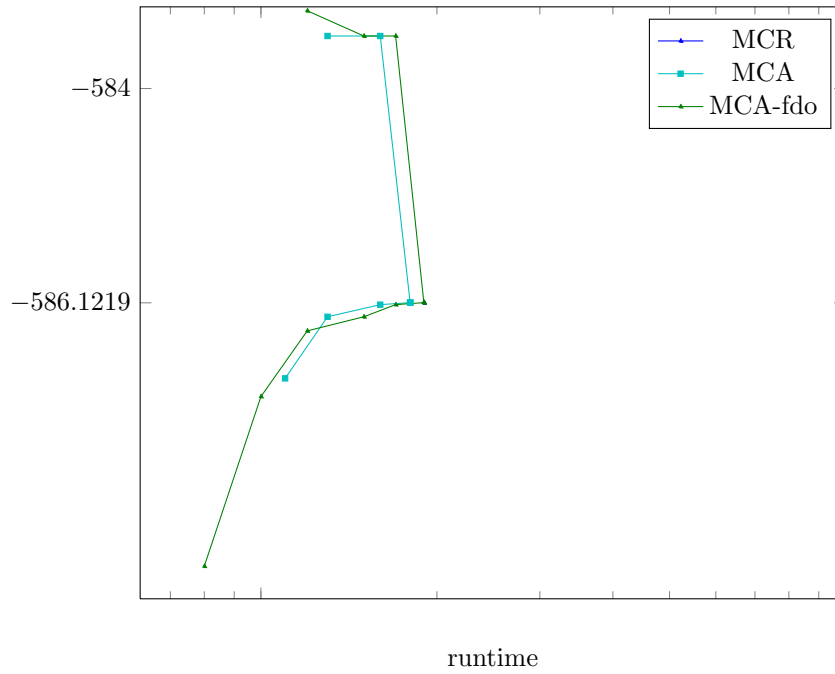


Figure 2077: Runtime results for the instance 6000328 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

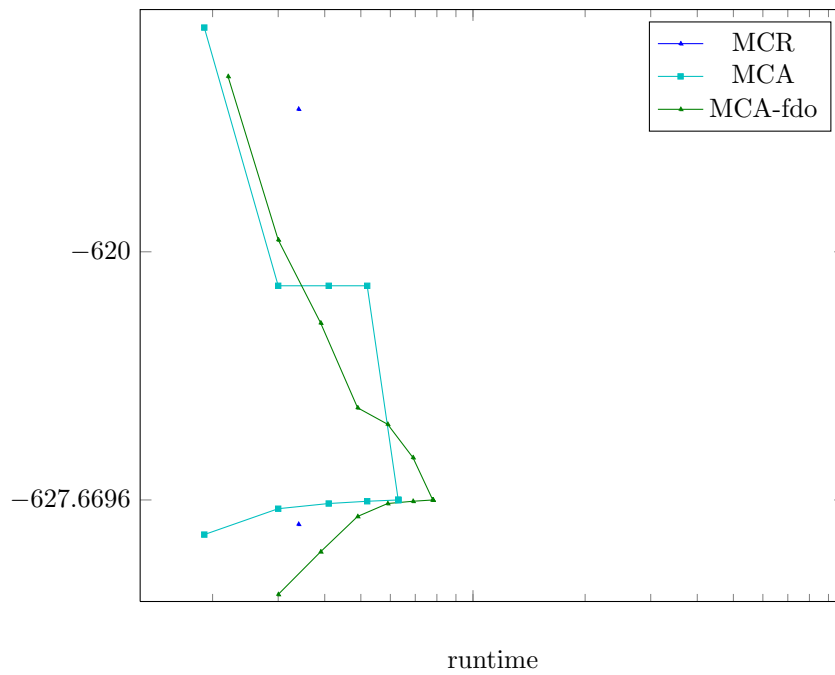


Figure 2078: Runtime results for the instance 6000329 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

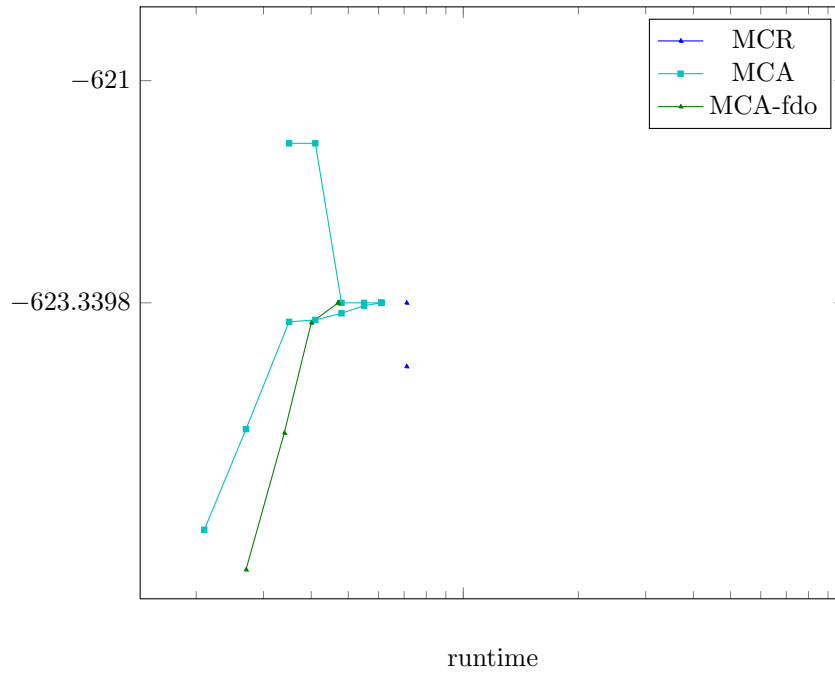


Figure 2081: Runtime results for the instance 6000332 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

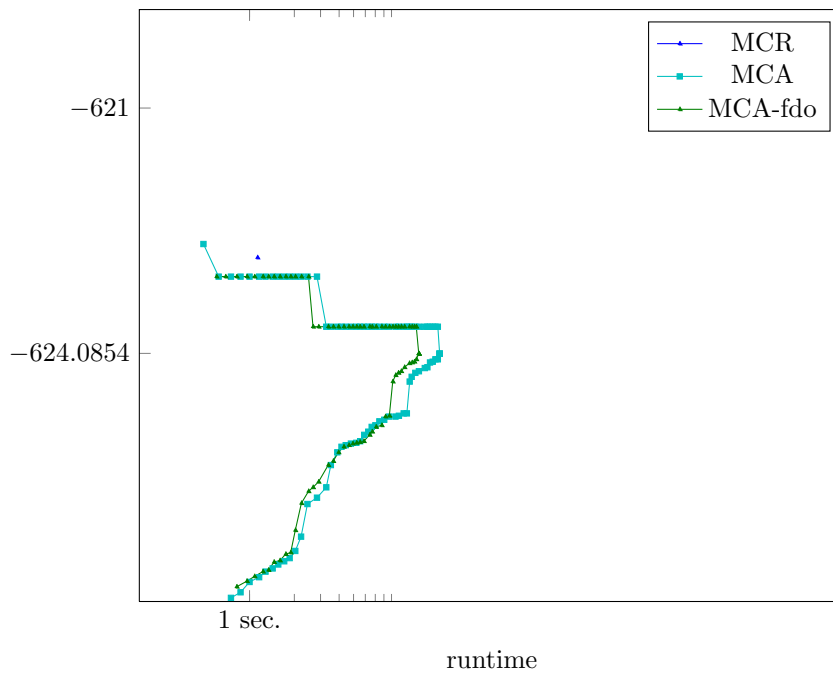


Figure 2082: Runtime results for the instance 6000333 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

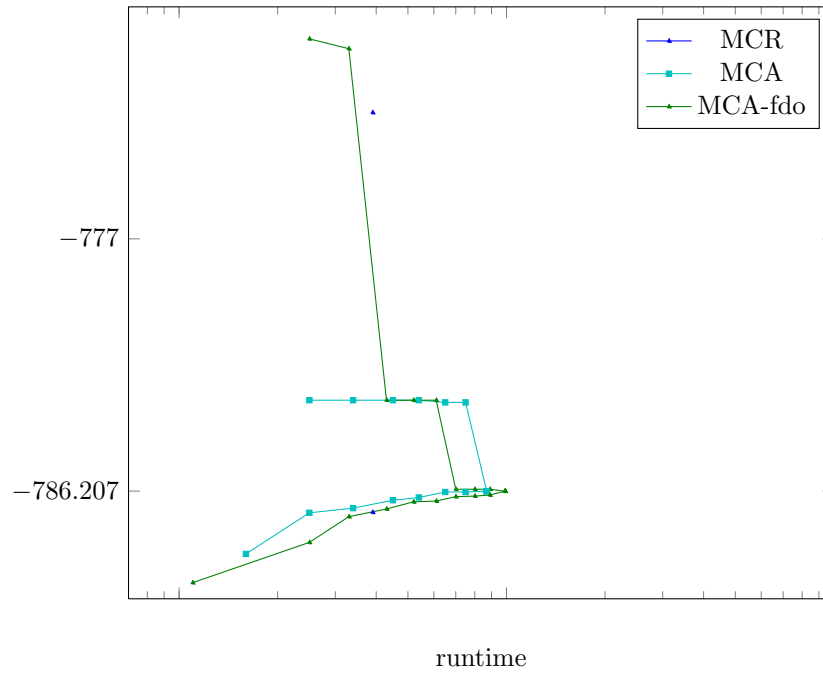


Figure 2083: Runtime results for the instance 6000334 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

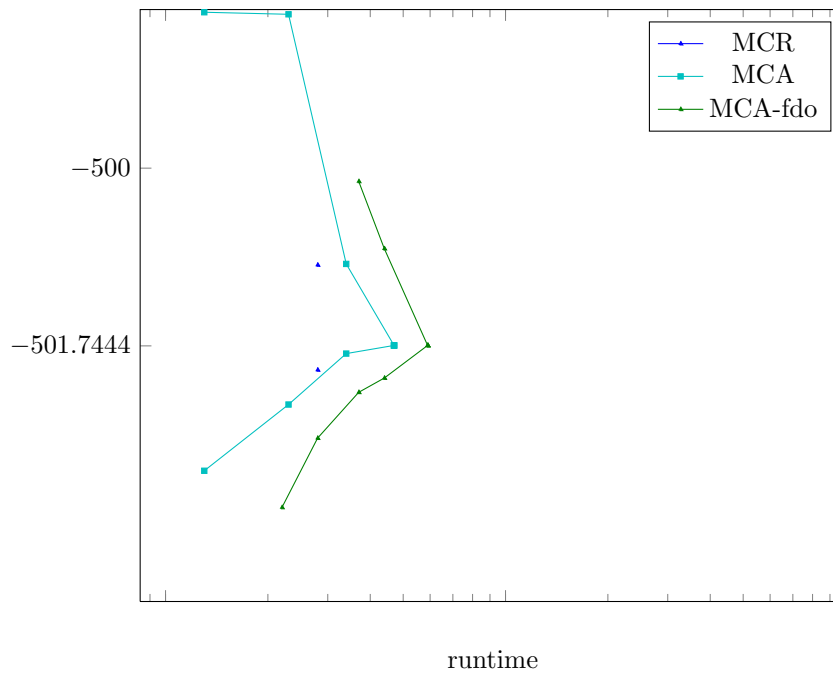


Figure 2084: Runtime results for the instance 6000335 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

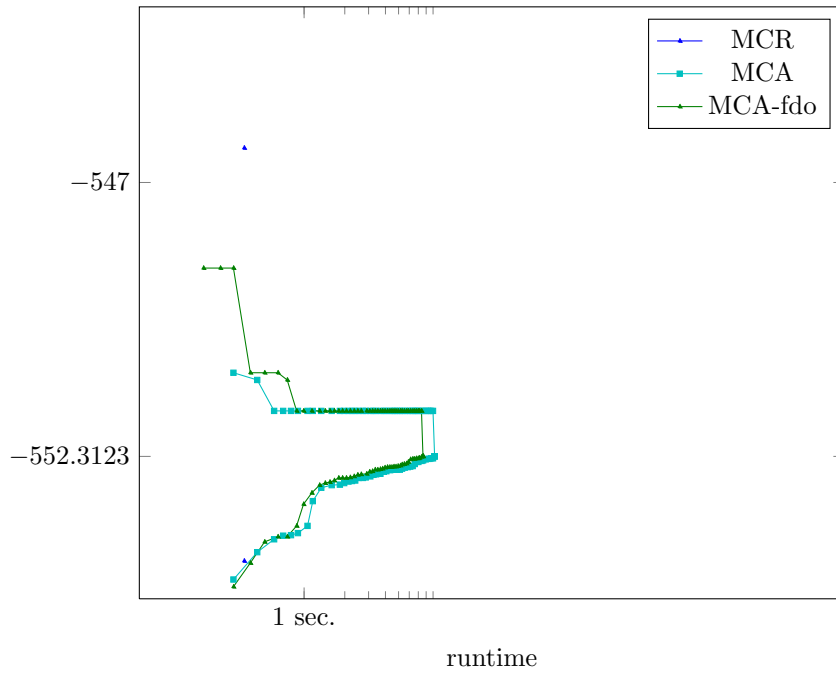


Figure 2085: Runtime results for the instance 6000336 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

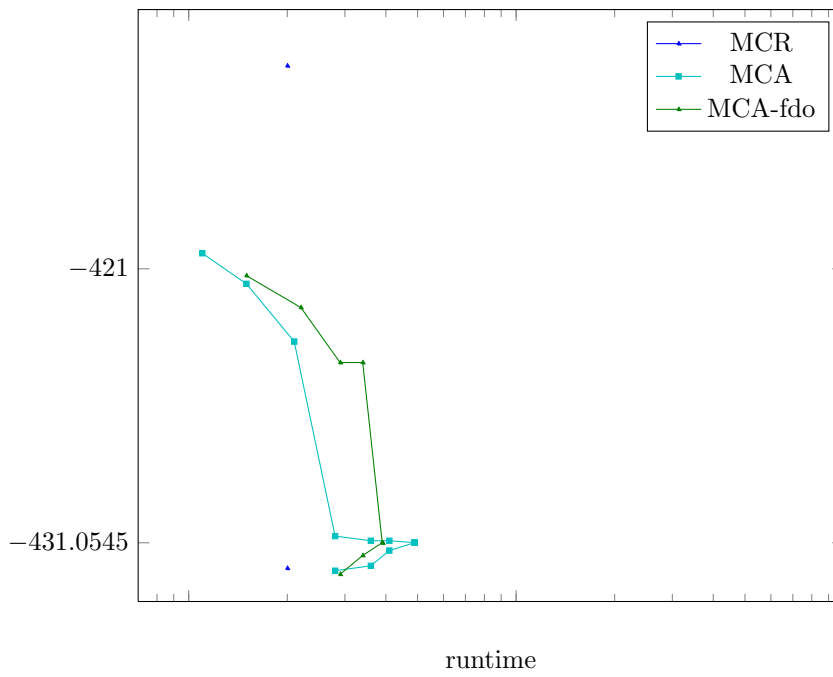


Figure 2086: Runtime results for the instance 6000337 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

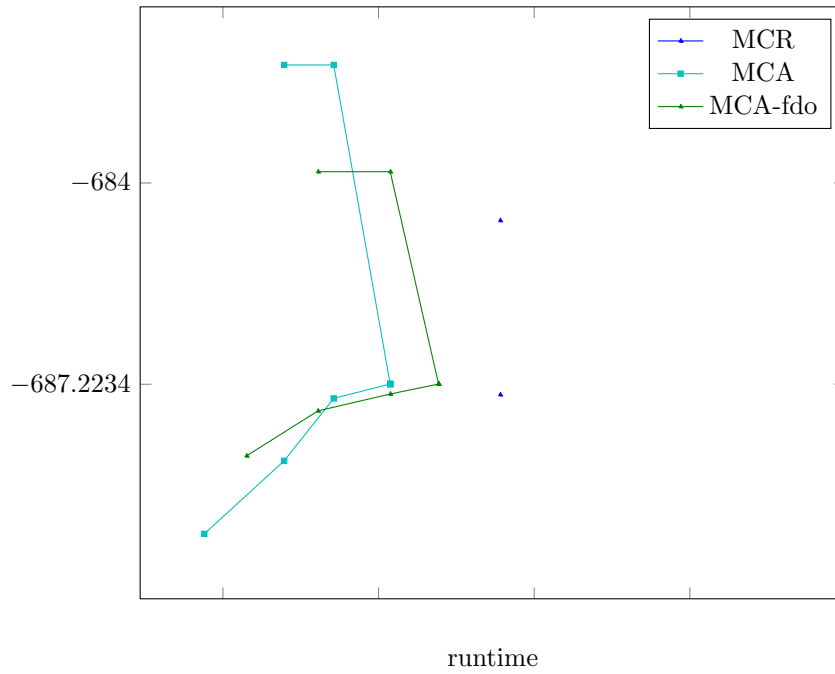


Figure 2087: Runtime results for the instance 6000338 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

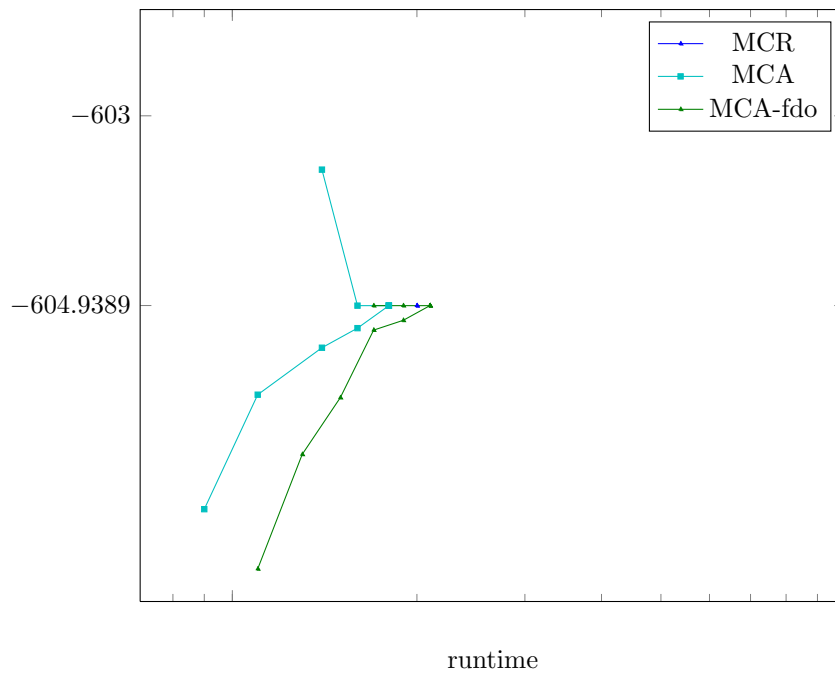


Figure 2088: Runtime results for the instance 6000339 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

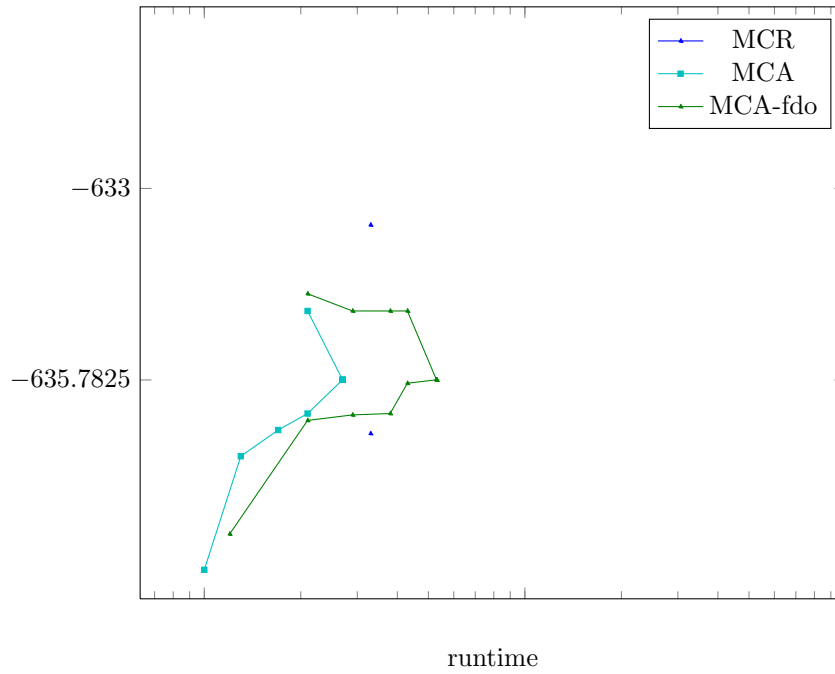
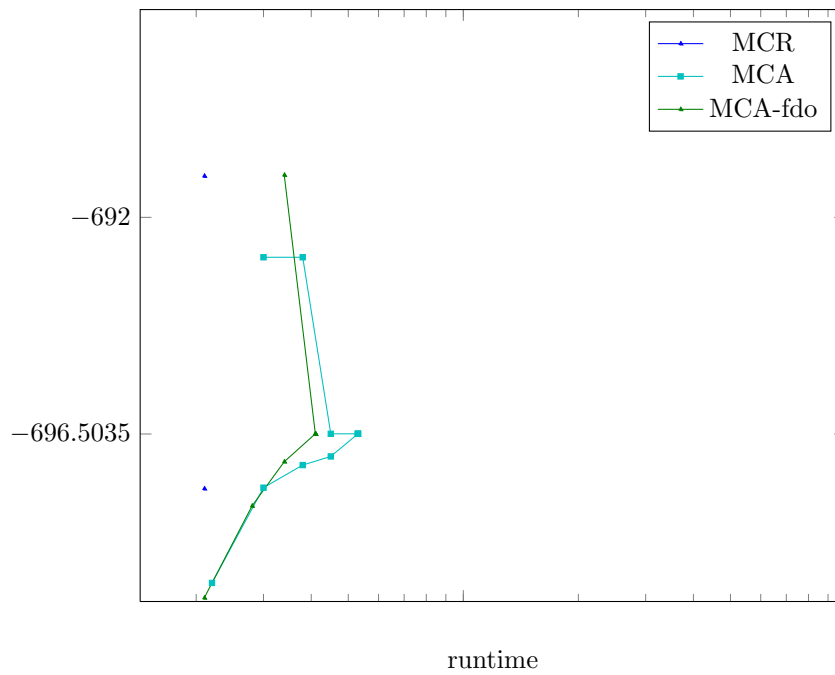


Figure 2089: Runtime results for the instance 6000340 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



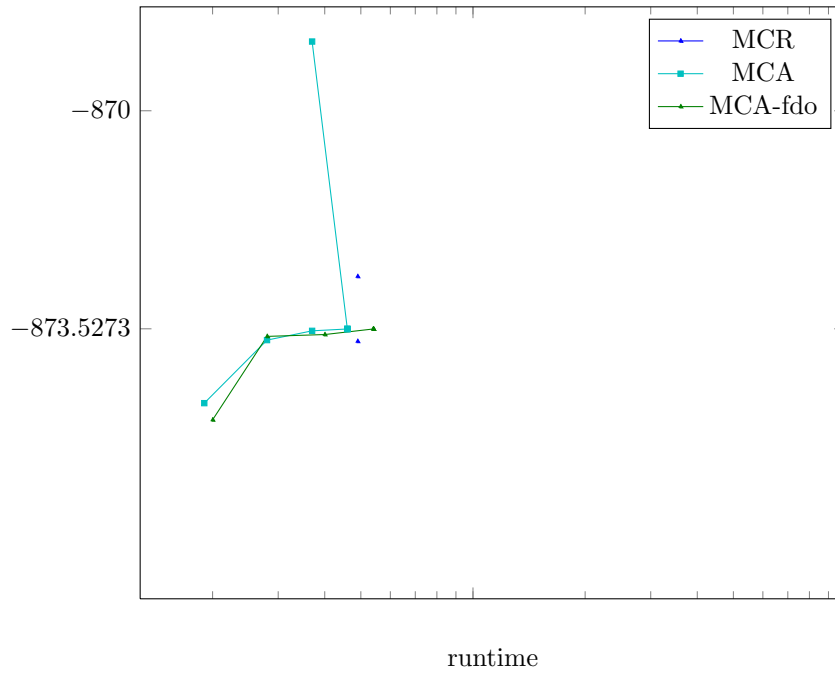


Figure 2091: Runtime results for the instance 6000342 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

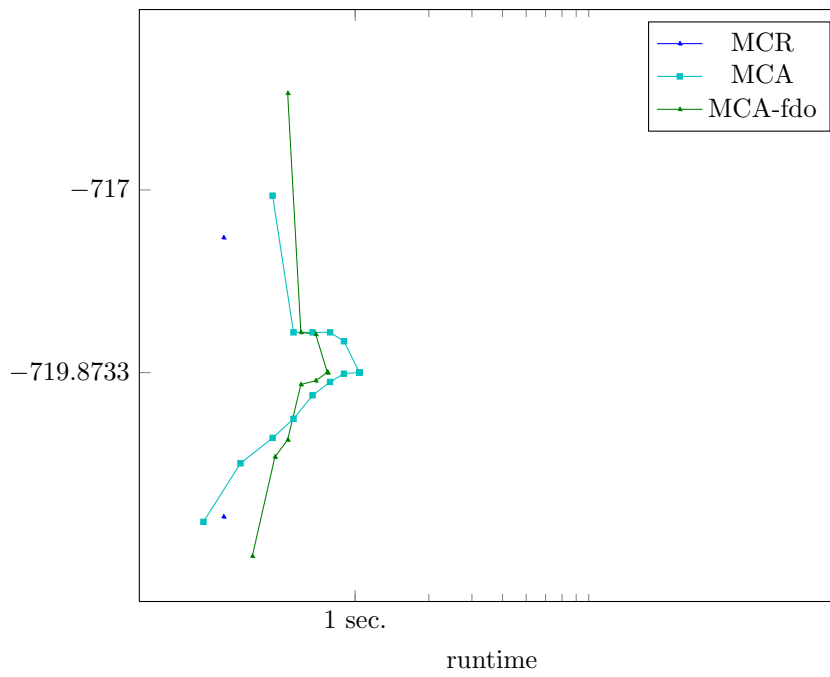


Figure 2092: Runtime results for the instance 6000343 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

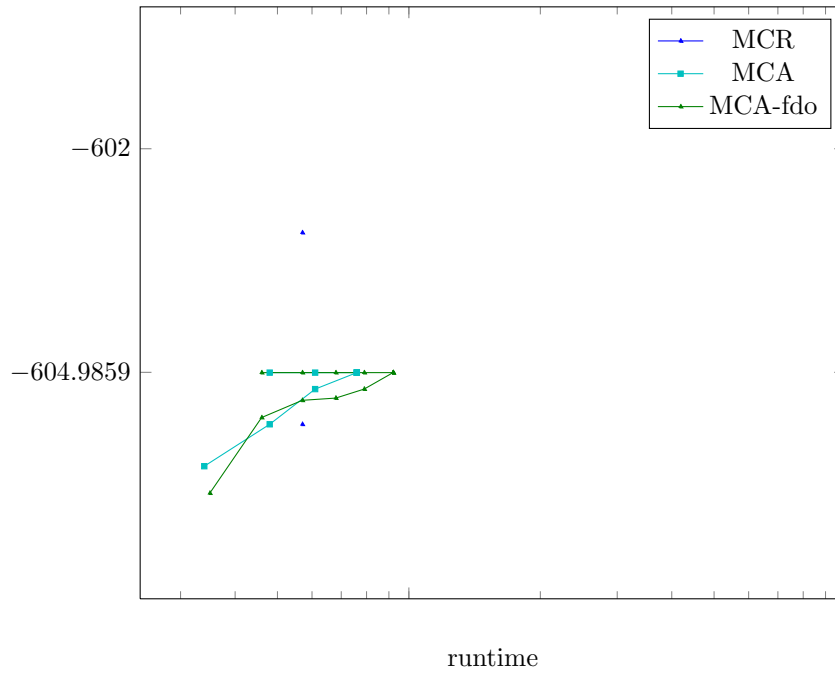


Figure 2093: Runtime results for the instance 6000344 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

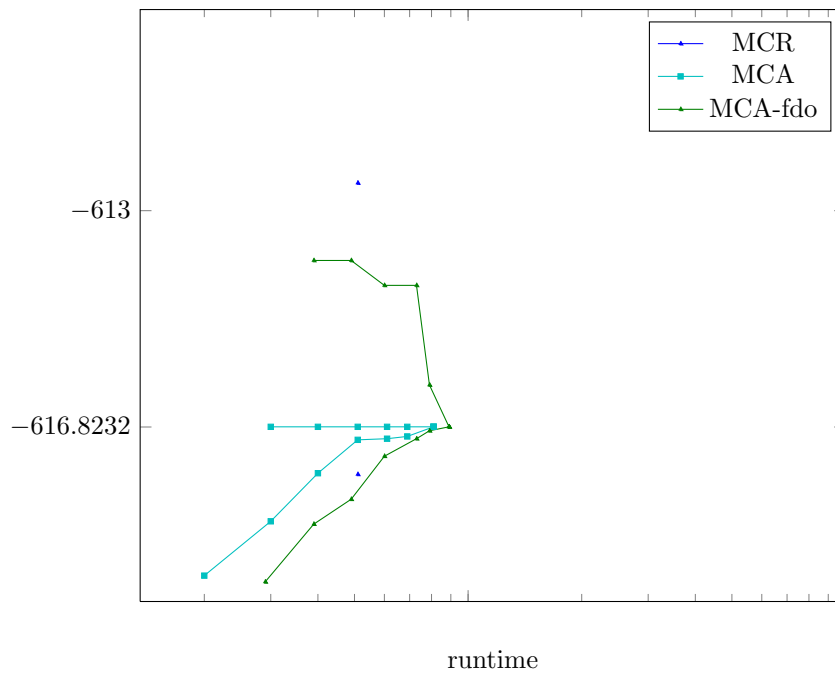


Figure 2094: Runtime results for the instance 6000345 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

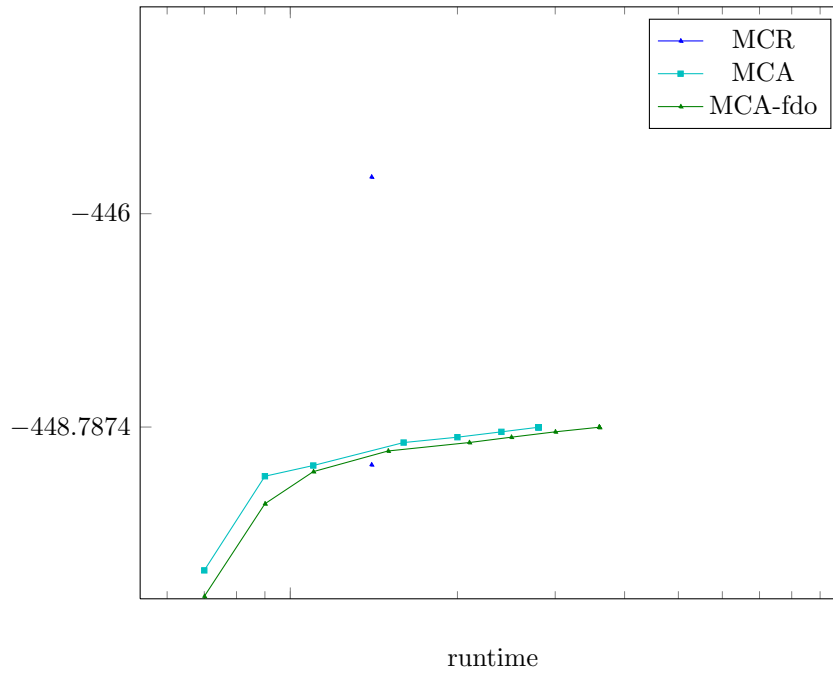


Figure 2095: Runtime results for the instance 6000346 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

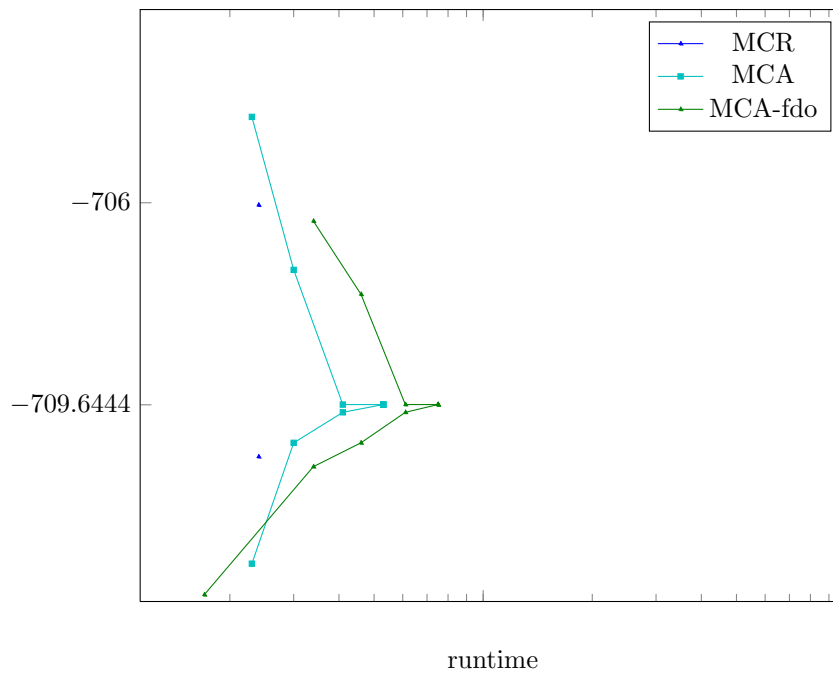


Figure 2096: Runtime results for the instance 6000347 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

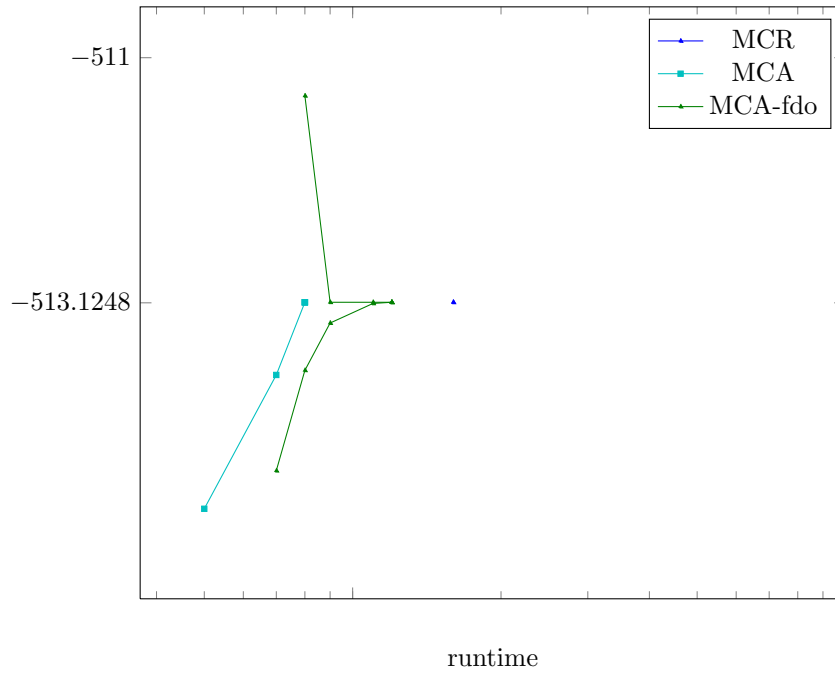


Figure 2097: Runtime results for the instance 6000348 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

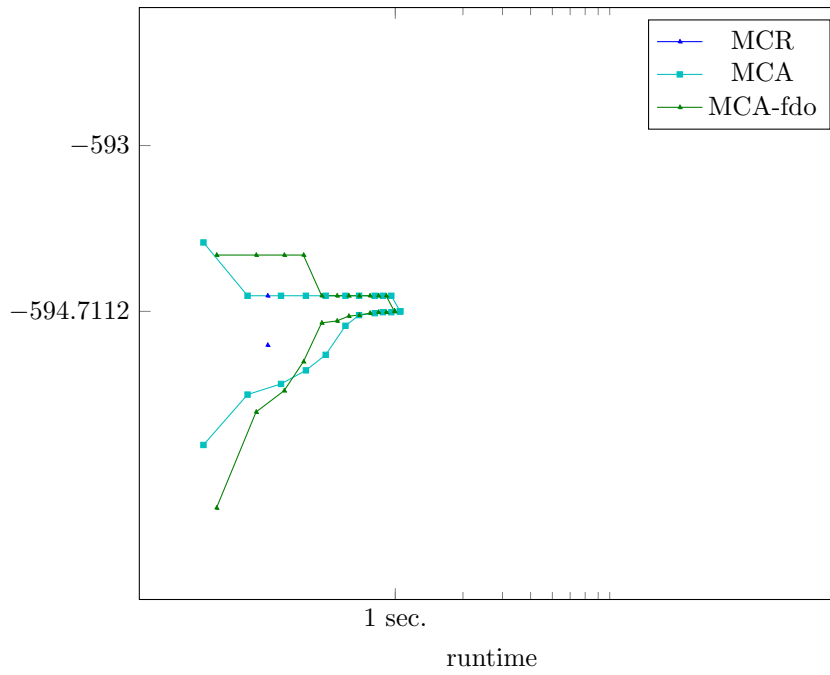


Figure 2098: Runtime results for the instance 6000349 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

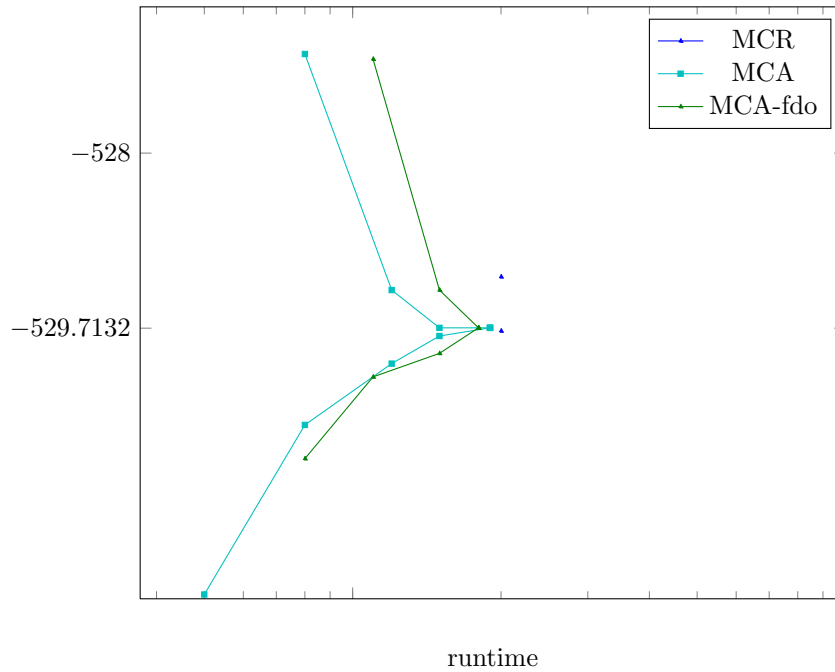
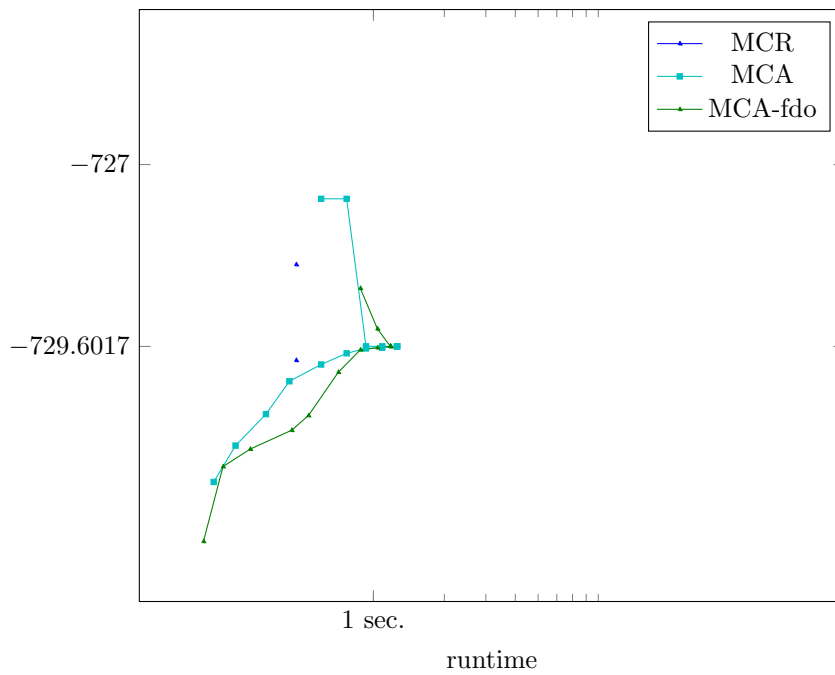


Figure 2099: Runtime results for the instance 6000350 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



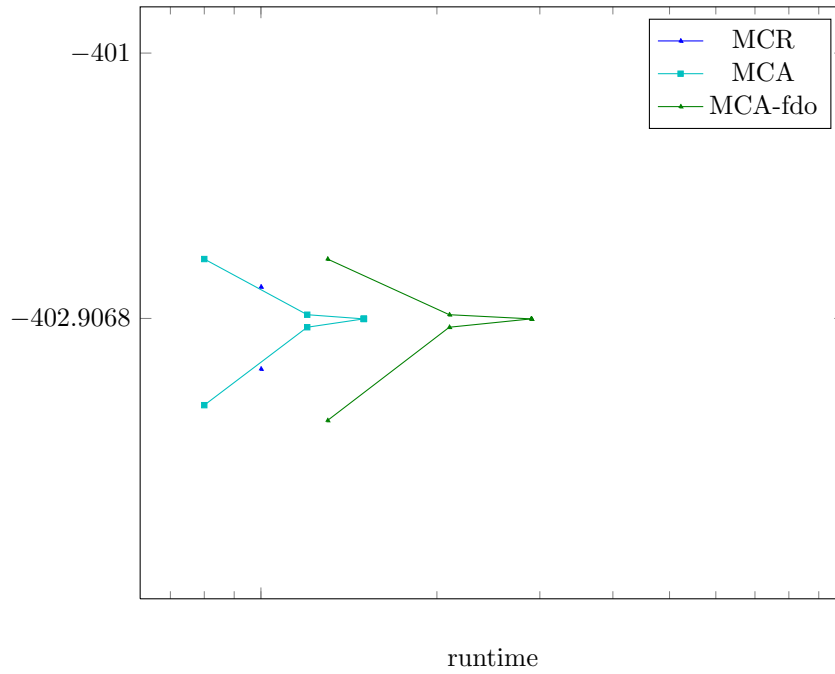


Figure 2103: Runtime results for the instance 6000354 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

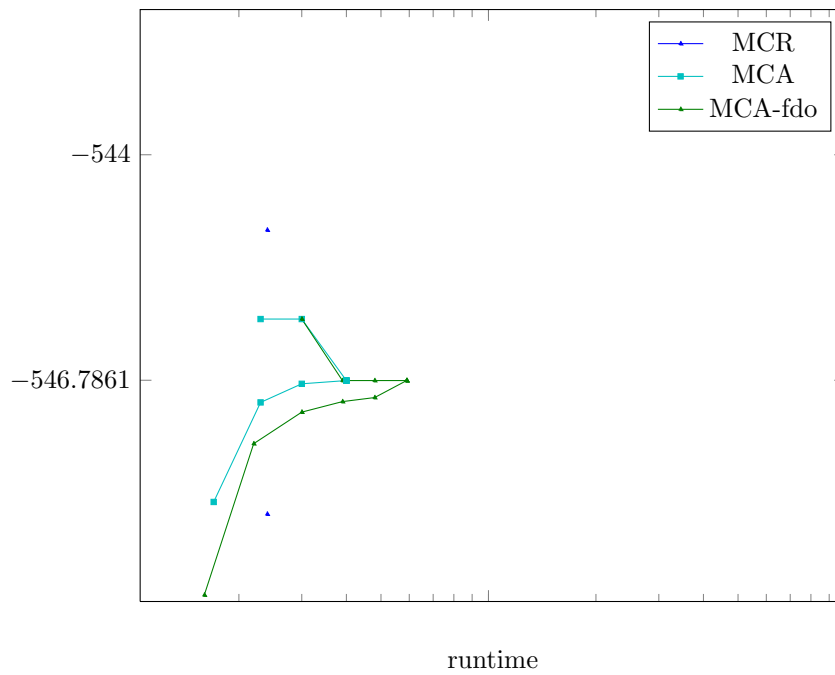


Figure 2104: Runtime results for the instance 6000355 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

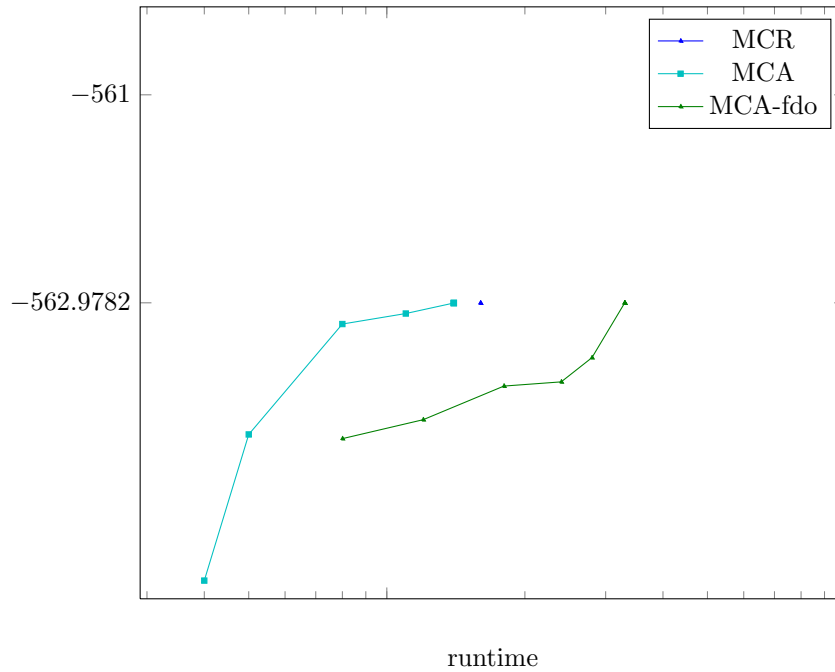


Figure 2105: Runtime results for the instance 8000811 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

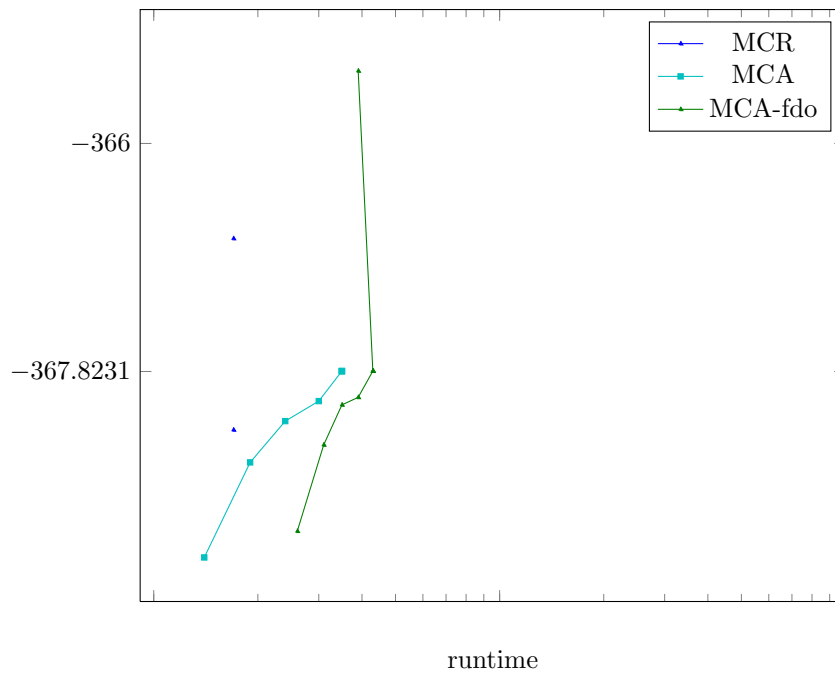


Figure 2106: Runtime results for the instance 8001155 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

