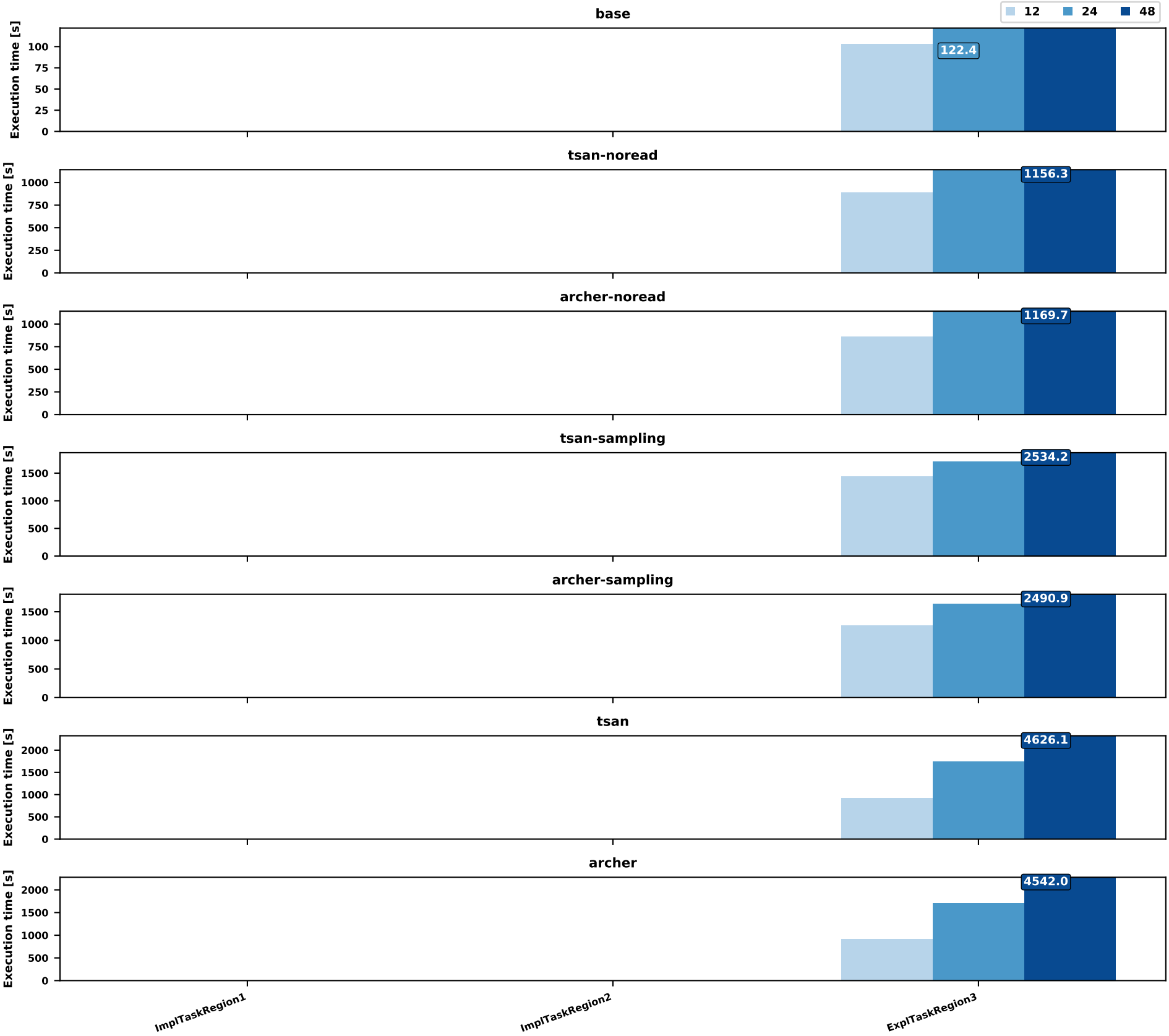
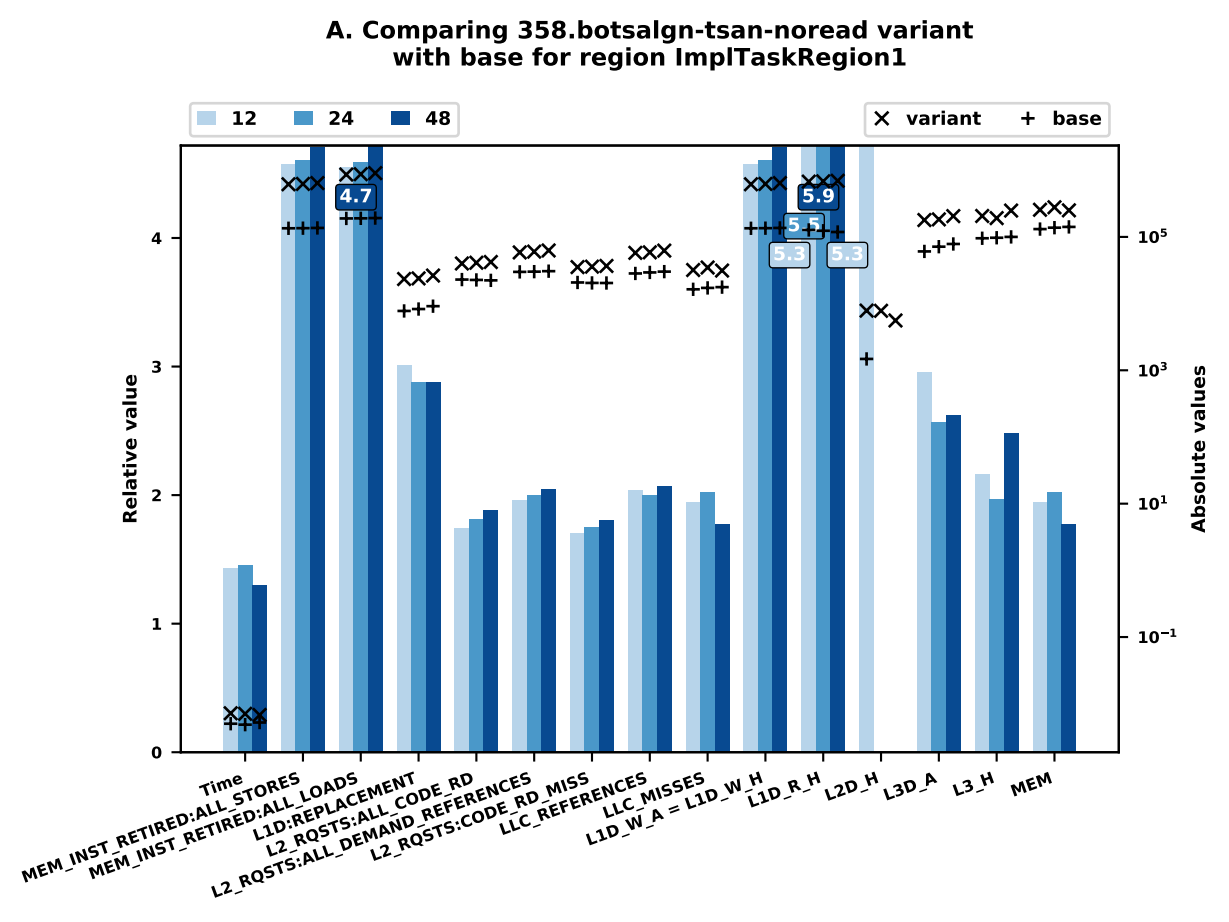
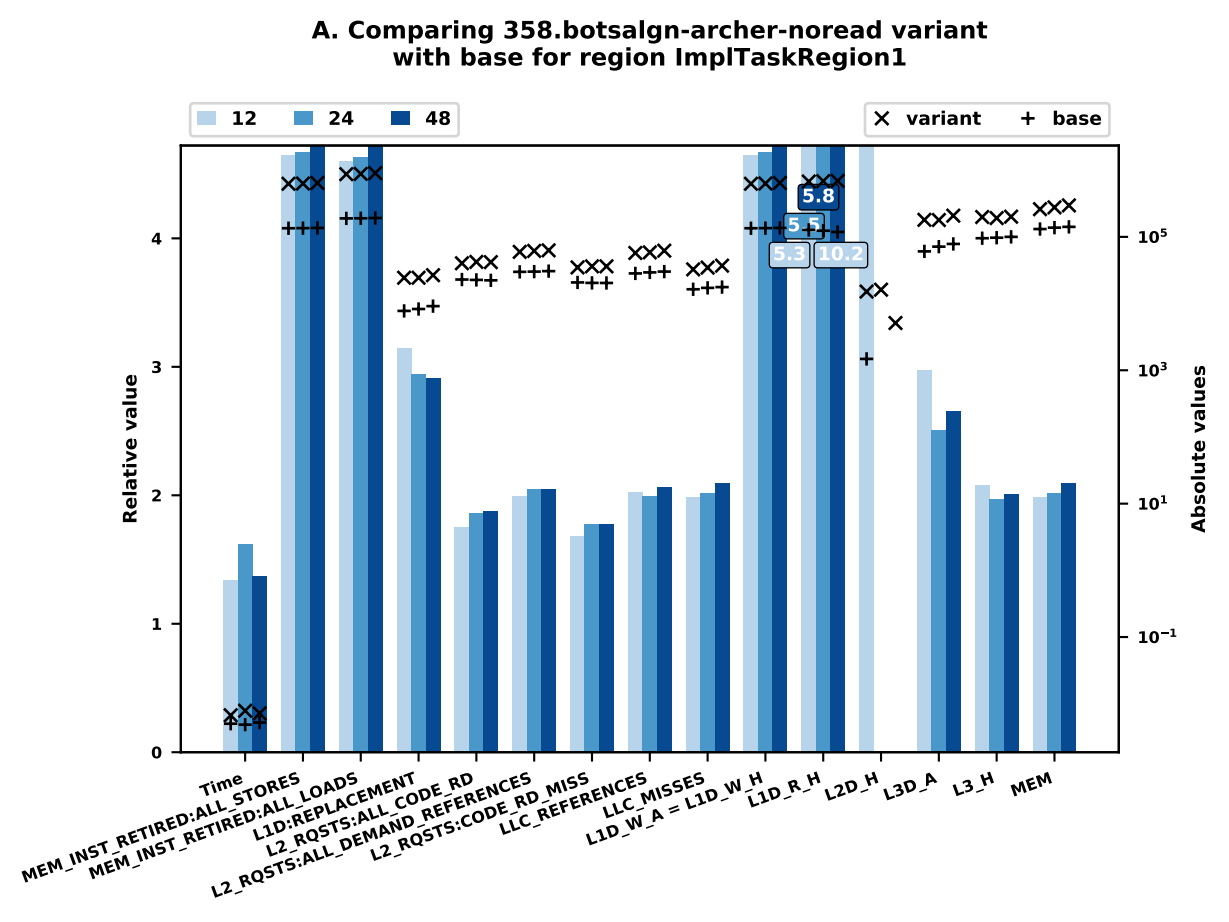
