```
===========================================================
Model Name:  Schaffer
Searcher Name:  DE
Seed: 1 Lives:  3
A12test: 0.6
DE Options:
Repeats: 100 Candidates: 100
Extrapolate: 0.2 Crossover: 0.3
Epsilon: 0.01
Time to run (s):  13.722162
Runs:  30
Average per run (s):  0.4574054
(*          |            ), -0.00000, -0.00000, -0.00000, -0.00000, -0.00000
===========================================================
===========================================================
Model Name:  Schaffer
Searcher Name:  PSO
Seed: 1 Lives:  3
A12test: 0.6
PSO Options:
Time to run (s):  1.151626
Runs:  30
Average per run (s):  0.0383875333333
(*          |            ), 0.00000, 0.00000, 0.00000, 0.00000, 0.00000
===========================================================
===========================================================
Model Name:  Schaffer
Searcher Name:  SA
Seed: 1 Lives:  3
A12test: 0.6
SA Options:
KMAX: 500 Cooling: 0.6
Time to run (s):  0.824883
Runs:  30
Average per run (s):  0.0274961
(*          |          ), 0.00000, 0.00000, 0.00003, 0.00004, 0.00013
===========================================================
===========================================================
Model Name:  Schaffer
Searcher Name:  MWS
Seed: 1 Lives:  3
A12test: 0.6
MaxWalkSat Options:
Prob: 0.75
MaxTries: 500 MaxChanges 500
Threshold: 0.001 Slices: 10
Time to run (s):  0.843486
Runs:  30
Average per run (s):  0.0281162
(*          |            ), 0.00004, 0.00013, 0.00022, 0.00043, 0.00089
===========================================================
===========================================================
Model Name:  Schaffer
Searcher Name:  GA
Seed: 1 Lives:  3
A12test: 0.6
GA Options:
popSize: 50 Crossover: 0.6
Gens: [10]
Time to run (s):  5.937305
Runs:  30
Average per run (s):  0.19791016667
(*          |            ), 0.00000, 0.00000, 0.00000, 0.00001, 0.00006
===========================================================
Scott-Knott for Schaffer

rank ,     name ,    med  ,  iqr
----------------------------------------------------
   1 ,      DE ,      0 ,     0 (*             |            ),-0.00, -0.00, -0.00, -0.00, -0.00
   1 ,     PSO ,      0 ,     0 (*             |            ), 0.00, 0.00, 0.00, 0.00, 0.00
   1 ,      GA ,      0 ,     0 (*             |            ), 0.00, 0.00, 0.00, 0.00, 0.00
   1 ,      SA ,      0 ,     0 (*---          |            ), 0.00, 0.00, 0.00, 0.00, 0.00
   1 ,     MWS ,      0 ,     0 ( --- *    ---|----------  ), 0.00, 0.00, 0.00, 0.00, 0.00


===========================================================
Model Name:  Kursawe
Searcher Name:  DE
Seed: 1 Lives:  3
A12test: 0.6
DE Options:
Repeats: 100 Candidates: 100
Extrapolate: 0.2 Crossover: 0.3
Epsilon: 0.01
Time to run (s):  60.942744
Runs:  30
Average per run (s):  2.0314248
(*          |            ), -0.01530, -0.01165, -0.00883, -0.00692, -0.00210
===========================================================
===========================================================
Model Name:  Kursawe
Searcher Name:  PSO
Seed: 1 Lives:  3
A12test: 0.6
PSO Options:
```

```
Time to run (s):  47.449344
Runs:  30
Average per run (s):  1.5816448
(*          |            ), -0.00054, -0.00022, -0.00008, 0.00078, 0.04526
===========================================================
===========================================================
Model Name:  Kursawe
Searcher Name:  SA
Seed: 1 Lives:  3
A12test: 0.6
SA Options:
KMAX: 500 Cooling: 0.6
Time to run (s):  14.880413
Runs:  30
Average per run (s):  0.496013766667
(*          |            ), 0.01768, 0.03519, 0.05005, 0.07085, 0.10534
===========================================================
===========================================================
Model Name:  Kursawe
Searcher Name:  MWS
Seed: 1 Lives:  3
A12test: 0.6
MaxWalkSat Options:
Prob: 0.75
MaxTries: 500 MaxChanges 500
Threshold: 0.001 Slices: 10
Time to run (s):  20.75992
No valid runs!