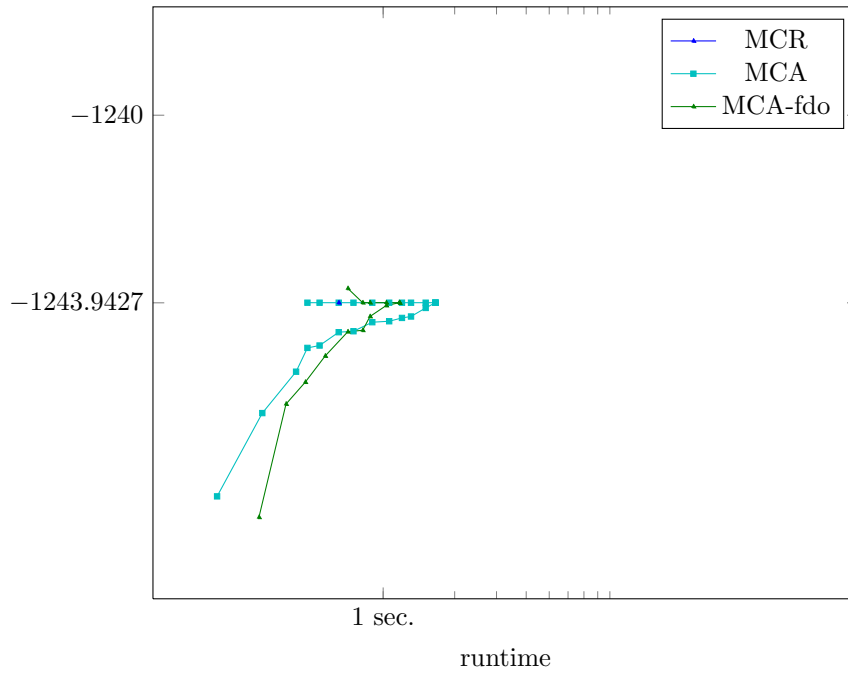


Figure 2107: Runtime results for the instance 8001974 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

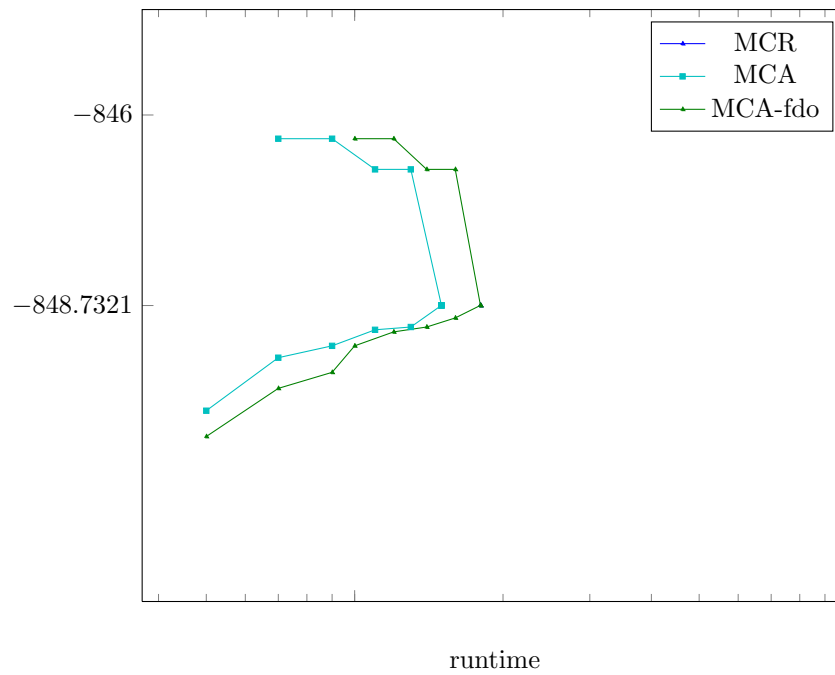


Figure 2108: Runtime results for the instance 8002274 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

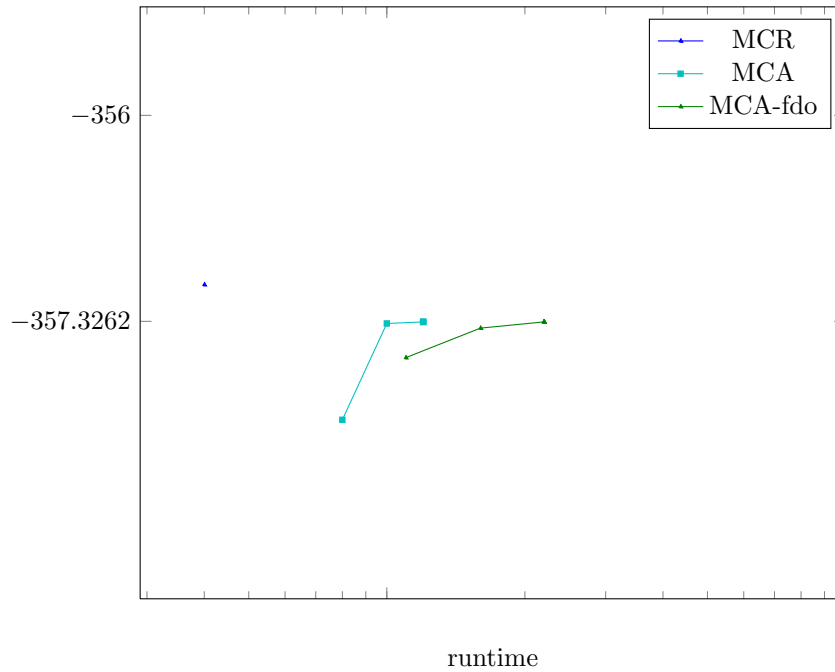
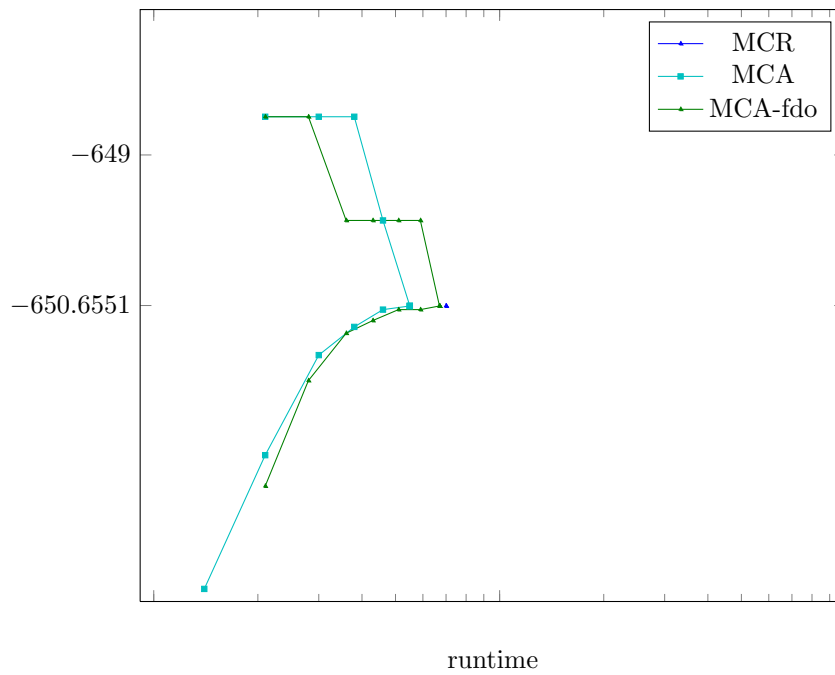


Figure 2109: Runtime results for the instance 8002764 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



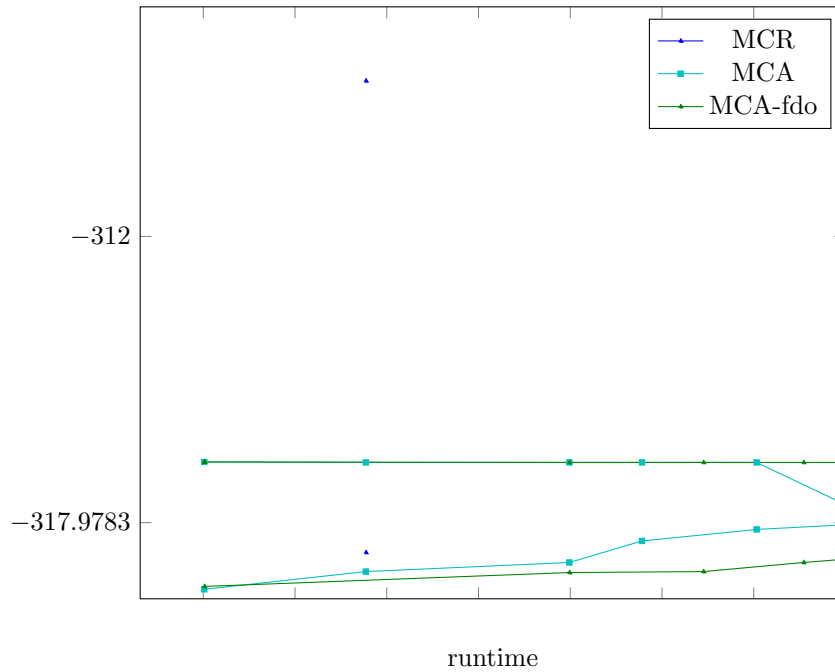
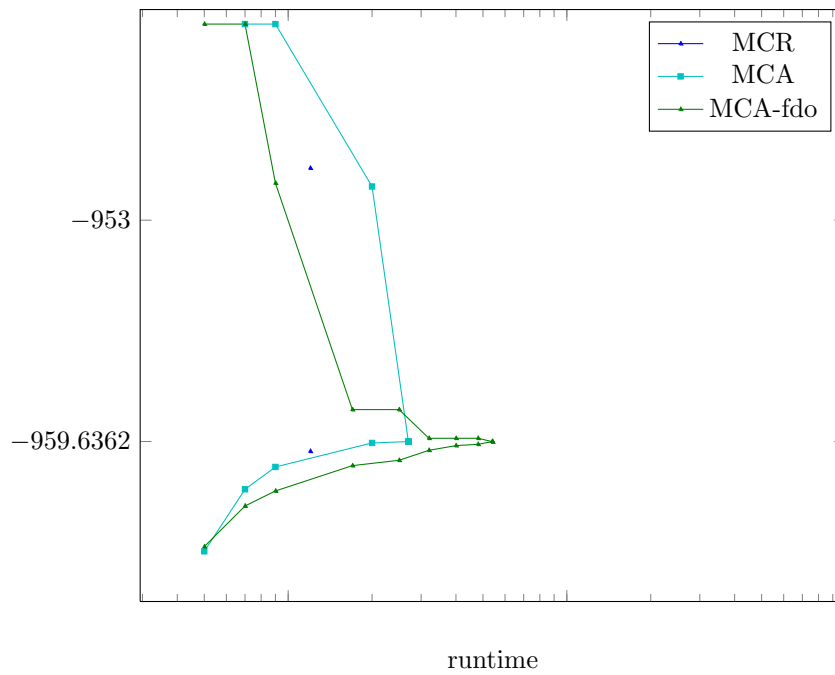


Figure 2111: Runtime results for the instance 8003836 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



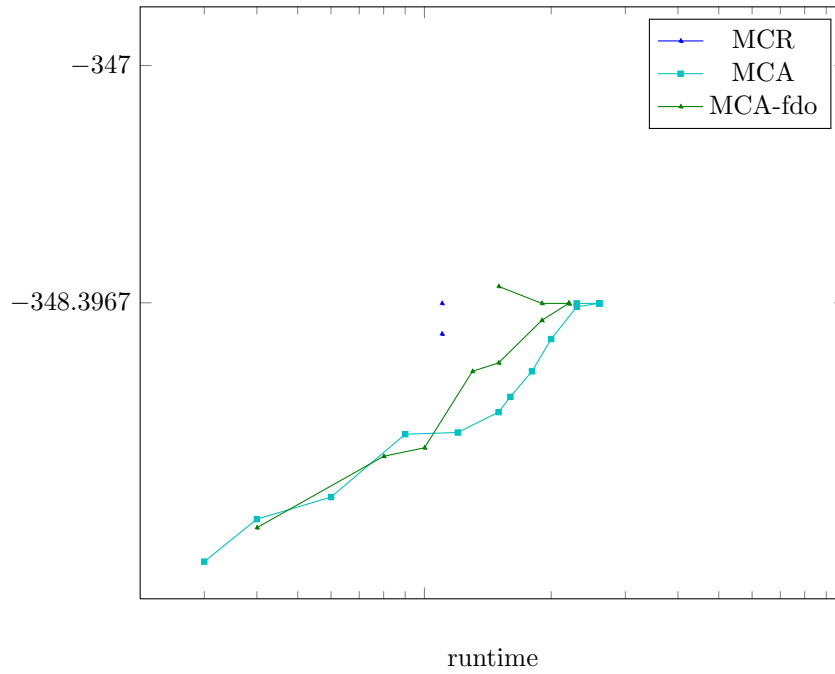


Figure 2113: Runtime results for the instance 8004573 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

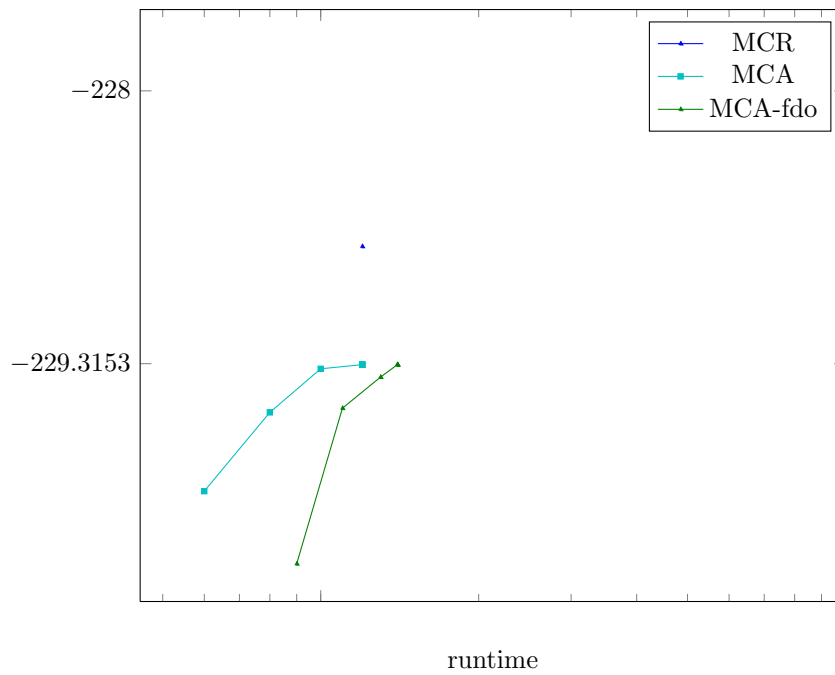


Figure 2114: Runtime results for the instance 8005616 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

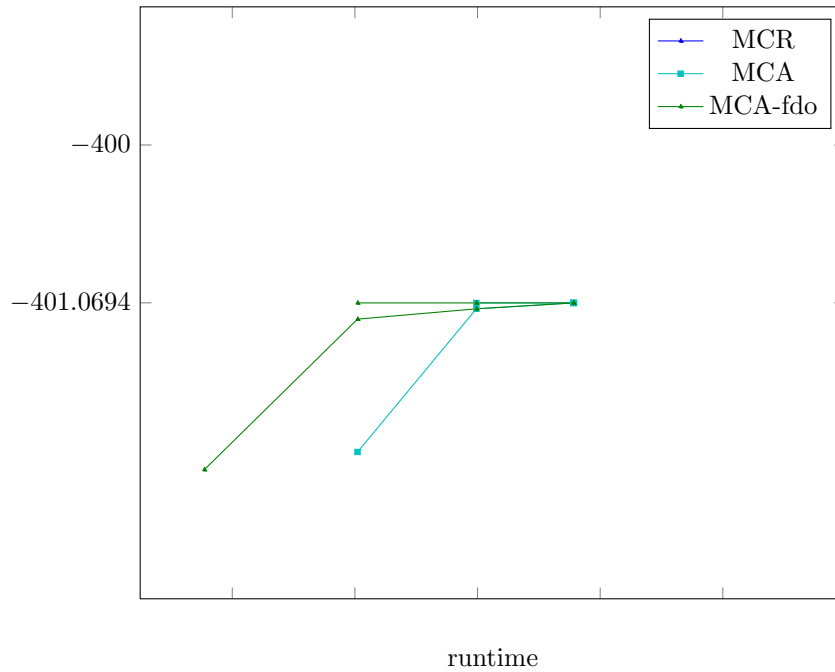


Figure 2115: Runtime results for the instance 8006160 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

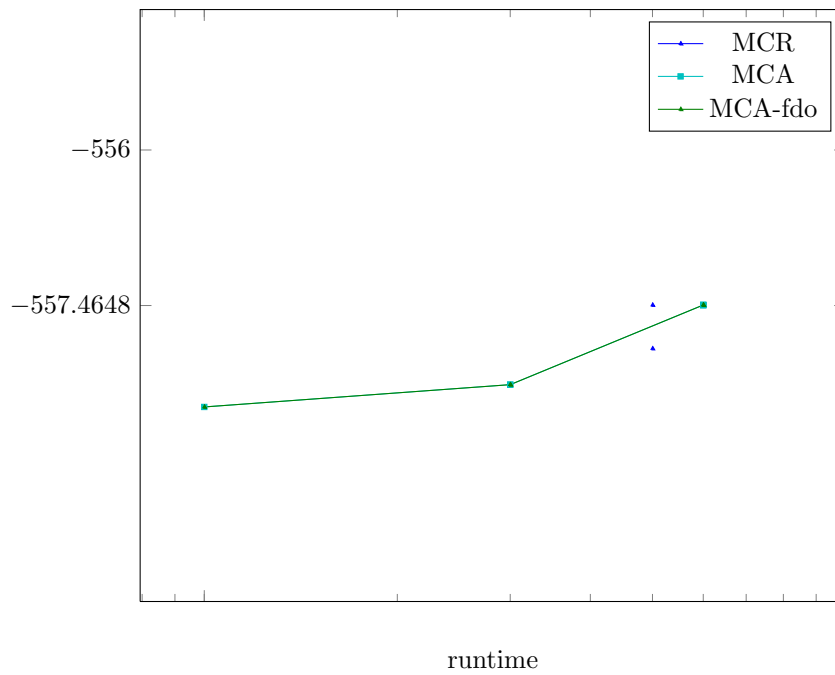


Figure 2116: Runtime results for the instance 8006302 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

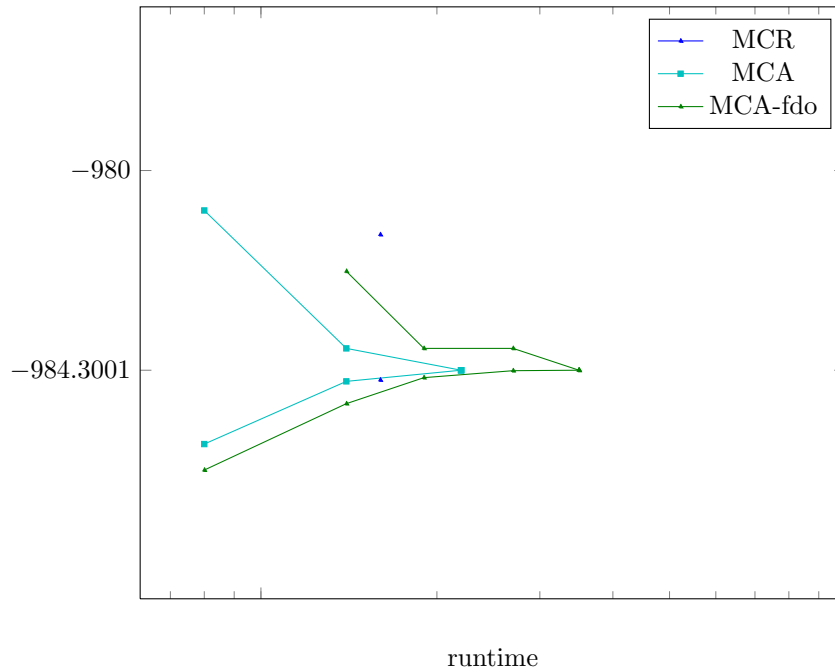


Figure 2117: Runtime results for the instance 8008099 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

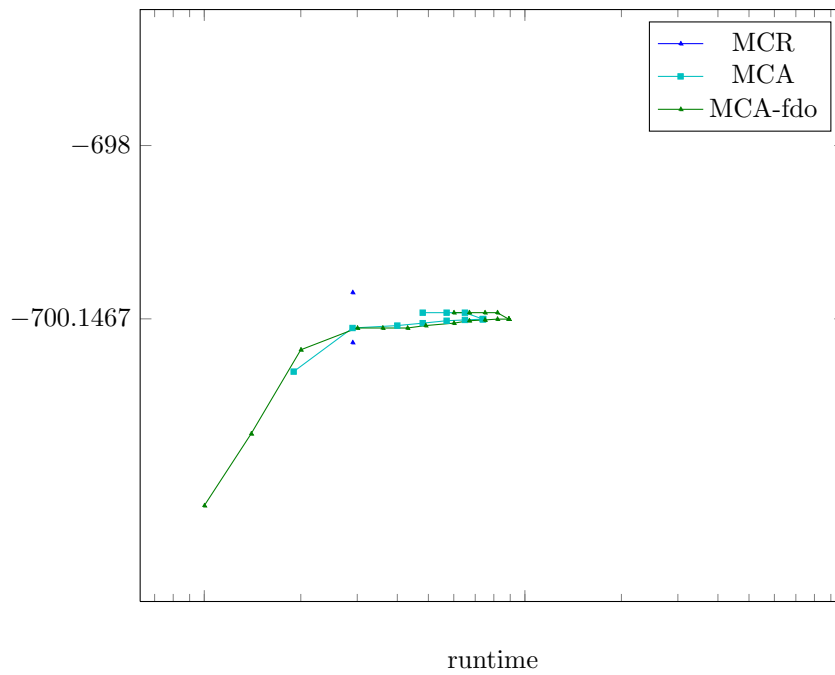


Figure 2118: Runtime results for the instance 8008545 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

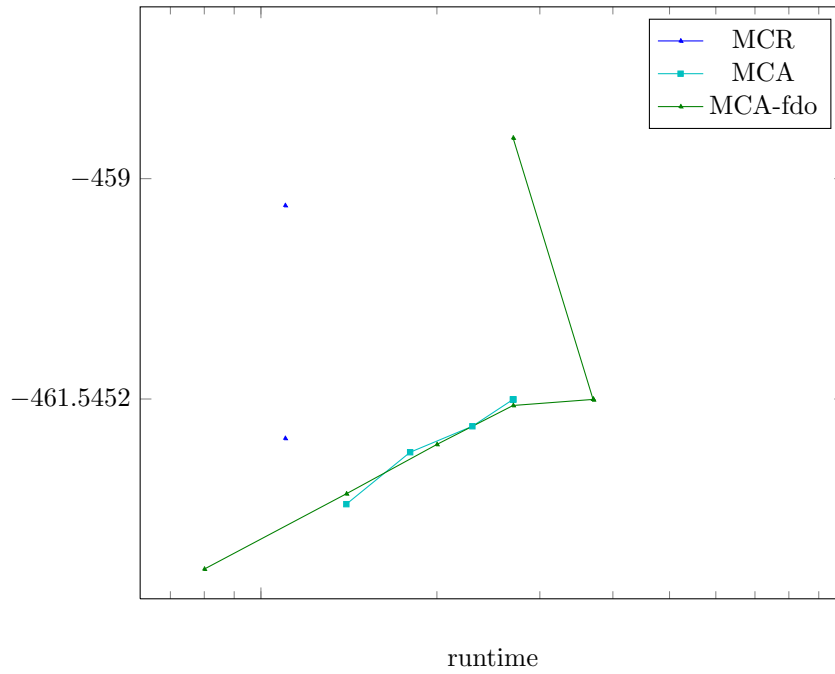


Figure 2119: Runtime results for the instance 8008998 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

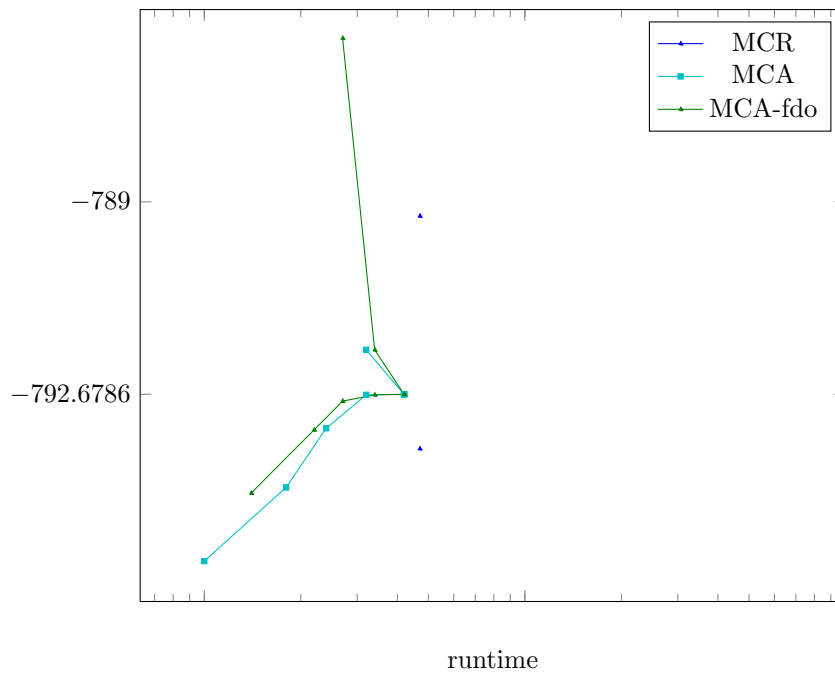


Figure 2120: Runtime results for the instance 9000001 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

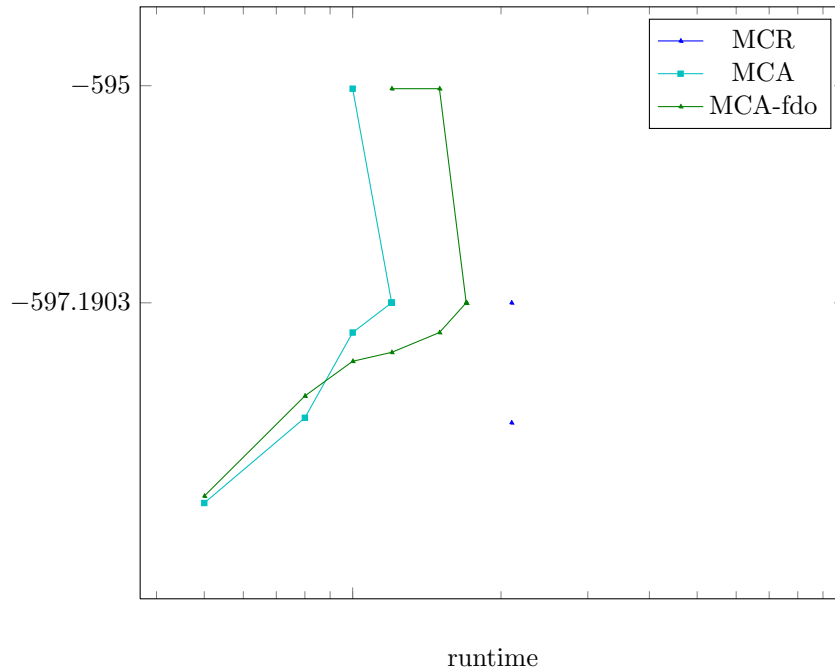


Figure 2121: Runtime results for the instance 9000002 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

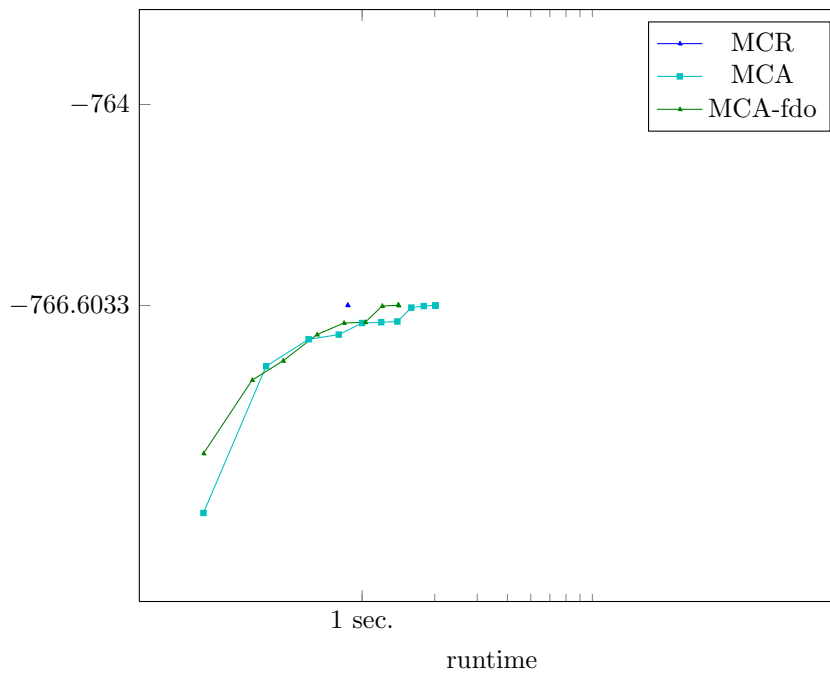


Figure 2122: Runtime results for the instance 9000003 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

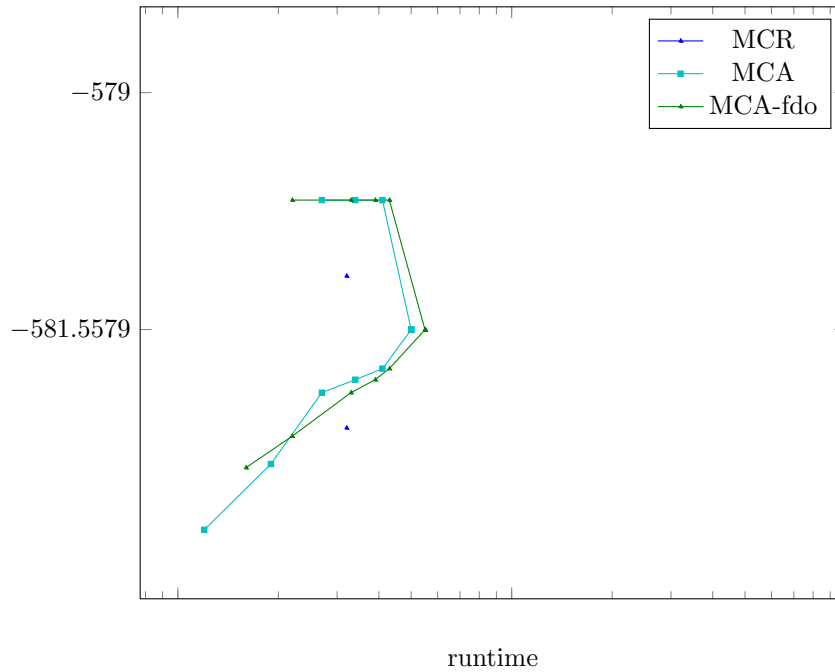


Figure 2123: Runtime results for the instance 9000029 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

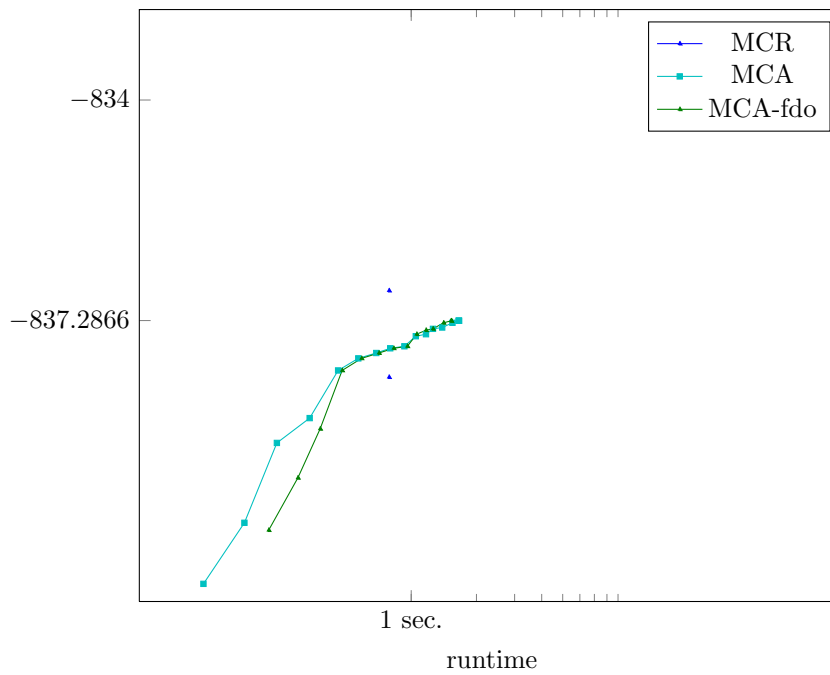


Figure 2124: Runtime results for the instance 9000127 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

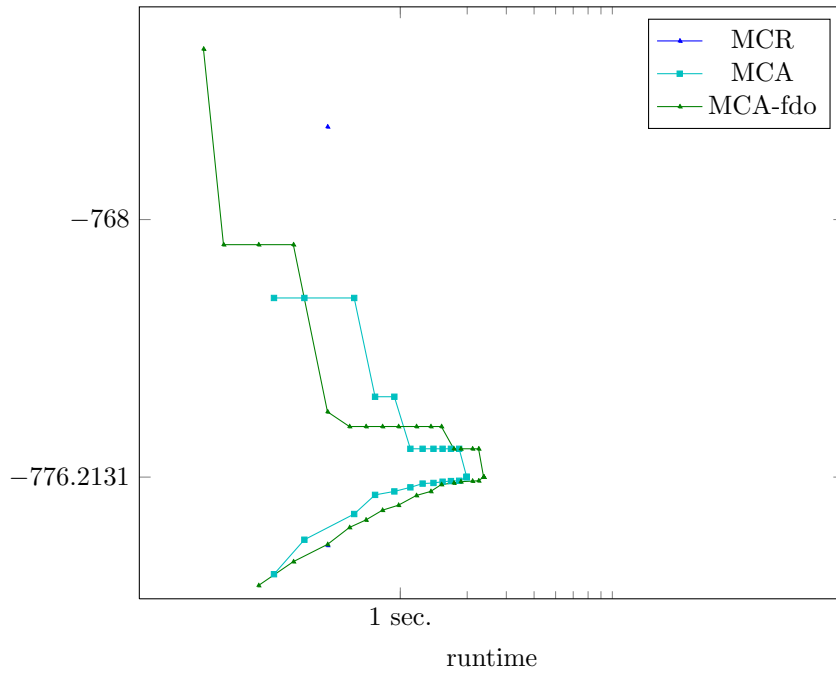


Figure 2125: Runtime results for the instance 9000136 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

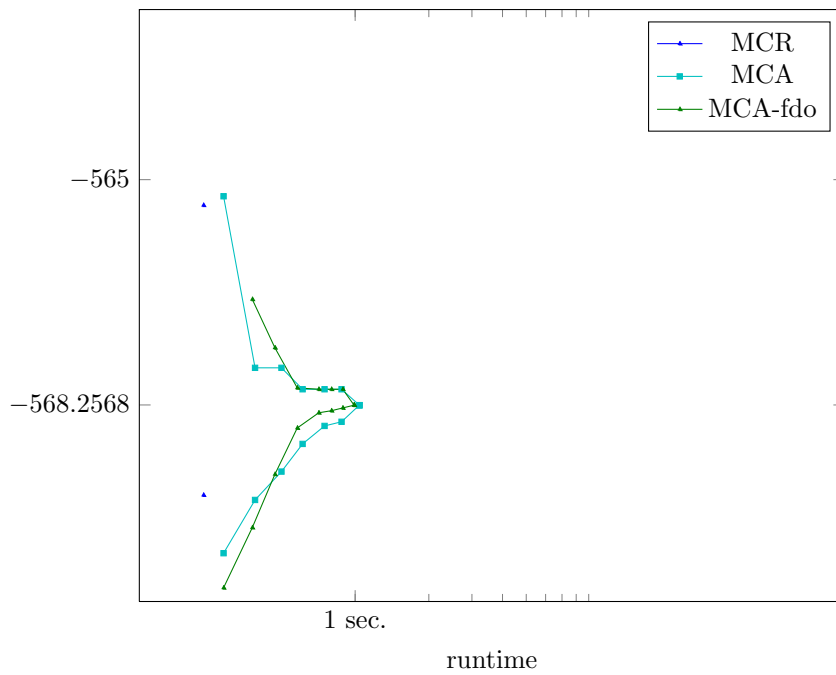


Figure 2126: Runtime results for the instance 9000210 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

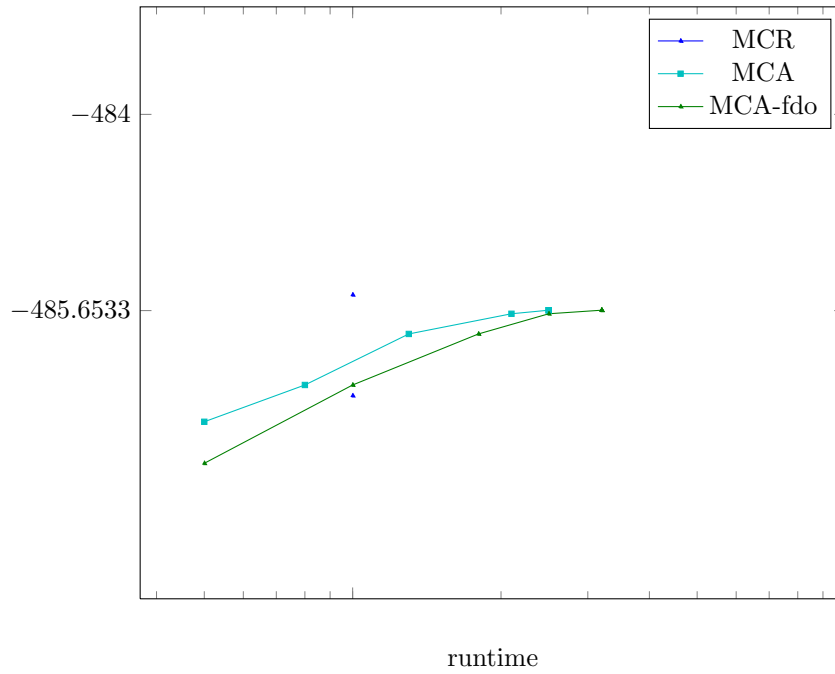


Figure 2127: Runtime results for the instance 9000288 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

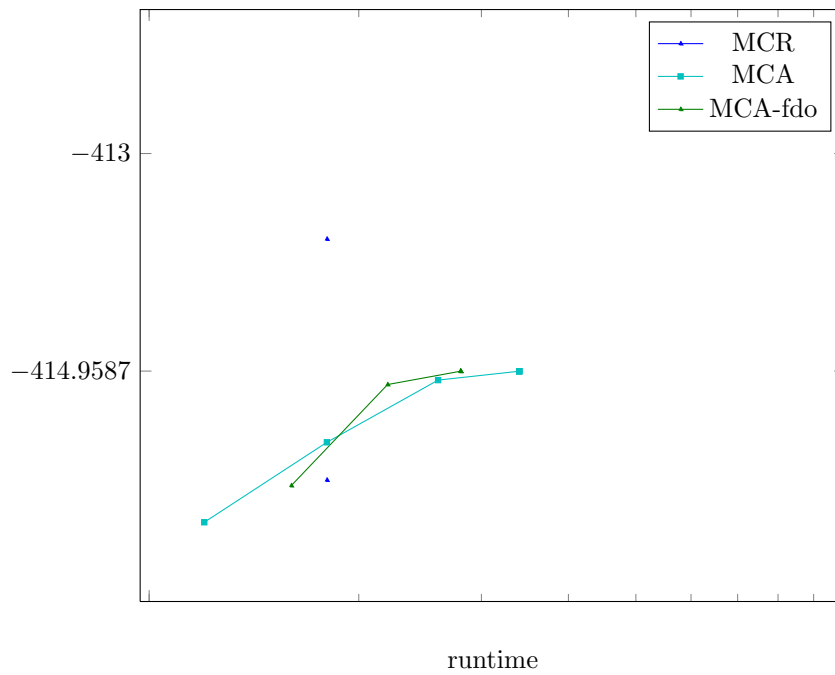


Figure 2128: Runtime results for the instance 9000395 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

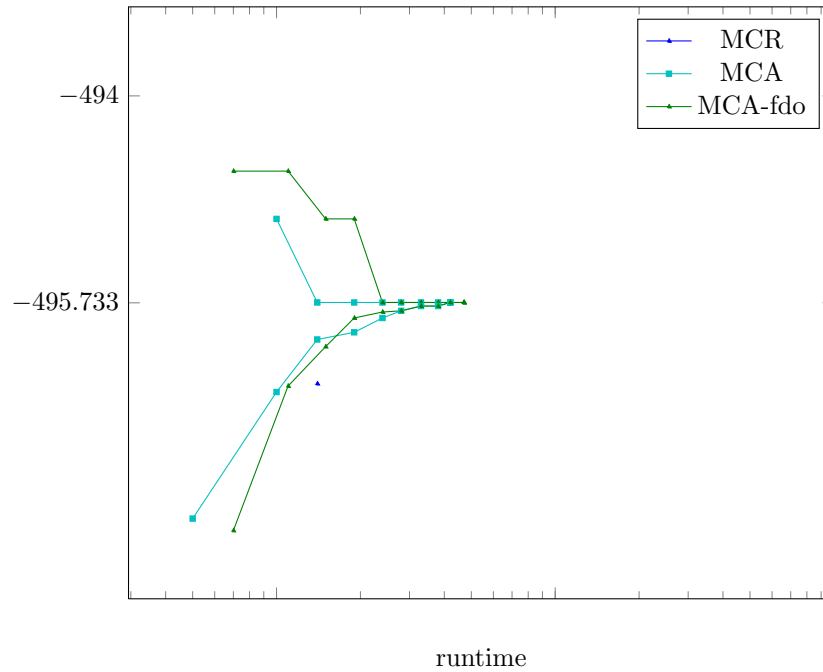


Figure 2129: Runtime results for the instance 9000747 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

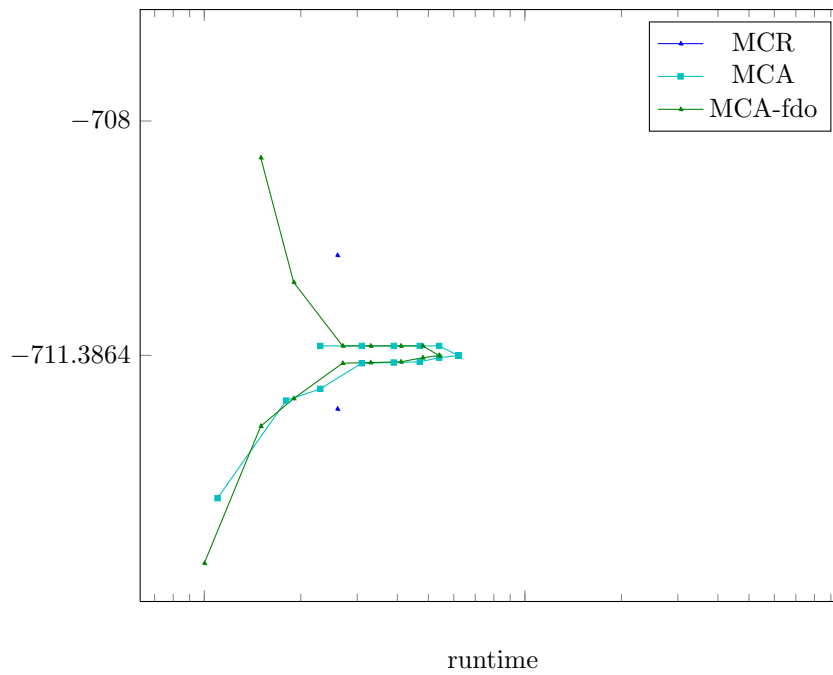


Figure 2130: Runtime results for the instance 9000868 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

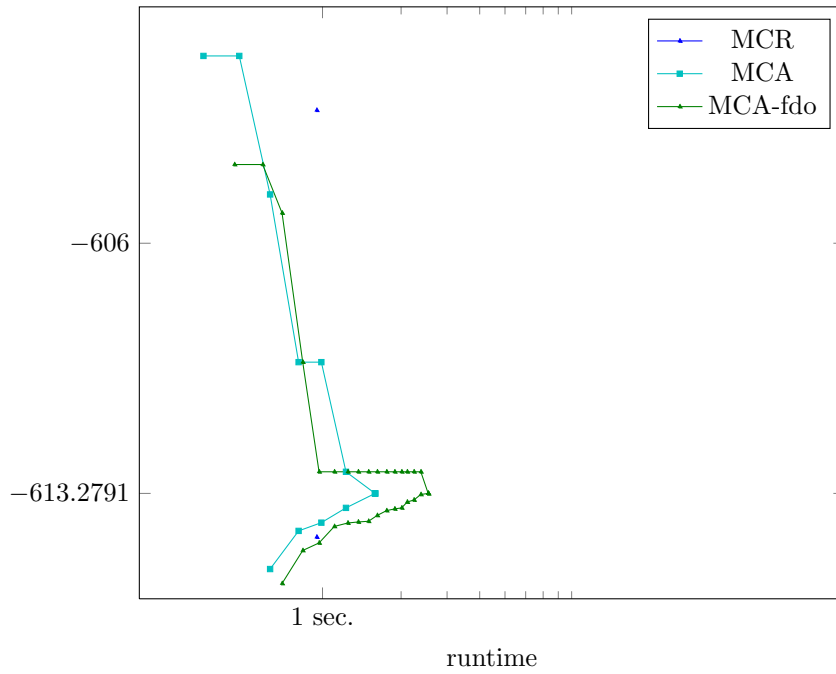


Figure 2131: Runtime results for the instance 9000875 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

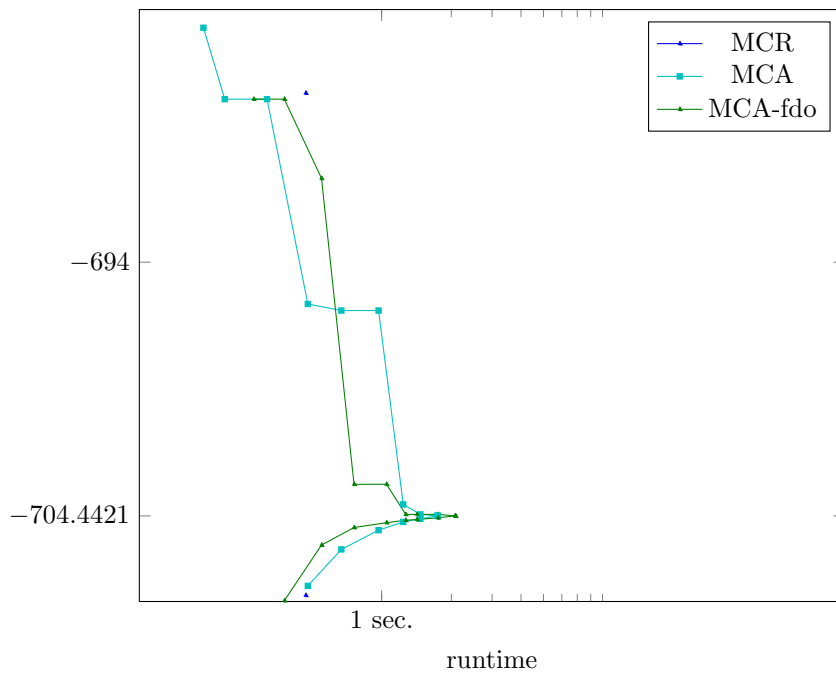


Figure 2132: Runtime results for the instance 9000928 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