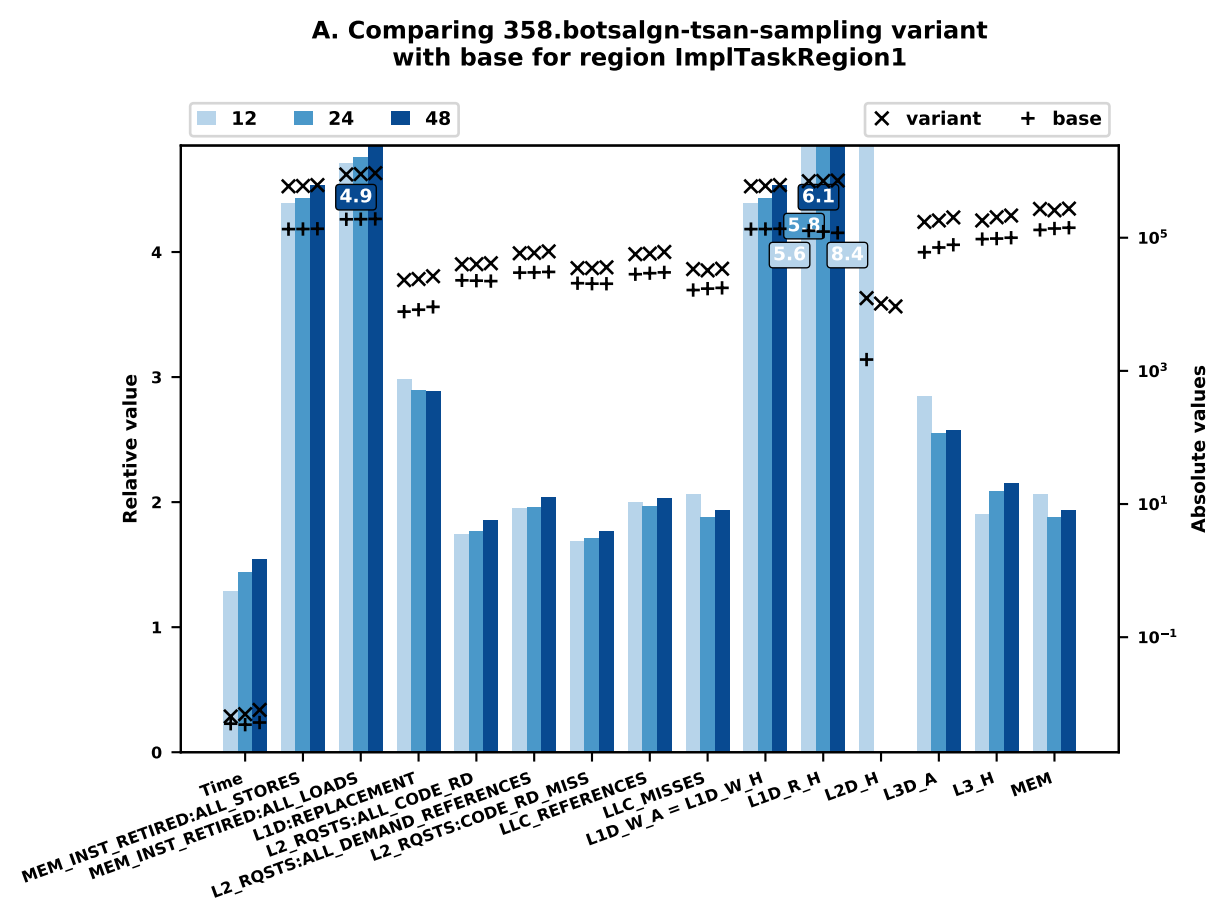
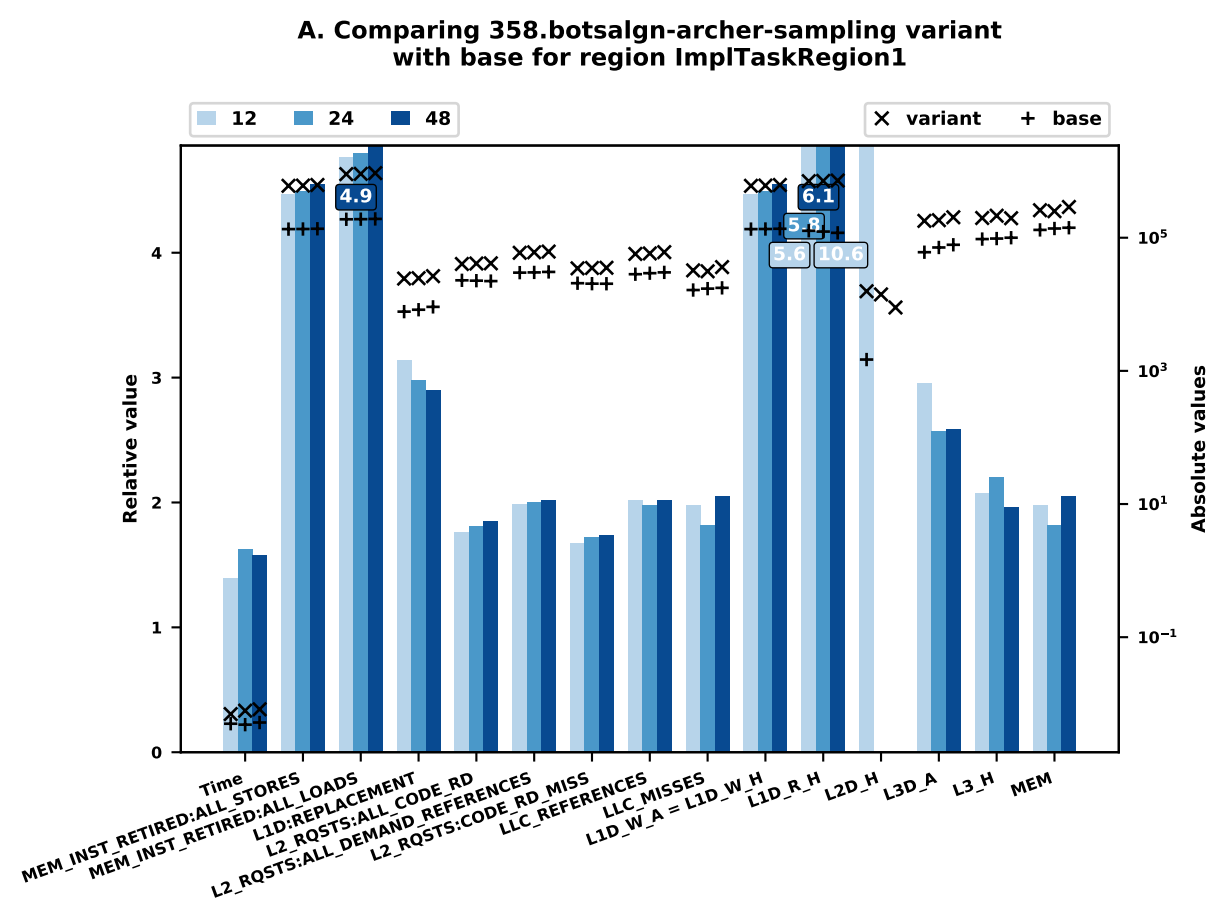
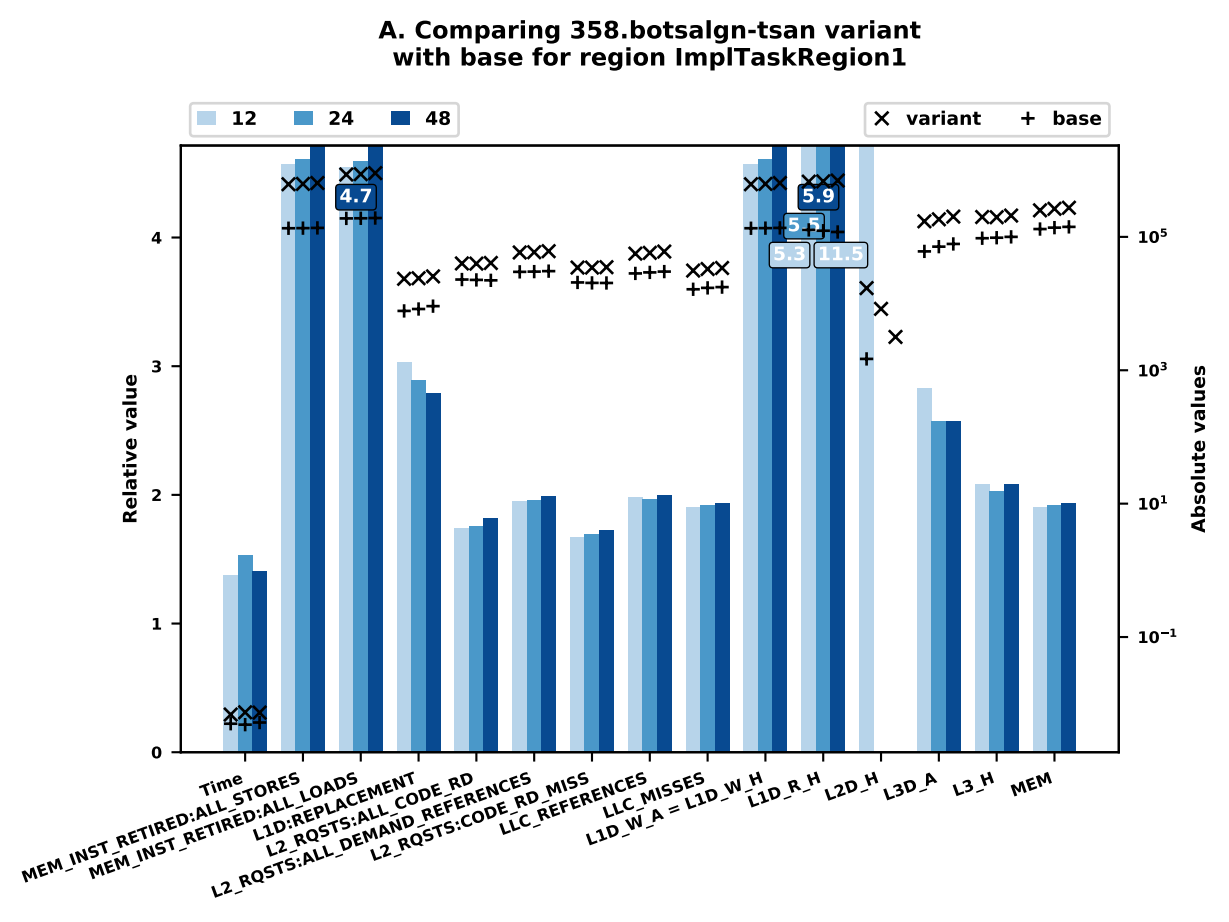

