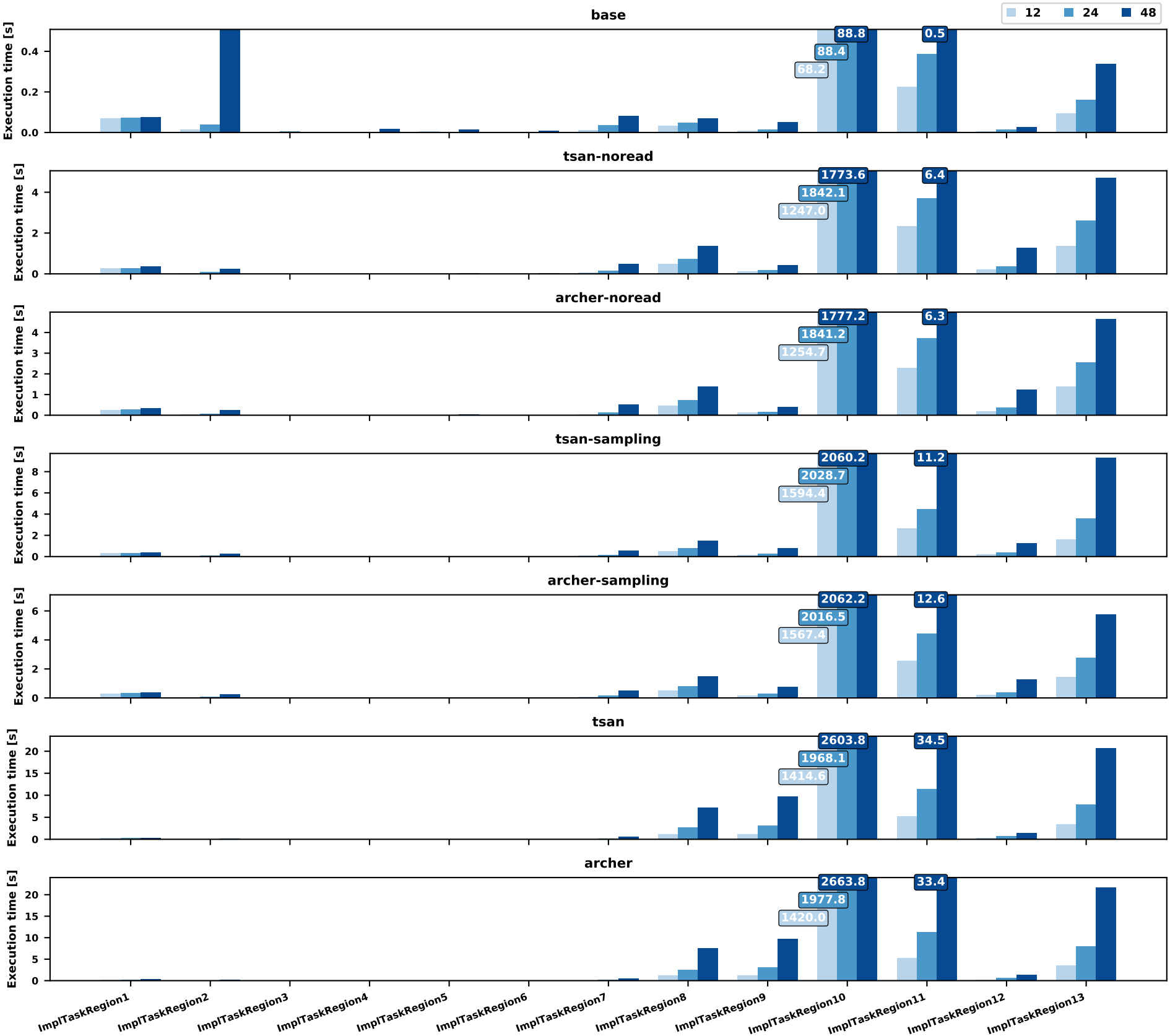
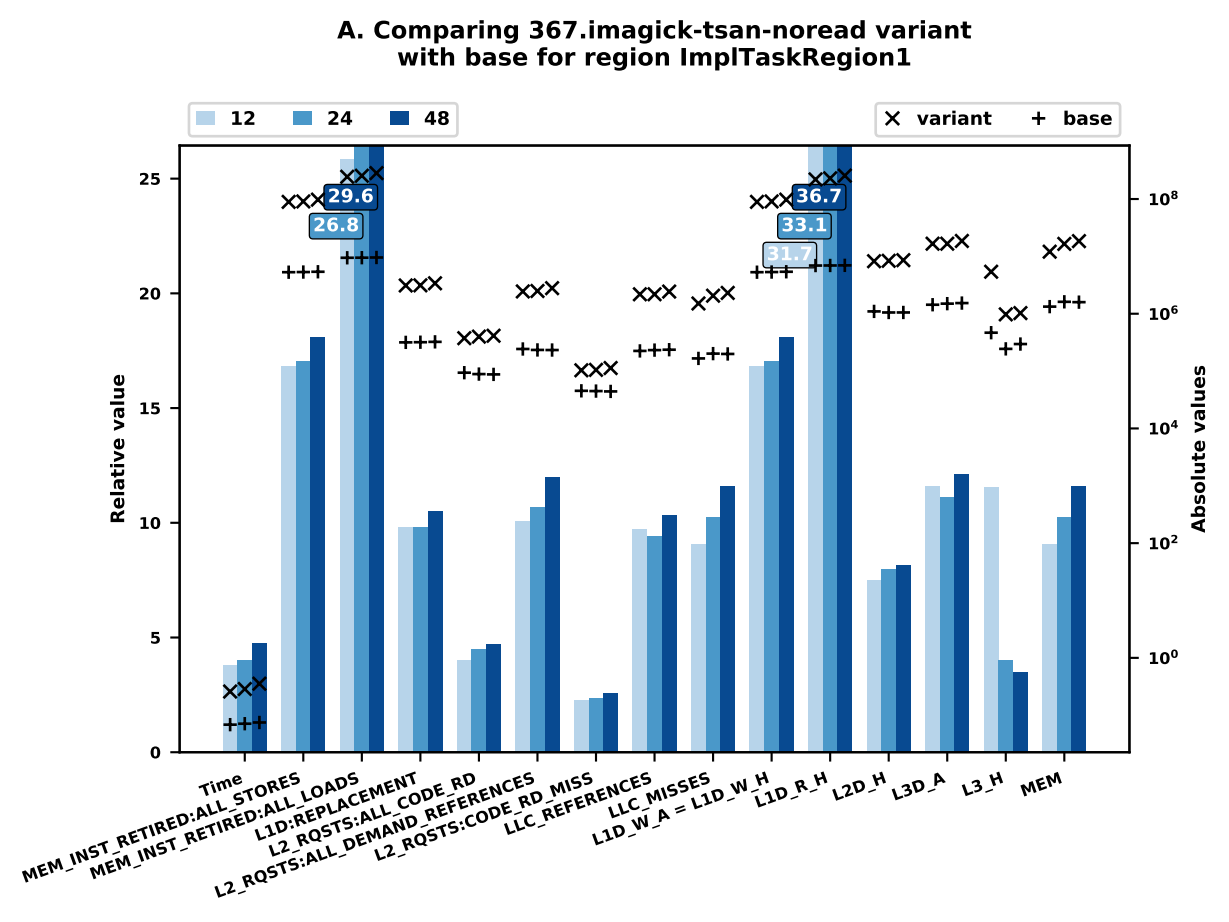
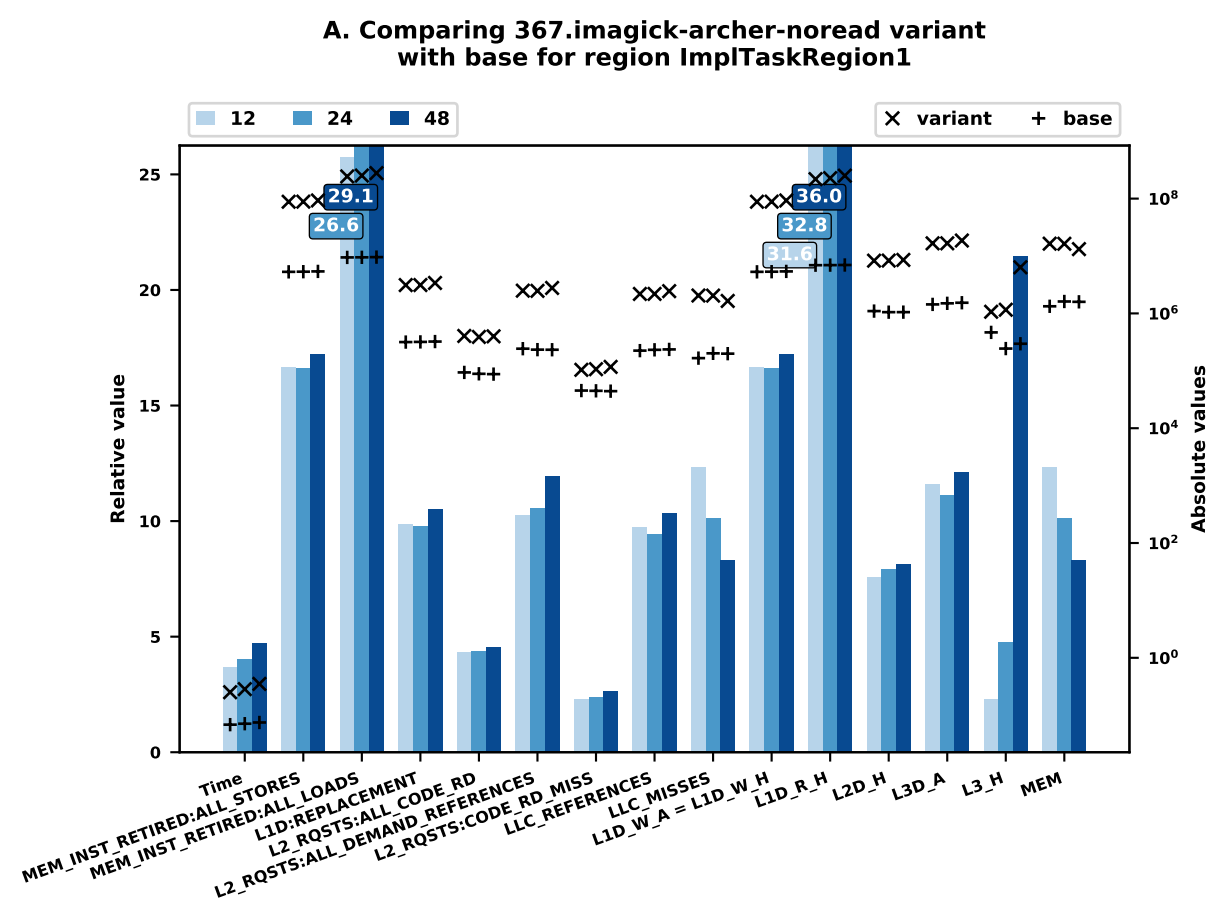
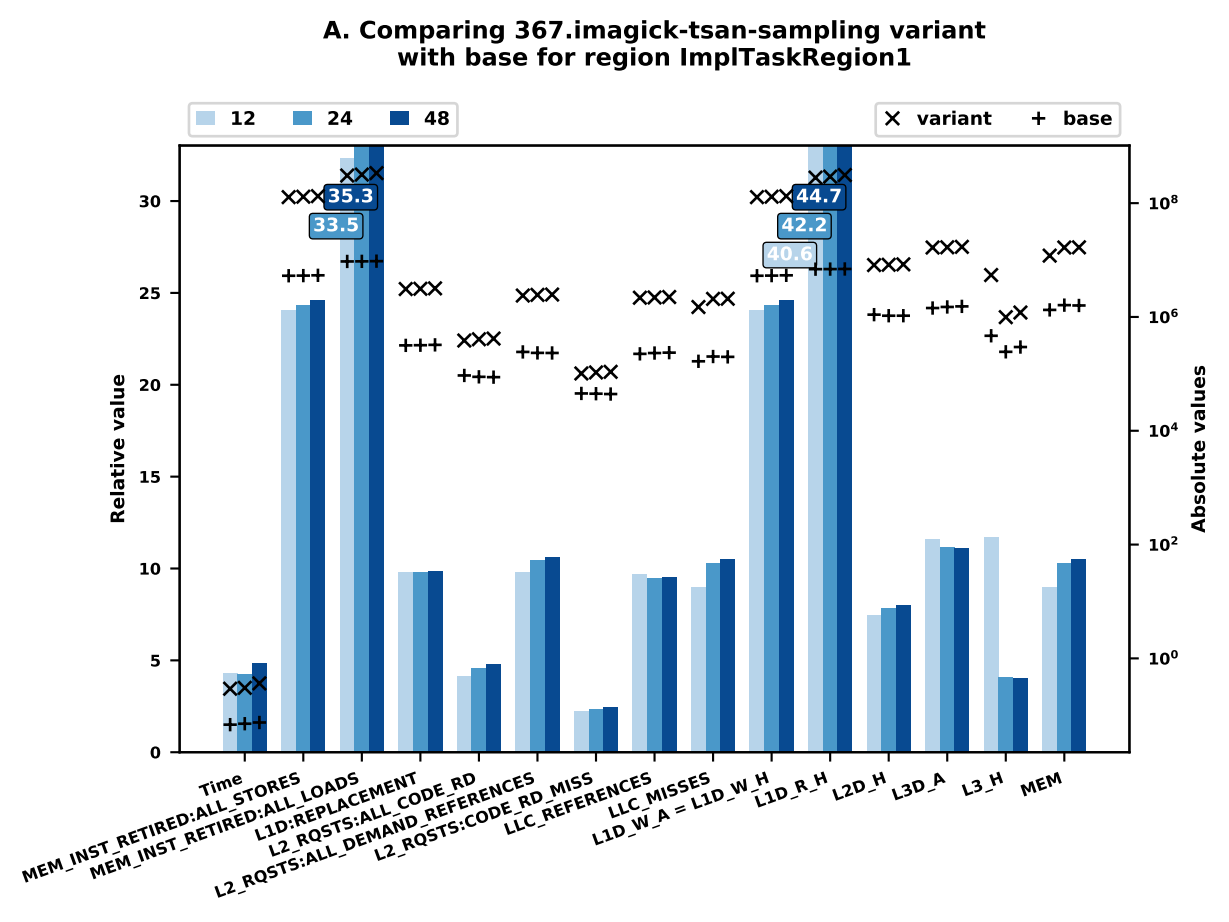
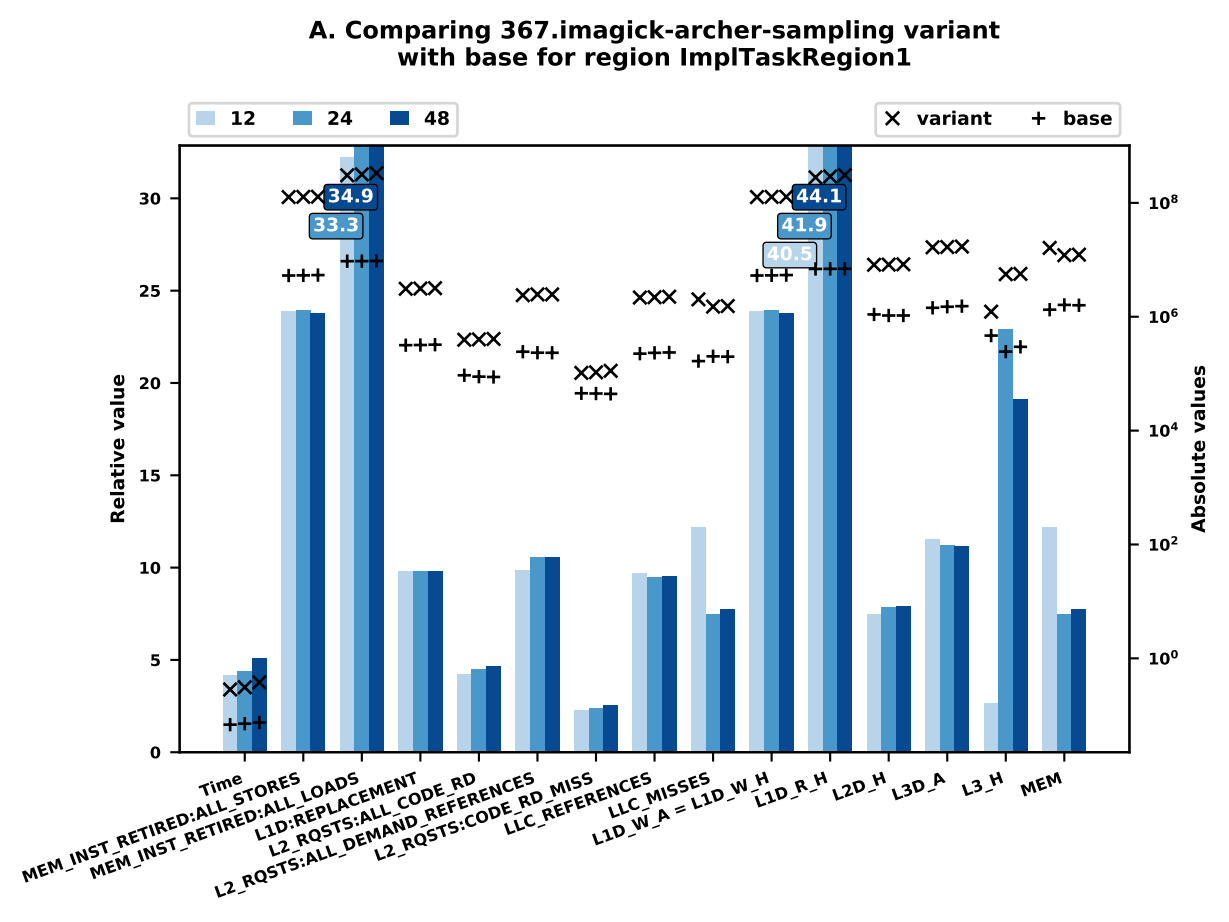
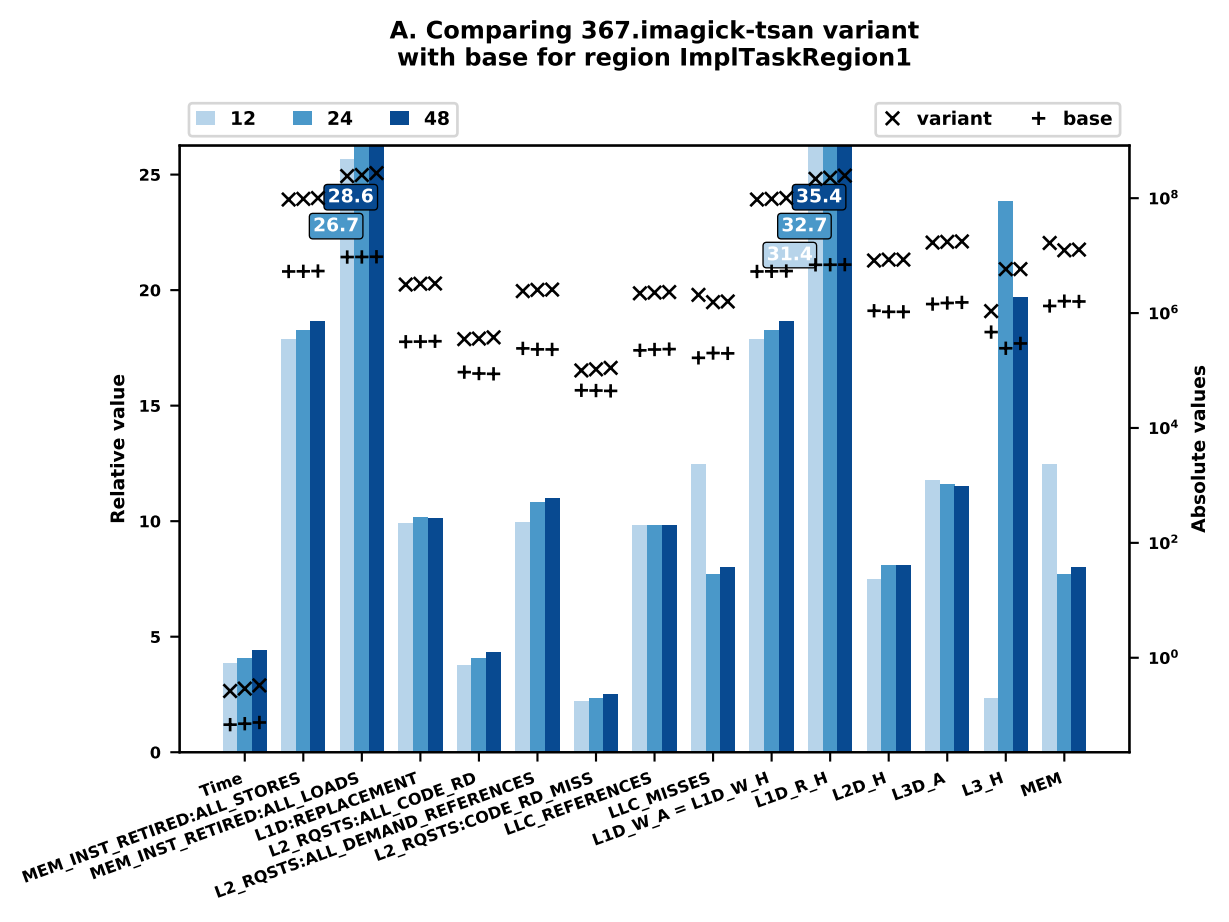

12
24
48
base
tsan-noread
archer-noread
tsan-sampling
archer-sampling
tsan
archer
Execution time [s]
68.2
88.4
88.8
0.5
1247.0
1842.1
1773.6
6.4
1254.7
1841.2
1777.2
6.3
1594.4
2028.7
2060.2
11.2
1567.4
2016.5
2062.2
12.6
1414.6
1968.1
2603.8
34.5
1420.0
1977.8
2663.8
33.4
ImplTaskRegion1
ImplTaskRegion2
ImplTaskRegion3
ImplTaskRegion4
ImplTaskRegion5
ImplTaskRegion6
ImplTaskRegion7
ImplTaskRegion8
ImplTaskRegion9
ImplTaskRegion10
ImplTaskRegion11
ImplTaskRegion12
ImplTaskRegion13

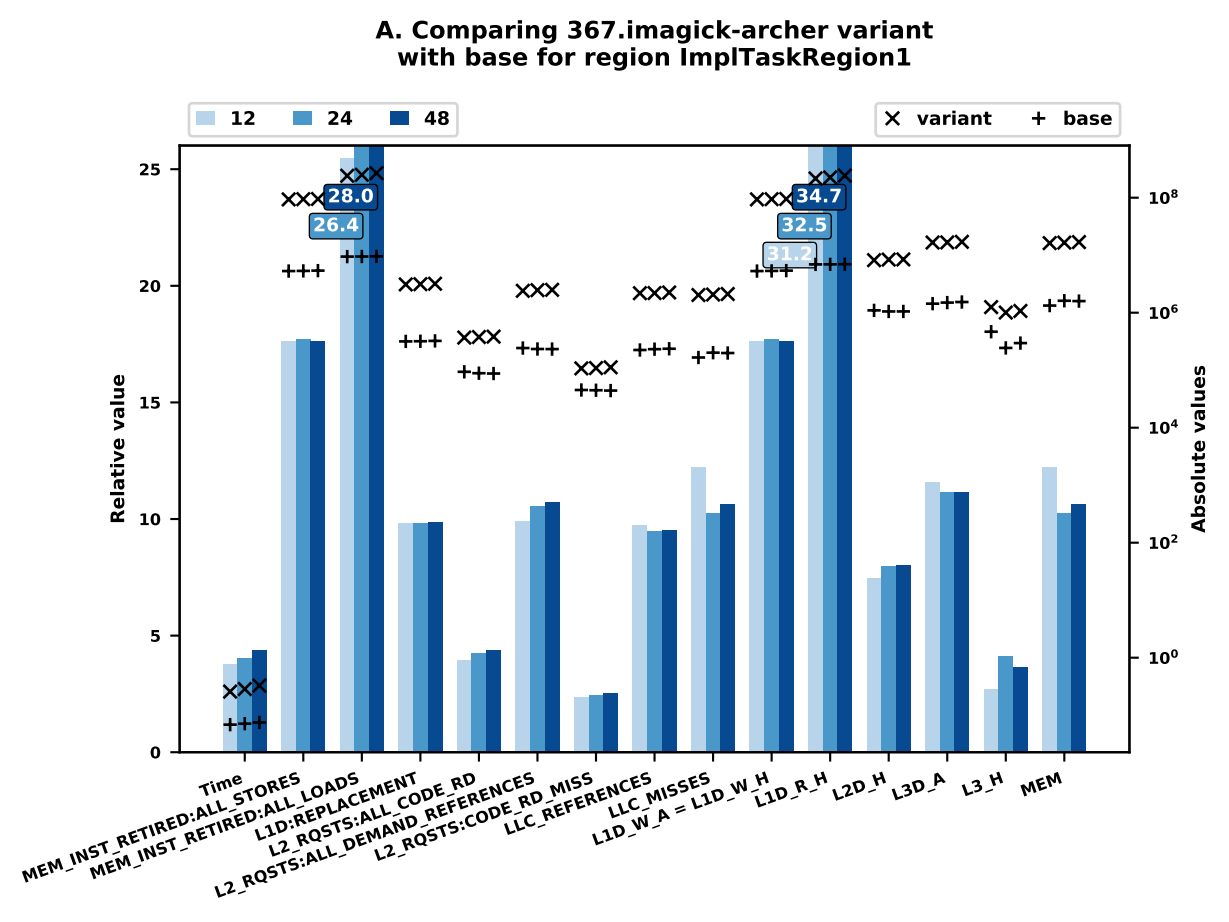

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
29.6
26.8
36.7
33.1
31.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

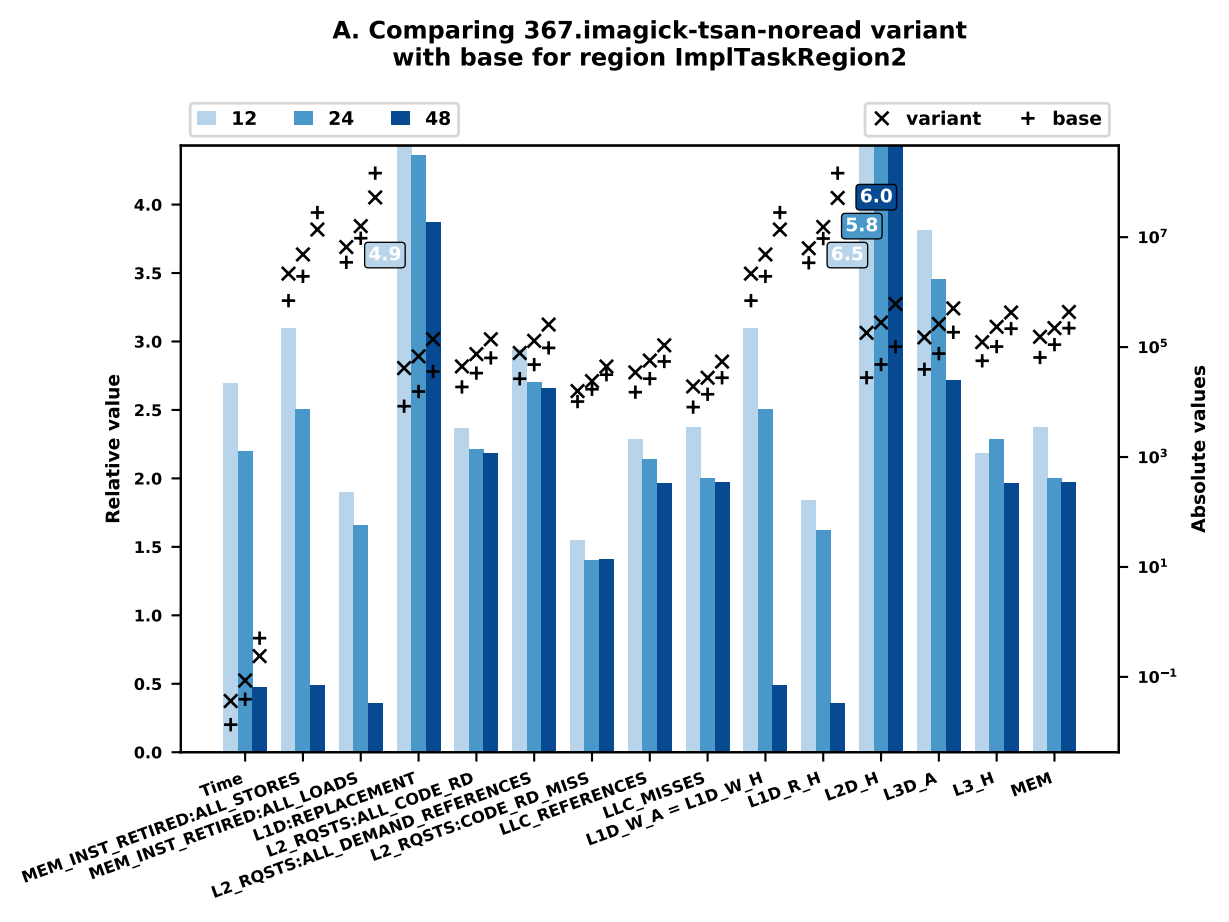

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
29.1
26.6
36.0
32.8
31.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

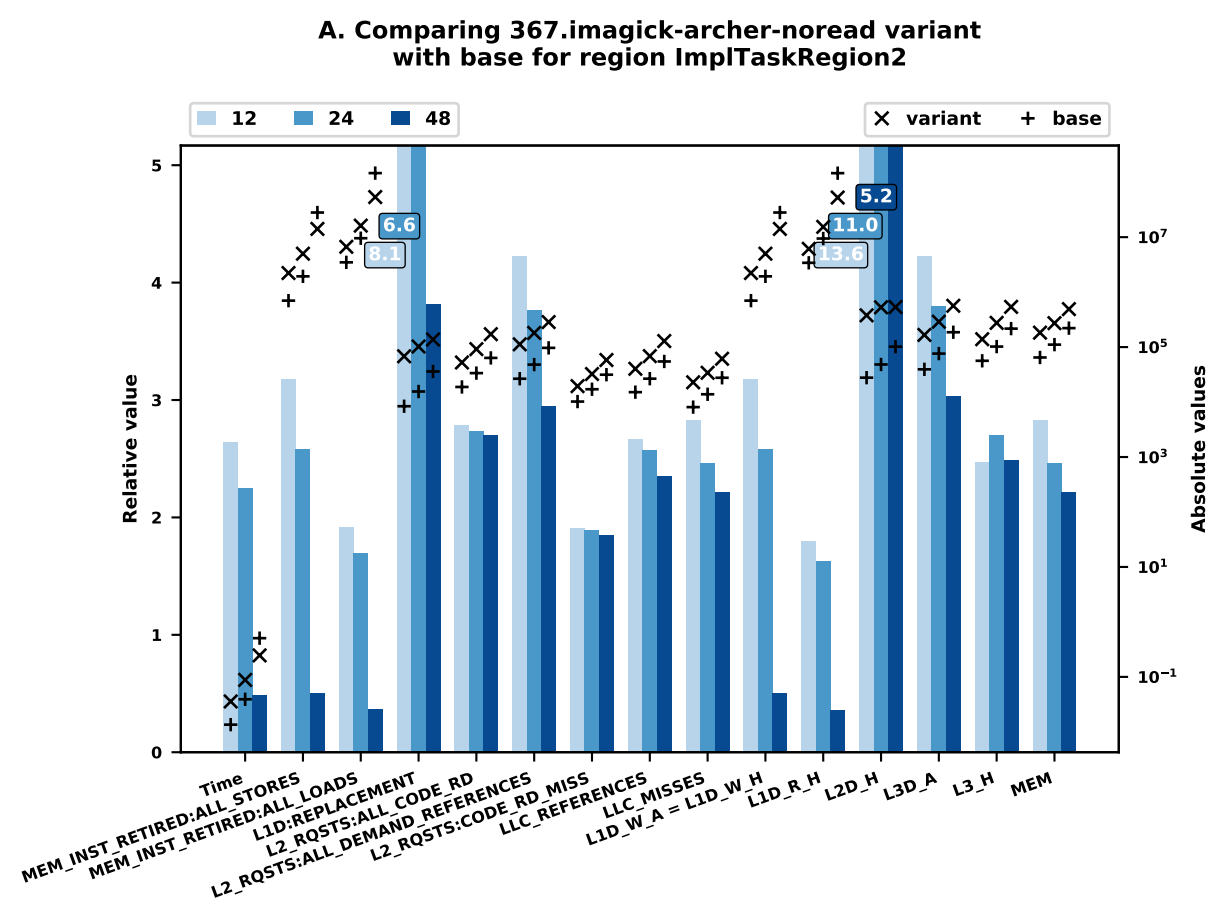

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
35.3
33.5
44.7
42.2
40.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

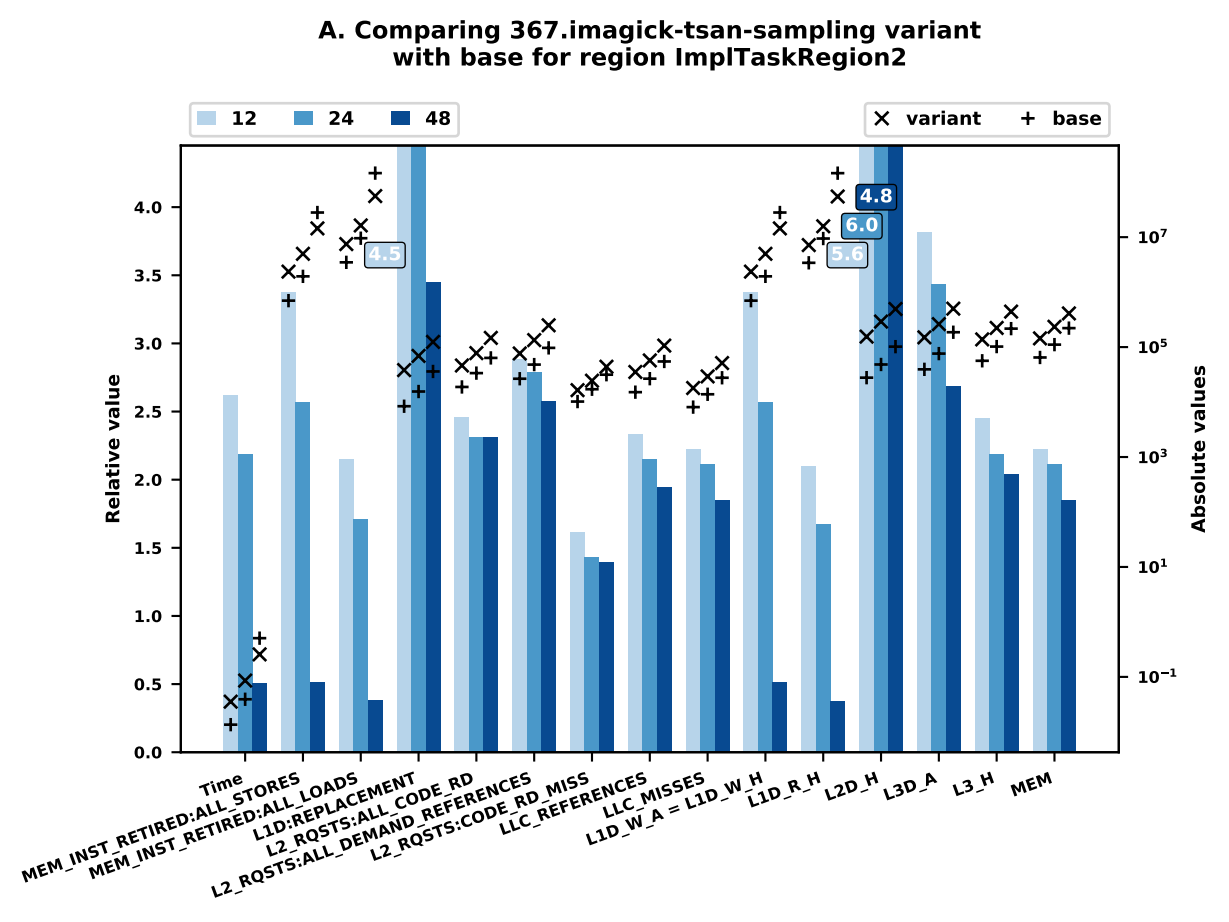

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
34.9
33.3
44.1
41.9
40.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