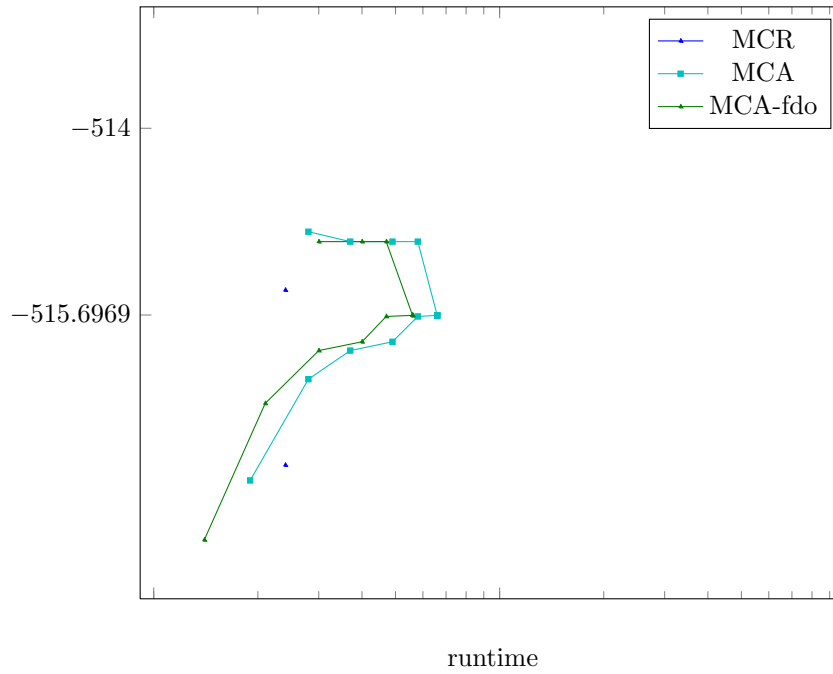


Figure 2133: Runtime results for the instance 9000933 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

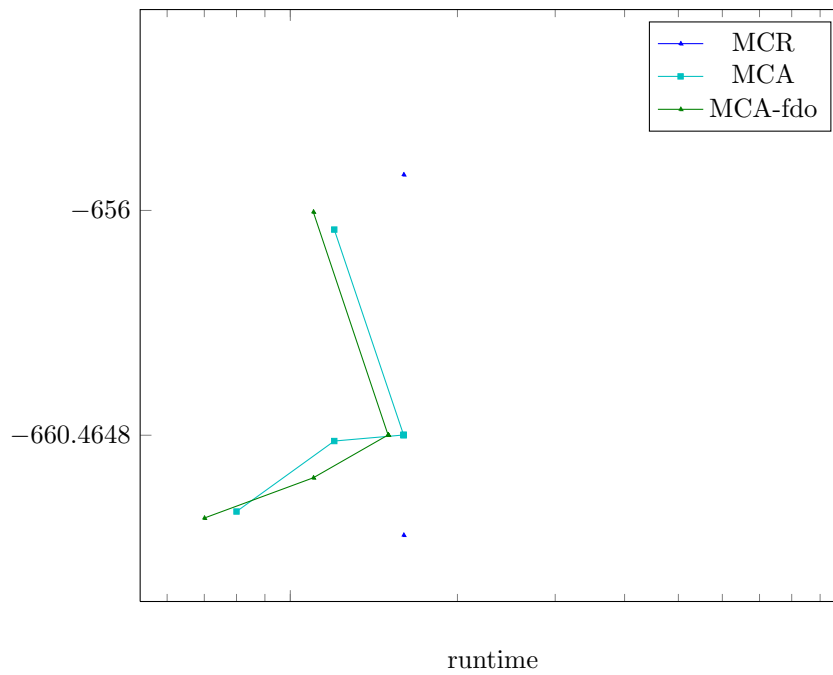


Figure 2134: Runtime results for the instance 9000989 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

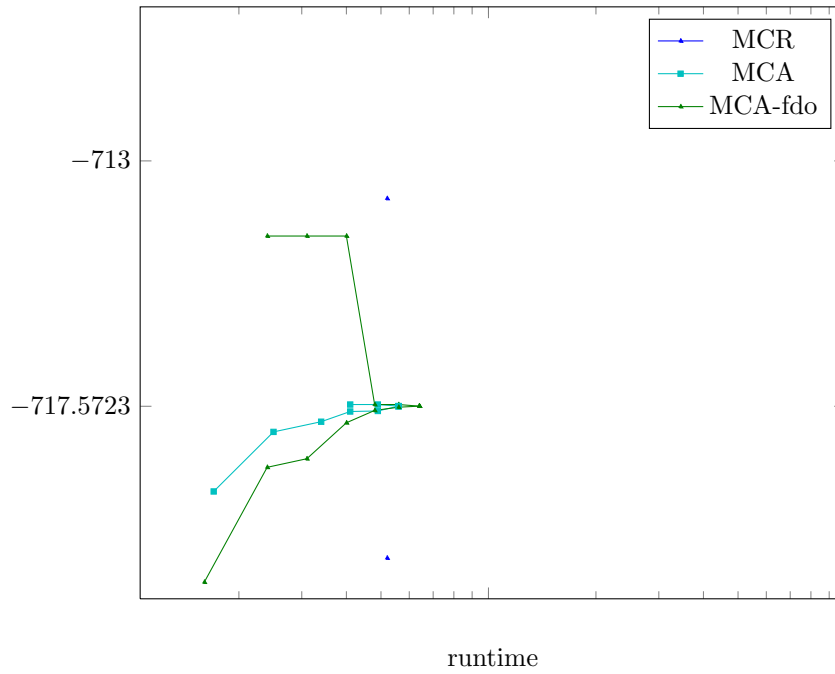


Figure 2135: Runtime results for the instance 9001001 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

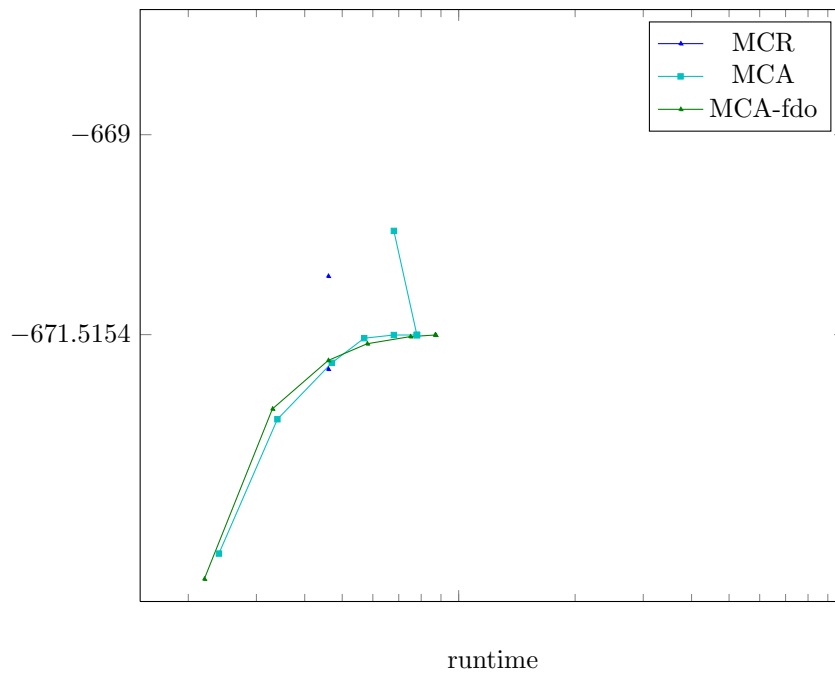


Figure 2136: Runtime results for the instance 9001034 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

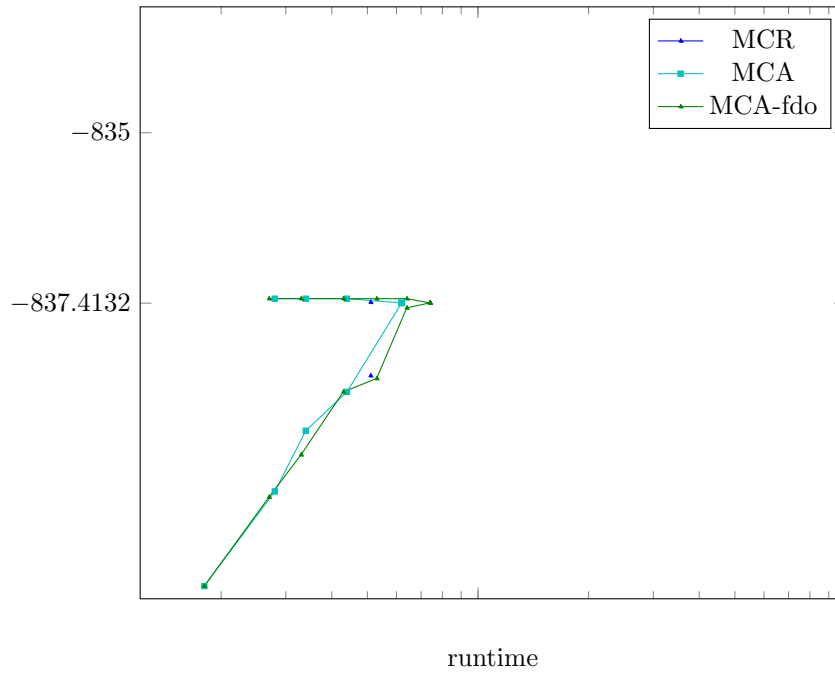


Figure 2139: Runtime results for the instance 9001300 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

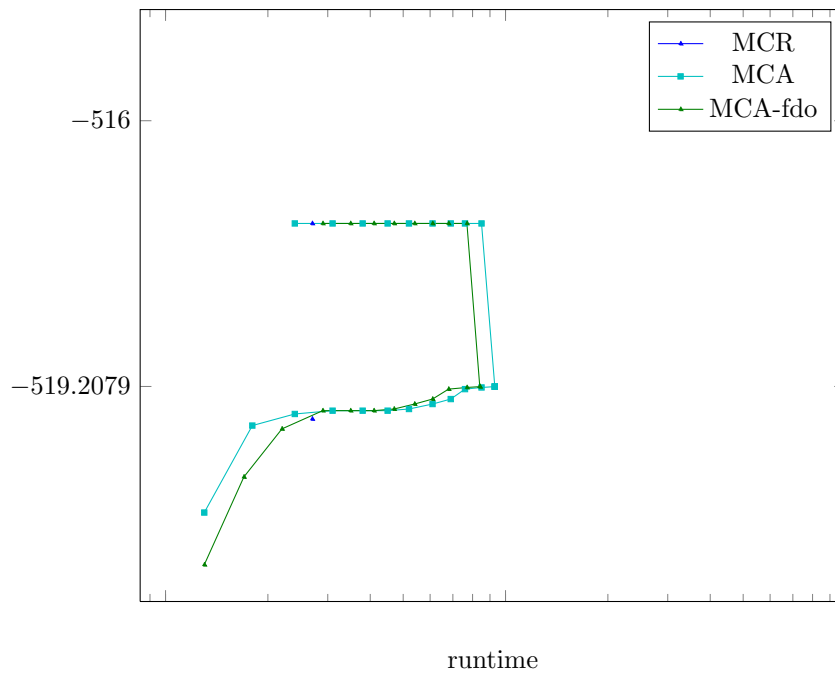


Figure 2140: Runtime results for the instance 9001317 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

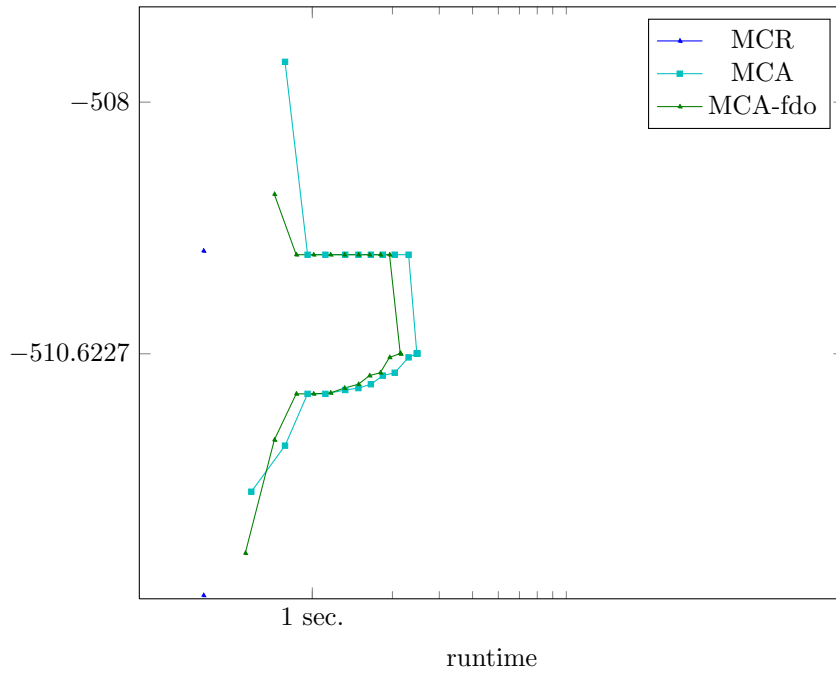
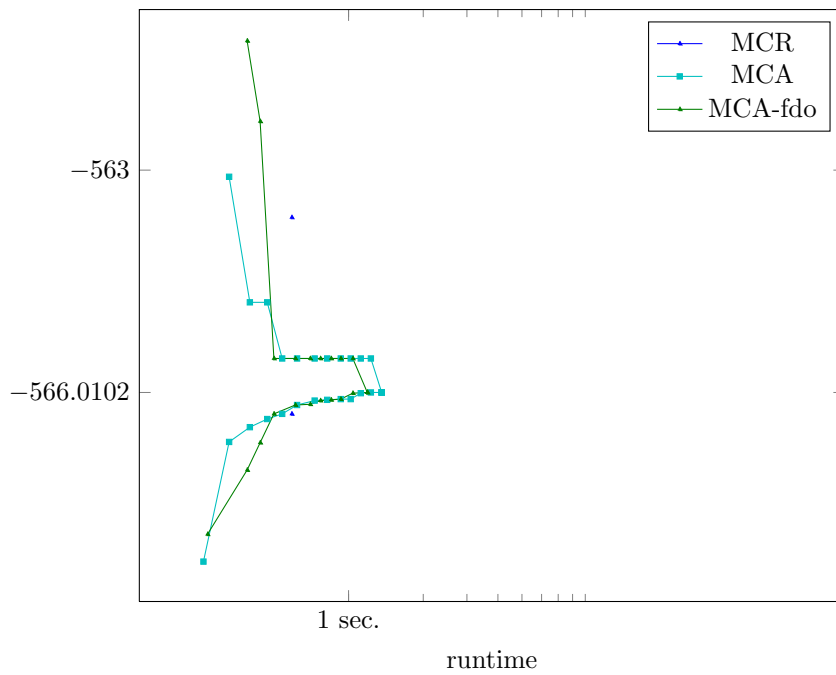


Figure 2141: Runtime results for the instance 9001619 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



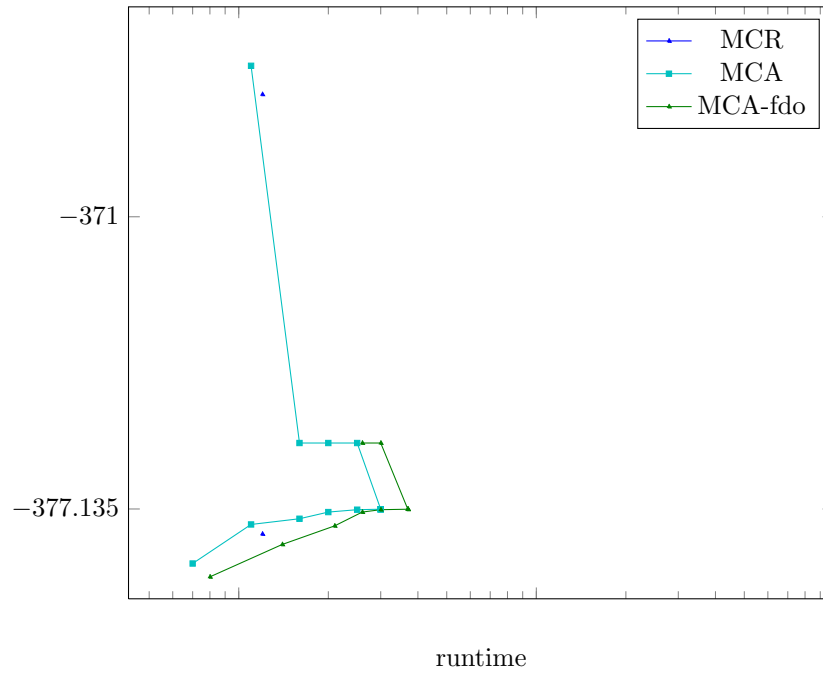


Figure 2143: Runtime results for the instance 9001991 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

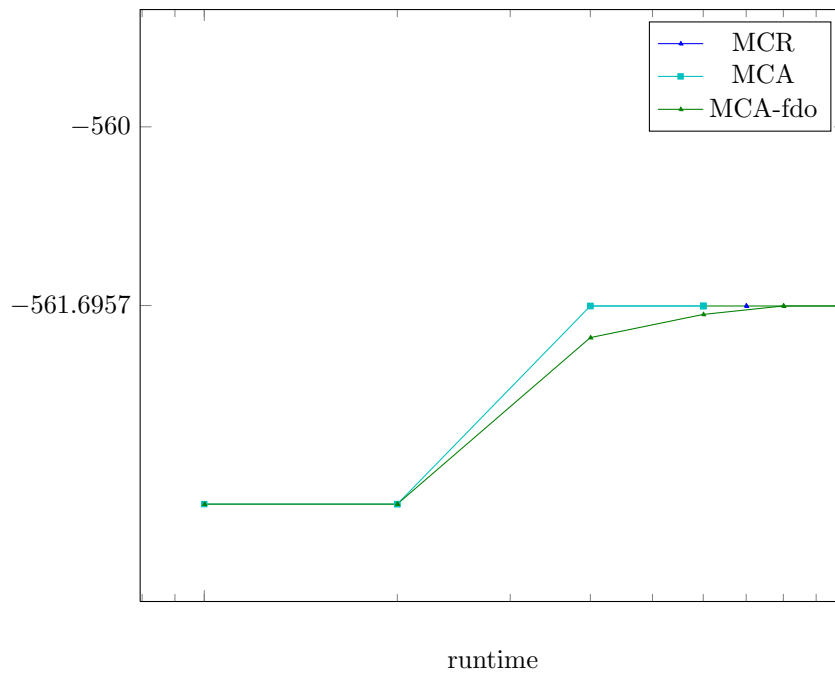


Figure 2144: Runtime results for the instance 9002004 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

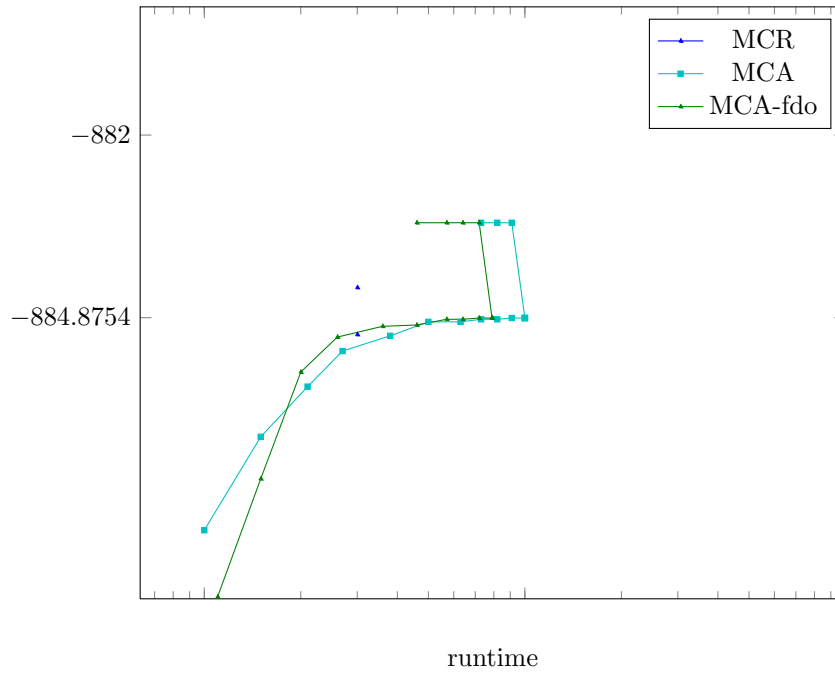


Figure 2145: Runtime results for the instance 9002021 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

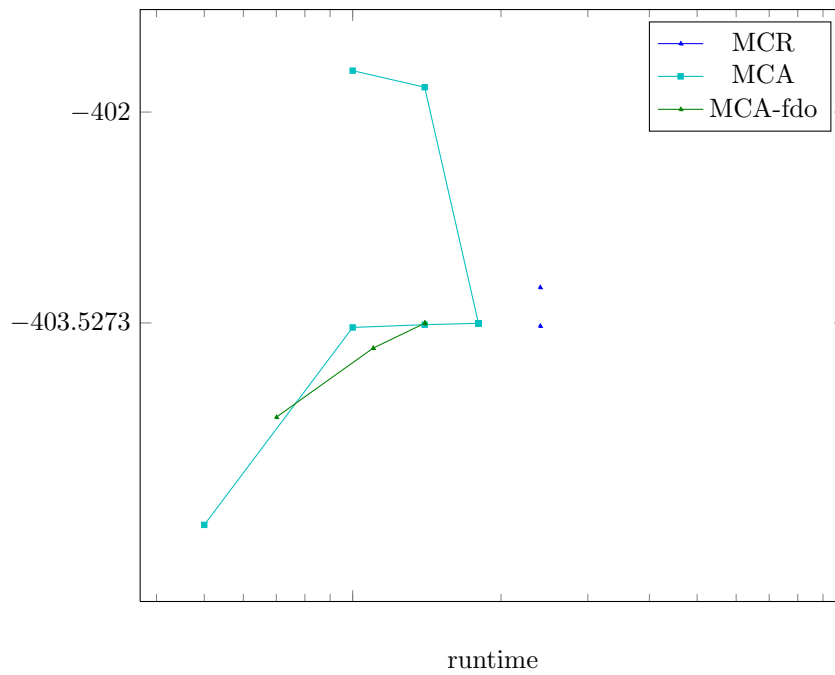


Figure 2146: Runtime results for the instance 9002090 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

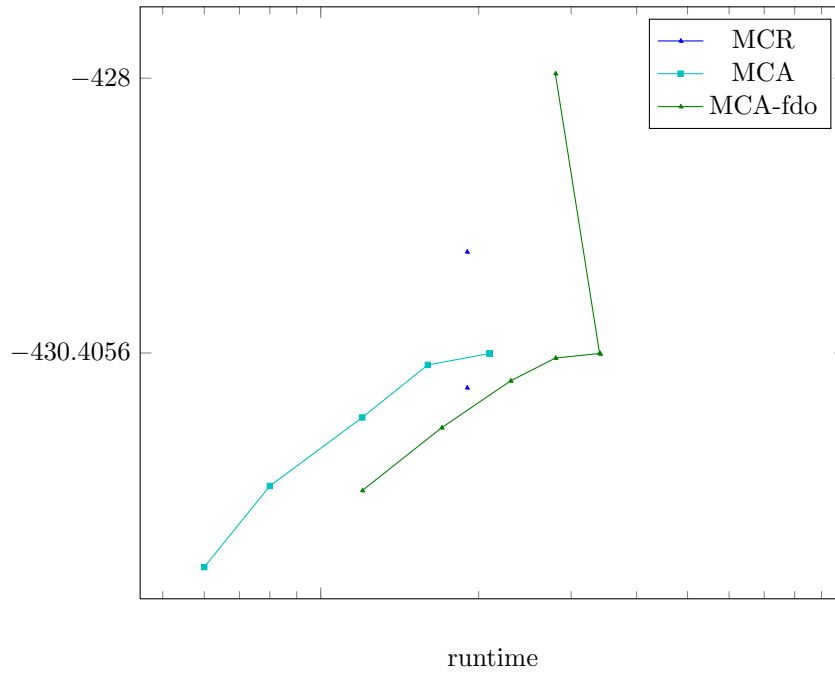


Figure 2147: Runtime results for the instance 9002114 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

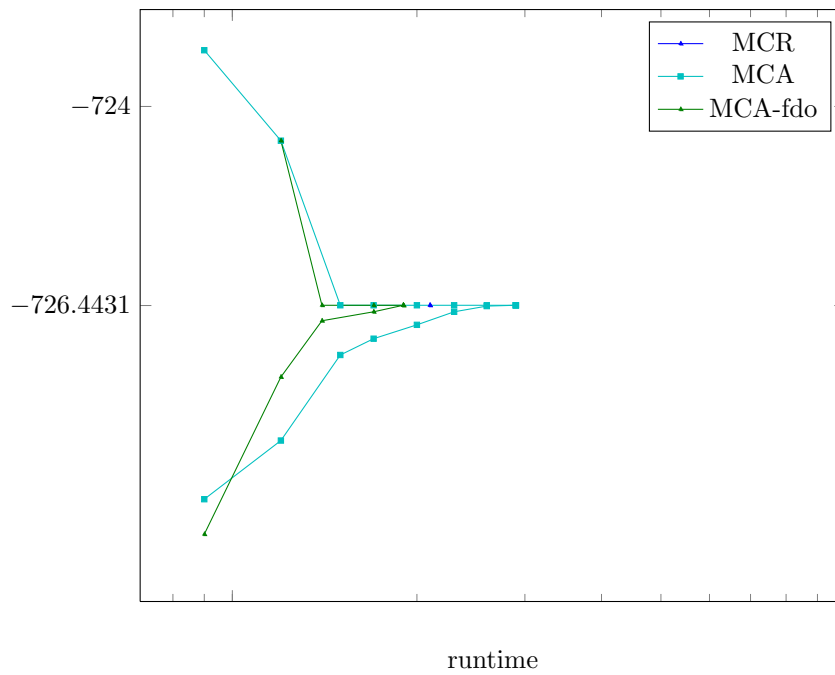


Figure 2148: Runtime results for the instance 9002474 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

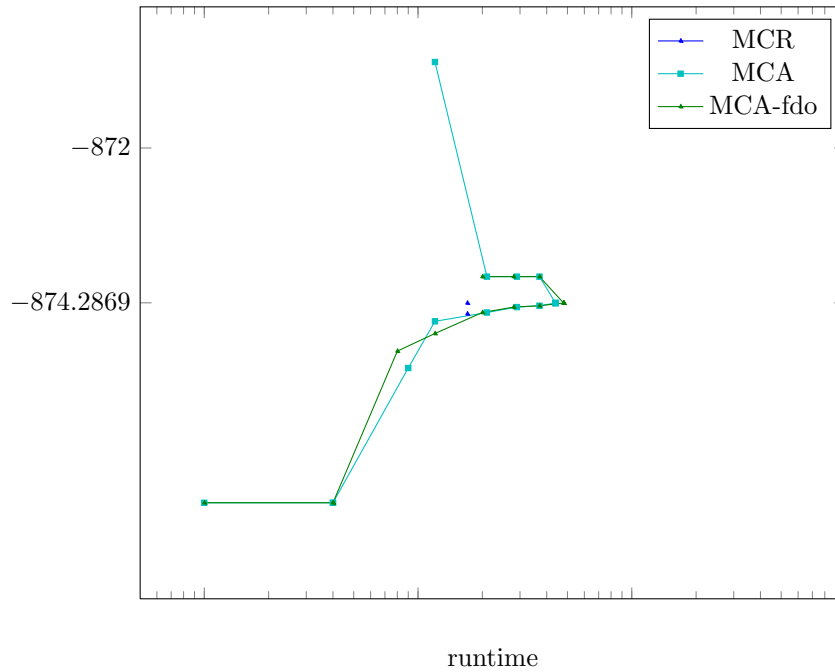


Figure 2149: Runtime results for the instance 9002577 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

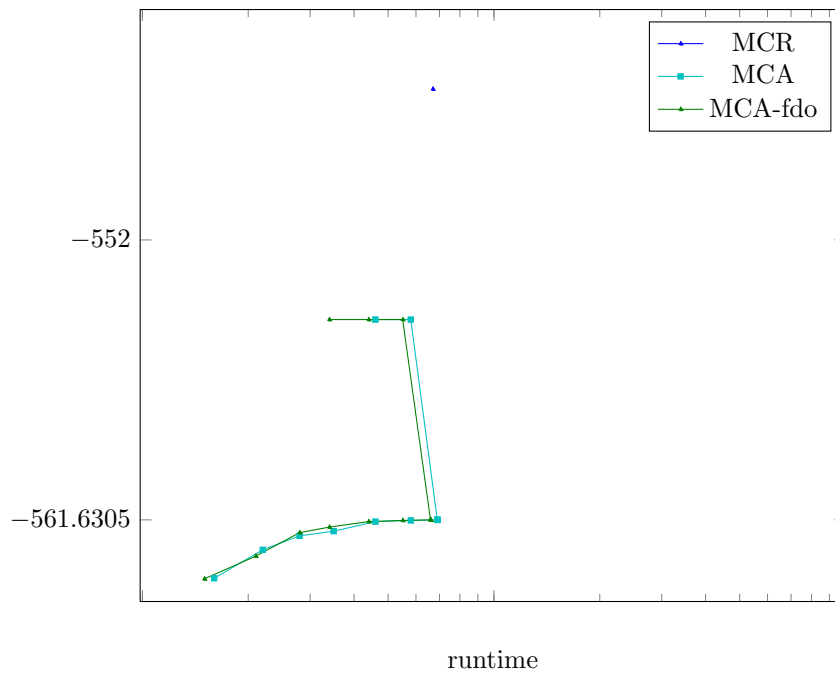


Figure 2150: Runtime results for the instance 9002827 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

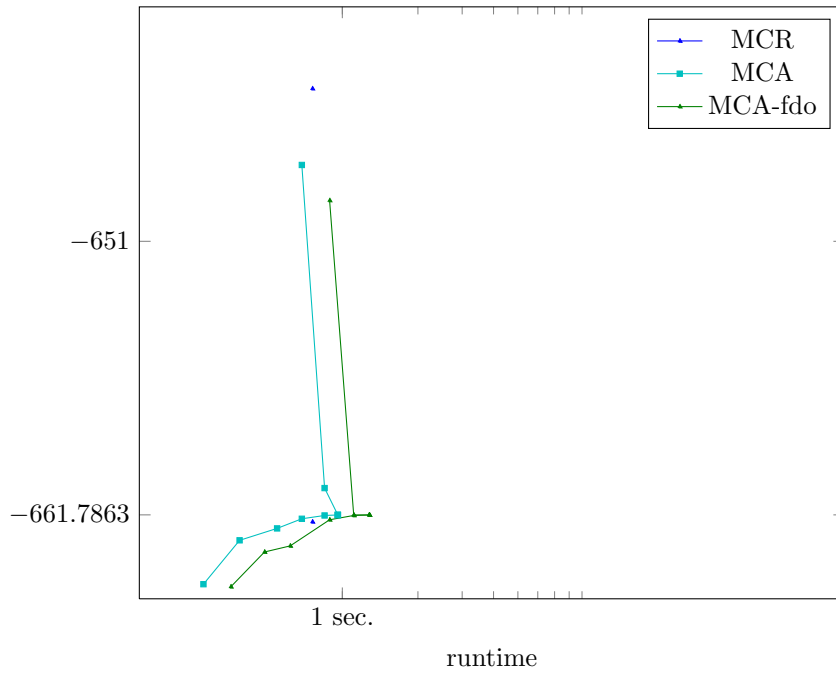


Figure 2151: Runtime results for the instance 9002861 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

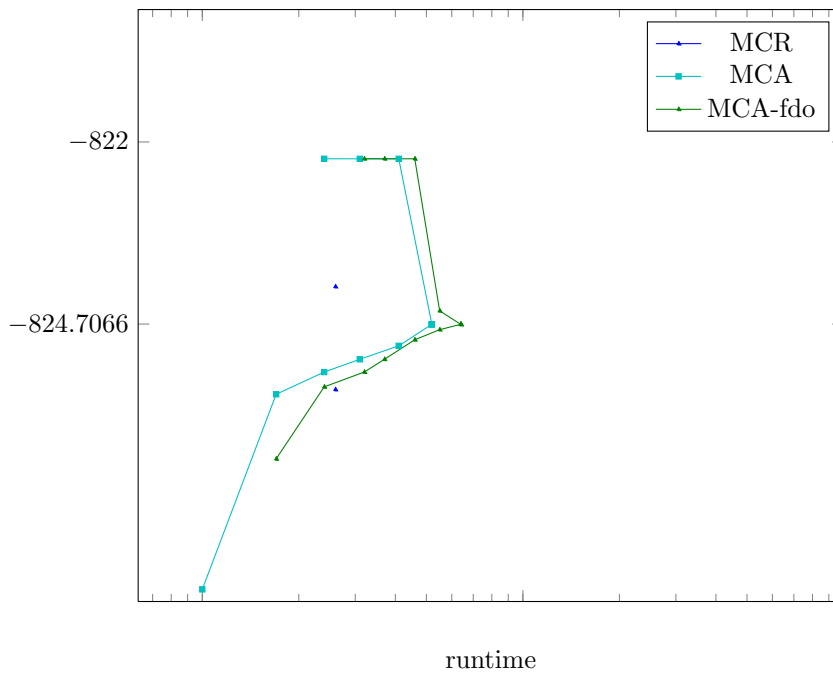


Figure 2152: Runtime results for the instance 9002972 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

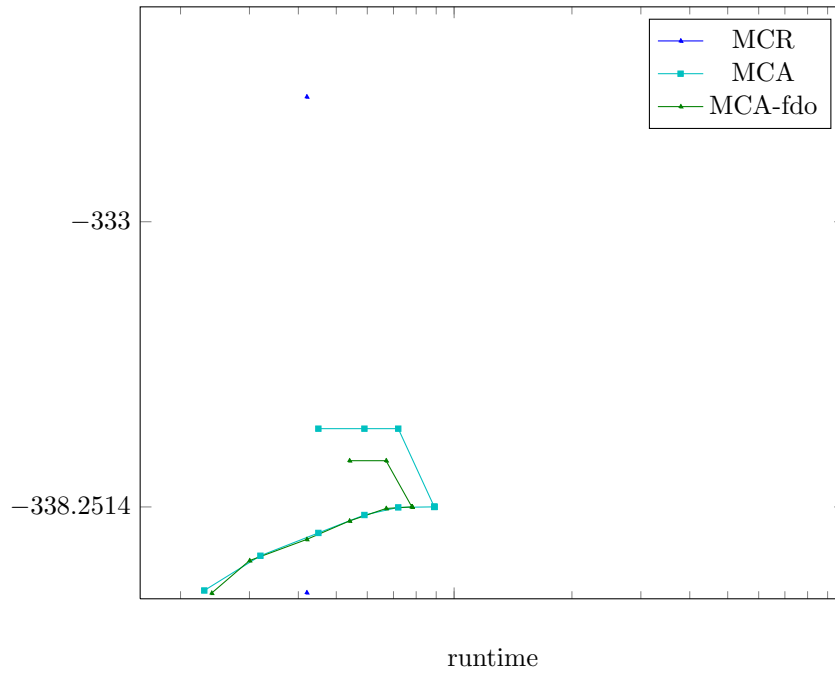


Figure 2153: Runtime results for the instance 9003116 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

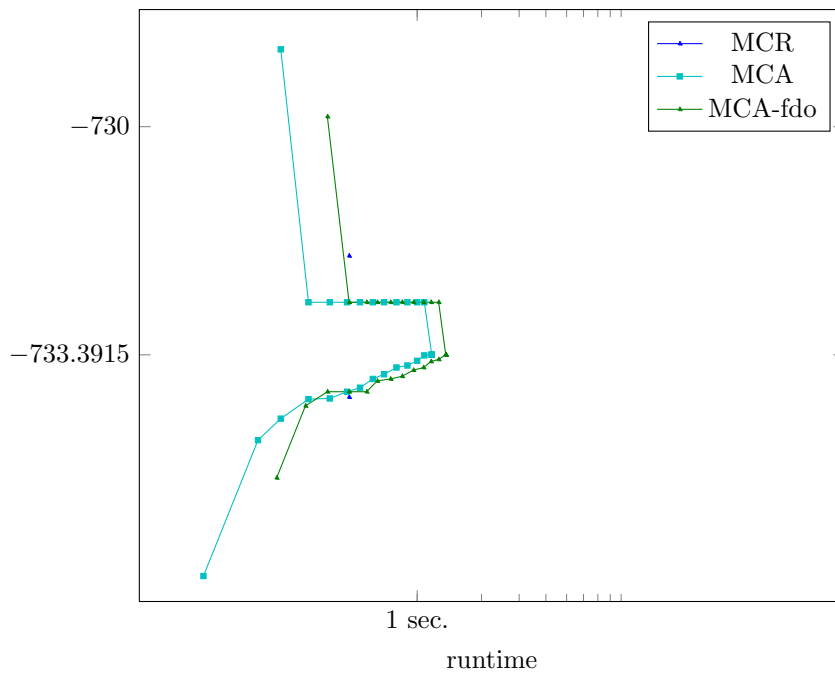


Figure 2154: Runtime results for the instance 9003135 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

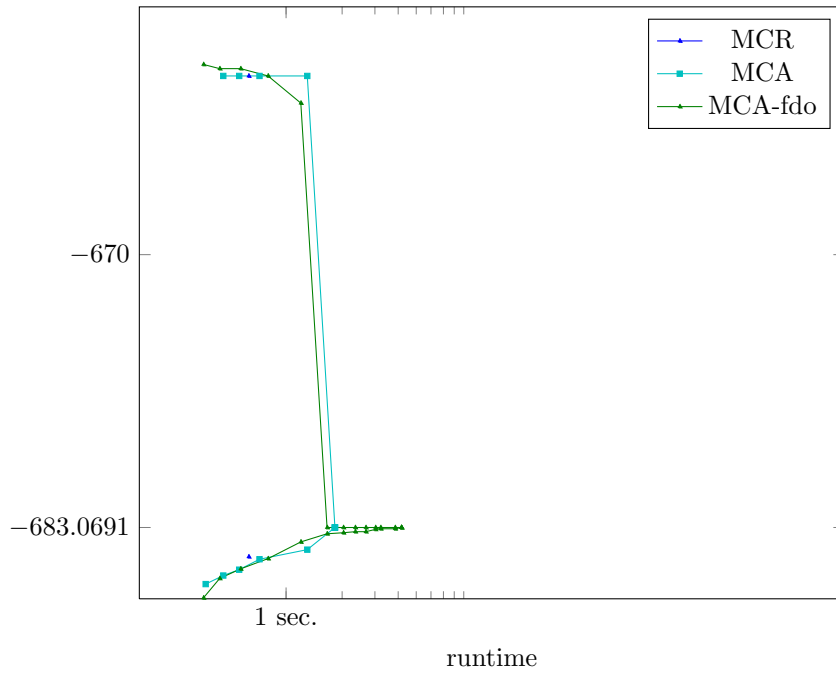


Figure 2155: Runtime results for the instance 9003234 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

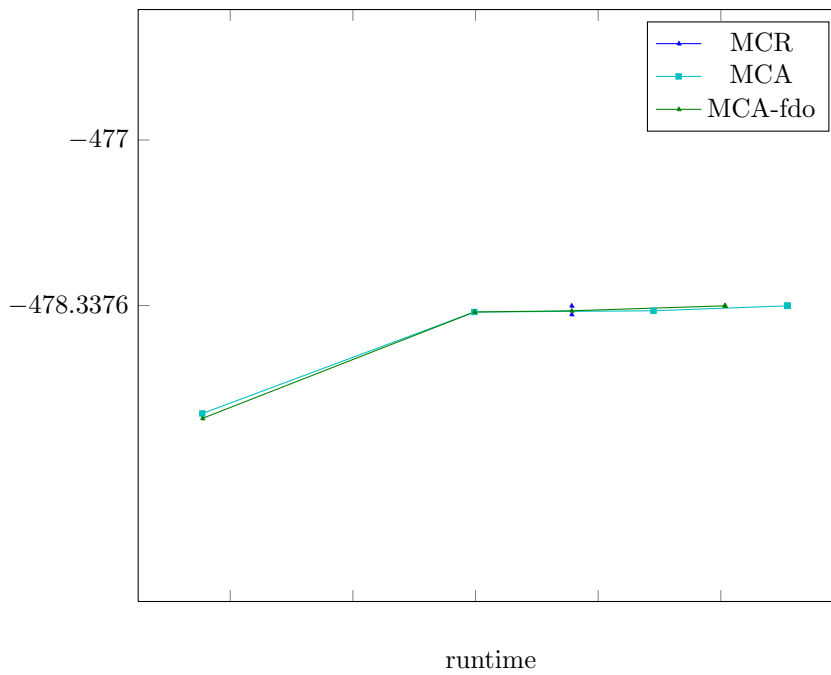


Figure 2156: Runtime results for the instance 9003250 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

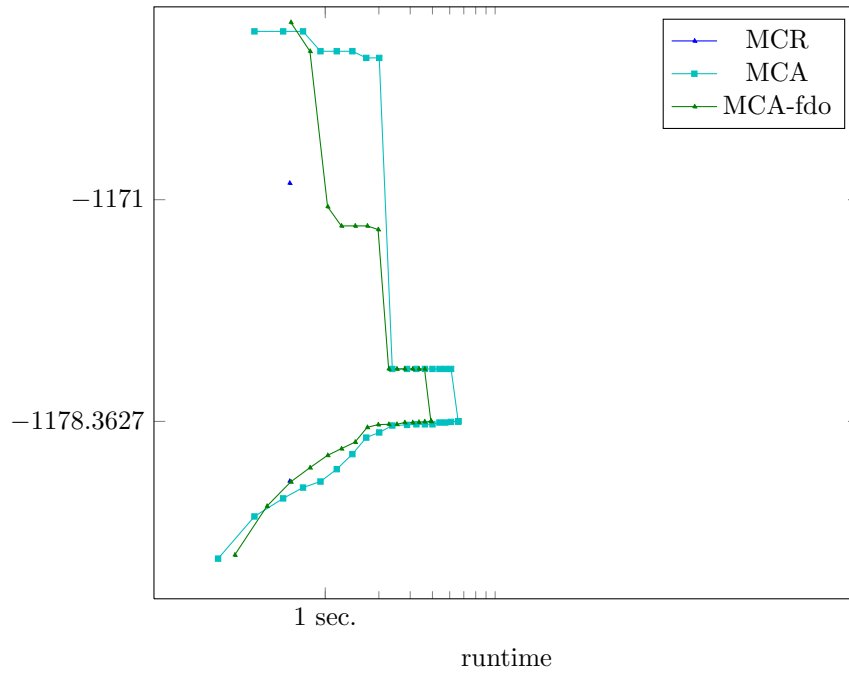


Figure 2157: Runtime results for the instance 9003301 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

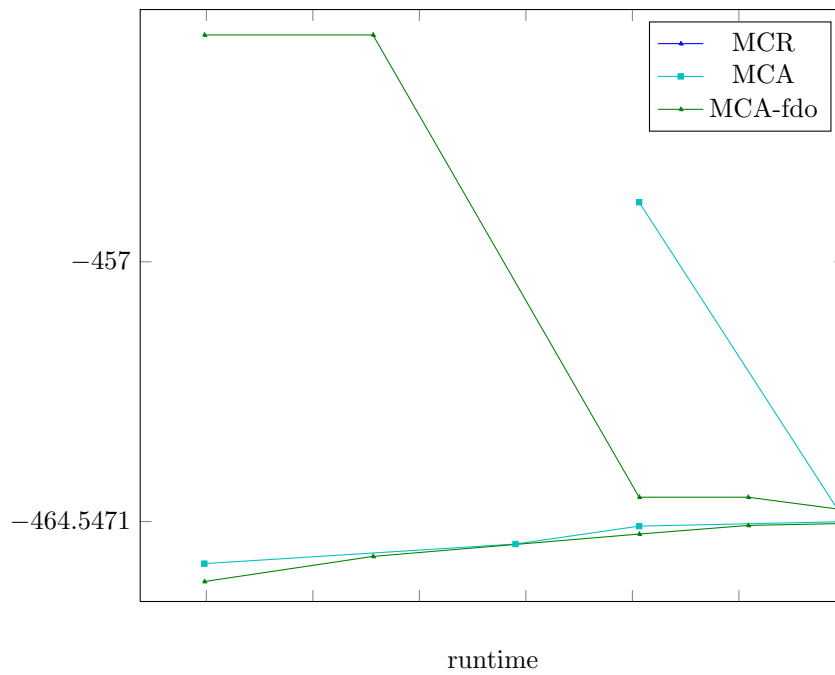


Figure 2158: Runtime results for the instance 9003333 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

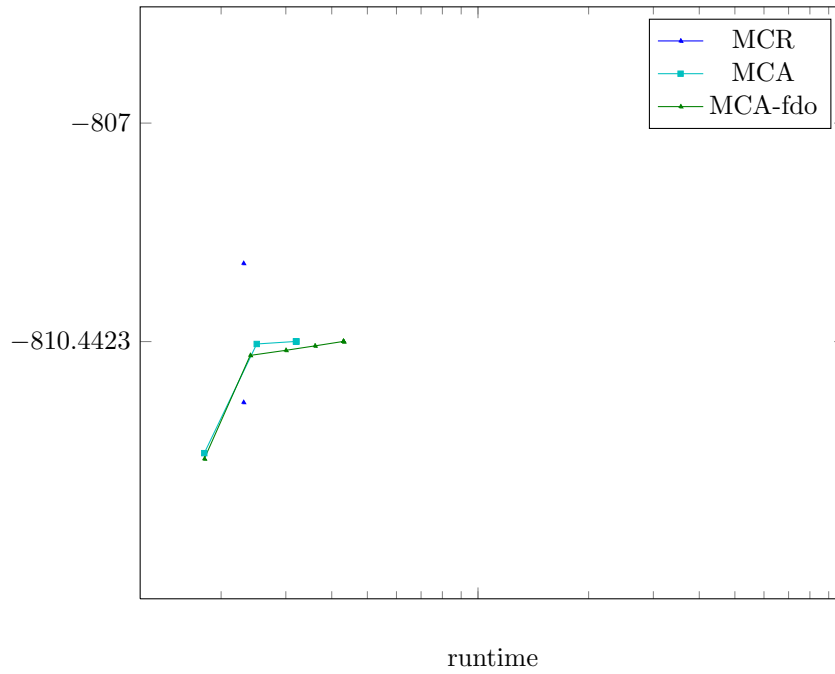


Figure 2159: Runtime results for the instance 9003339 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

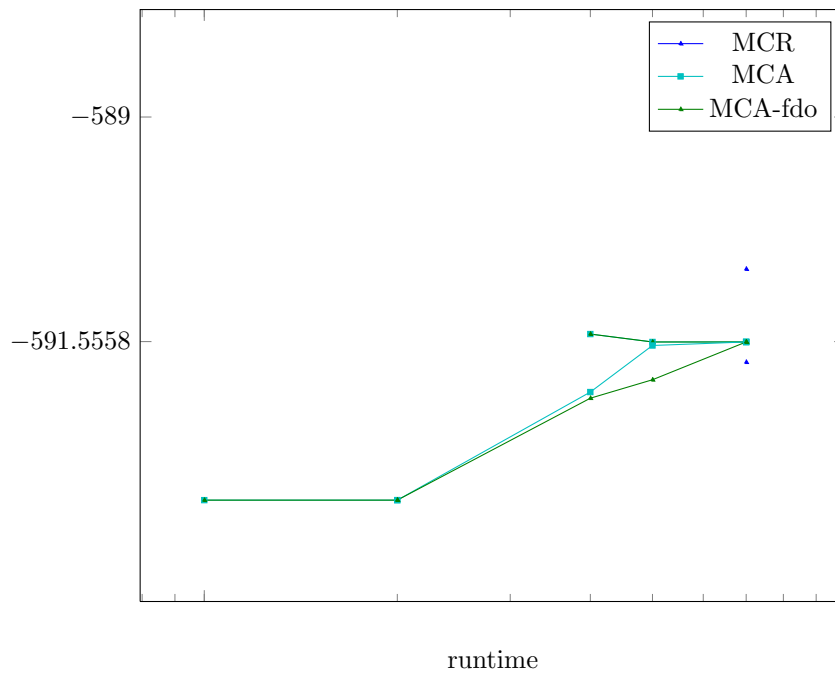


Figure 2160: Runtime results for the instance 9003378 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