12
24
48
base
Execution time [s]
0
25
50
75
100
122.4
tsan-noread
Execution time [s]
0
250
500
750
1000
1156.3
archer-noread
Execution time [s]
0
250
500
750
1000
1169.7
tsan-sampling
Execution time [s]
0
500
1000
1500
2534.2
archer-sampling
Execution time [s]
0
500
1000
1500
2490.9
tsan
Execution time [s]
0
500
1000
1500
2000
4626.1
archer
Execution time [s]
0
500
1000
1500
2000
4542.0
ImplTaskRegion1
ImplTaskRegion2
ExplTaskRegion3

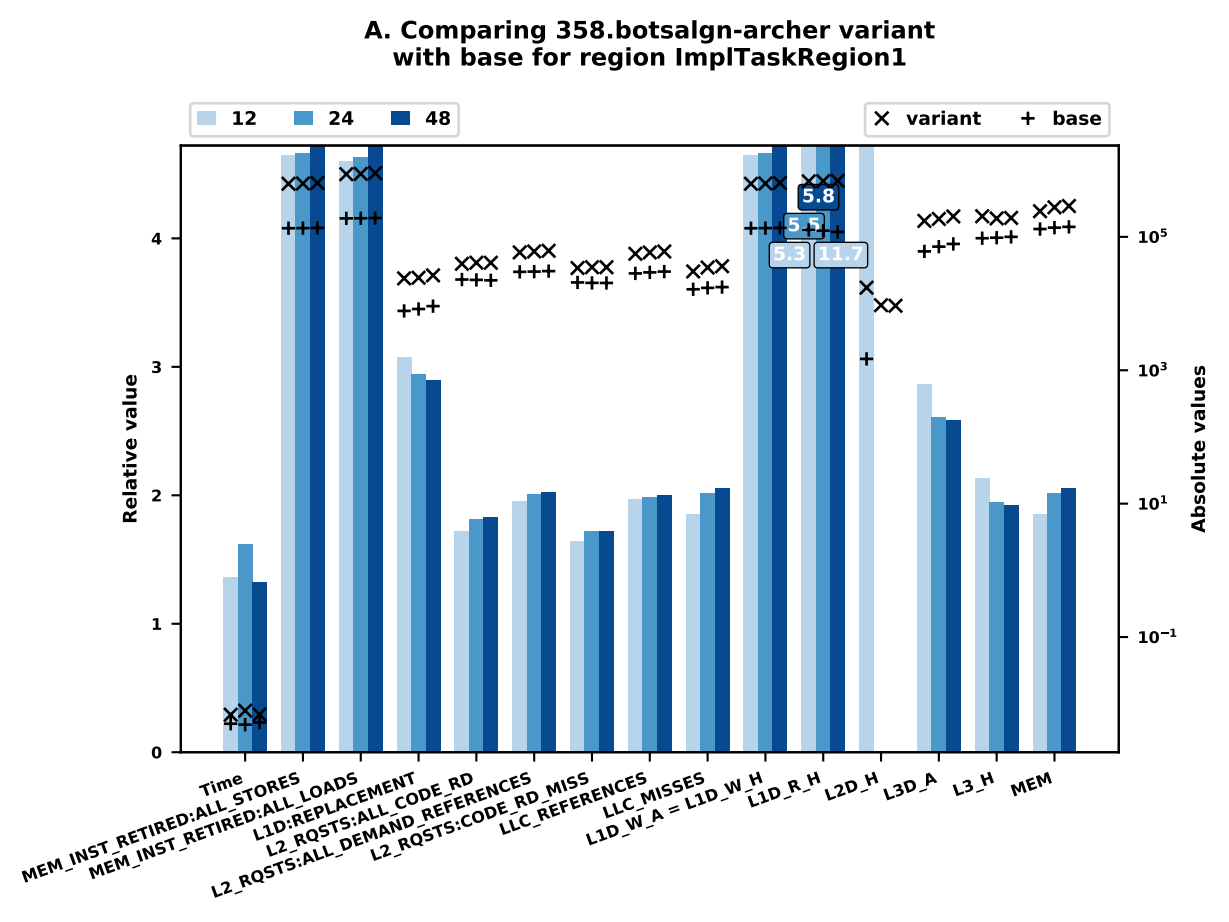

A. Comparing 358.botsalgn-tsan-noread variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
4.7
5.9
5.5
5.3
5.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