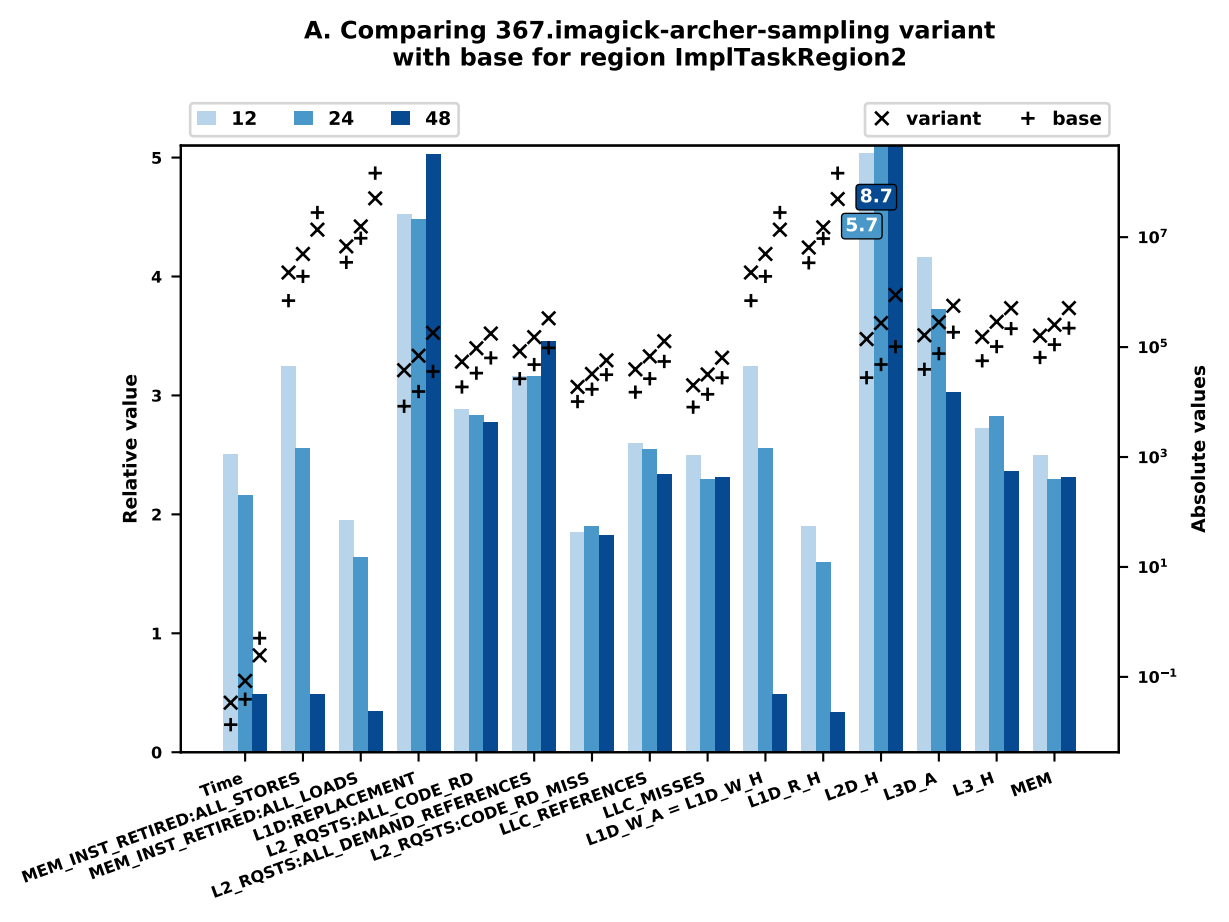

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
28.6
26.7
35.4
32.7
31.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

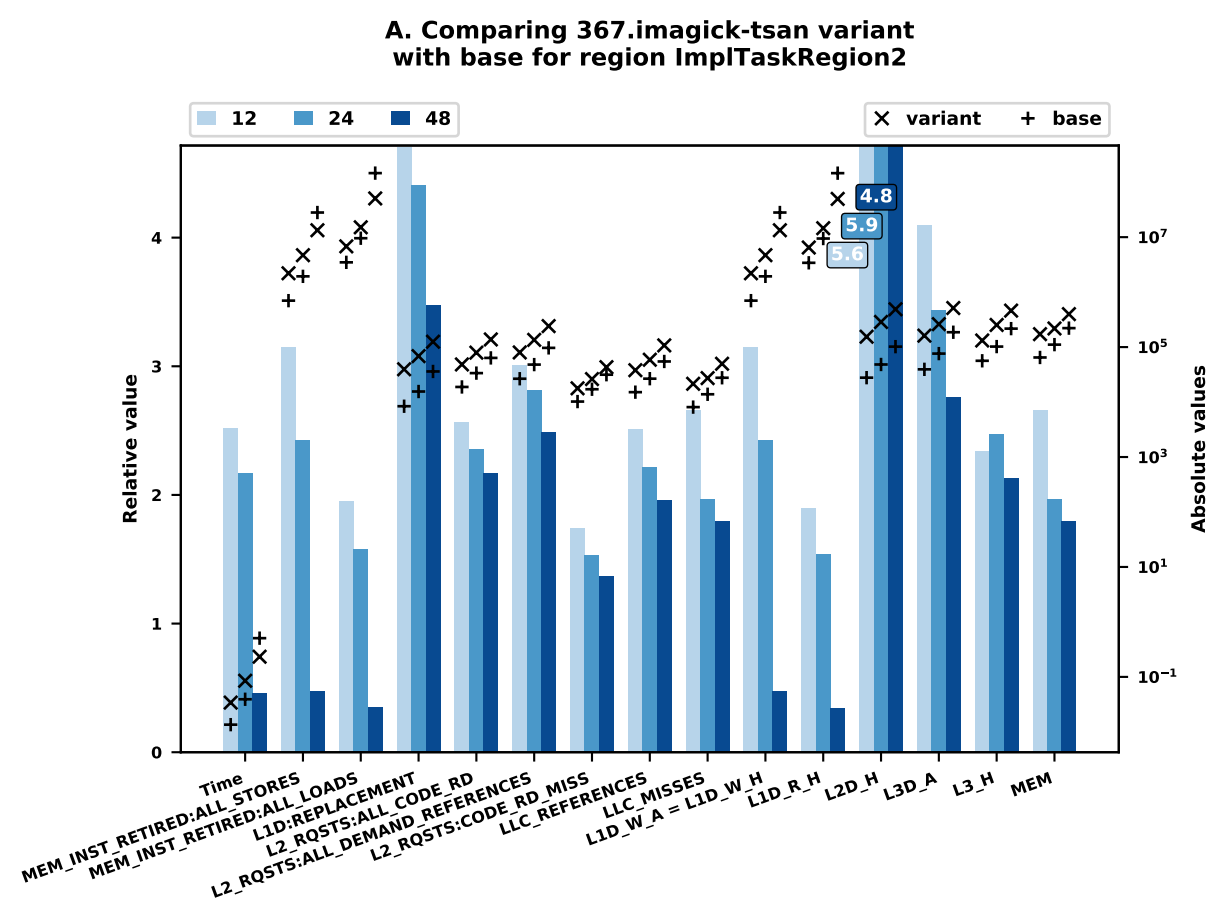

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
28.0
26.4
34.7
32.5
31.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

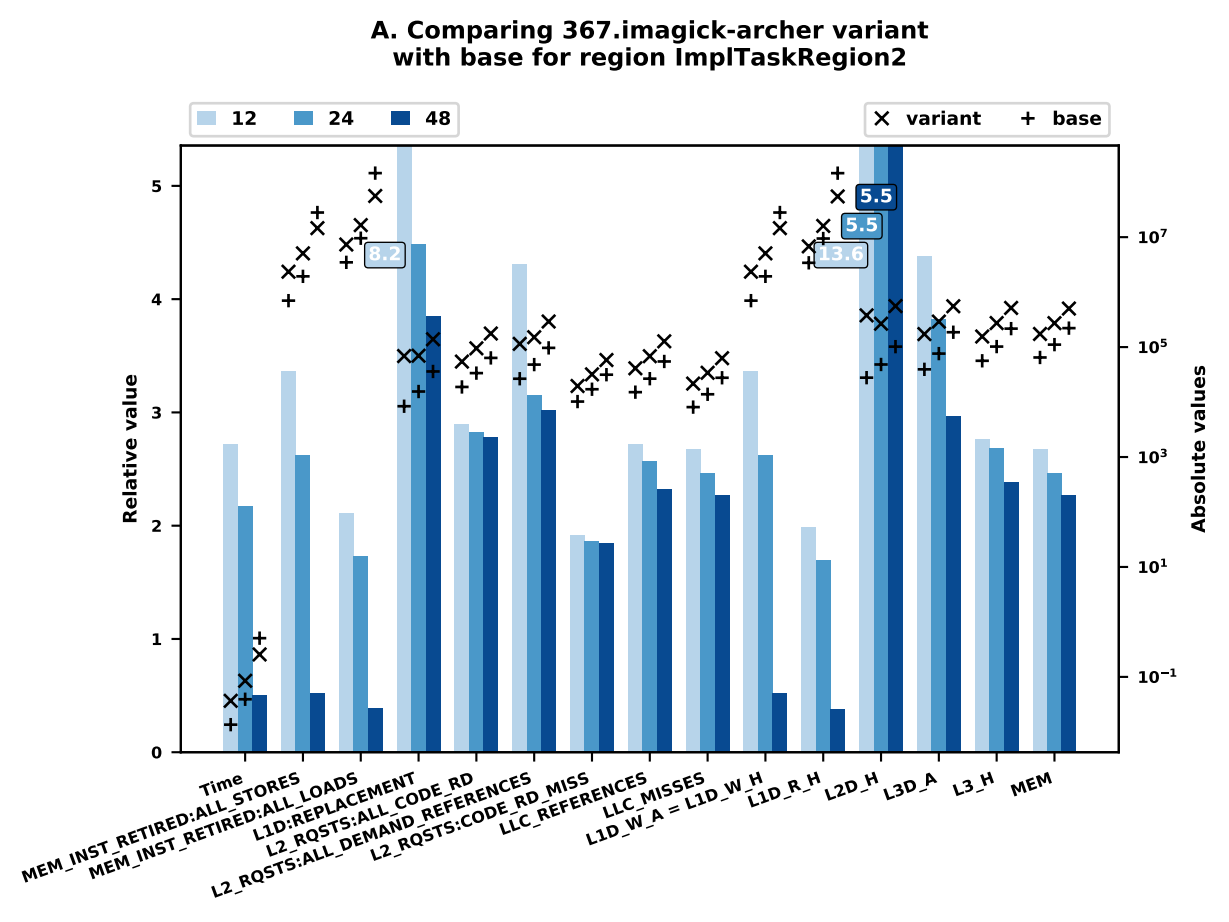

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
4.9
6.0
5.8
6.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

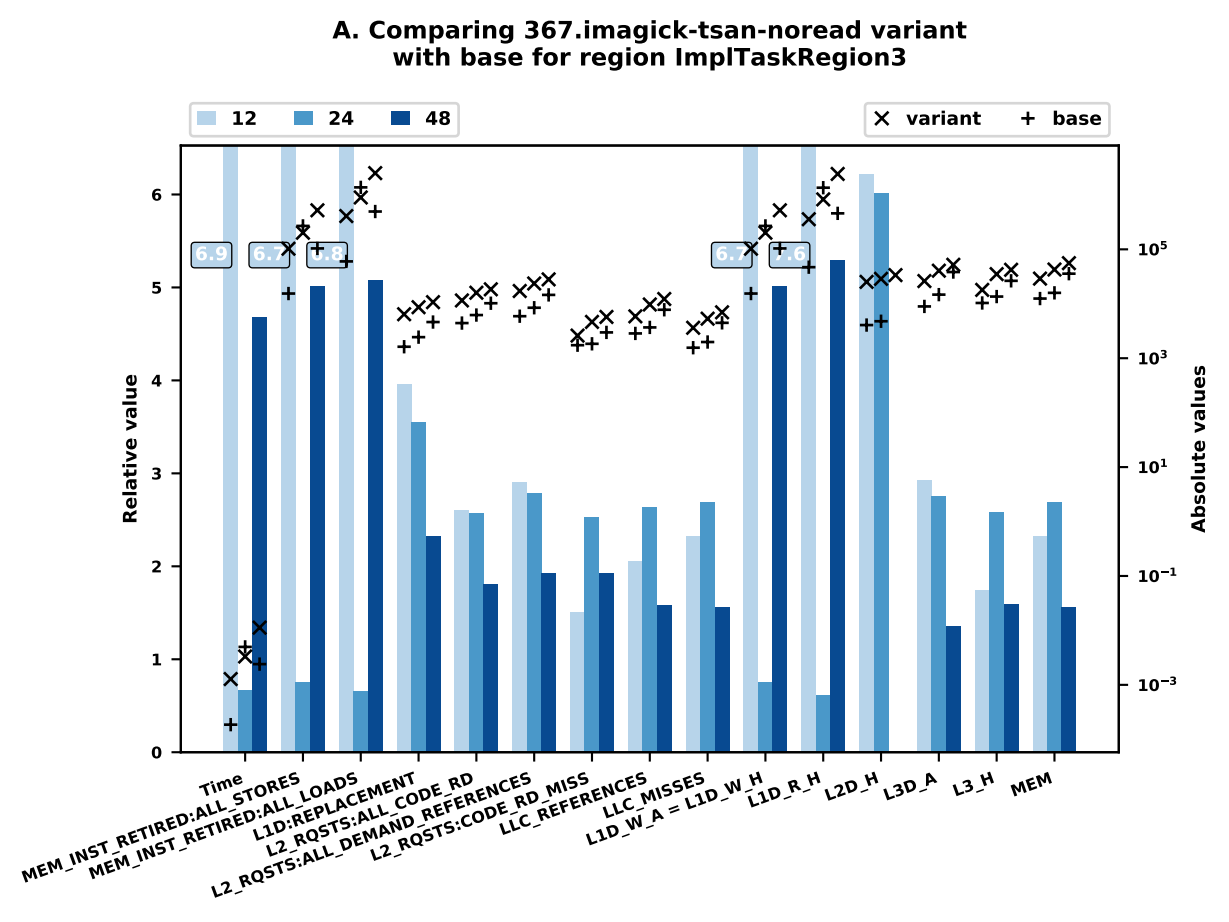

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
6.6
8.1
5.2
11.0
13.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

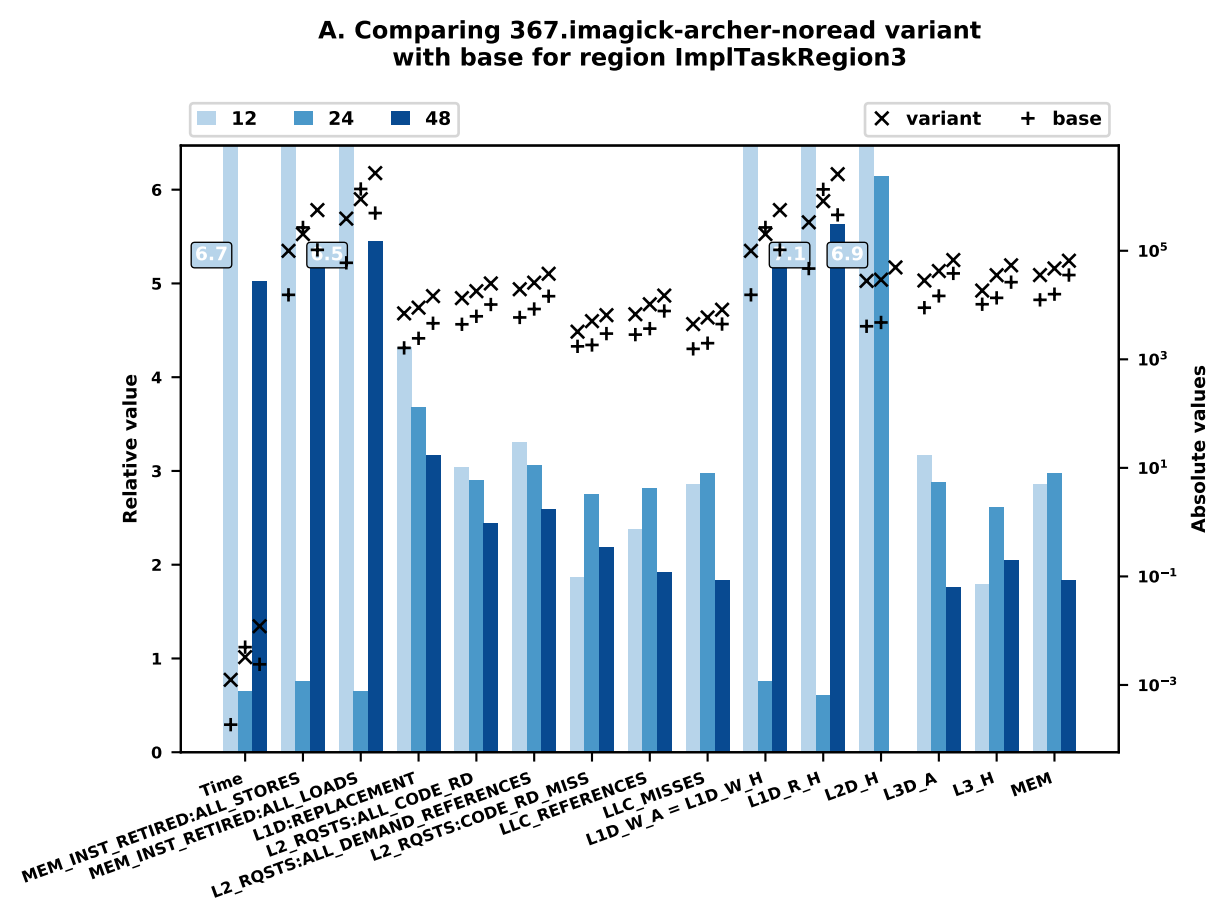

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
4.5
4.8
6.0
5.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

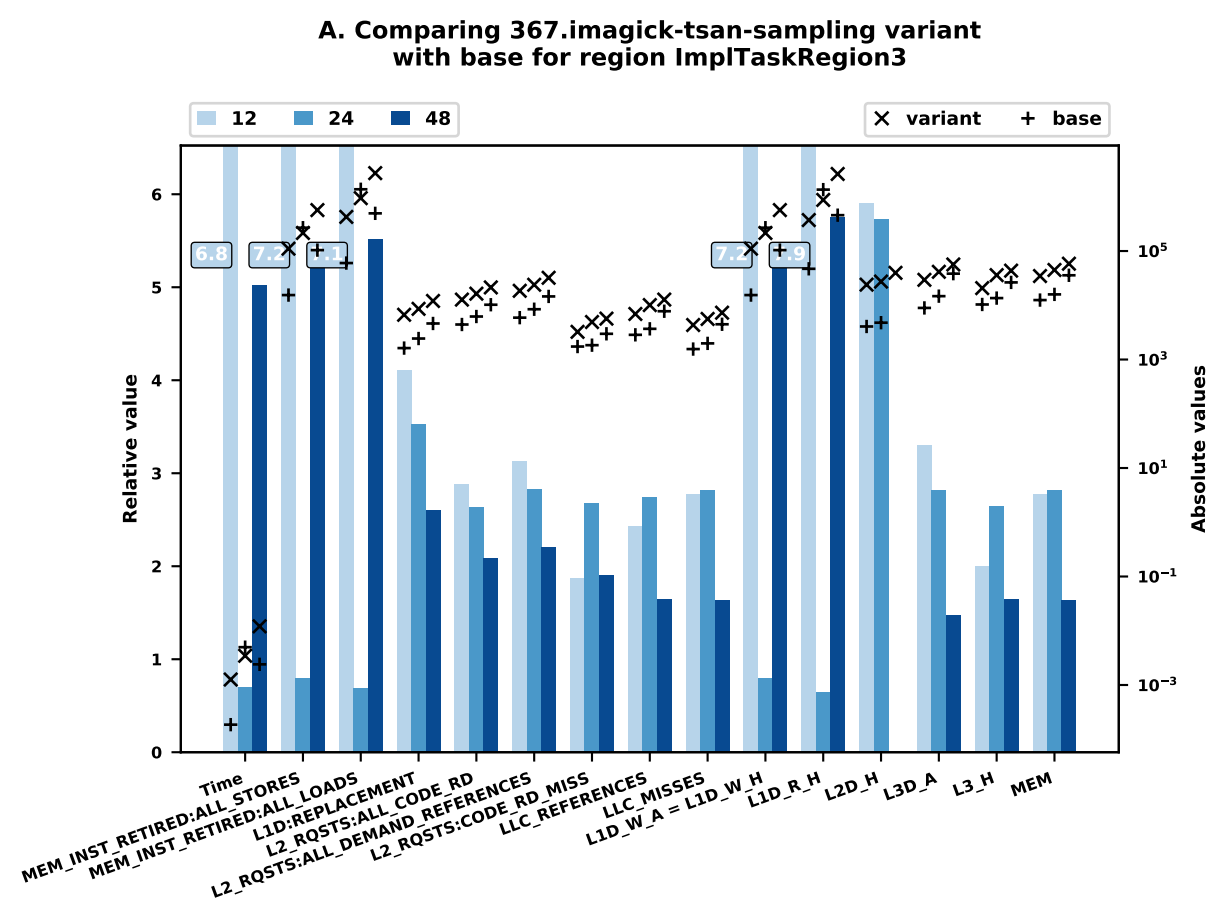

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion2
12
24
48
variant
base
8.7
5.7
Relative value
Absolute values
0
1
2
3
4
5
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
$10^{7}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

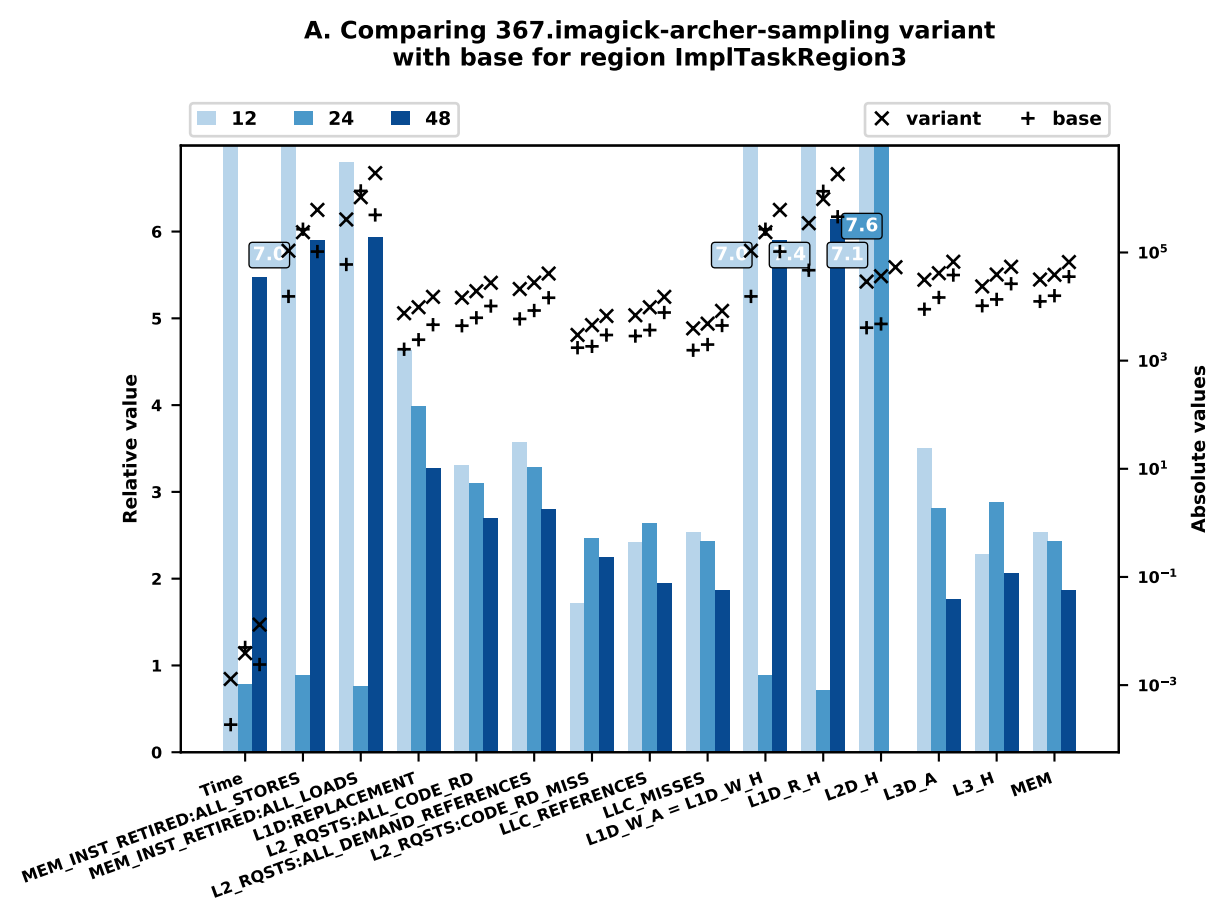

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
4.8
5.9
5.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

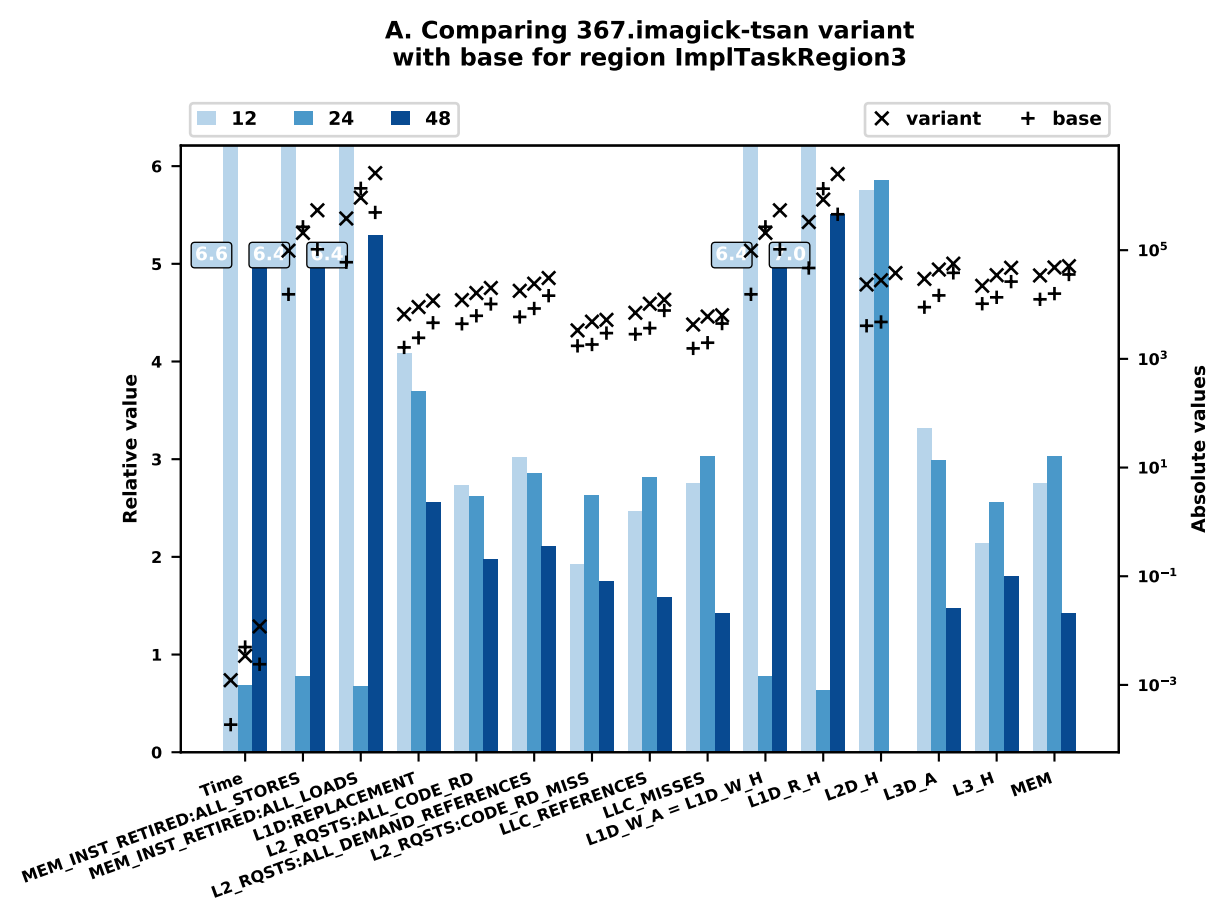

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
$10^{7}$
$10^{5}$
$10^{3}$
$10^{1}$
$10^{-1}$
8.2
5.5
5.5
13.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

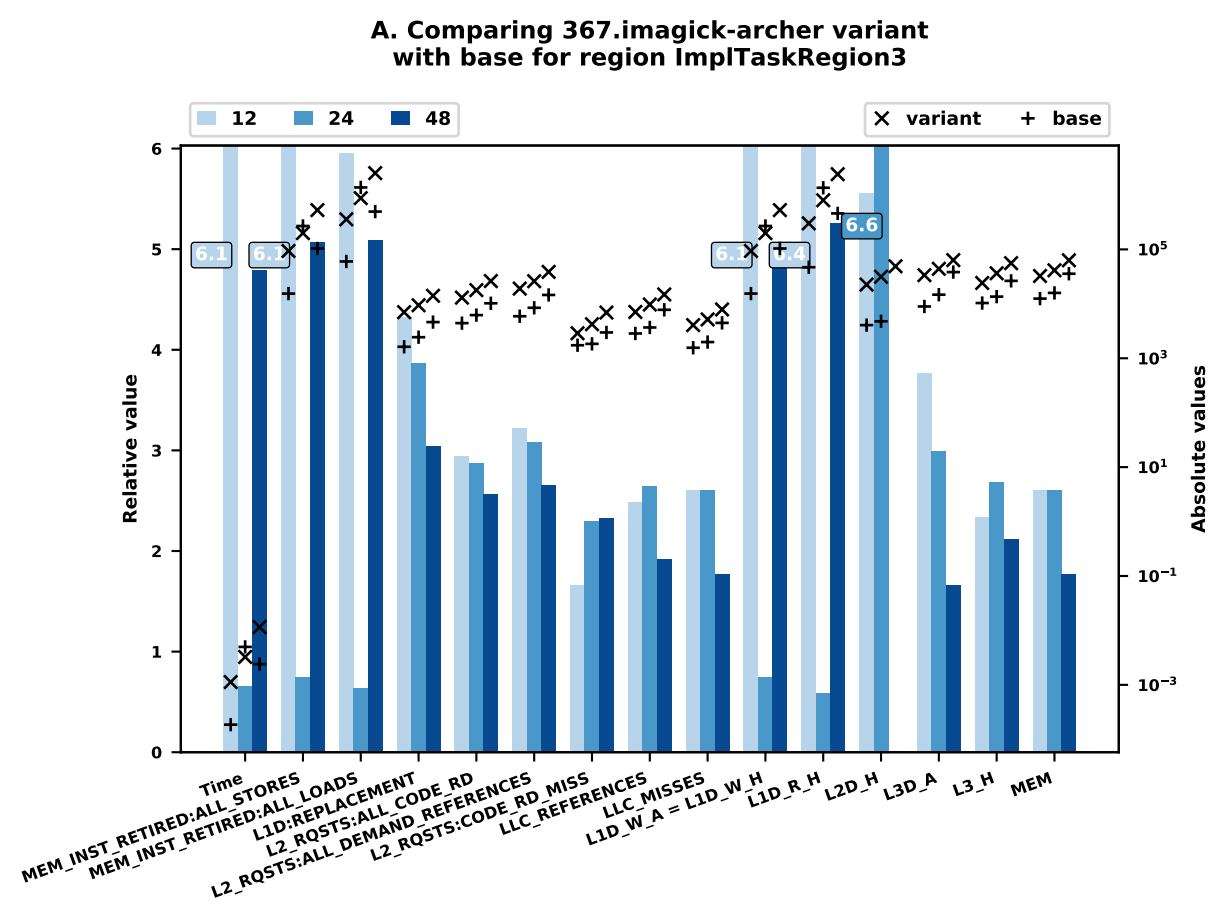

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion3
12
24
48
variant
base
6.9
6.7
6.8
6.7
6.6
Relative value
Absolute values
0
1
2
3
4
5
6
$10^{-3}$
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

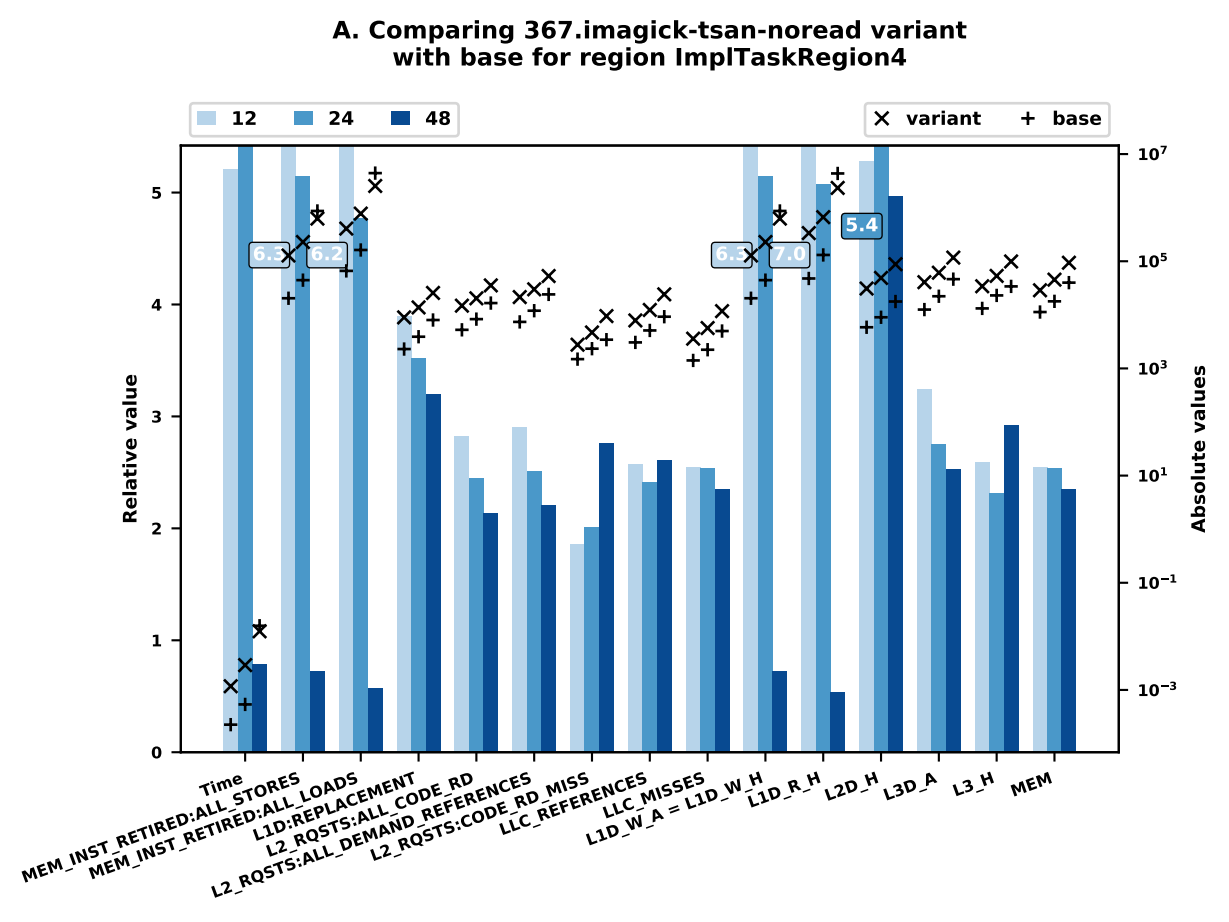

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
6.7
6.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