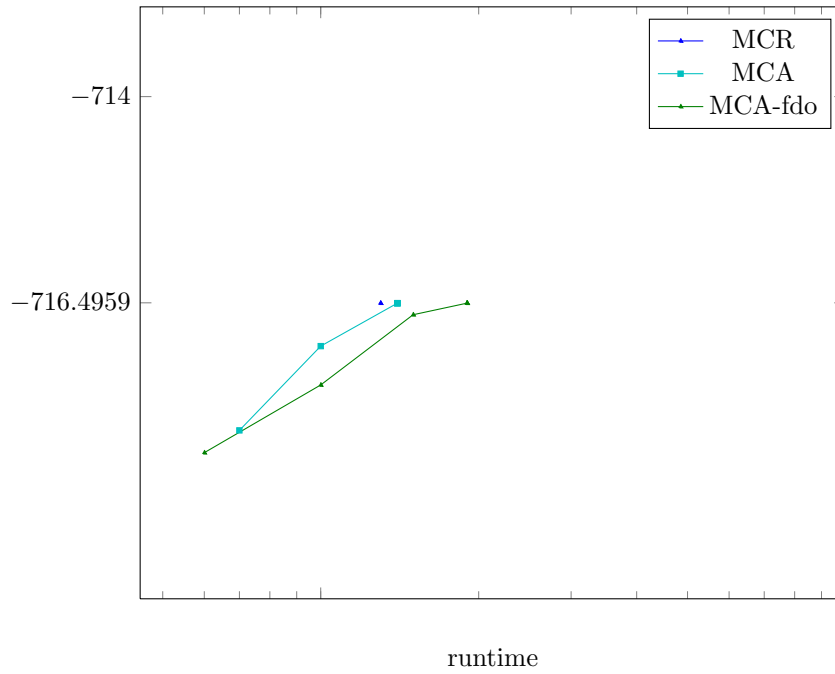


Figure 2161: Runtime results for the instance 9003423 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

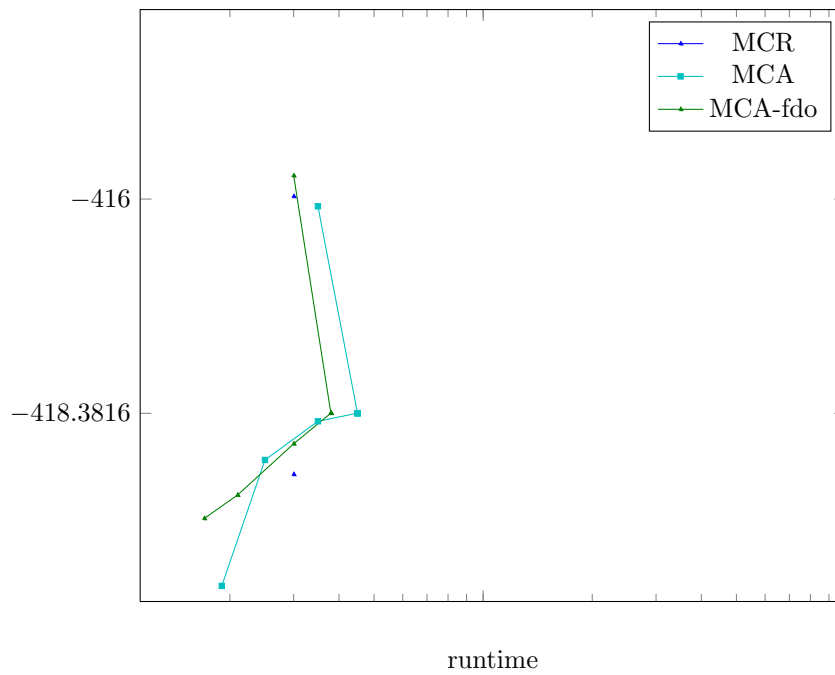


Figure 2162: Runtime results for the instance 9003585 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

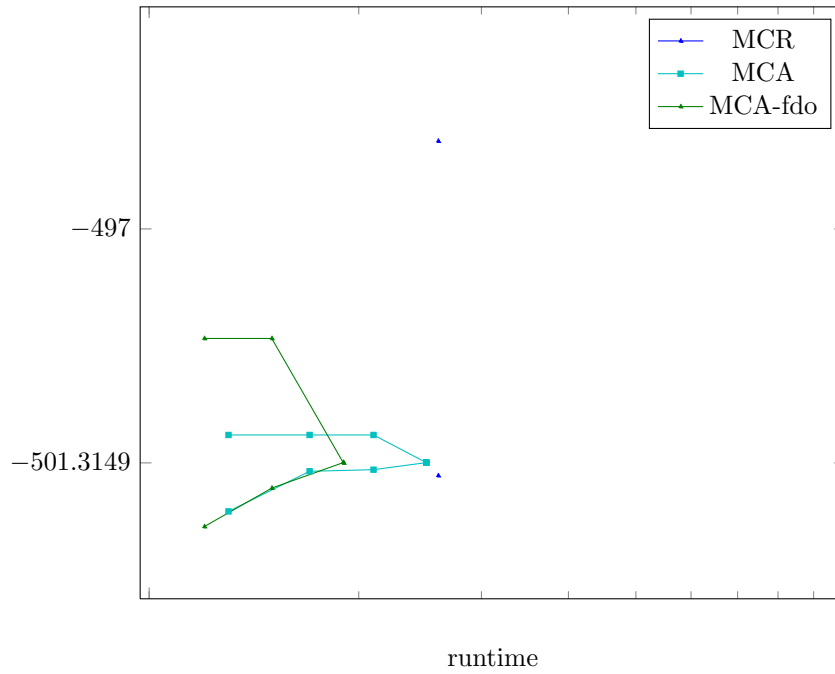
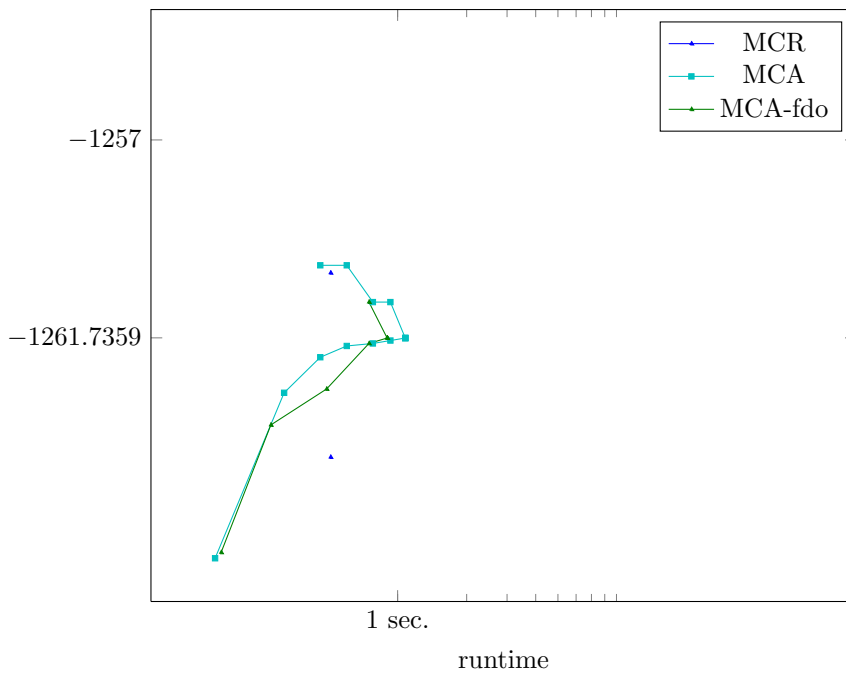


Figure 2163: Runtime results for the instance 9003635 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.



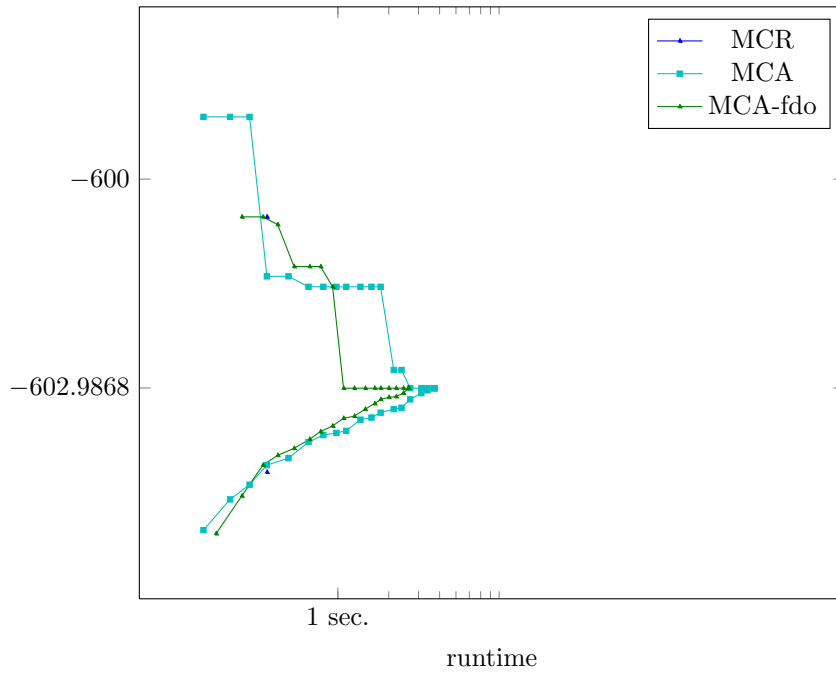


Figure 2165: Runtime results for the instance 9004060 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

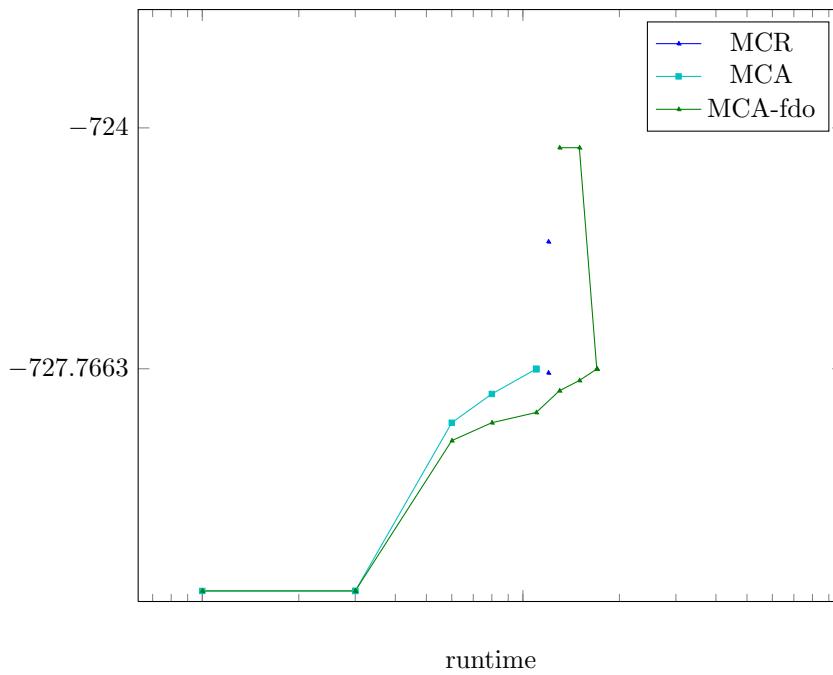


Figure 2166: Runtime results for the instance 9004066 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

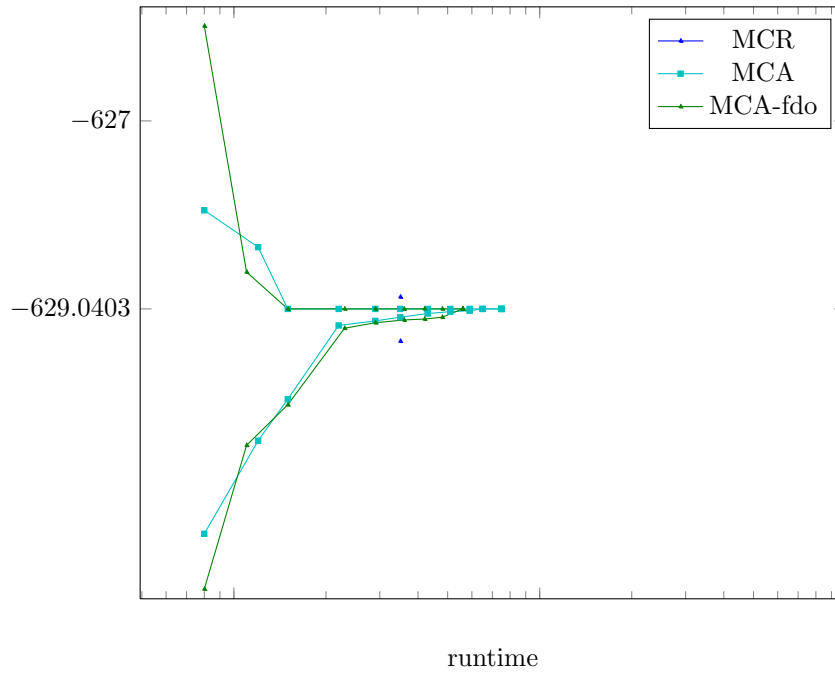


Figure 2167: Runtime results for the instance 9004070 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

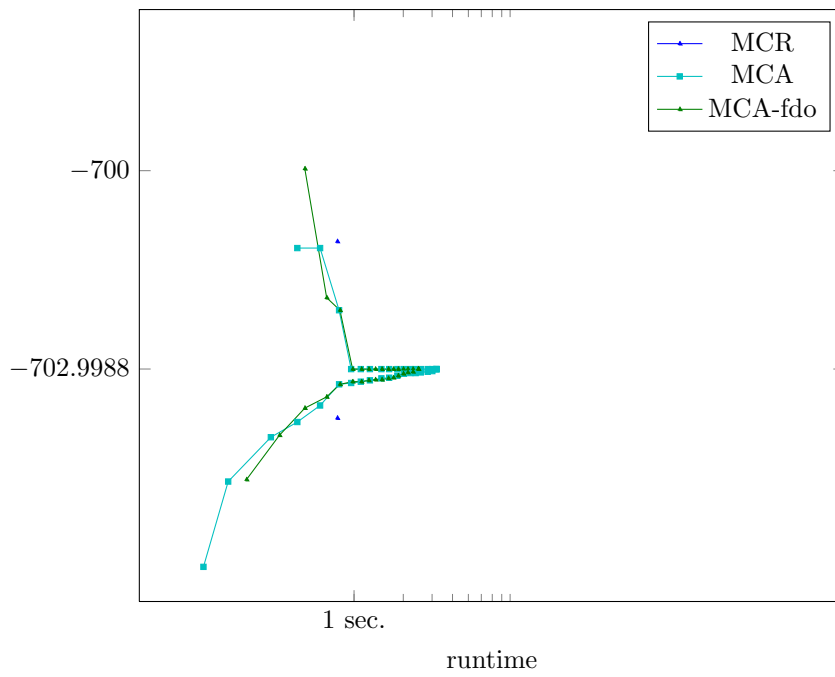


Figure 2168: Runtime results for the instance 9004199 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

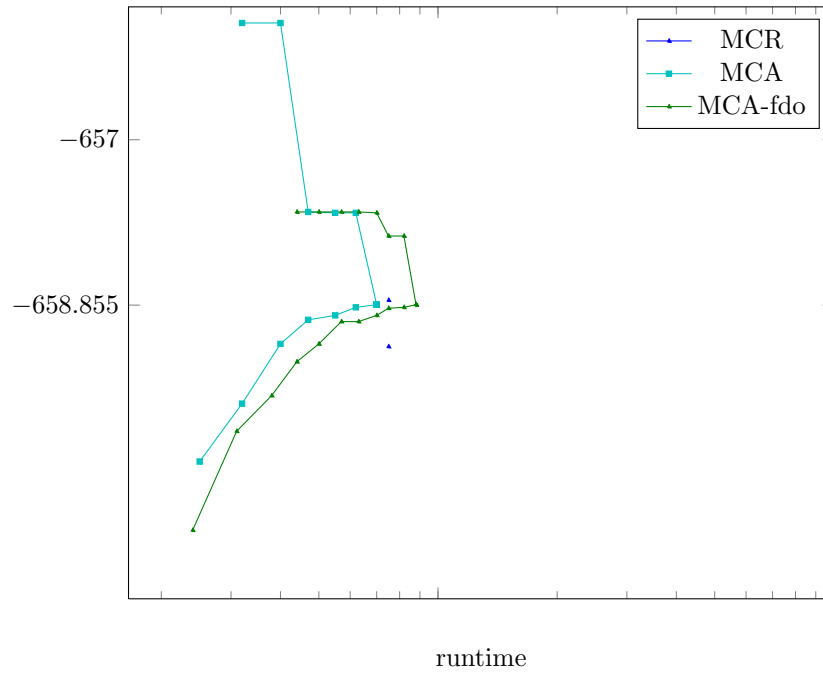


Figure 2171: Runtime results for the instance 9004353 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

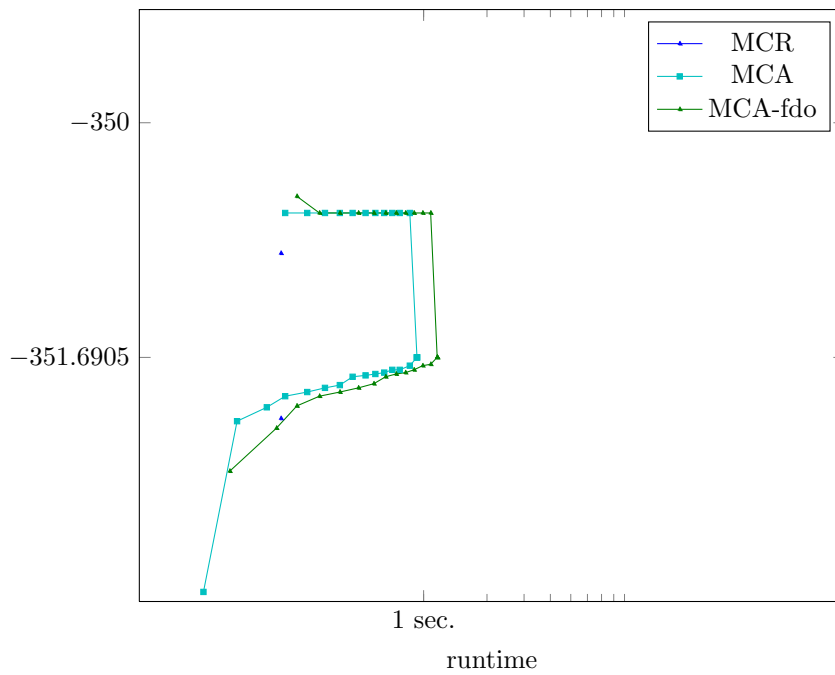


Figure 2172: Runtime results for the instance 9004368 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

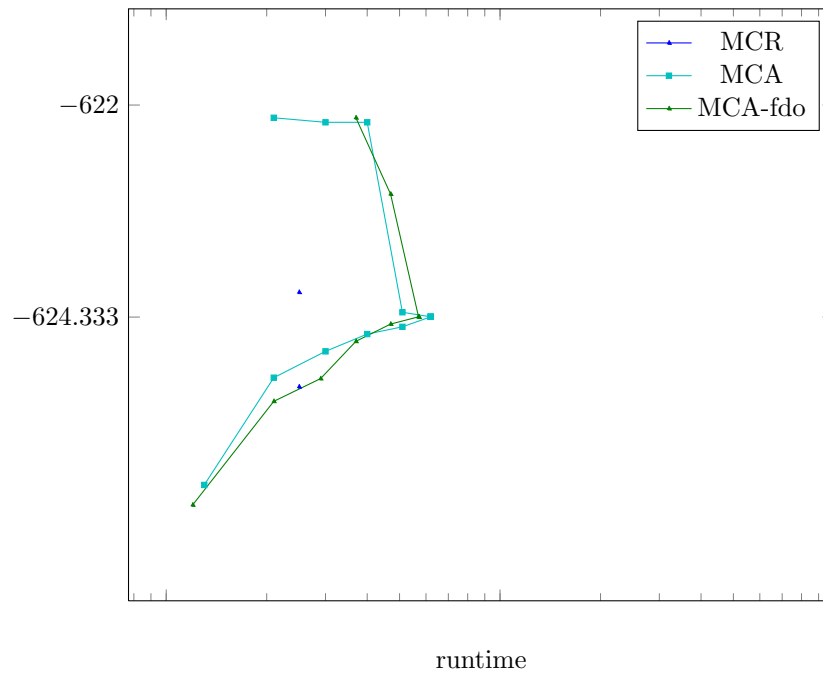


Figure 2173: Runtime results for the instance 9004383 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

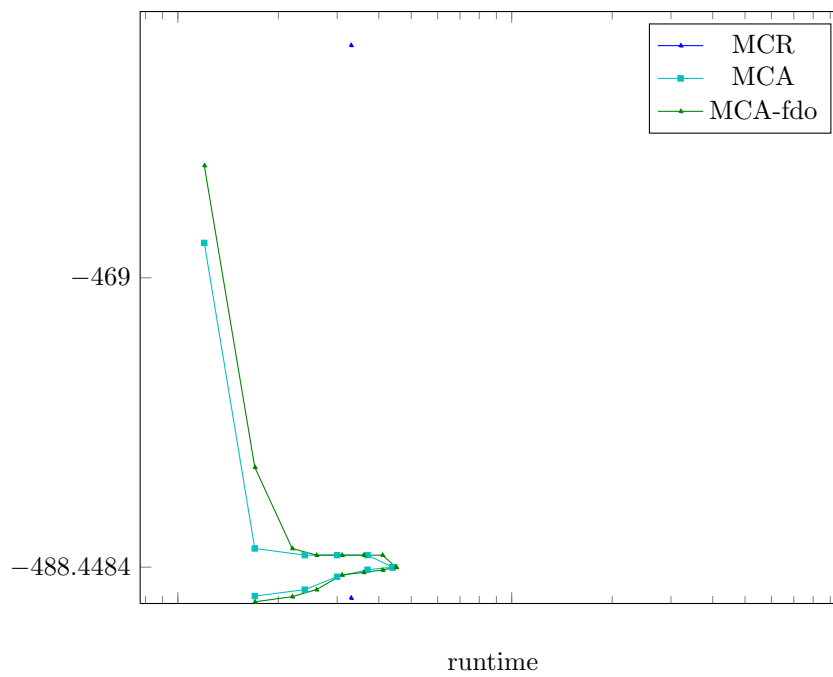


Figure 2174: Runtime results for the instance 9004427 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

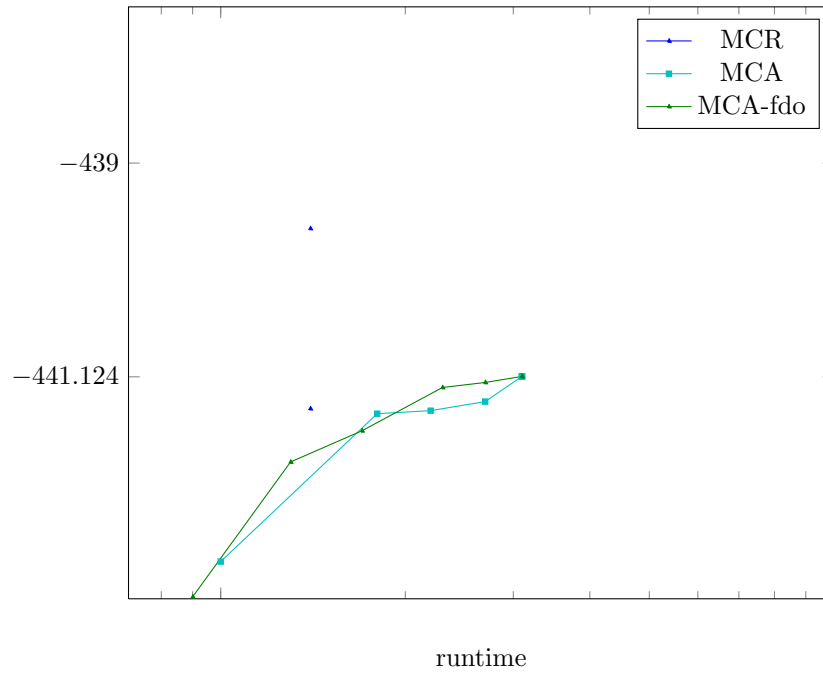


Figure 2175: Runtime results for the instance 9004520 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

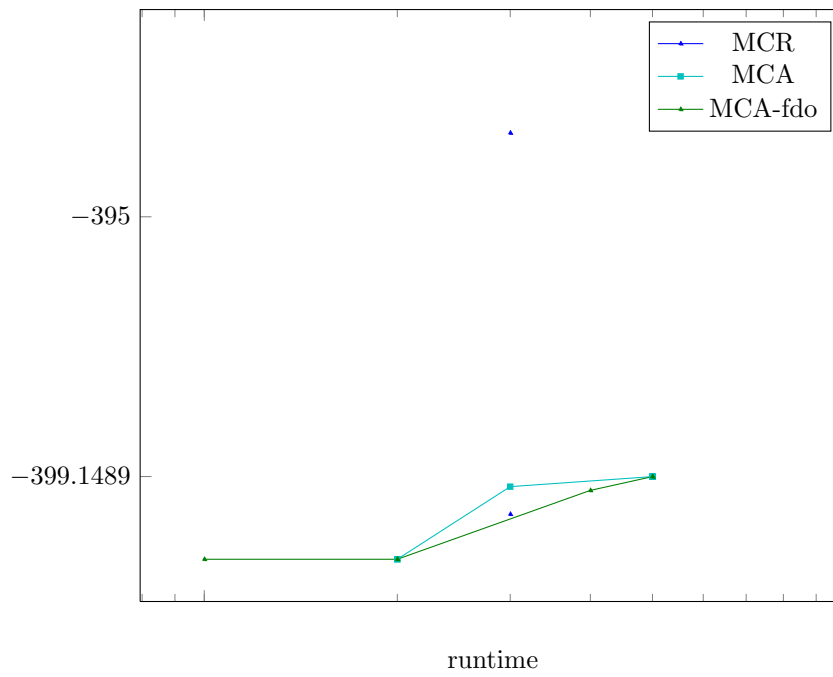


Figure 2176: Runtime results for the instance 9004581 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

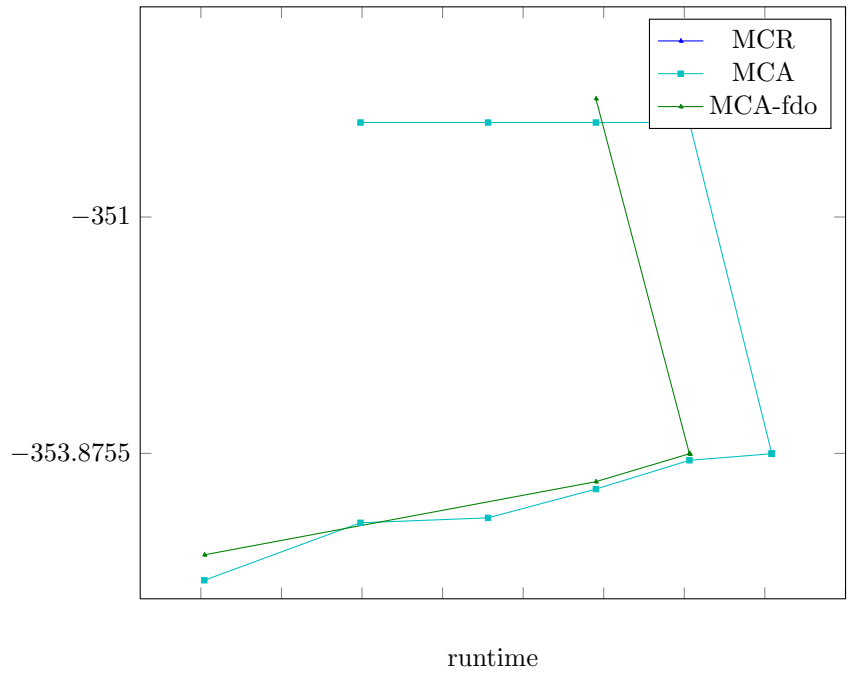


Figure 2177: Runtime results for the instance 9004766 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

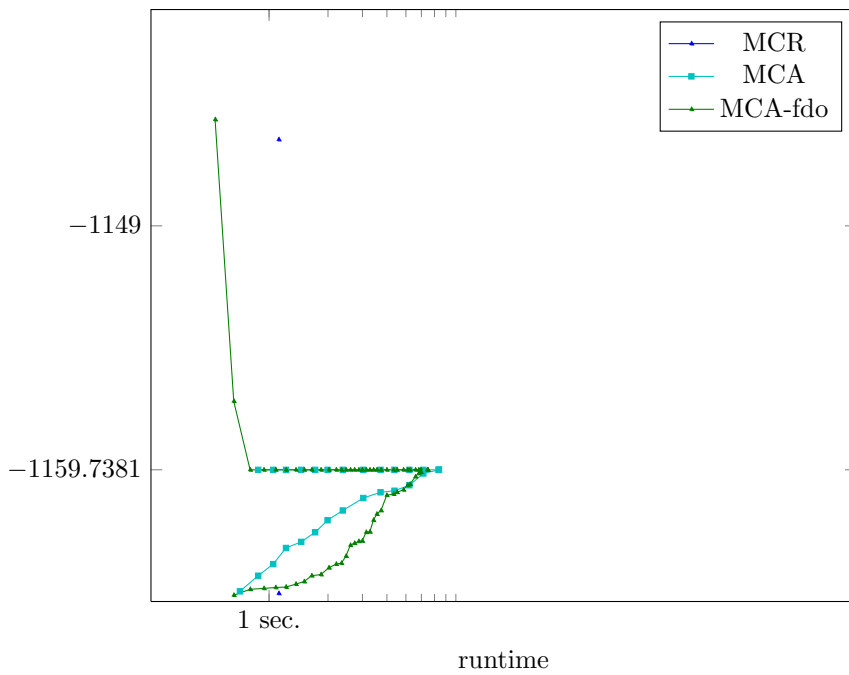


Figure 2178: Runtime results for the instance 9004879 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

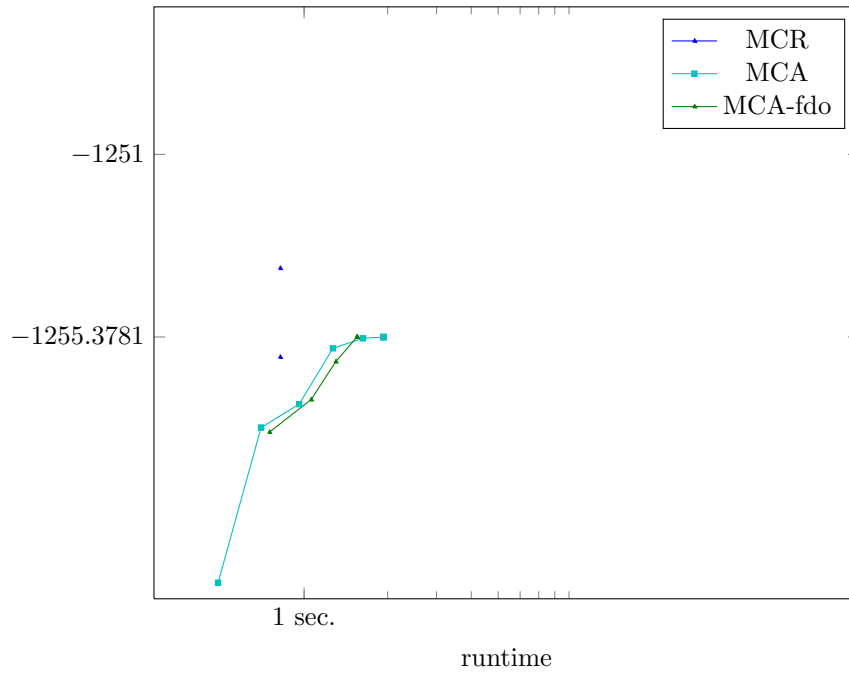


Figure 2179: Runtime results for the instance 9004965 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

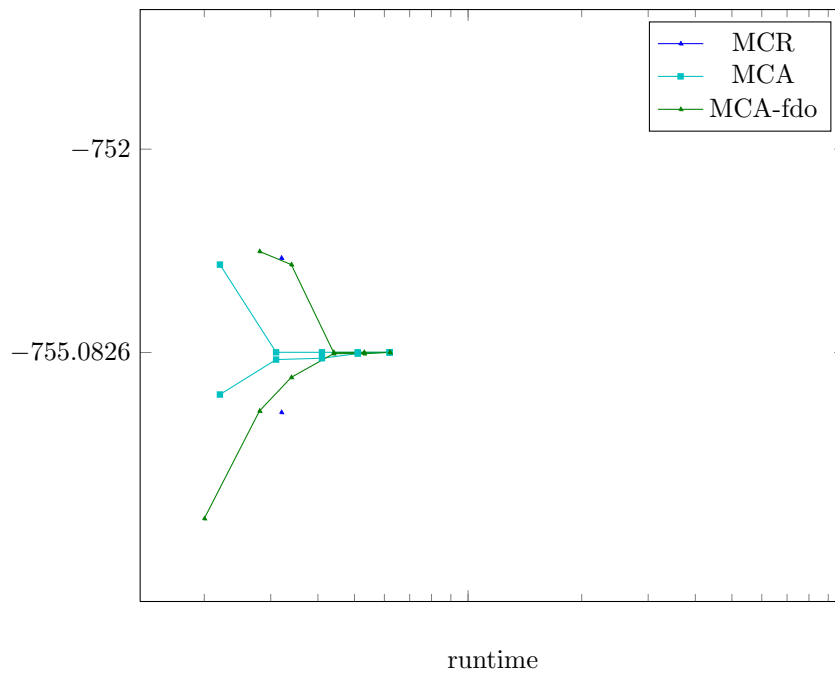


Figure 2180: Runtime results for the instance 9004971 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

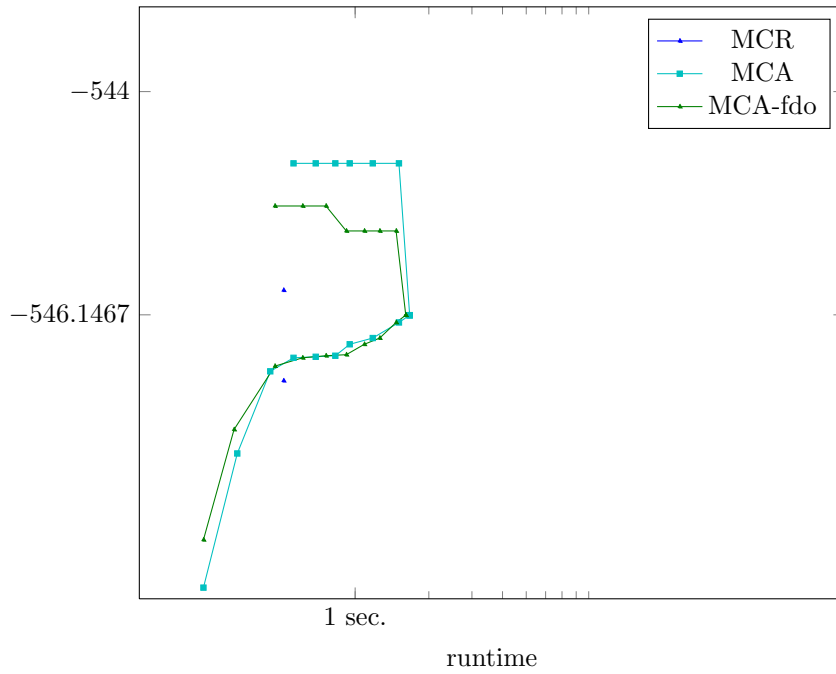


Figure 2181: Runtime results for the instance 9005011 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

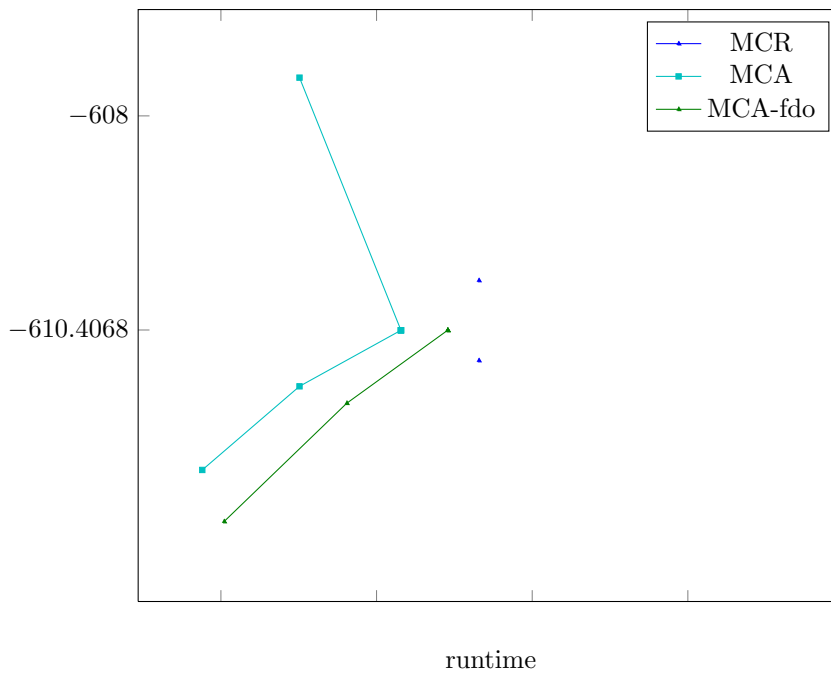


Figure 2182: Runtime results for the instance 9005105 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

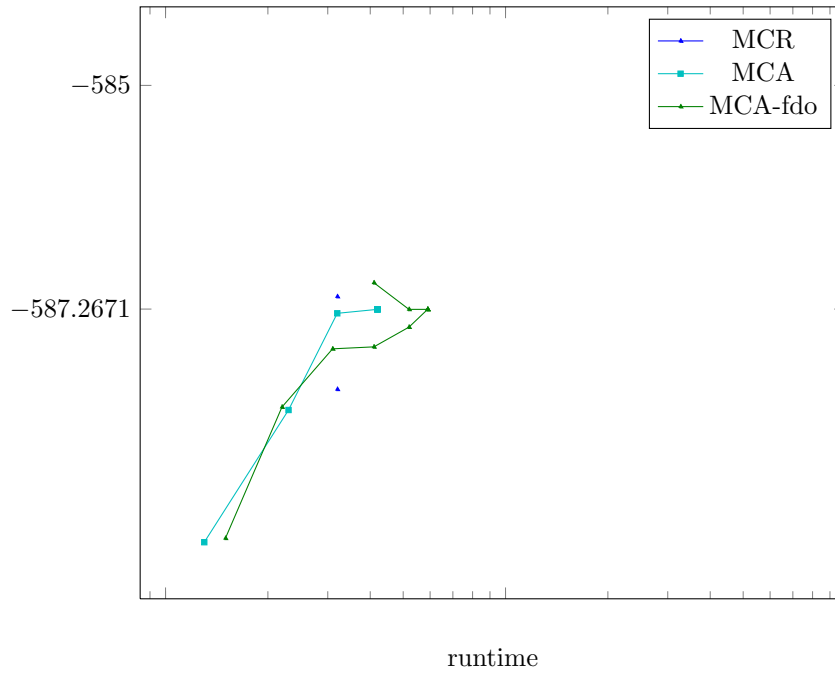


Figure 2183: Runtime results for the instance 9005245 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

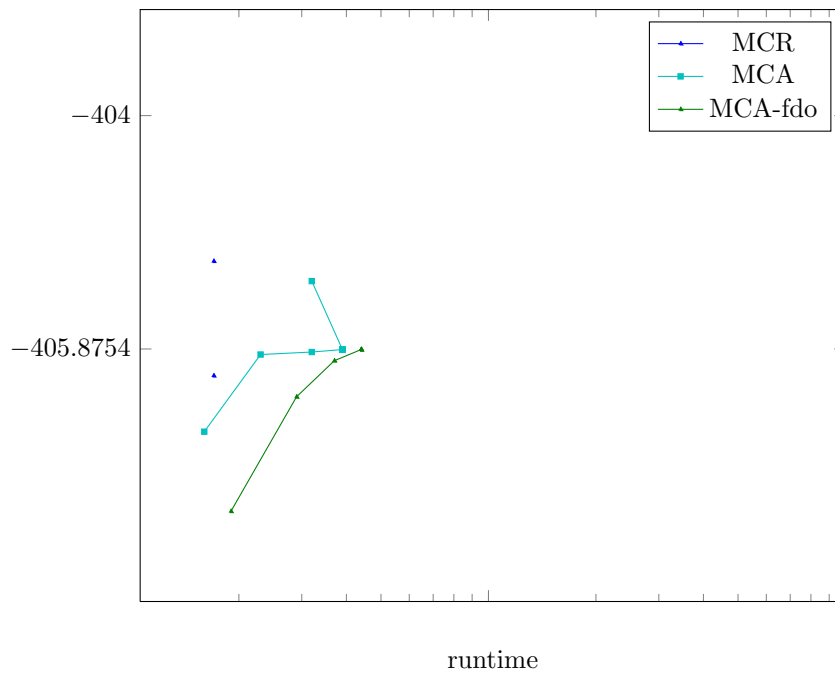


Figure 2184: Runtime results for the instance 9005273 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

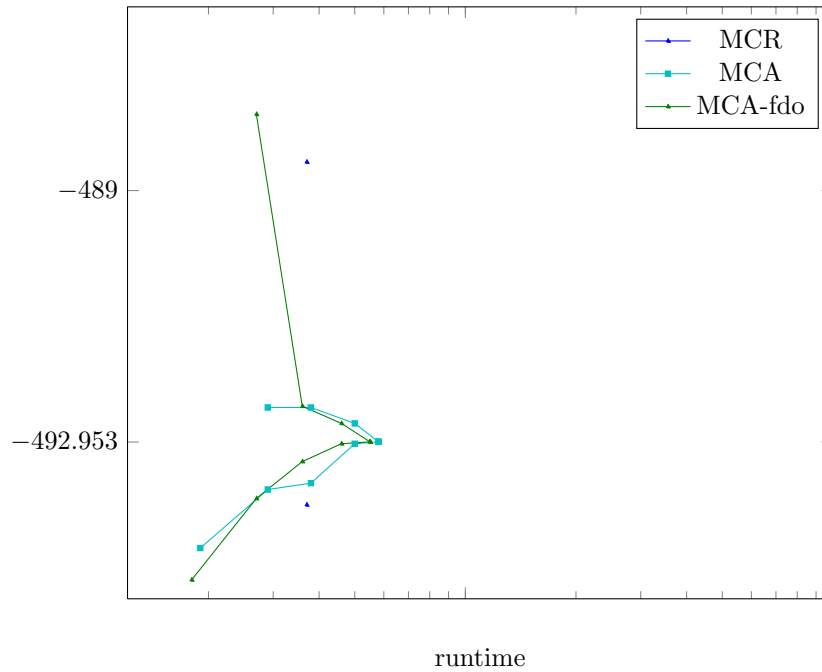


Figure 2185: Runtime results for the instance 9005294 of the *correlation-clustering* models. Plots show best value of integer solution and (if provided) best lower bound.