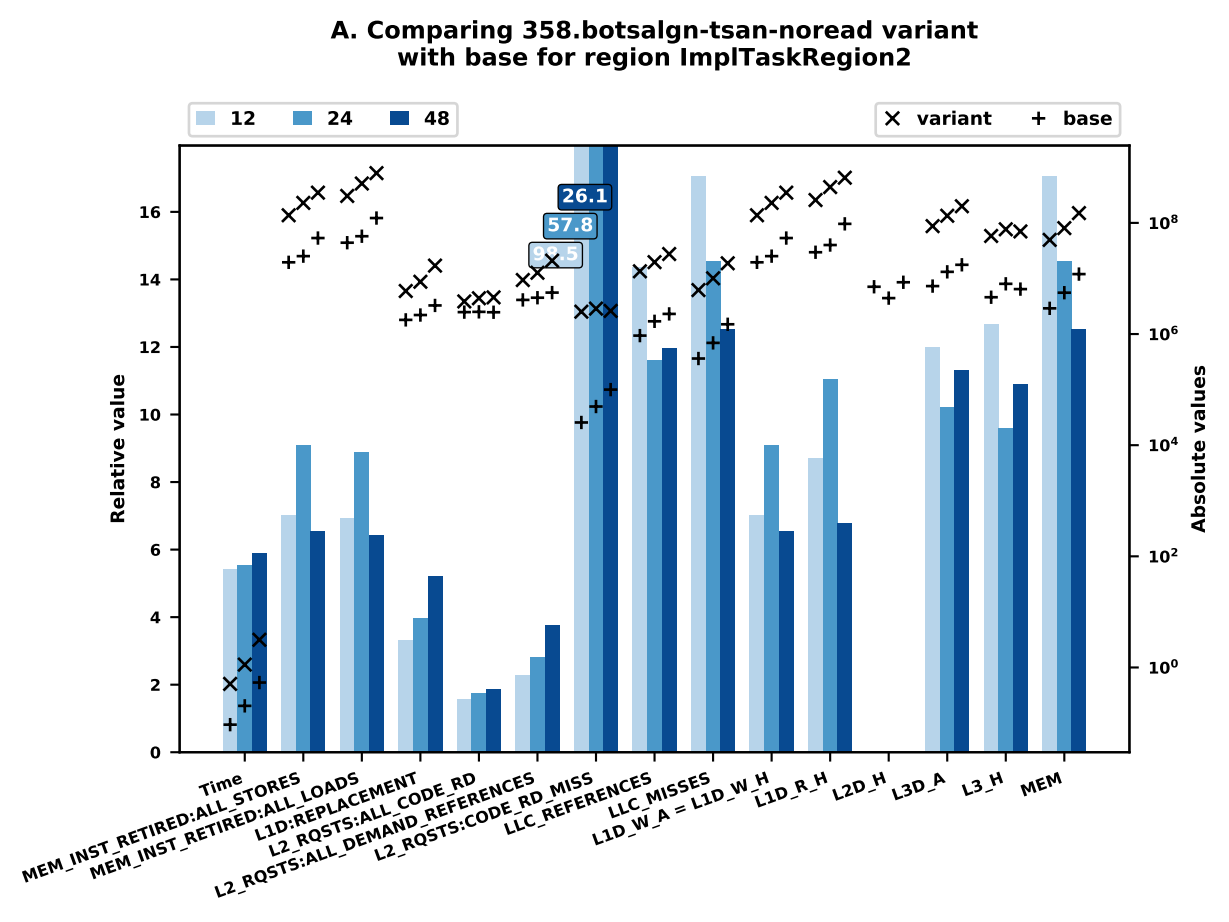

A. Comparing 358.botsalgn-archer-noread variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
5.8
5.5
5.3
10.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

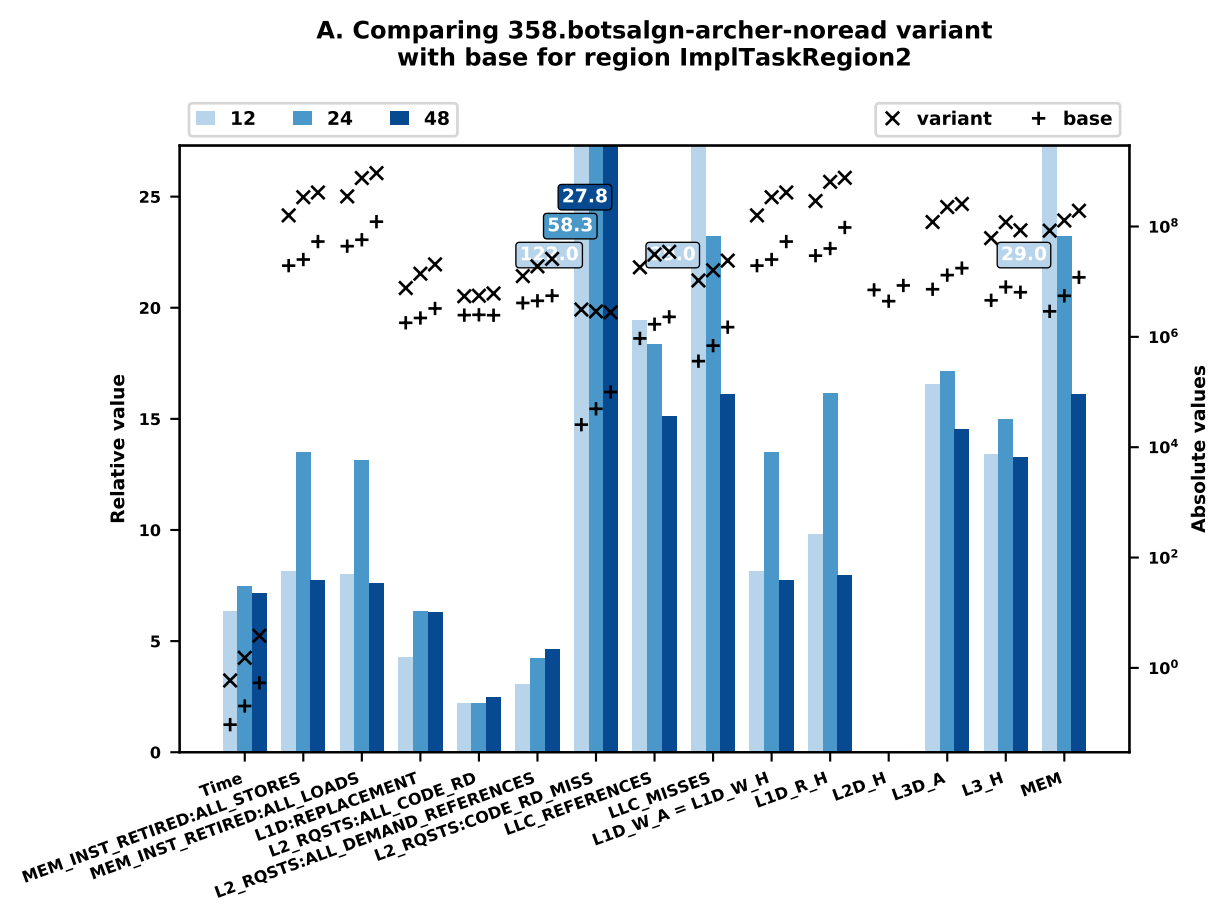

A. Comparing 358.botsalgn-tsan-sampling variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
4.9
6.1
5.8
5.6
8.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