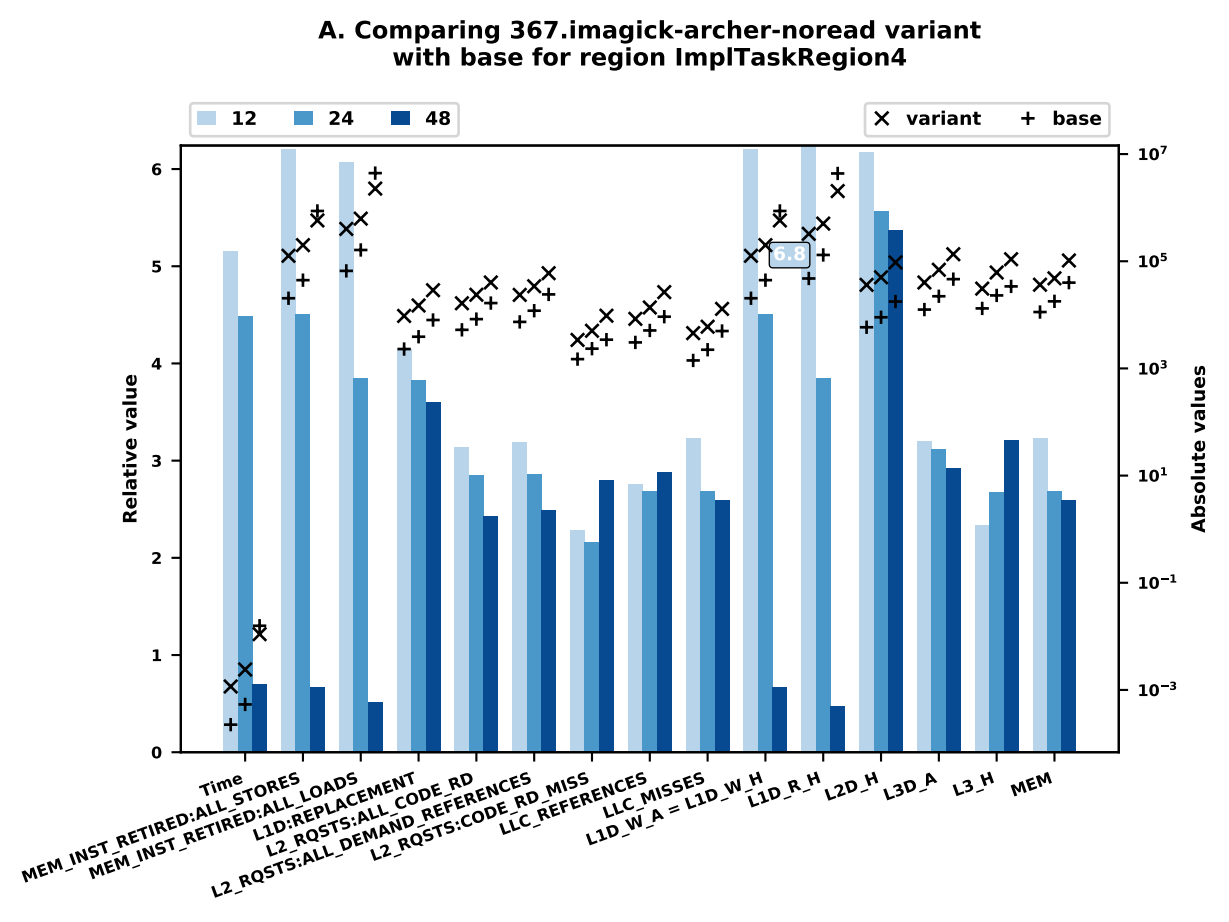

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
$10^{-3}$
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
6.8
7.2
7.2
7.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

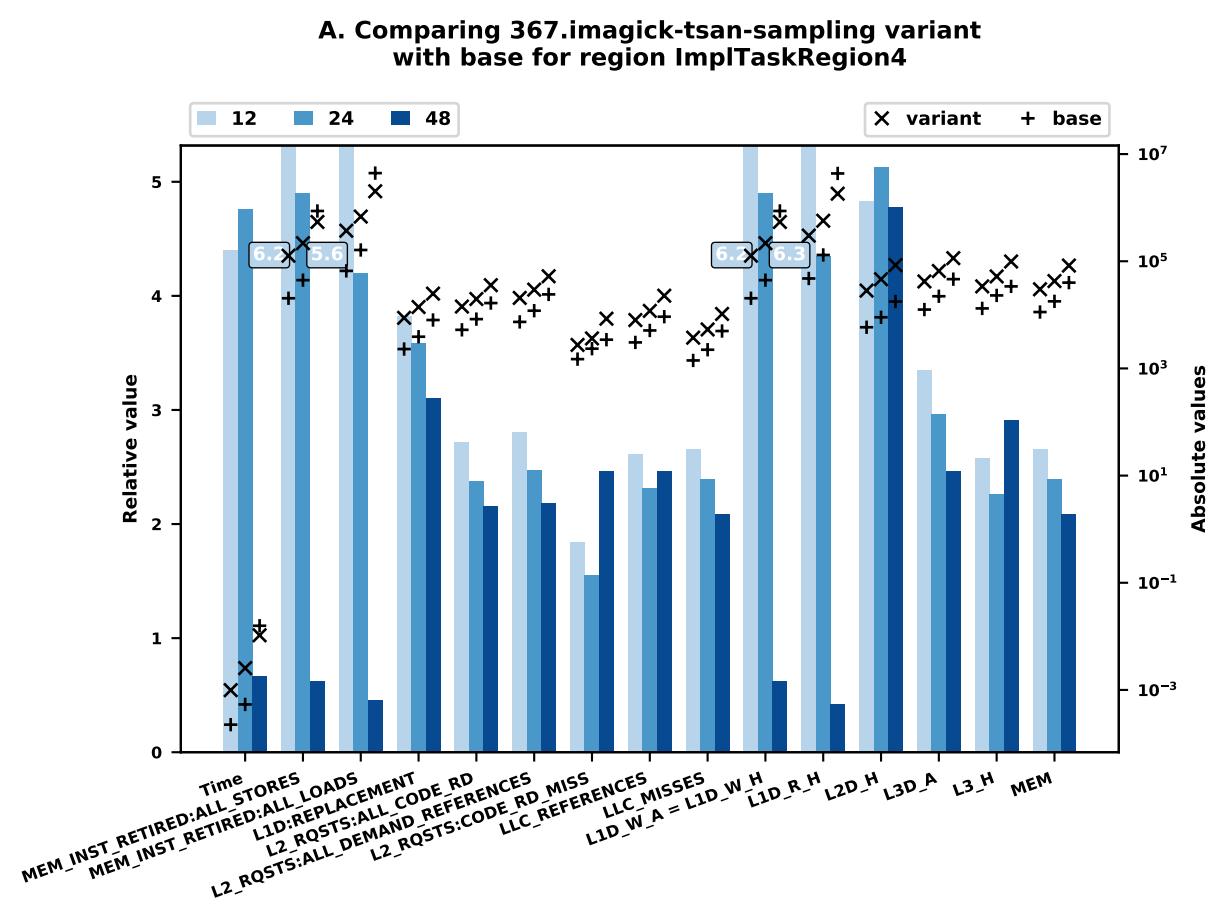

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
7.0
7.0
7.4
7.1
7.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

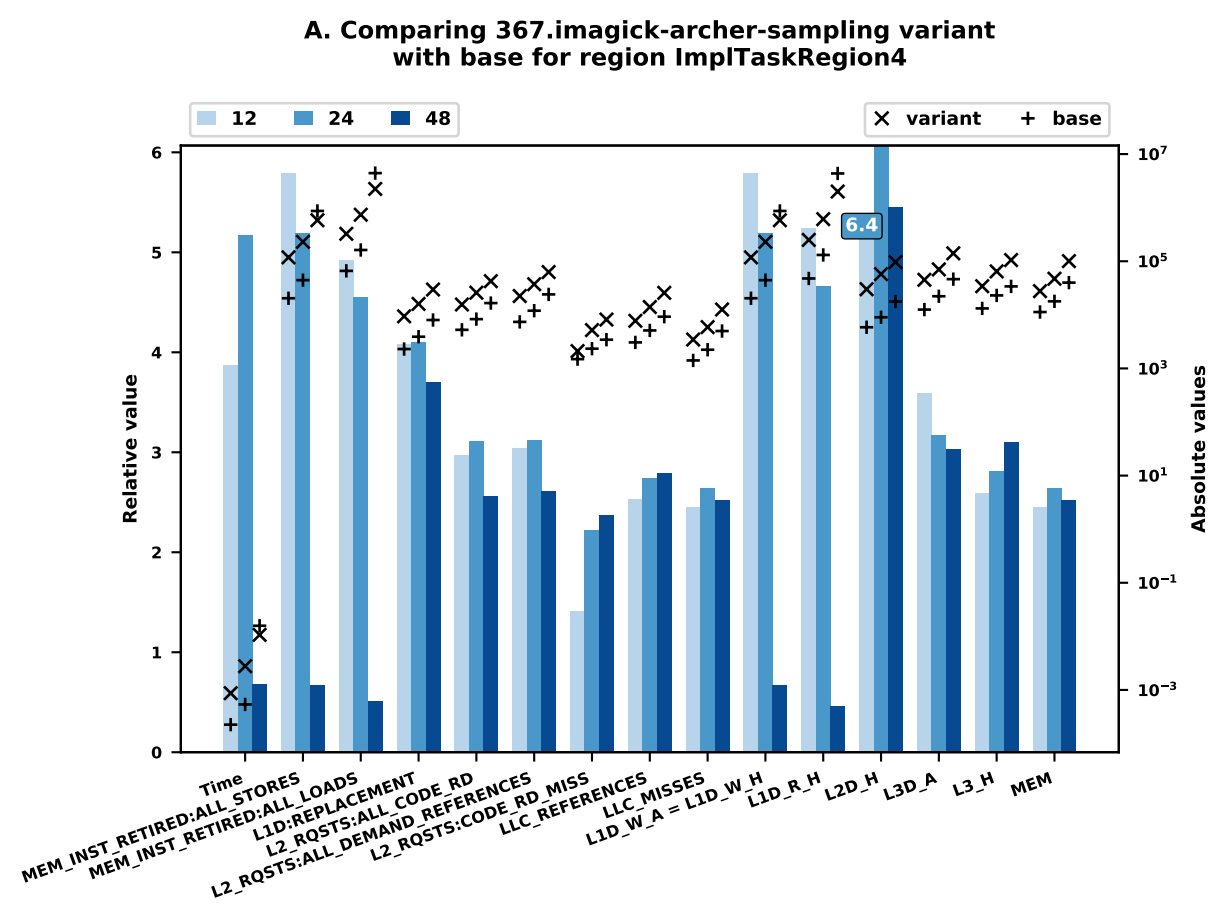

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion3
12
24
48
variant
base
6.6
6.4
6.4
6.4
7.0
Relative value
Absolute values
0
1
2
3
4
5
6
$10^{5}$
$10^{3}$
$10^{1}$
$10^{-1}$
$10^{-3}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

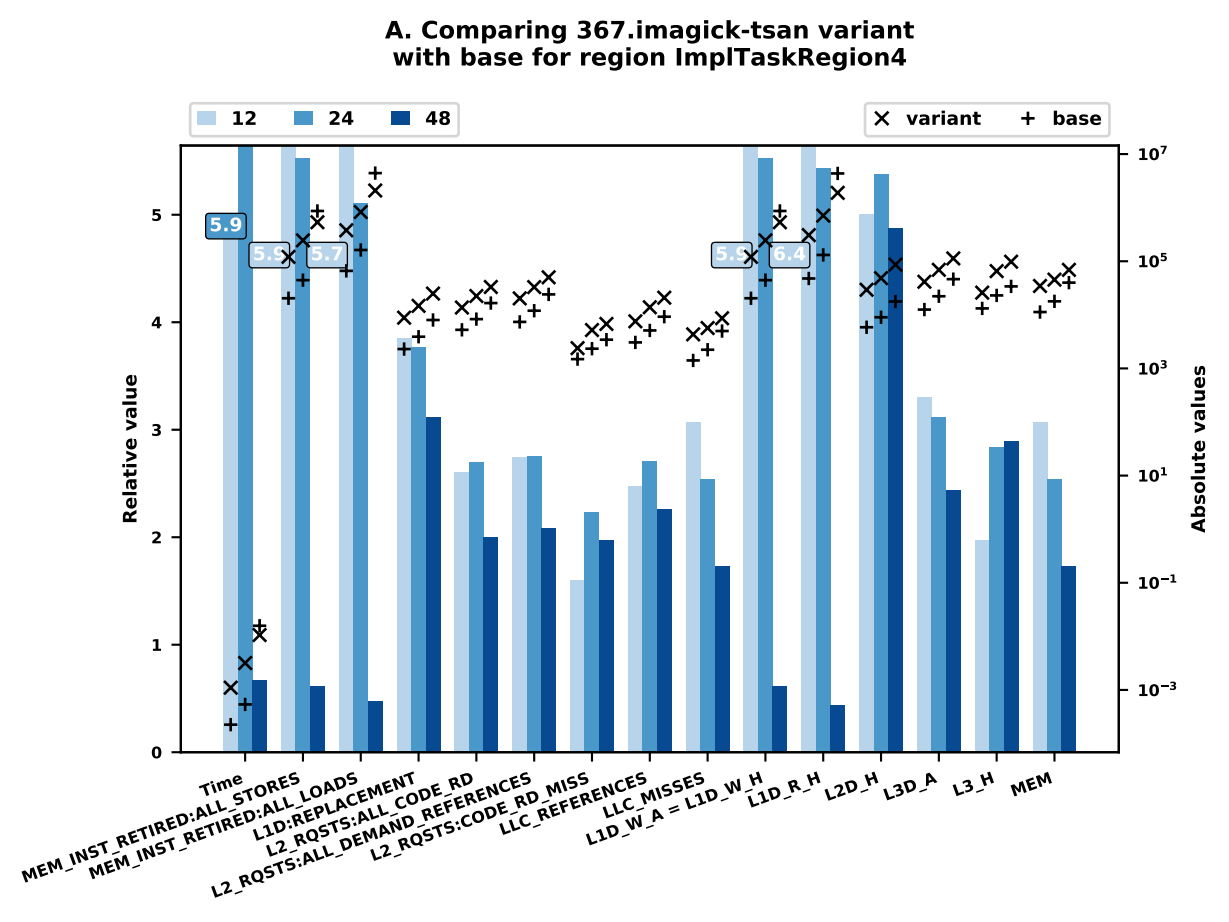

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
6.1
6.1
6.1
6.4
6.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

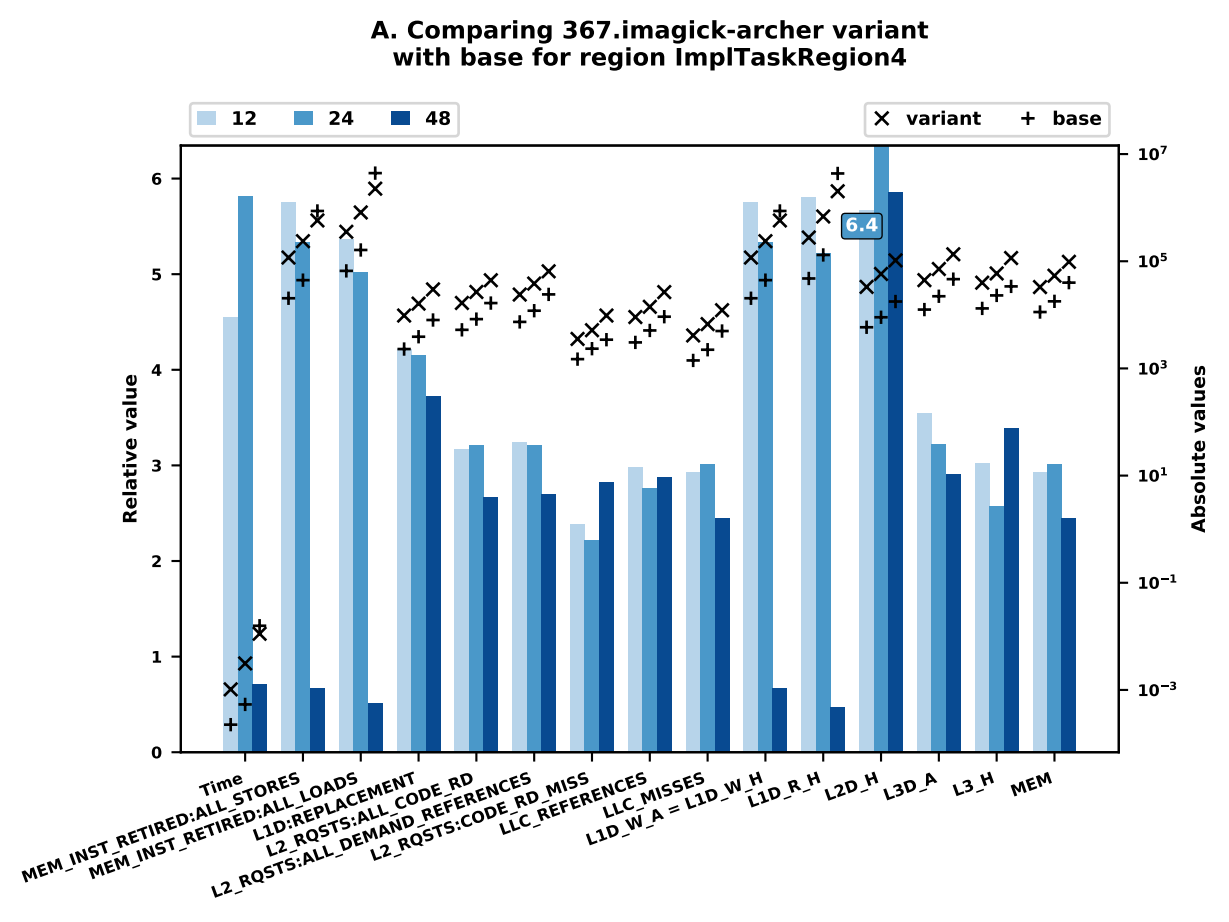

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
6.3
6.2
6.3
7.0
5.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

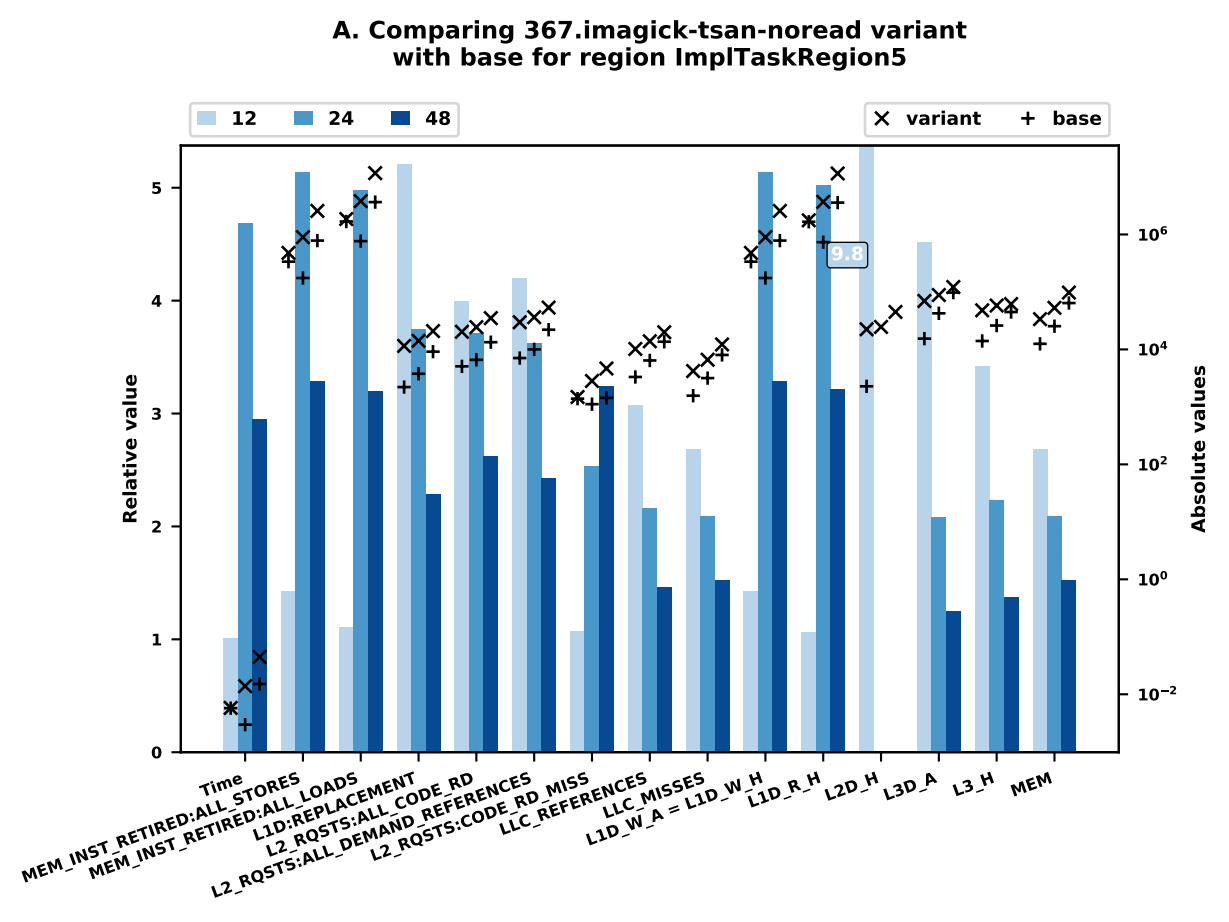

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
6.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

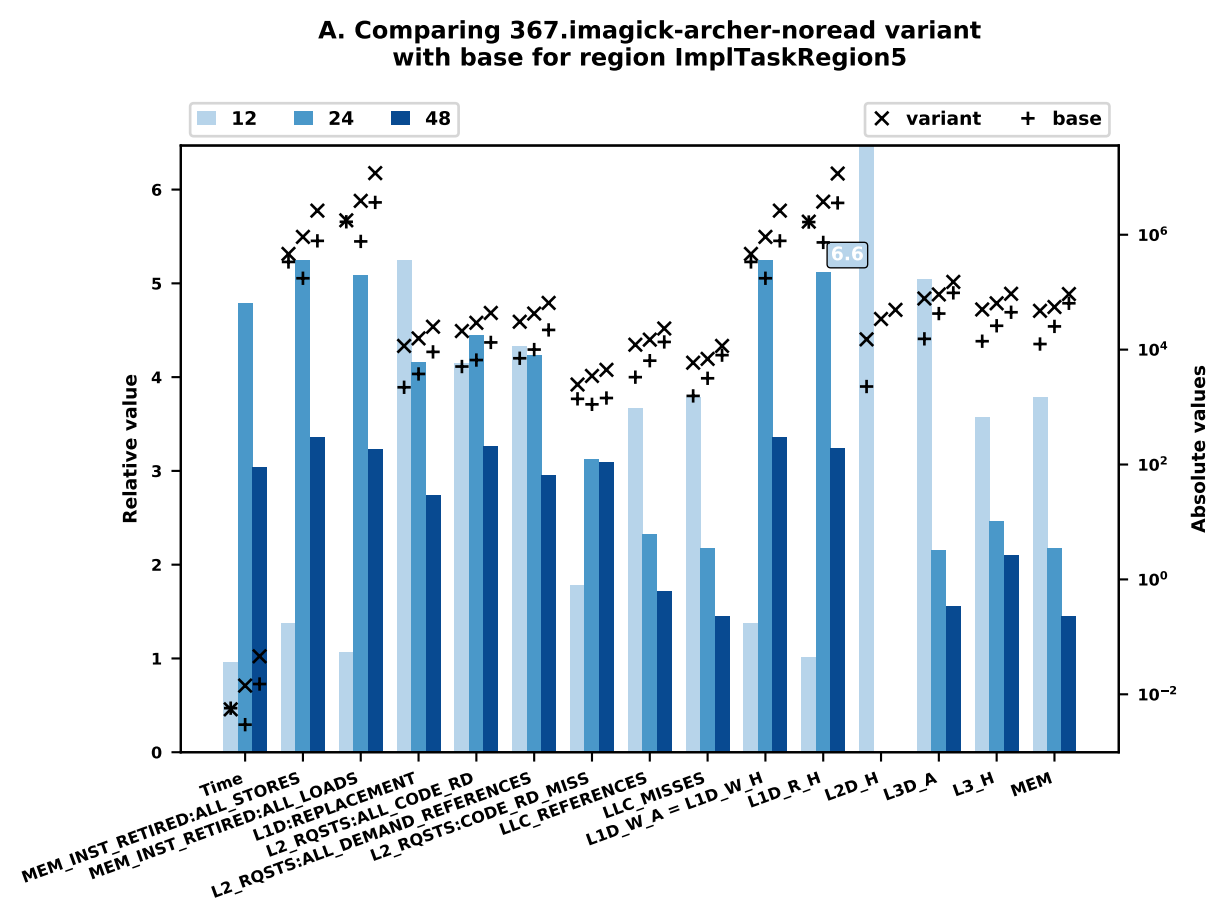

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
6.2
5.6
6.2
6.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

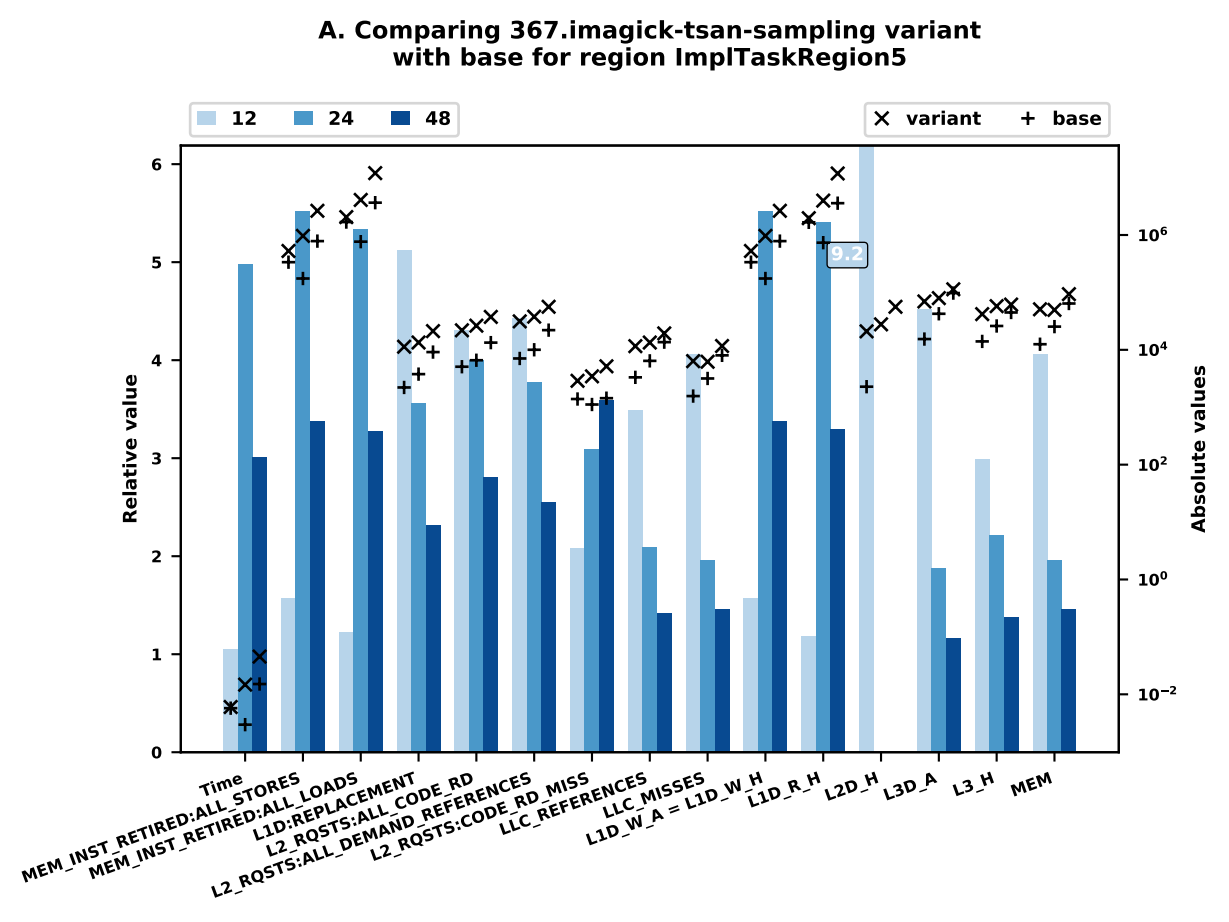

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
6.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

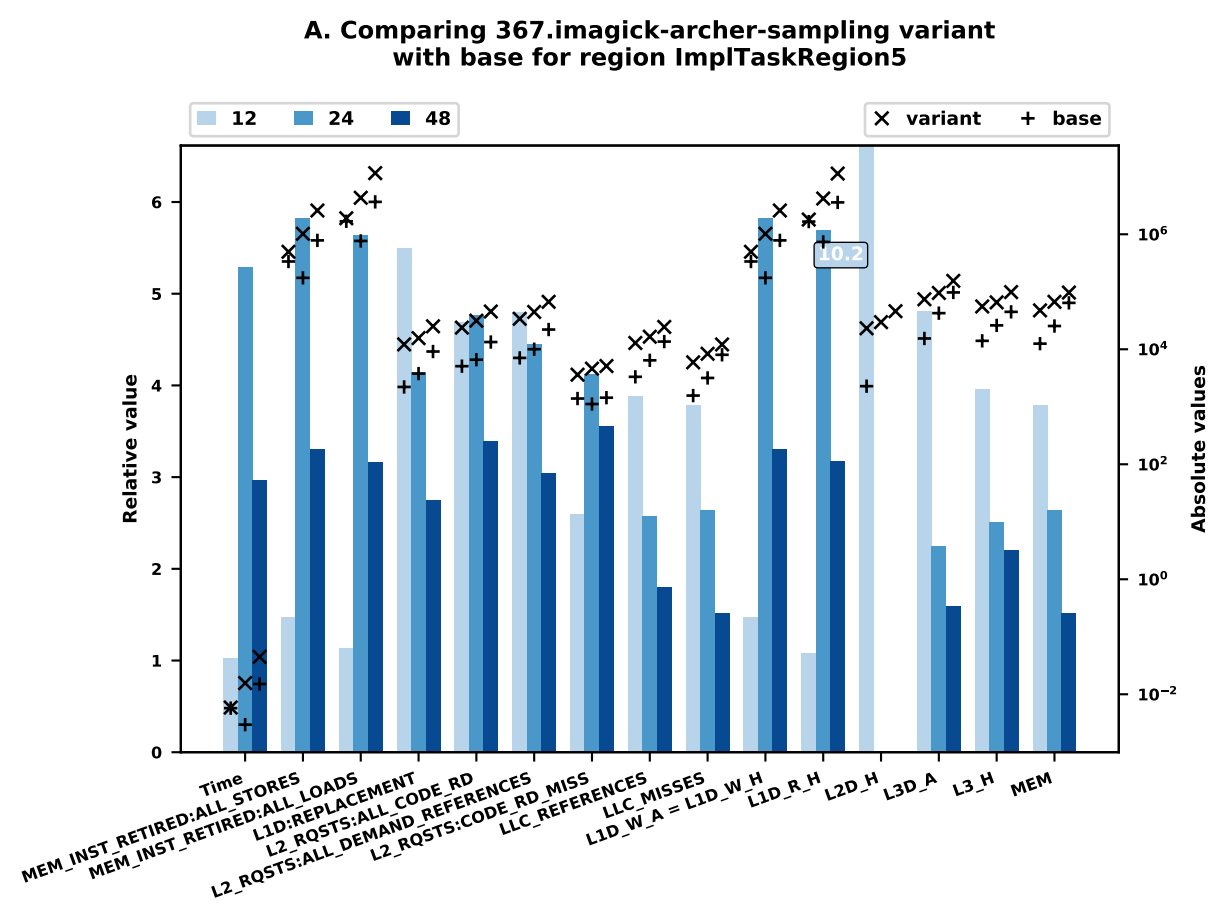

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
5.9
5.9
5.7
5.9
6.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

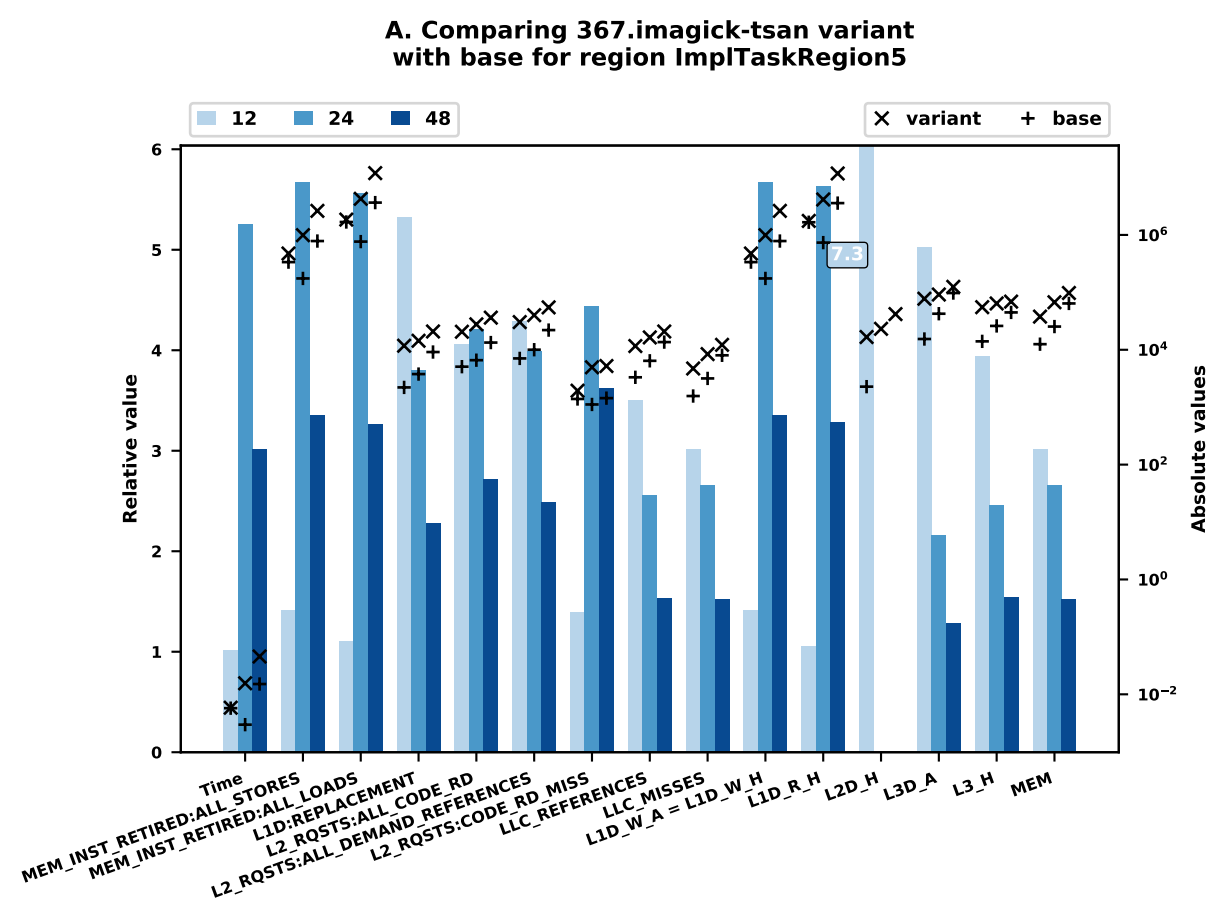

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
6.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