5.16. 2nd order Image Segmentation (images-seg)

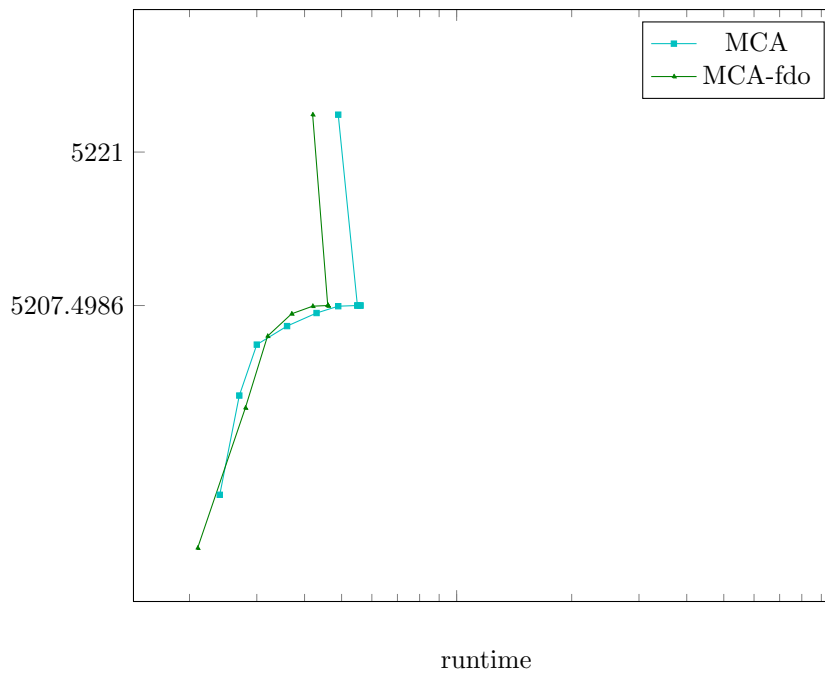


Figure 2186: Runtime results for the instance 101085.bmp of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

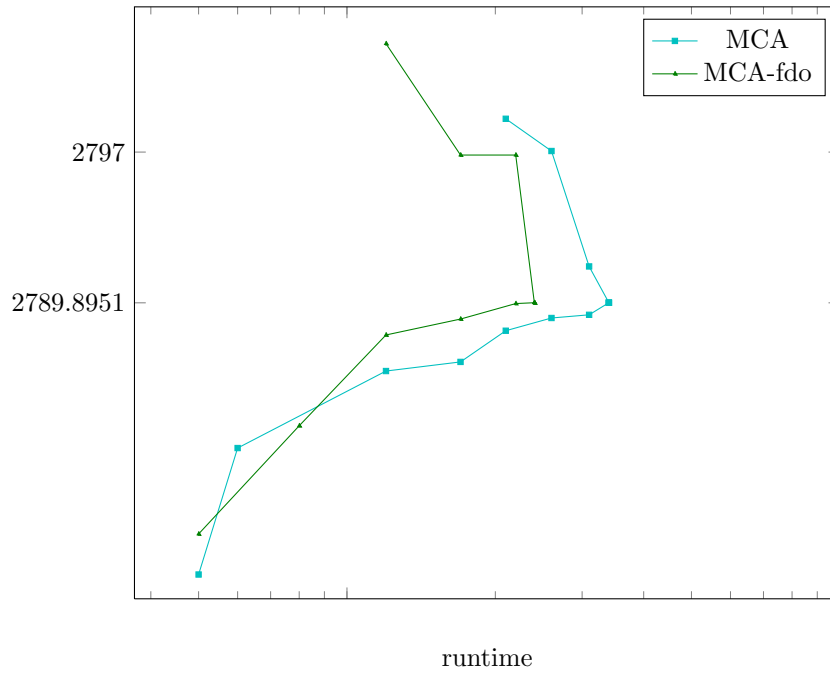


Figure 2187: Runtime results for the instance *101087.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

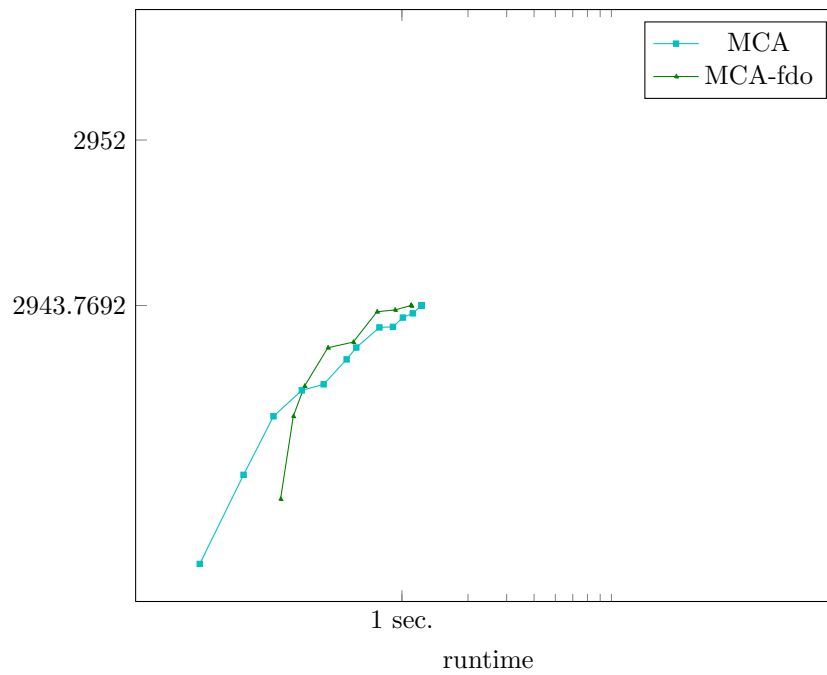


Figure 2188: Runtime results for the instance *102061.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

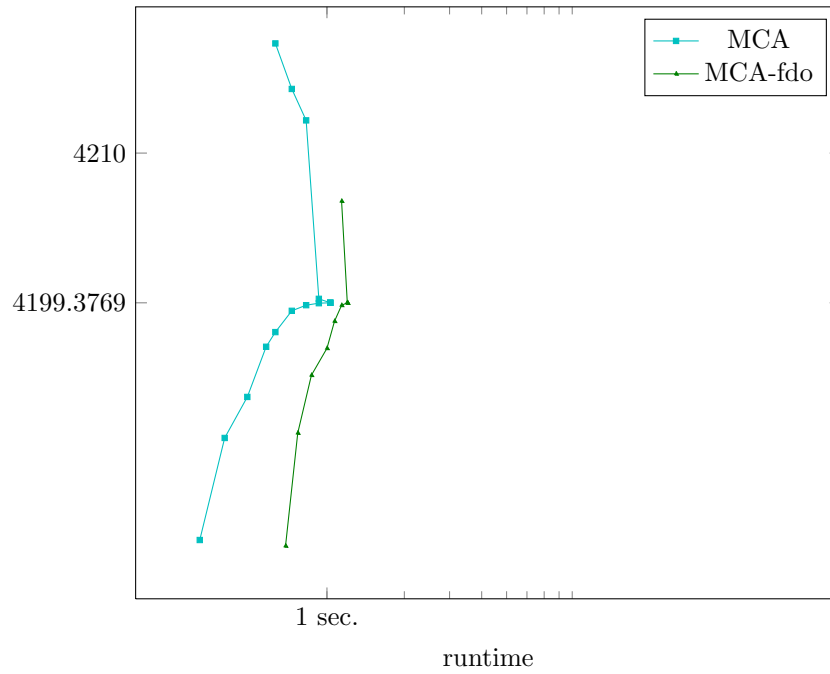


Figure 2189: Runtime results for the instance *103070.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

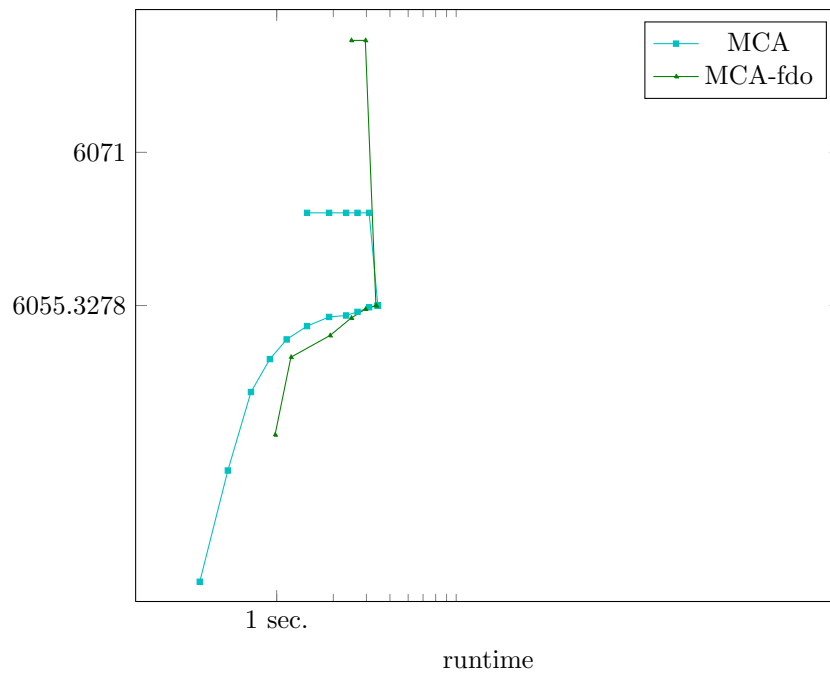


Figure 2190: Runtime results for the instance *105025.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

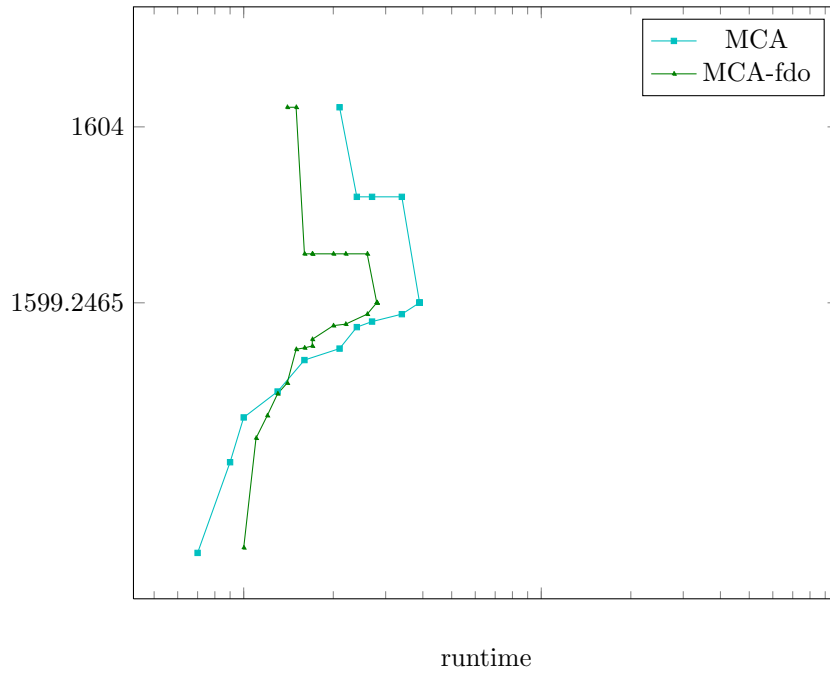


Figure 2191: Runtime results for the instance *106024.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

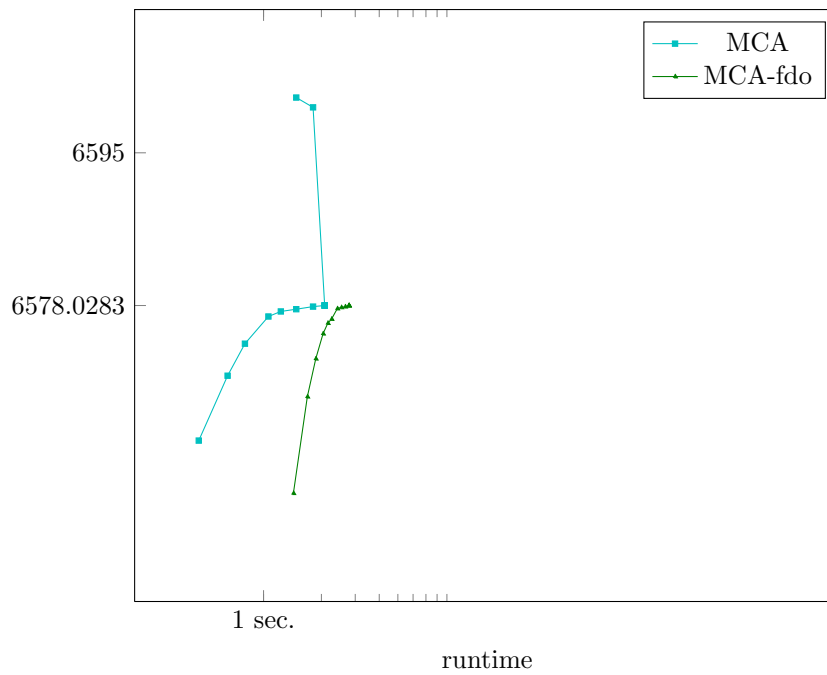


Figure 2192: Runtime results for the instance *108005.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

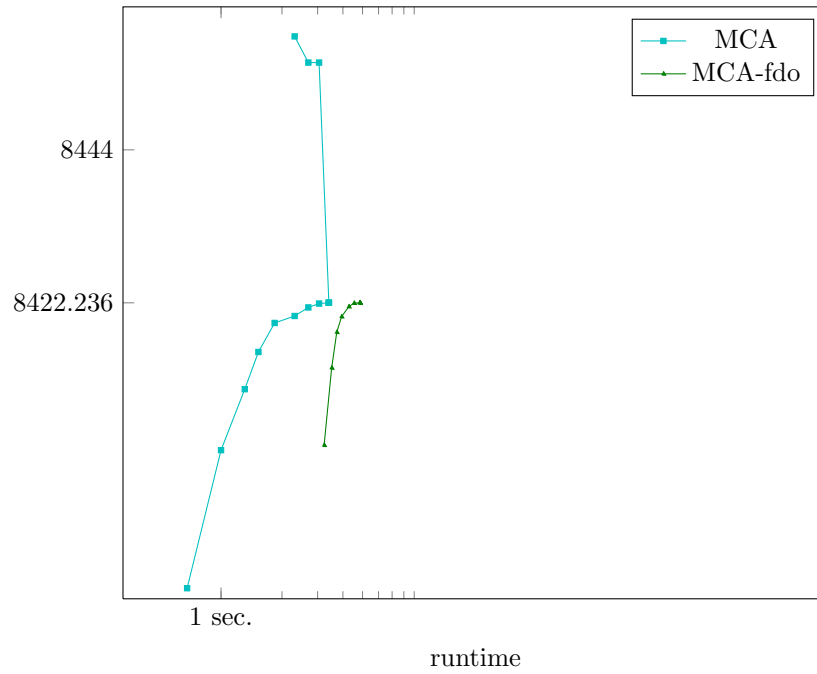


Figure 2193: Runtime results for the instance *108070.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

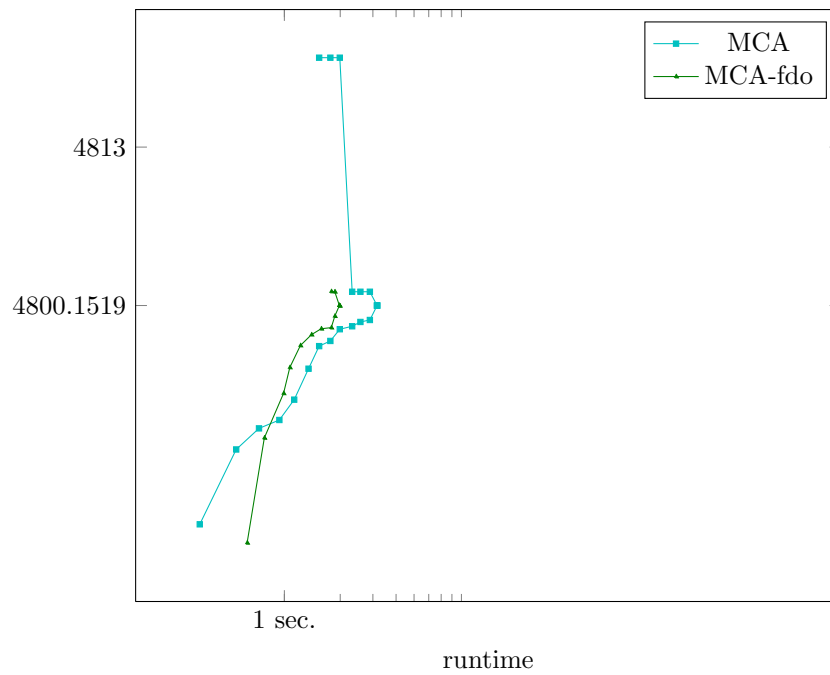


Figure 2194: Runtime results for the instance *108082.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

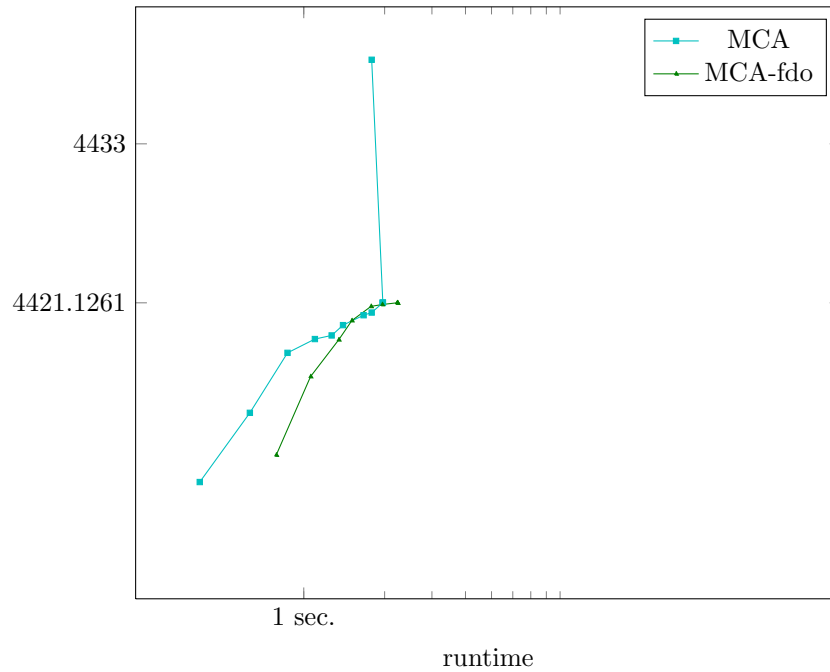


Figure 2195: Runtime results for the instance *109053.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

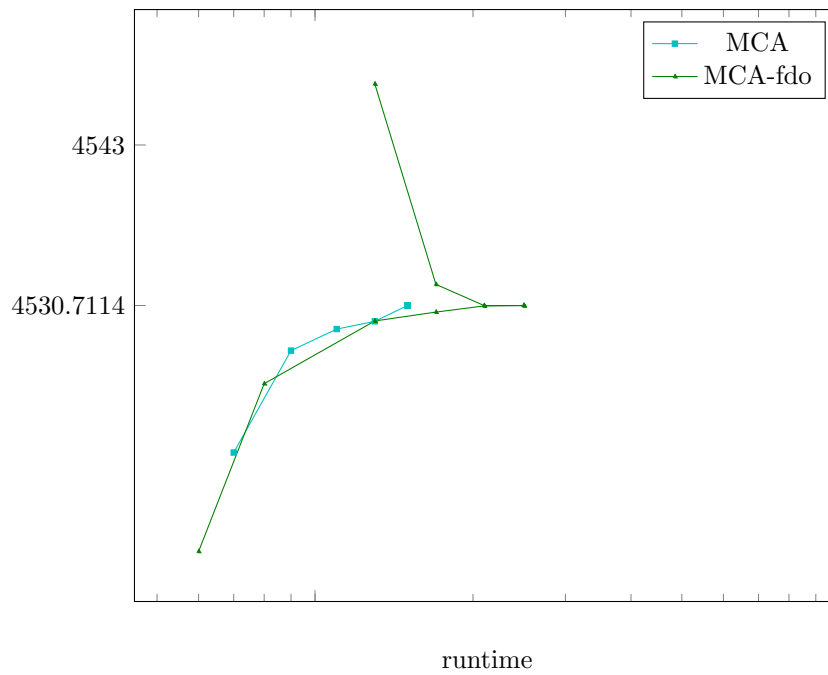


Figure 2196: Runtime results for the instance *119082.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

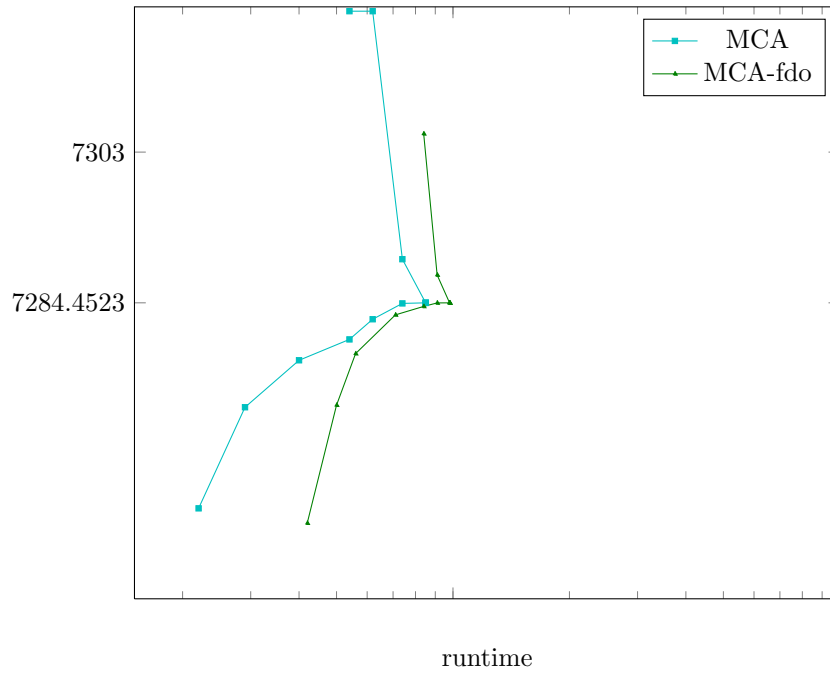


Figure 2197: Runtime results for the instance *12084.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

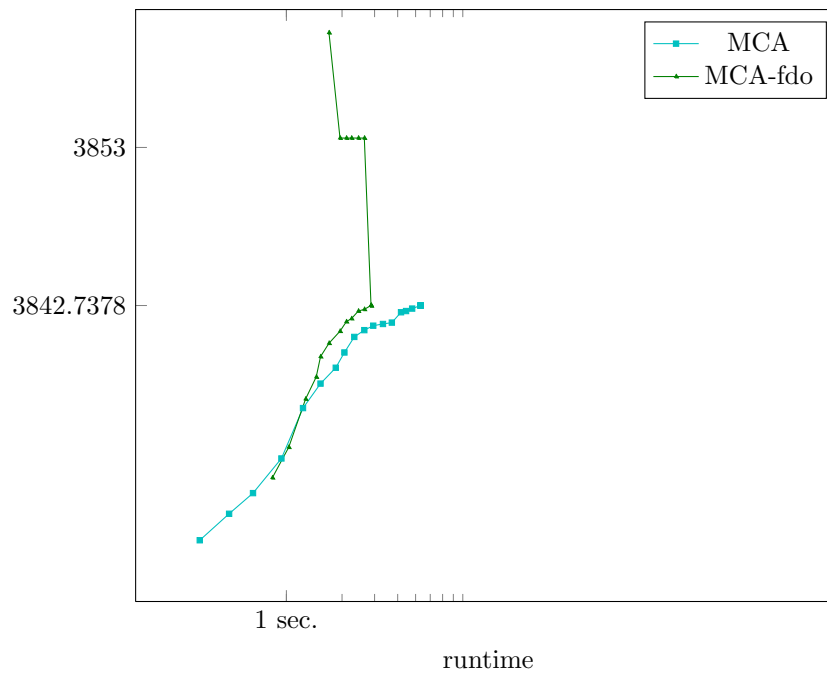


Figure 2198: Runtime results for the instance *123074.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

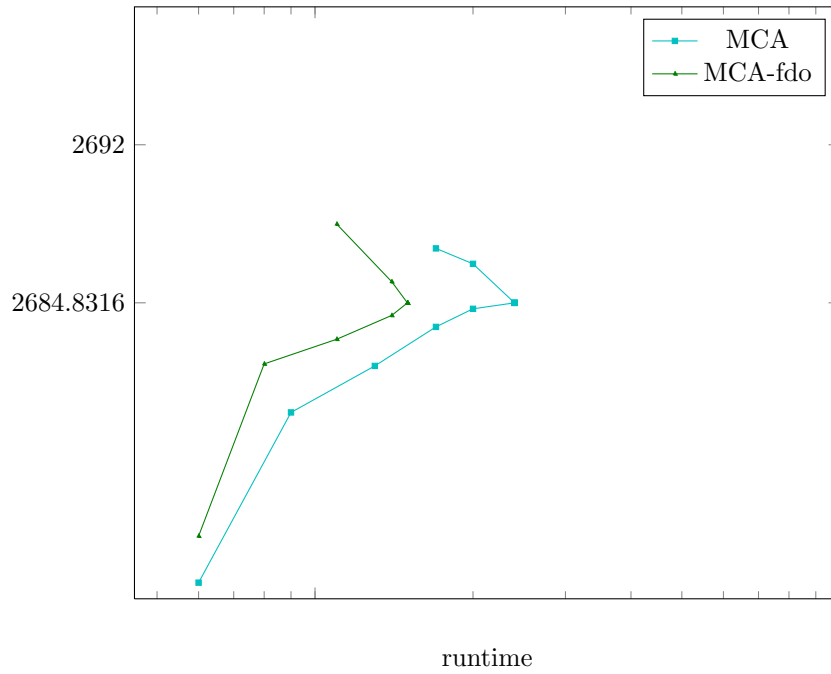


Figure 2199: Runtime results for the instance *126007.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

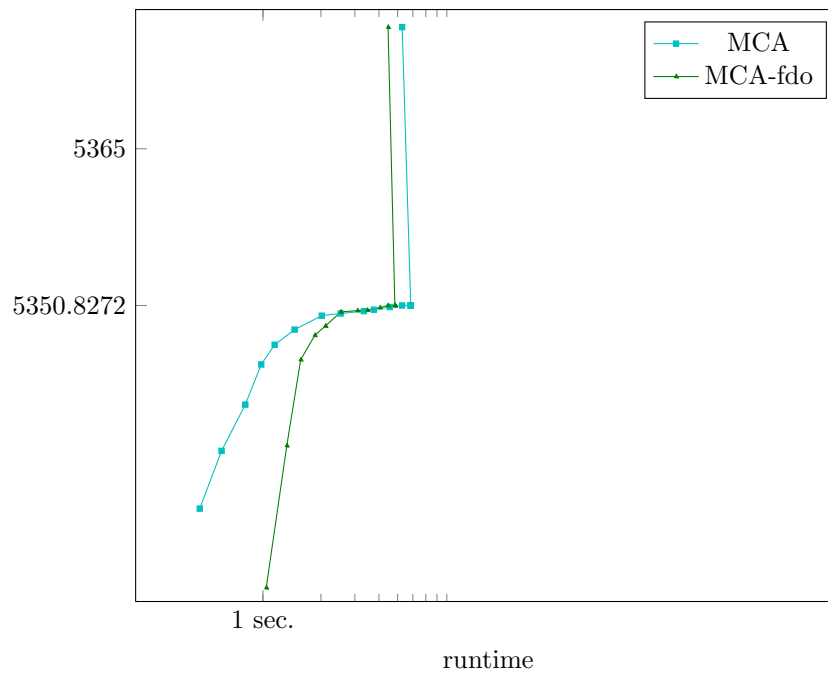


Figure 2200: Runtime results for the instance *130026.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

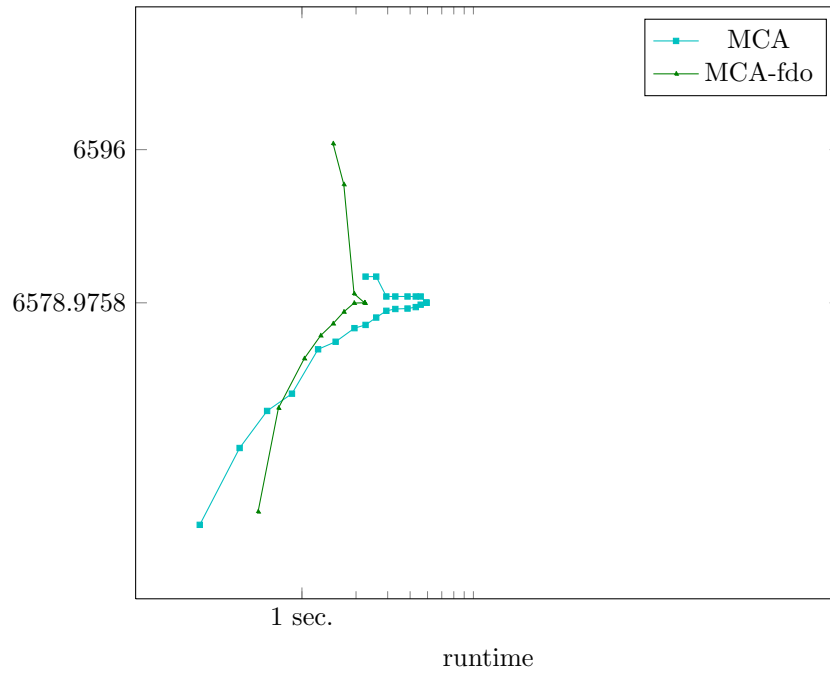


Figure 2201: Runtime results for the instance *134035.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

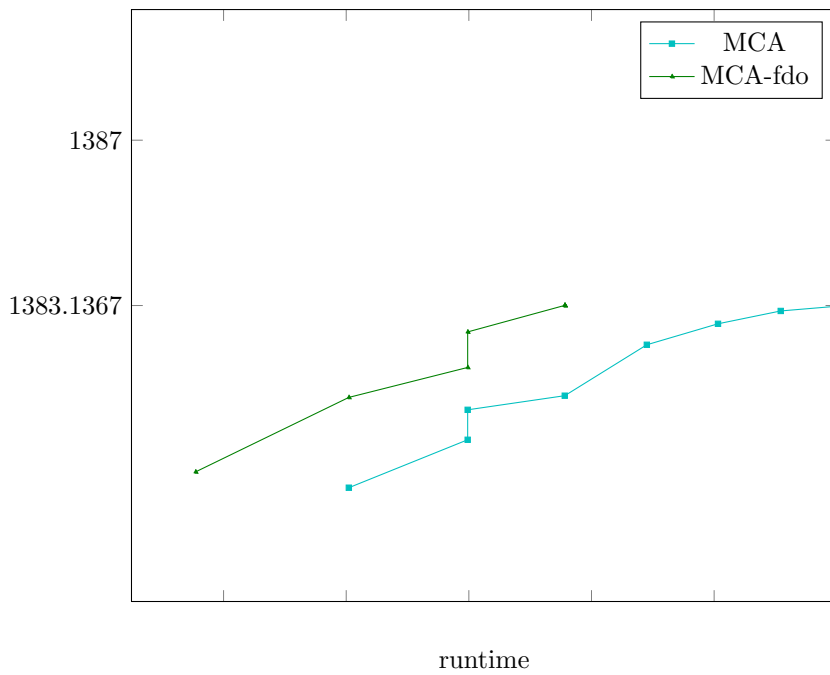


Figure 2202: Runtime results for the instance *14037.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

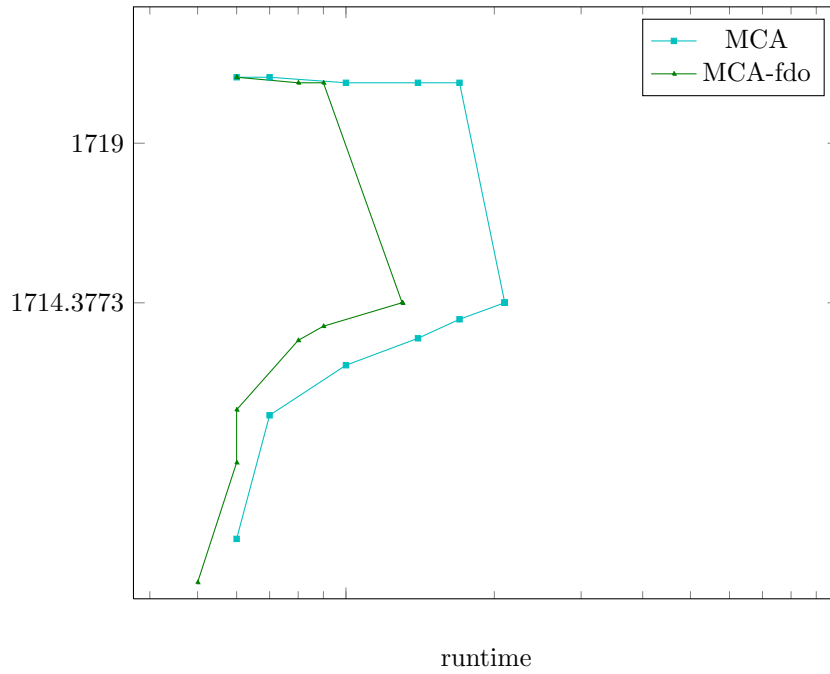


Figure 2203: Runtime results for the instance *143090.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

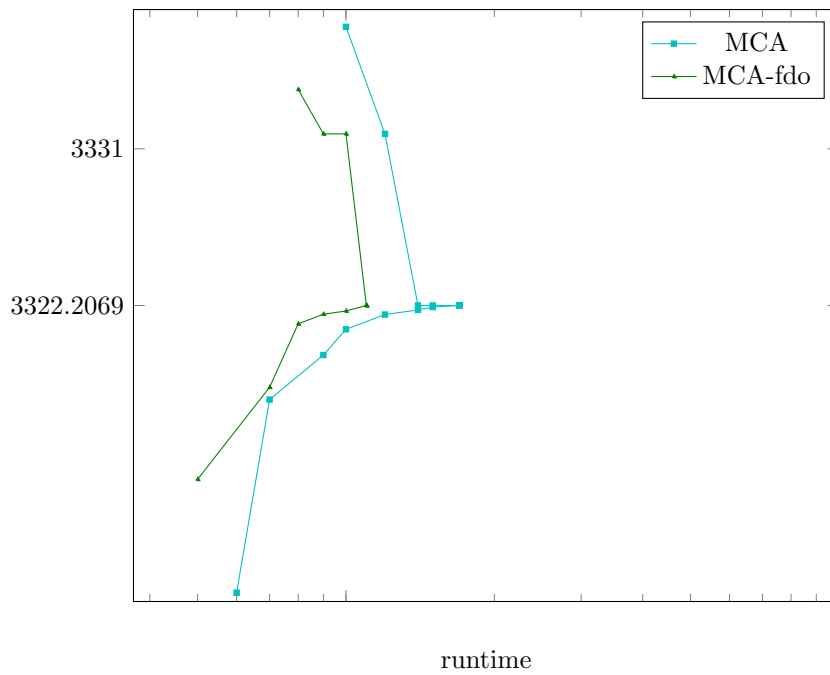


Figure 2204: Runtime results for the instance *145086.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

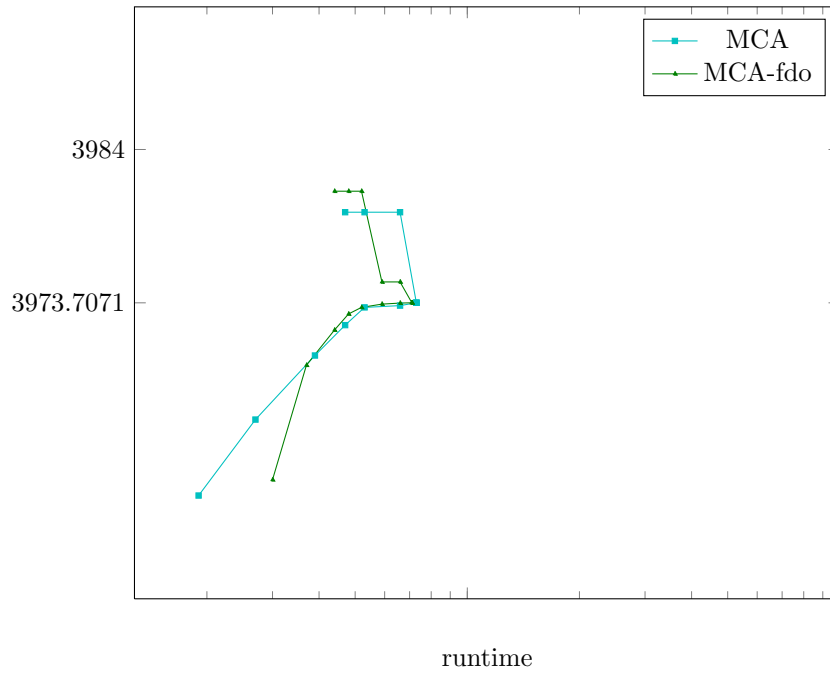


Figure 2205: Runtime results for the instance *147091.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

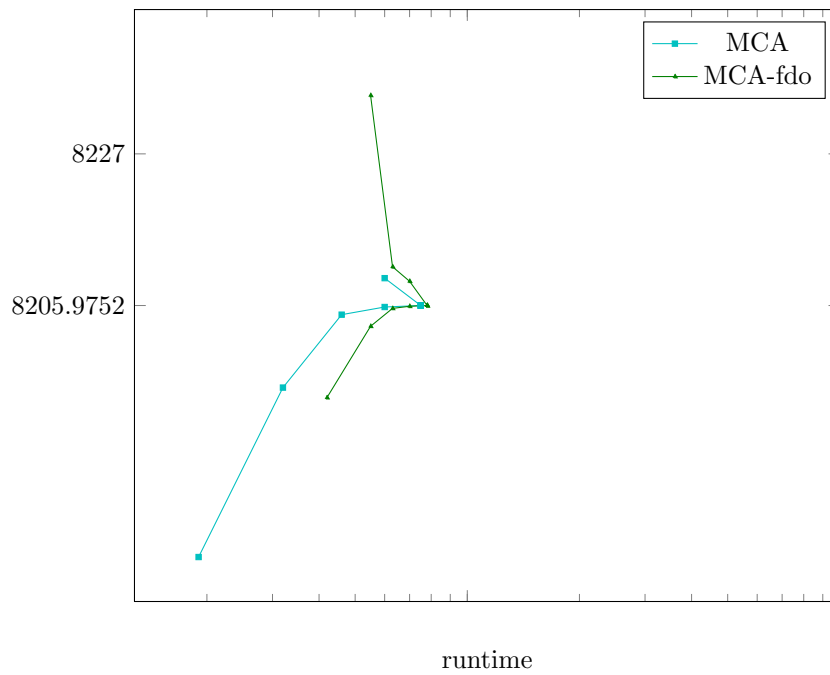


Figure 2206: Runtime results for the instance *148026.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

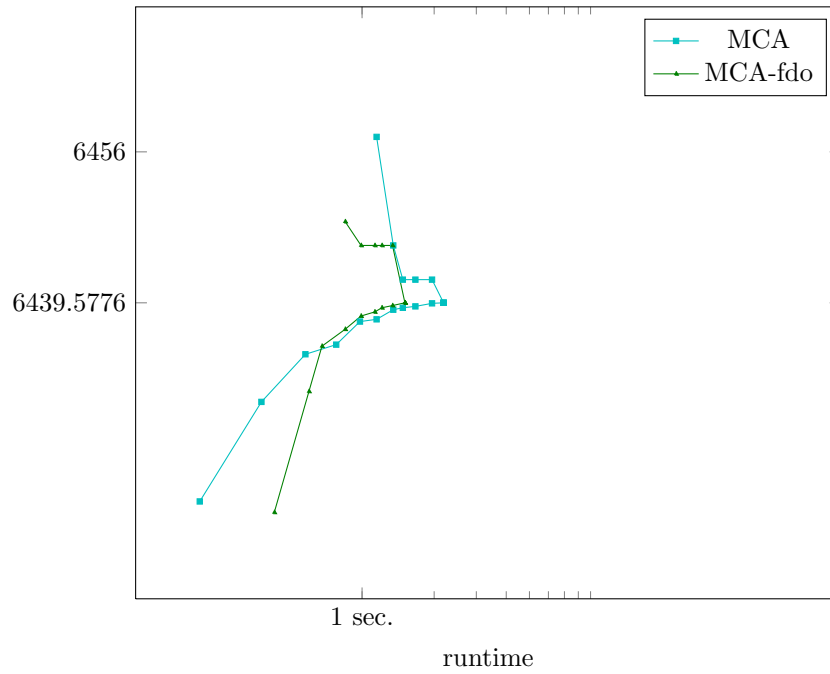


Figure 2207: Runtime results for the instance *148089.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

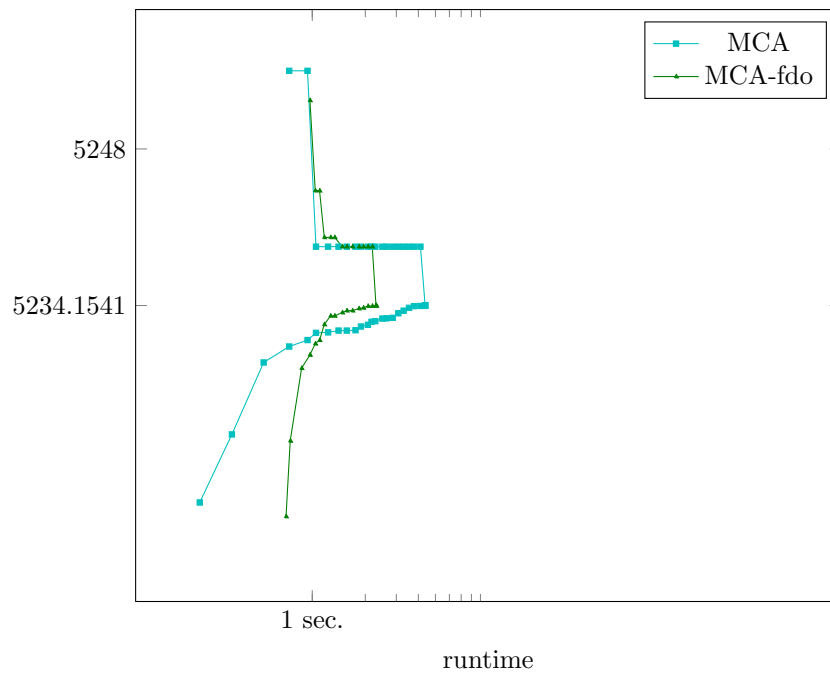


Figure 2208: Runtime results for the instance *156065.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

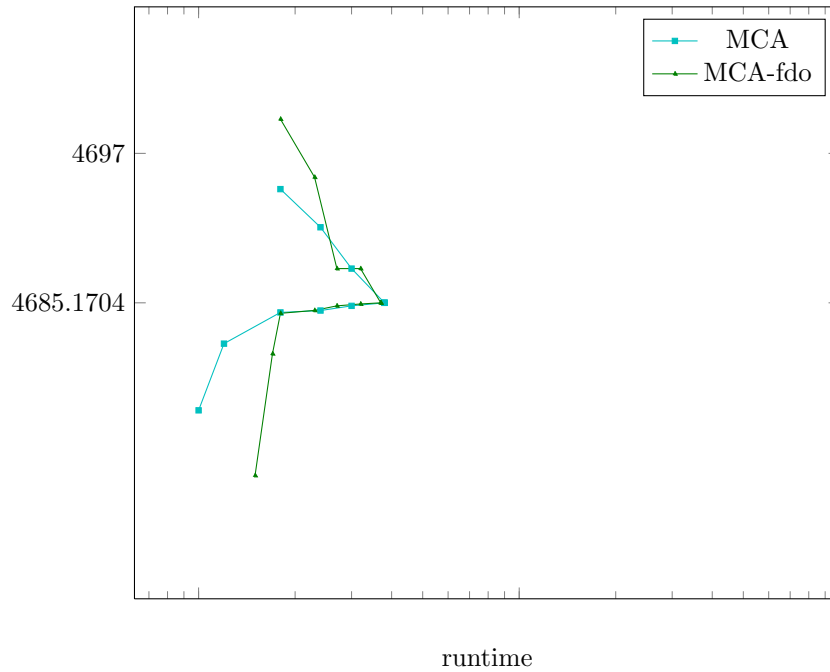


Figure 2209: Runtime results for the instance *157055.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

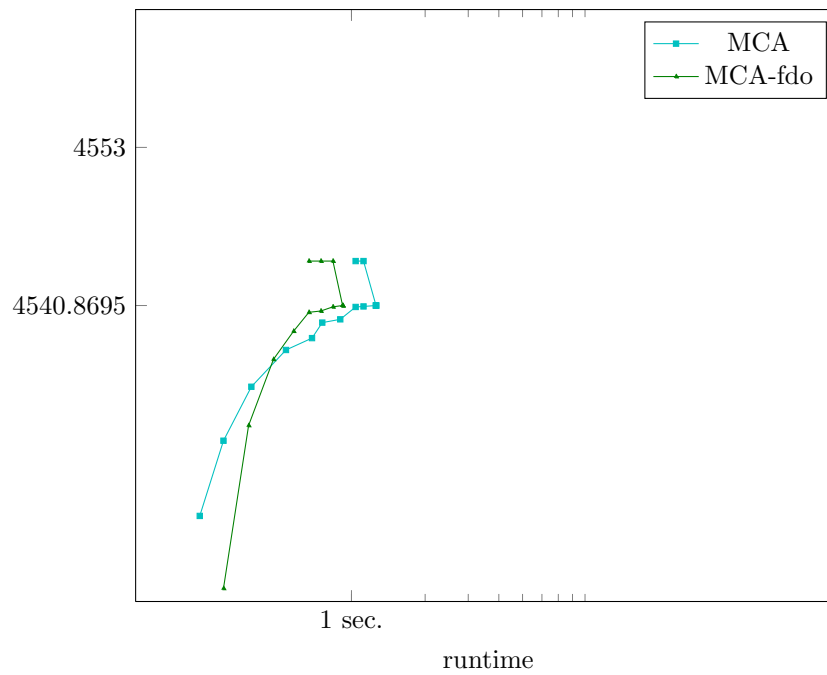


Figure 2210: Runtime results for the instance *159008.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

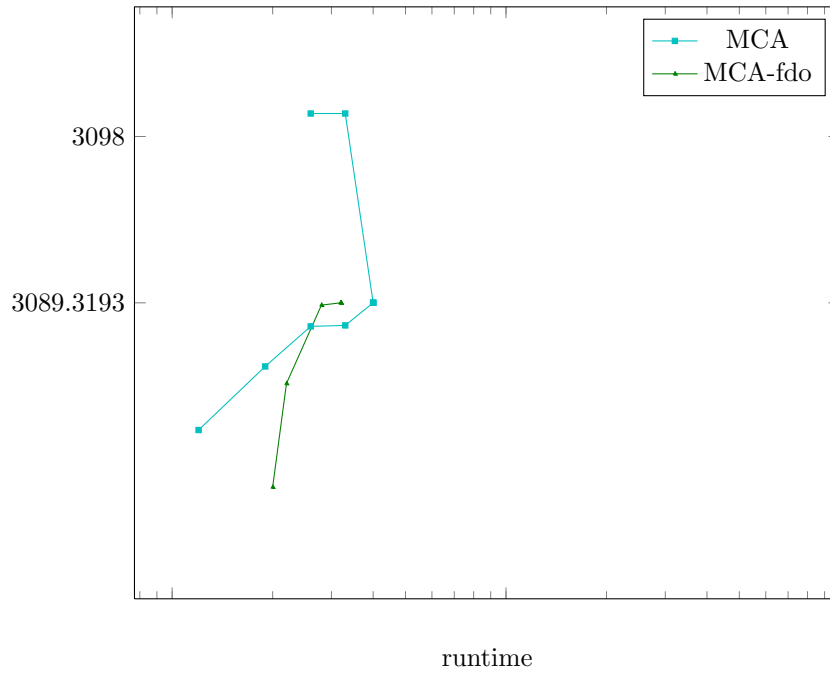


Figure 2211: Runtime results for the instance *160068.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

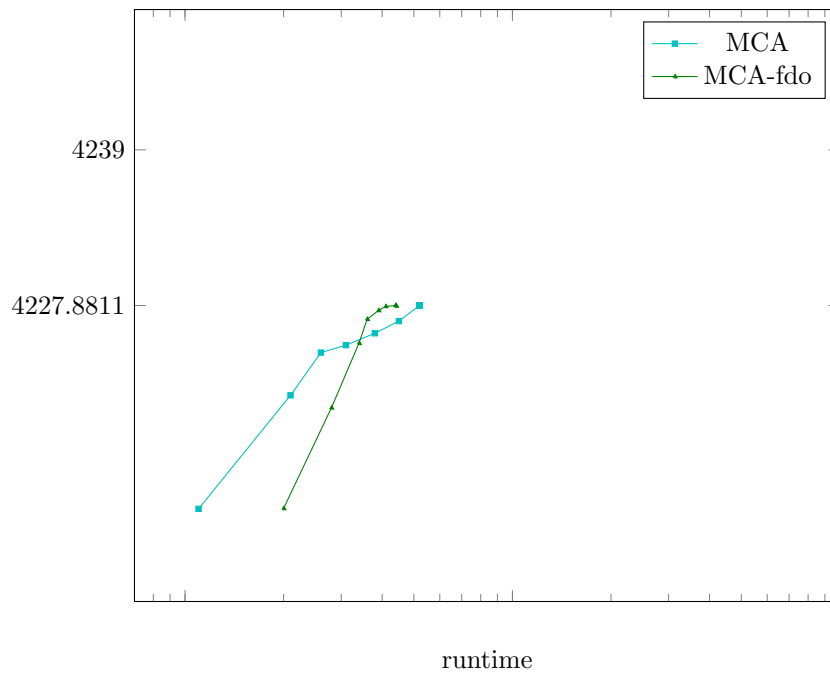


Figure 2212: Runtime results for the instance *16077.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

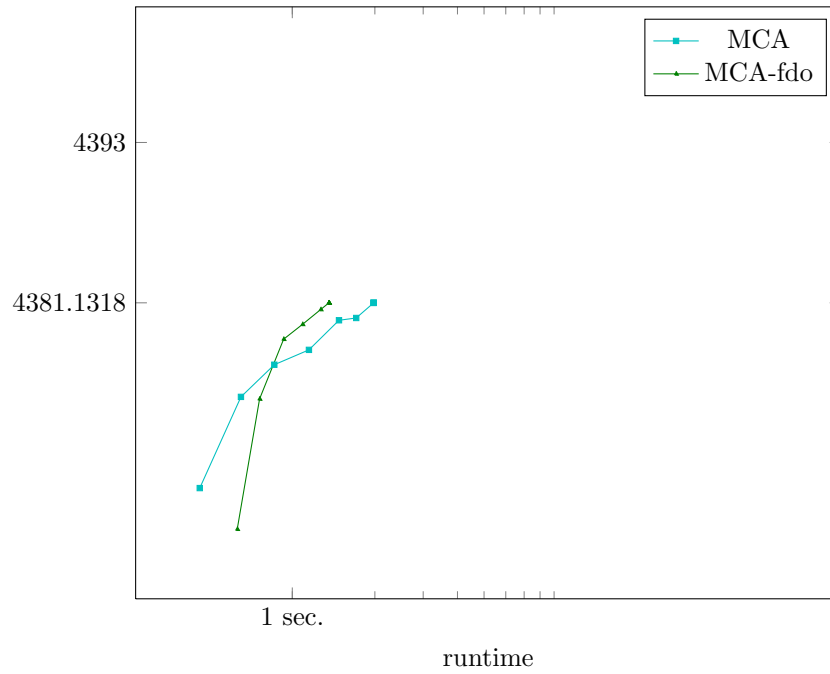


Figure 2213: Runtime results for the instance *163085.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