===========================================================
===========================================================
Model Name:  Kursawe
Searcher Name:  GA
Seed: 1 Lives:  3
A12test: 0.6
GA Options:
popSize: 50 Crossover: 0.6
Gens: [10]
Time to run (s):  51.942907
Runs:  30
Average per run (s):  1.73143023333
(*          |            ), 0.01657, 0.04304, 0.06291, 0.07494, 0.08974
===========================================================
Scott-Knott for Kursawe

rank ,     name ,    med  ,  iqr
----------------------------------------------------
   1 ,      DE ,     -1 ,     0 (-*-              |            ),-0.02, -0.01, -0.01, -0.01, -0.00
   1 ,     PSO ,      0 ,     0 (  *------        |            ),-0.00, -0.00, -0.00, 0.00, 0.05
   2 ,      SA ,      5 ,     4 (       --- * -|----         ), 0.02, 0.04, 0.05, 0.07, 0.11
   2 ,      GA ,      5 ,     4 (       ---- * |-             ), 0.02, 0.04, 0.06, 0.07, 0.09


===========================================================
Model Name:  ZDT1
Searcher Name:  DE
Seed: 1 Lives:  3
A12test: 0.6
DE Options:
Repeats: 100 Candidates: 100
Extrapolate: 0.2 Crossover: 0.3
Epsilon: 0.01
Time to run (s):  66.37838
Runs:  30
Average per run (s):  2.21261266667
(*          |            ), 0.00000, 0.00000, 0.00000, 0.00000, 0.00000
===========================================================
===========================================================
Model Name:  ZDT1
Searcher Name:  PSO
Seed: 1 Lives:  3
A12test: 0.6
PSO Options:
Time to run (s):  100.190031
Runs:  30
Average per run (s):  3.3396677
(*          |            ), 0.06417, 0.13846, 0.16493, 0.21838, 0.25862
===========================================================
===========================================================
Model Name:  ZDT1
Searcher Name:  SA
Seed: 1 Lives:  3
A12test: 0.6
SA Options:
KMAX: 500 Cooling: 0.6
Time to run (s):  8.403673
Runs:  30
Average per run (s):  0.280122433333
(*          |            ), 0.02970, 0.08570, 0.10055, 0.14840, 0.18991
===========================================================
===========================================================
Model Name:  ZDT1
Searcher Name:  MWS
Seed: 1 Lives:  3
A12test: 0.6
MaxWalkSat Options:
```

```
Prob: 0.75
MaxTries: 500 MaxChanges 500
Threshold: 0.001 Slices: 10
Time to run (s): 8.453186
Runs:  30
Average per run (s): 0.281772866667
(*            |              ), 0.00000, 0.00000, 0.00000, 0.00000, 0.00000
=============================================================
=============================================================
Model Name:  ZDT1
Searcher Name:  GA
Seed: 1 Lives:  3
A12test: 0.6
GA Options:
popSize: 50 Crossover: 0.6
Gens: [10]
Time to run (s): 32.886714
Runs:  30
Average per run (s): 1.0962238
(*            |              ), 0.08353, 0.15156, 0.15998, 0.19528, 0.25170
=============================================================
Scott-Knott for ZDT1

rank ,     name ,    med  ,  iqr
-----------------------------------------------------
   1 ,       DE ,      0 ,      0 (*          |        ), 0.00, 0.00, 0.00, 0.00, 0.00
   1 ,      MWS ,      0 ,      0 (*          |        ), 0.00, 0.00, 0.00, 0.00, 0.00
   2 ,       SA ,     10 ,      7 ( ------ *  |--      ), 0.03, 0.09, 0.10, 0.15, 0.19