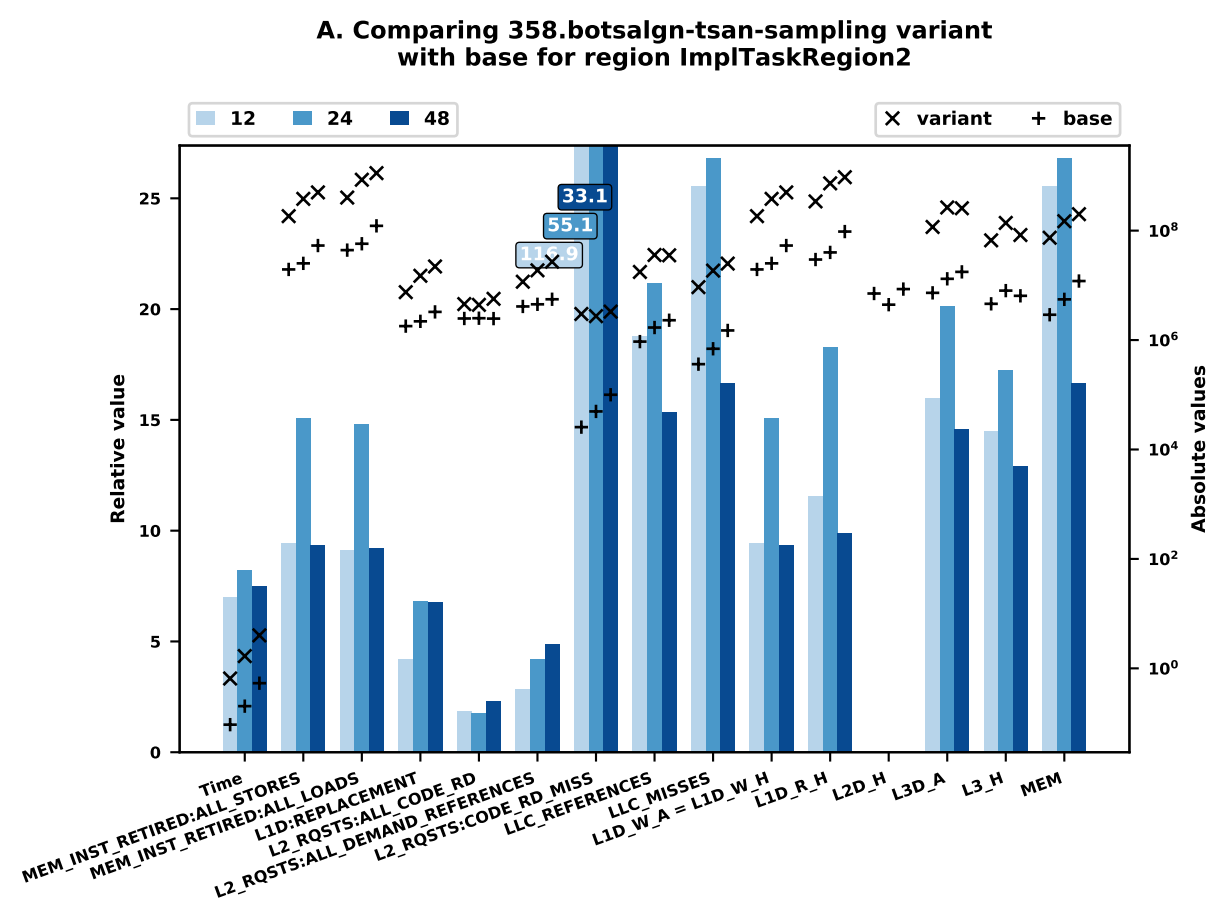

A. Comparing 358.botsalgn-archer-sampling variant with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
4.9
6.1
5.8
5.6
10.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

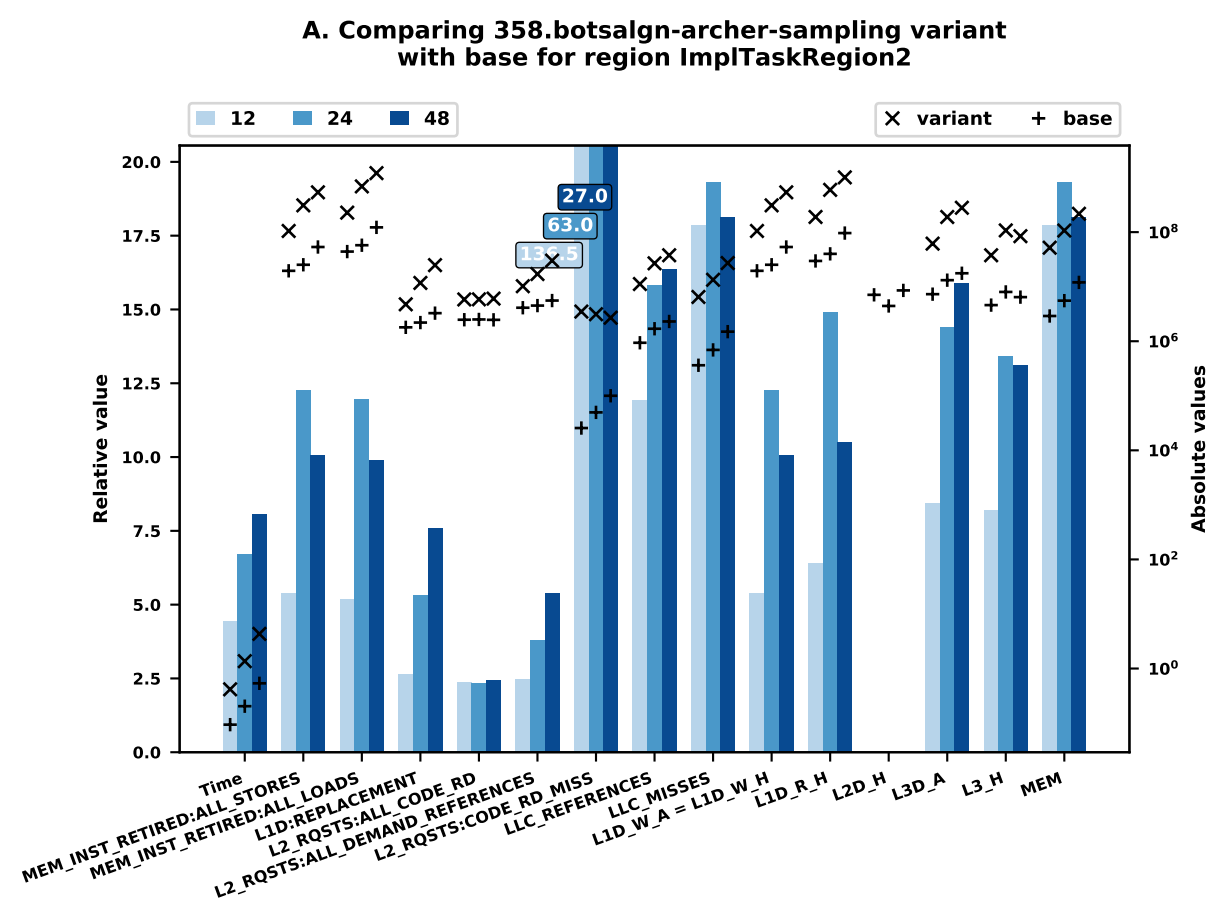

A. Comparing 358.botsalgn-tsan variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
4.7
5.9
5.5
5.3
11.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

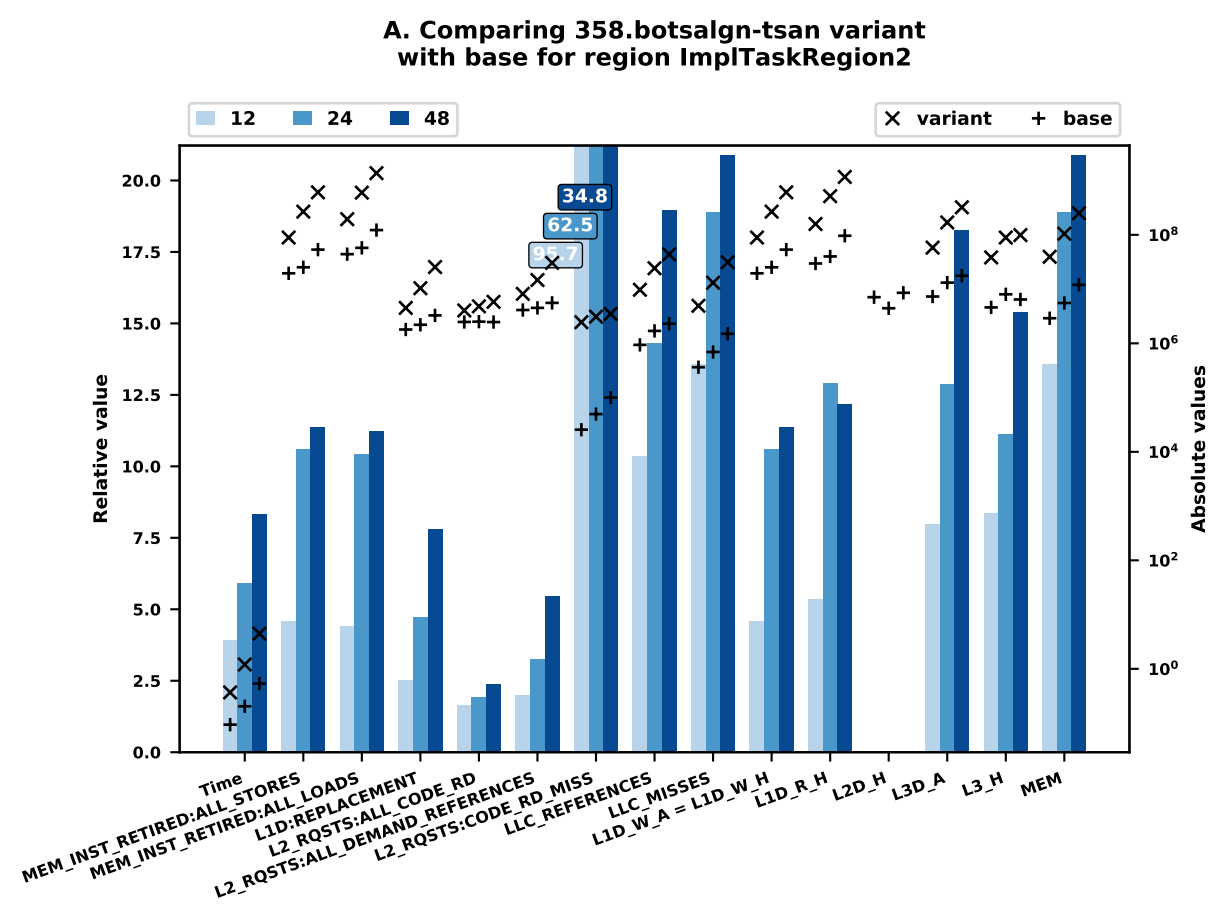

A. Comparing 358.botsalgn-archer variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
5.8
5.5
5.3
11.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