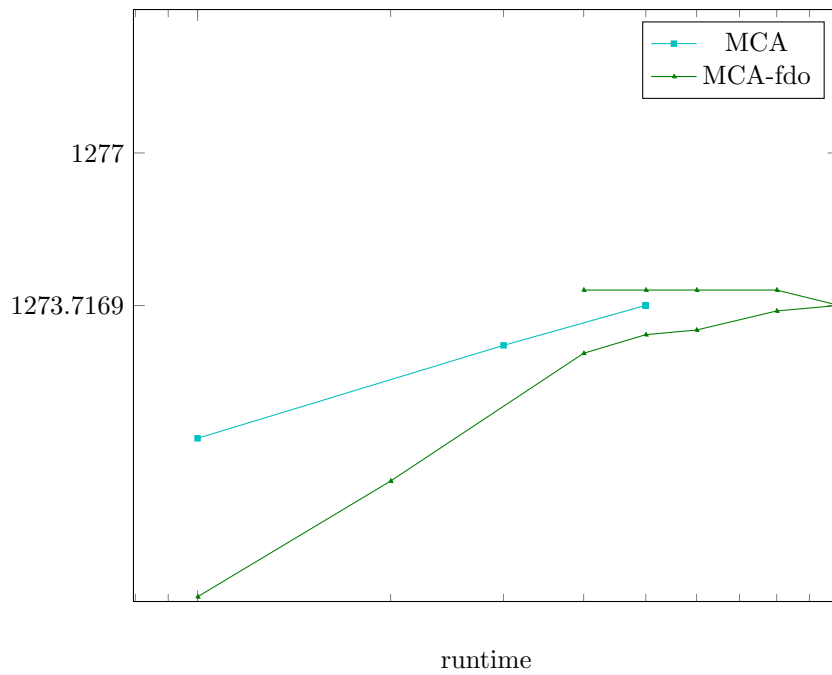


Figure 2214: Runtime results for the instance *167062.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

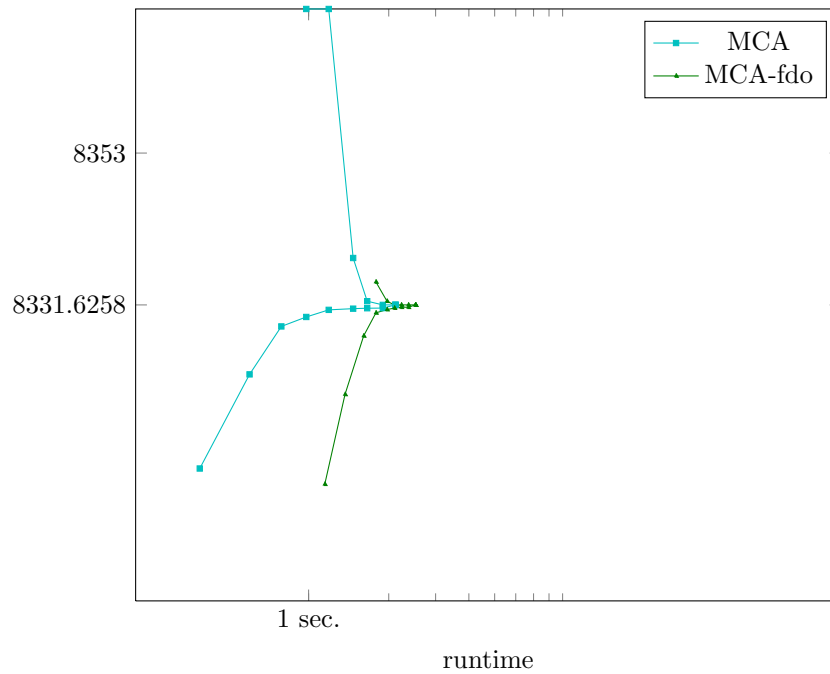


Figure 2215: Runtime results for the instance *167083.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

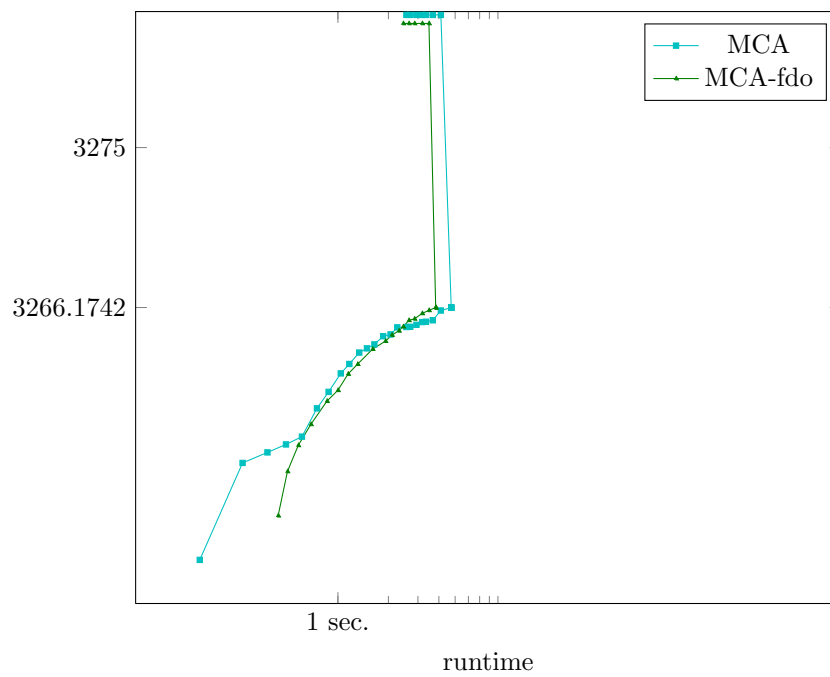


Figure 2216: Runtime results for the instance *170057.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

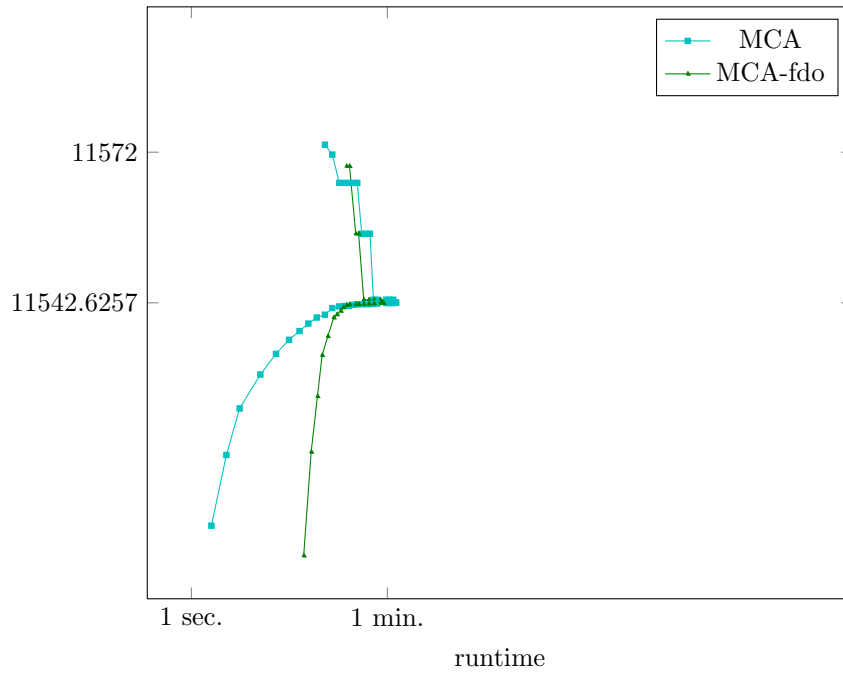


Figure 2217: Runtime results for the instance *175032.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

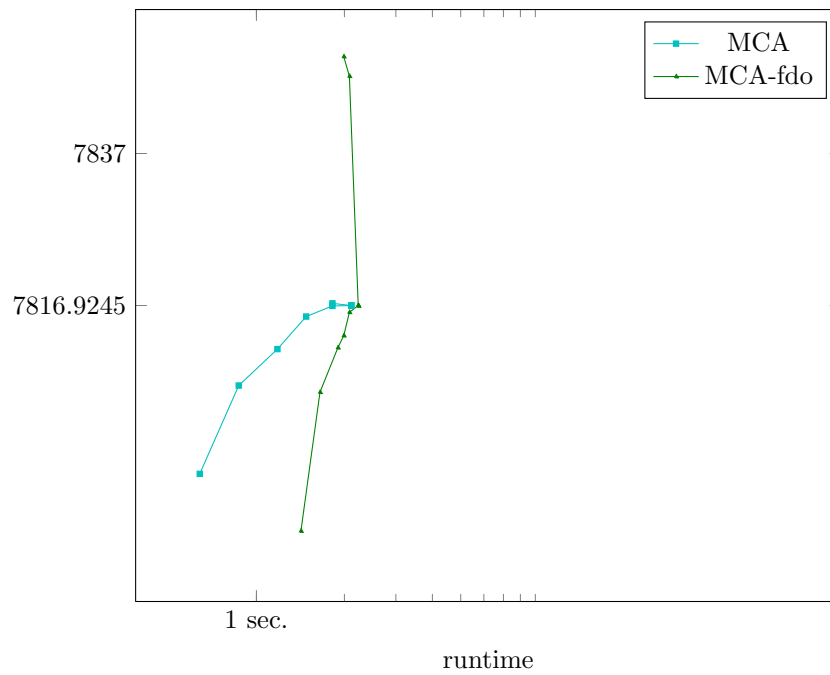


Figure 2218: Runtime results for the instance *175043.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

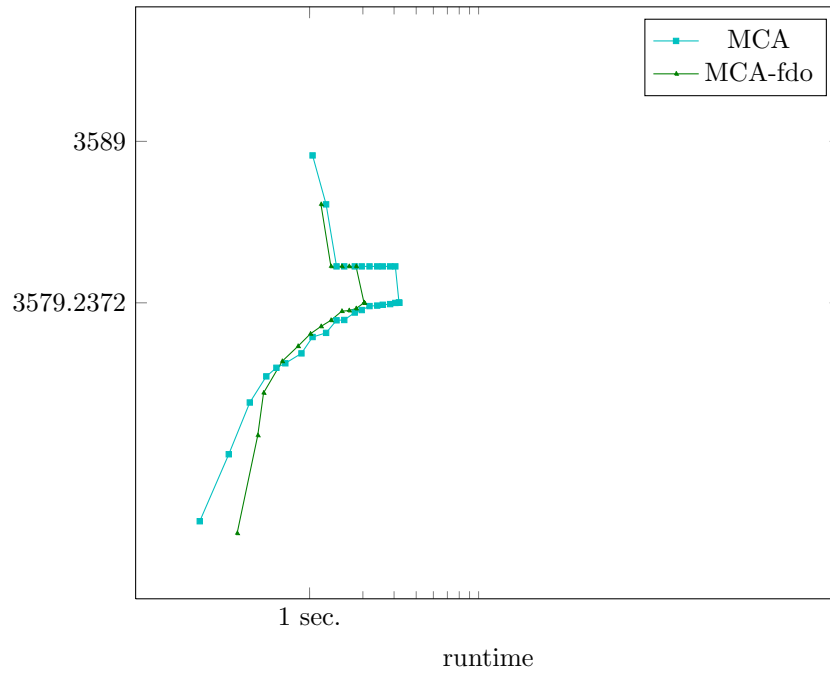


Figure 2219: Runtime results for the instance *182053.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

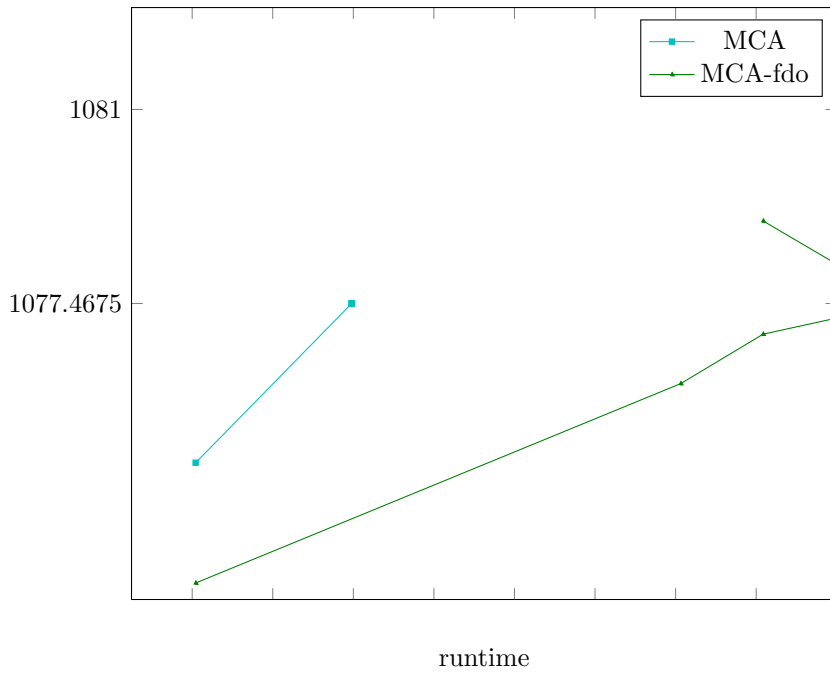


Figure 2220: Runtime results for the instance *189080.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

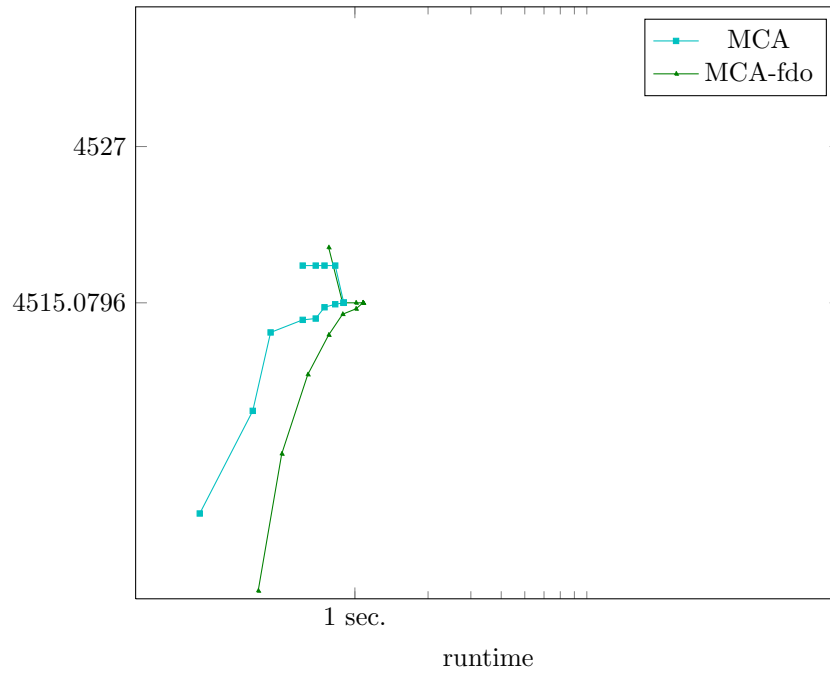


Figure 2221: Runtime results for the instance *19021.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

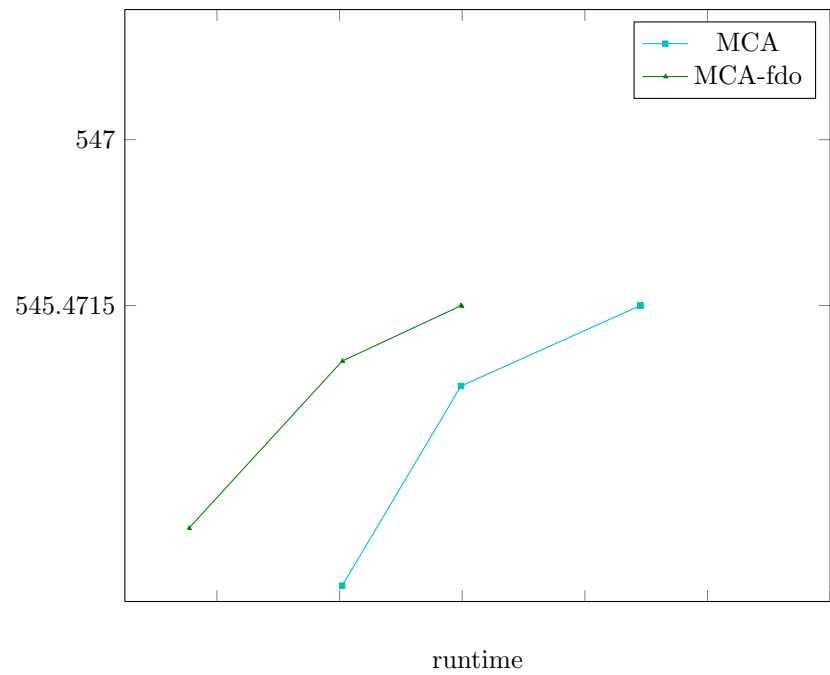


Figure 2222: Runtime results for the instance *196073.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

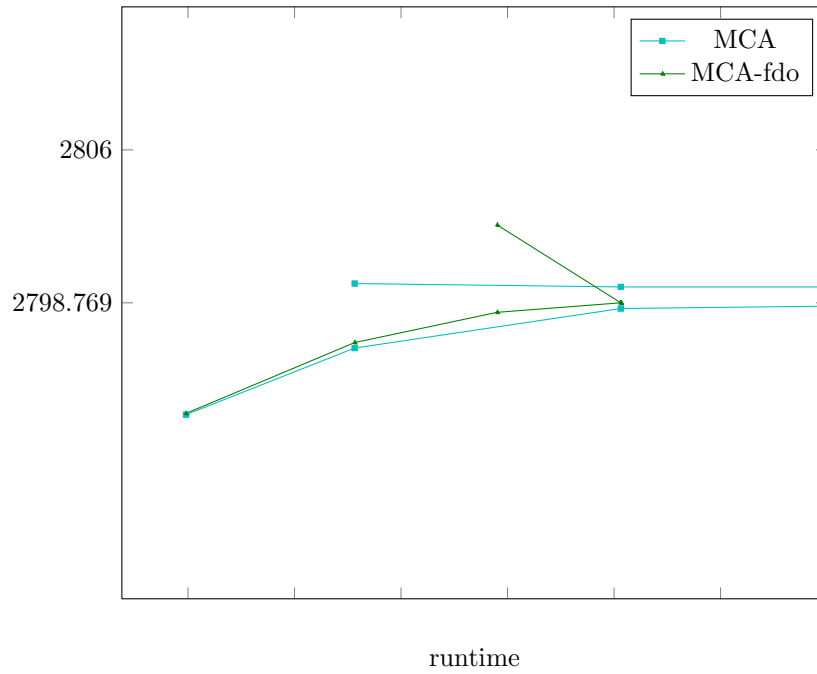


Figure 2223: Runtime results for the instance *197017.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

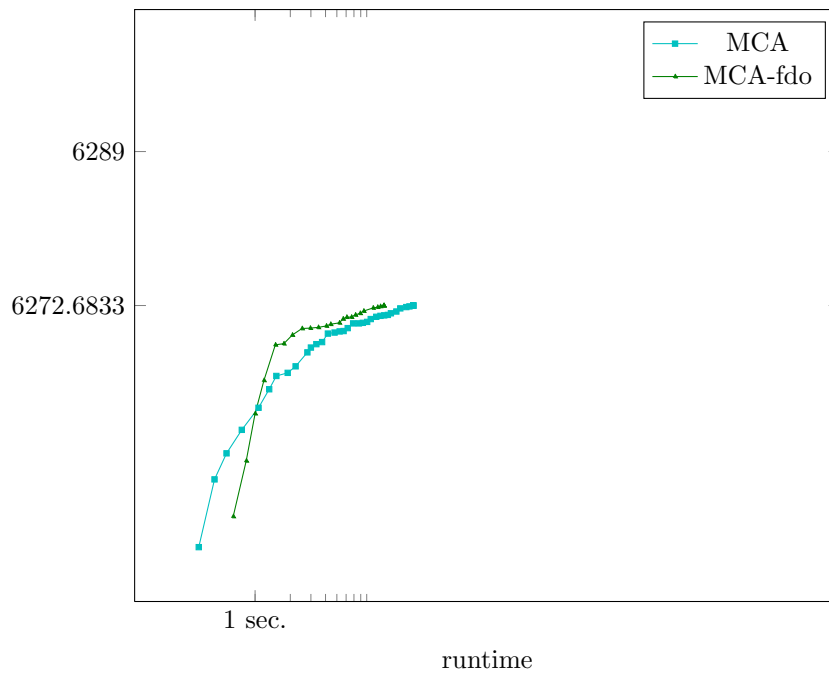


Figure 2224: Runtime results for the instance *208001.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

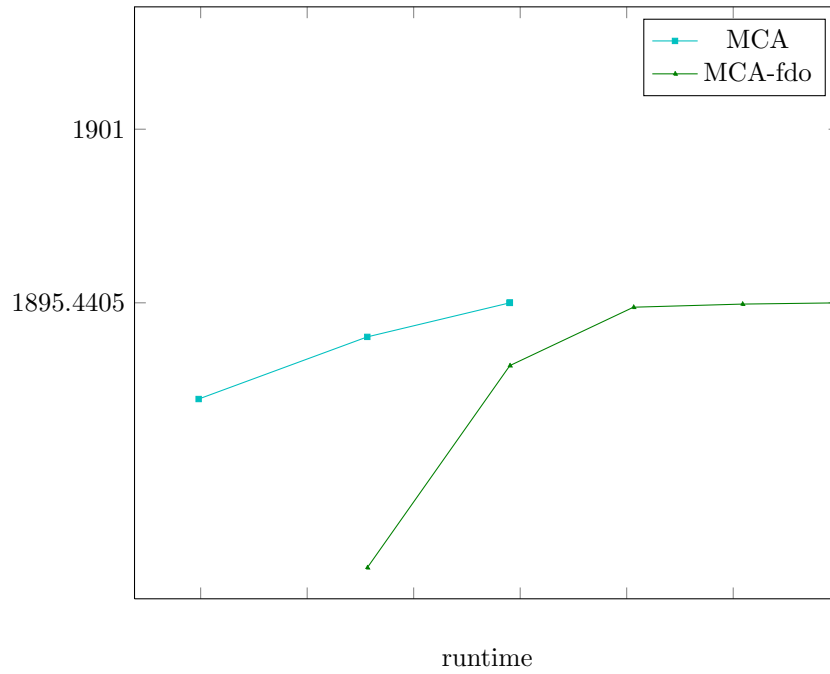


Figure 2225: Runtime results for the instance *210088.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

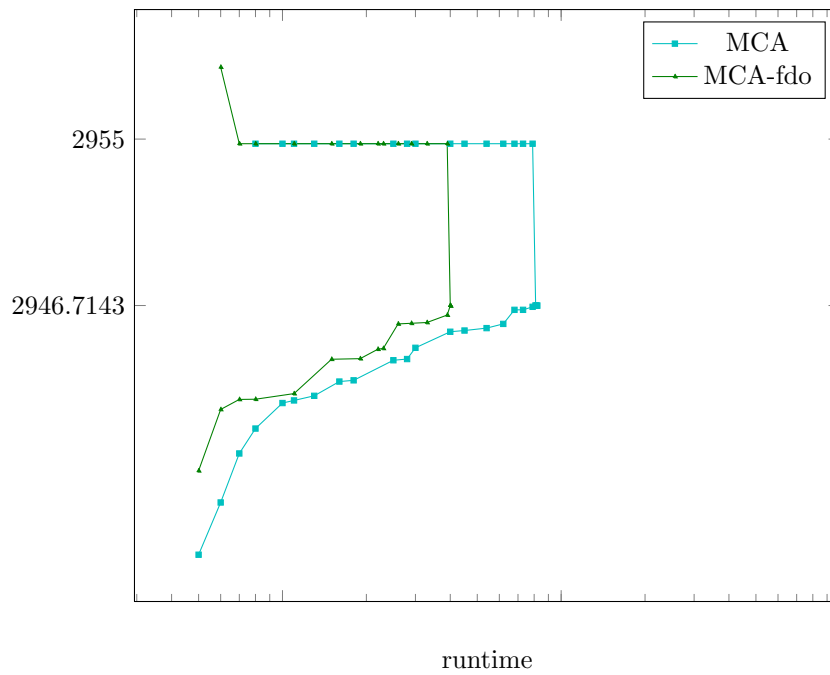


Figure 2226: Runtime results for the instance *21077.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

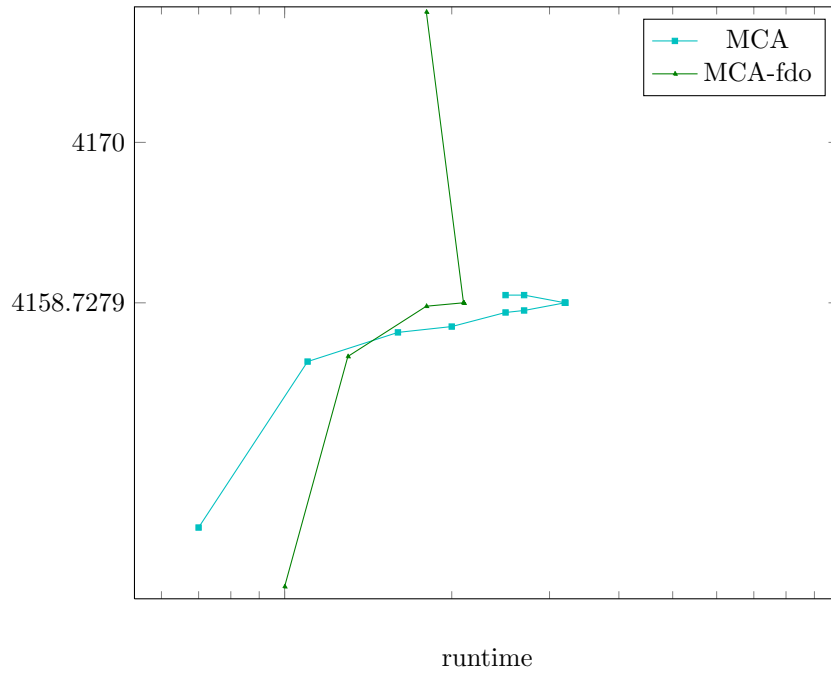


Figure 2227: Runtime results for the instance *216081.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

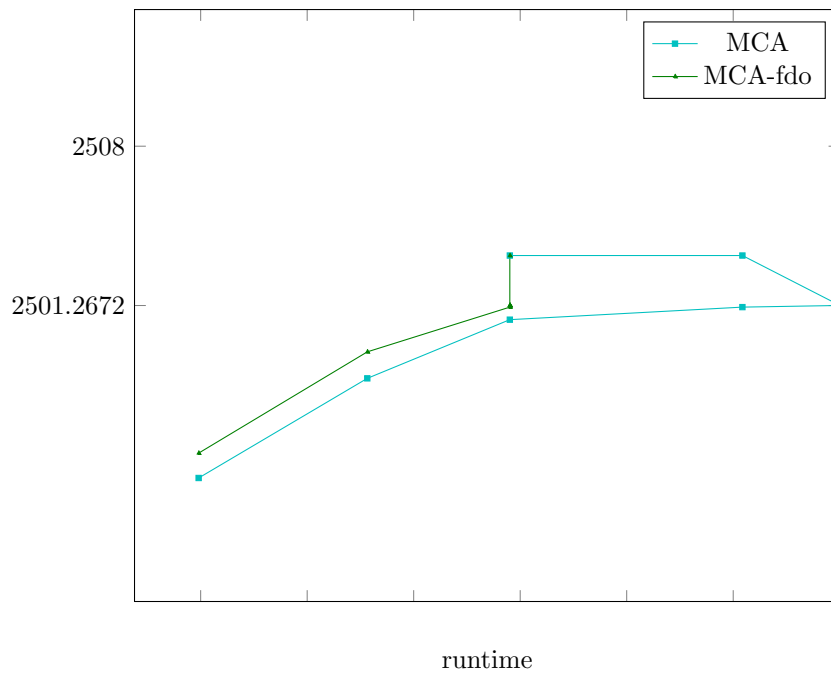


Figure 2228: Runtime results for the instance *219090.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

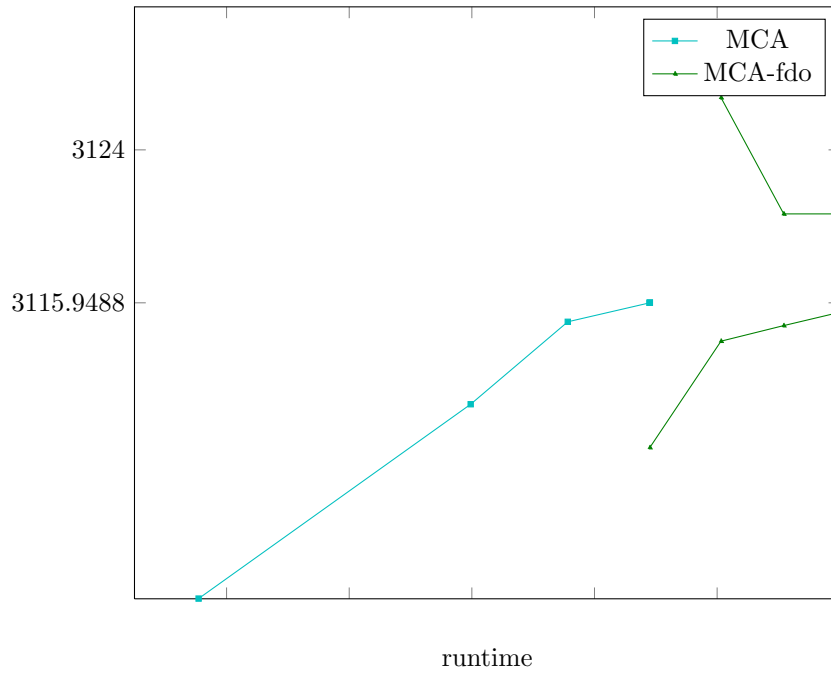


Figure 2229: Runtime results for the instance *220075.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

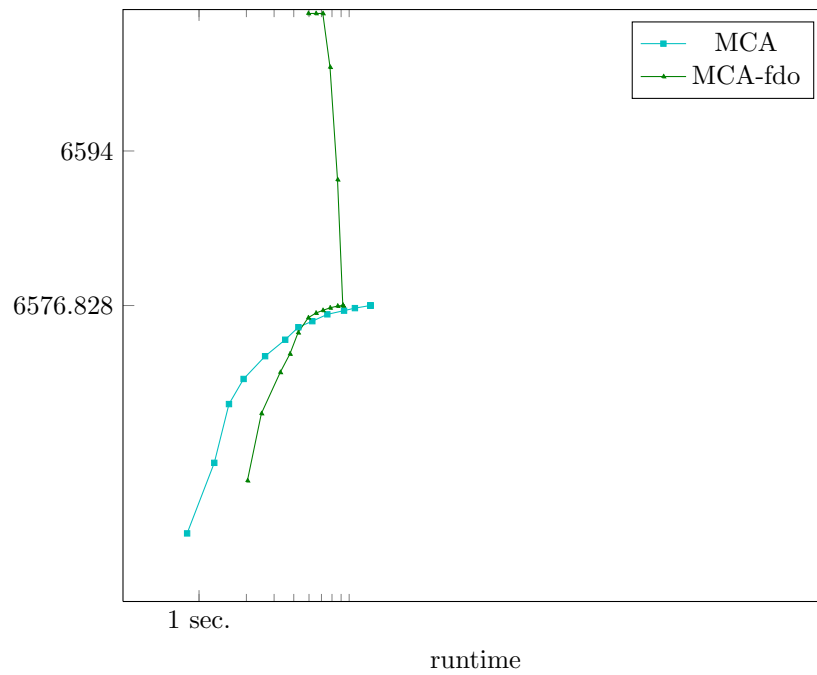


Figure 2230: Runtime results for the instance *223061.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

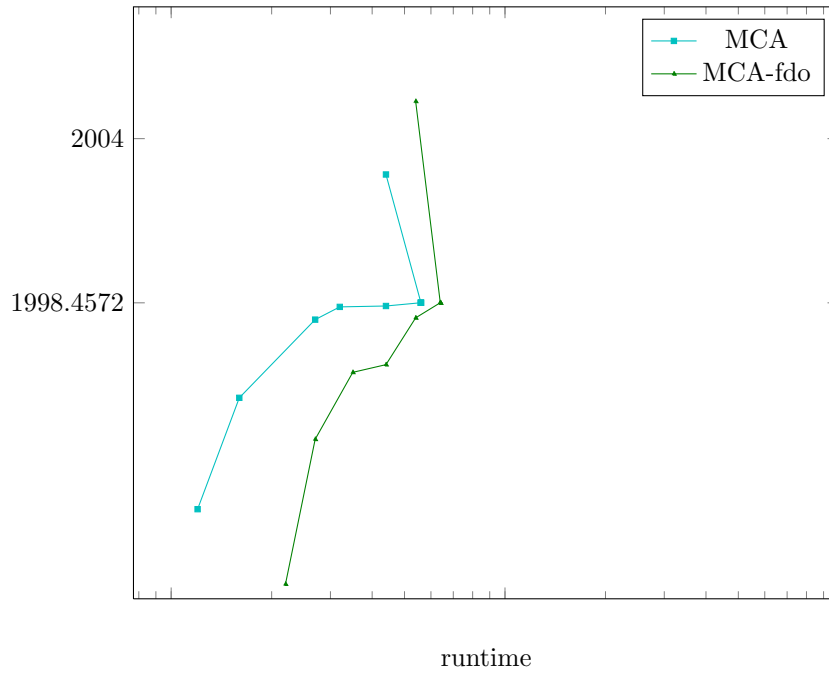


Figure 2231: Runtime results for the instance 227092.bmp of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

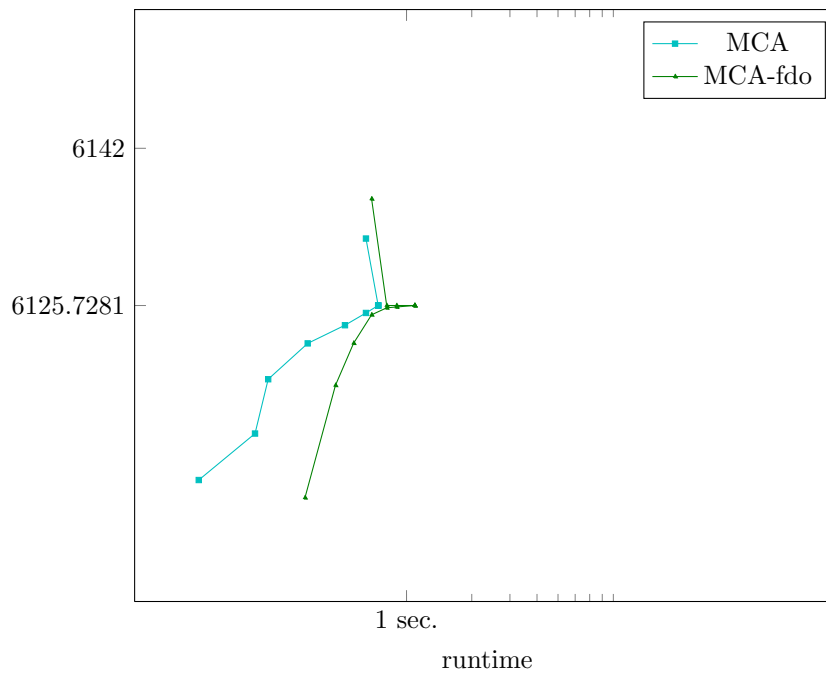


Figure 2232: Runtime results for the instance 229036.bmp of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

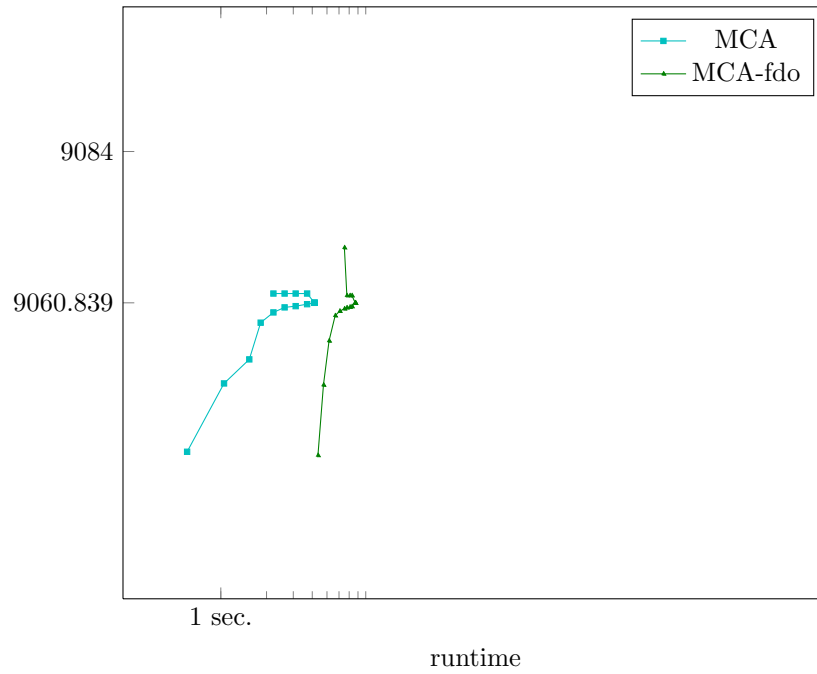


Figure 2233: Runtime results for the instance *236037.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

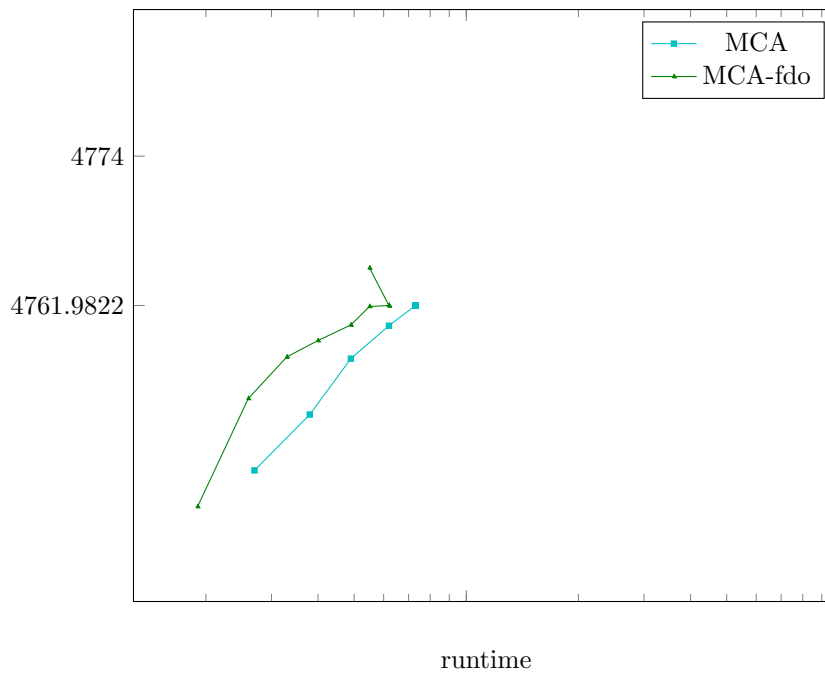


Figure 2234: Runtime results for the instance *24077.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

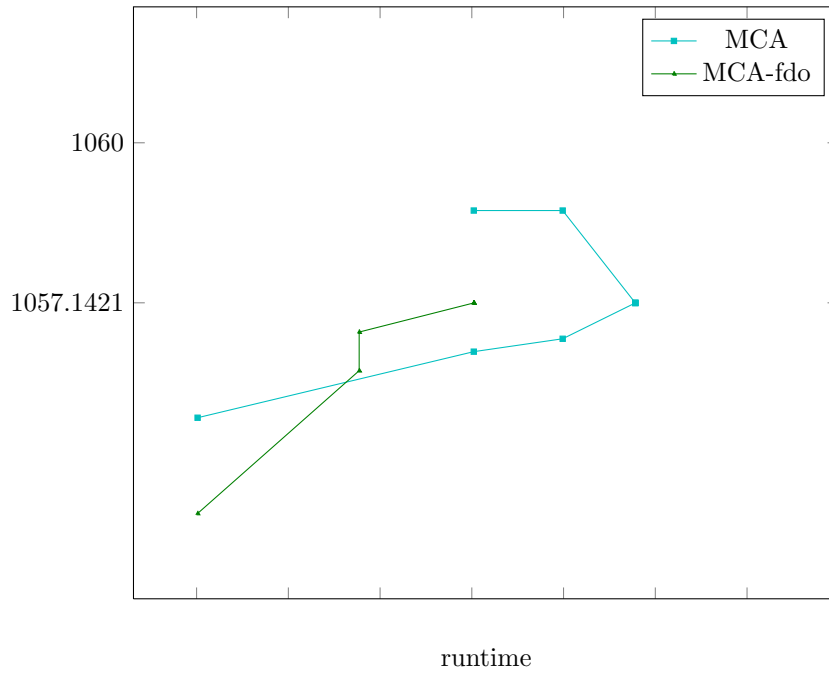


Figure 2235: Runtime results for the instance *241004.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

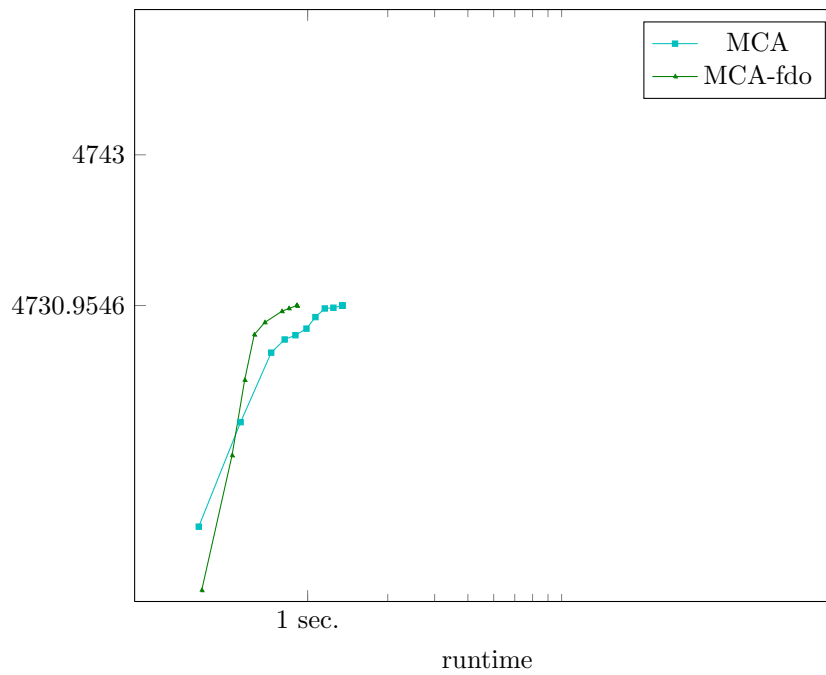


Figure 2236: Runtime results for the instance *241048.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

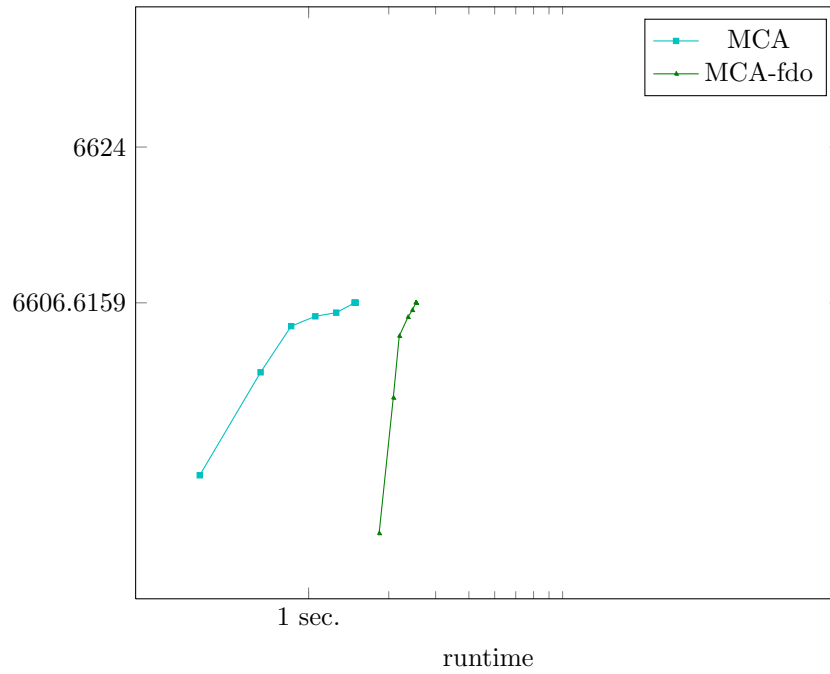


Figure 2237: Runtime results for the instance *253027.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

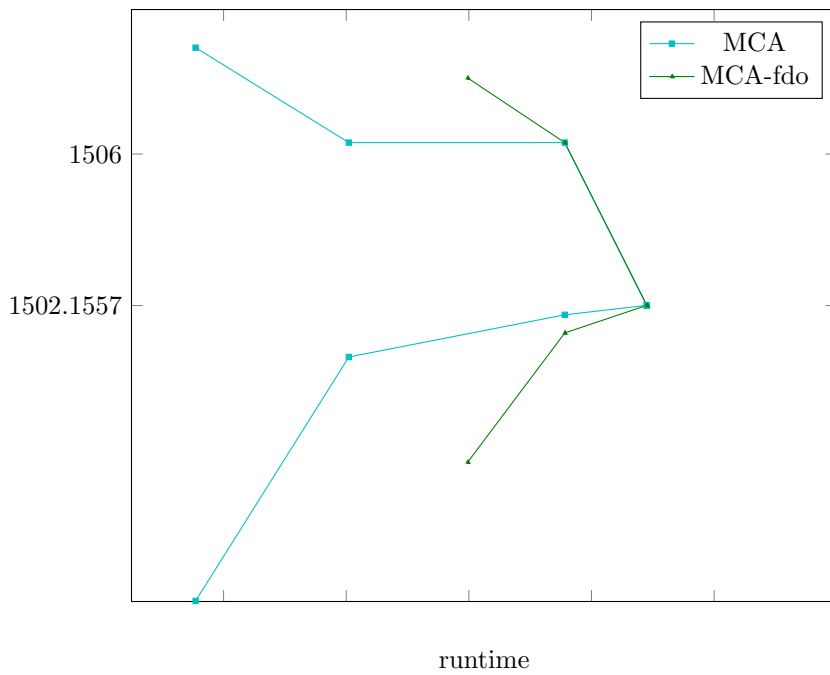


Figure 2238: Runtime results for the instance *253055.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

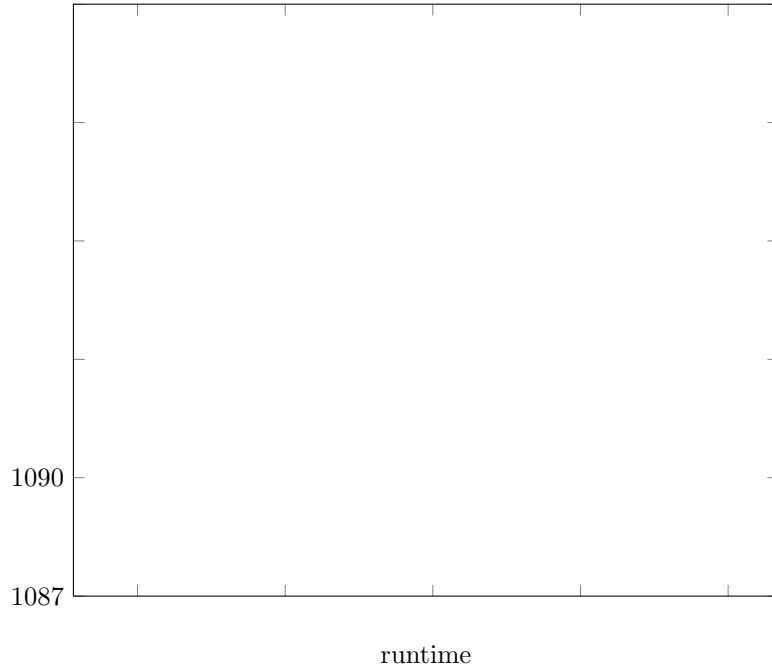


Figure 2239: Runtime results for the instance *260058.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