   3 ,       GA ,     16 ,      7 (      ------ * -----  ), 0.08, 0.15, 0.16, 0.20, 0.25
   3 ,      PSO ,     16 ,     11 (      ------- |* ----  ), 0.06, 0.14, 0.16, 0.22, 0.26

=============================================================
Model Name:  ZDT3
Searcher Name:  DE
Seed: 1 Lives:  3
A12test: 0.6
DE Options:
Repeats: 100 Candidates: 100
Extrapolate: 0.2 Crossover: 0.3
Epsilon: 0.01
Time to run (s): 68.980923
Runs:  30
Average per run (s): 2.2993641
(*            |              ), 0.00000, 0.00000, 0.00000, 0.00000, 0.00000
=============================================================
Model Name:  ZDT3
Searcher Name:  PSO
Seed: 1 Lives:  3
A12test: 0.6
PSO Options:
Time to run (s): 110.236111
Runs:  30
Average per run (s): 3.67453703333
(*            |              ), 0.05285, 0.12991, 0.16264, 0.18646, 0.27443
=============================================================
Model Name:  ZDT3
Searcher Name:  SA
Seed: 1 Lives:  3
A12test: 0.6
SA Options:
KMAX: 500 Cooling: 0.6
Time to run (s): 9.342738
Runs:  30
Average per run (s): 0.3114246
(*            |              ), 0.00000, 0.07778, 0.14157, 0.21477, 0.28382
=============================================================
Model Name:  ZDT3
Searcher Name:  MWS
Seed: 1 Lives:  3
A12test: 0.6
MaxWalkSat Options:
Prob: 0.75
MaxTries: 500 MaxChanges 500
Threshold: 0.001 Slices: 10
Time to run (s): 9.763686
Runs:  30
Average per run (s): 0.3254562
(*            |              ), 0.00000, 0.00000, 0.00000, 0.00000, 0.00083
=============================================================
=============================================================
Model Name:  ZDT3
Searcher Name:  GA
Seed: 1 Lives:  3
A12test: 0.6
GA Options:
popSize: 50 Crossover: 0.6
Gens: [10]
Time to run (s): 36.541851
Runs:  30
Average per run (s): 1.2180617
(*            |              ), 0.04320, 0.12381, 0.15514, 0.20596, 0.24168
```

```
=============================================================
Scott-Knott for ZDT3

rank ,     name ,    med  ,  iqr
-----------------------------------------------------
   1 ,       DE ,      0 ,      0 (*          |        ), 0.00, 0.00, 0.00, 0.00, 0.00
   1 ,      MWS ,      0 ,      0 (*          |        ), 0.00, 0.00, 0.00, 0.00, 0.00
   2 ,       SA ,     14 ,     14 (------- *  |  ------- ), 0.00, 0.08, 0.14, 0.21, 0.28
   2 ,       GA ,     15 ,     10 (  --------  *| ----   ), 0.04, 0.12, 0.16, 0.21, 0.24
   2 ,      PSO ,     16 ,      9 (  ------- *| ------- ), 0.05, 0.13, 0.16, 0.19, 0.27

=============================================================
Model Name:  Viennet3
Searcher Name:  DE
Seed: 1 Lives:  3
A12test: 0.6
DE Options:
Repeats: 100 Candidates: 100
Extrapolate: 0.2 Crossover: 0.3
Epsilon: 0.01
Time to run (s): 17.168309
Runs:  30
Average per run (s): 0.572276966667
(*            |              ), -0.00015, -0.00006, -0.00002, -0.00001, -0.00000
=============================================================
=============================================================
Model Name:  Viennet3
Searcher Name:  PSO
Seed: 1 Lives:  3
A12test: 0.6
PSO Options:
Time to run (s): 2.378356
Runs:  30
Average per run (s): 0.0792785333333
(*            |              ), -0.00009, -0.00003, -0.00001, -0.00000, 0.00000