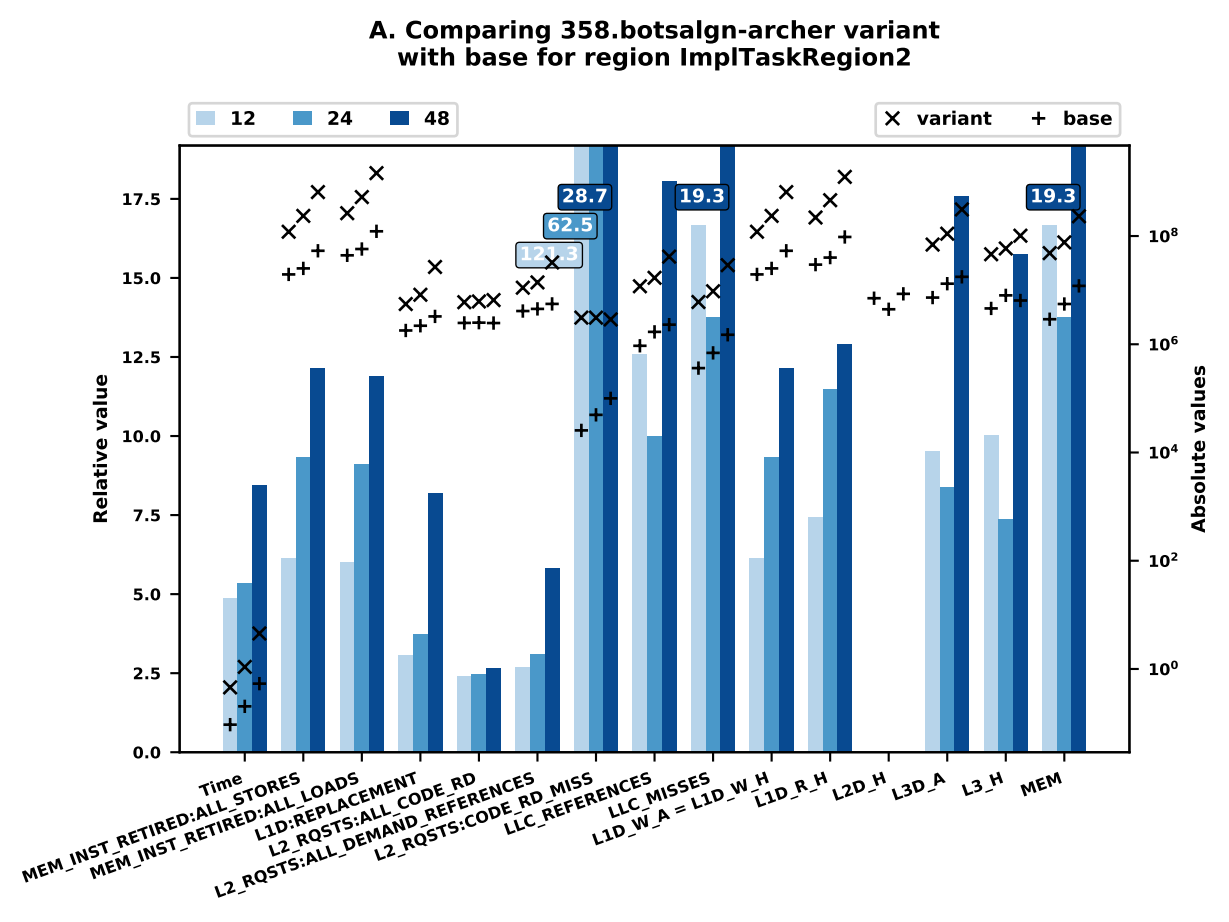

A. Comparing 358.botsalgn-tsan-noread variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
26.1
57.8
99.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

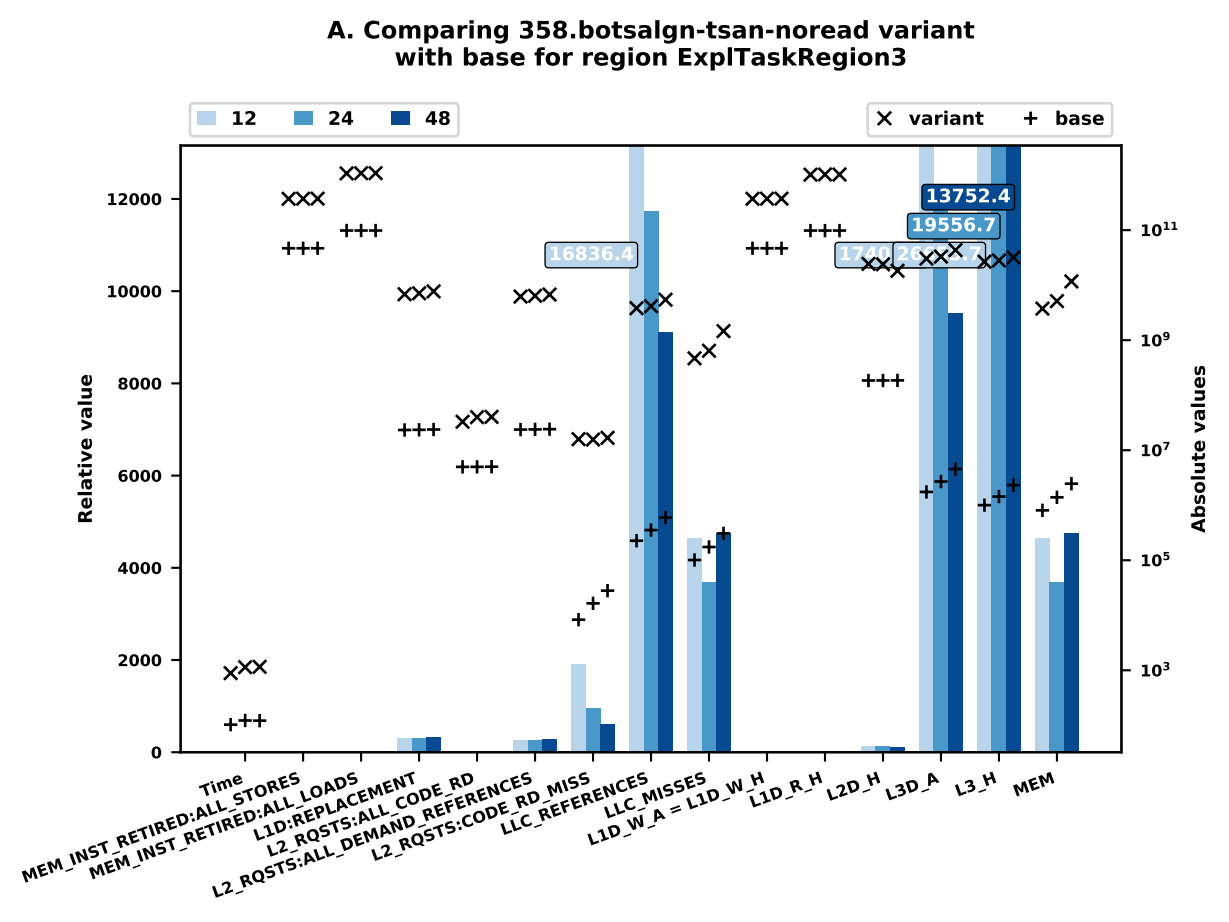

A. Comparing 358.botsalgn-archer-noread variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
0
5
10
15
20
25
10^0
10^2
10^4
10^6
10^8
27.8
58.3
122.0
29.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