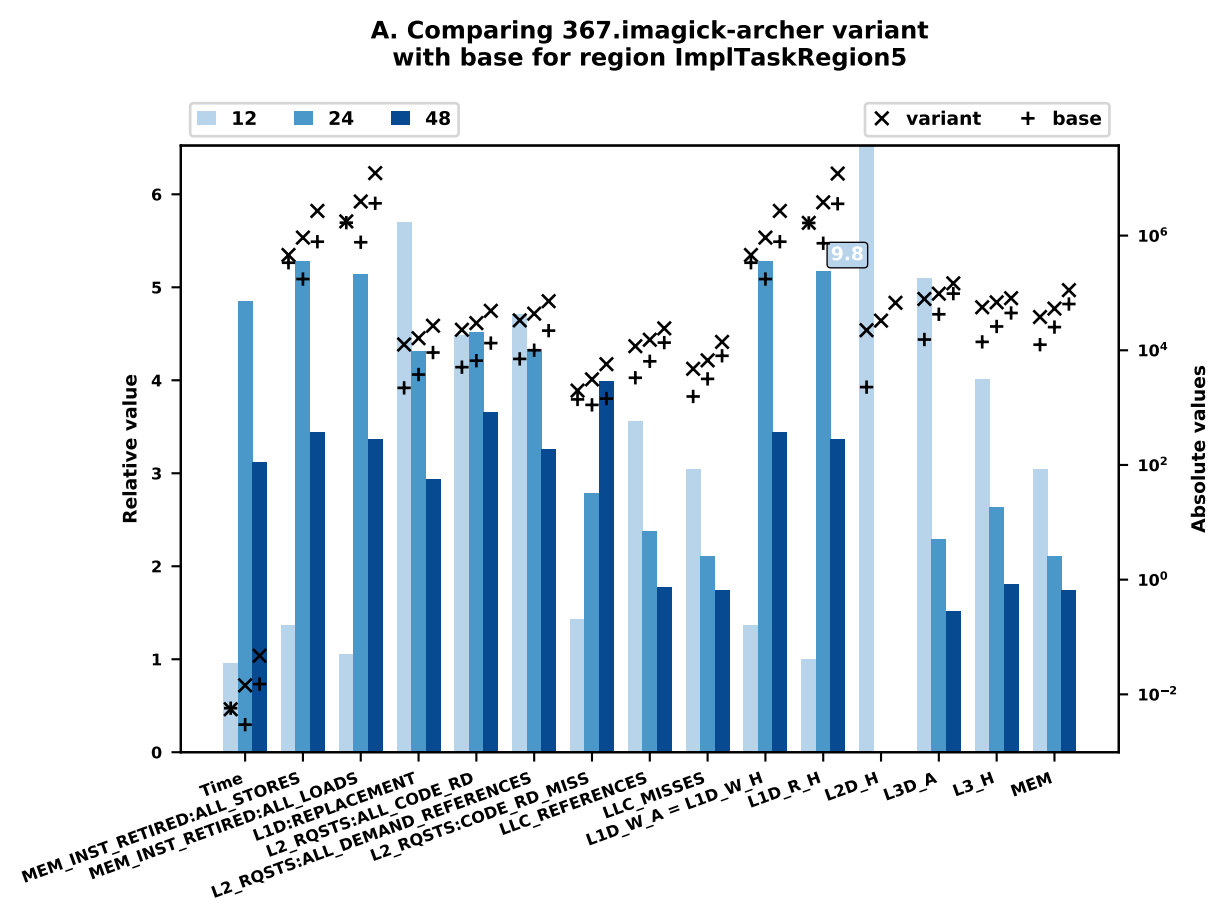

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
$10^{6}$
$10^{4}$
$10^{2}$
$10^{0}$
$10^{-2}$
9.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
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

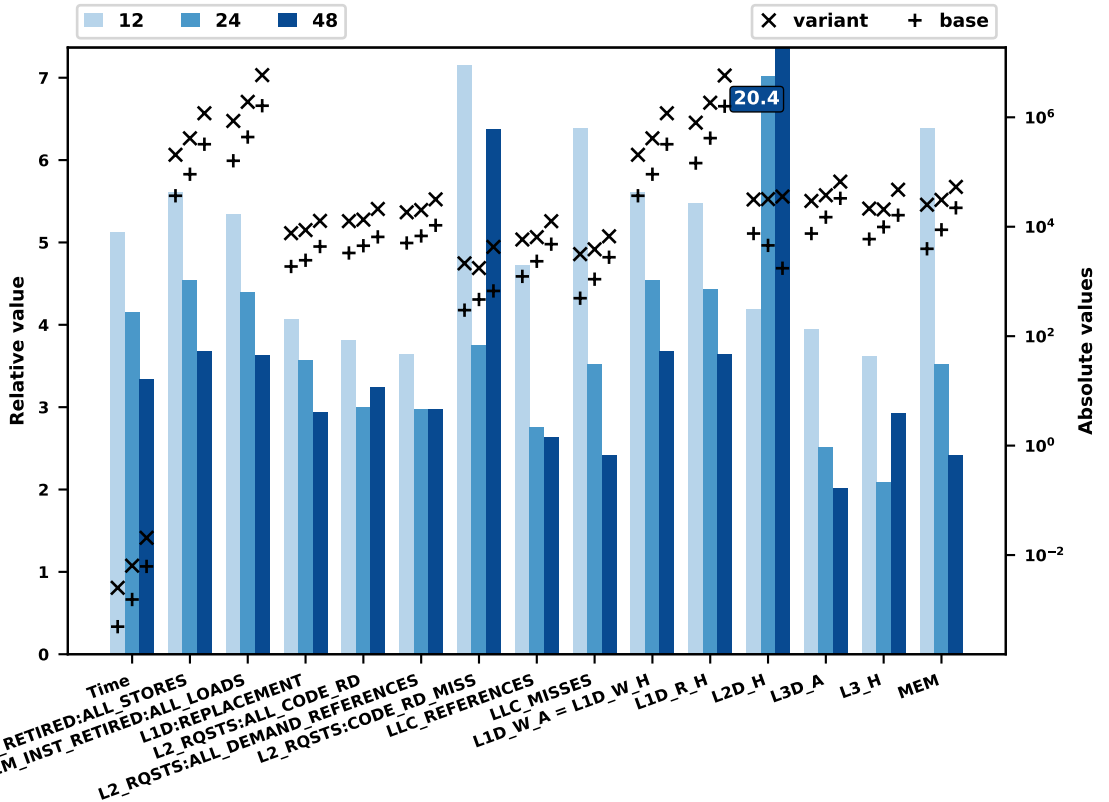

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
$10^{-2}$
$10^{0}$
$10^{2}$
$10^{4}$
$10^{6}$
6.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
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

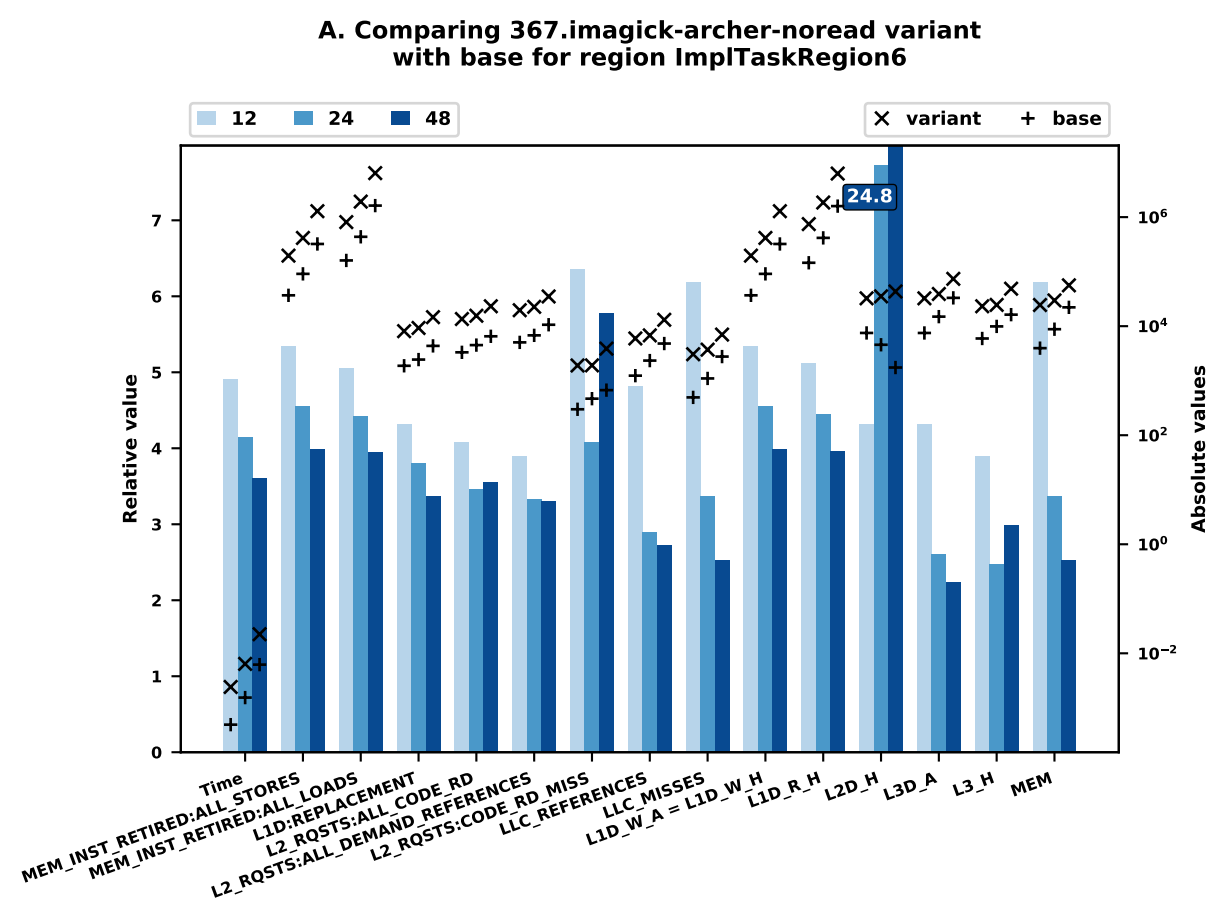

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
9.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

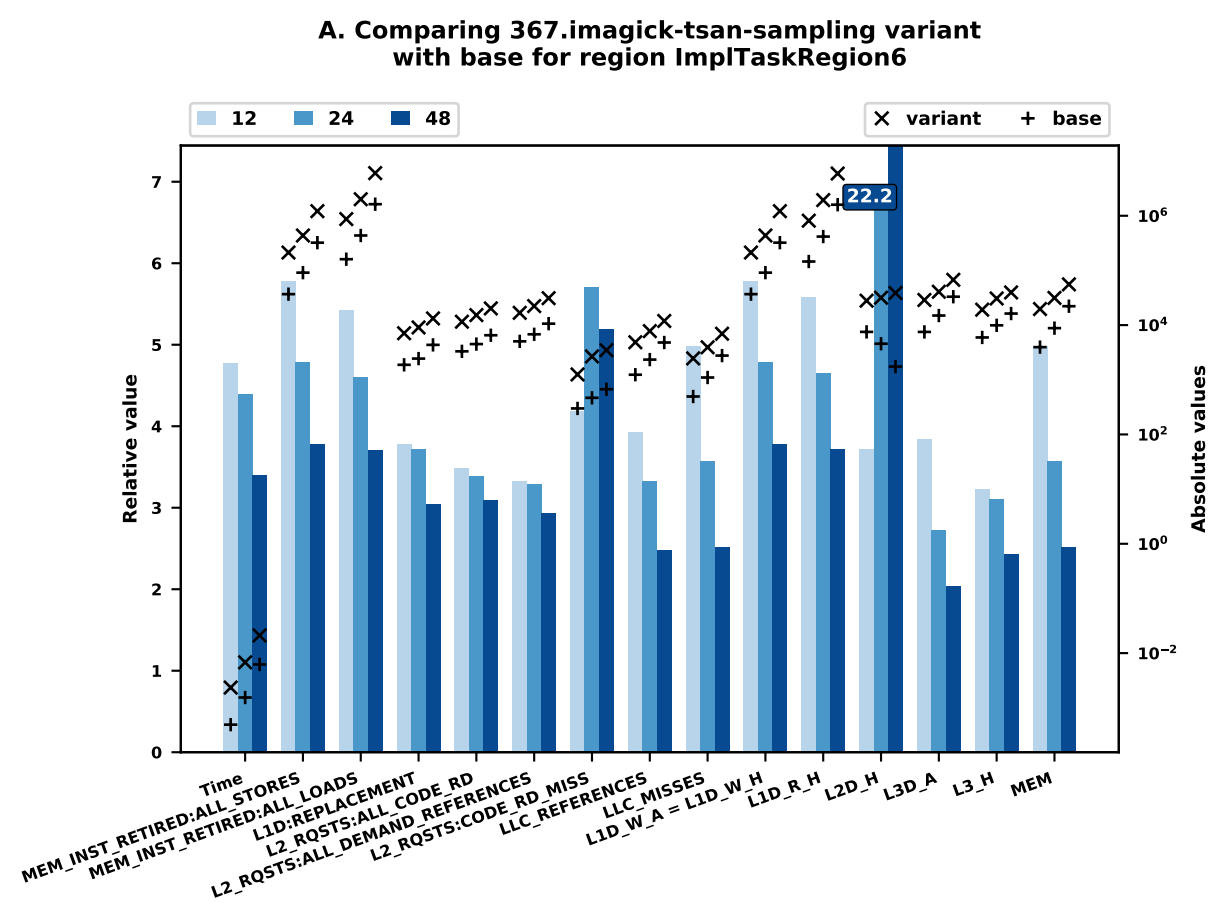

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
$10^{-2}$
$10^{0}$
$10^{2}$
$10^{4}$
$10^{6}$
10.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

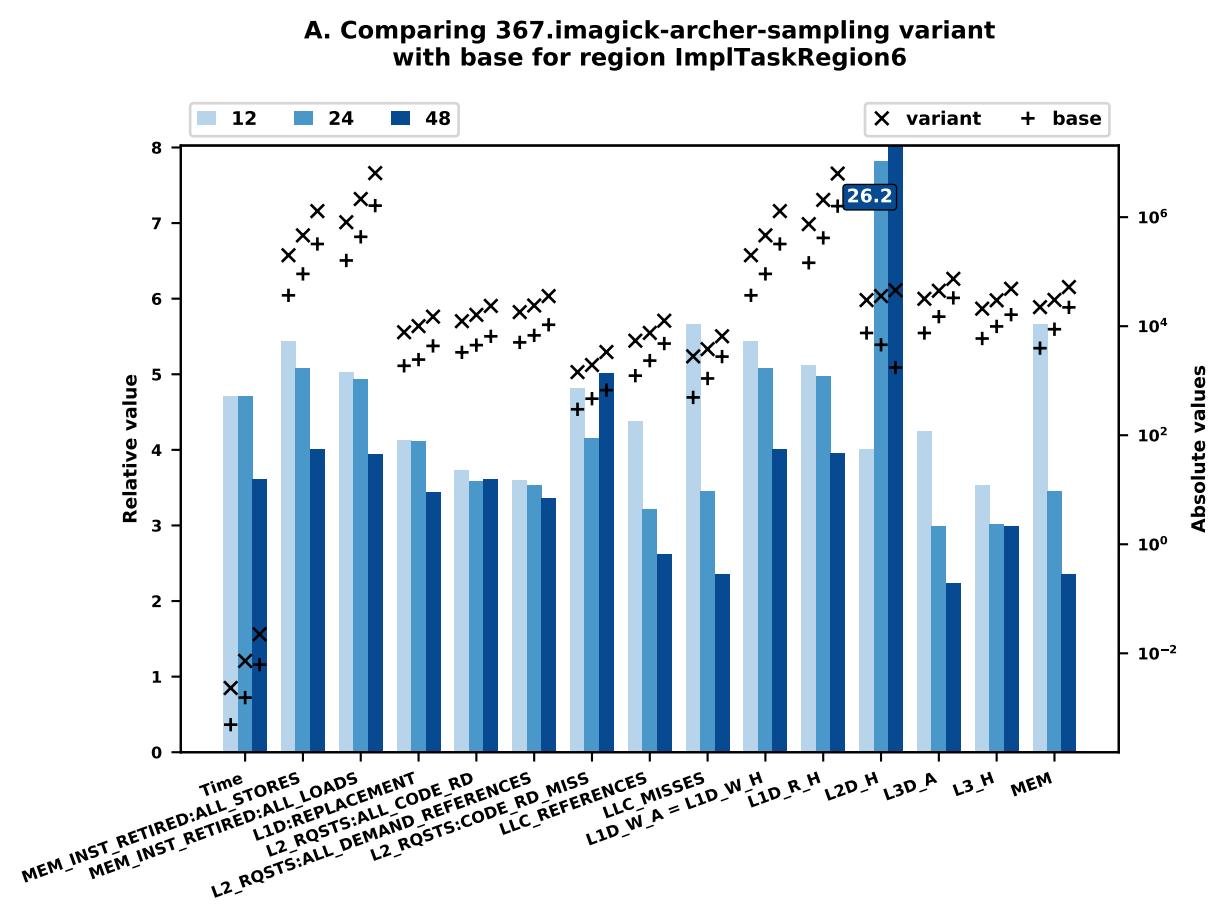

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
$10^{-2}$
$10^{0}$
$10^{2}$
$10^{4}$
$10^{6}$
7.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
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

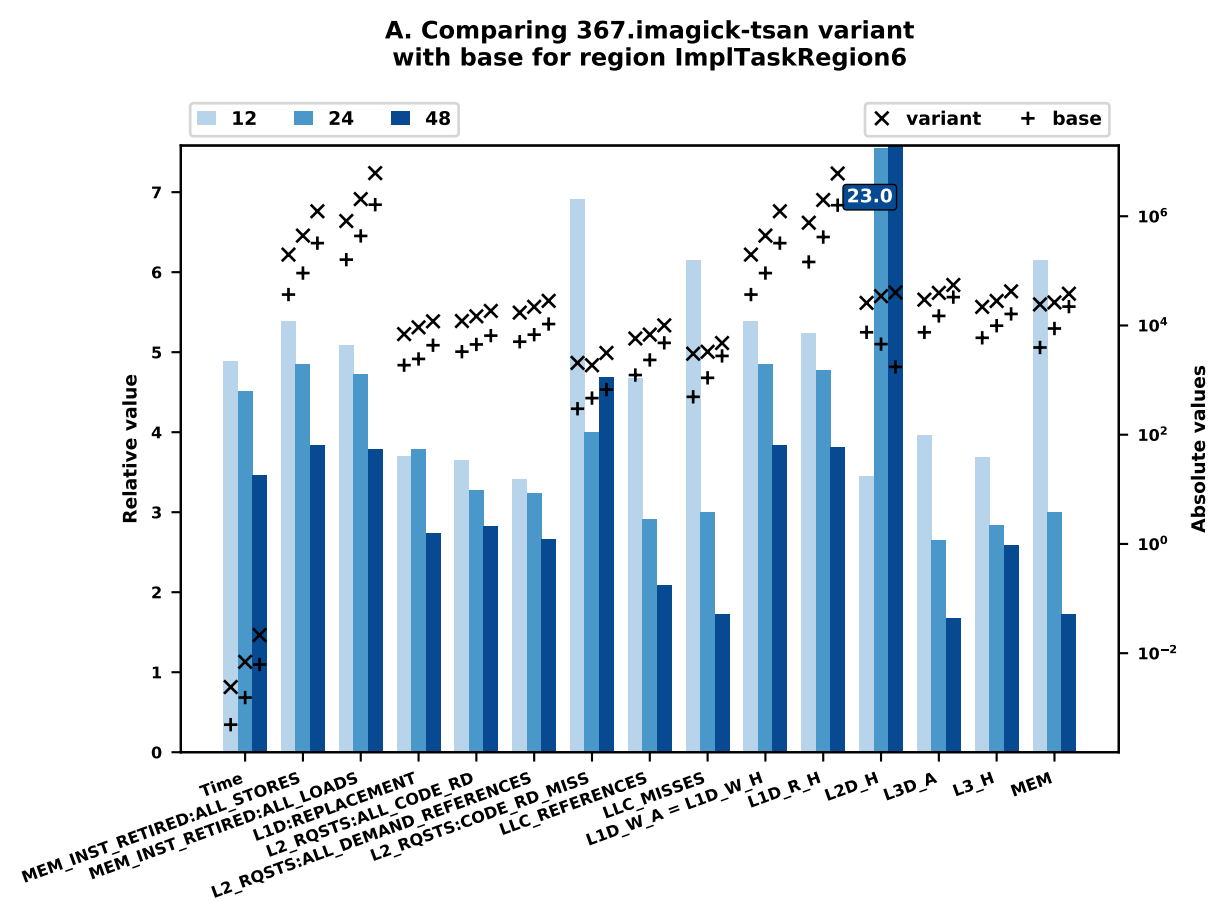

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
9.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

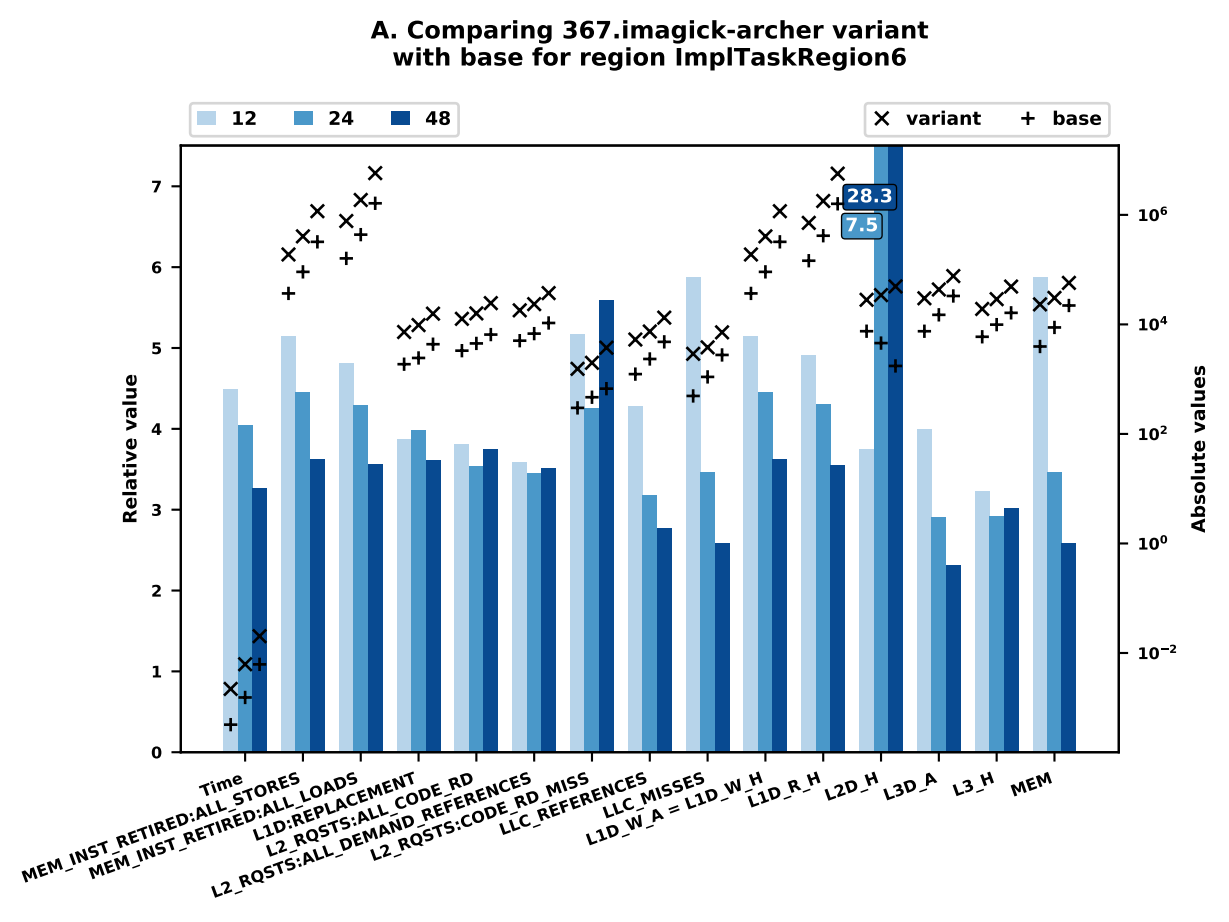

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion6
12
24
48
variant
base
20.4
Relative value
Absolute values
0
1
2
3
4
5
6
7
$10^{-2}$
$10^{0}$
$10^{2}$
$10^{4}$
$10^{6}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
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

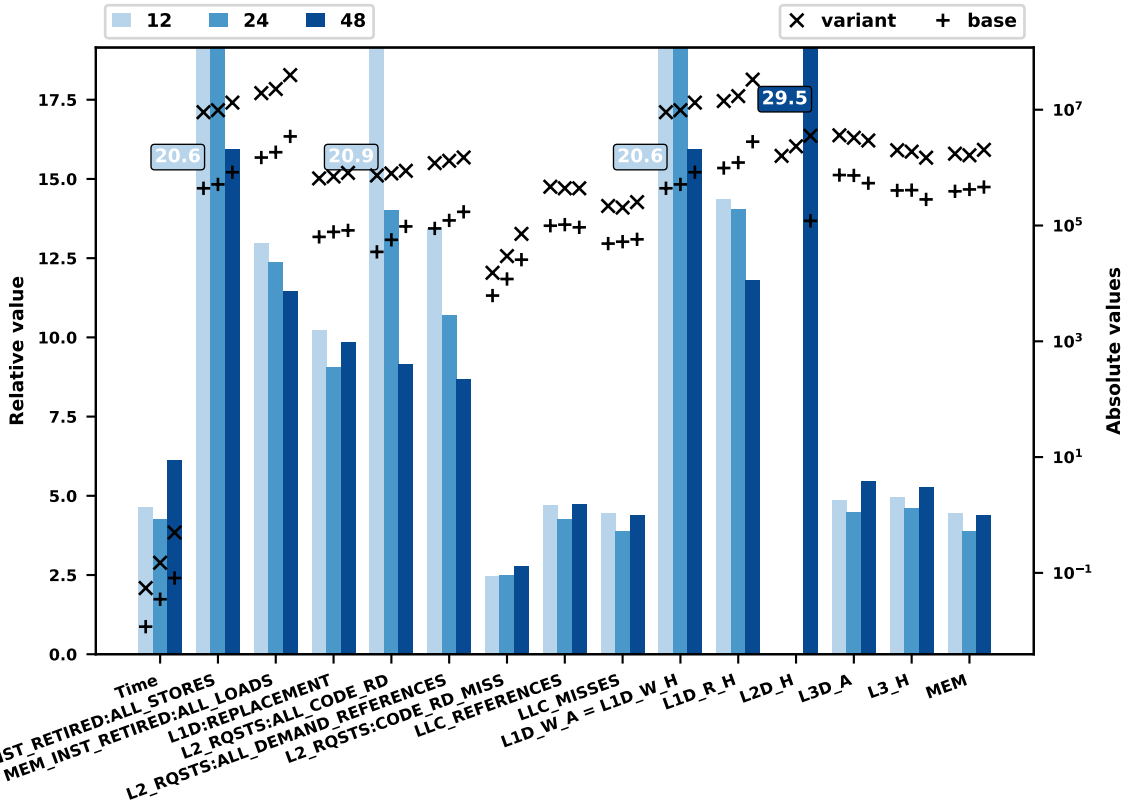

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion6
12
24
48
variant
base
24.8
Relative value
Absolute values
0
1
2
3
4
5
6
7
$10^{6}$
$10^{4}$
$10^{2}$
$10^{0}$
$10^{-2}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

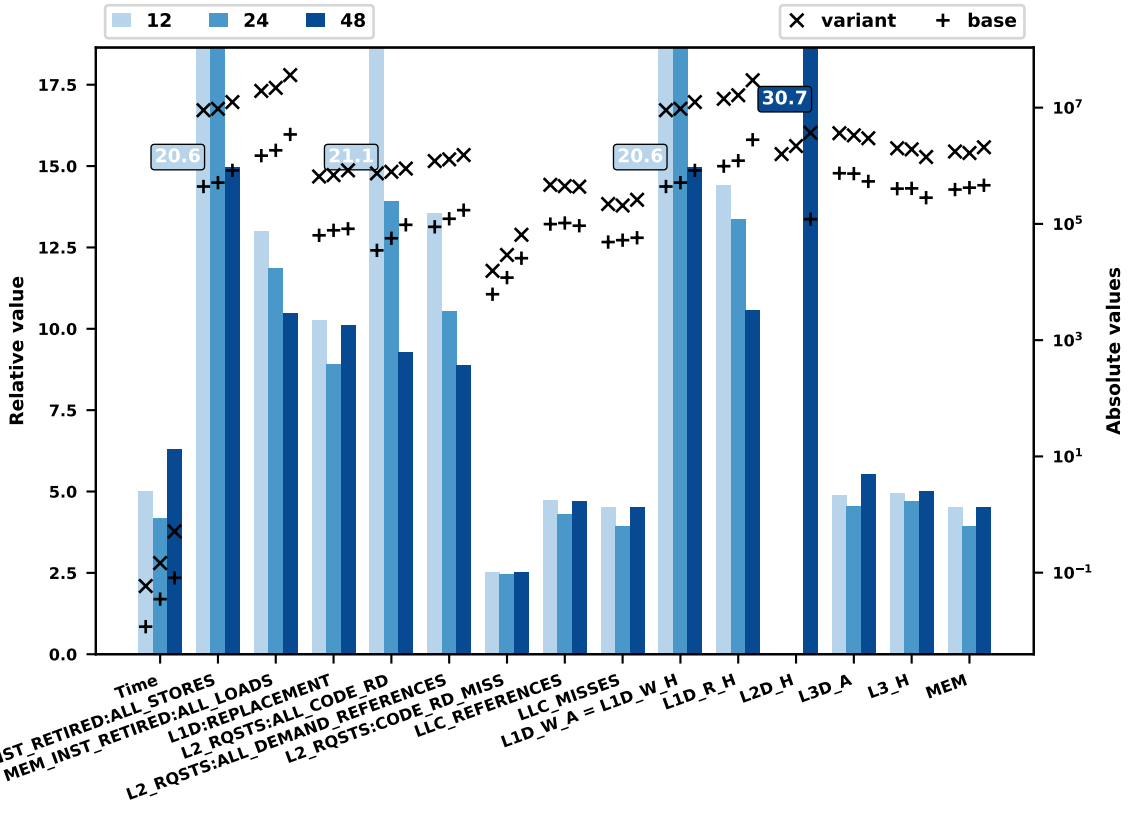

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion6
12
24
48
variant
base
22.2
Relative value
Absolute values
0
1
2
3
4
5
6
7
$10^{6}$
$10^{4}$
$10^{2}$
$10^{0}$
$10^{-2}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

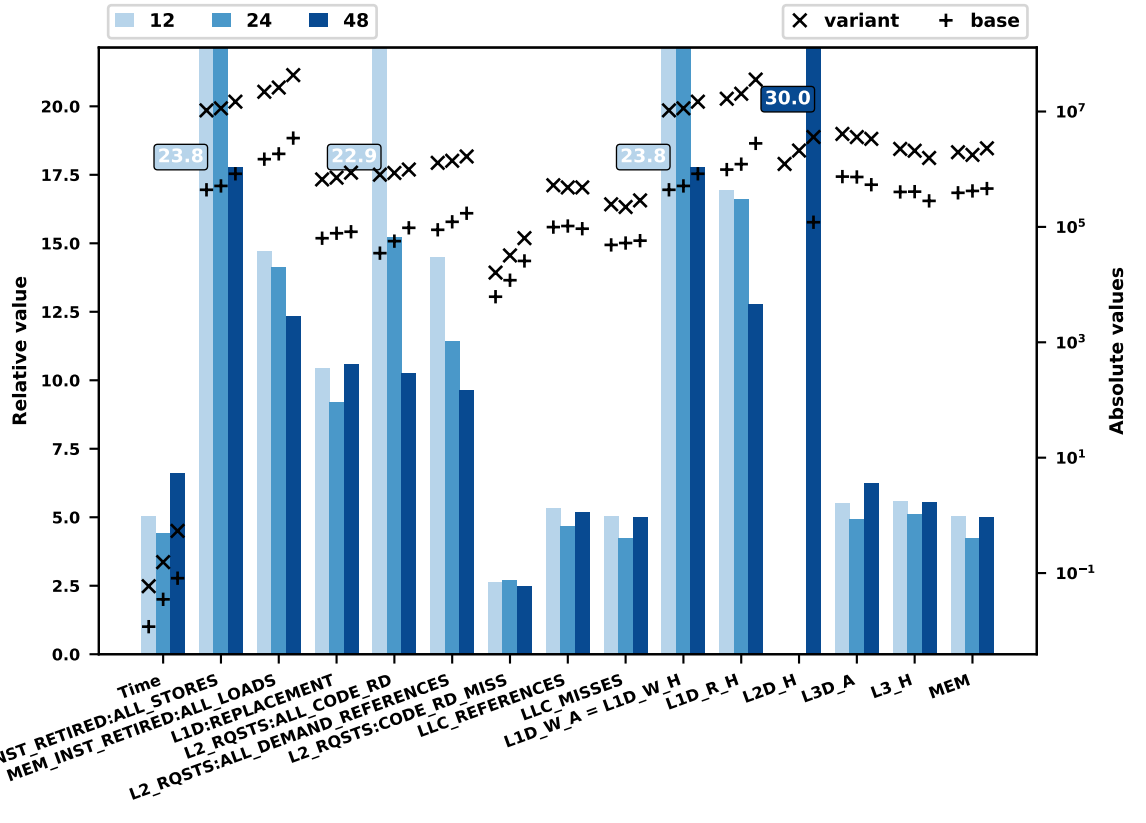

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion6
12
24
48
variant
base
Relative value
Absolute values
26.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