=============================================================
=============================================================
Model Name:  Viennet3
Searcher Name:  SA
Seed: 1 Lives:  3
A12test: 0.6
SA Options:
KMAX: 500 Cooling: 0.6
Time to run (s): 1.40533
Runs:  30
Average per run (s): 0.0468443333333
(*            |              ), 0.00034, 0.00081, 0.00179, 0.00265, 0.00500
=============================================================
=============================================================
Model Name:  Viennet3
Searcher Name:  MWS
Seed: 1 Lives:  3
A12test: 0.6
MaxWalkSat Options:
Prob: 0.75
MaxTries: 500 MaxChanges 500
Threshold: 0.001 Slices: 10
Time to run (s): 1.649587
Runs:  12
Average per run (s): 0.137465583333
(*            |              ), 0.00027, 0.00081, 0.00088, 0.00093, 0.00097
=============================================================
=============================================================
Model Name:  Viennet3
Searcher Name:  GA
Seed: 1 Lives:  3
A12test: 0.6
GA Options:
popSize: 50 Crossover: 0.6
Gens: [10]
Time to run (s): 7.859562
Runs:  30
Average per run (s): 0.2619854
(*            |              ), 0.00000, 0.00019, 0.00055, 0.00075, 0.00149
=============================================================
Scott-Knott for Viennet3

rank ,     name ,    med  ,  iqr
-----------------------------------------------------
   1 ,       DE ,      0 ,      0 (-*         |        ),-0.00, -0.00, -0.00, -0.00, -0.00
   1 ,      PSO ,      0 ,      0 ( *         |        ),-0.00, -0.00, -0.00, -0.00,  0.00
   1 ,       GA ,      0 ,      0 ( -  *--    |        ), 0.00,  0.00,  0.00,  0.00,  0.00
   1 ,      MWS ,      0 ,      0 (  --*      |        ), 0.00,  0.00,  0.00,  0.00,  0.00
   1 ,       SA ,      0 ,      0 ( --   *  -----|--    ), 0.00,  0.00,  0.00,  0.00,  0.01

=============================================================
Model Name:  Schwefel
Searcher Name:  DE
Seed: 1 Lives:  3
A12test: 0.6
DE Options:
Repeats: 100 Candidates: 100
Extrapolate: 0.2 Crossover: 0.3
```

```
Epsilon: 0.01
Time to run (s):  386.531651
Runs:  30
Average per run (s): 12.8843883667
(*         |          ),  -0.04345,  -0.03568,  -0.02721,  -0.02518,  -0.01789
=============================================================
=============================================================
Model Name:  Schwefel
Searcher Name:  PSO
Seed: 1 Lives:  3
A12test: 0.6
PSO Options:
Time to run (s):  579.406801
Runs:  30
Average per run (s): 19.3135600333
(*         |              ),  -0.00066,  0.02672,  0.04103,  0.05351,  0.08600
=============================================================
=============================================================
Model Name:  Schwefel
Searcher Name:  SA
Seed: 1 Lives:  3
A12test: 0.6
SA Options:
KMAX: 500 Cooling: 0.6
Time to run (s):  96.923565
Runs:  30
Average per run (s): 3.2307855
(*         |            ),  0.00840,  0.02765,  0.03605,  0.05711,  0.07963
=============================================================
Model Name:  Schwefel
Searcher Name:  MWS
Seed: 1 Lives:  3
A12test: 0.6
MaxWalkSat Options:
Prob: 0.75
MaxTries: 500 MaxChanges 500
Threshold: 0.001 Slices: 10
Time to run (s):  138.392923
No valid runs!
=============================================================
=============================================================
Model Name:  Schwefel
Searcher Name:  GA
Seed: 1 Lives:  3
A12test: 0.6
GA Options:
popSize: 50 Crossover: 0.6
Gens: [10]
Time to run (s):  324.984998
Runs:  30
Average per run (s): 10.8328332667
(*         |           ),  0.02095,  0.03705,  0.04739,  0.07176,  0.10129
=============================================================
Scott-Knott for Schwefel

rank ,     name ,    med  , iqr
-------------------------------------------------
   1 ,      DE ,     -3 ,    1 ( - *-        |           ),-0.04, -0.04, -0.03, -0.03, -0.02
   2 ,      SA ,      4 ,    3 (        --- * | ---        ), 0.01, 0.03, 0.04, 0.06, 0.08
   2 ,     PSO ,      4 ,    3 (        ---- *-----        ),-0.00, 0.03, 0.04, 0.05, 0.09
   2 ,      GA ,      4 ,    4 (           -- *  ----      ), 0.02, 0.04, 0.05, 0.07, 0.10


=============================================================
Model Name:  Osyczka
Searcher Name:  DE
Seed: 1 Lives:  3
A12test: 0.6
DE Options:
Repeats: 100 Candidates: 100
Extrapolate: 0.2 Crossover: 0.3
Epsilon: 0.01
Time to run (s):  41.871526
Runs:  30
Average per run (s): 1.39571753333
(*         |           ),  -0.03651,  -0.03124,  -0.02596,  -0.02200,  -0.01489
=============================================================
=============================================================
Model Name:  Osyczka
Searcher Name:  PSO
Seed: 1 Lives:  3
A12test: 0.6
PSO Options:
Time to run (s):  53.92393
Runs:  30
Average per run (s): 1.79746433333
(*         |             ),  0.03523,  0.06200,  0.08729,  0.11301,  0.22318
=============================================================
=============================================================
Model Name:  Osyczka
Searcher Name:  SA
Seed: 1 Lives:  3
A12test: 0.6
SA Options:
```

```
KMAX: 500 Cooling: 0.6
Time to run (s):  6.752034
Runs:  30
Average per run (s): 0.2250678
(*         |           ),  0.01129,  0.02620,  0.03920,  0.06472,  0.13617
=============================================================
=============================================================
Model Name:  Osyczka
Searcher Name:  MWS
Seed: 1 Lives:  3
A12test: 0.6
MaxWalkSat Options:
Prob: 0.75
MaxTries: 500 MaxChanges 500
Threshold: 0.001 Slices: 10
Time to run (s):  9.120772
Runs:  2
Average per run (s): 4.560386
(*         |           ),  -0.01982,  -0.01982,  -0.01472,  -0.01472,  -0.01472
=============================================================
=============================================================
Model Name:  Osyczka
Searcher Name:  GA
Seed: 1 Lives:  3
A12test: 0.6
GA Options:
popSize: 50 Crossover: 0.6
Gens: [10]
Time to run (s):  25.780227
Runs:  30
Average per run (s): 0.8593409
(*         |           ),  0.01405,  0.02940,  0.03369,  0.04297,  0.05687
=============================================================
Scott-Knott for Osyczka

rank ,     name ,    med  , iqr
-------------------------------------------------
   1 ,      DE ,     -3 ,    1 ( *        |          ),-0.04, -0.03, -0.03, -0.02, -0.01
   1 ,     MWS ,     -2 ,    0 ( *                   ),-0.02, -0.02, -0.01, -0.01, -0.01
   2 ,      GA ,      3 ,    2 (     -*-   |          ), 0.01, 0.03, 0.03, 0.04, 0.06
   2 ,      SA ,      4 ,    4 (     - * -----        ), 0.01, 0.03, 0.04, 0.06, 0.14
   3 ,     PSO ,      8 ,    6 (      -- * ----|---   ), 0.04, 0.06, 0.09, 0.11, 0.22
```