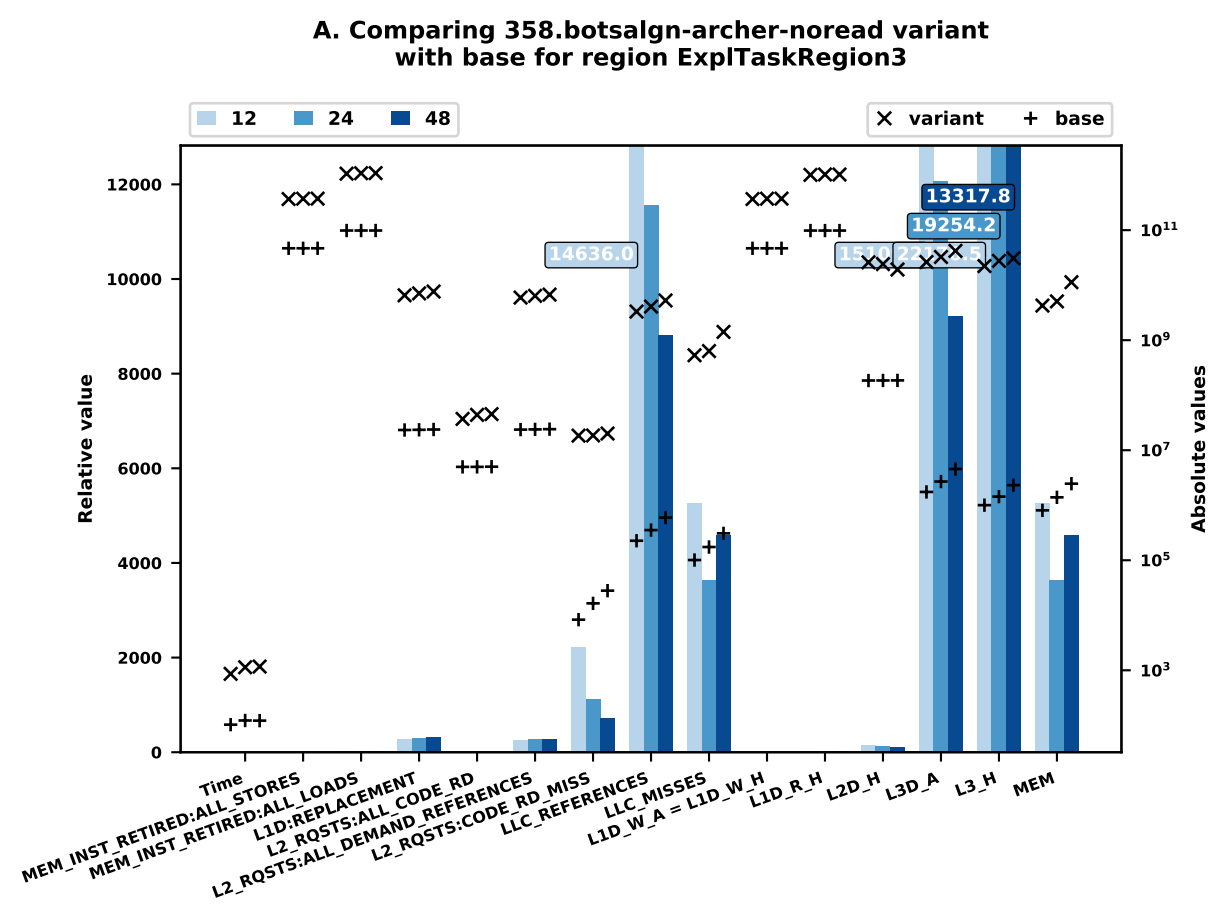

A. Comparing 358.botsalgn-tsan-sampling variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
0
5
10
15
20
25
10^0
10^2
10^4
10^6
10^8
33.1
55.1
116.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

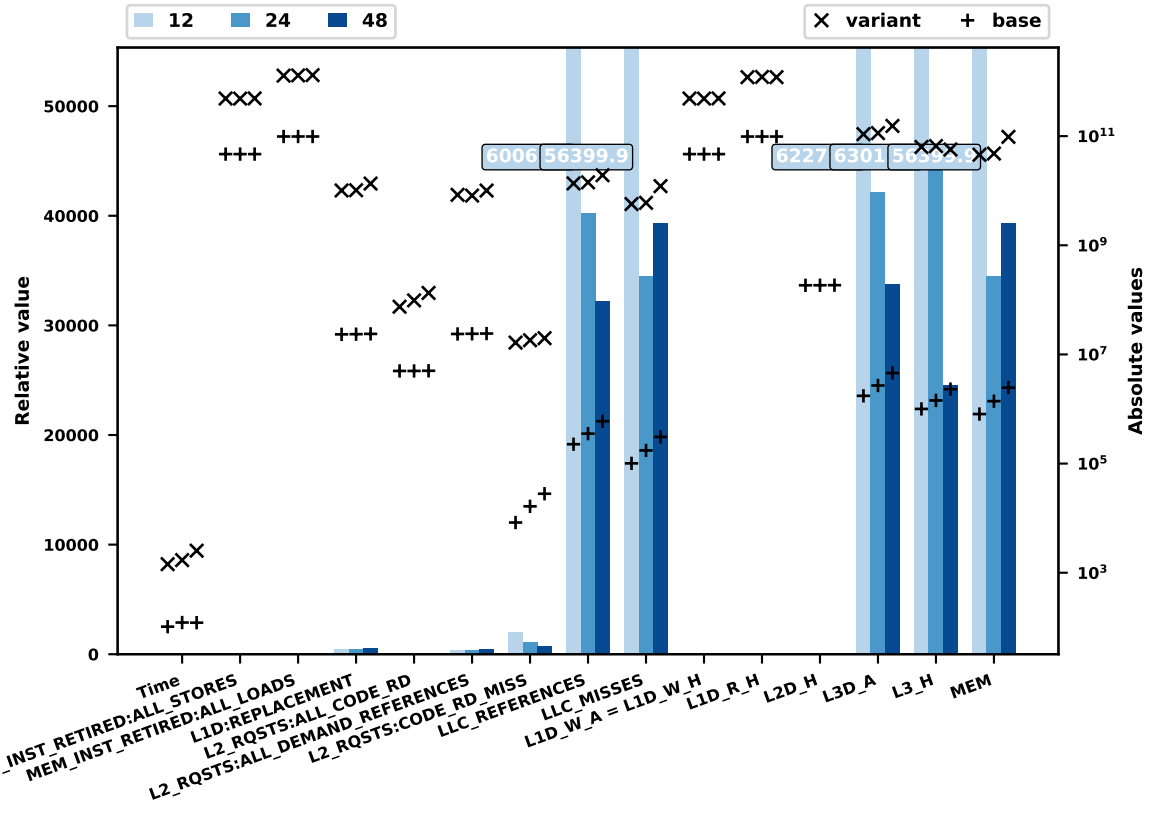

A. Comparing 358.botsalgn-archer-sampling variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10^0
10^2
10^4
10^6
10^8
27.0
63.0
136.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

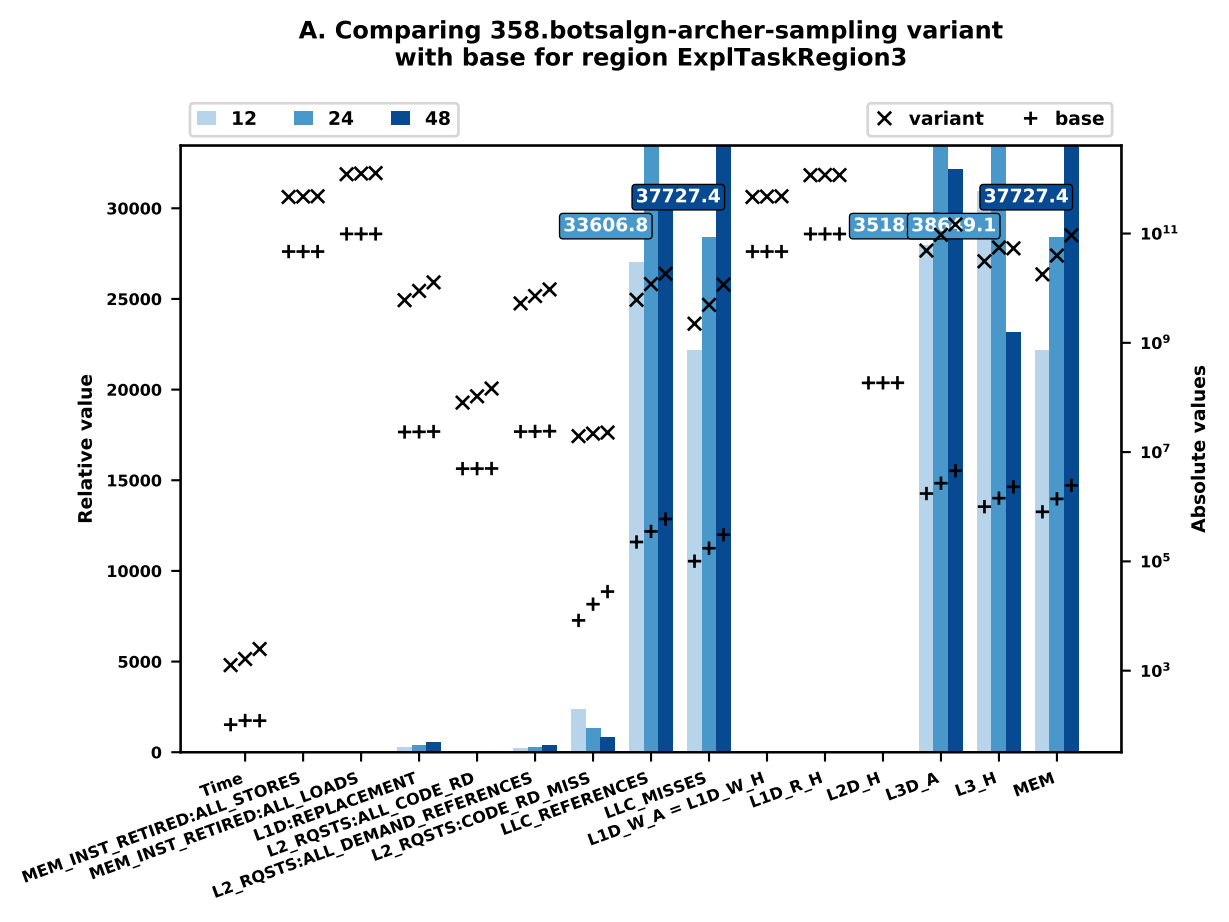

A. Comparing 358.botsalgn-tsan variant
with base for region ImplTaskRegion2
12
24
48
variant
base
34.8
62.5
95.7
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10^0
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