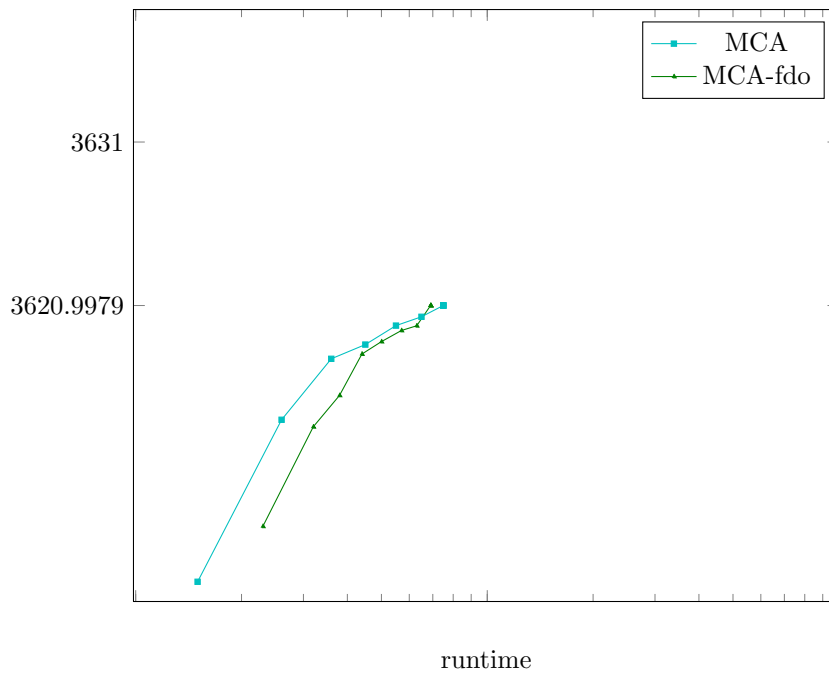


Figure 2240: Runtime results for the instance *271035.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

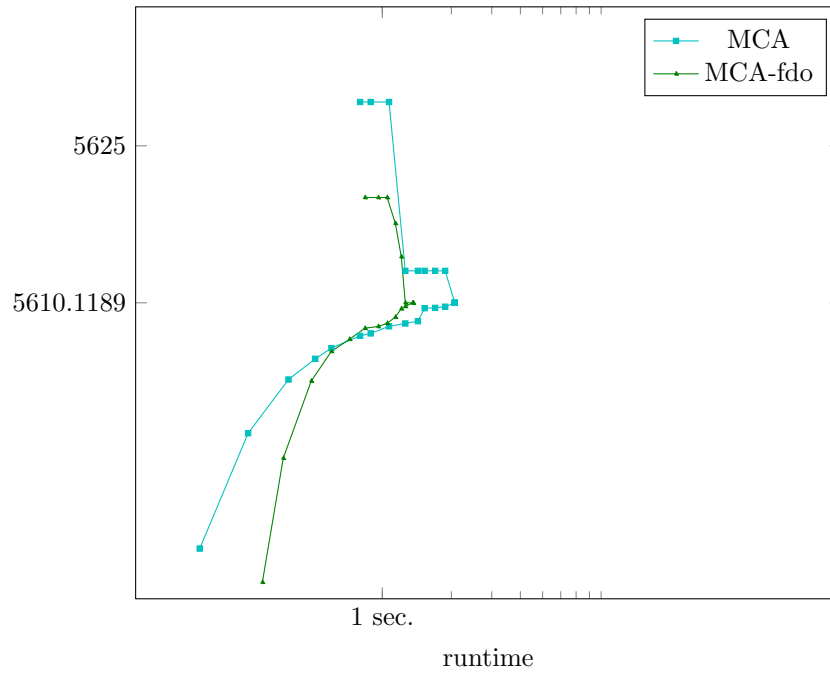


Figure 2241: Runtime results for the instance *285079.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

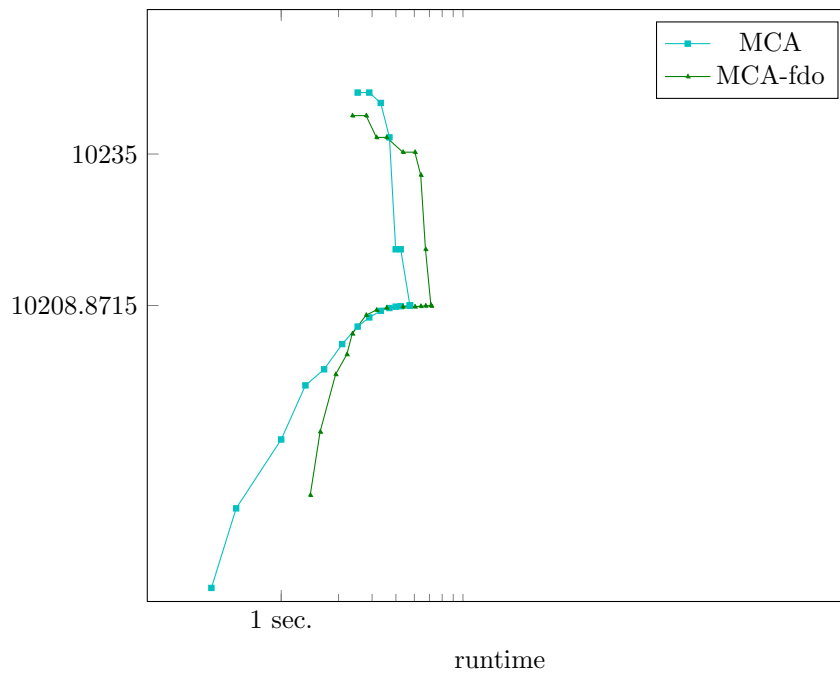


Figure 2242: Runtime results for the instance *291000.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

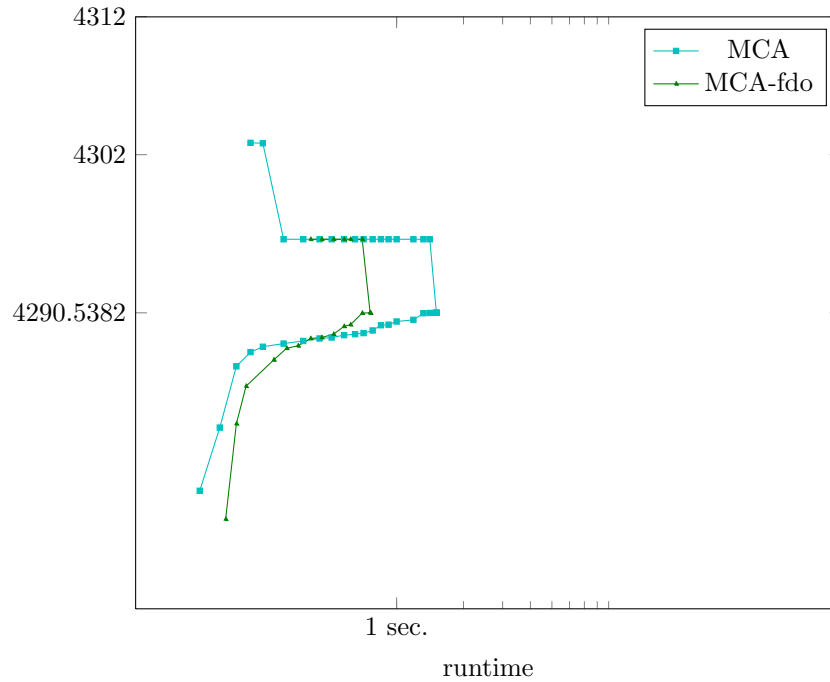


Figure 2243: Runtime results for the instance *295087.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

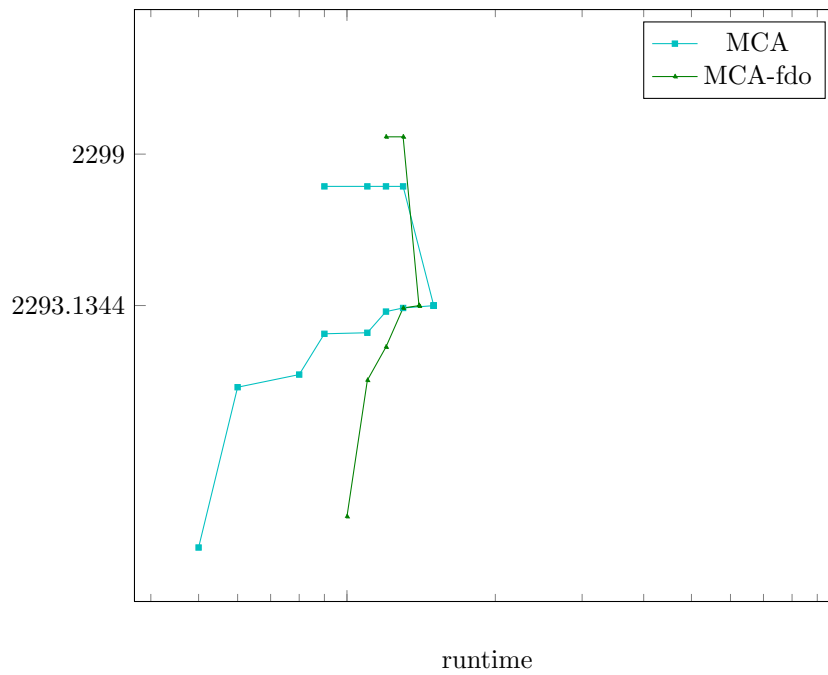


Figure 2244: Runtime results for the instance *296007.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

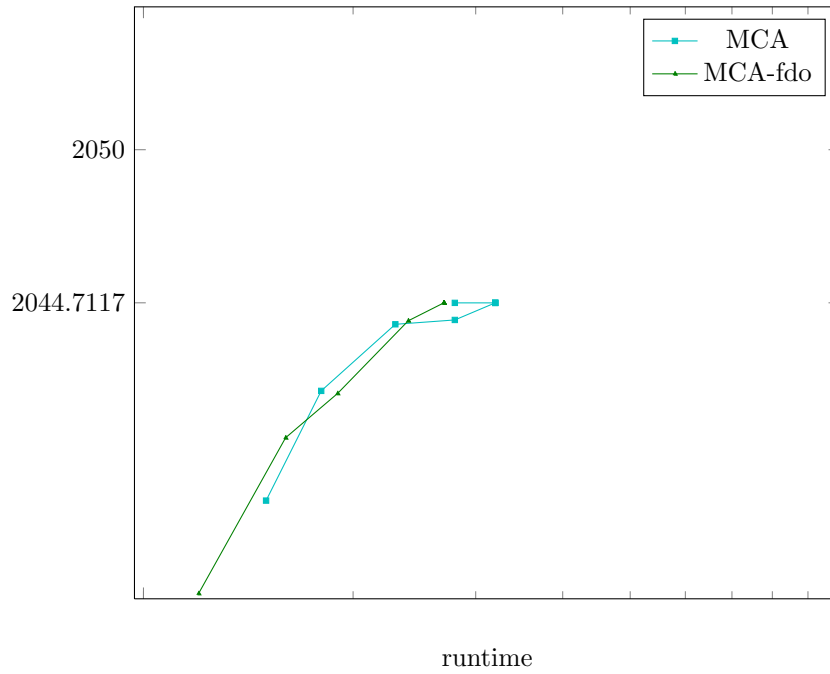


Figure 2245: Runtime results for the instance *296059.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

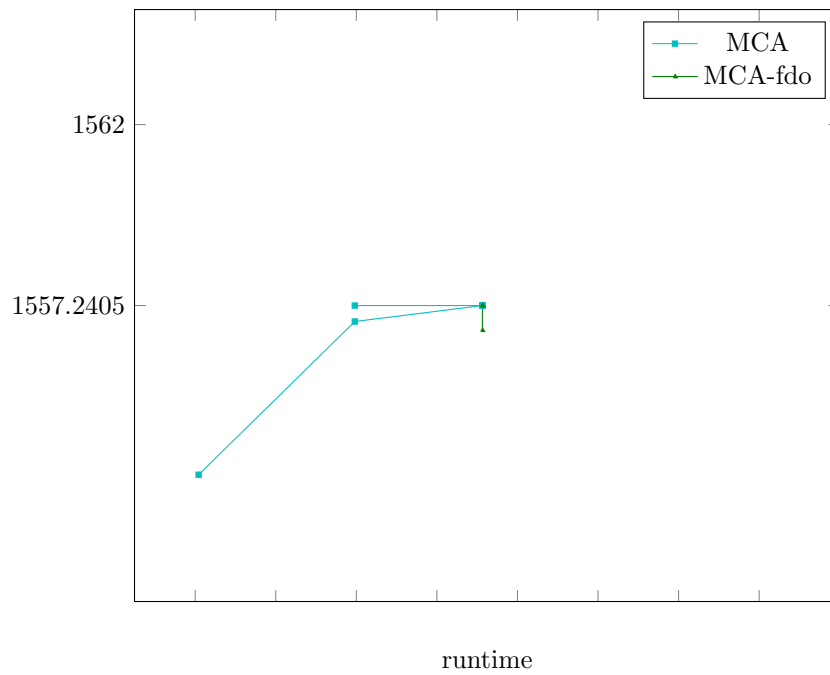


Figure 2246: Runtime results for the instance *299086.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

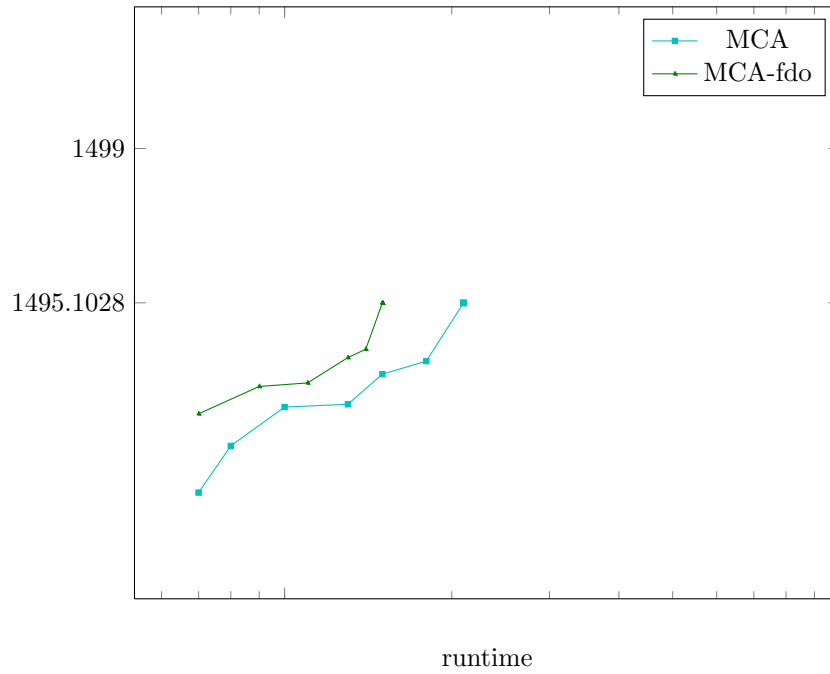


Figure 2247: Runtime results for the instance *300091.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

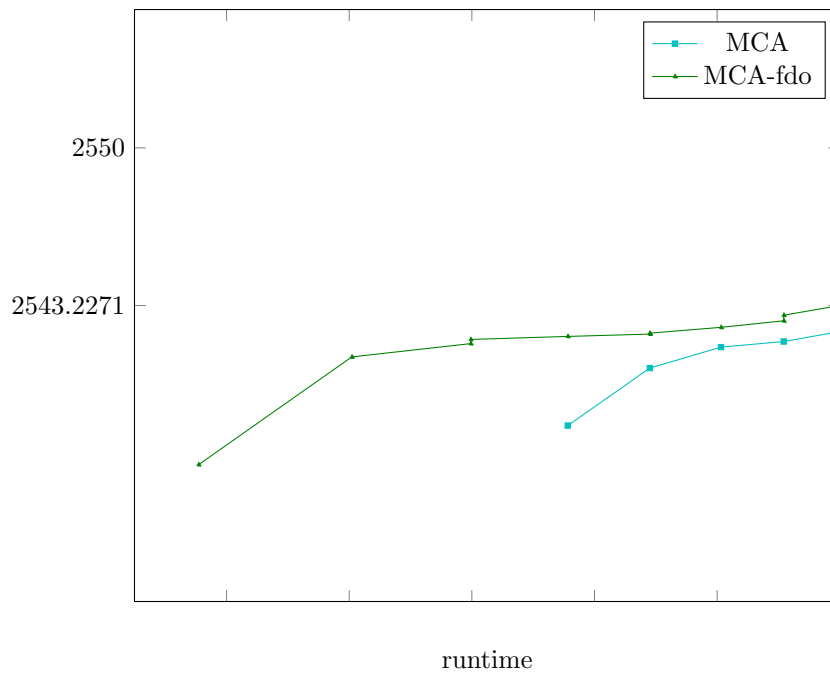


Figure 2248: Runtime results for the instance *302008.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

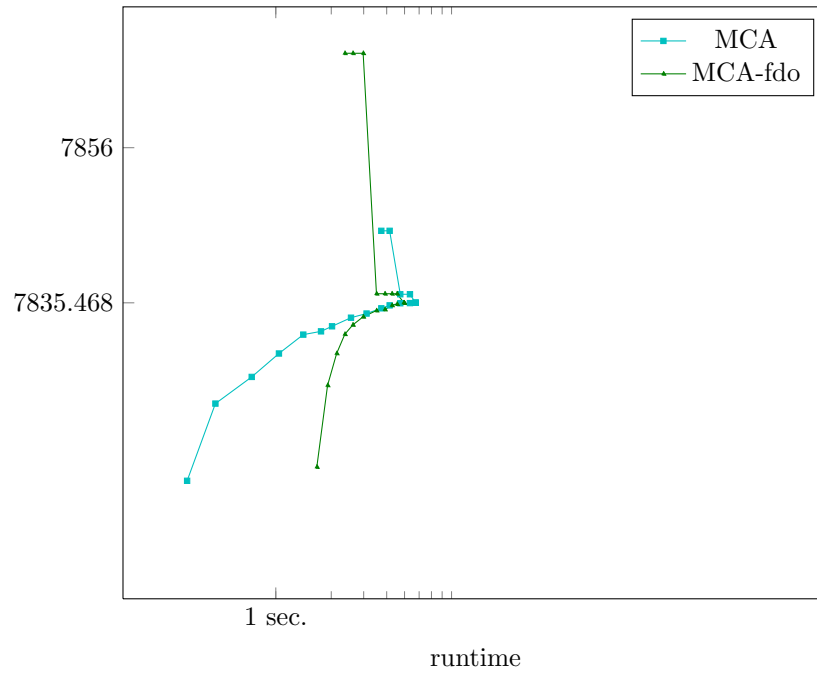


Figure 2249: Runtime results for the instance 304034.bmp of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

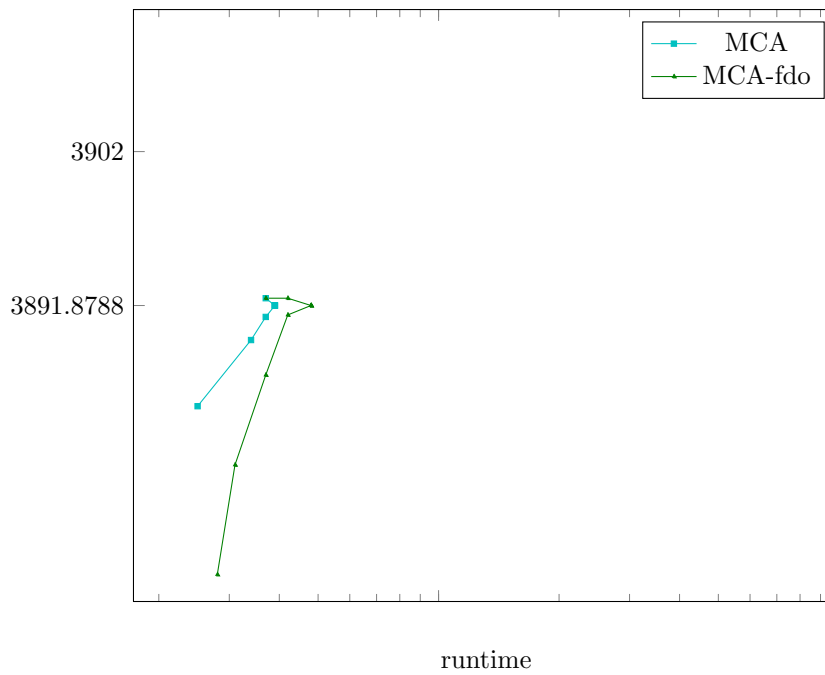


Figure 2250: Runtime results for the instance 304074.bmp of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

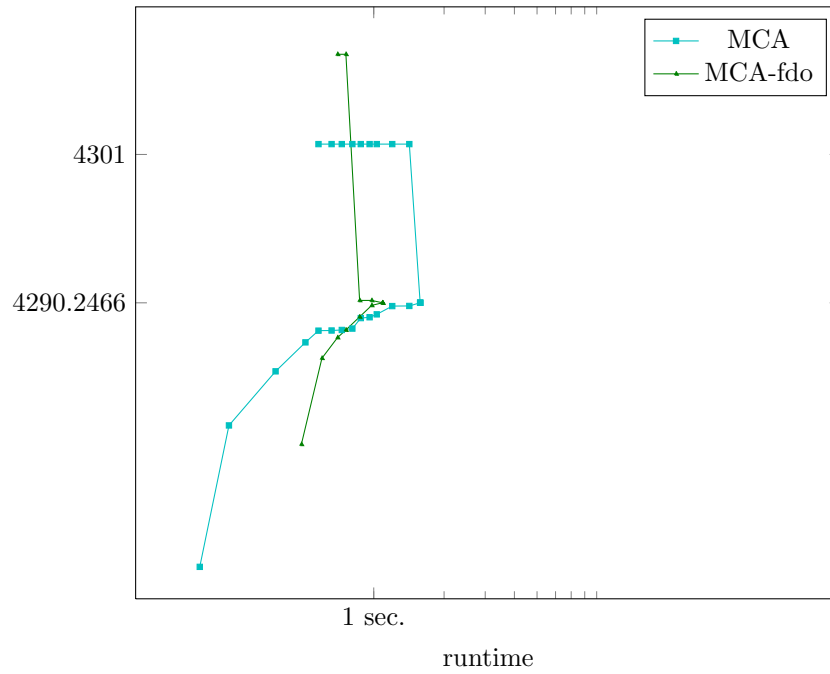


Figure 2251: Runtime results for the instance *306005.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

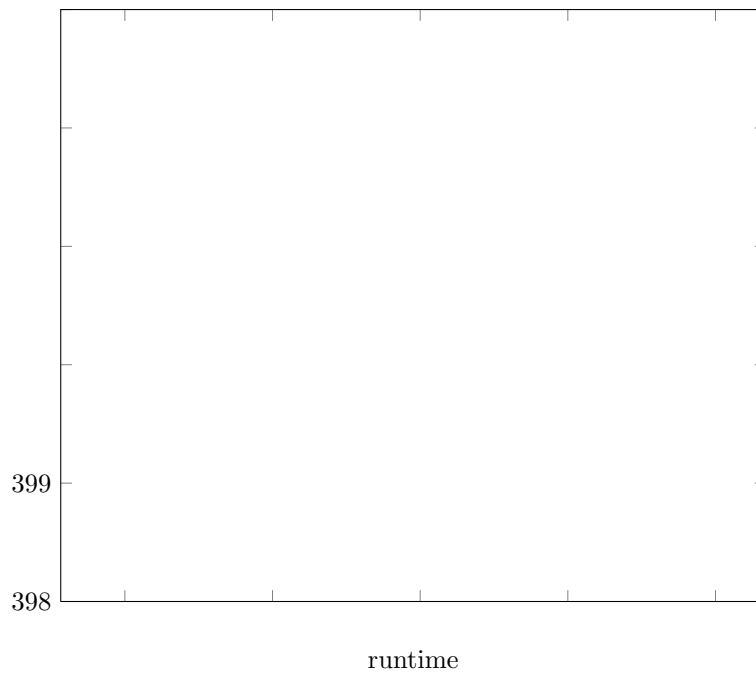


Figure 2252: Runtime results for the instance *3096.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

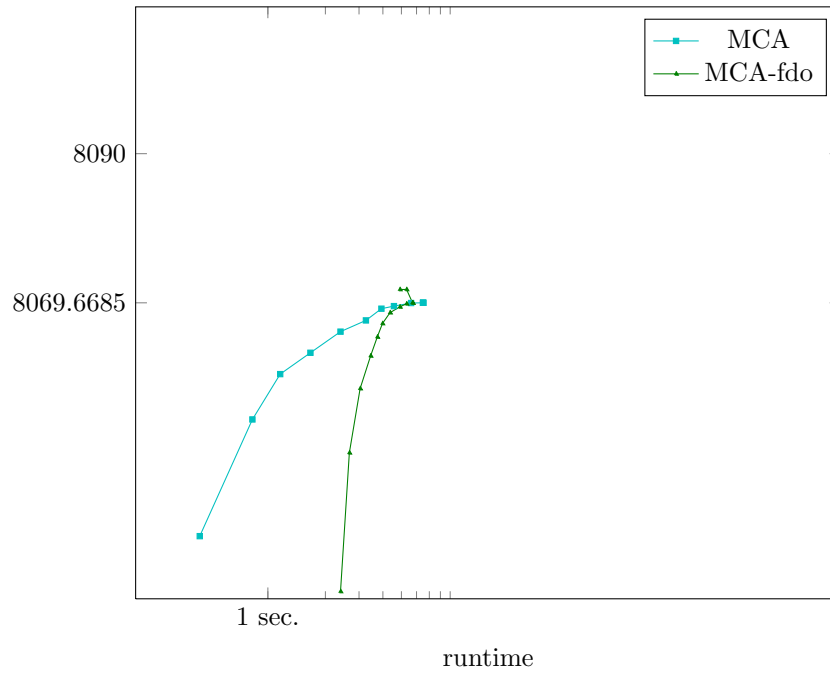


Figure 2253: Runtime results for the instance *33039.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

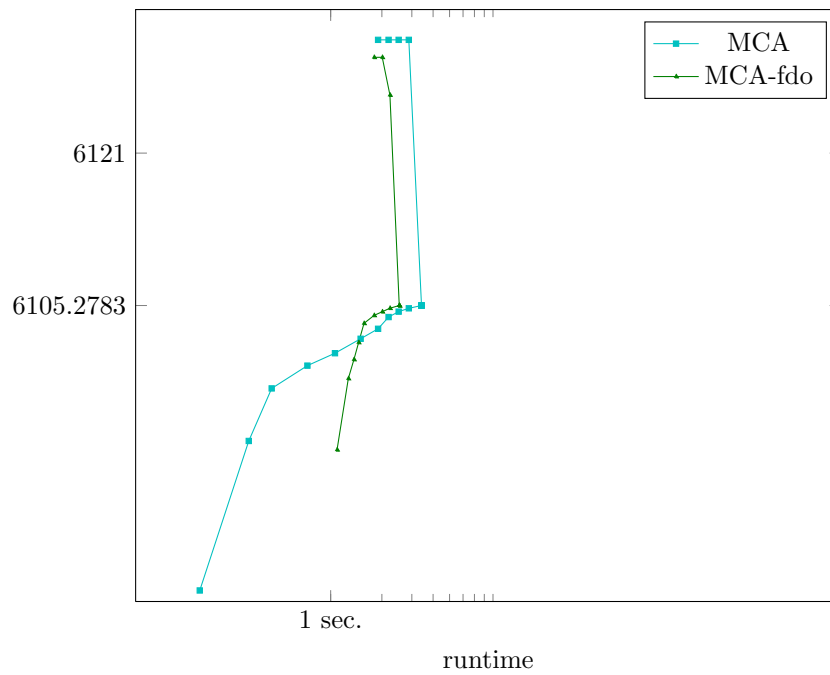


Figure 2254: Runtime results for the instance *351093.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

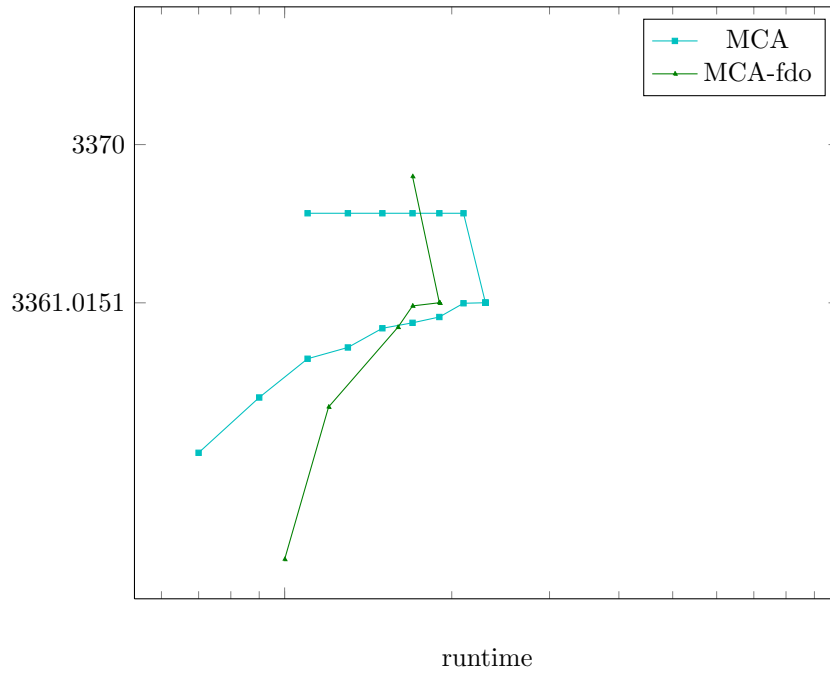


Figure 2255: Runtime results for the instance *361010.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

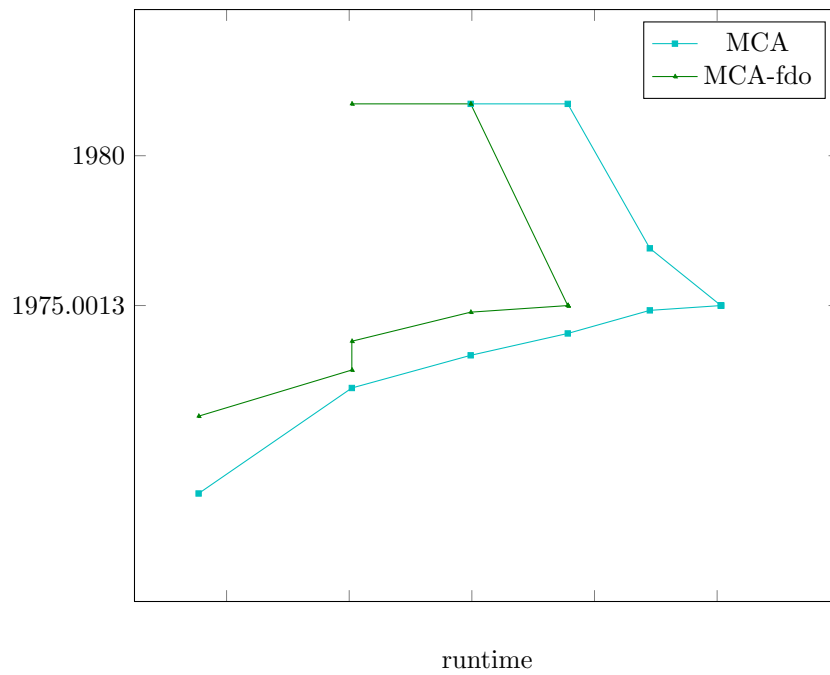


Figure 2256: Runtime results for the instance *37073.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

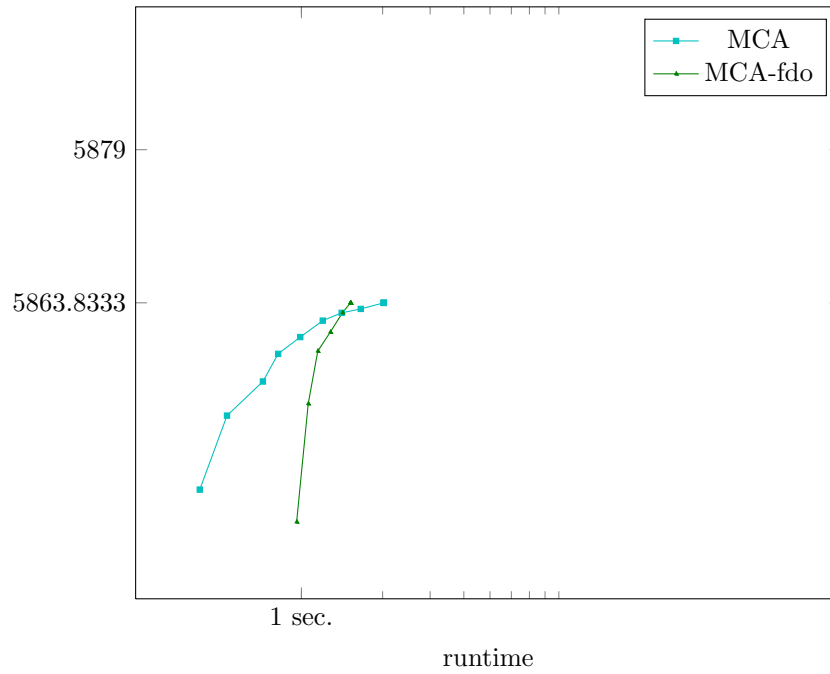
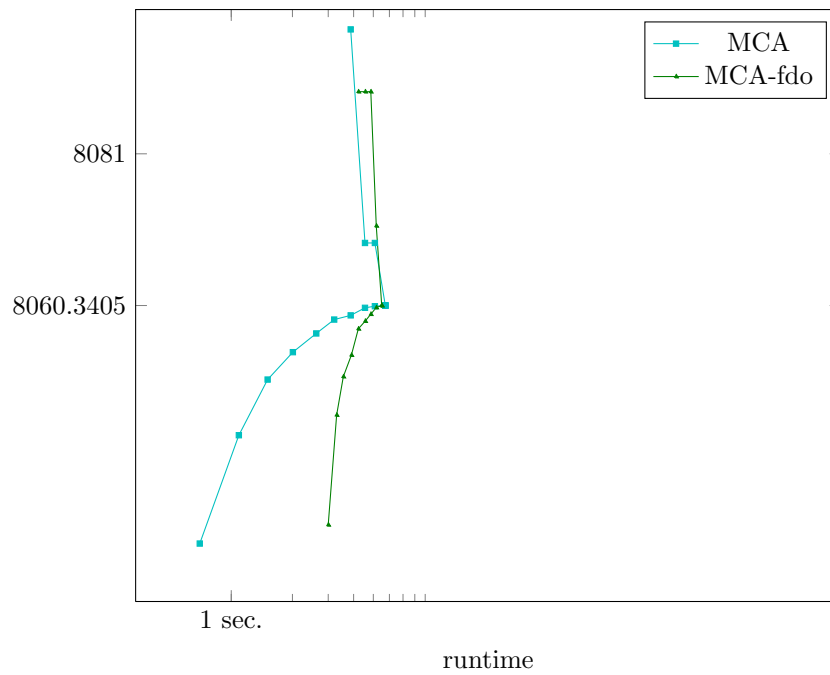


Figure 2257: Runtime results for the instance *376043.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.



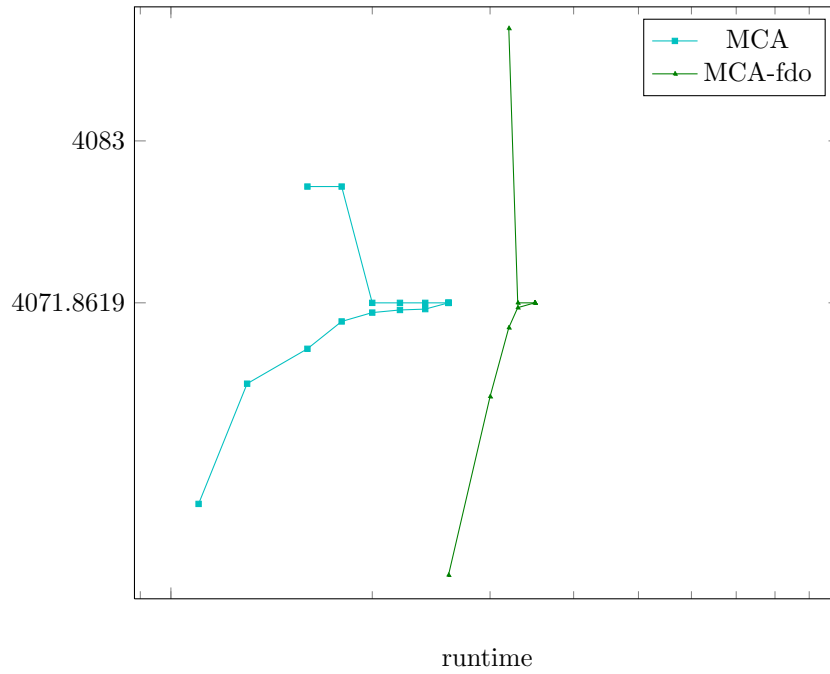


Figure 2259: Runtime results for the instance *38092.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

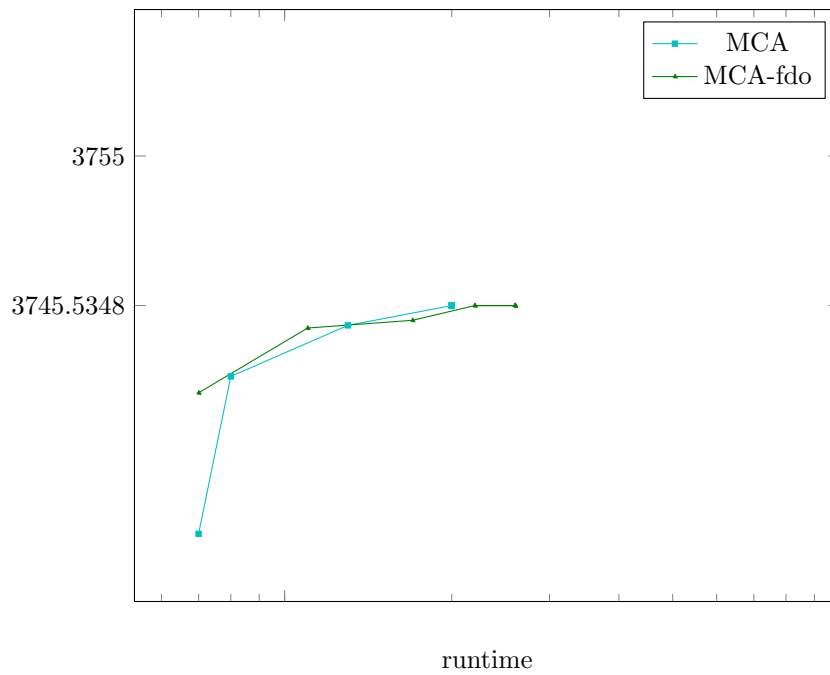


Figure 2260: Runtime results for the instance *385039.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

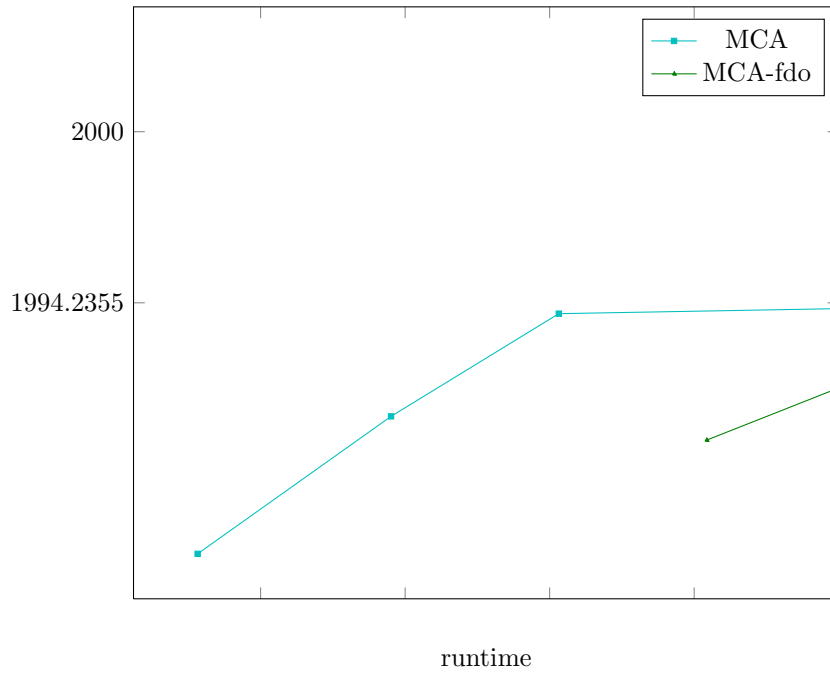


Figure 2261: Runtime results for the instance *41033.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

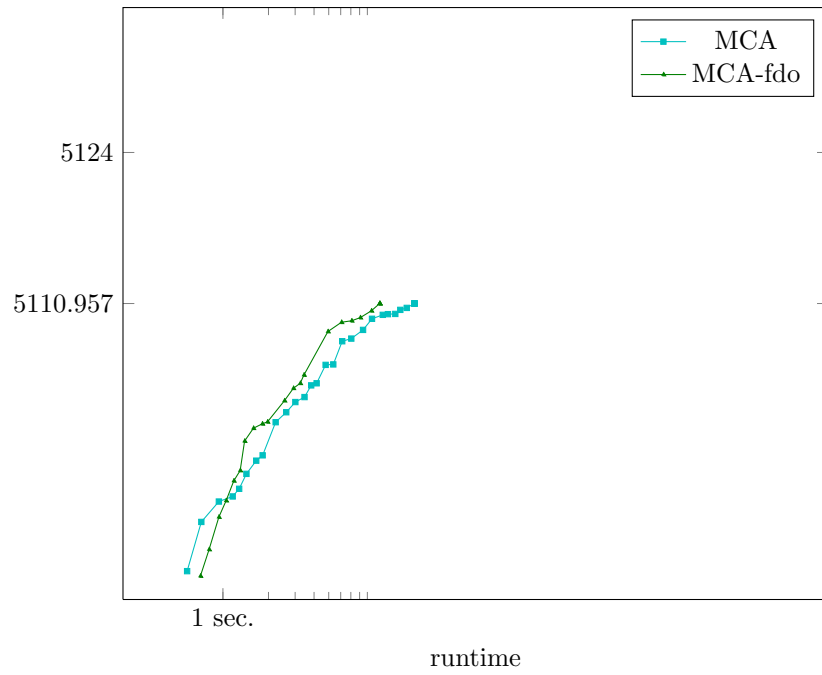


Figure 2262: Runtime results for the instance *41069.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

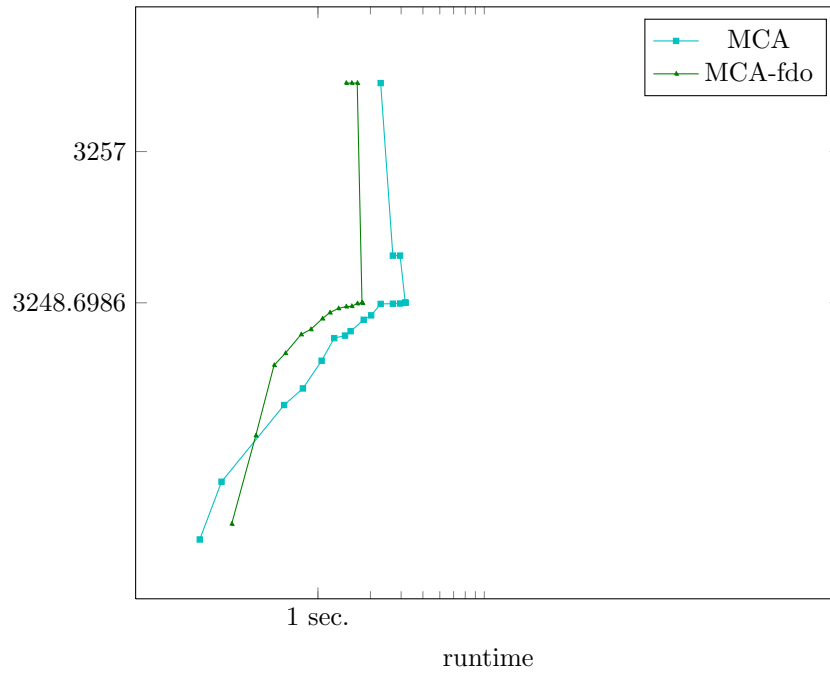


Figure 2263: Runtime results for the instance *42012.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

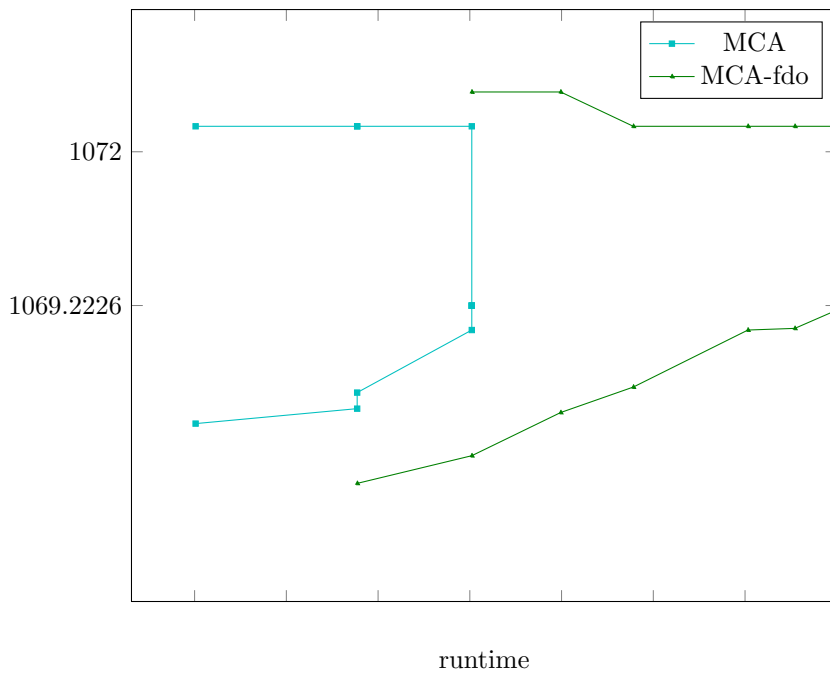


Figure 2264: Runtime results for the instance *42049.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

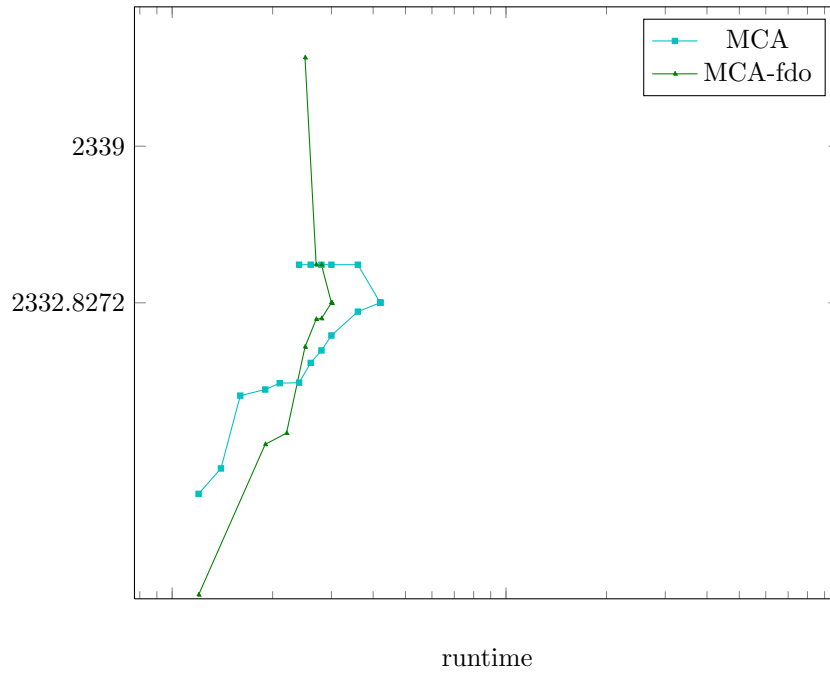


Figure 2265: Runtime results for the instance *43074.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

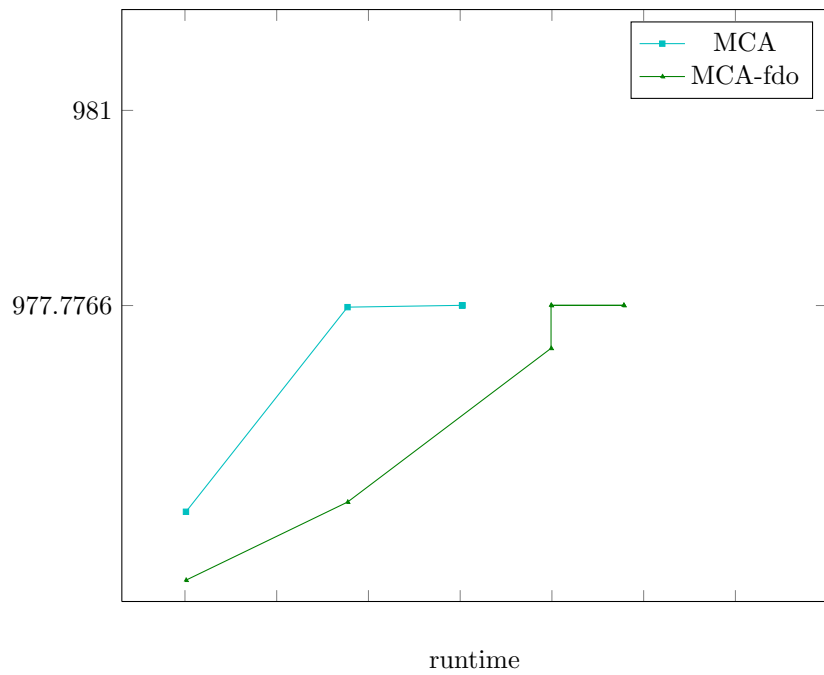


Figure 2266: Runtime results for the instance *45096.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

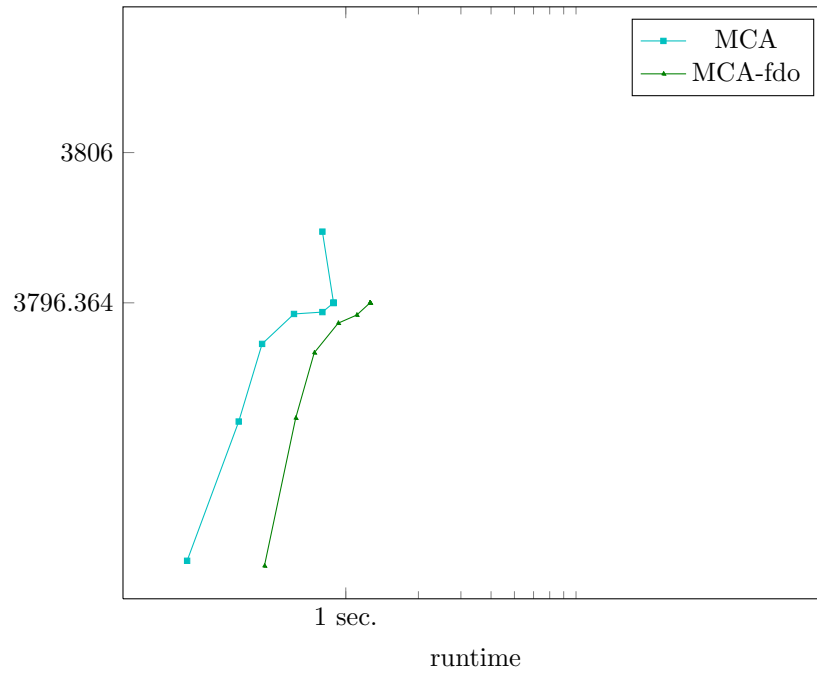


Figure 2267: Runtime results for the instance *54082.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

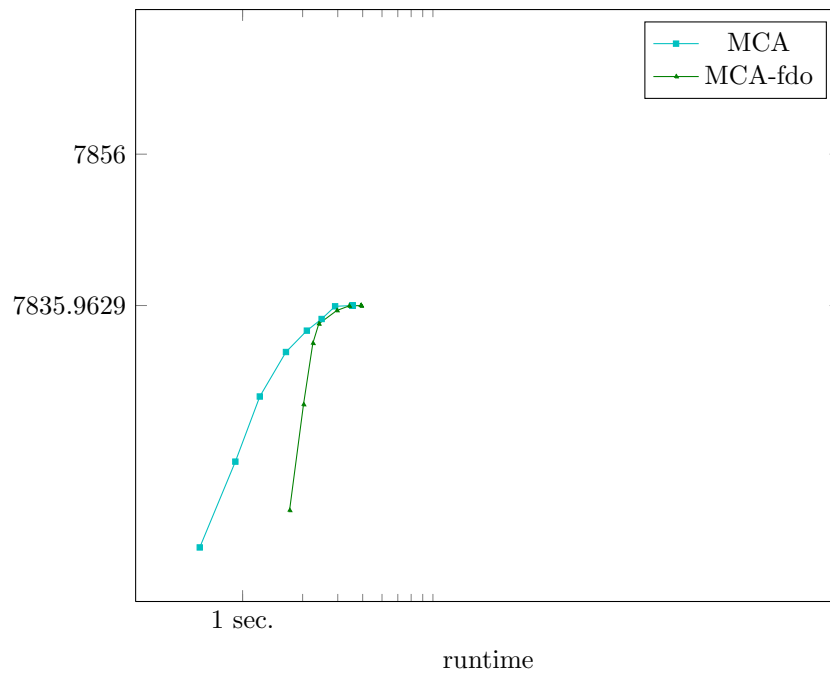


Figure 2268: Runtime results for the instance *55073.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

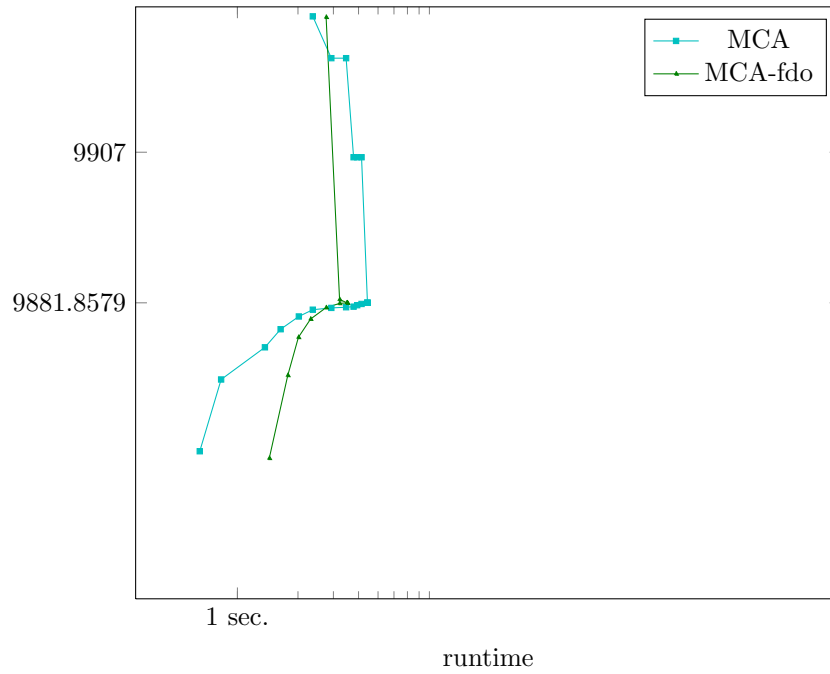


Figure 2269: Runtime results for the instance *58060.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

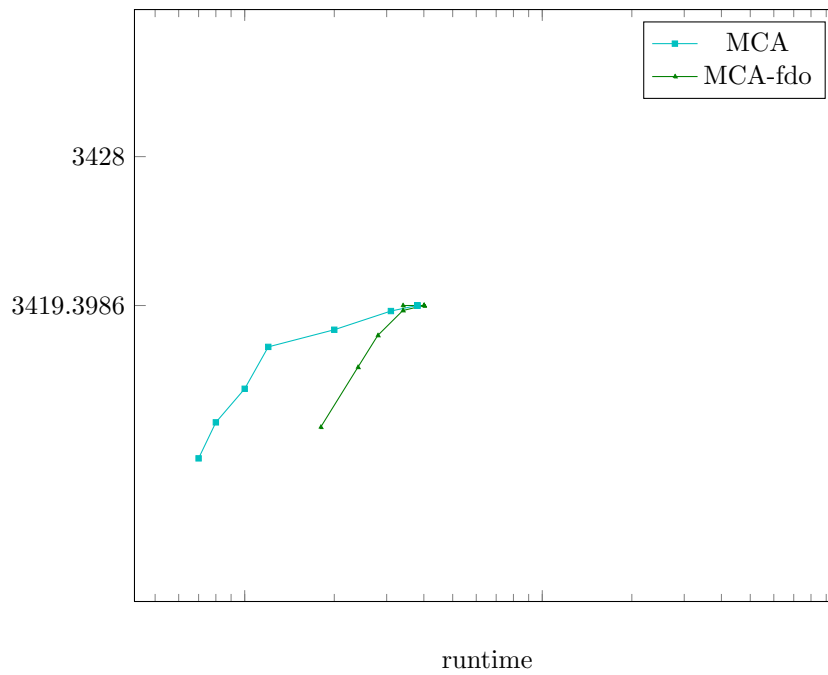


Figure 2270: Runtime results for the instance *62096.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

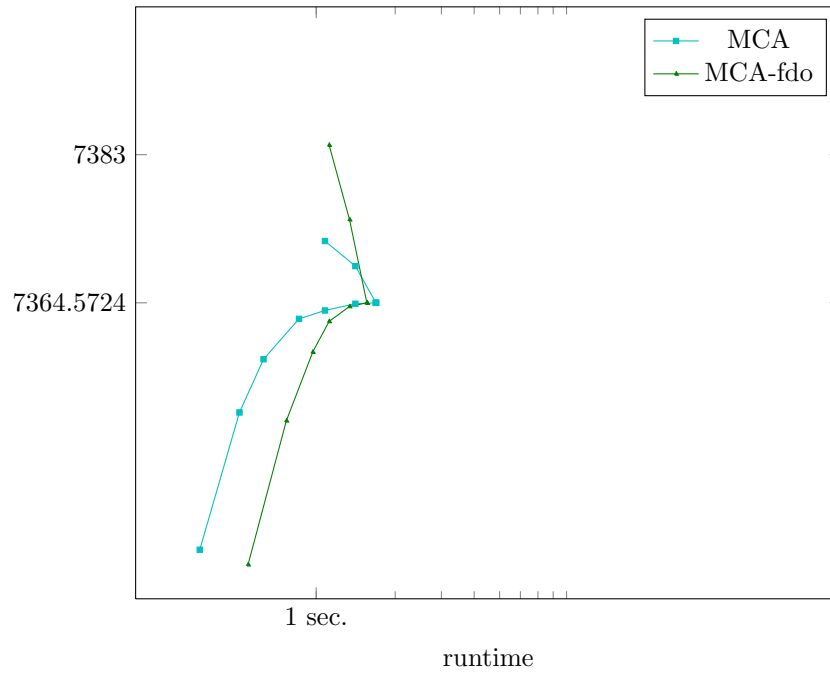


Figure 2271: Runtime results for the instance *65033.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

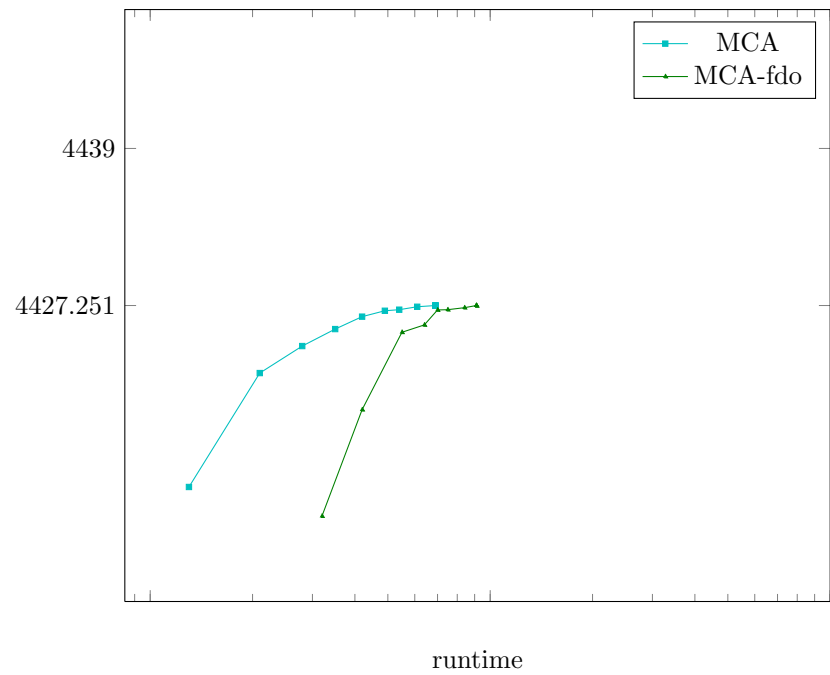


Figure 2272: Runtime results for the instance *66053.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

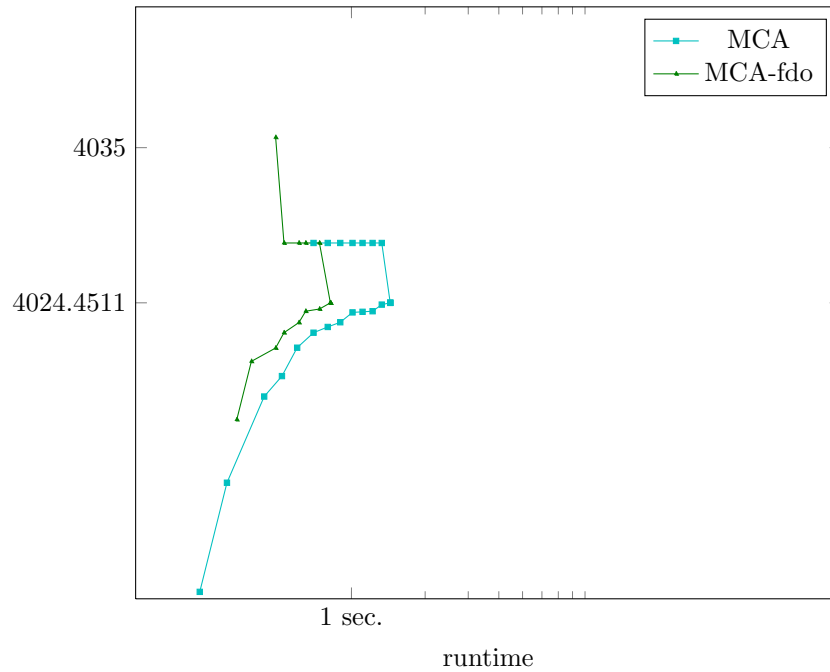


Figure 2273: Runtime results for the instance *69015.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

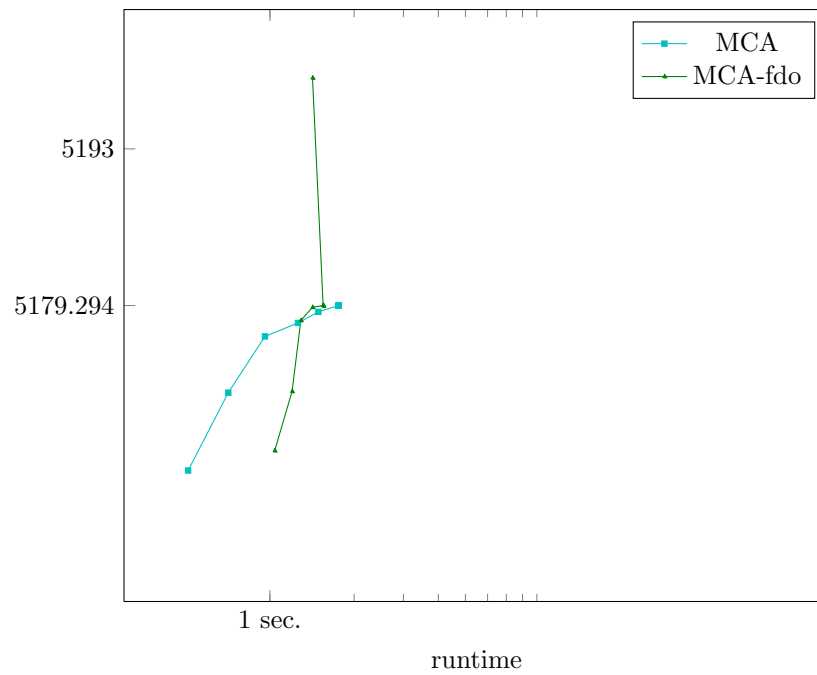


Figure 2274: Runtime results for the instance *69020.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

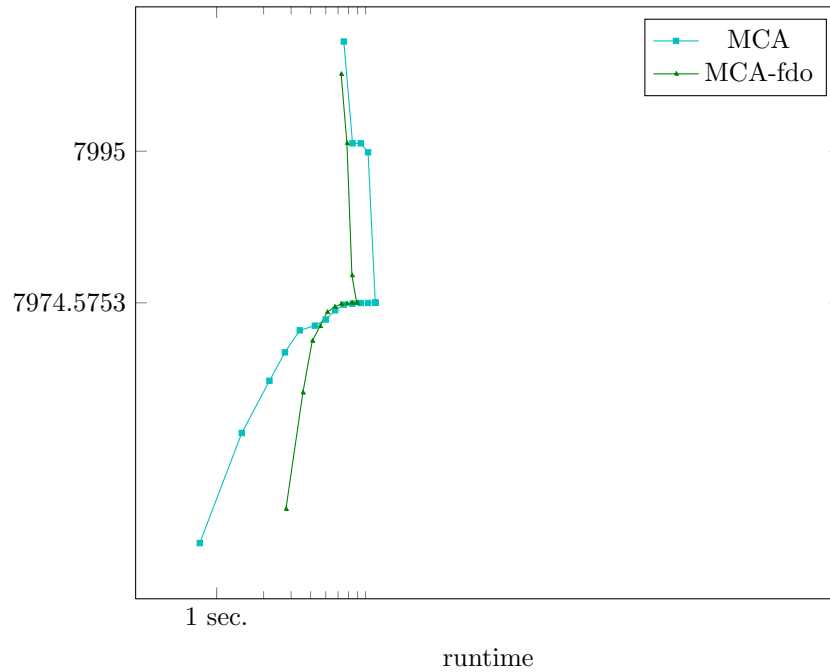


Figure 2275: Runtime results for the instance *69040.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

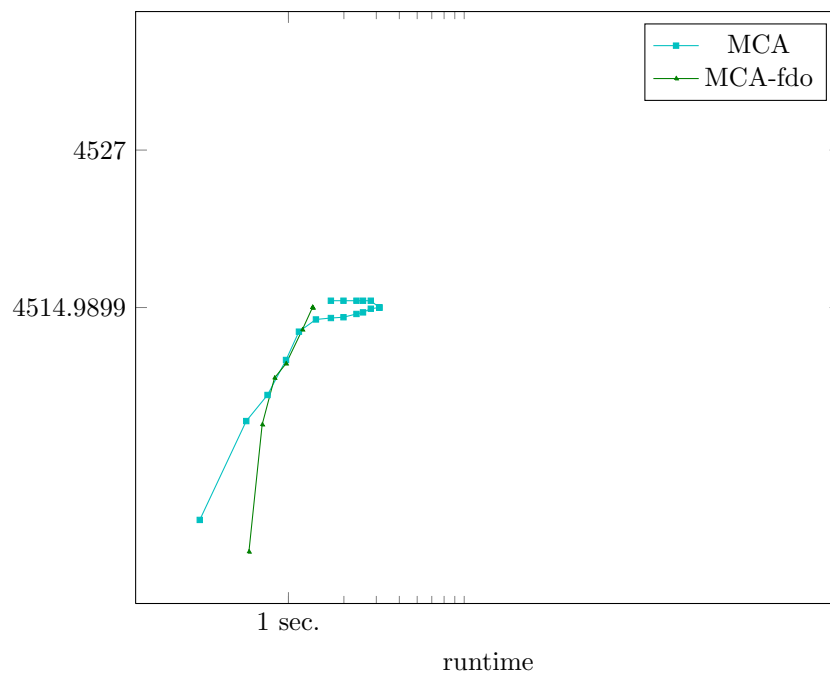


Figure 2276: Runtime results for the instance *76053.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

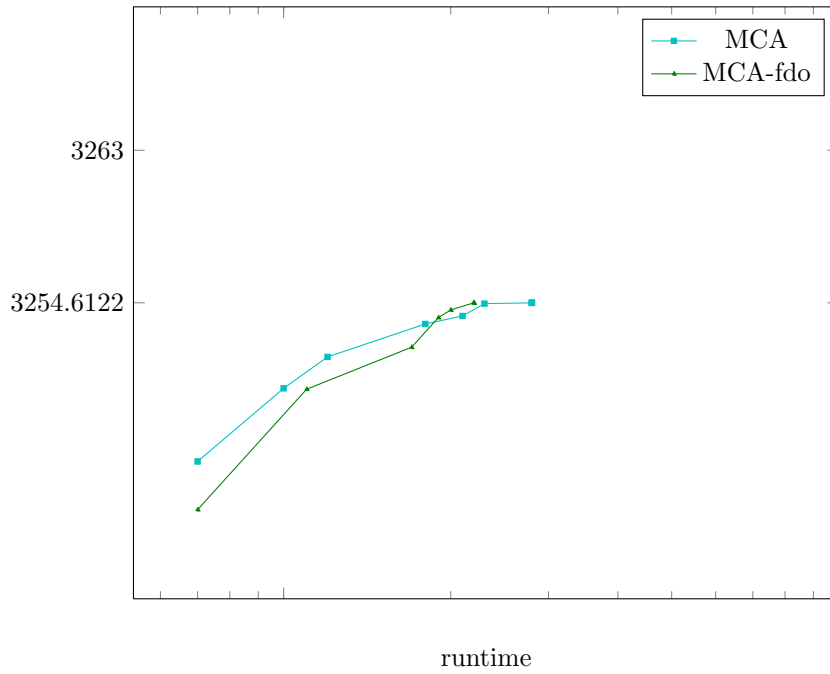


Figure 2277: Runtime results for the instance *78004.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

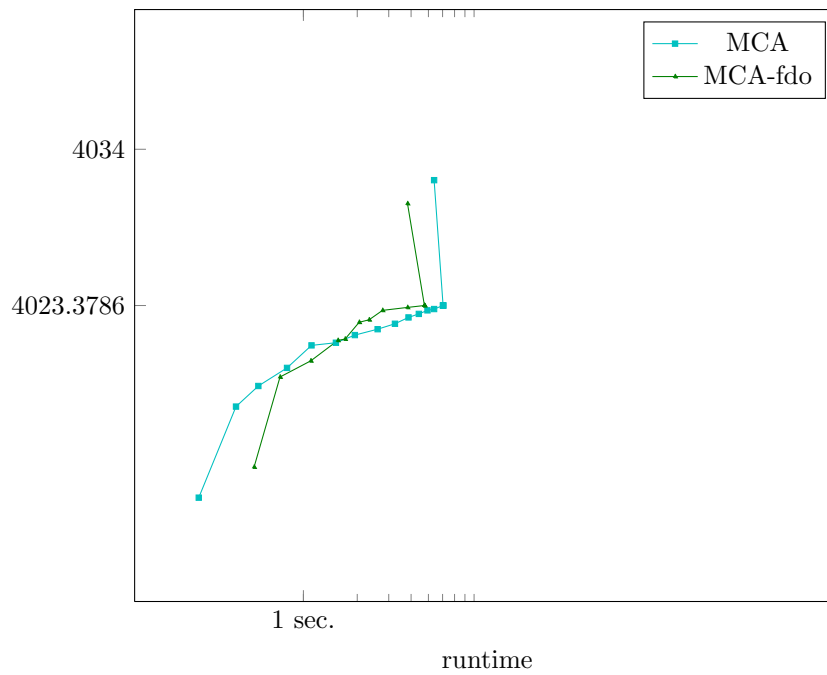


Figure 2278: Runtime results for the instance *8023.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

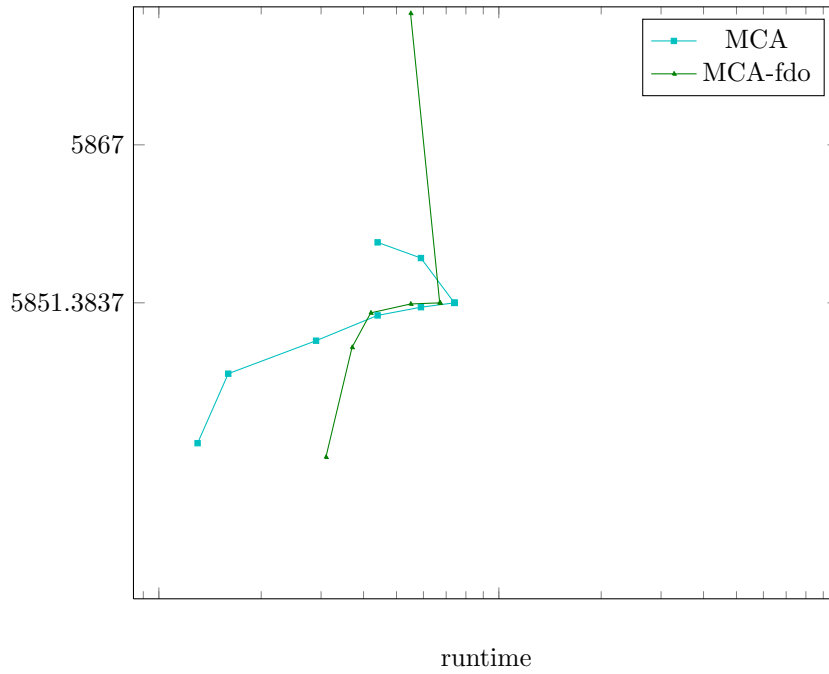


Figure 2279: Runtime results for the instance *85048.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

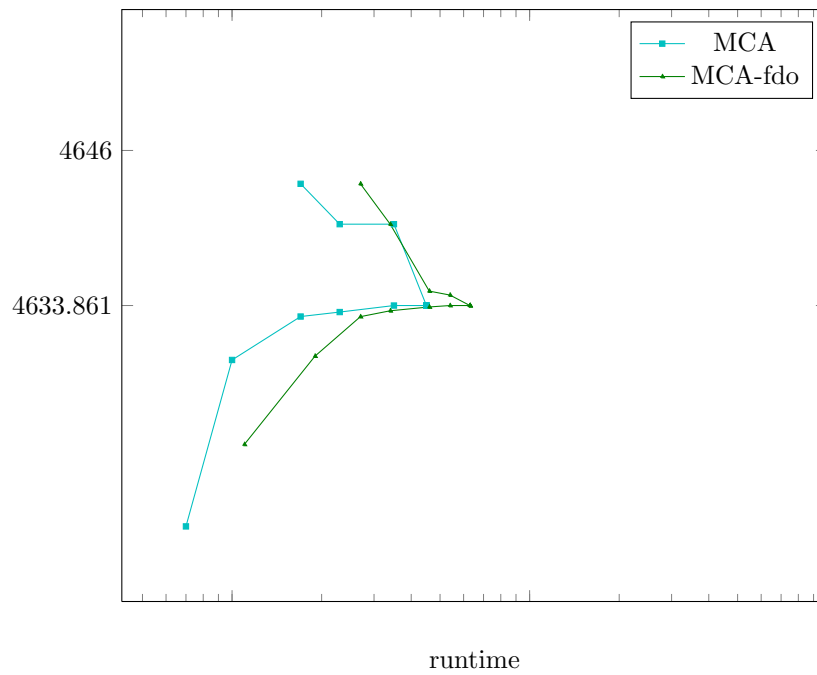


Figure 2280: Runtime results for the instance *86000.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

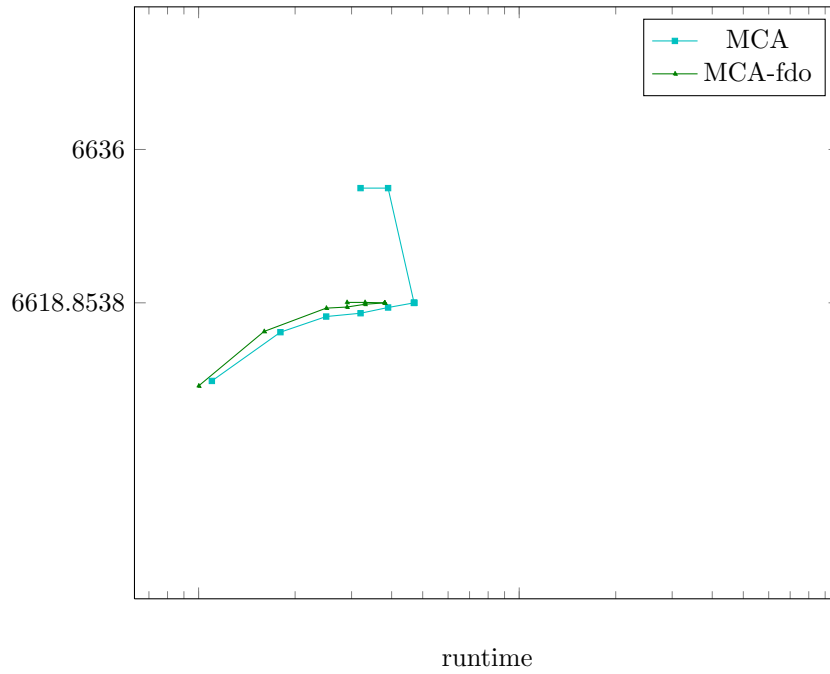


Figure 2281: Runtime results for the instance *86016.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

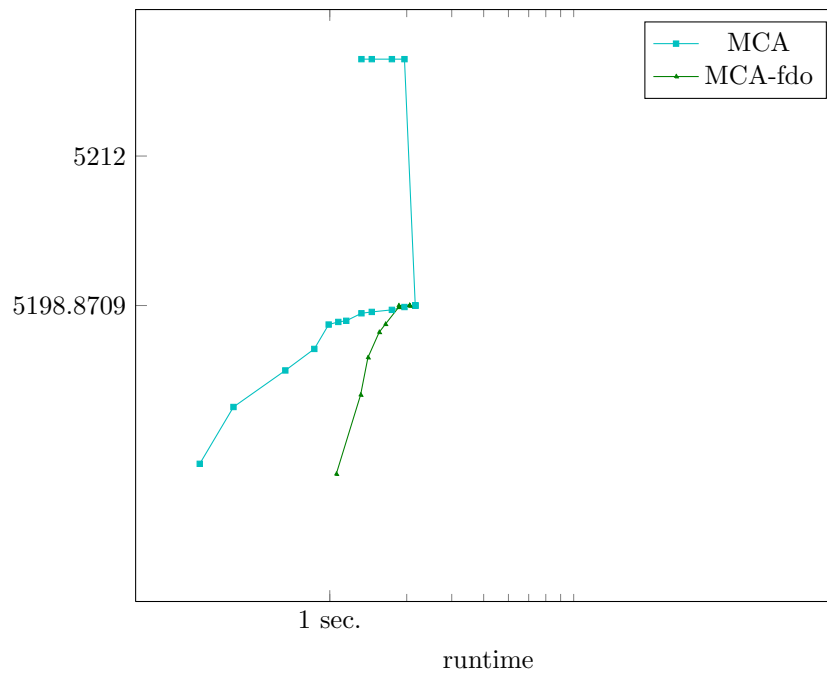


Figure 2282: Runtime results for the instance *86068.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

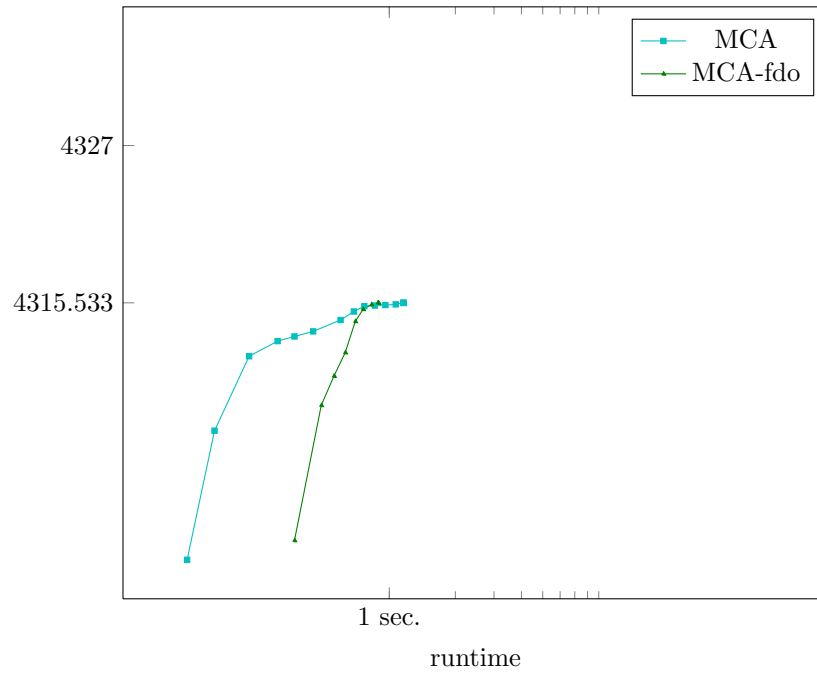


Figure 2283: Runtime results for the instance *87046.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

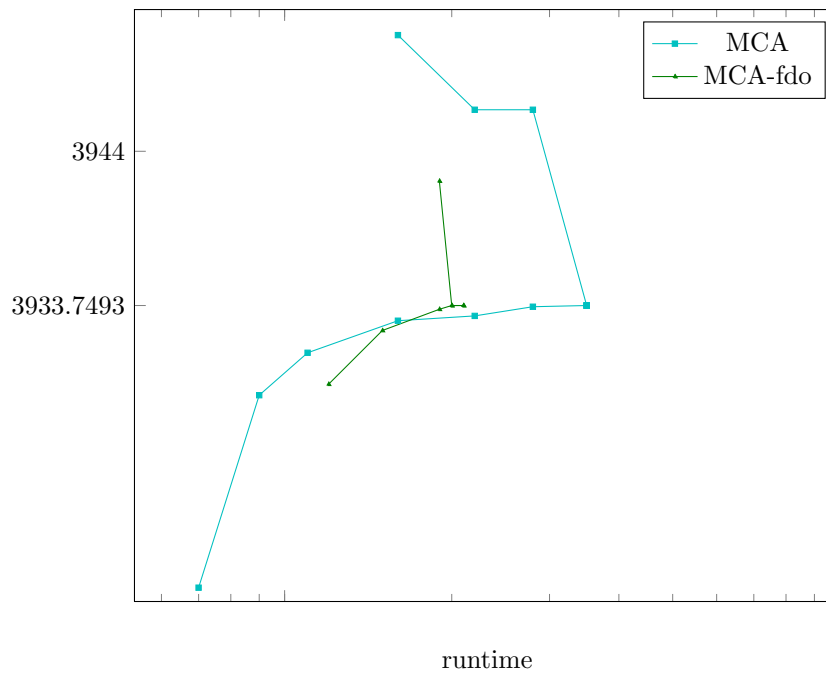


Figure 2284: Runtime results for the instance *89072.bmp* of the *image-seg* models. Plots show best value of integer solution and (if provided) best lower bound.

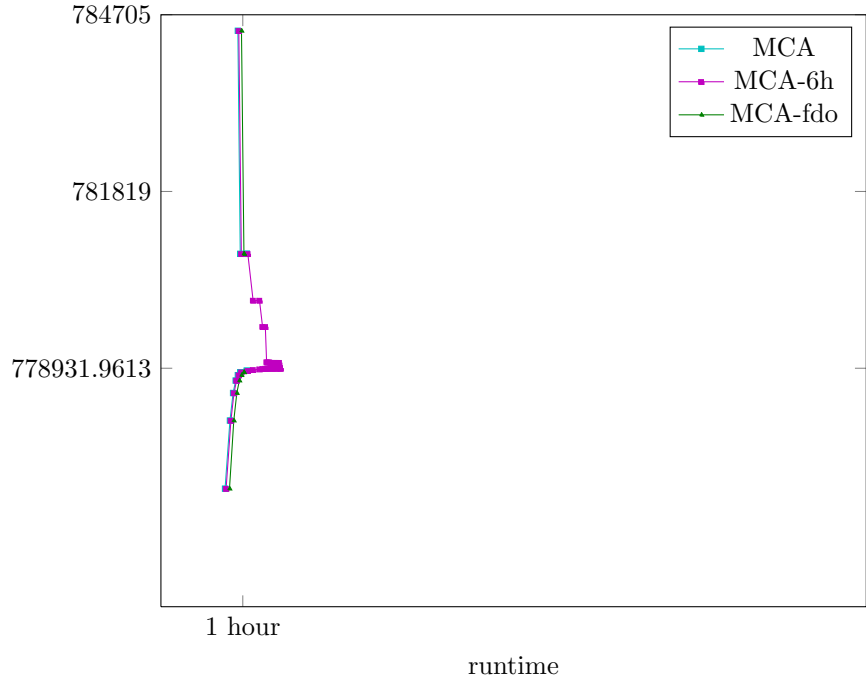


Figure 2287: Runtime results for the instance *mc3d2-model* of the *seg-3d* models. Plots show best value of integer solution and (if provided) best lower bound.

5.18. Cell Tracking (cell-tracking)

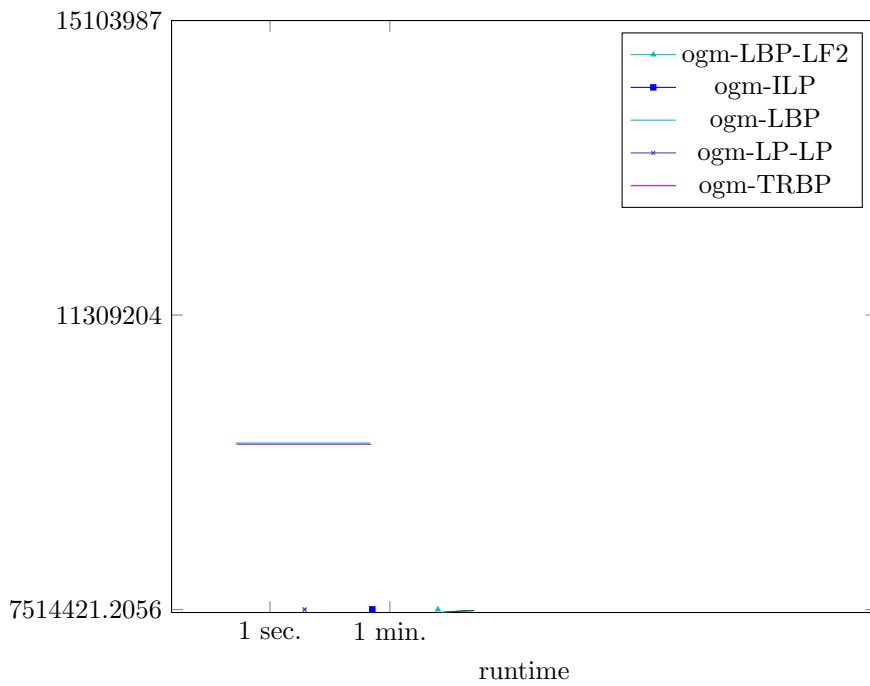


Figure 2288: Runtime results for the instance *ogm_model* of the *cell-tracking* models. Plots show best value of integer solution and (if provided) best lower bound.

5.19. Non-Rigid Point Matching (matching)

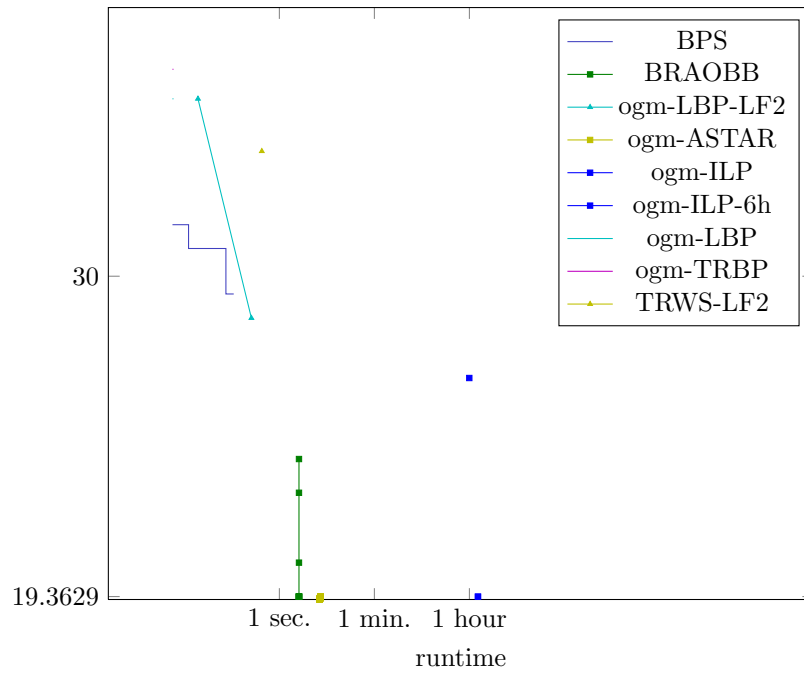


Figure 2289: Runtime results for the instance *matching0* of the *matching* models. Plots show best value of integer solution and (if provided) best lower bound.

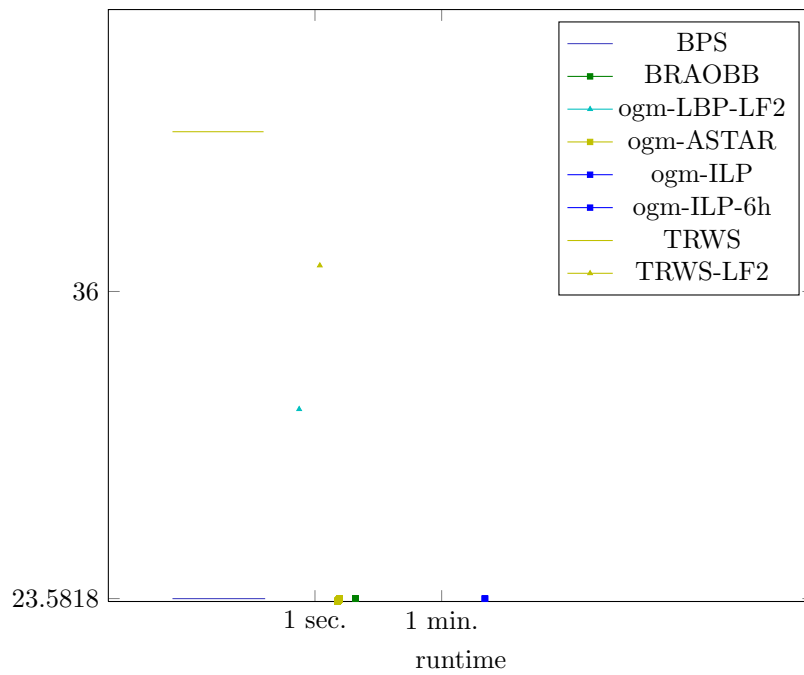


Figure 2290: Runtime results for the instance *matching1* of the *matching* models. Plots show best value of integer solution and (if provided) best lower bound.

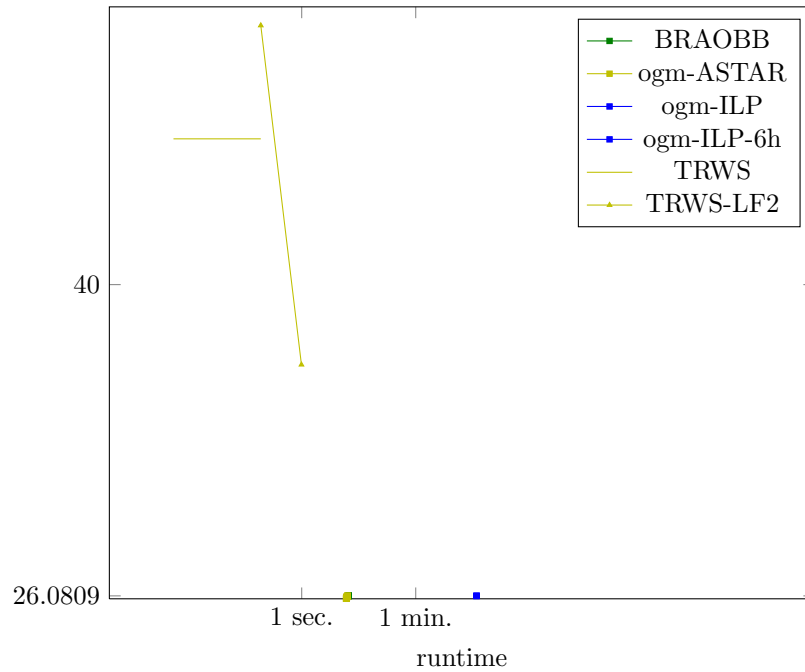


Figure 2291: Runtime results for the instance *matching2* of the *matching* models. Plots show best value of integer solution and (if provided) best lower bound.

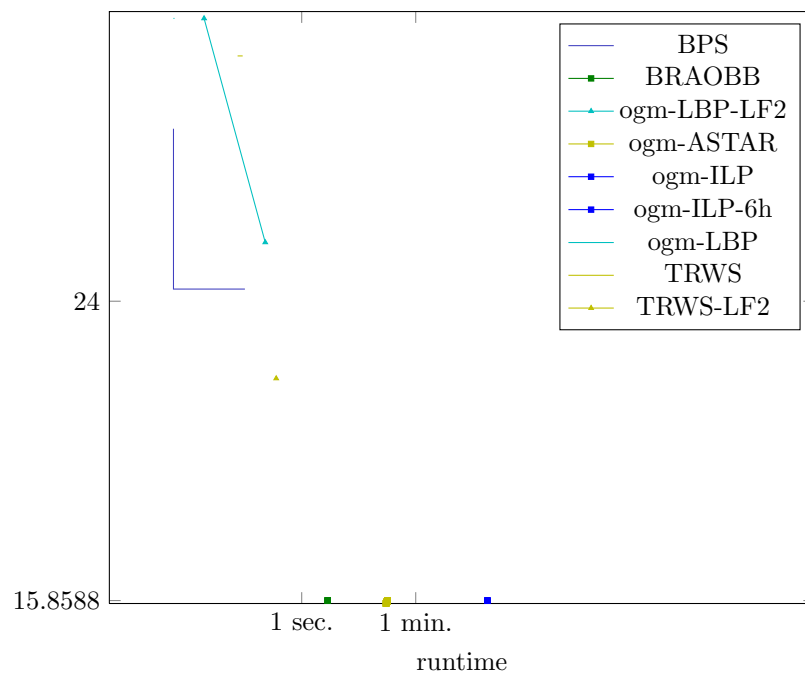


Figure 2292: Runtime results for the instance *matching3* of the *matching* models. Plots show best value of integer solution and (if provided) best lower bound.

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