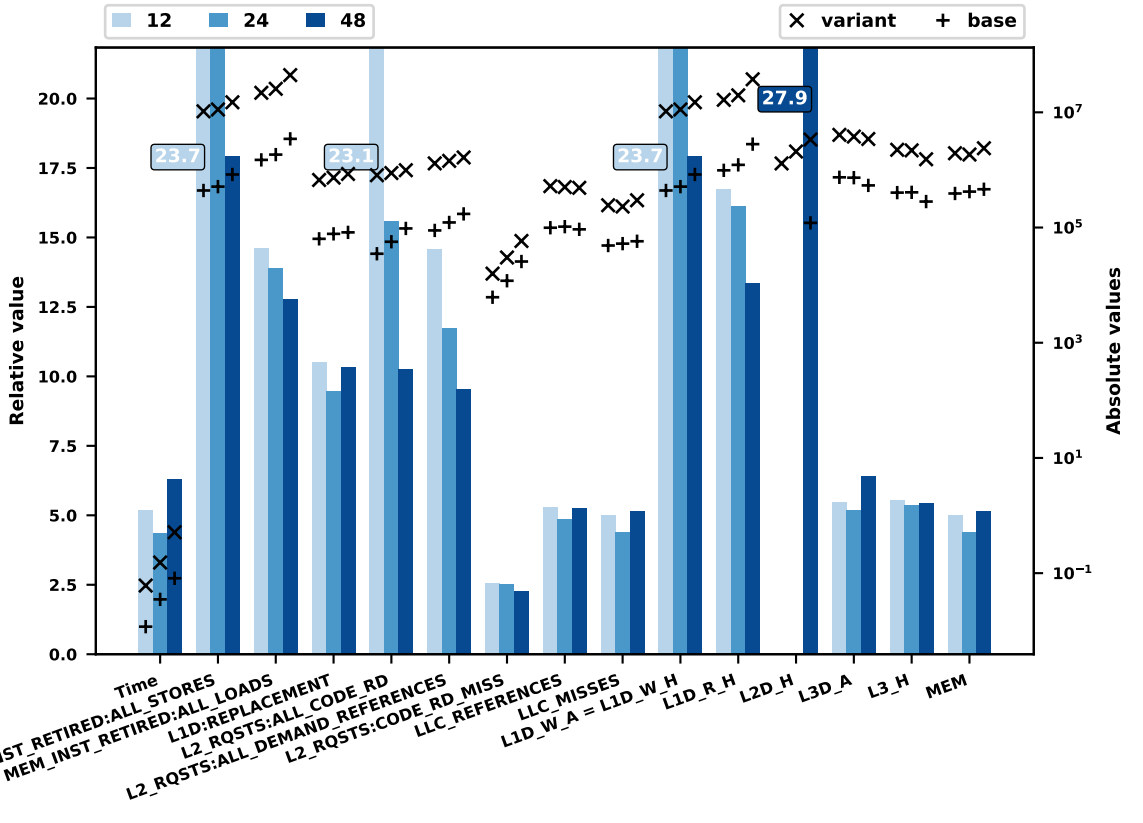

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion6
12
24
48
variant
base
Relative value
Absolute values
23.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

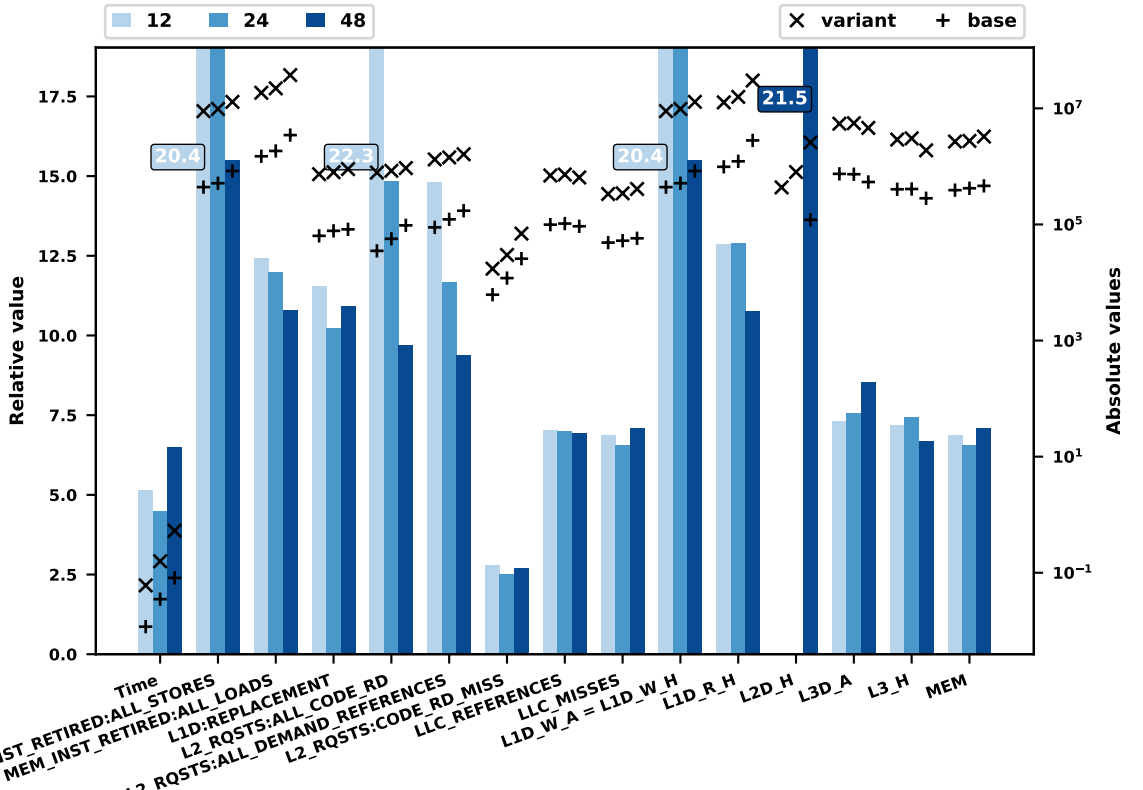

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion6
12
24
48
variant
base
28.3
7.5
Relative value
Absolute values
0
1
2
3
4
5
6
7
$10^{-2}$
$10^{0}$
$10^{2}$
$10^{4}$
$10^{6}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
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

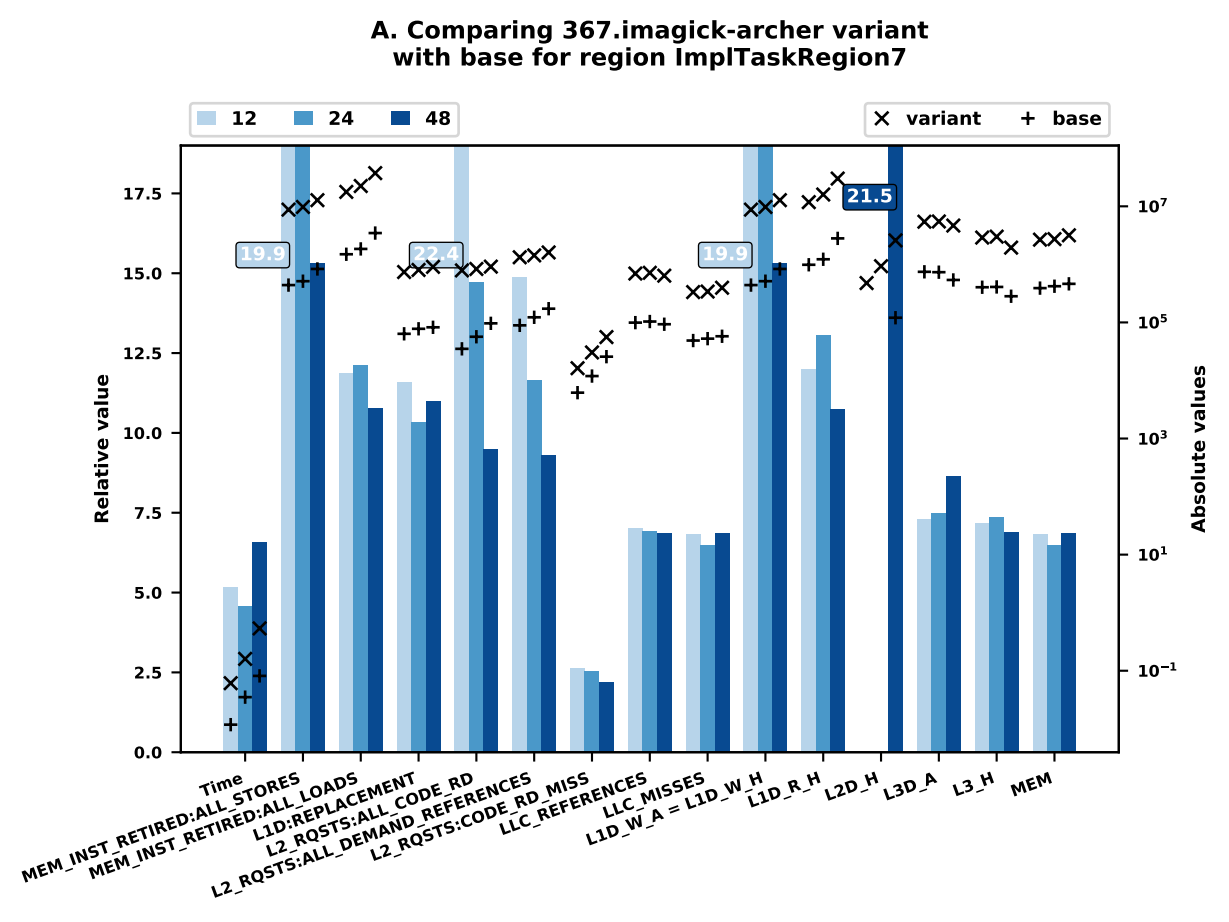

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
$10^{7}$
20.6
20.9
20.6
29.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
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

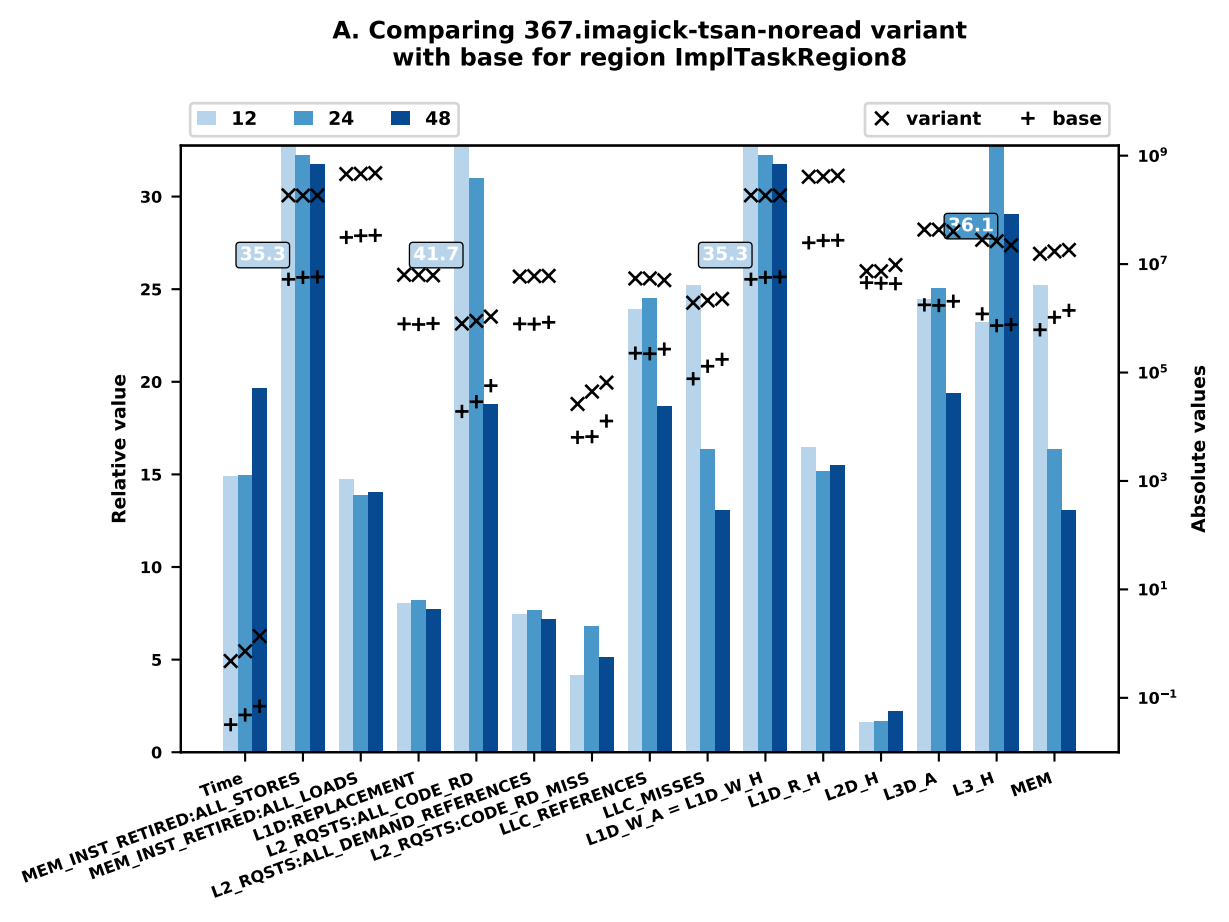

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
$10^{7}$
$10^{5}$
$10^{3}$
$10^{1}$
$10^{-1}$
20.6
21.1
20.6
30.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
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

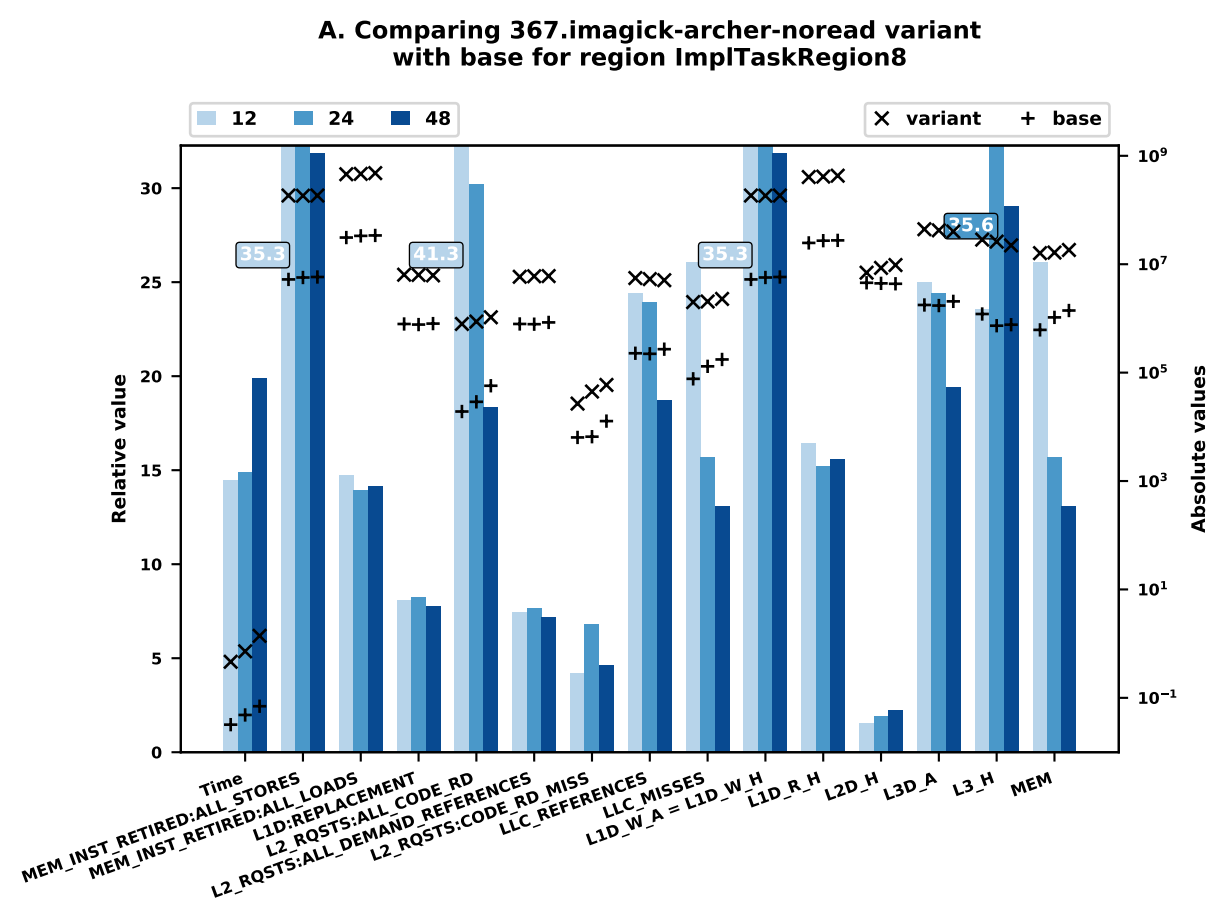

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
23.8
22.9
23.8
30.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

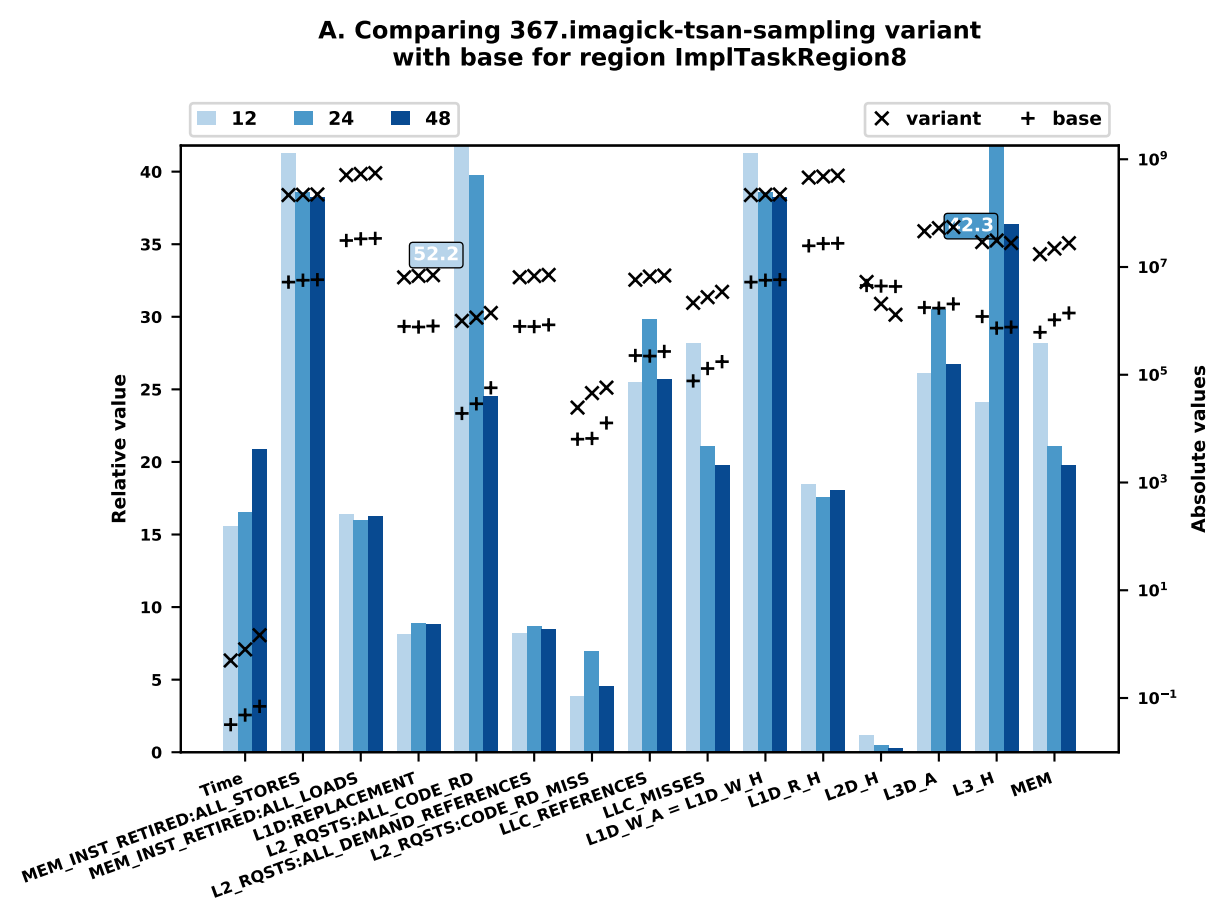

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
23.7
23.1
23.7
27.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

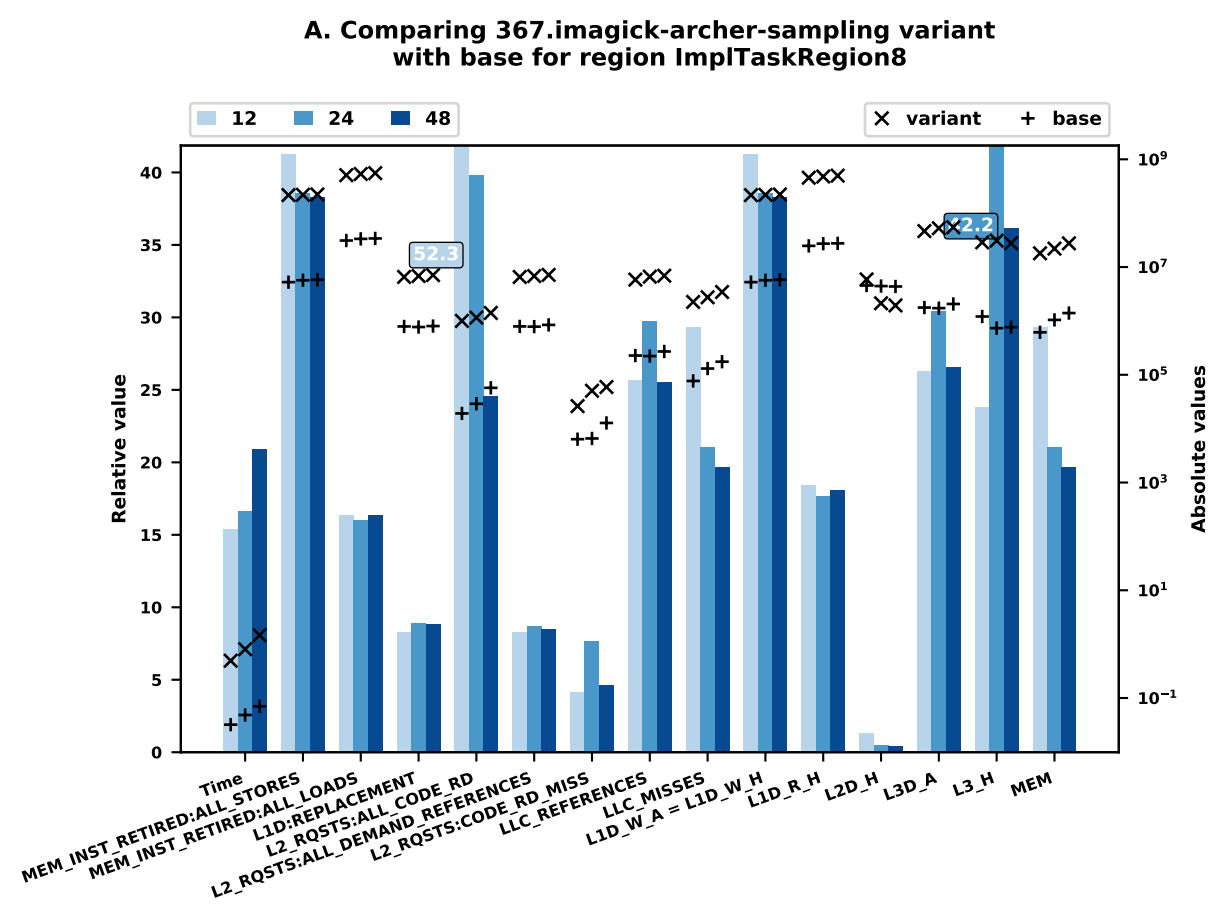

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
20.4
22.3
20.4
21.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

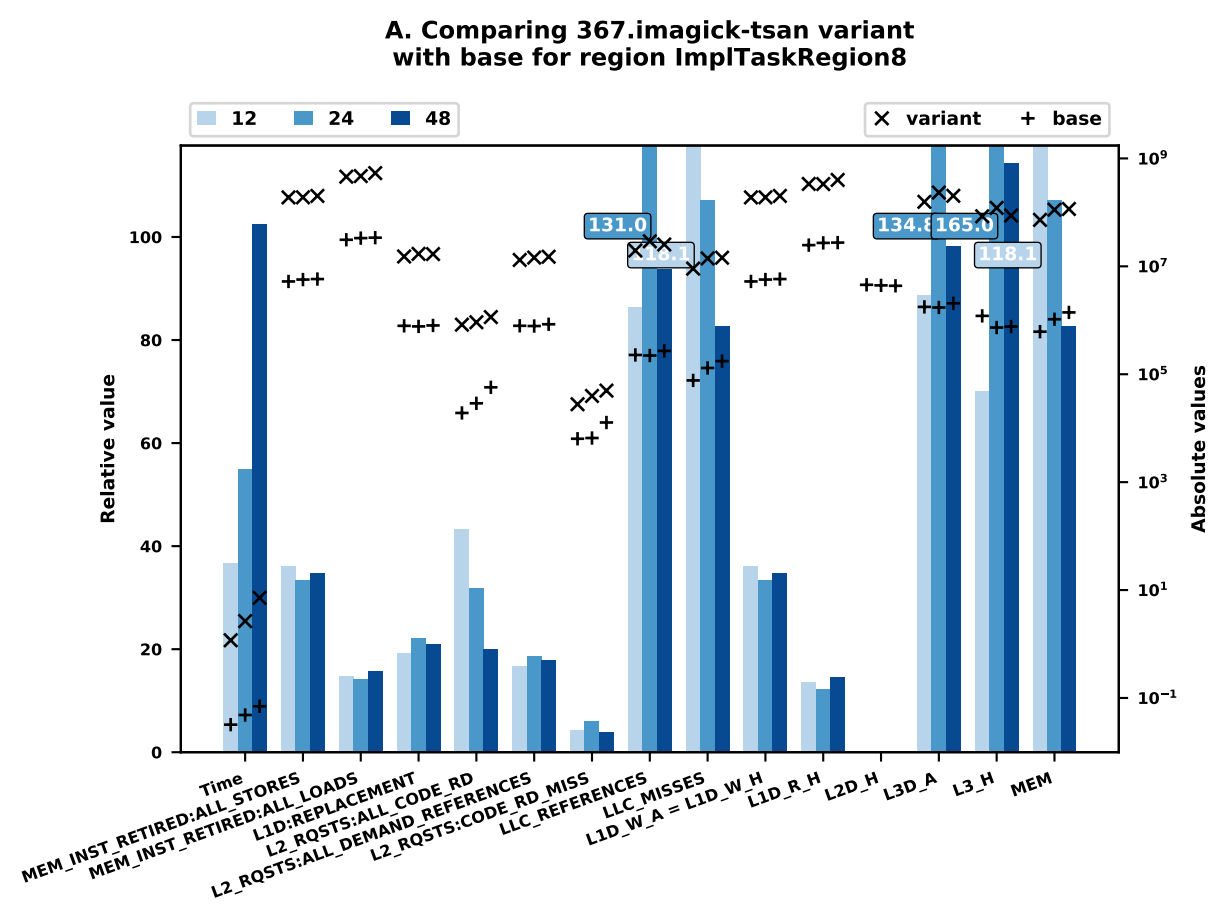

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
19.9
22.4
19.9
21.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

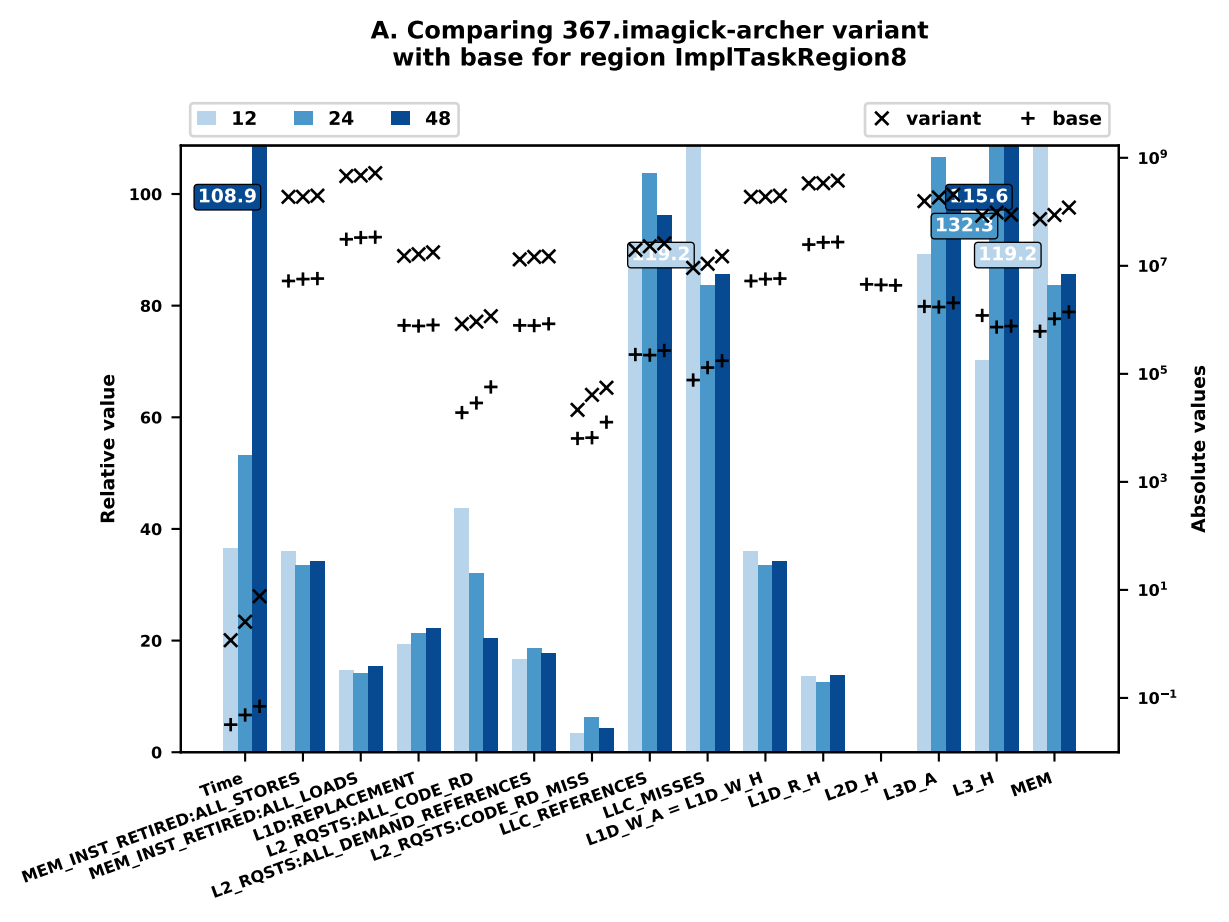

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
35.3
41.7
35.3
36.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

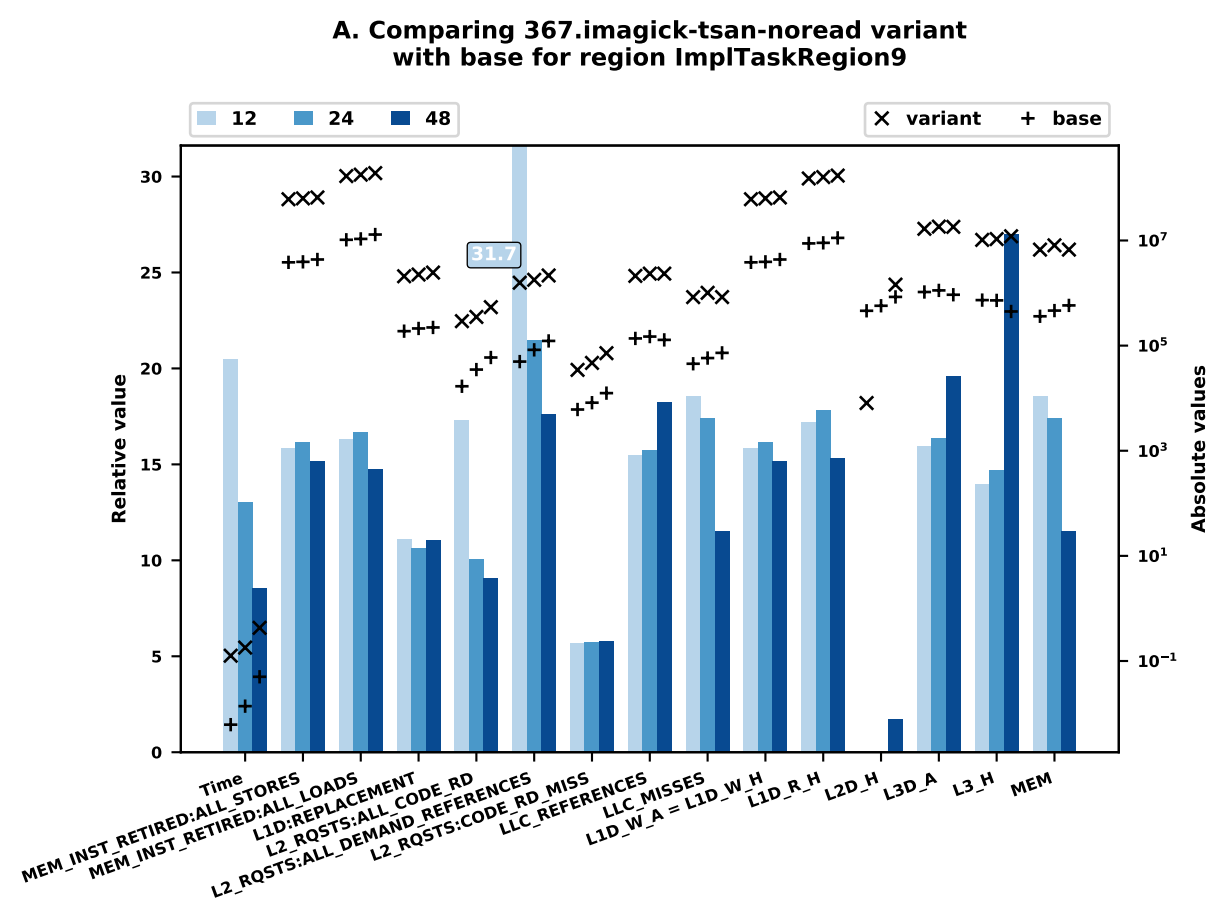

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
35.3
41.3
35.3
35.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

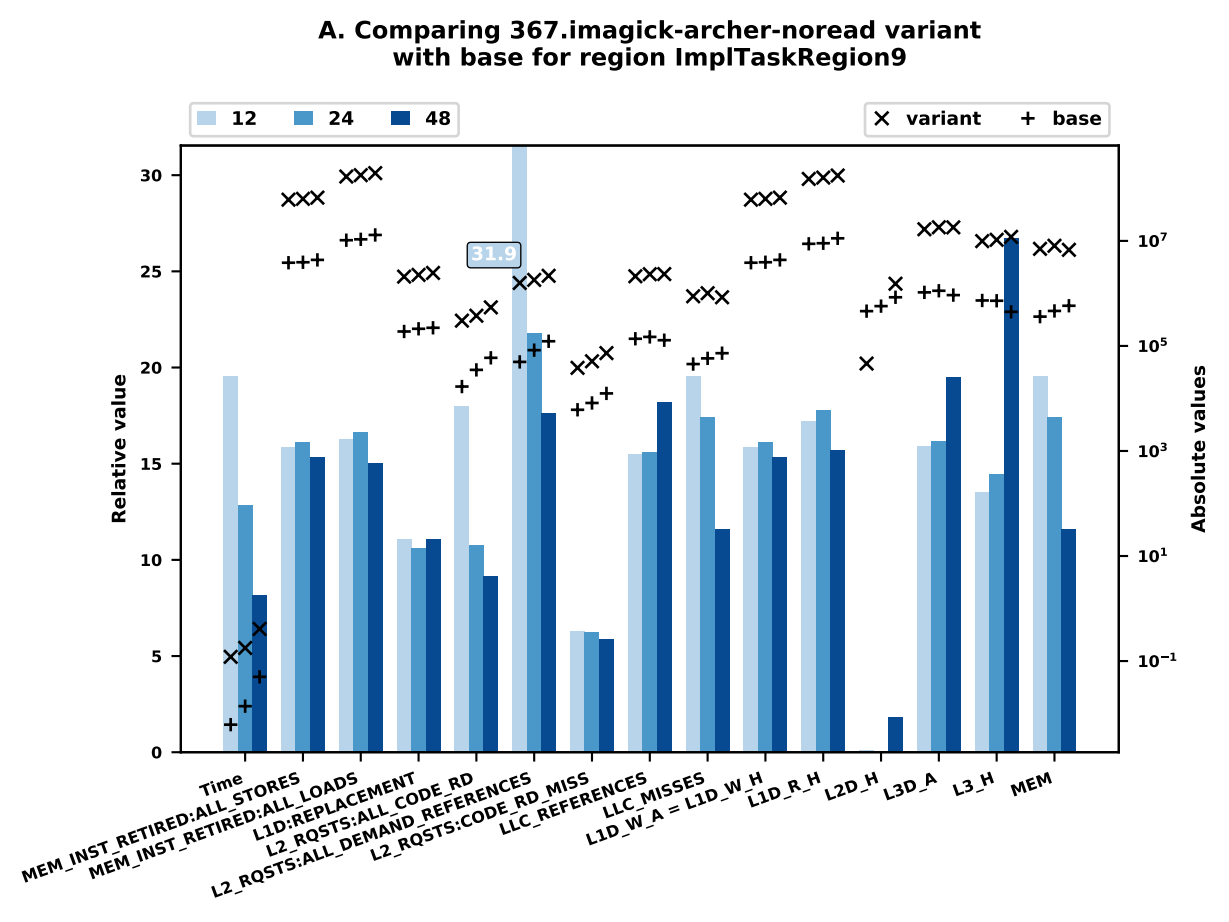

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
S2.2
S2.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

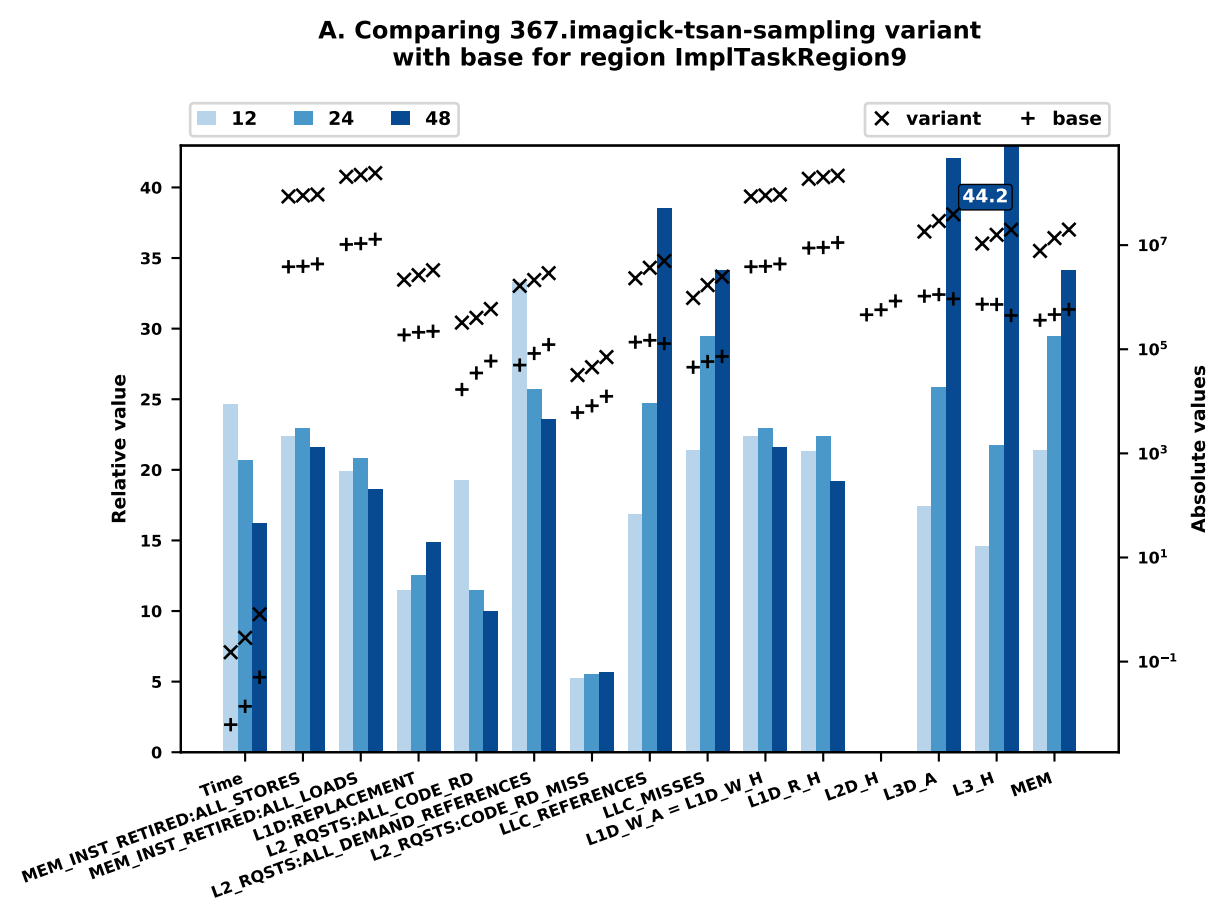

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
S2.3
S2.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

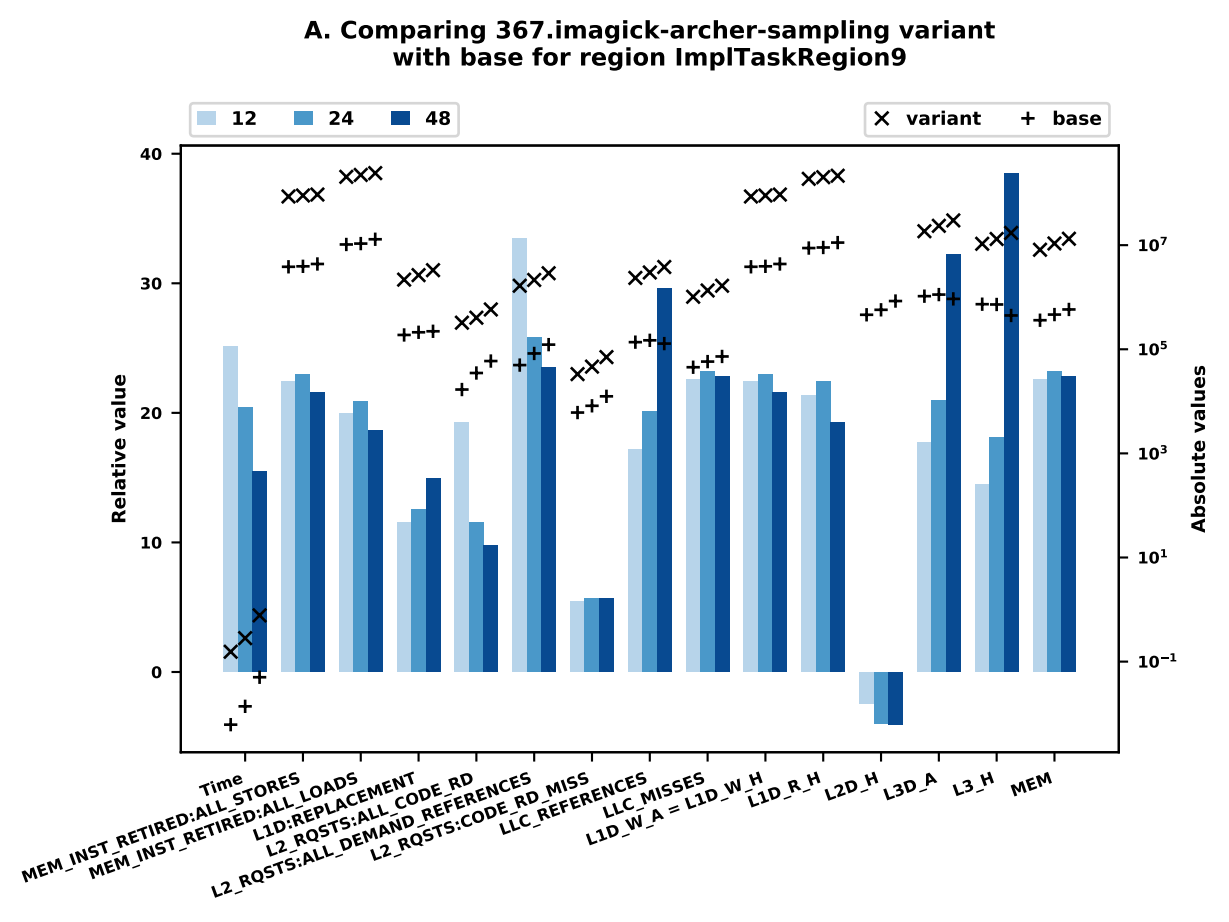

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
0
20
40
60
80
100
$10^{9}$
$10^{7}$
$10^{5}$
$10^{3}$
$10^{1}$
$10^{-1}$
131.0
134.8
165.0
118.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
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

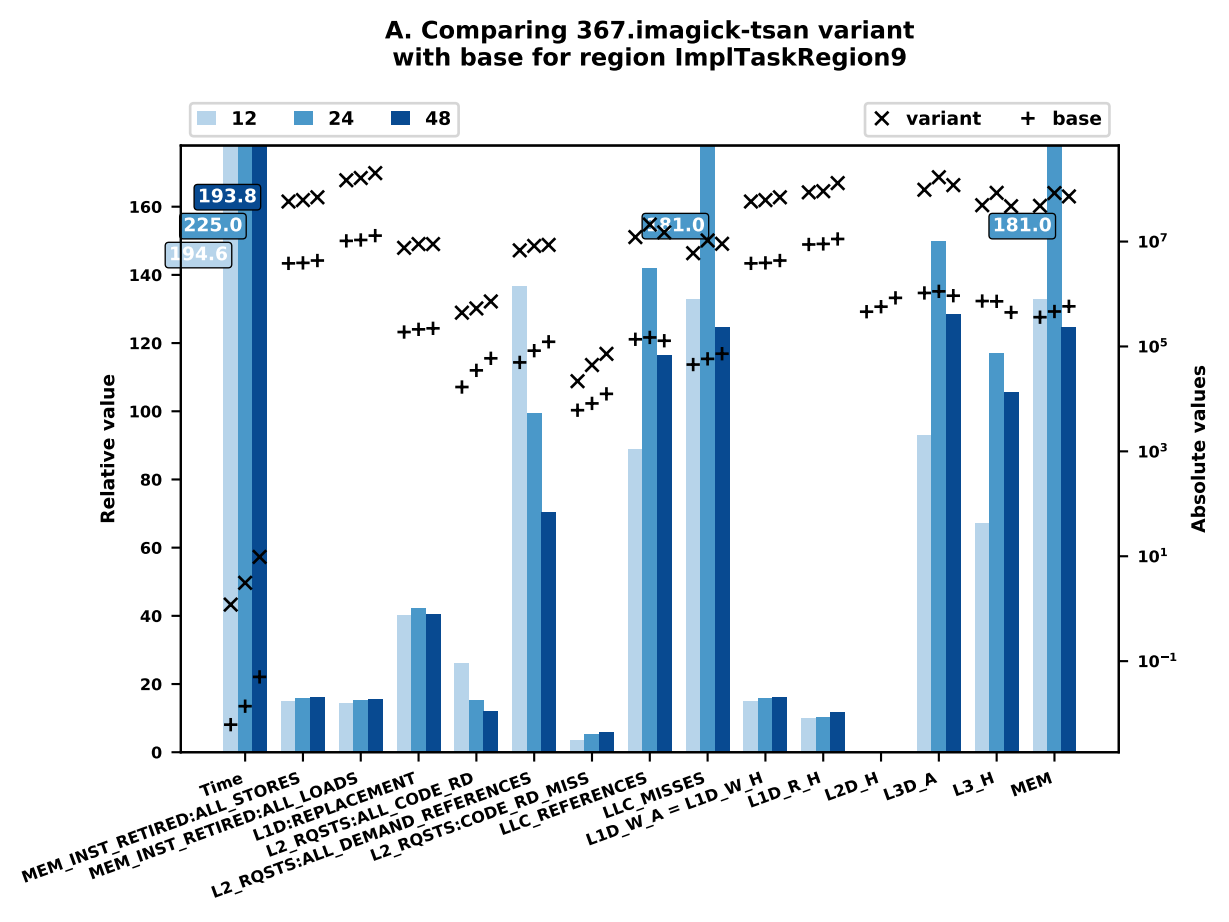

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
108.9
119.2
115.6
132.3
119.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

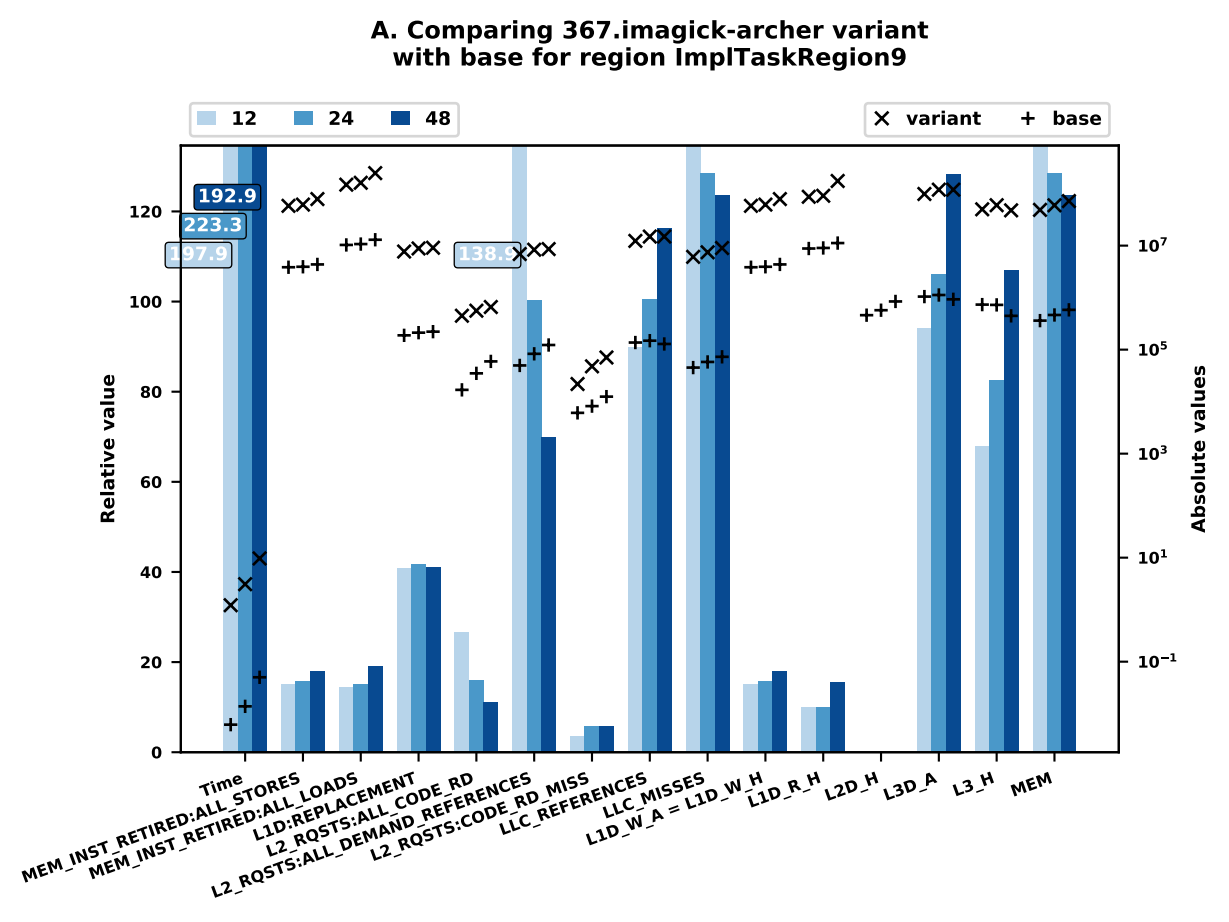

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion9
12
24
48
variant
base
31.7
Relative value
Absolute values
0
5
10
15
20
25
30
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
$10^{7}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

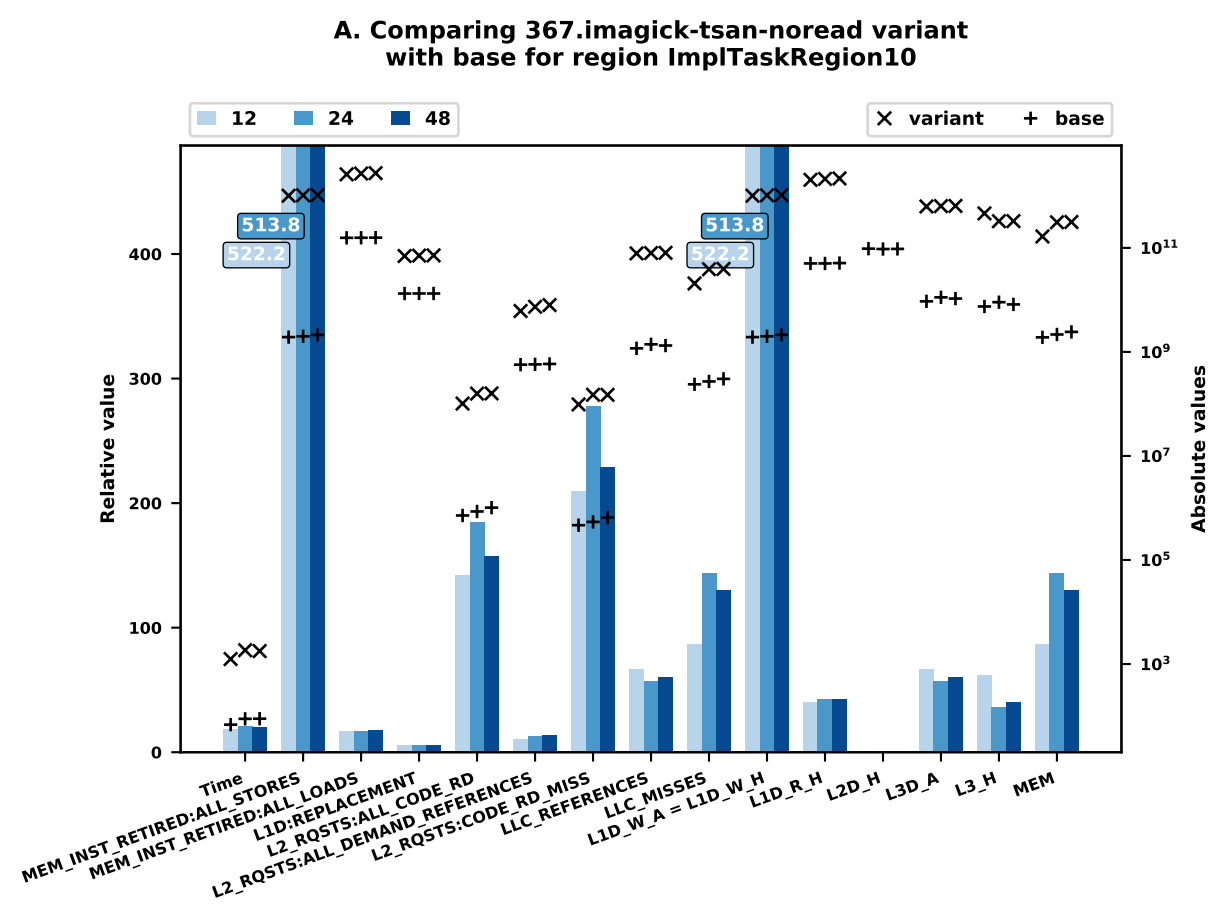

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion9
12
24
48
variant
base
Relative value
Absolute values
31.9
0
5
10
15
20
25
30
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
$10^{7}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

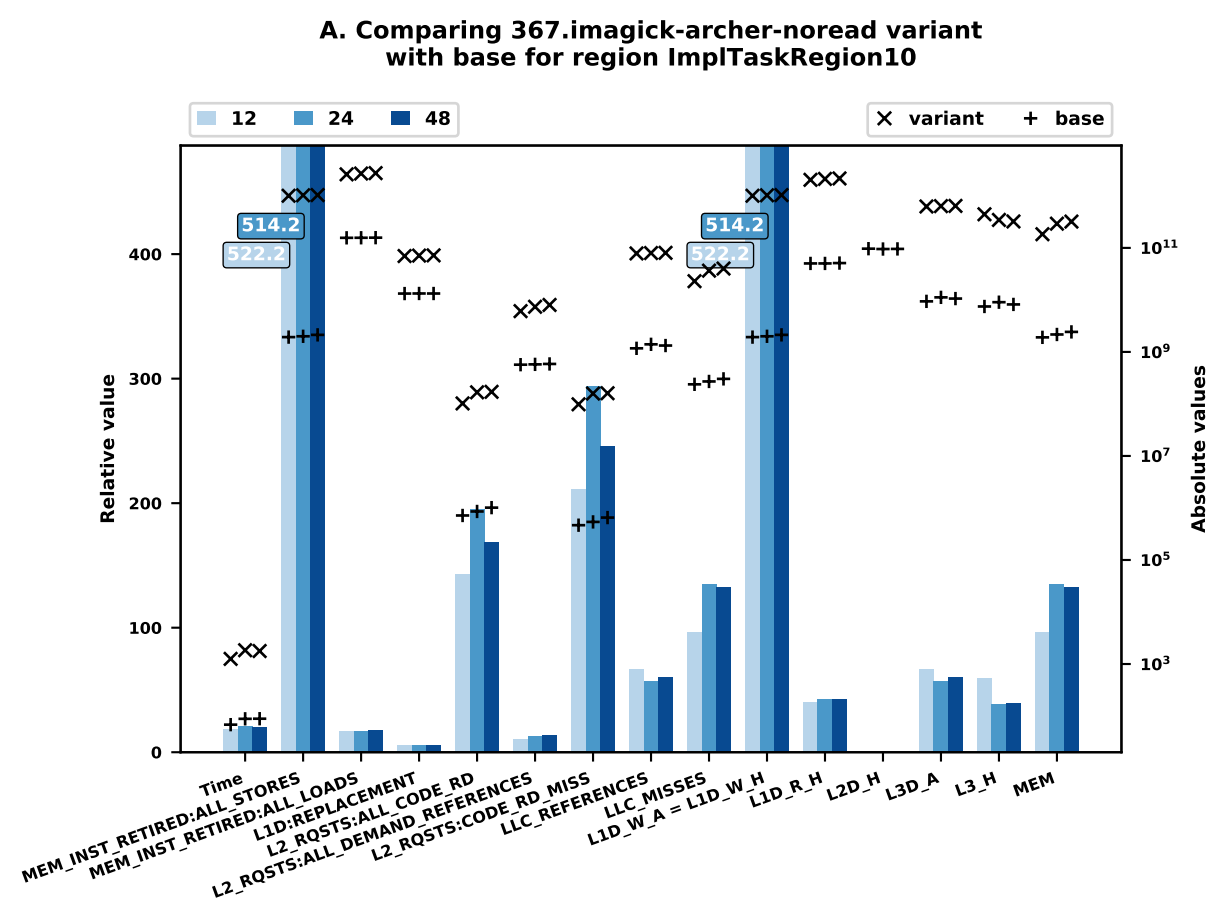

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion9
12
24
48
variant
base
Relative value
Absolute values
44.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

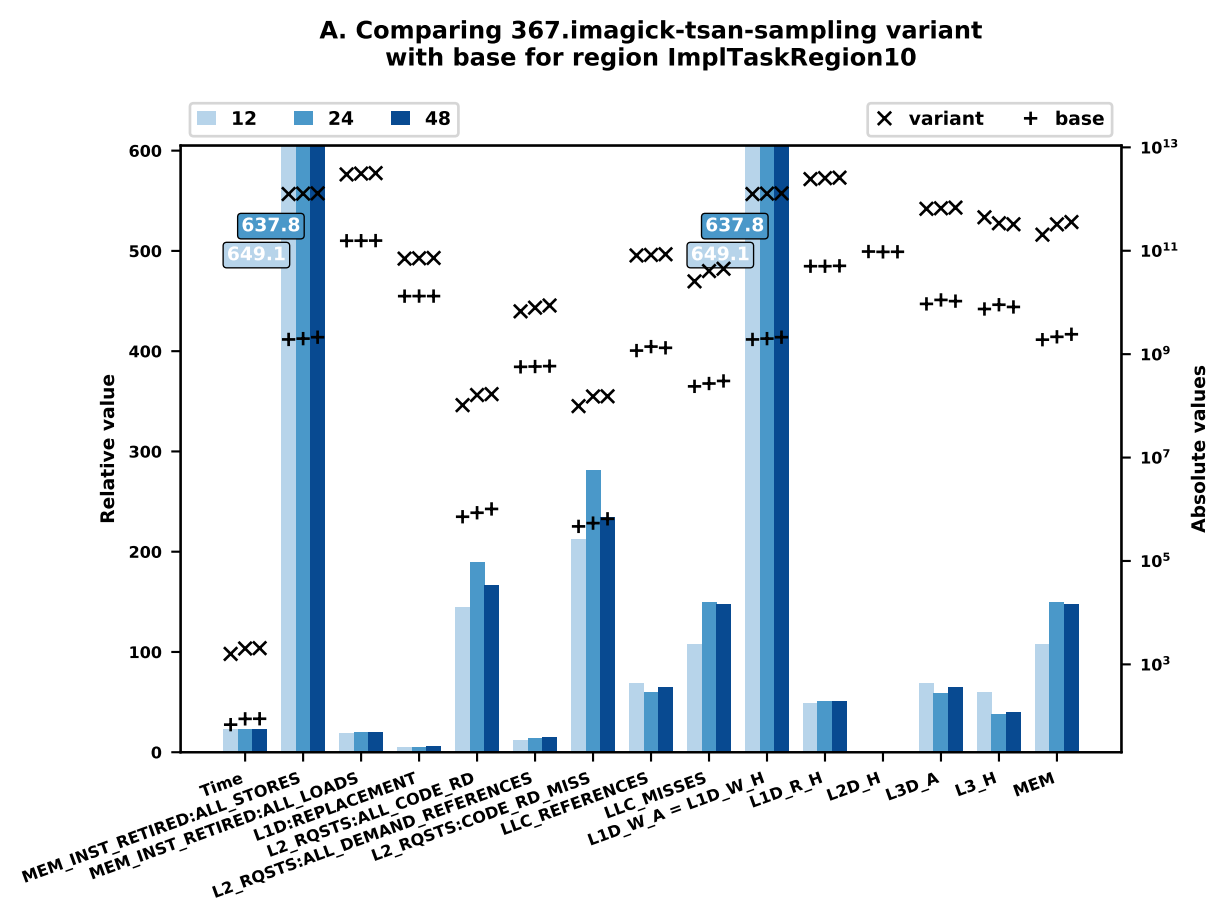

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion9
12
24
48
variant
base
Relative value
Absolute values
40
30
20
10
0
$10^{7}$
$10^{5}$
$10^{3}$
$10^{1}$
$10^{-1}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
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

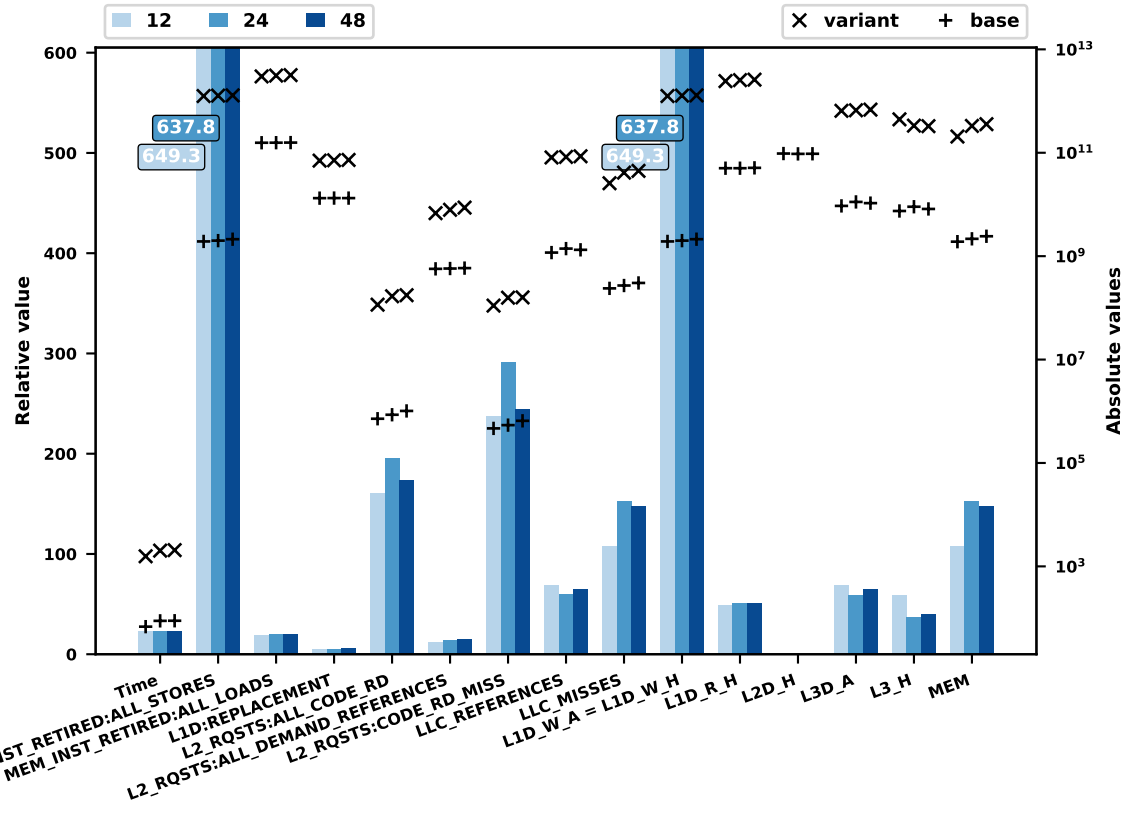

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion9
12
24
48
variant
base
193.8
225.0
194.6
181.0
181.0
Relative value
Absolute values
0
20
40
60
80
100
120
140
160
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
$10^{7}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
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

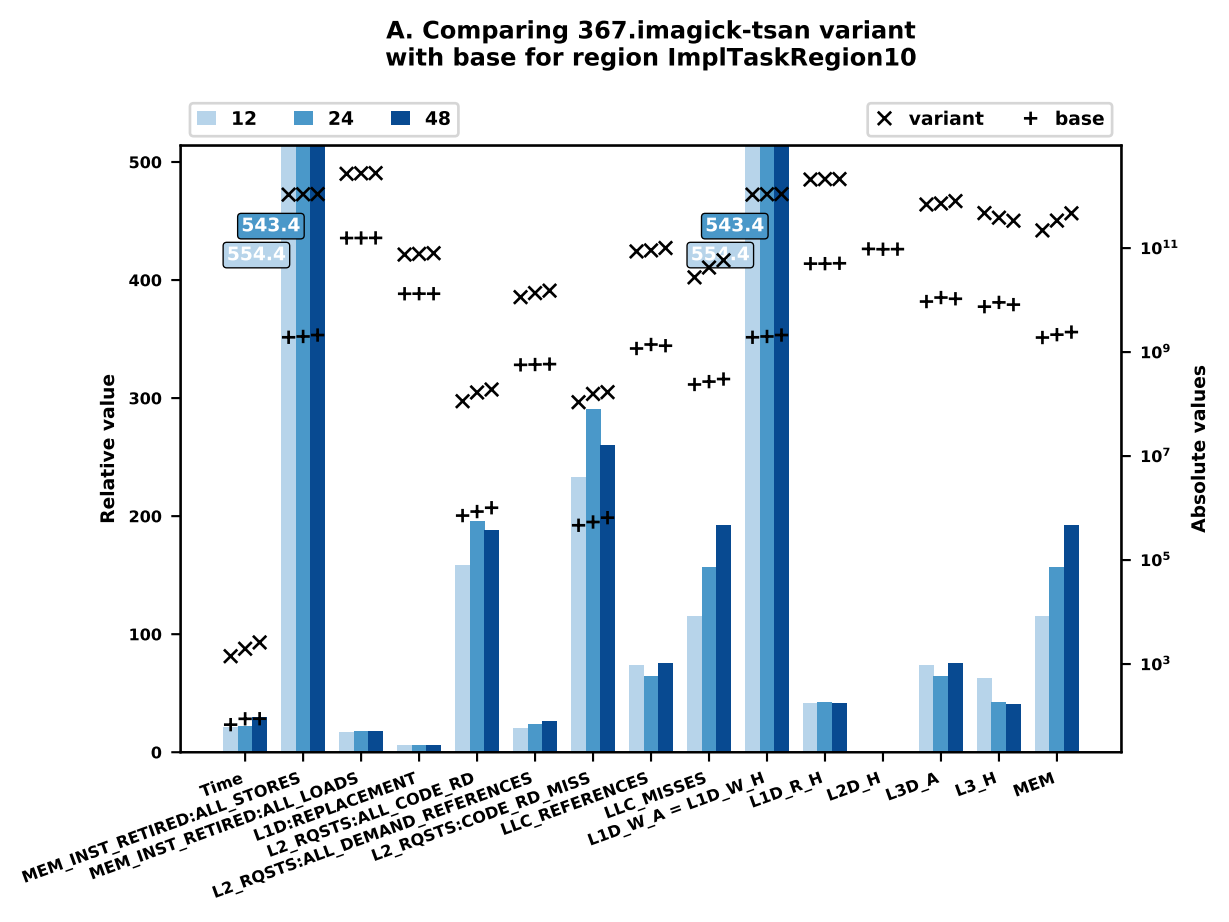

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion9
12
24
48
variant
base
192.9
223.3
197.9
138.
Relative value
Absolute values
0
20
40
60
80
100
120
$10^{7}$
$10^{5}$
$10^{3}$
$10^{1}$
$10^{-1}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

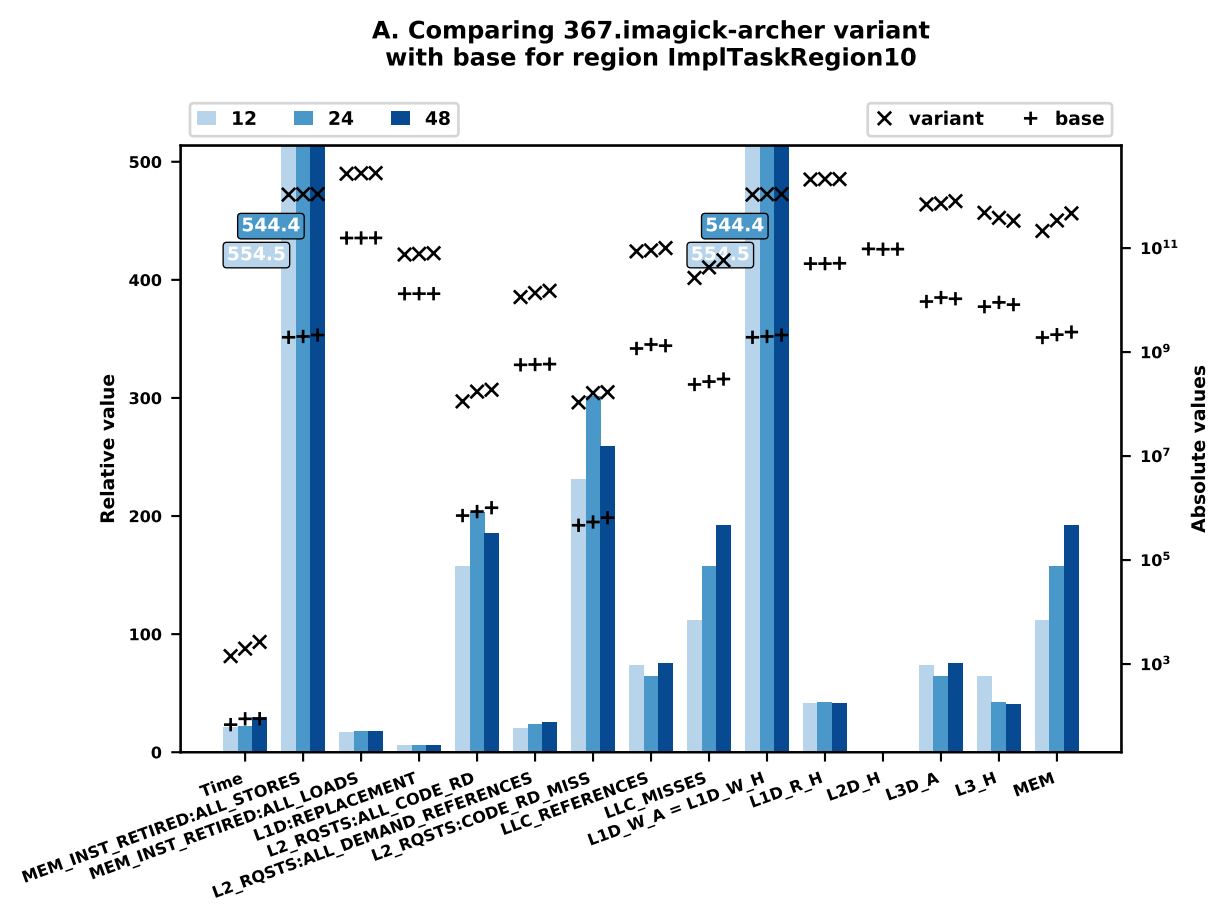

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion10
12
24
48
variant
base
513.8
522.2
513.8
522.2
Relative value
Absolute values
0
100
200
300
400
$10^{3}$
$10^{5}$
$10^{7}$
$10^{9}$
$10^{11}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

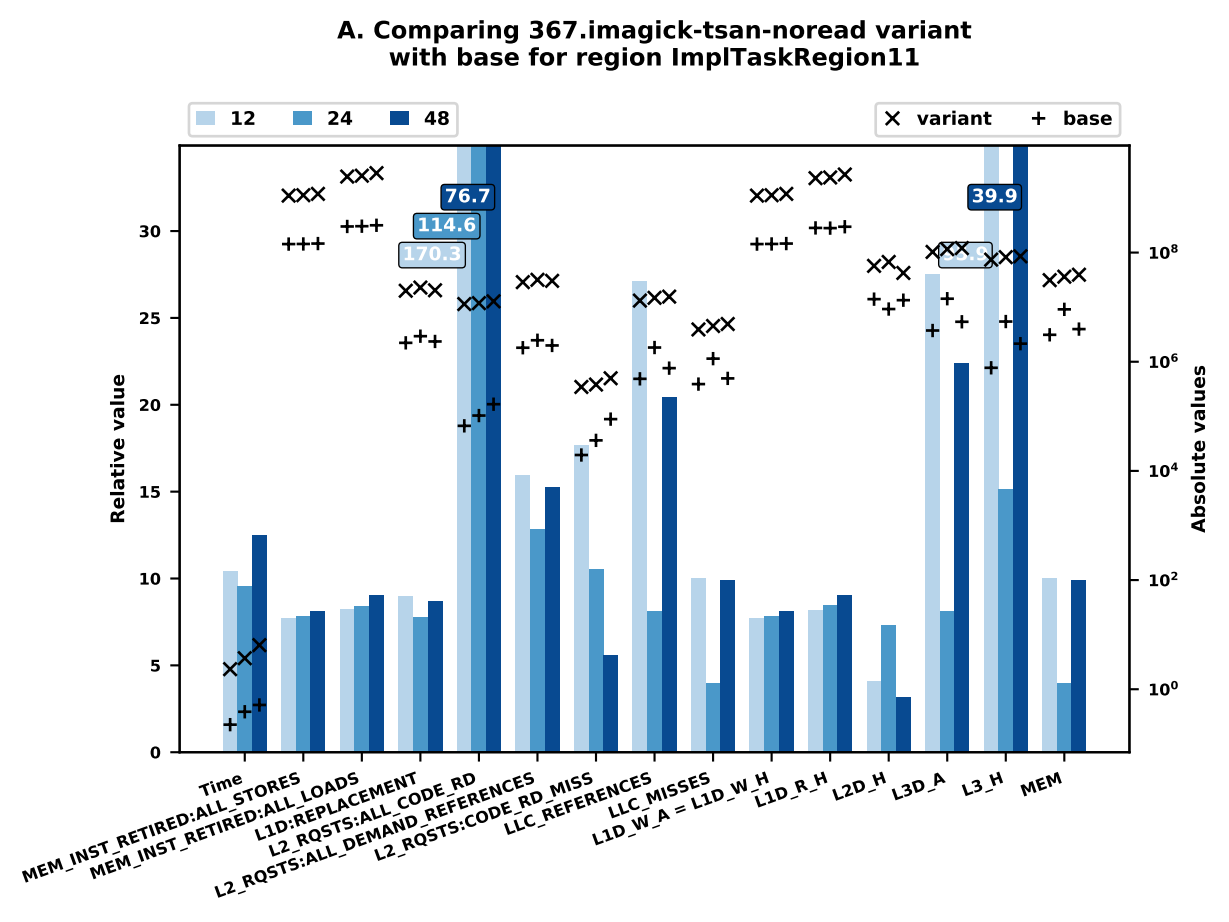

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion10
12
24
48
variant
base
514.2
522.2
514.2
522.2
Relative value
Absolute values
0
100
200
300
400
$10^3$
$10^5$
$10^7$
$10^9$
$10^{11}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

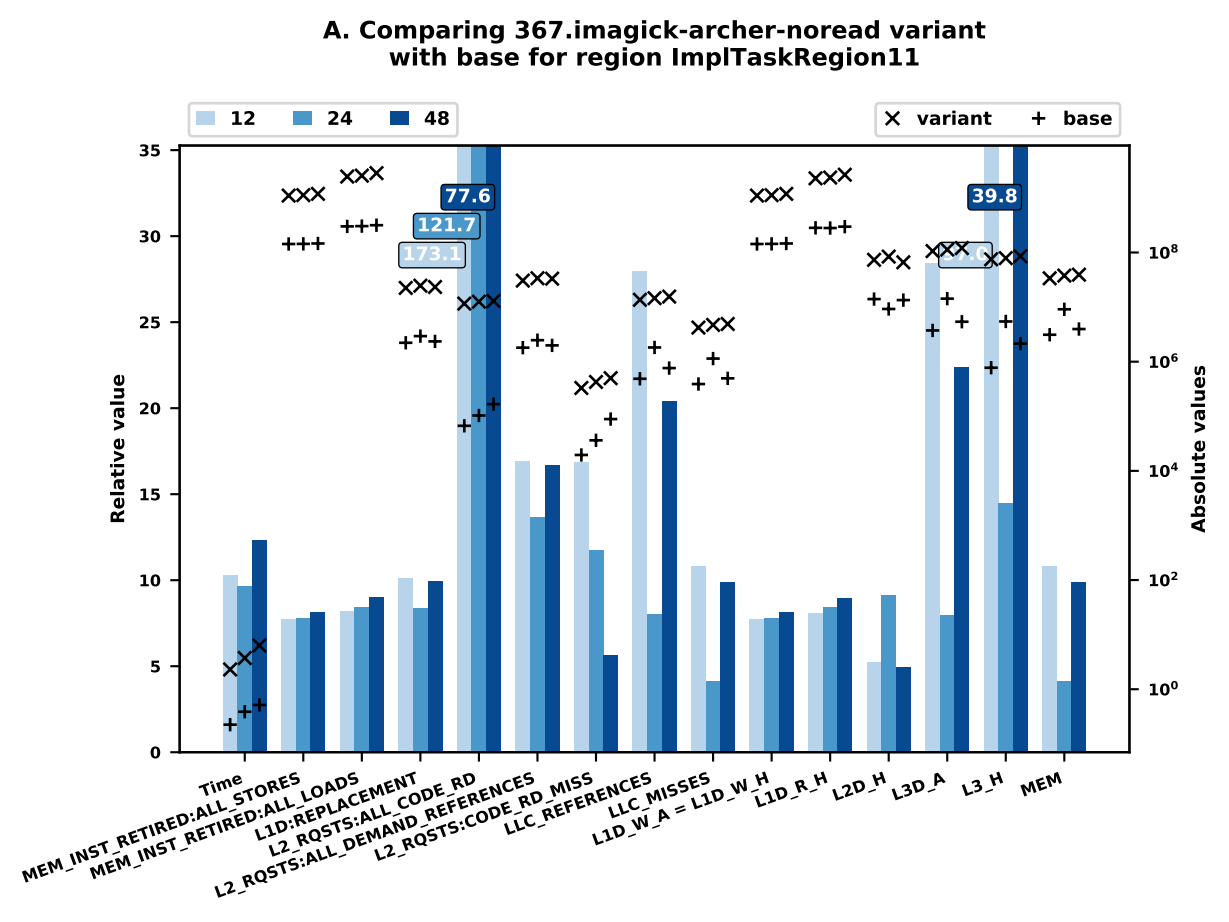

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion10
12
24
48
variant
base
637.8
649.1
637.8
649.1
Relative value
Absolute values
0
100
200
300
400
500
600
$10^{3}$
$10^{5}$
$10^{7}$
$10^{9}$
$10^{11}$
$10^{13}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
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

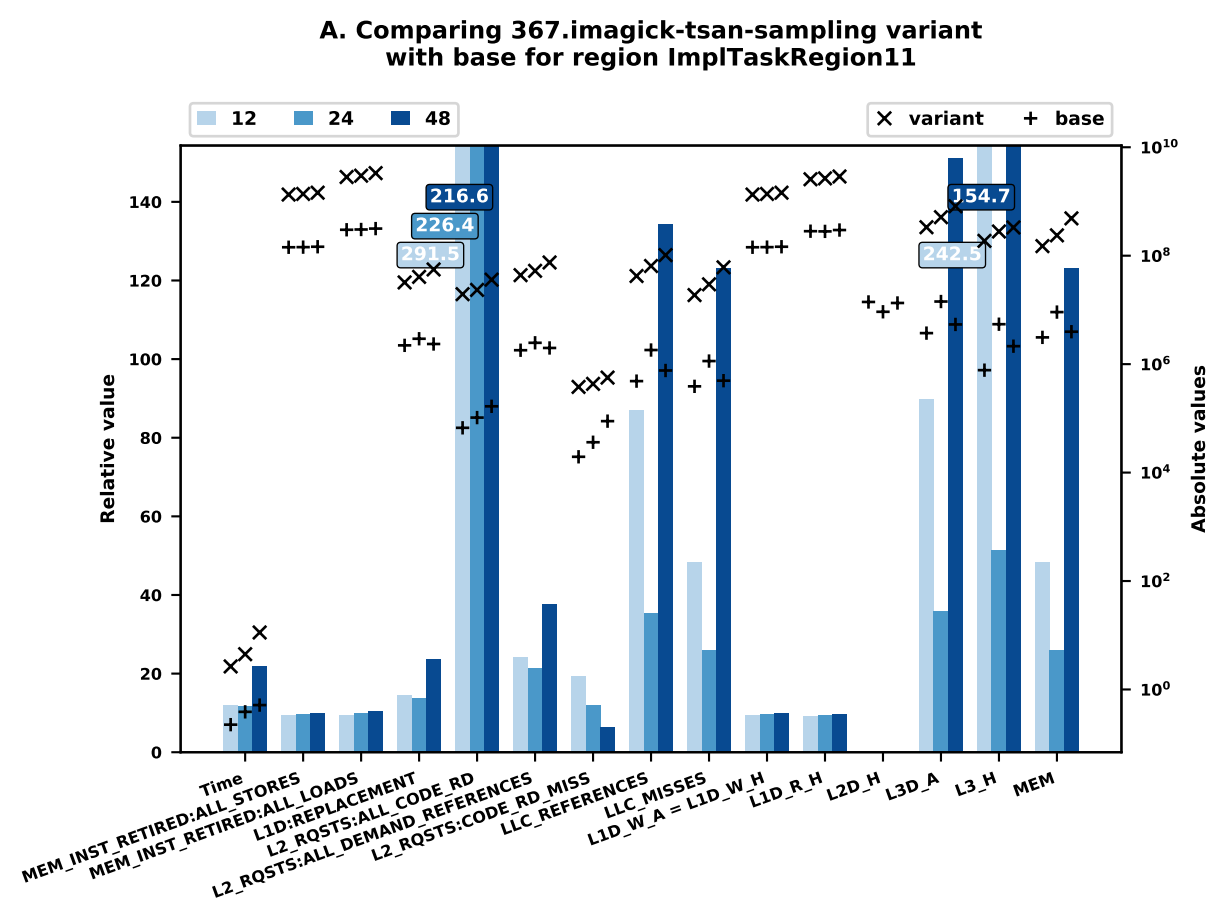

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion10
12
24
48
variant
base
637.8
649.3
637.8
649.3
Relative value
Absolute values
600
500
400
300
200
100
0
$10^{13}$
$10^{11}$
$10^{9}$
$10^{7}$
$10^{5}$
$10^{3}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
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

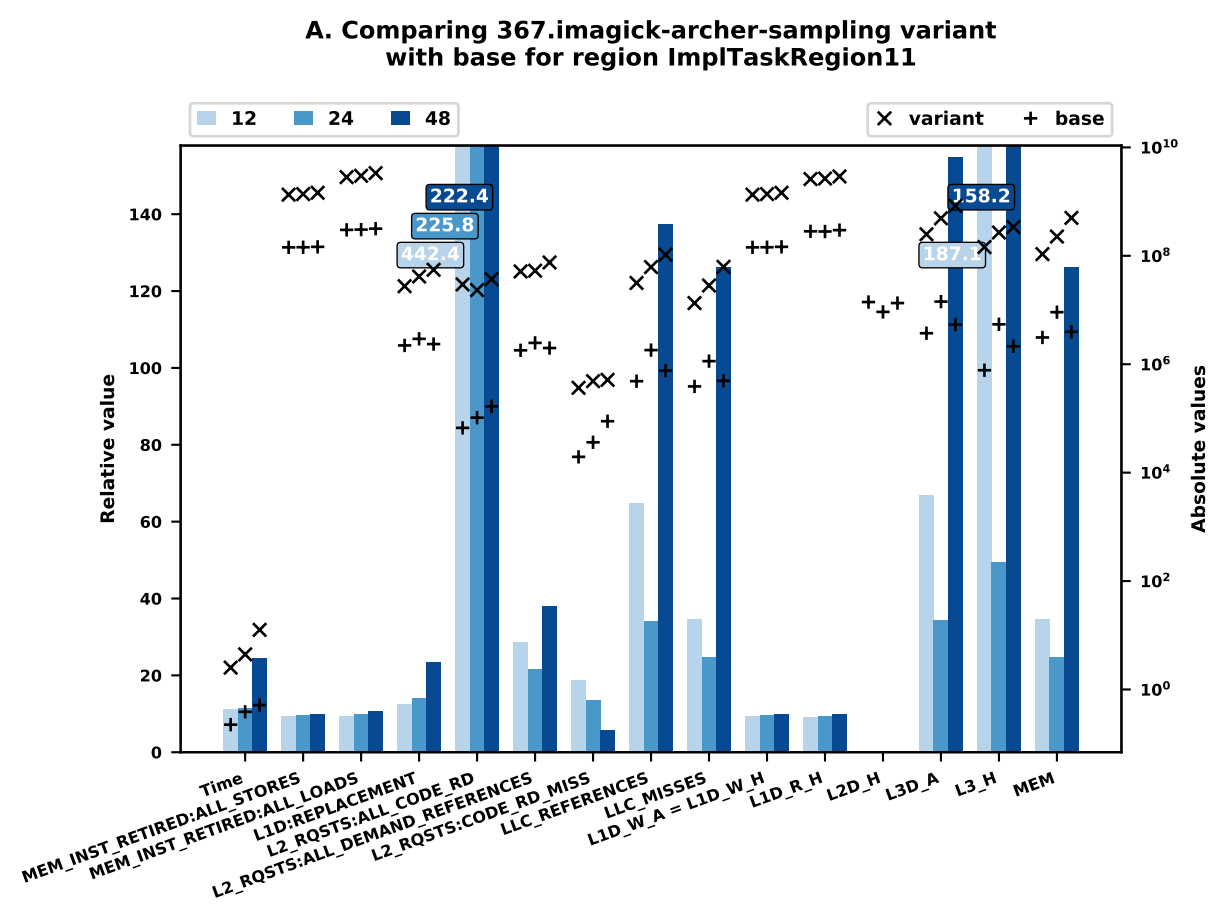

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion10
12
24
48
variant
base
Relative value
Absolute values
543.4
554.4
543.4
554.4
0
100
200
300
400
500
$10^3$
$10^5$
$10^7$
$10^9$
$10^{11}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

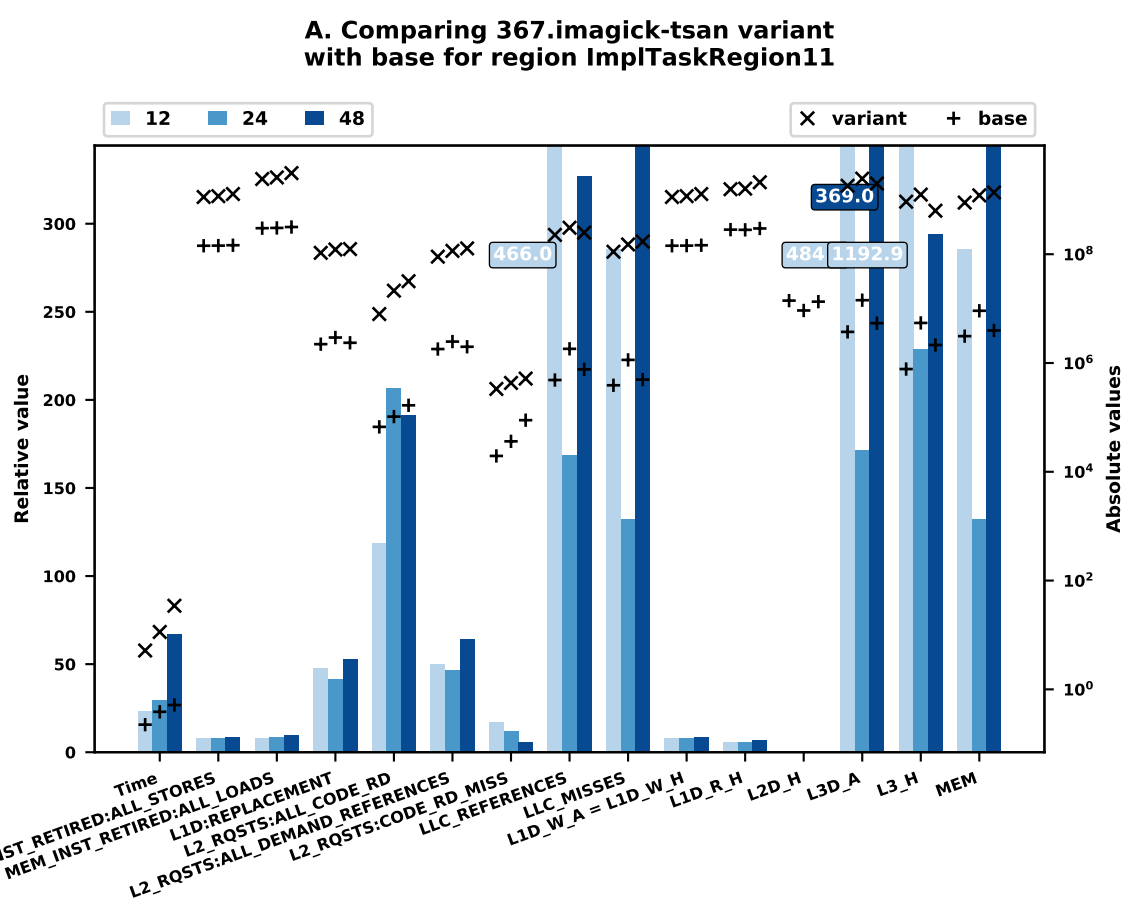

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion10
12
24
48
variant
base
Relative value
Absolute values
544.4
554.5
544.4
554.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

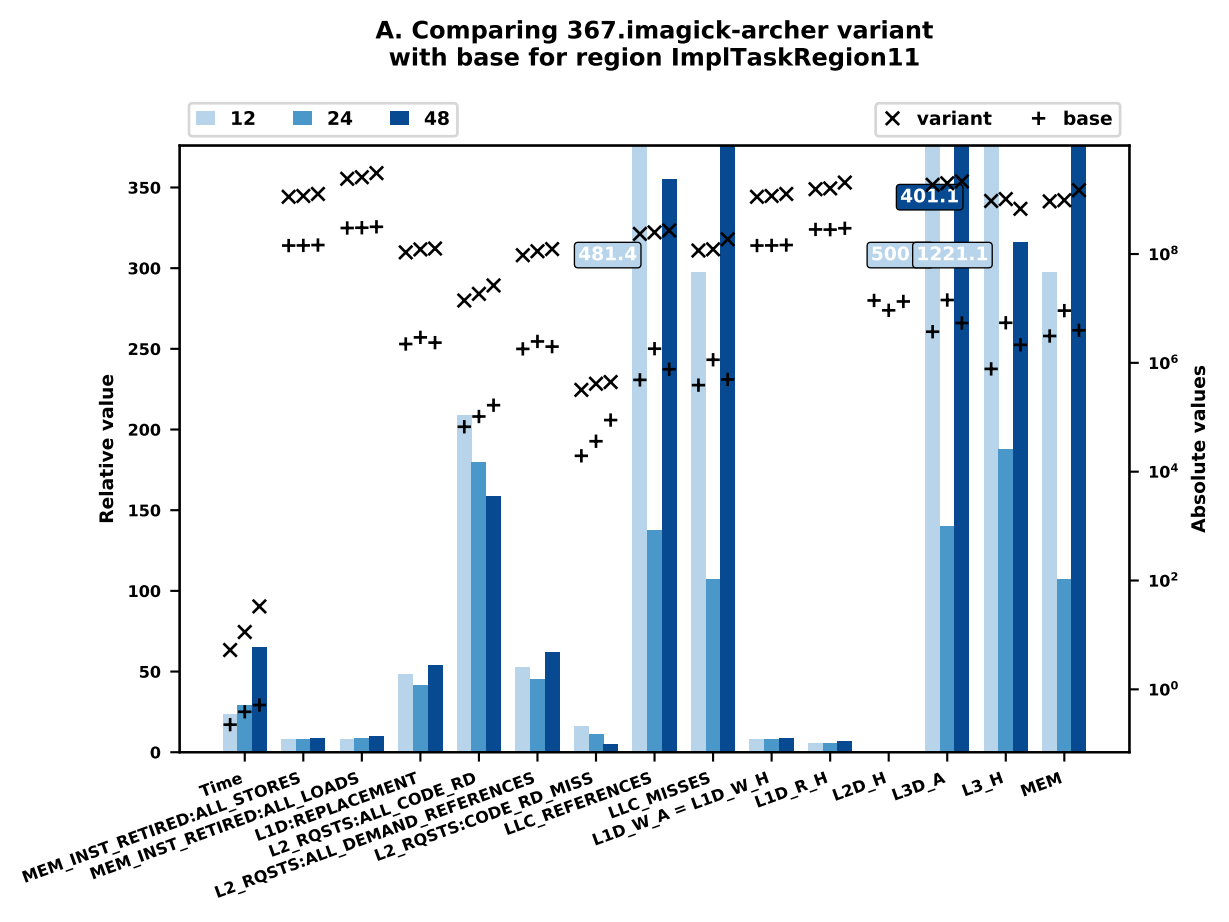

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
0
5
10
15
20
25
30
$10^0$
$10^2$
$10^4$
$10^6$
$10^8$
76.7
114.6
170.3
39.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

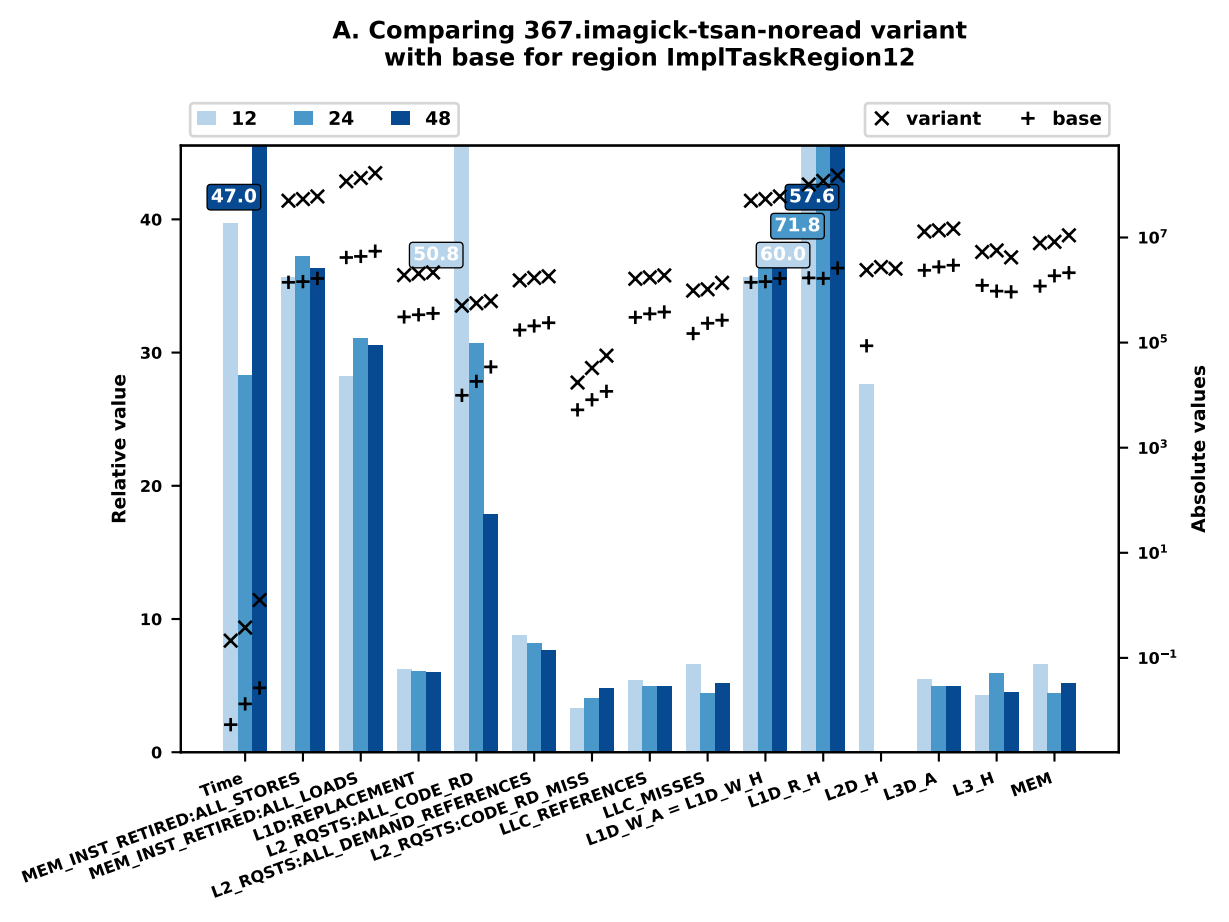

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
77.6
121.7
173.1
39.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

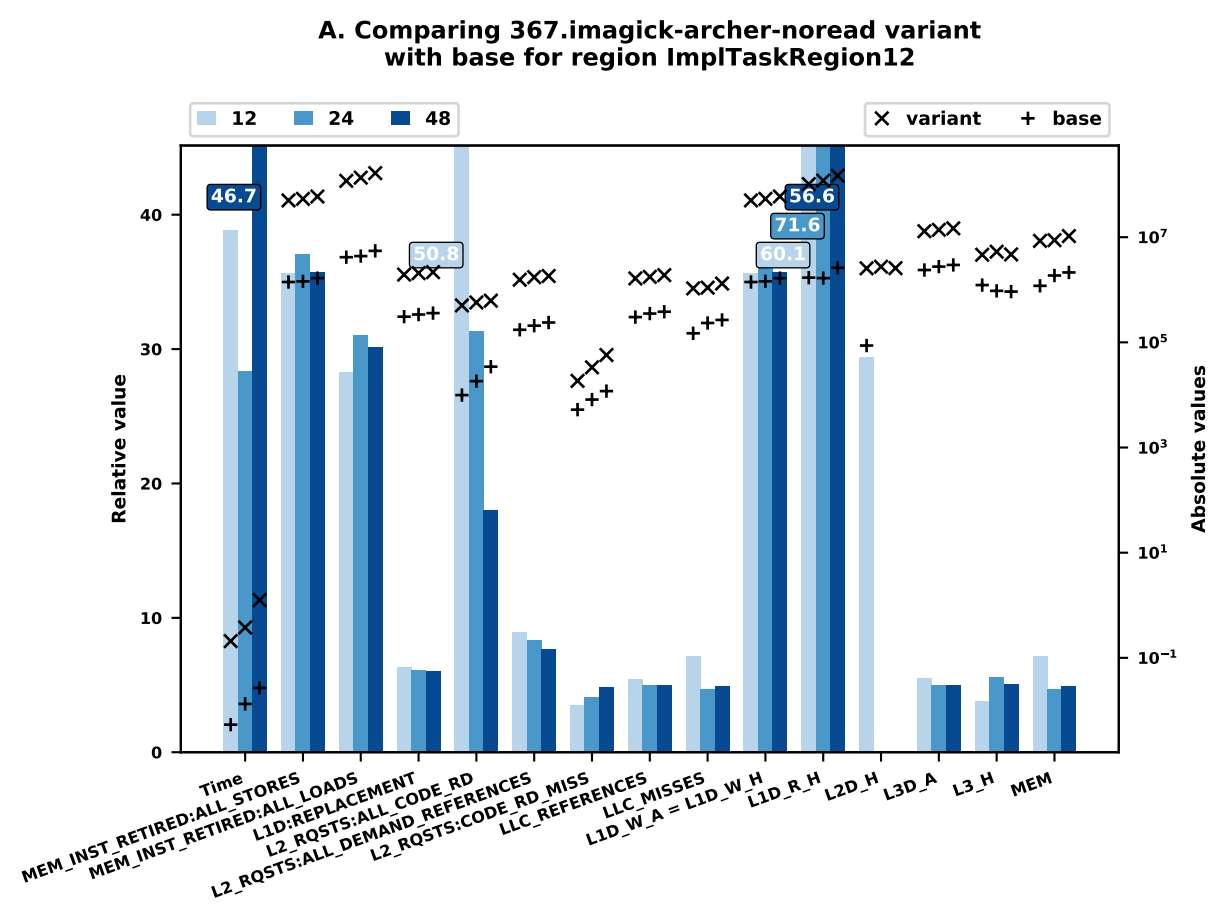

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
216.6
226.4
291.5
154.7
242.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

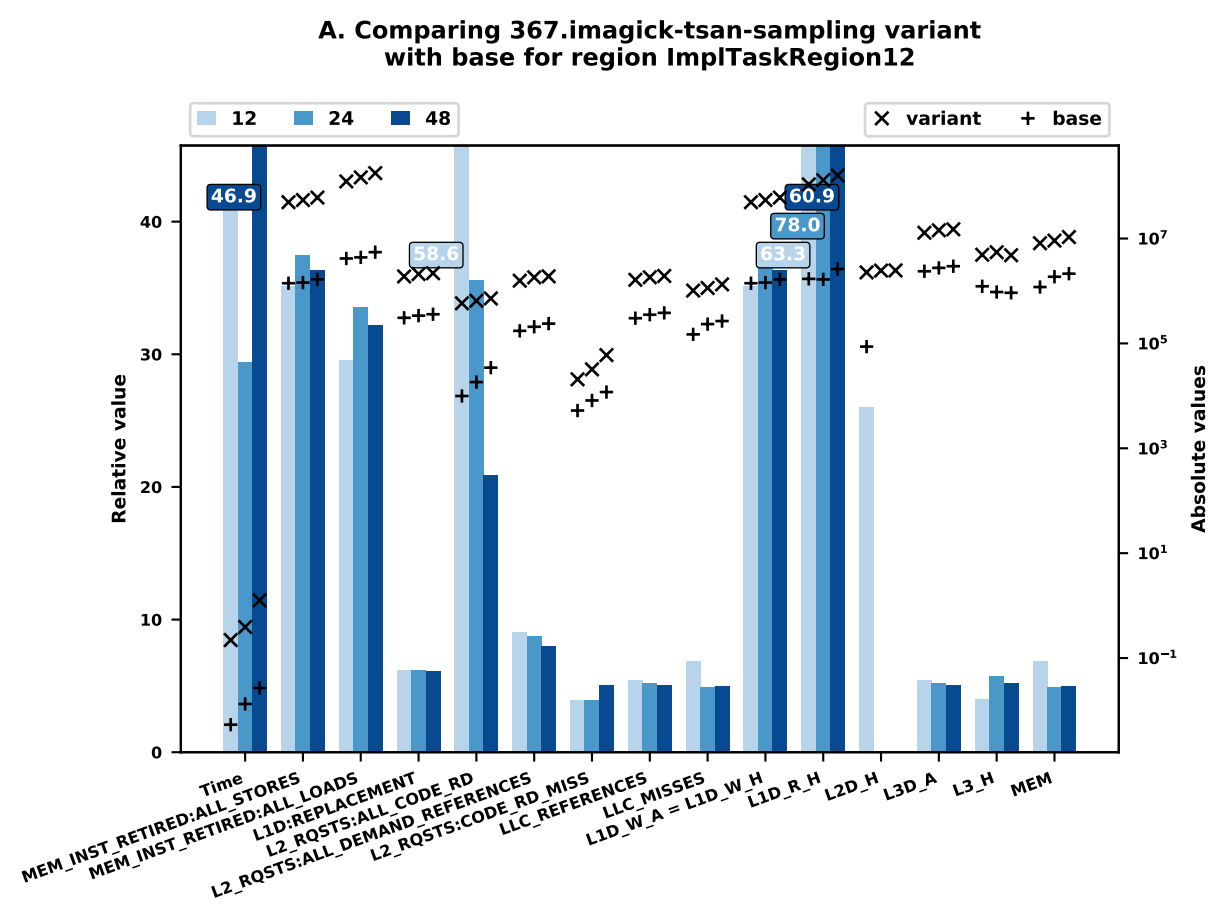

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
222.4
225.8
442.4
158.2
187.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

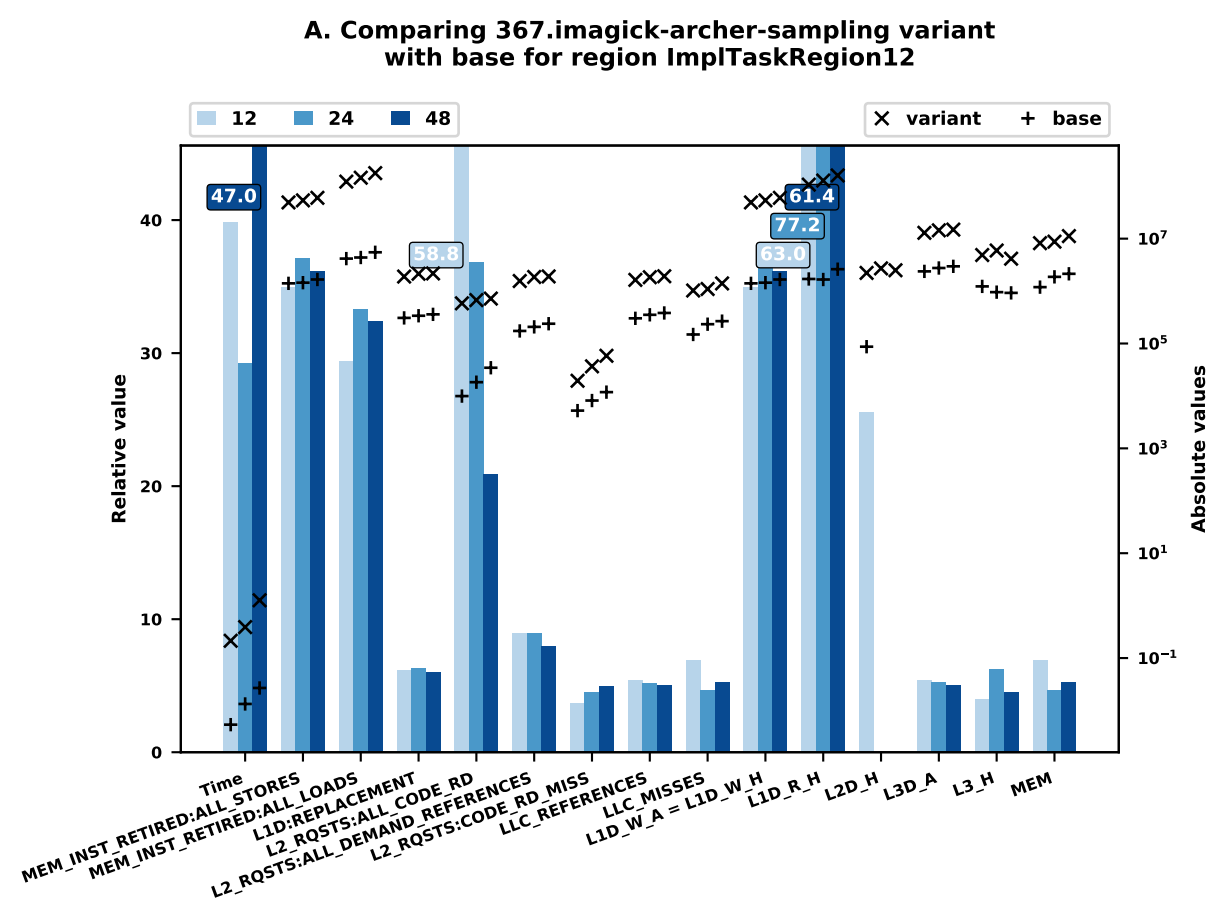

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
0
50
100
150
200
250
300
$10^0$
$10^2$
$10^4$
$10^6$
$10^8$
466.0
484
1192.9
369.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

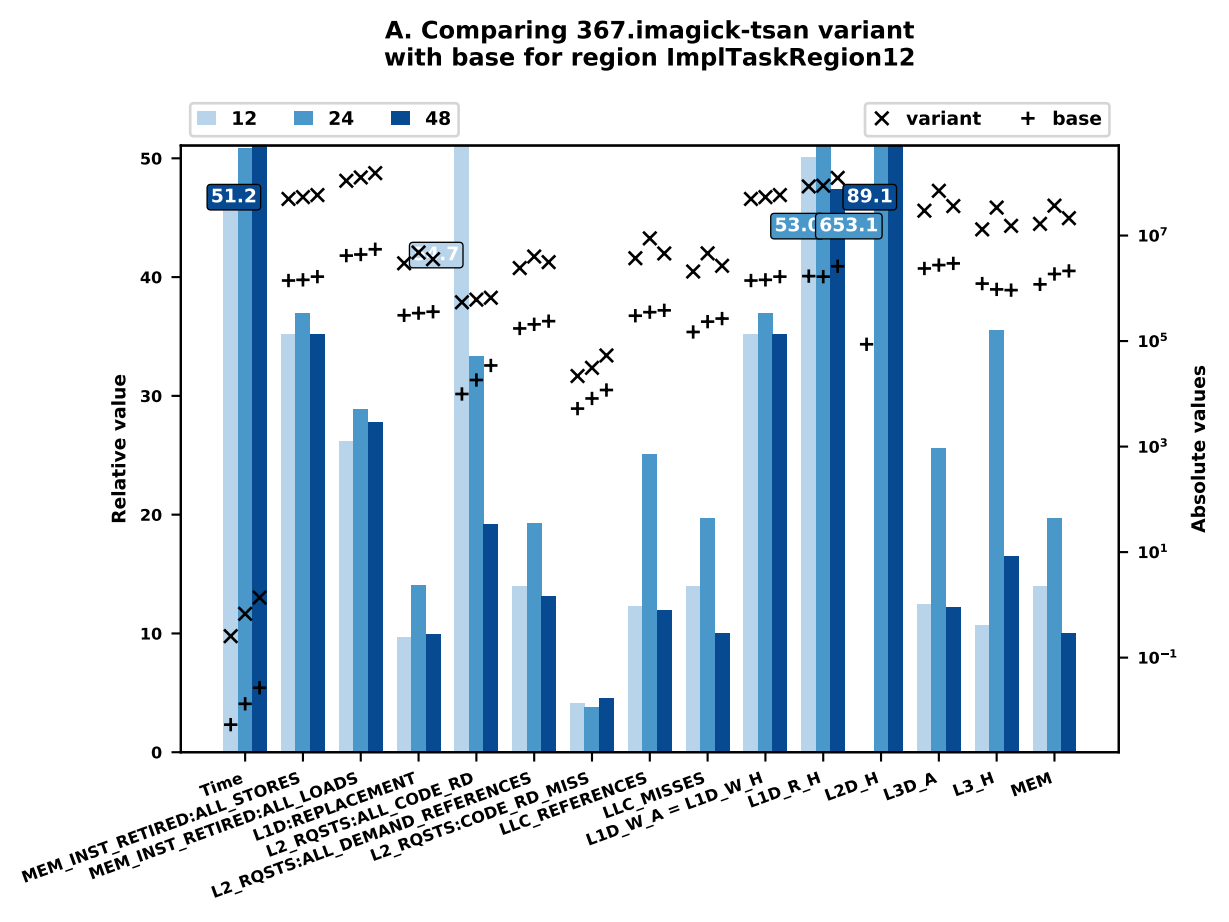

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
0
50
100
150
200
250
300
350
$10^0$
$10^2$
$10^4$
$10^6$
$10^8$
481.4
401.1
500
1221.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

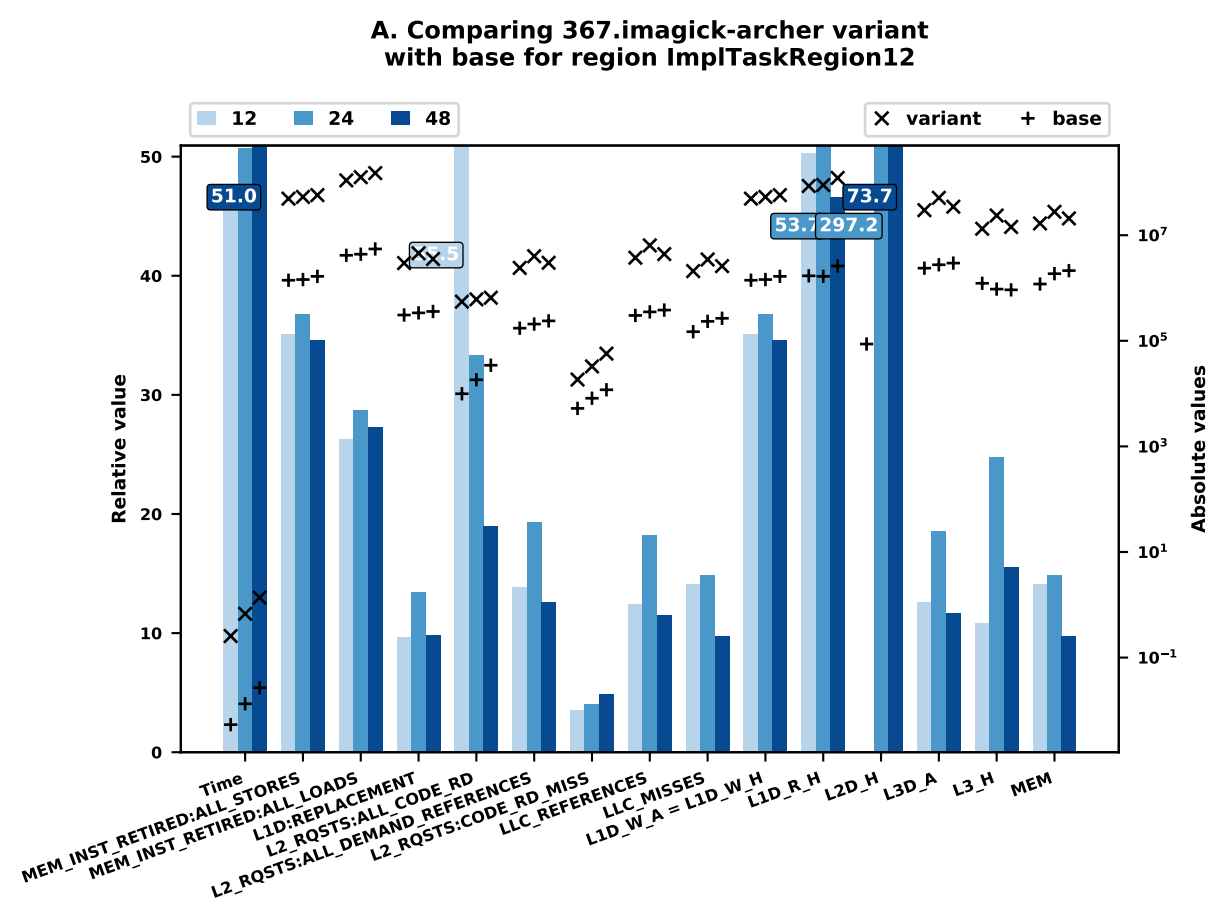

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion12
12
24
48
variant
base
47.0
50.8
57.6
71.8
60.0
Relative value
Absolute values
0
10
20
30
40
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
$10^{7}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

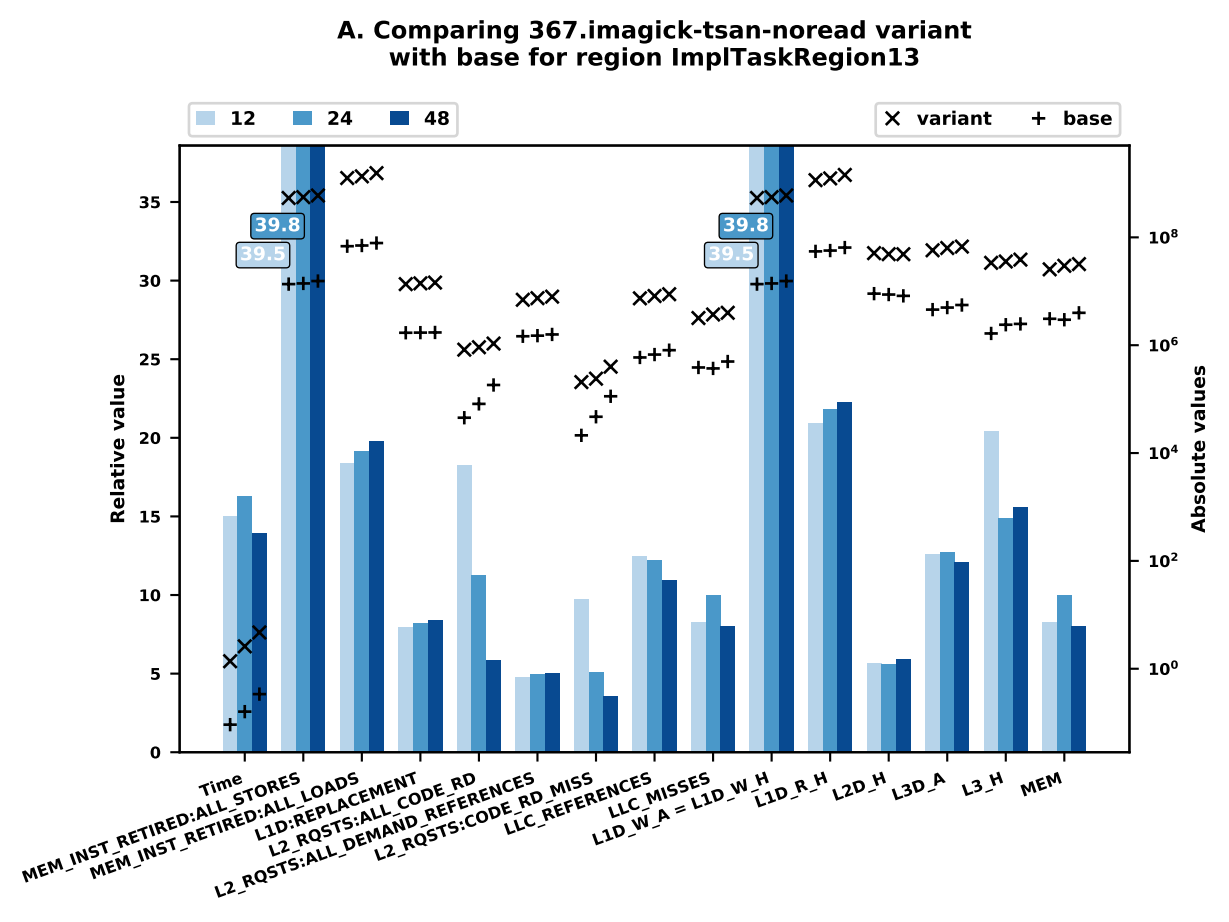

A. Comparing 367.imagick-archer-noread variant
with base for region ImplTaskRegion12
12
24
48
variant
base
46.7
50.8
56.6
71.6
60.1
Relative value
Absolute values
0
10
20
30
40
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
$10^{7}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

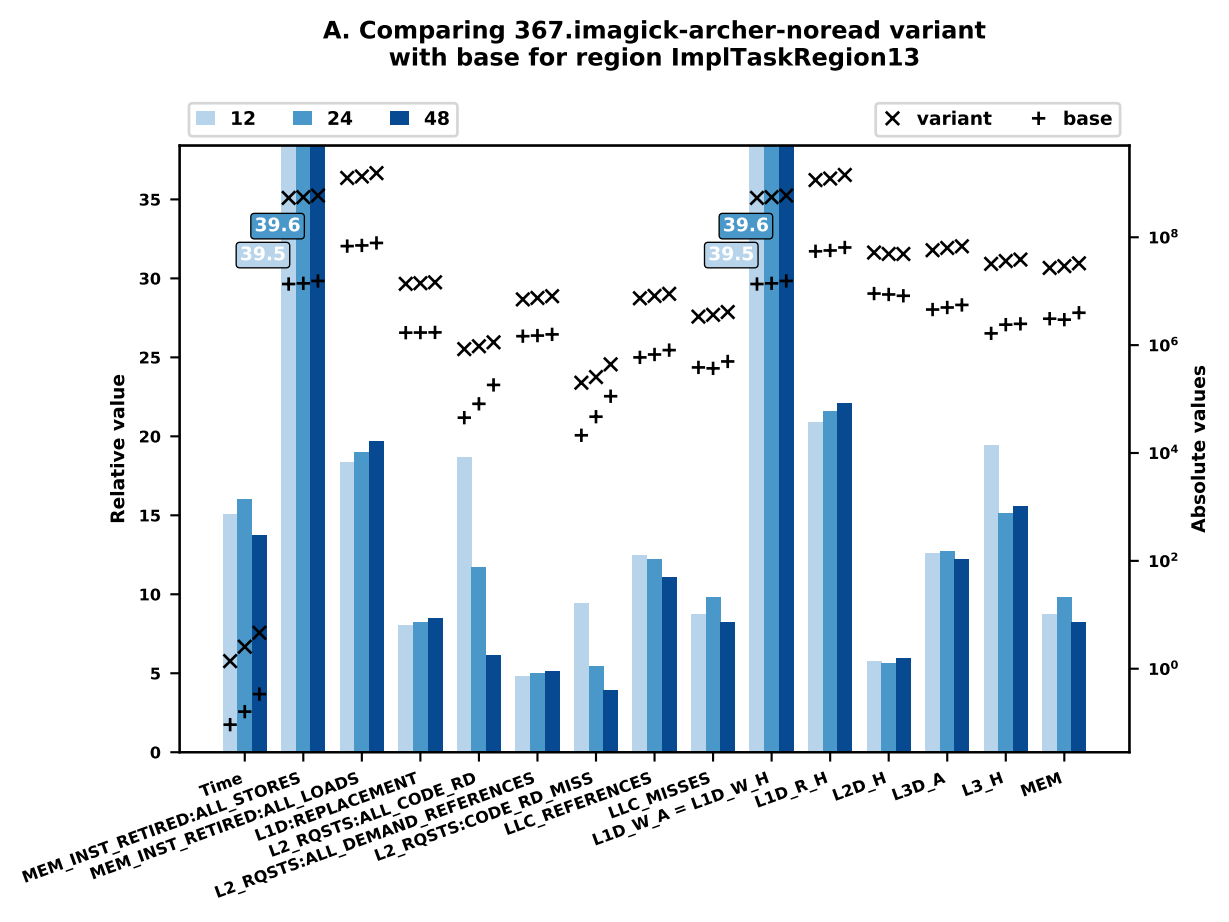

A. Comparing 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion12
12
24
48
variant
base
46.9
58.6
60.9
78.0
63.3
Relative value
Absolute values
0
10
20
30
40
$10^{7}$
$10^{5}$
$10^{3}$
$10^{1}$
$10^{-1}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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

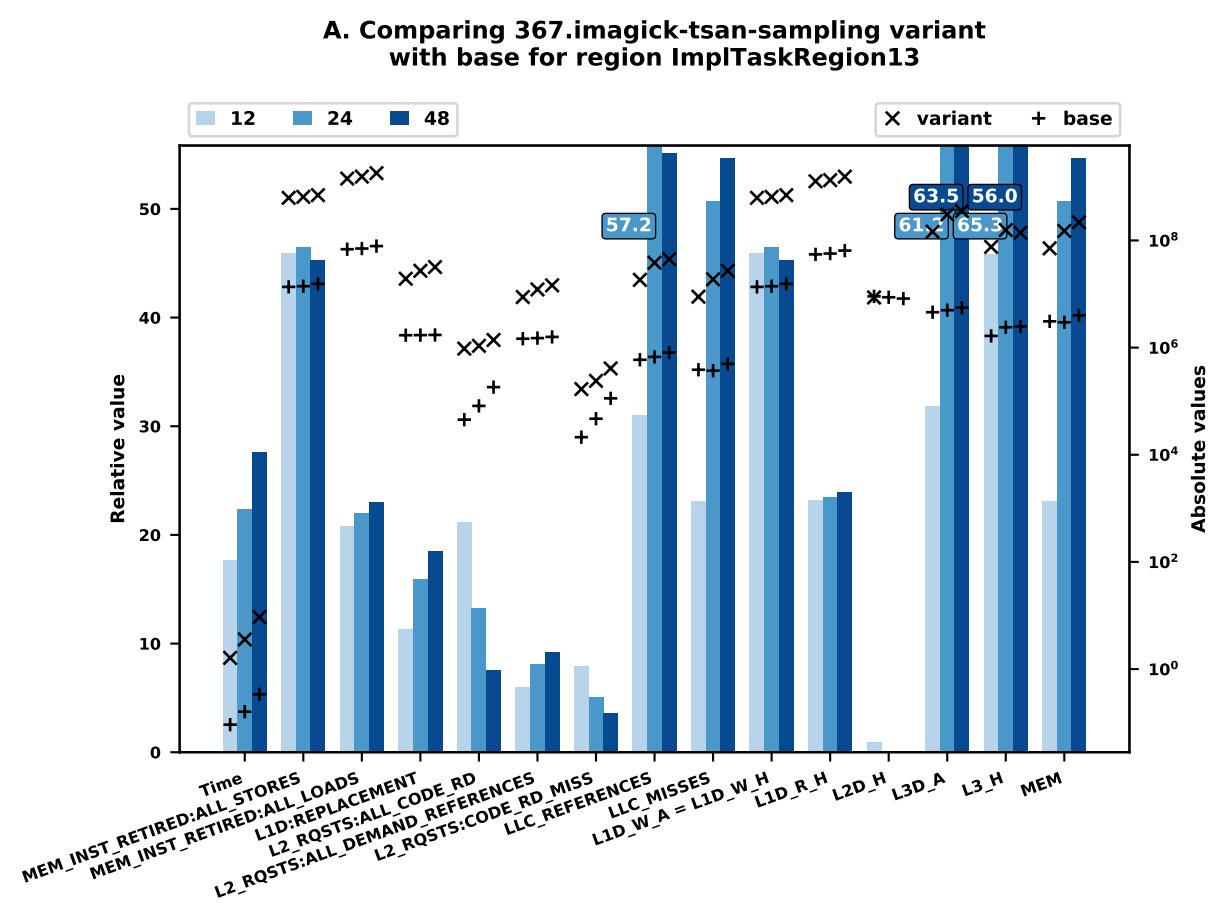

A. Comparing 367.imagick-archer-sampling variant
with base for region ImplTaskRegion12
12
24
48
variant
base
47.0
58.8
61.4
77.2
63.0
Relative value
Absolute values
0
10
20
30
40
$10^{-1}$
$10^{1}$
$10^{3}$
$10^{5}$
$10^{7}$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
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

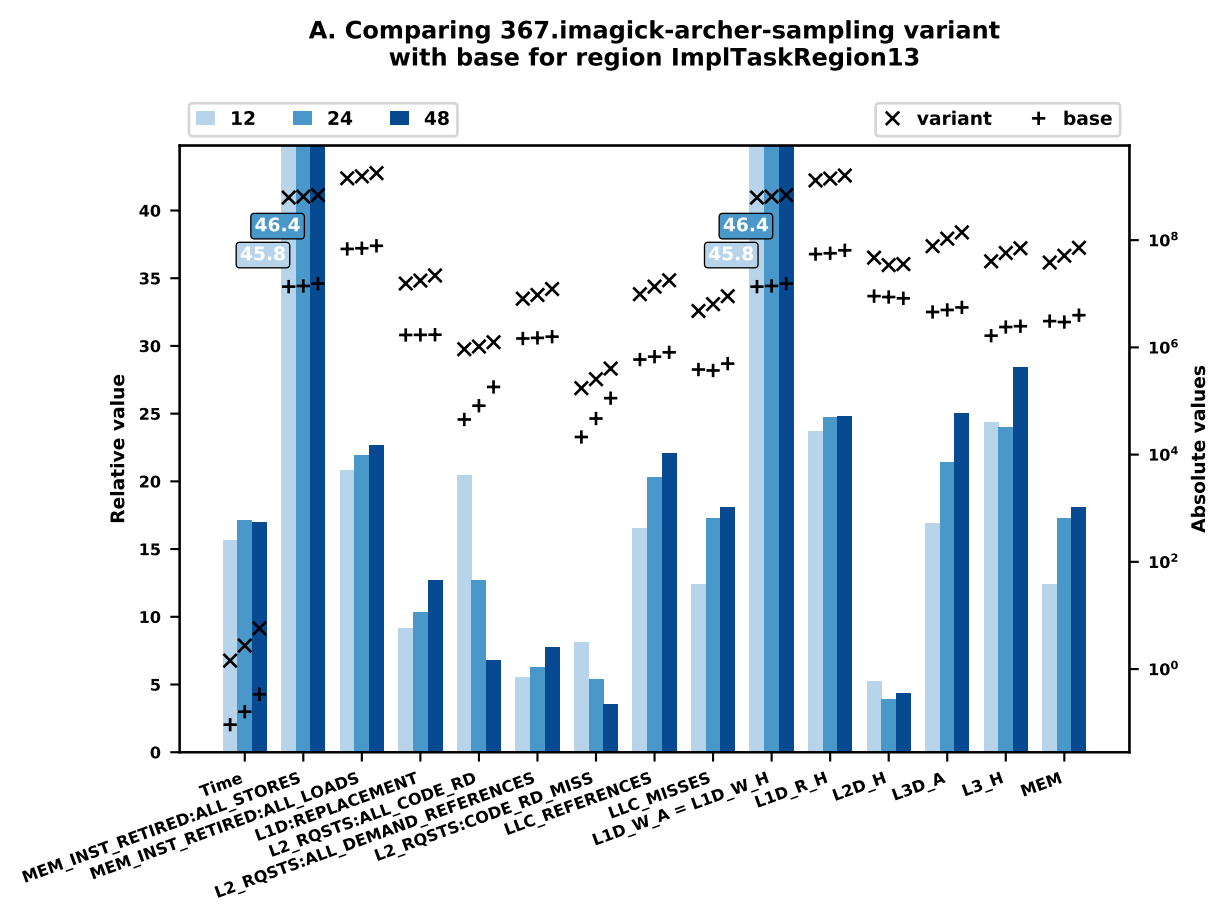

A. Comparing 367.imagick-tsan variant
with base for region ImplTaskRegion12
12
24
48
variant
base
Relative value
Absolute values
51.2
89.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

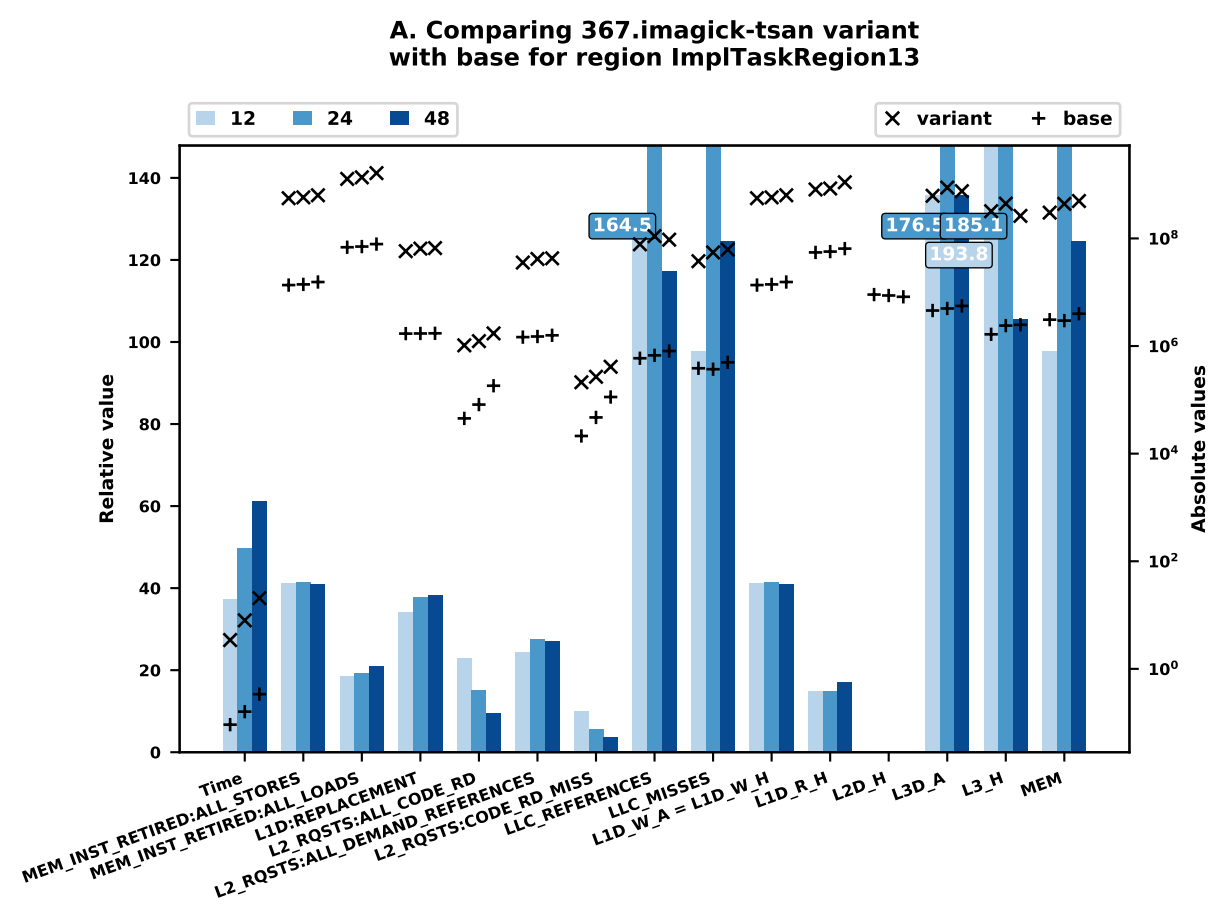

A. Comparing 367.imagick-archer variant
with base for region ImplTaskRegion12
12
24
48
variant
base
Relative value
Absolute values
51.0
73.7
53.7
297.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

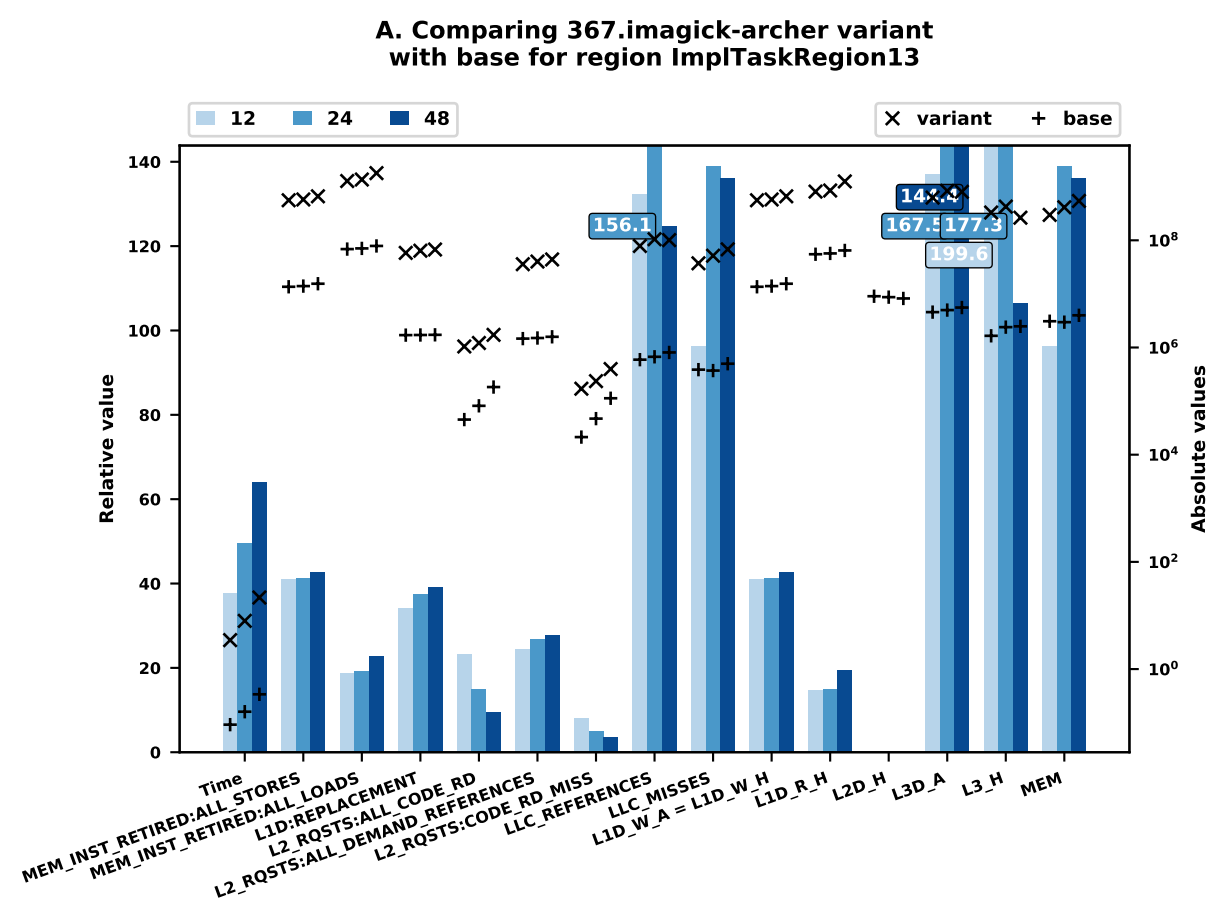

A. Comparing 367.imagick-tsan-noread variant
with base for region ImplTaskRegion13
12
24
48
variant
base
39.8
39.5
39.8
39.5
Relative value
Absolute values
0
5
10
15
20
25
30
35
$10^0$
$10^2$
$10^4$
$10^6$
$10^8$
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
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 367.imagick-archer-noread variant
with base for region ImplTaskRegion13
12
24
48
variant
base
39.6
39.5
39.6
39.5
Relative value
Absolute values
0
5
10
15
20
25
30
35
$10^0$
$10^2$
$10^4$
$10^6$
$10^8$
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 367.imagick-tsan-sampling variant
with base for region ImplTaskRegion13
12
24
48
variant
base
Relative value
Absolute values
0
10
20
30
40
50
$10^0$
$10^2$
$10^4$
$10^6$
$10^8$
57.2
63.5
56.0
61.1
65.3
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 367.imagick-archer-sampling variant
with base for region ImplTaskRegion13
12
24
48
variant
base
Relative value
Absolute values
46.4
45.8
46.4
45.8
0
5
10
15
20
25
30
35
40
$10^0$
$10^2$
$10^4$
$10^6$
$10^8$
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 367.imagick-tsan variant
with base for region ImplTaskRegion13
12
24
48
variant
base
Relative value
Absolute values
164.5
176.5
185.1
193.8
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 367.imagick-archer variant
with base for region ImplTaskRegion13
12
24
48
variant
base
Relative value
Absolute values
156.1
167.5
177.3
199.6
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