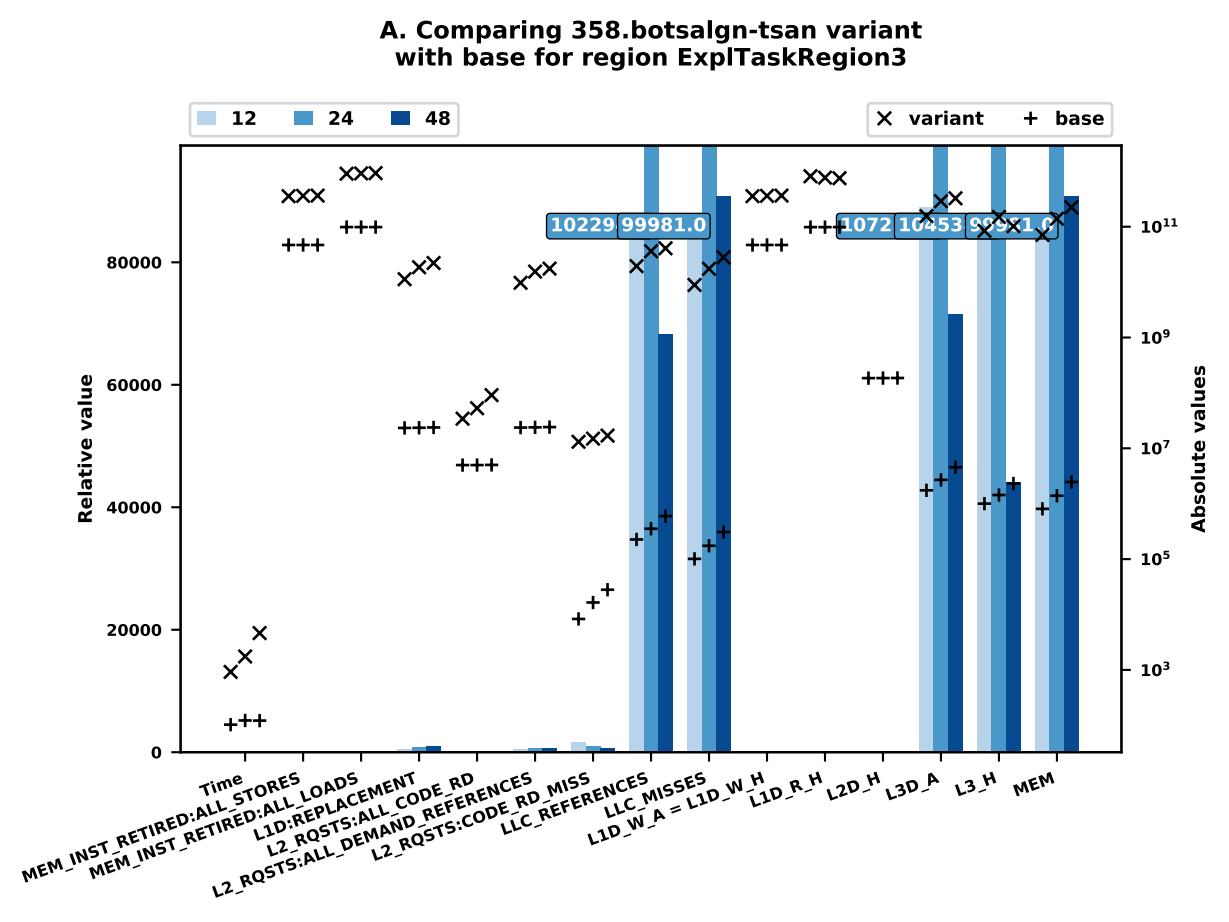

A. Comparing 358.botsalgn-archer variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
10^0
10^2
10^4
10^6
10^8
121.3
62.5
28.7
19.3
19.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

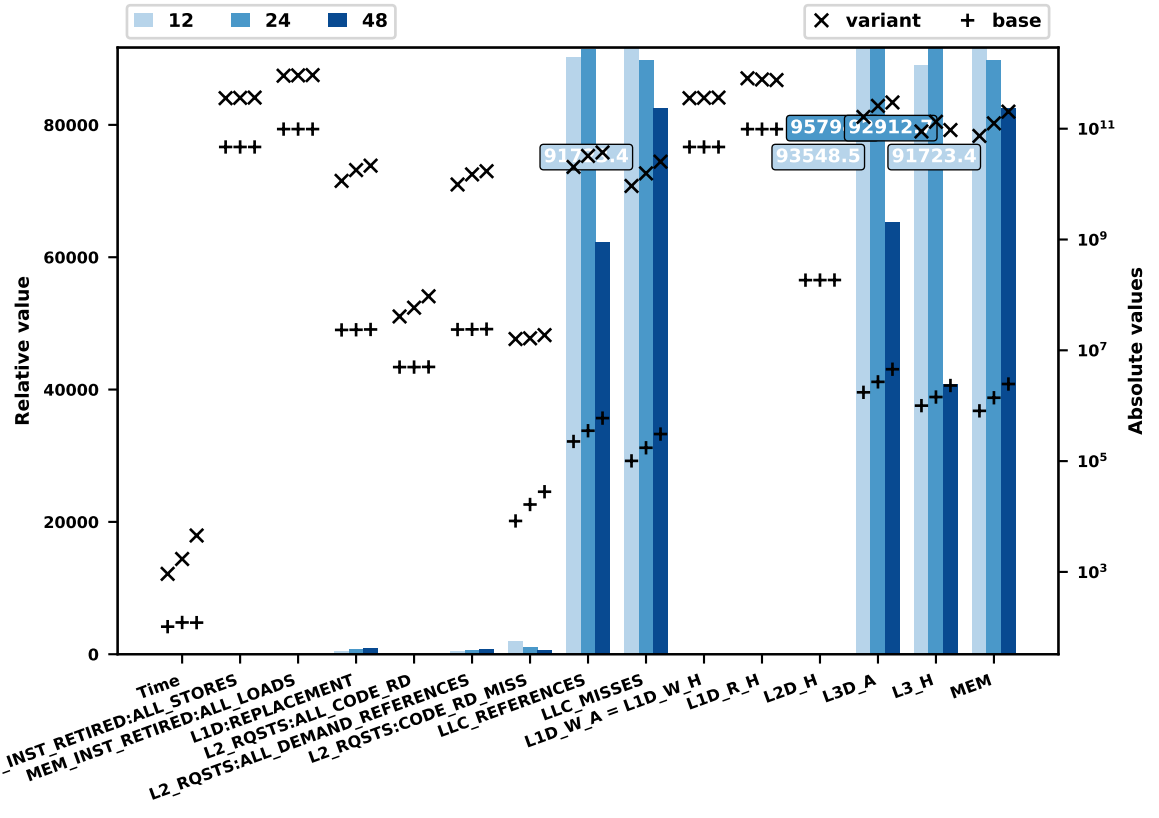

A. Comparing 358.botsalgn-tsan-noread variant
with base for region ExplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
16836.4
13752.4
19556.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 358.botsalgn-archer-noread variant
with base for region ExplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
0
2000
4000
6000
8000
10000
12000
10^{3}
10^{5}
10^{7}
10^{9}
10^{11}
14636.0
13317.8
19254.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 358.botsalgn-tsan-sampling variant
with base for region ExplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
50000
40000
30000
20000
10000
0
10^{11}
10^{9}
10^{7}
10^{5}
10^{3}
6006
56399.9
6227
6301
56399.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 358.botsalgn-archer-sampling variant
with base for region ExplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
30000
25000
20000
15000
10000
5000
0
10^{11}
10^{9}
10^{7}
10^{5}
10^{3}
37727.4
33606.8
37727.4
3518
38619.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 358.botsalgn-tsan variant
with base for region ExplTaskRegion3
12
24
48
variant
base
10229
99981.0
1072
10453
99941.0
Relative value
Absolute values
0
20000
40000
60000
80000
10^{3}
10^{5}
10^{7}
10^{9}
10^{11}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 358.botsalgn-archer variant
with base for region ExplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
0
20000
40000
60000
80000
10^3
10^5
10^7
10^9
10^{11}
9579
92912.2
93548.5
91723.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM