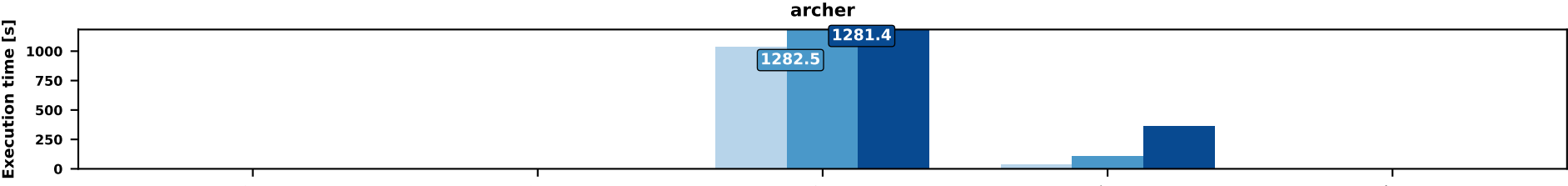
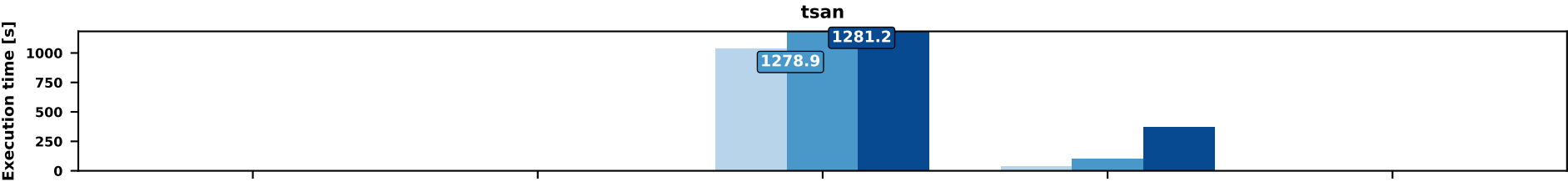
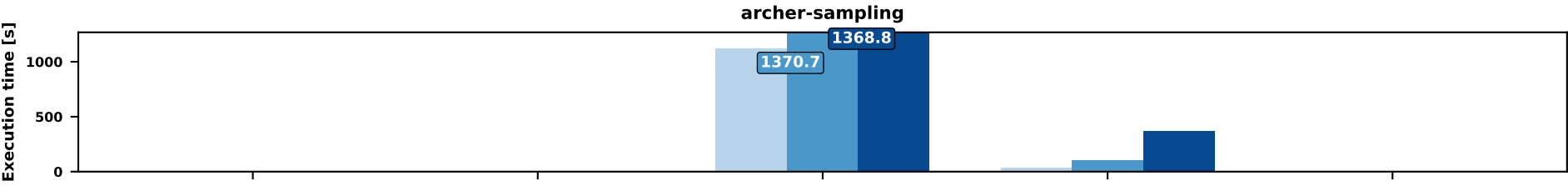
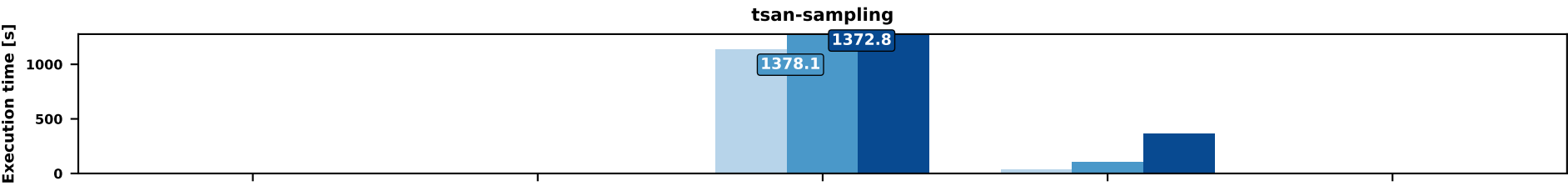
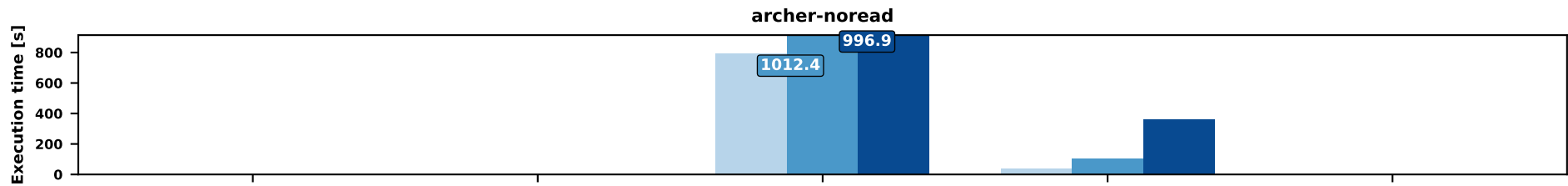
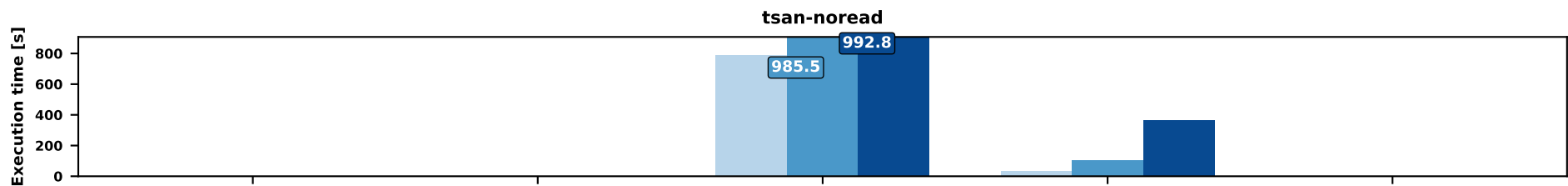
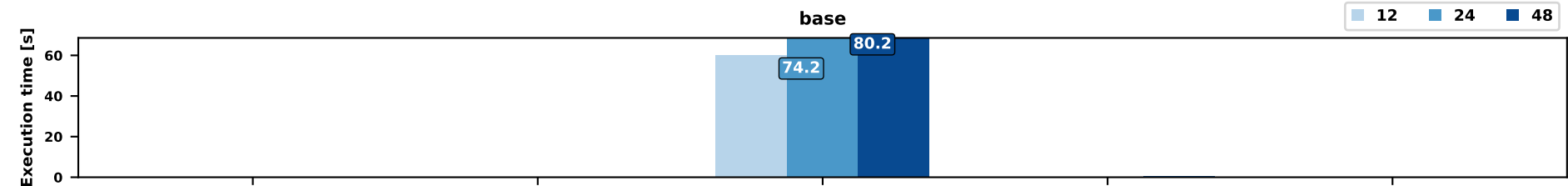
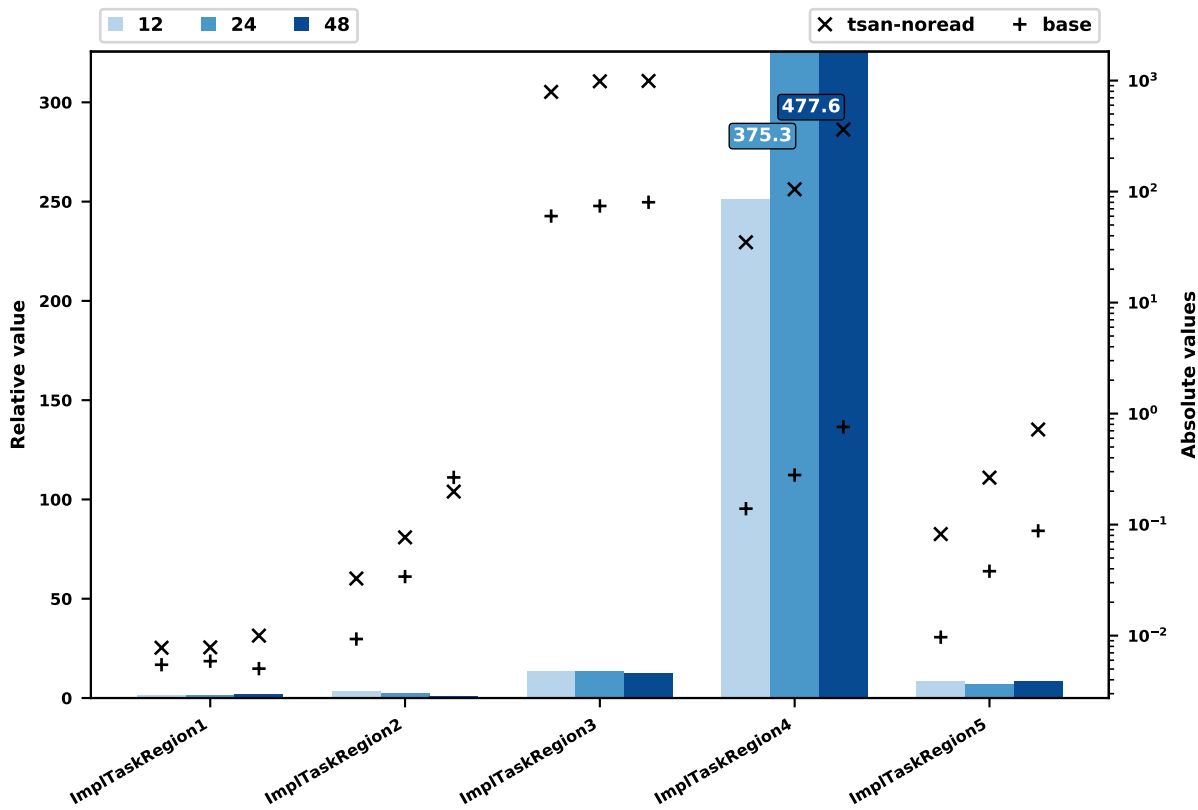


12 24 48

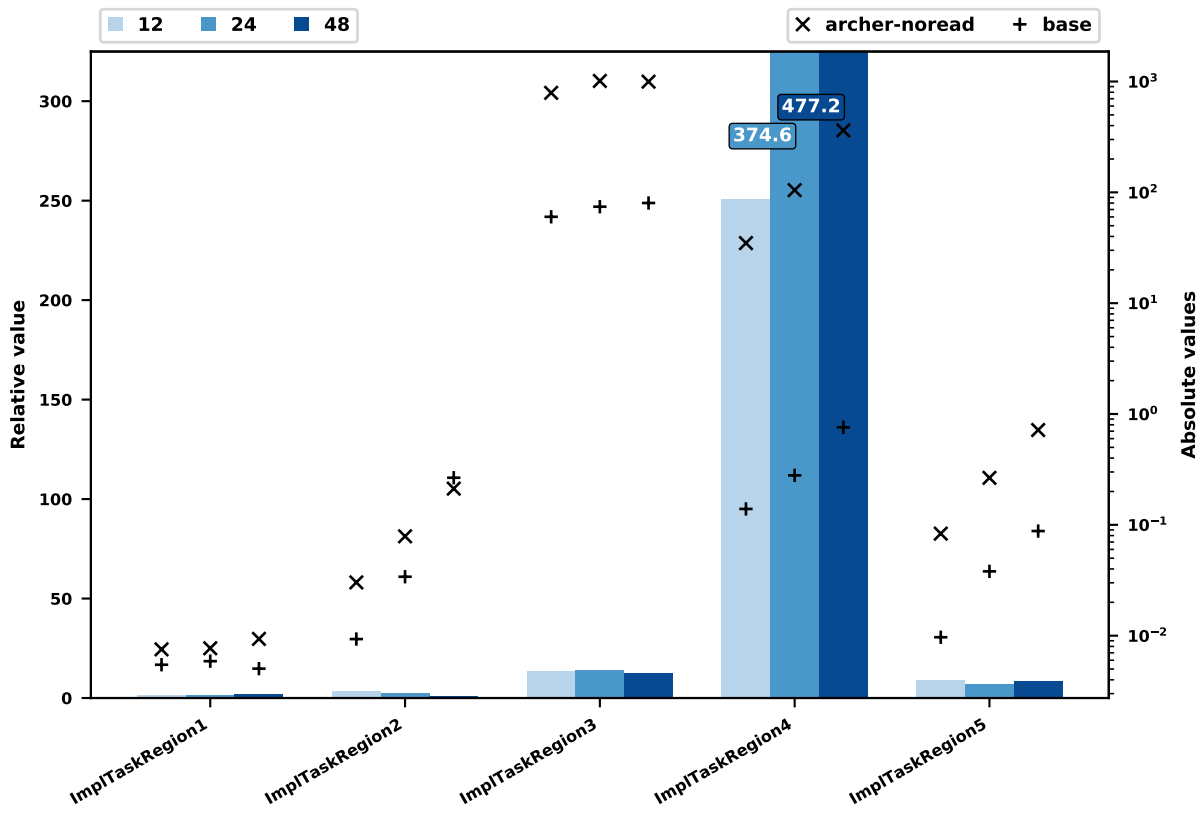


ImplTaskRegion1 ImplTaskRegion2 ImplTaskRegion3 ImplTaskRegion4 ImplTaskRegion5

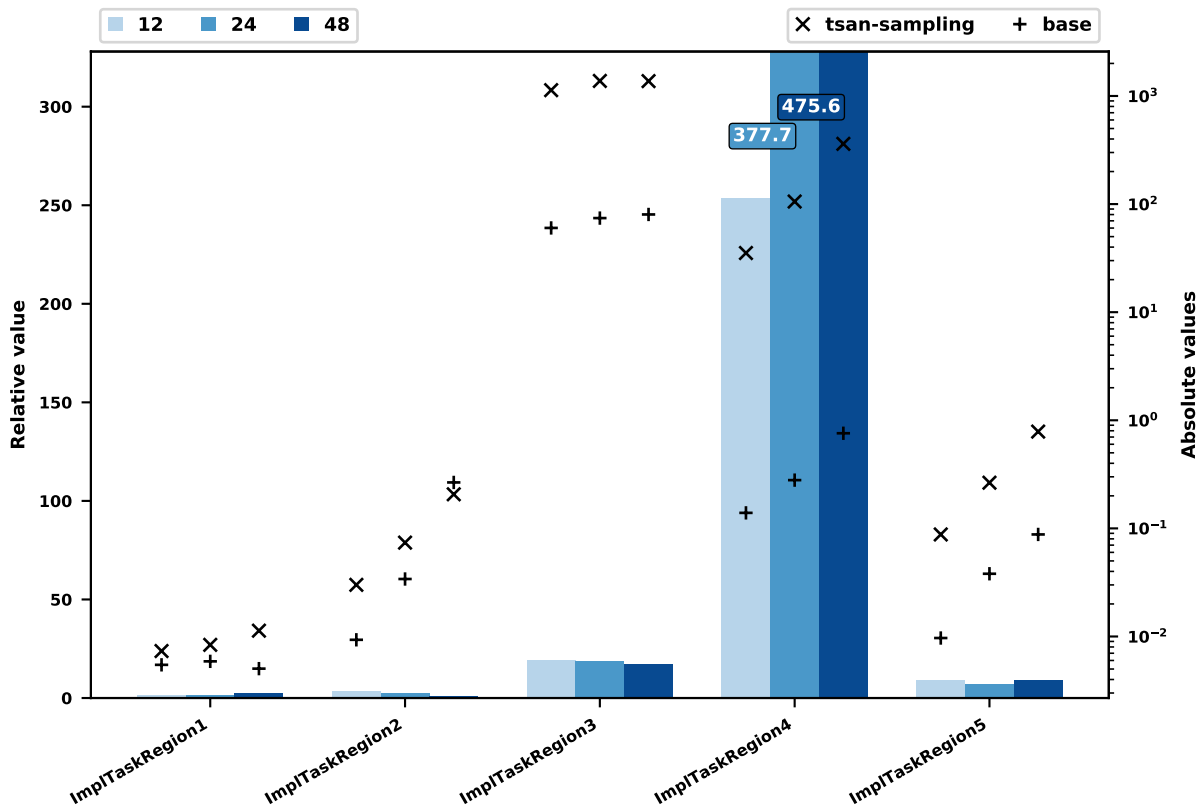
## B. Comparing 372.smithwa-tsan-noread variant with base for metric Time



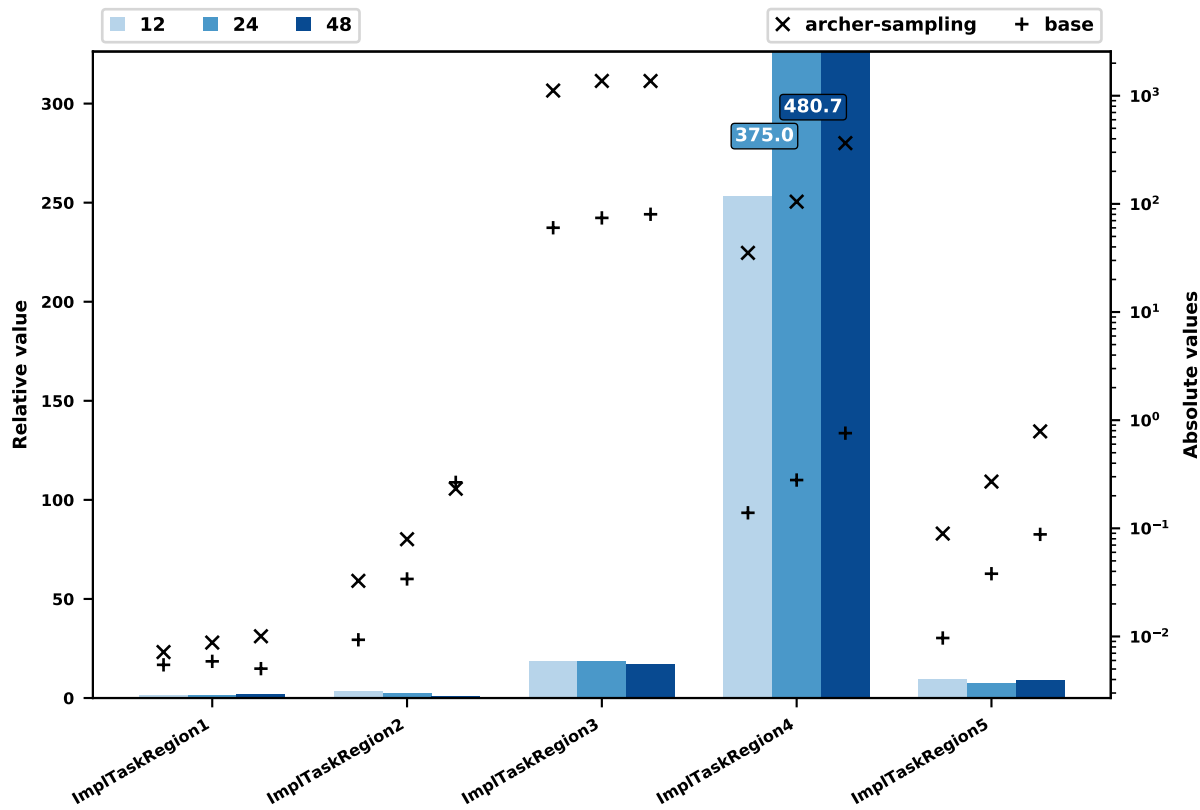
## B. Comparing 372.smithwa-archer-nored variant with base for metric Time



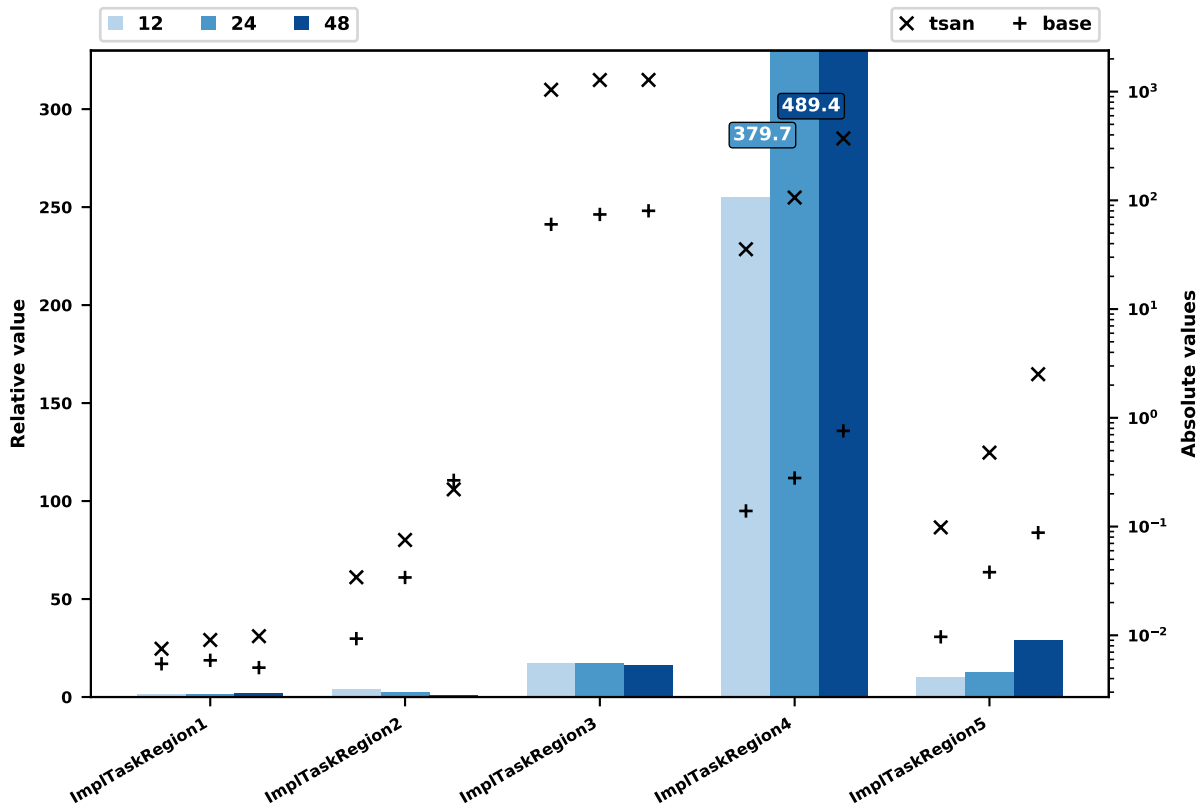
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric Time



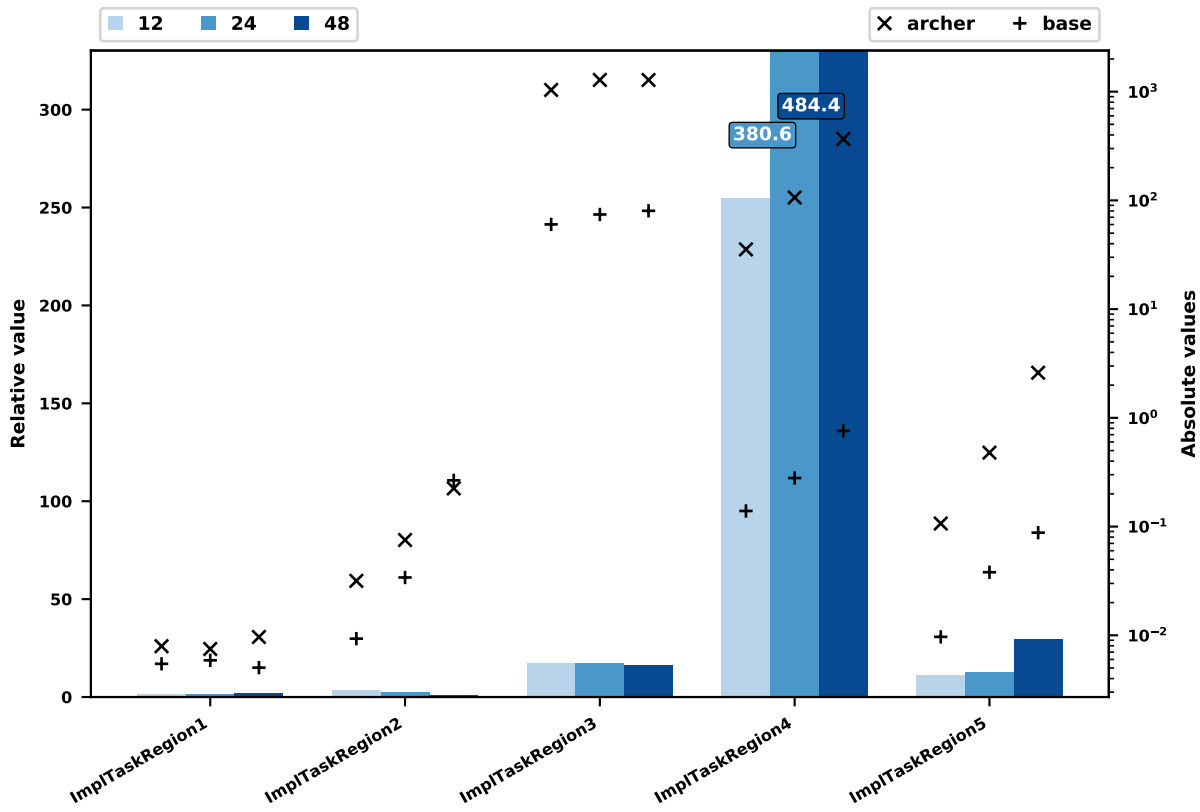
## B. Comparing 372.smithwa-archer-sampling variant with base for metric Time



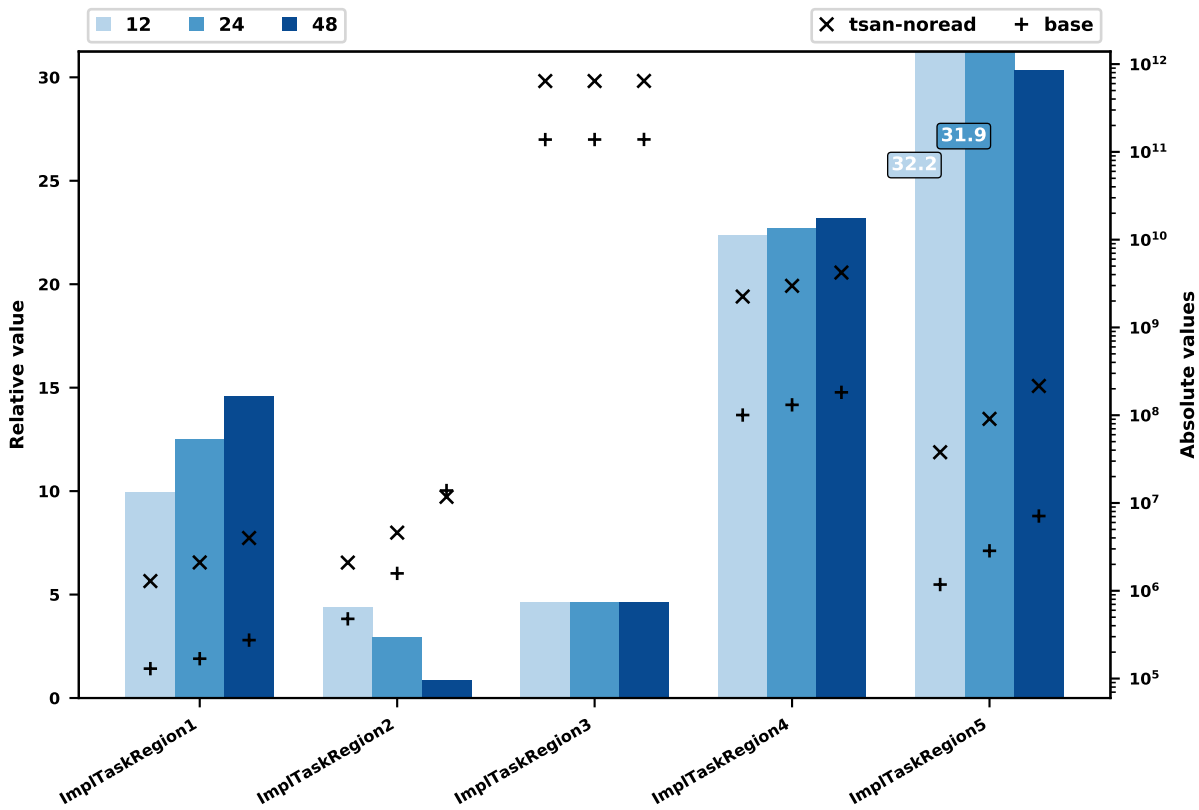
## B. Comparing 372.smithwa-tsan variant with base for metric Time



## B. Comparing 372.smithwa-archer variant with base for metric Time

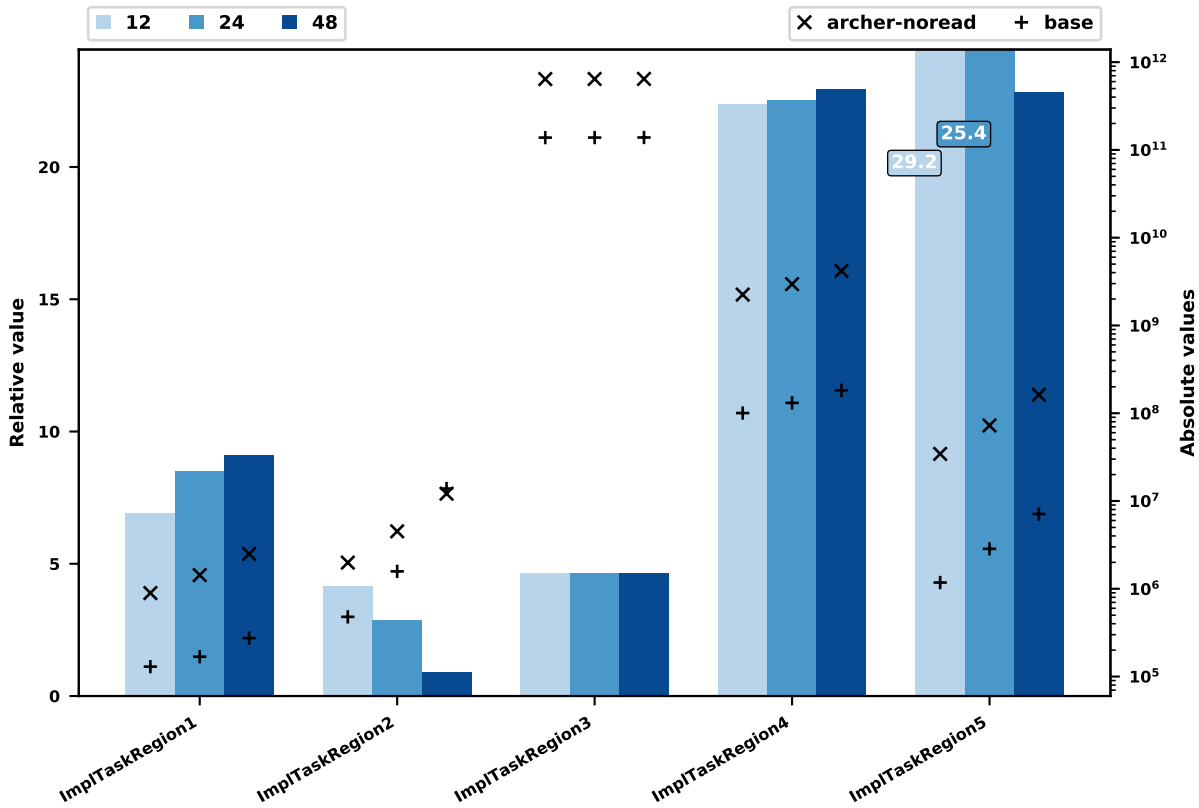


## B. Comparing 372.smithwa-tsan-noread variant with base for metric MEM\_INST\_RETIRED:ALL\_STORES

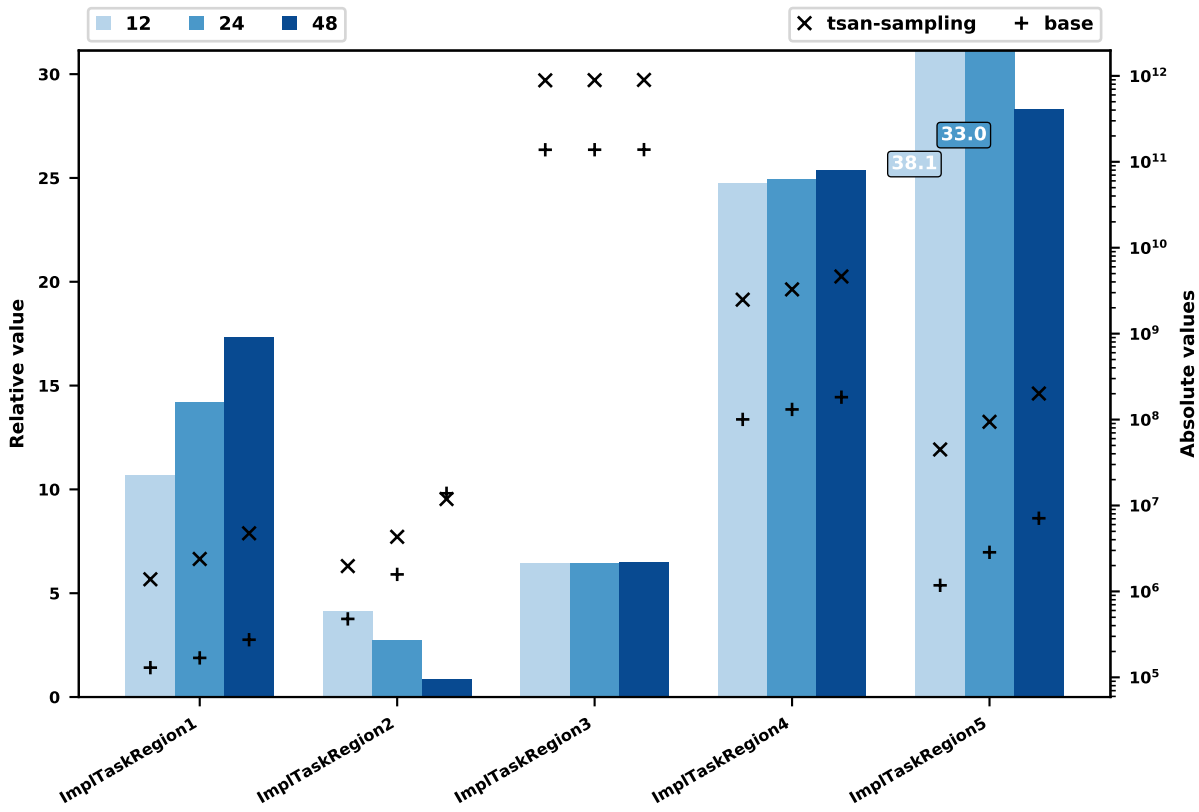




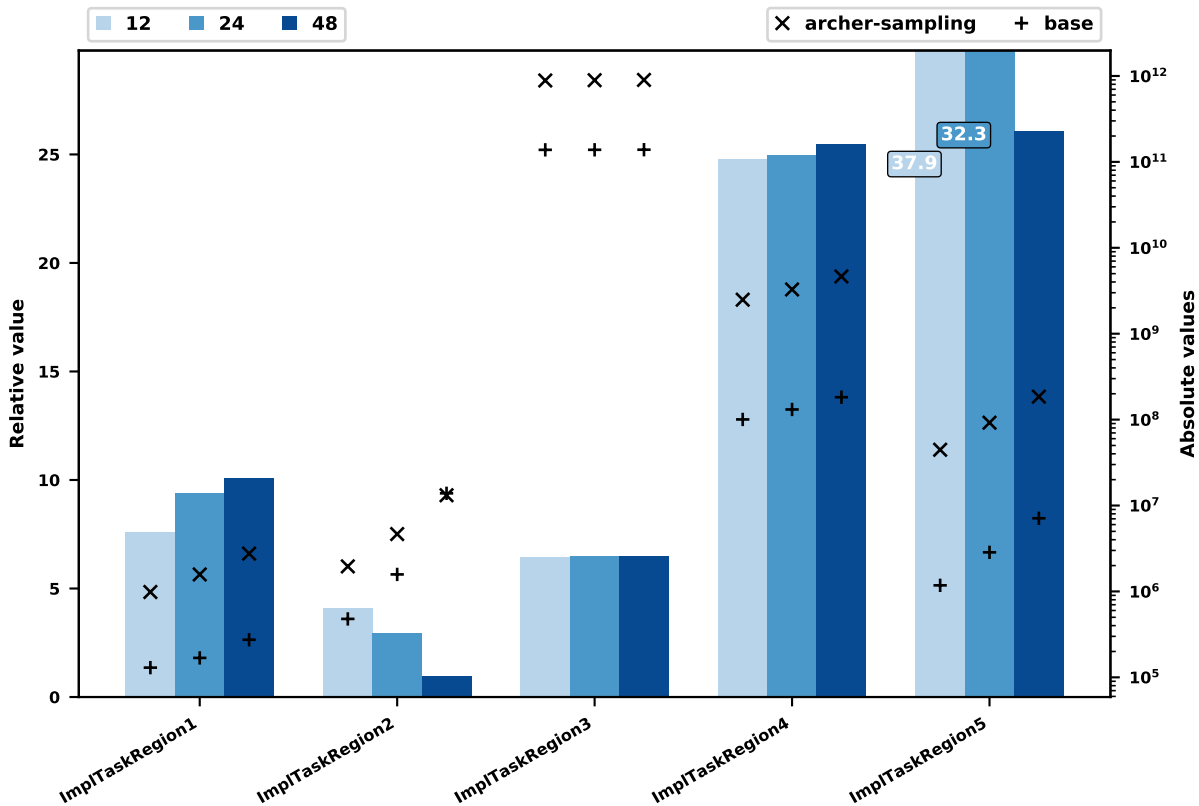
**B. Comparing 372.smithwa-archer-noread variant with base  
for metric MEM\_INST\_RETIRED:ALL\_STORES**



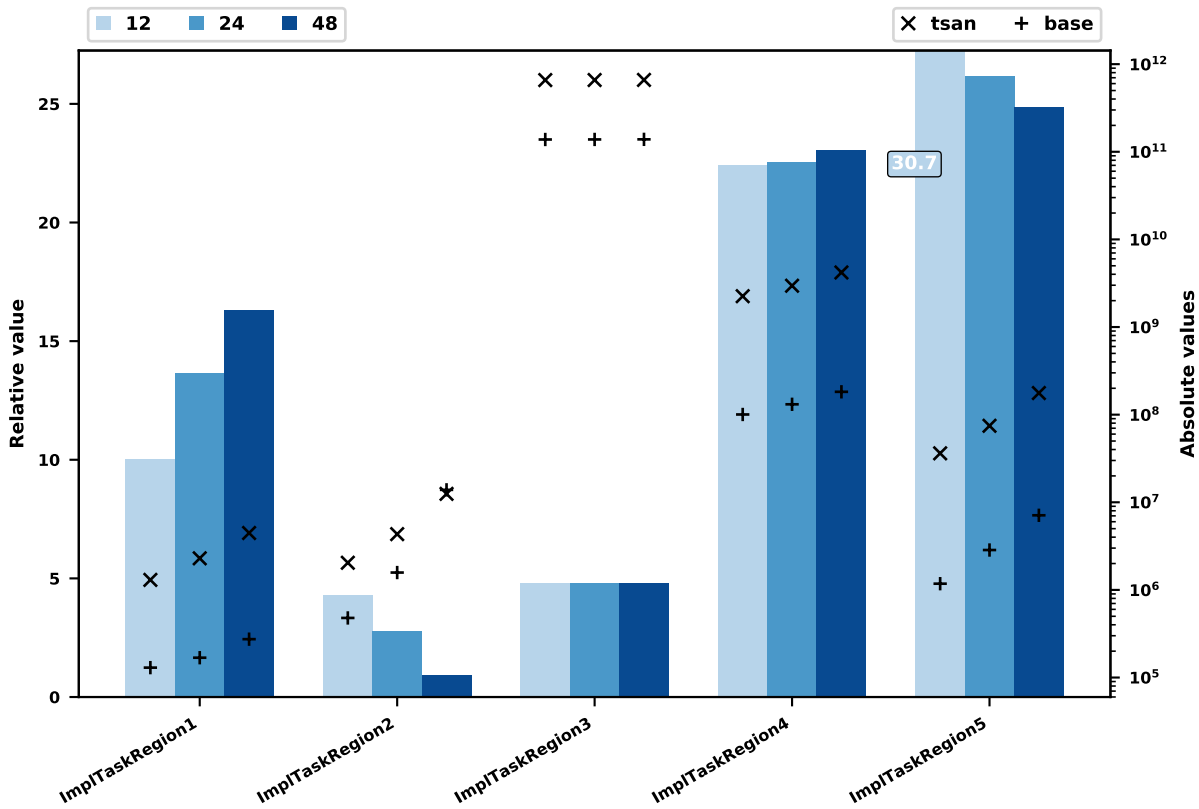
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric MEM\_INST\_RETIRED:ALL\_STORES



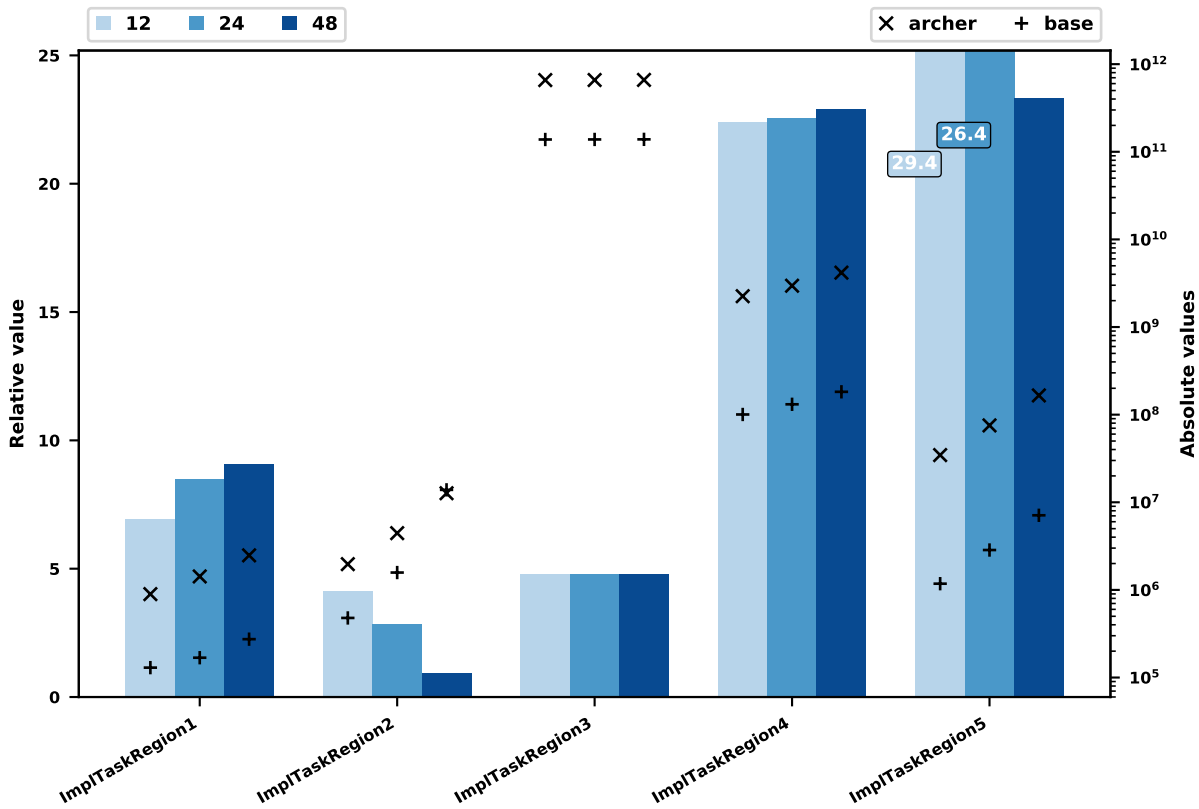
## B. Comparing 372.smithwa-archer-sampling variant with base for metric MEM\_INST\_RETIRED:ALL\_STORES



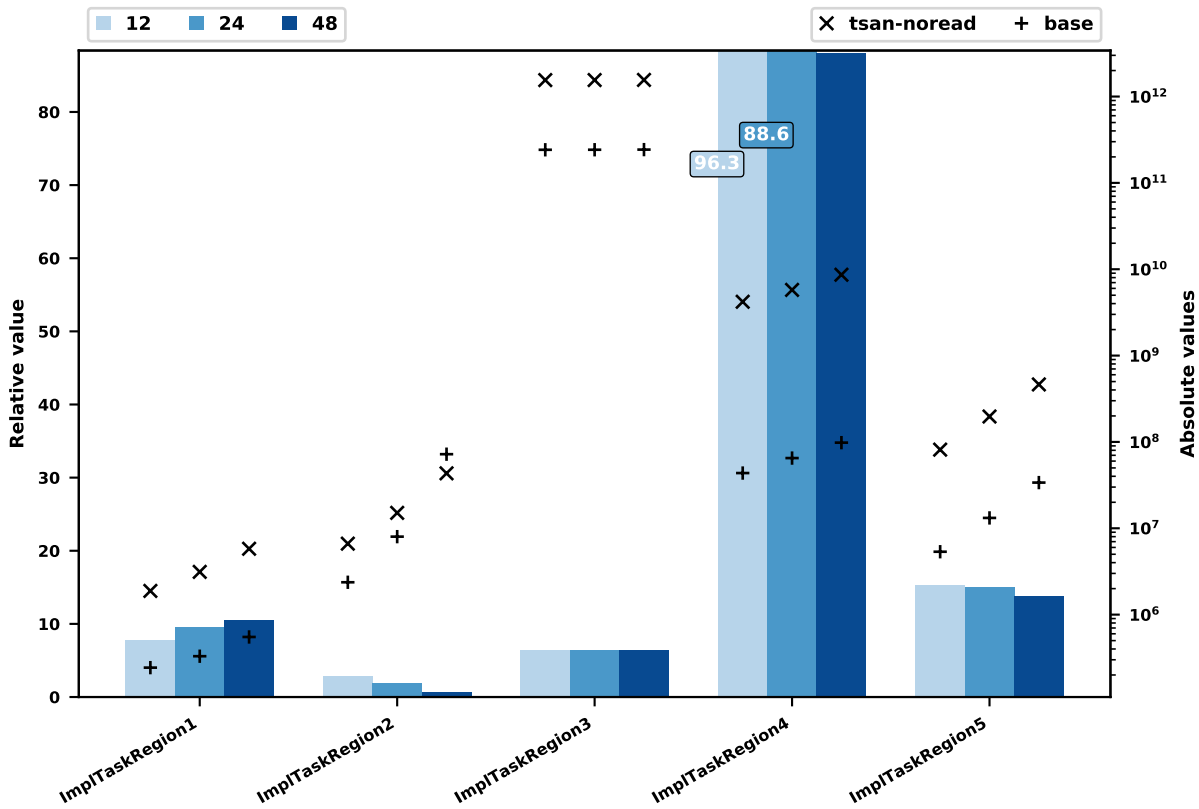
**B. Comparing 372.smithwa-tsan variant with base  
for metric MEM\_INST\_RETIRED:ALL\_STORES**



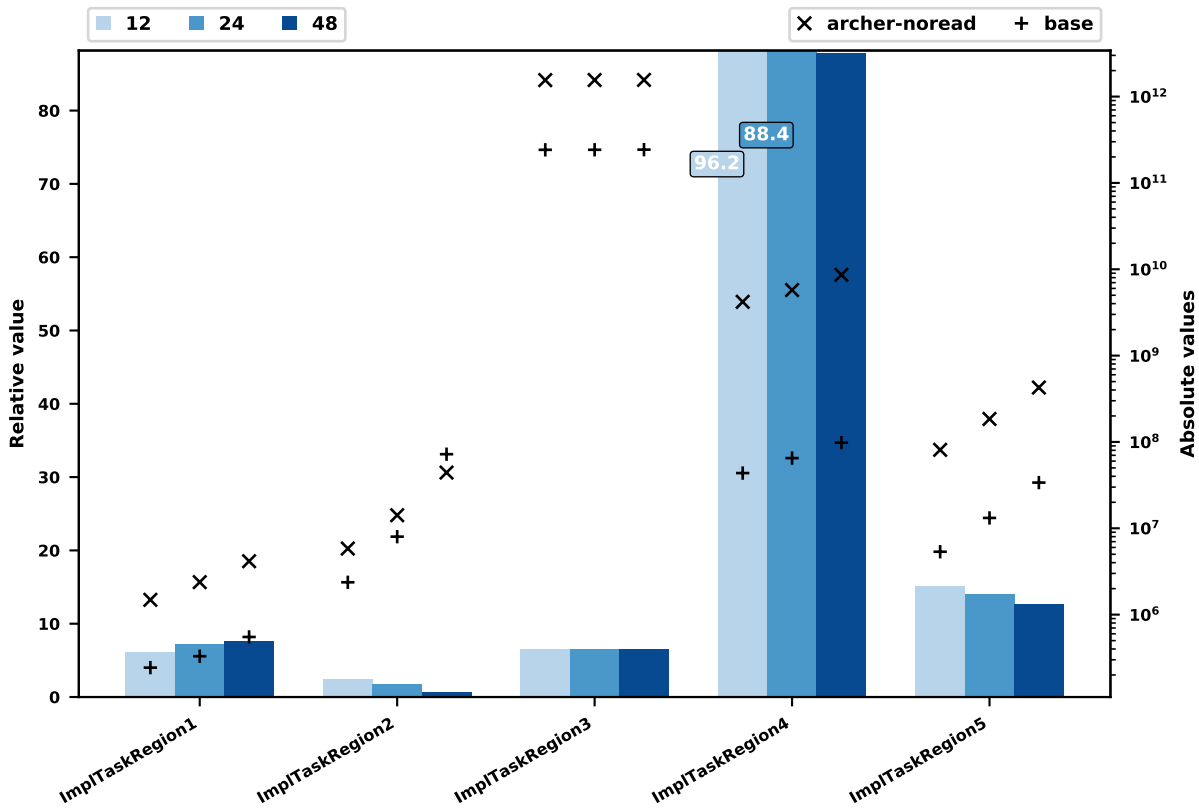
## B. Comparing 372.smithwa-archer variant with base for metric MEM\_INST\_RETIRED:ALL\_STORES



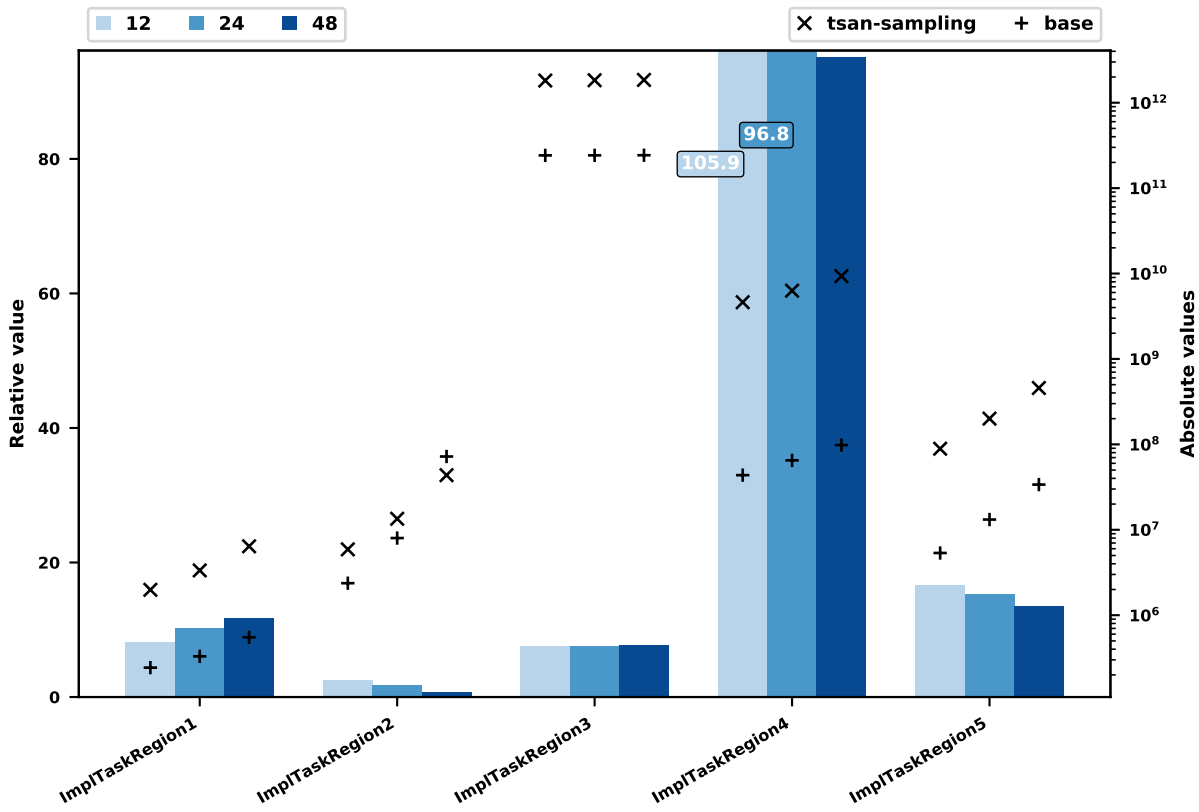
## B. Comparing 372.smithwa-tsan-noread variant with base for metric MEM\_INST\_RETIRED:ALL\_LOADS



## B. Comparing 372.smithwa-archer-noread variant with base for metric MEM\_INST\_RETIRED:ALL\_LOADS

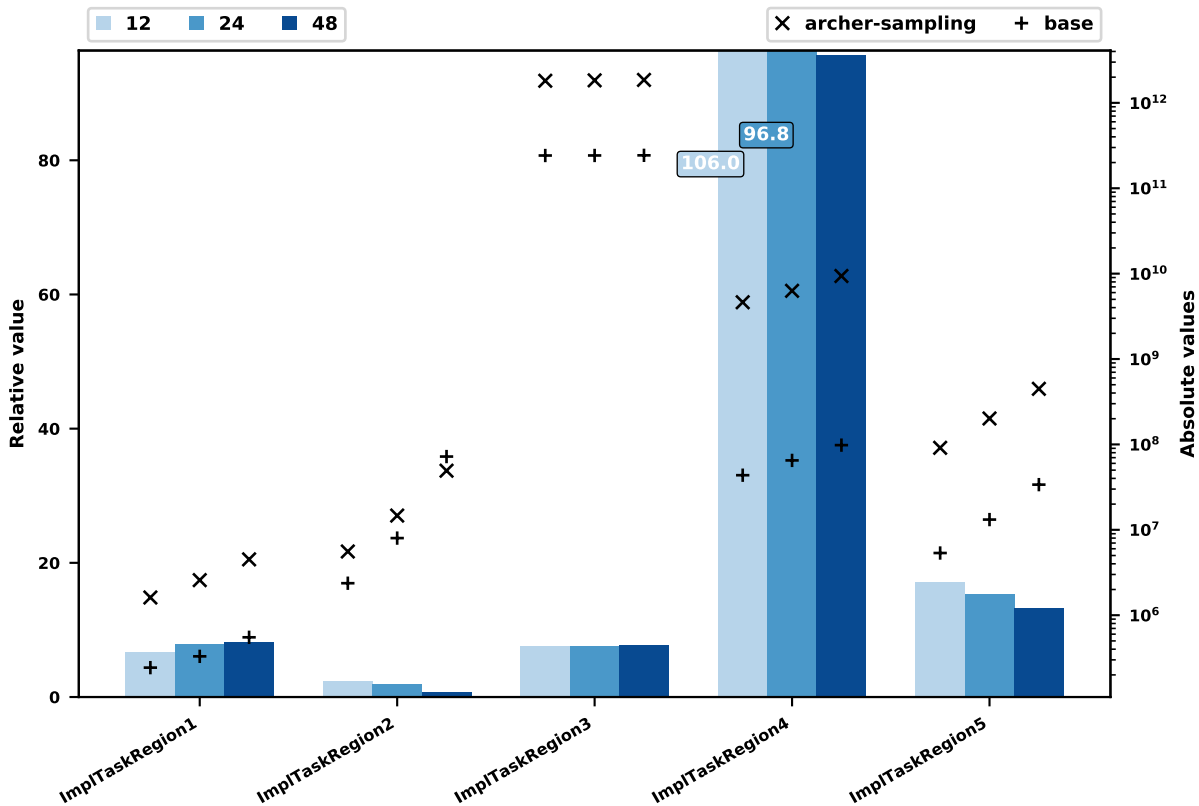


## B. Comparing 372.smithwa-tsan-sampling variant with base for metric MEM\_INST\_RETIRED:ALL\_LOADS

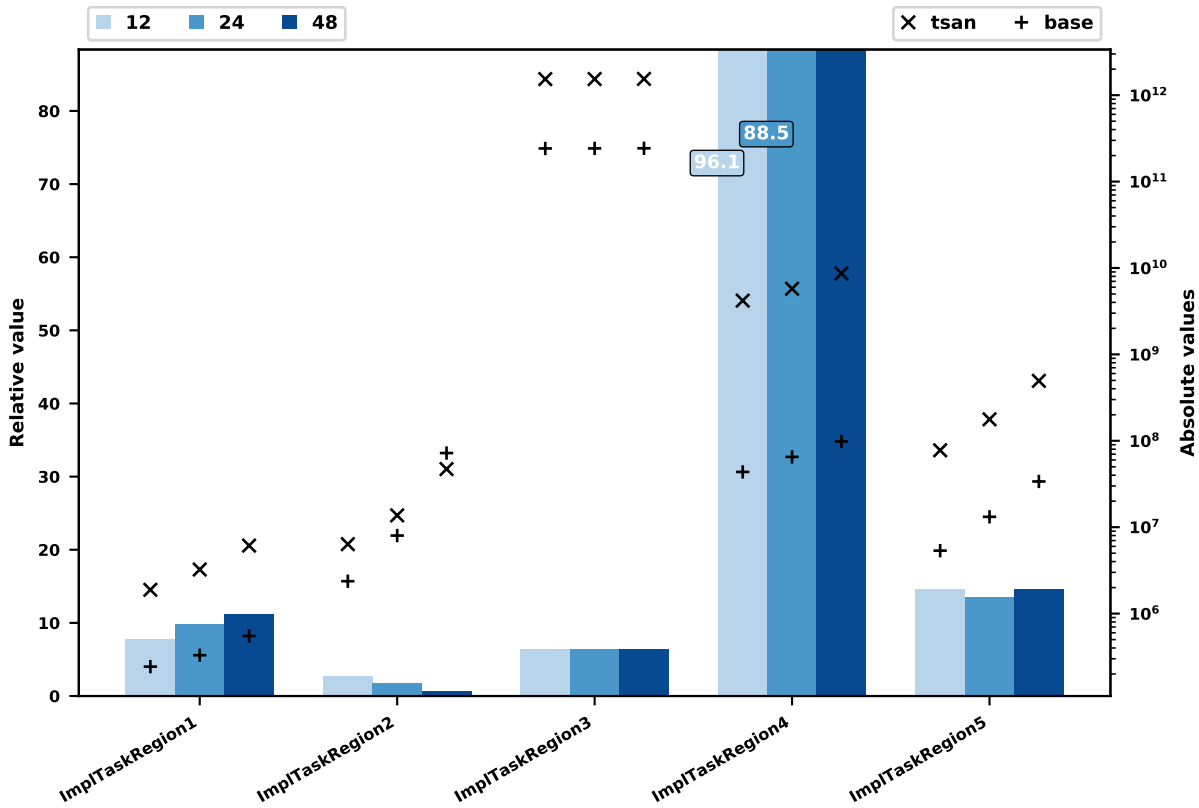




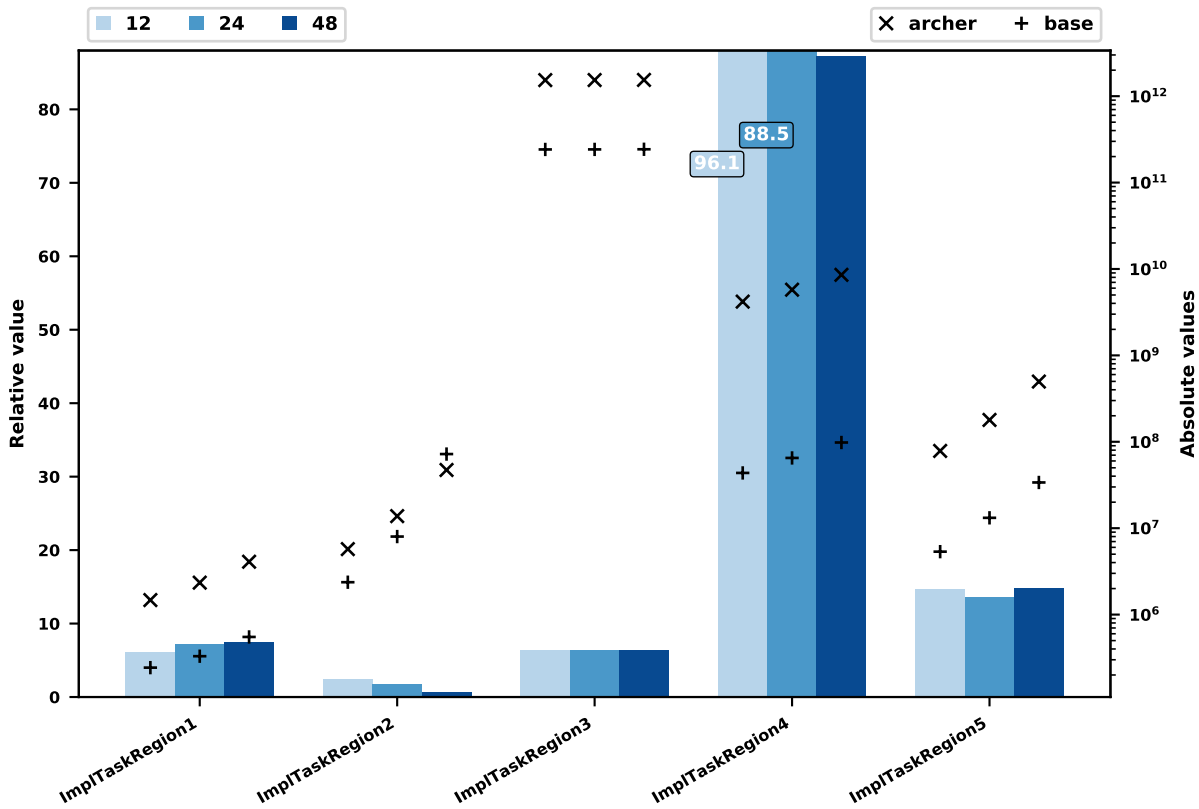
## B. Comparing 372.smithwa-archer-sampling variant with base for metric MEM\_INST\_RETIRED:ALL\_LOADS



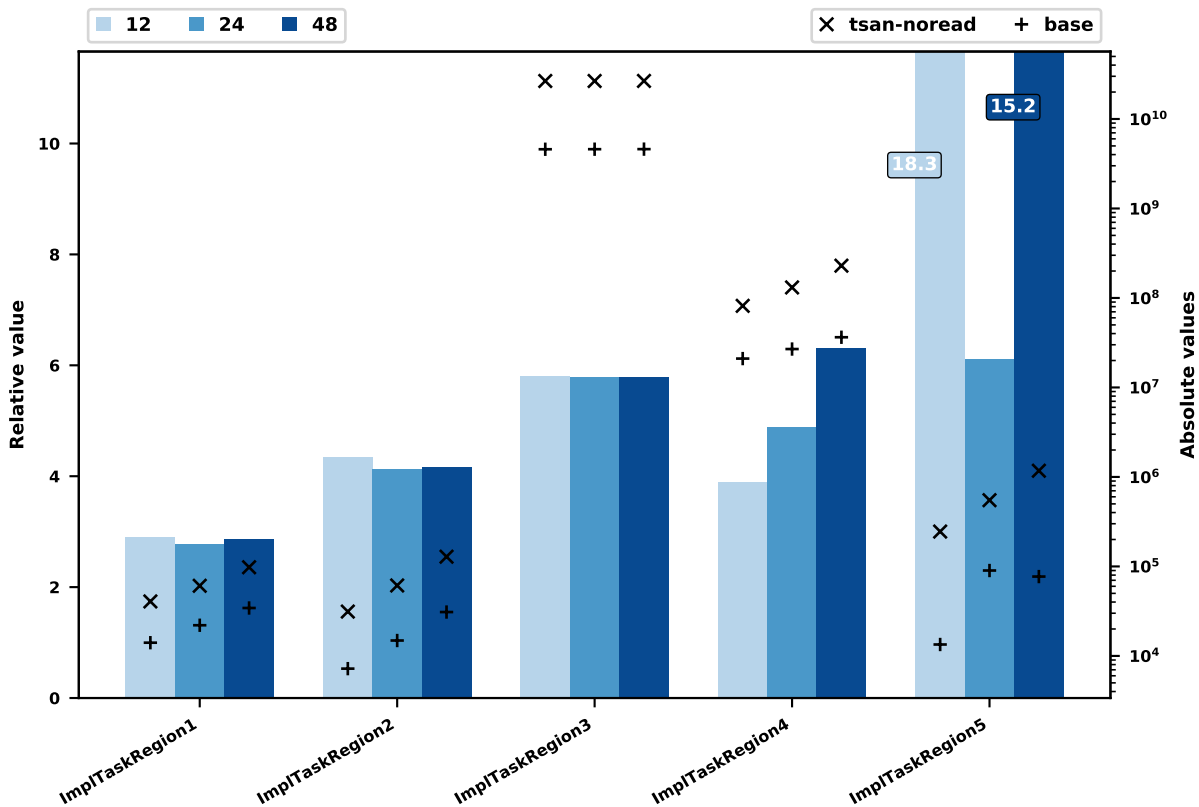
**B. Comparing 372.smithwa-tsan variant with base  
for metric MEM\_INST\_RETIRED:ALL\_LOADS**



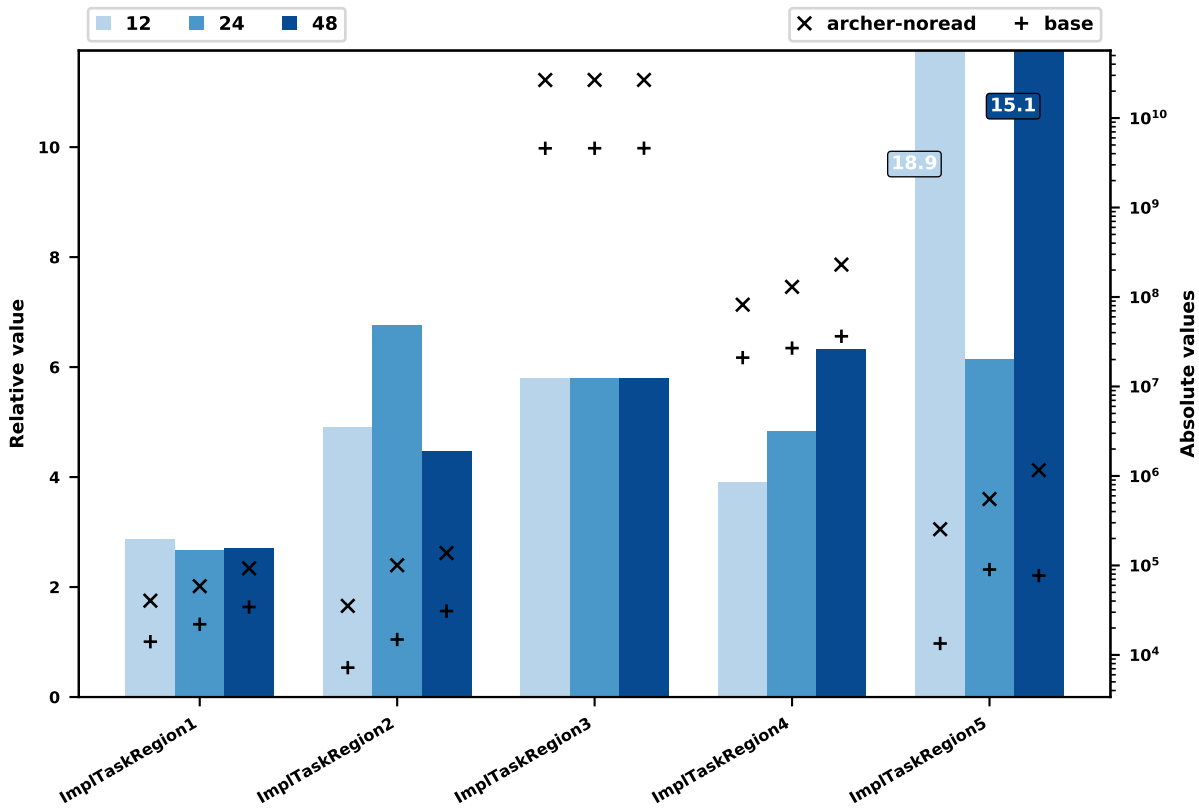
## B. Comparing 372.smithwa-archer variant with base for metric MEM\_INST\_RETIRED:ALL\_LOADS



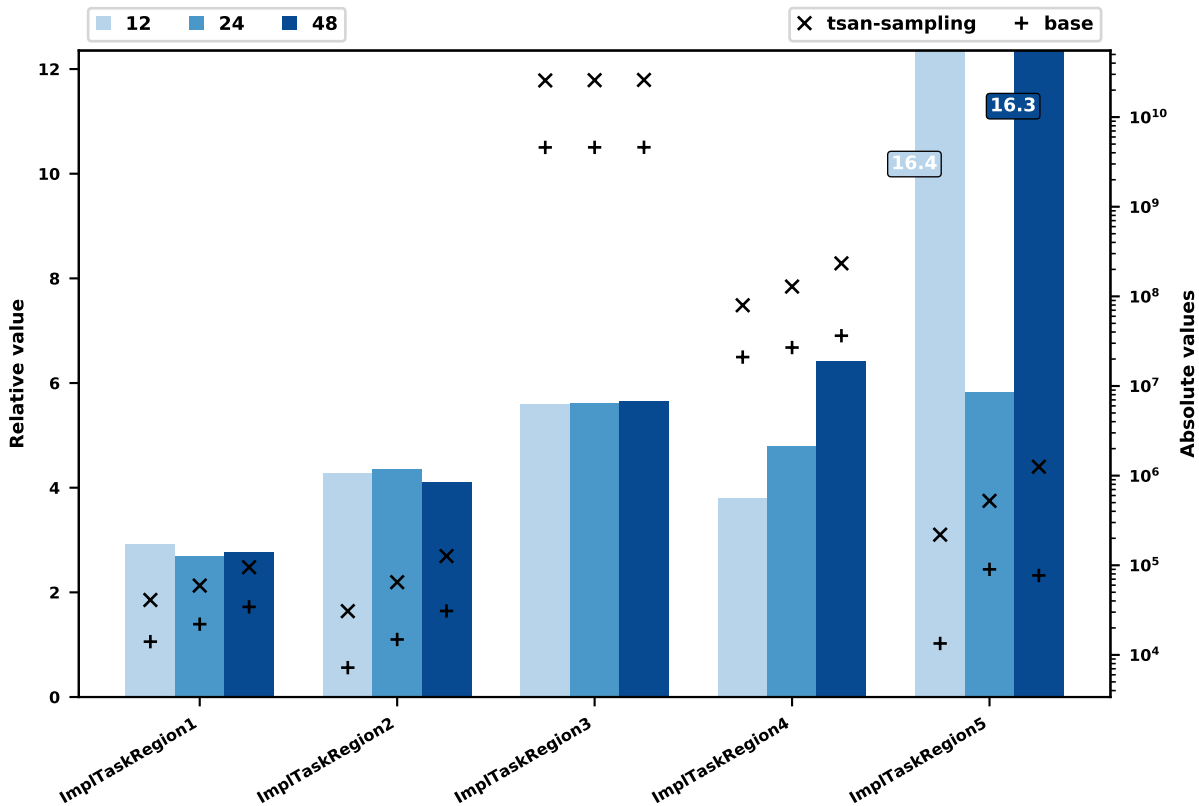
## B. Comparing 372.smithwa-tsan-noread variant with base for metric L1D:REPLACEMENT



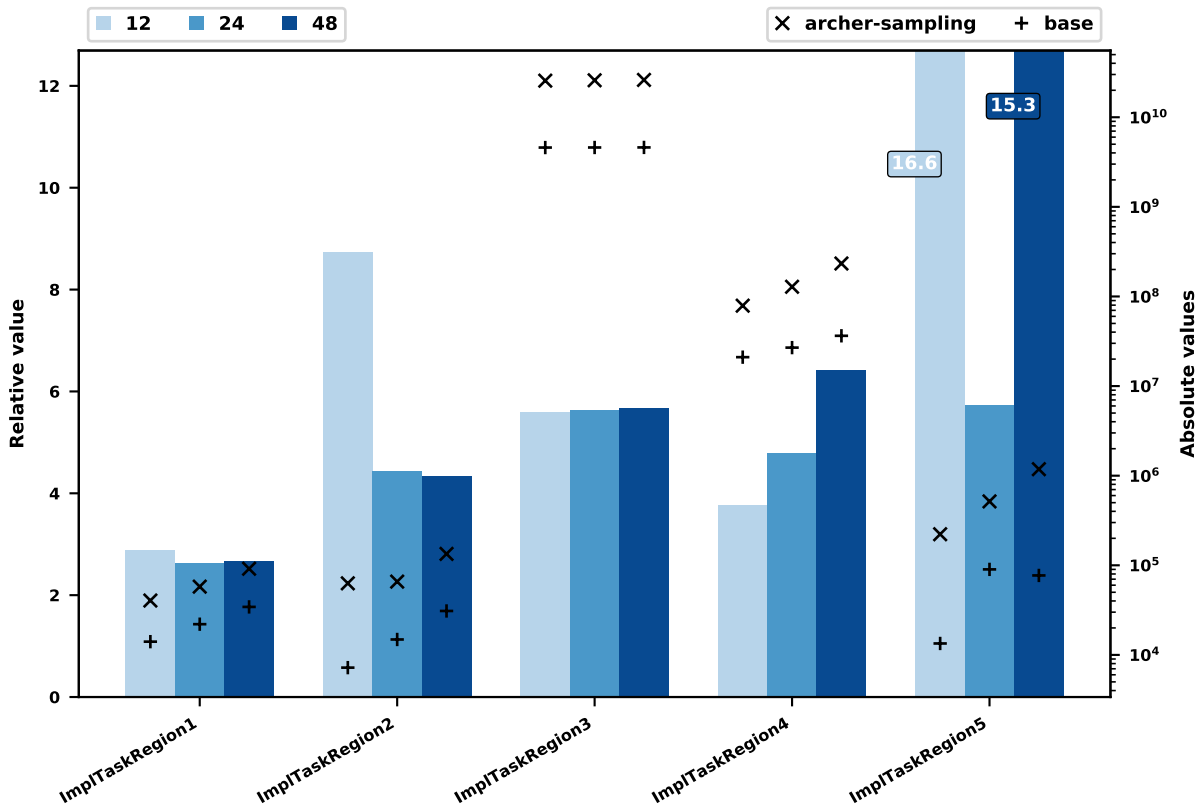
## B. Comparing 372.smithwa-archer-noread variant with base for metric L1D:REPLACEMENT



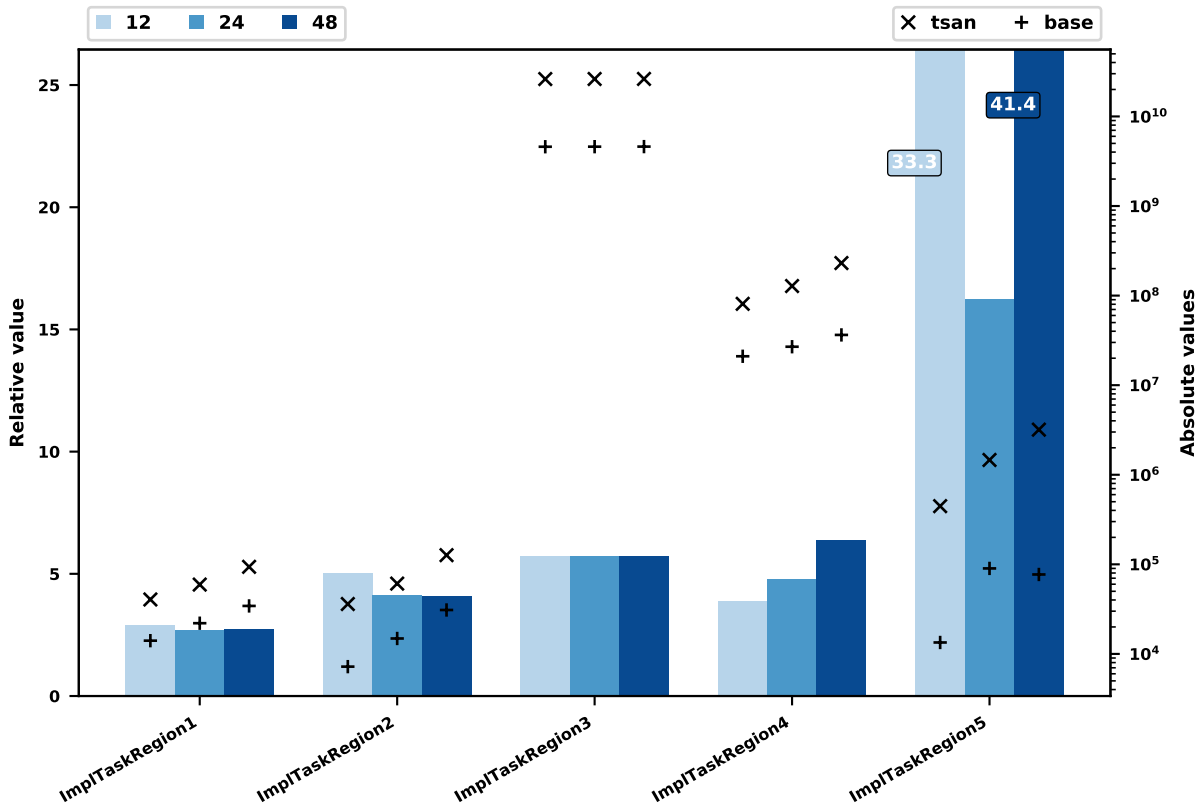
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric L1D:REPLACEMENT



## B. Comparing 372.smithwa-archer-sampling variant with base for metric L1D:REPLACEMENT

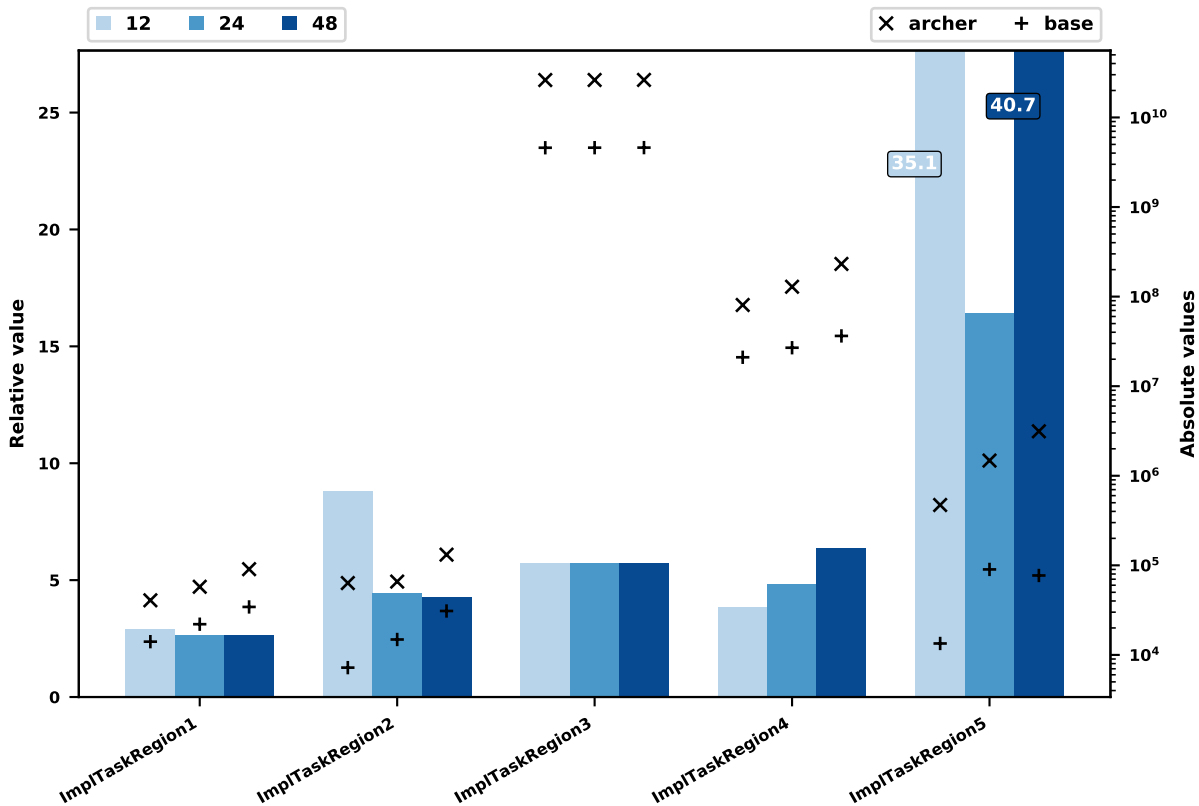


## B. Comparing 372.smithwa-tsan variant with base for metric L1D:REPLACEMENT

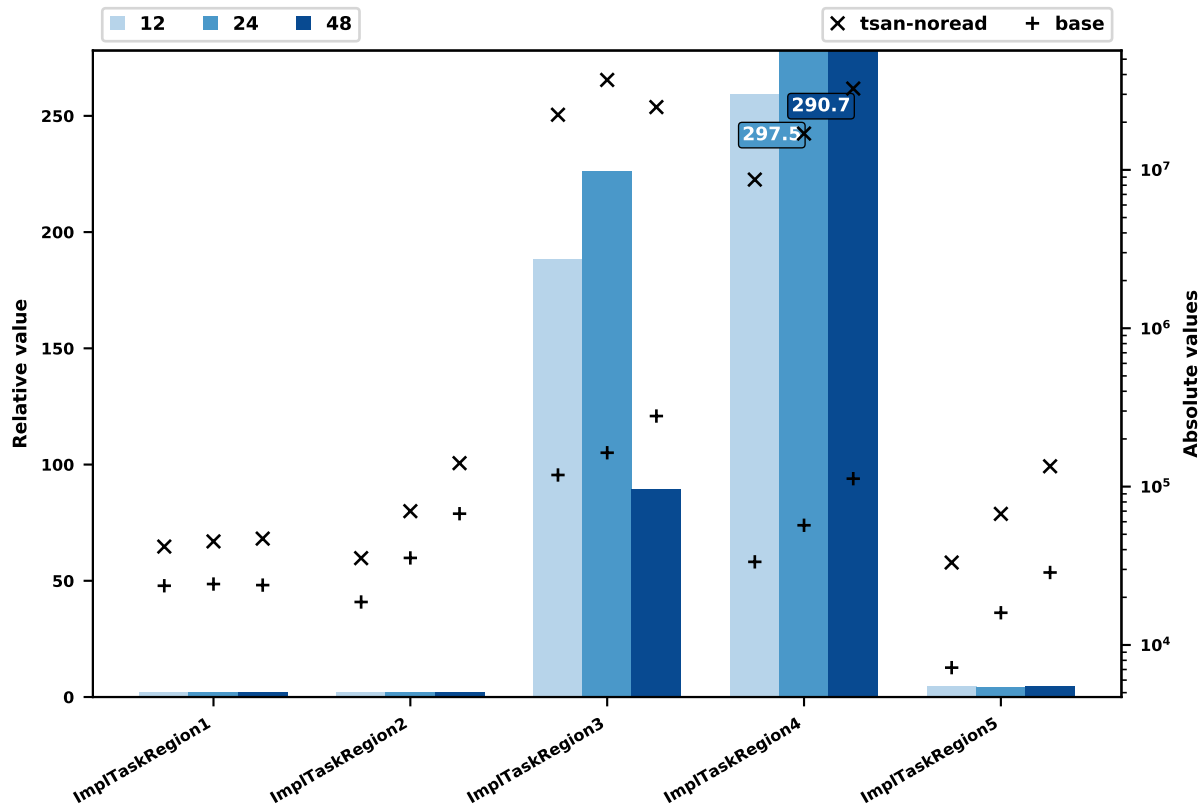




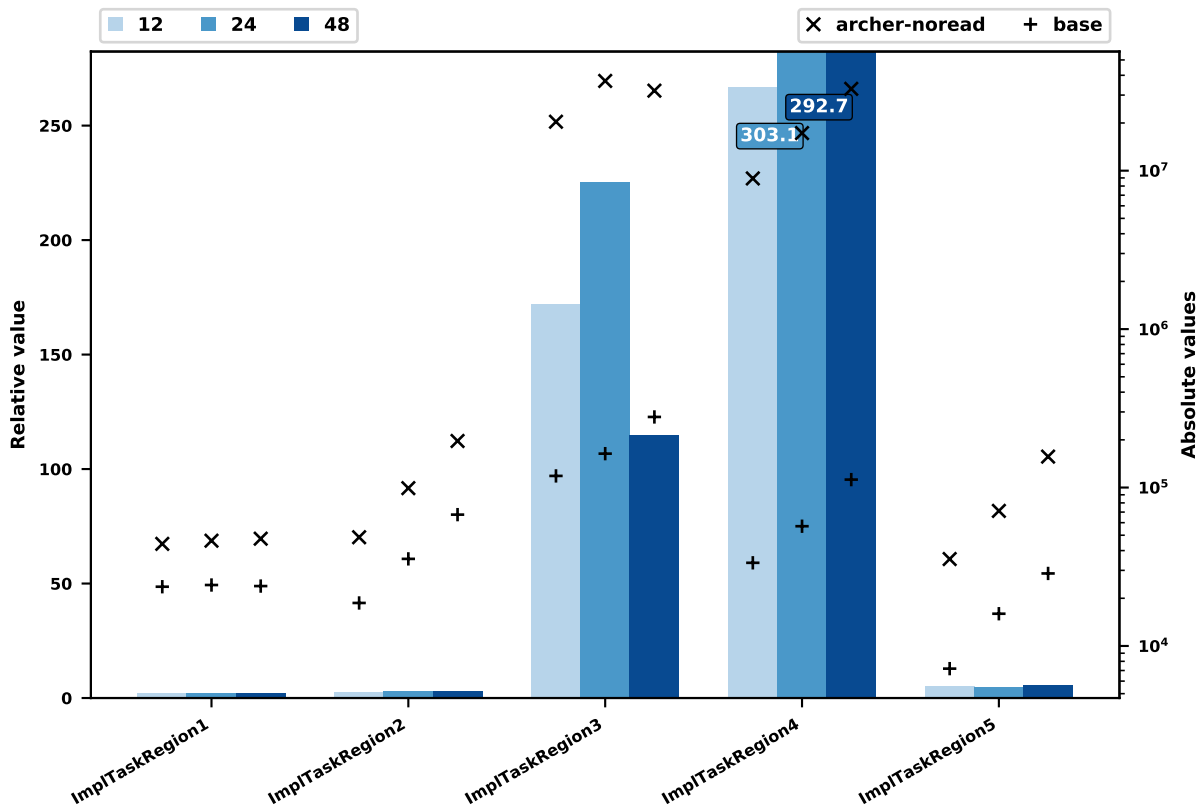
## B. Comparing 372.smithwa-archer variant with base for metric L1D:REPLACEMENT



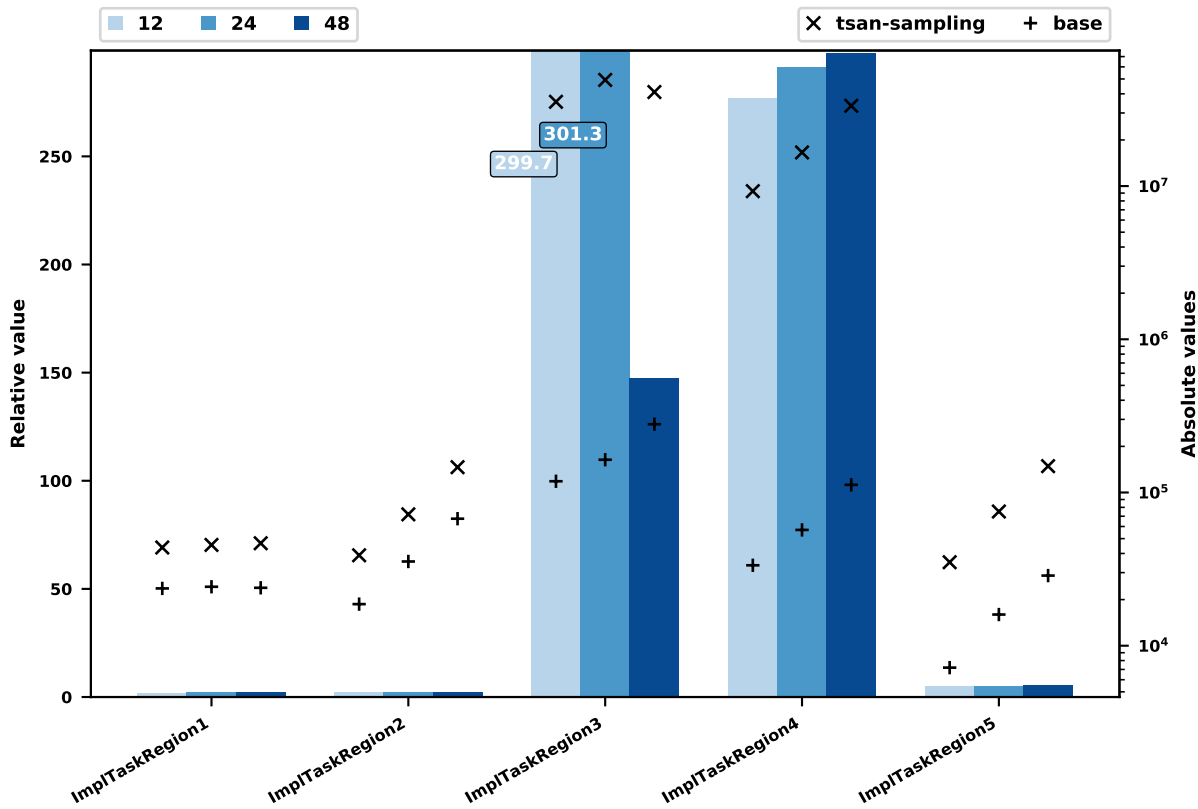
## B. Comparing 372.smithwa-tsan-noread variant with base for metric L2\_RQSTS:ALL\_CODE\_RD



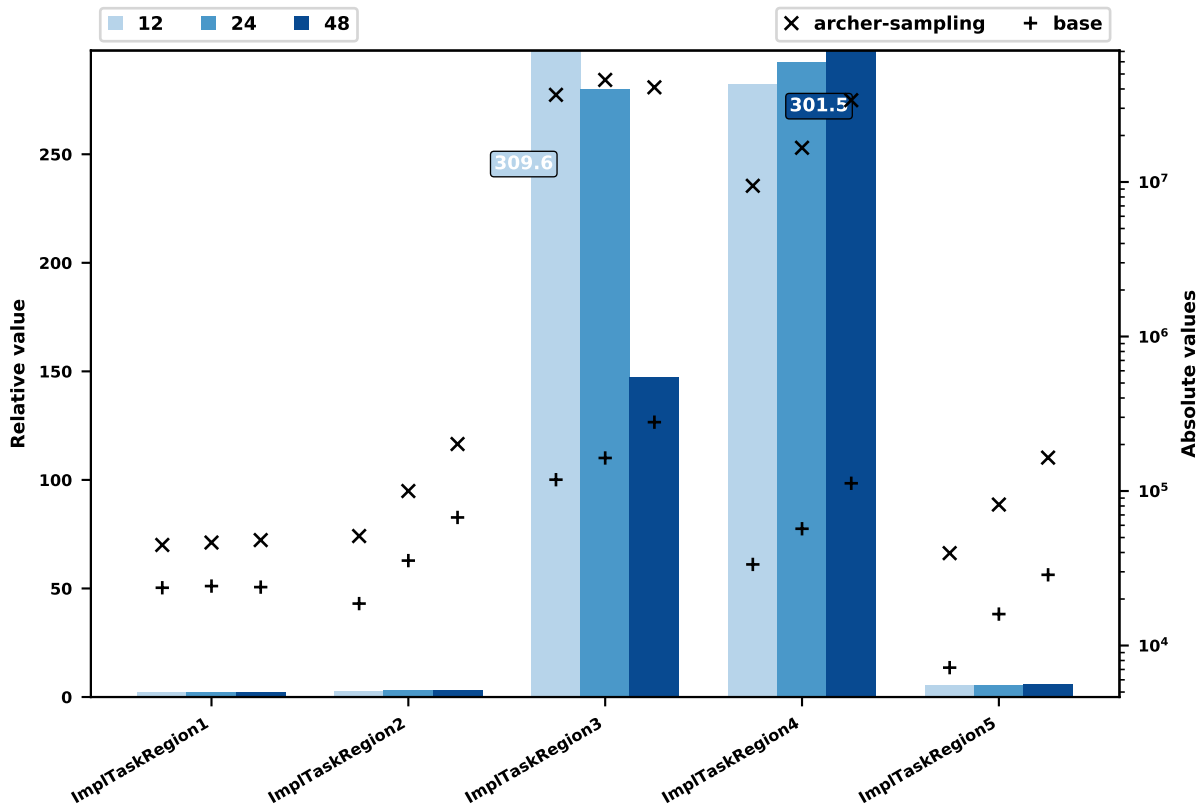
## B. Comparing 372.smithwa-archer-noread variant with base for metric L2\_RQSTS:ALL\_CODE\_RD



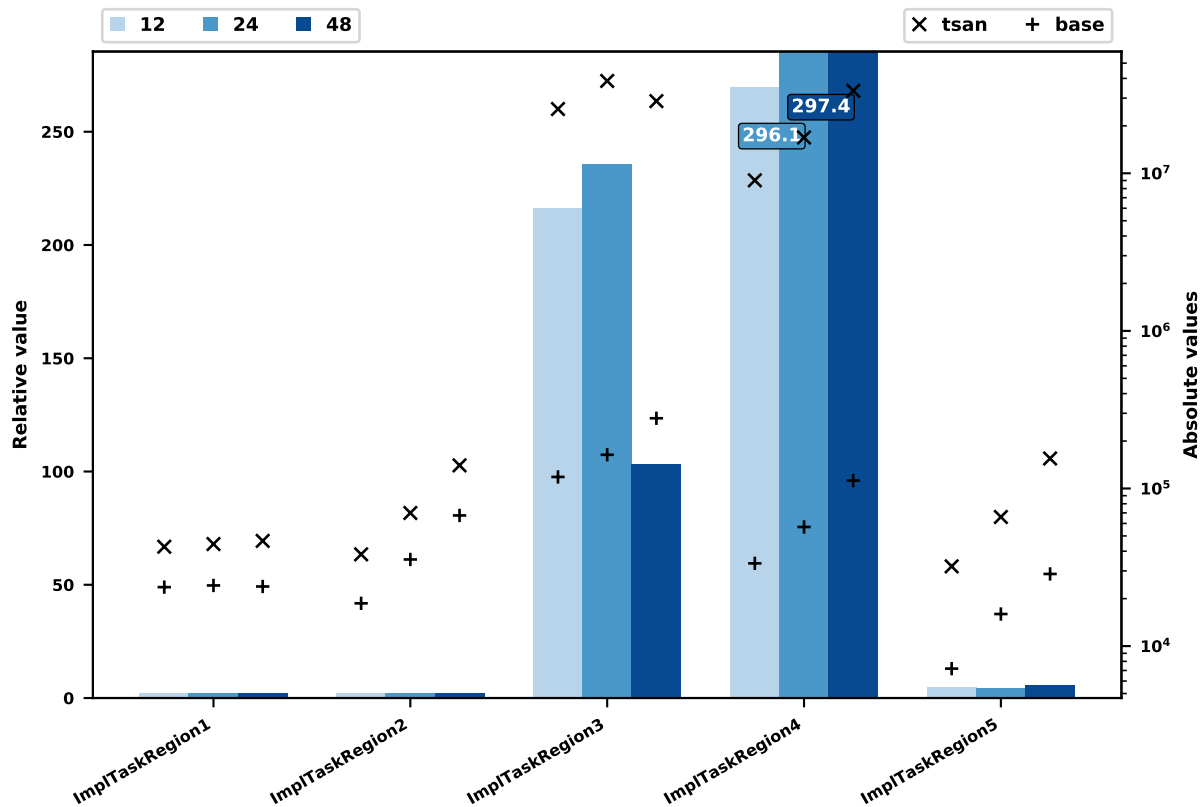
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric L2\_RQSTS:ALL\_CODE\_RD



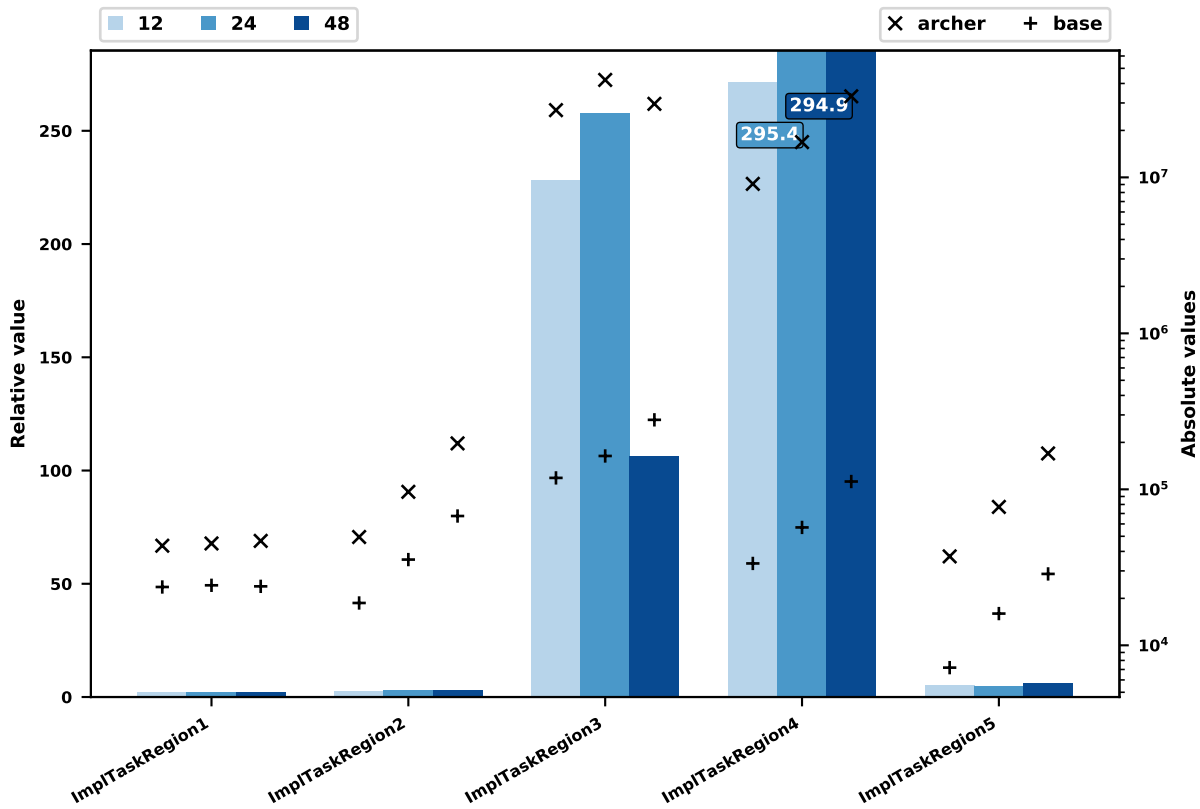
## B. Comparing 372.smithwa-archer-sampling variant with base for metric L2\_RQSTS:ALL\_CODE\_RD



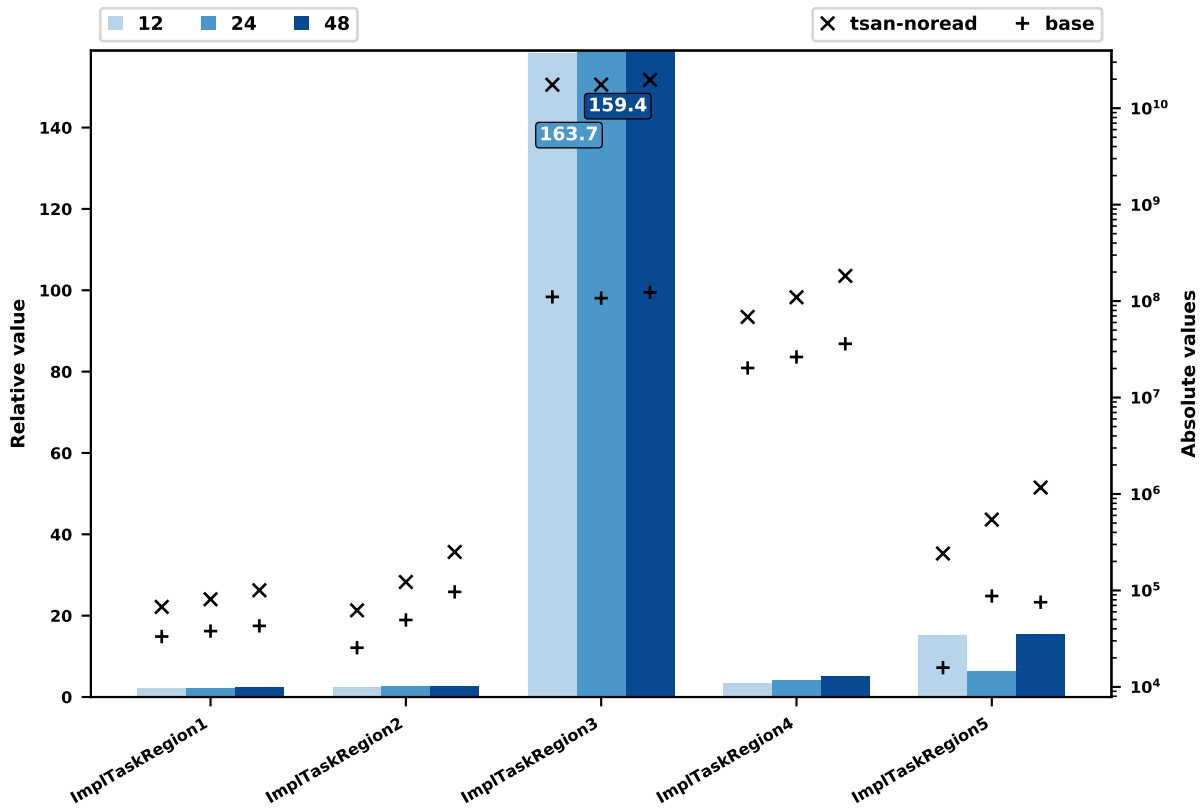
## B. Comparing 372.smithwa-tsan variant with base for metric L2\_RQSTS:ALL\_CODE\_RD



## B. Comparing 372.smithwa-archer variant with base for metric L2\_RQSTS:ALL\_CODE\_RD

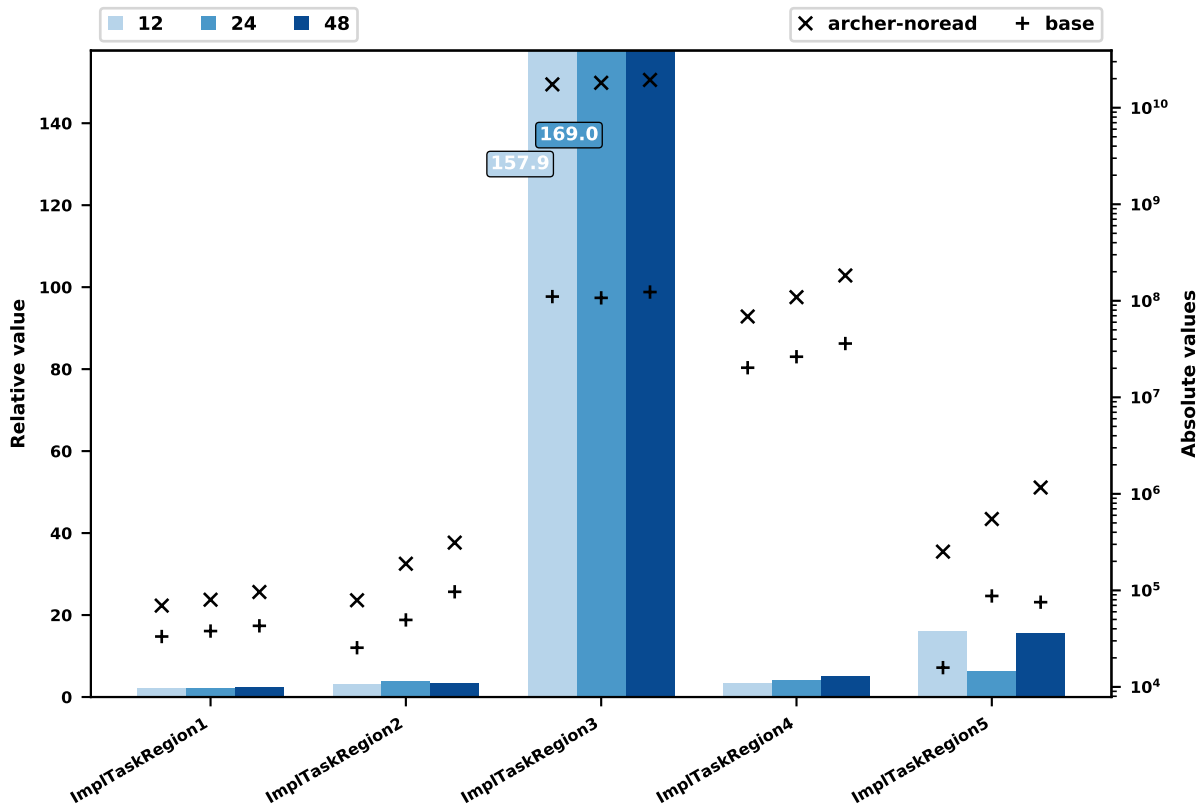


## B. Comparing 372.smithwa-tsan-noread variant with base for metric L2\_RQSTS:ALL\_DEMAND\_REFERENCES

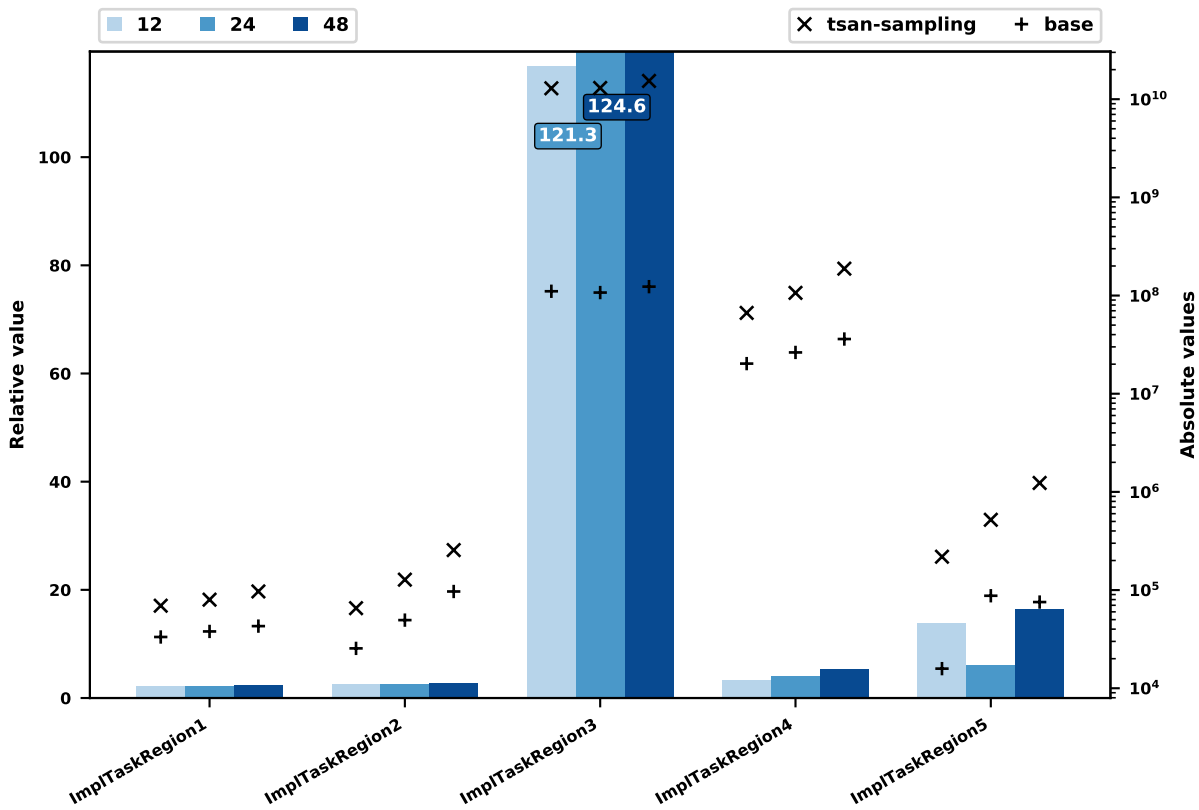




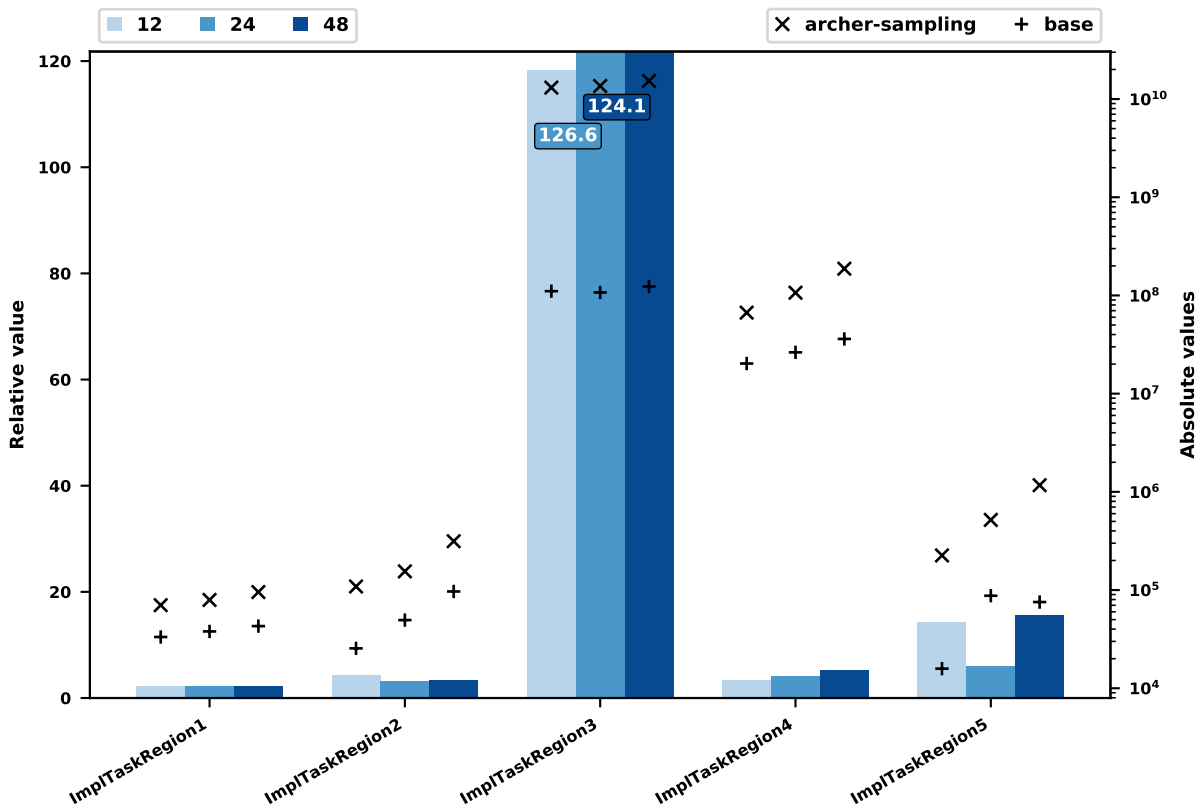
## B. Comparing 372.smithwa-archer-nored variant with base for metric L2\_RQSTS:ALL\_DEMAND\_REFERENCES



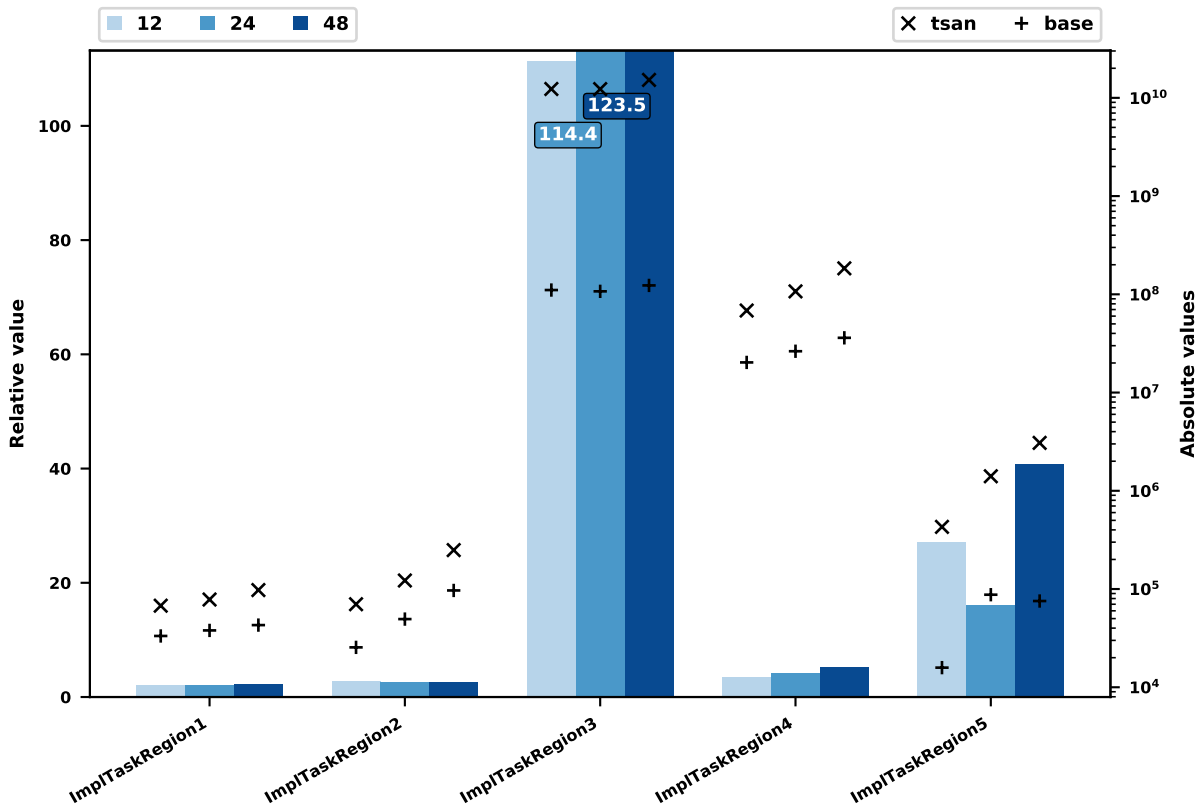
# B. Comparing 372.smithwa-tsan-sampling variant with base for metric L2\_RQSTS:ALL\_DEMAND\_REFERENCES



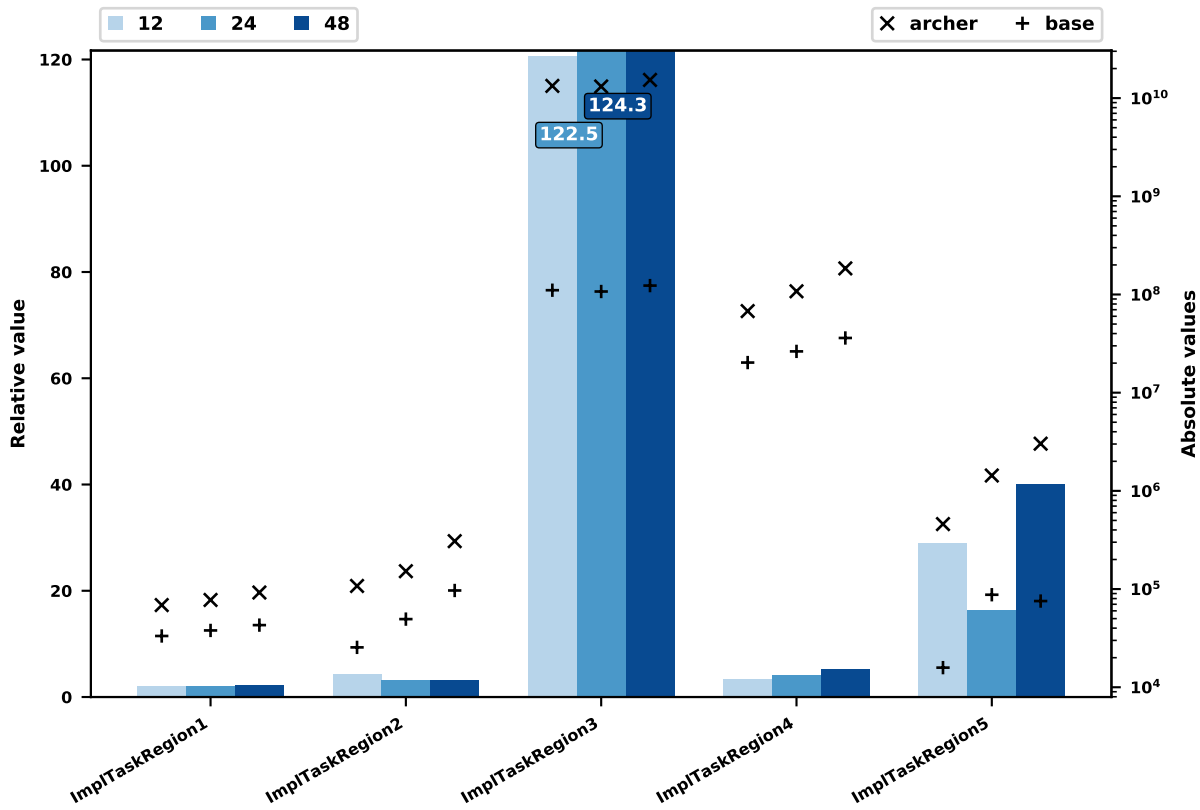
## B. Comparing 372.smithwa-archer-sampling variant with base for metric L2\_RQSTS:ALL\_DEMAND\_REFERENCES



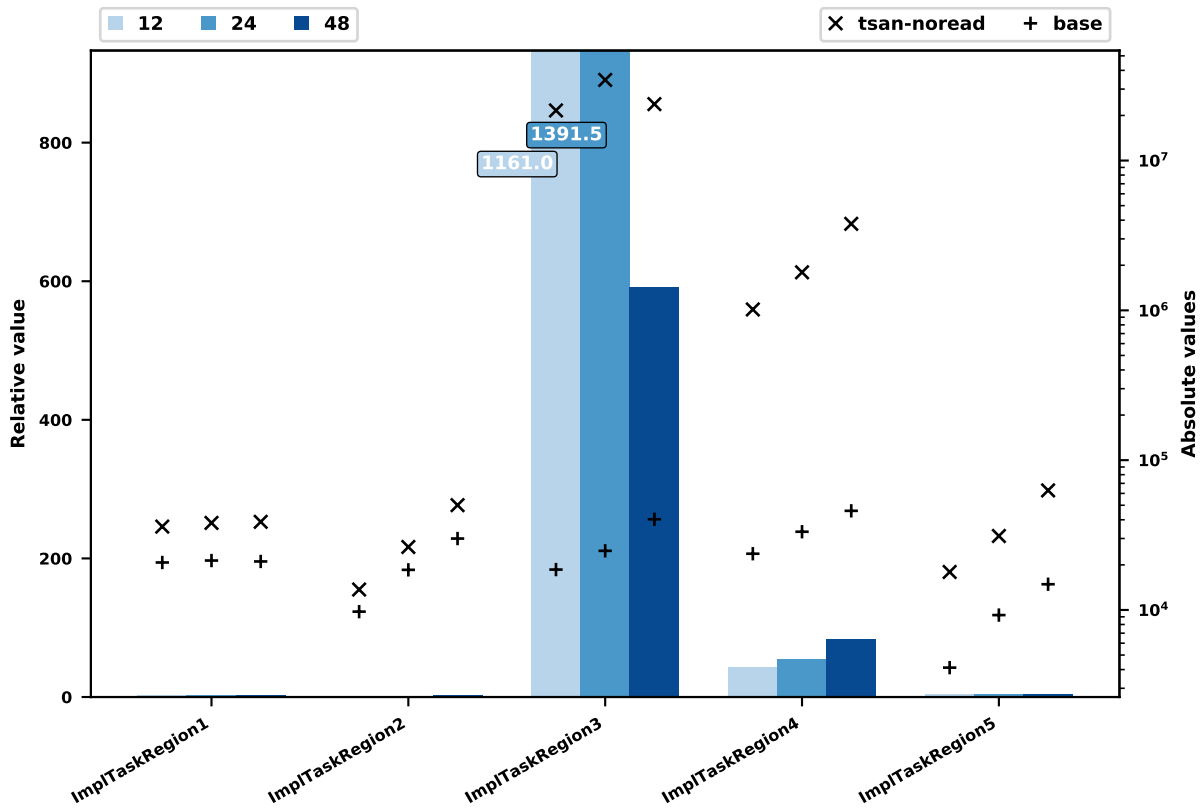
## B. Comparing 372.smithwa-tsan variant with base for metric L2\_RQSTS:ALL\_DEMAND\_REFERENCES



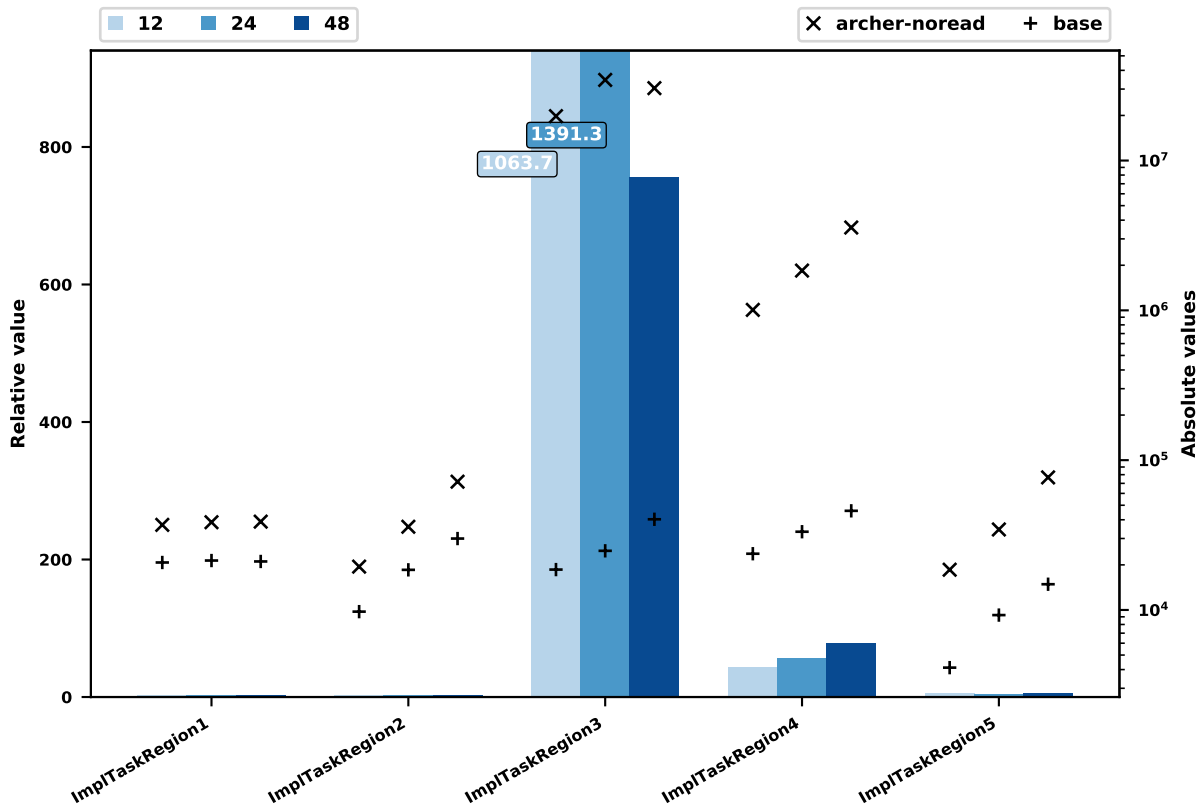
**B. Comparing 372.smithwa-archer variant with base  
for metric L2\_RQSTS:ALL\_DEMAND\_REFERENCES**



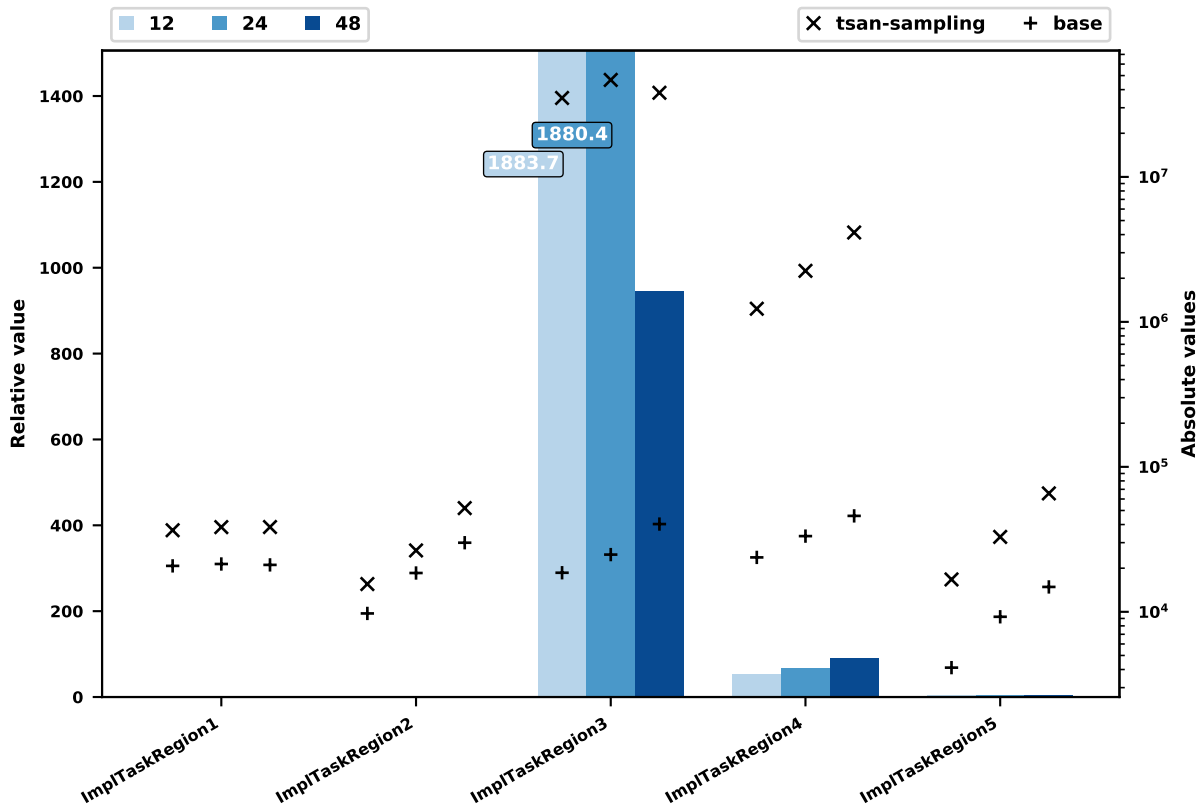
## B. Comparing 372.smithwa-tsan-noread variant with base for metric L2\_RQSTS:CODE\_RD\_MISS



## B. Comparing 372.smithwa-archer-noread variant with base for metric L2\_RQSTS:CODE\_RD\_MISS

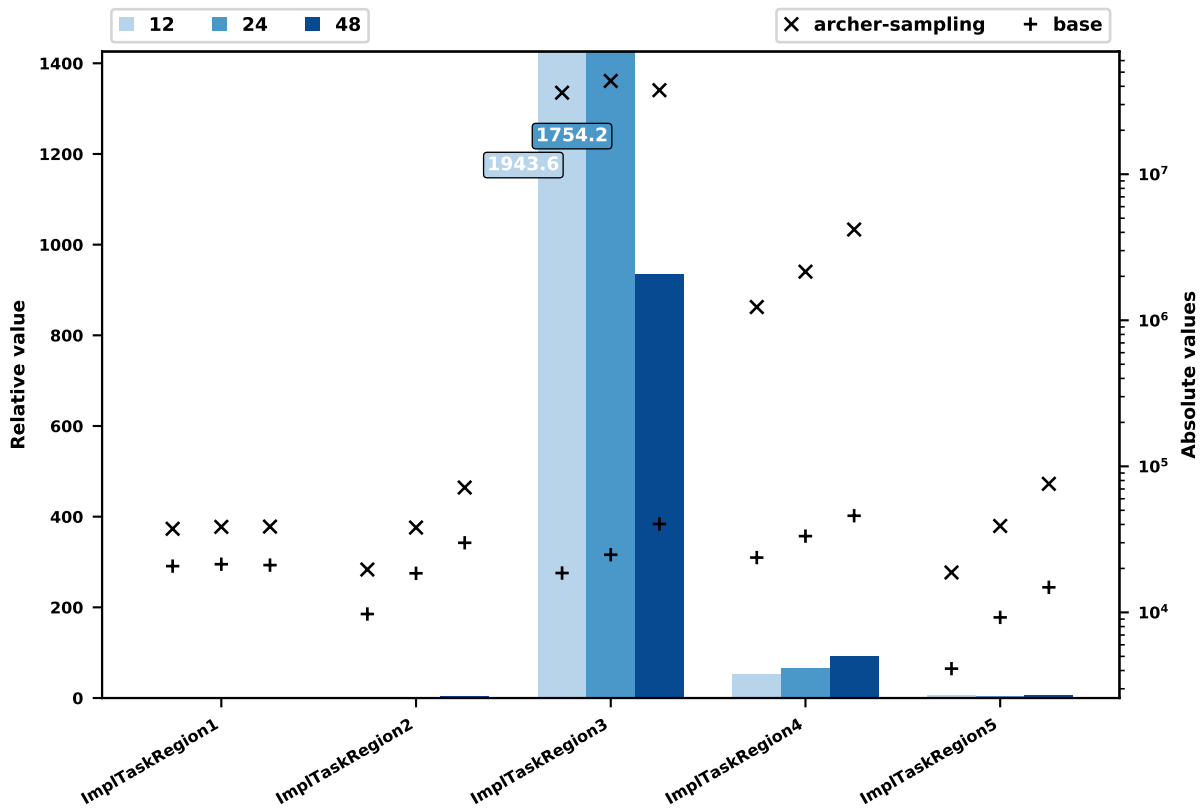


## B. Comparing 372.smithwa-tsan-sampling variant with base for metric L2\_RQSTS:CODE\_RD\_MISS

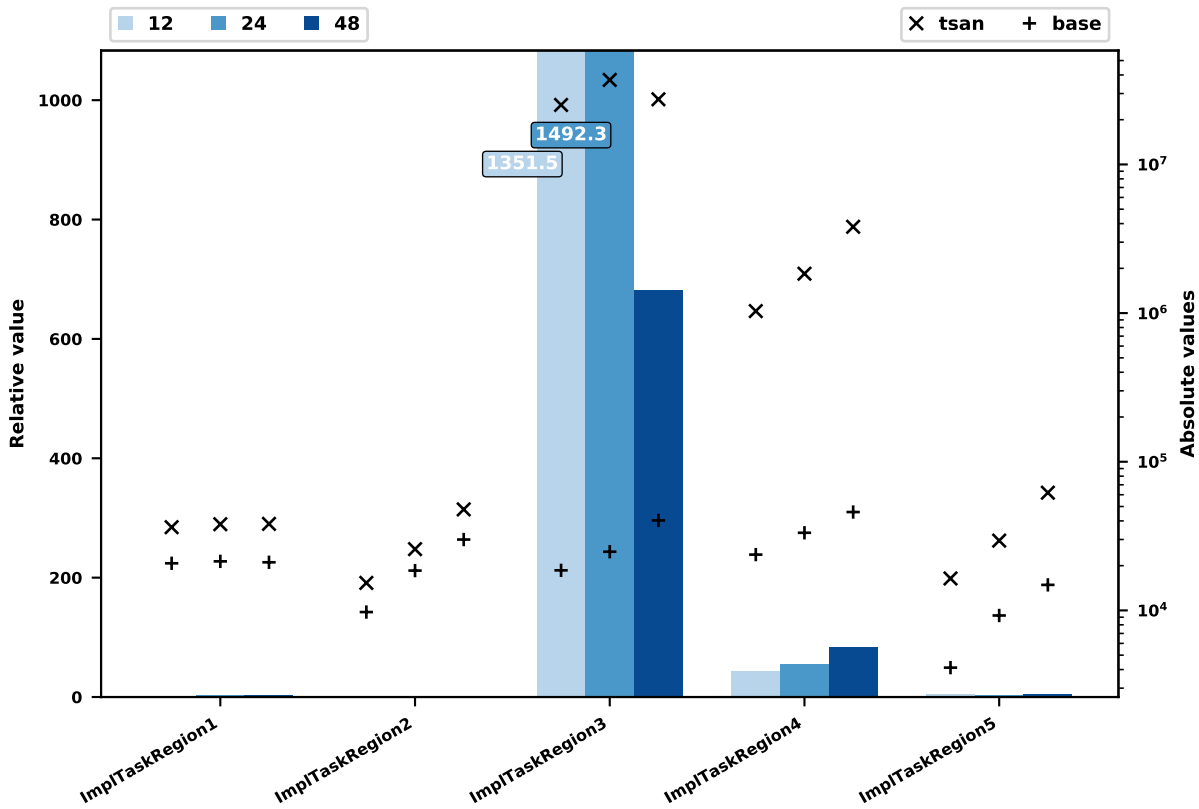




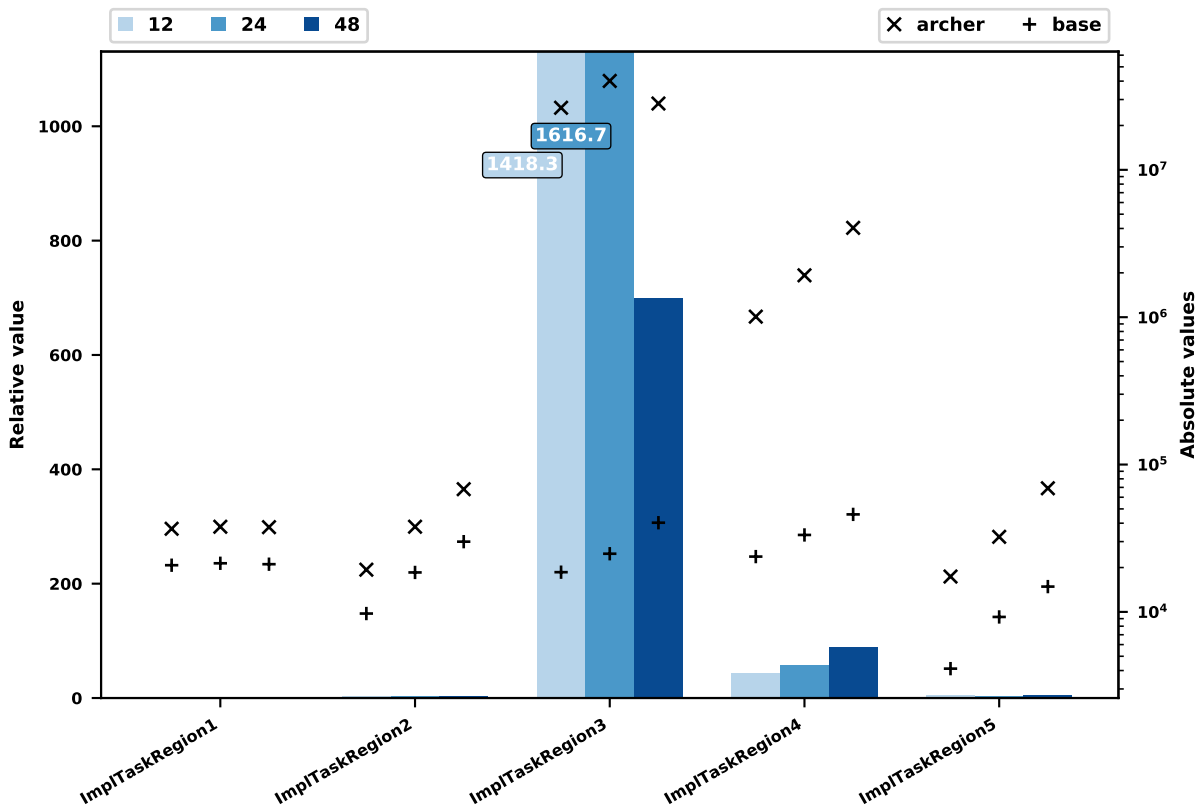
## B. Comparing 372.smithwa-archer-sampling variant with base for metric L2\_RQSTS:CODE\_RD\_MISS



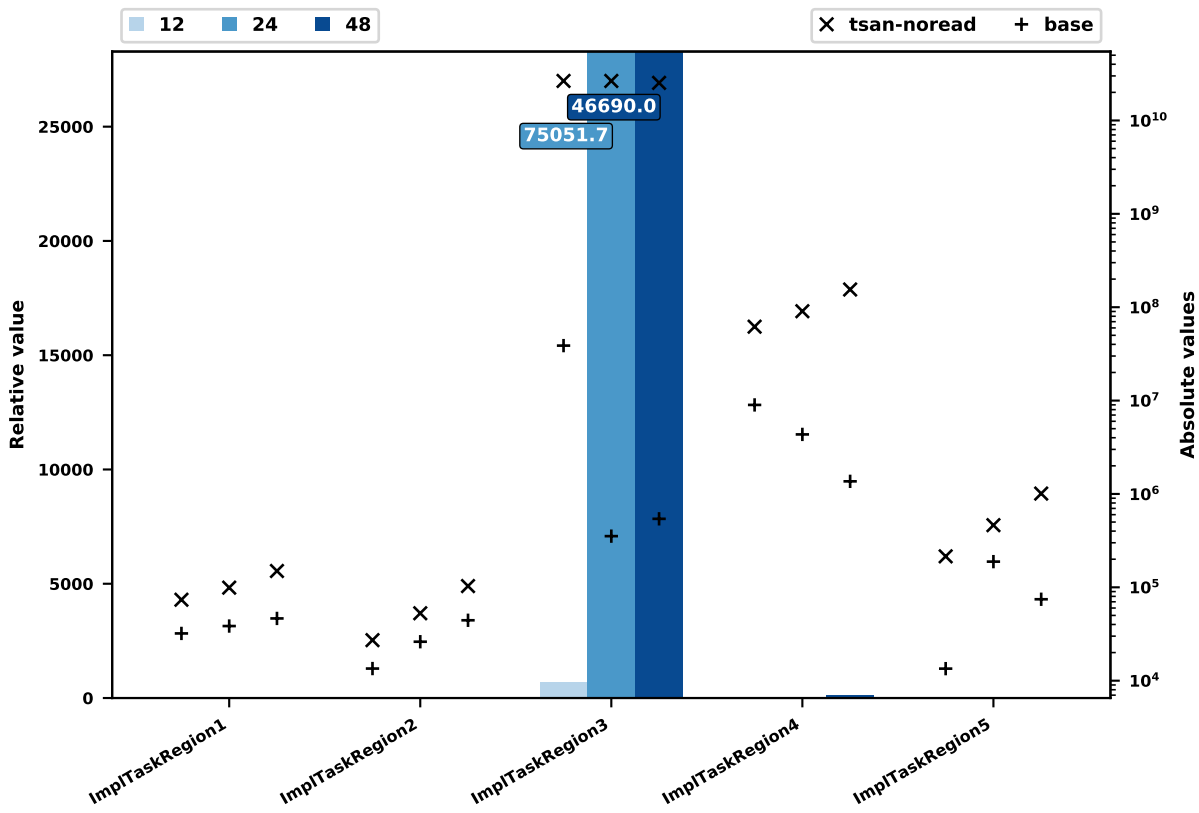
**B. Comparing 372.smithwa-tsan variant with base  
for metric L2\_RQSTS:CODE\_RD\_MISS**



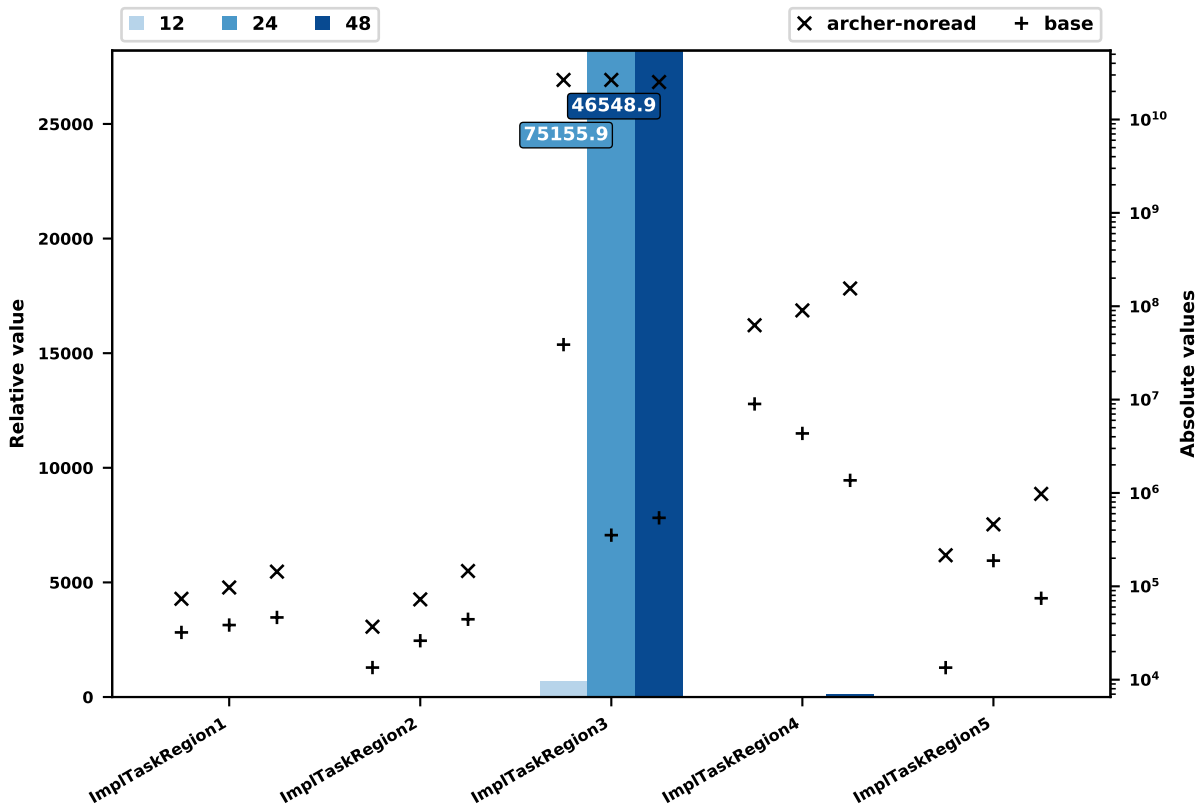
## B. Comparing 372.smithwa-archer variant with base for metric L2\_RQSTS:CODE\_RD\_MISS



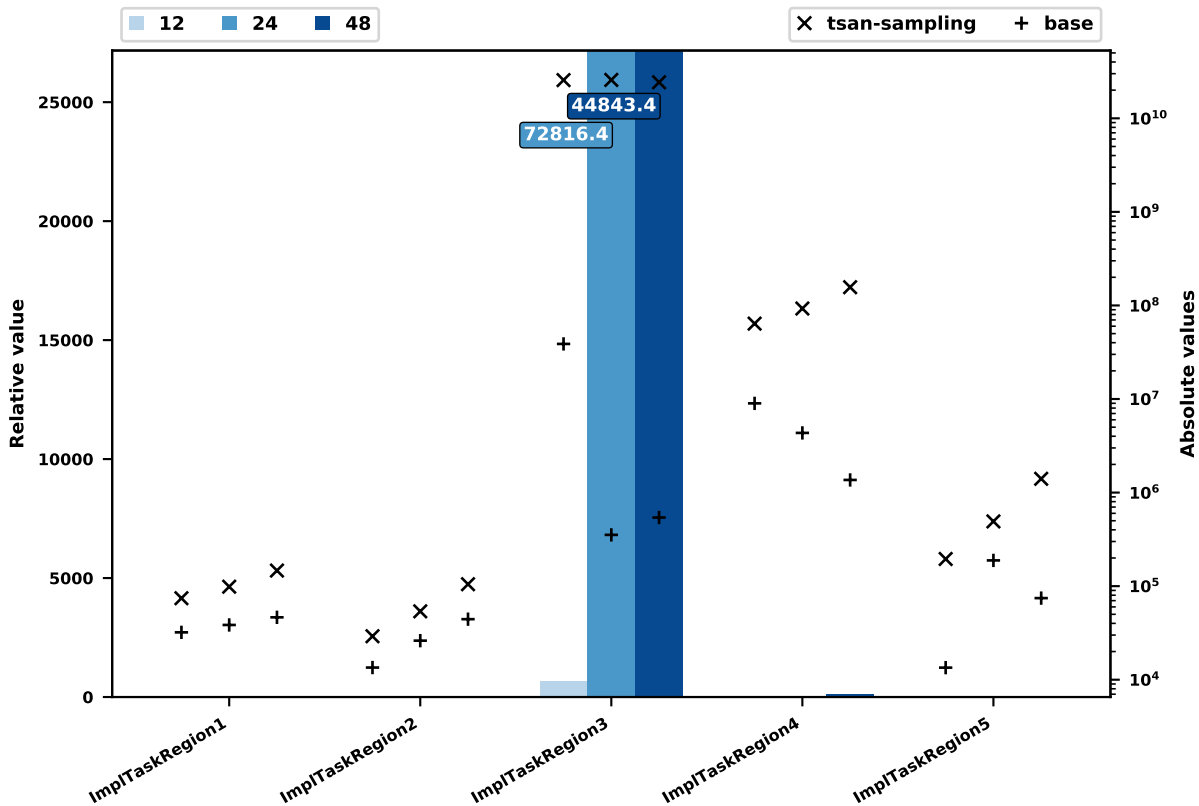
## B. Comparing 372.smithwa-tsan-noread variant with base for metric LLC\_REFERENCES



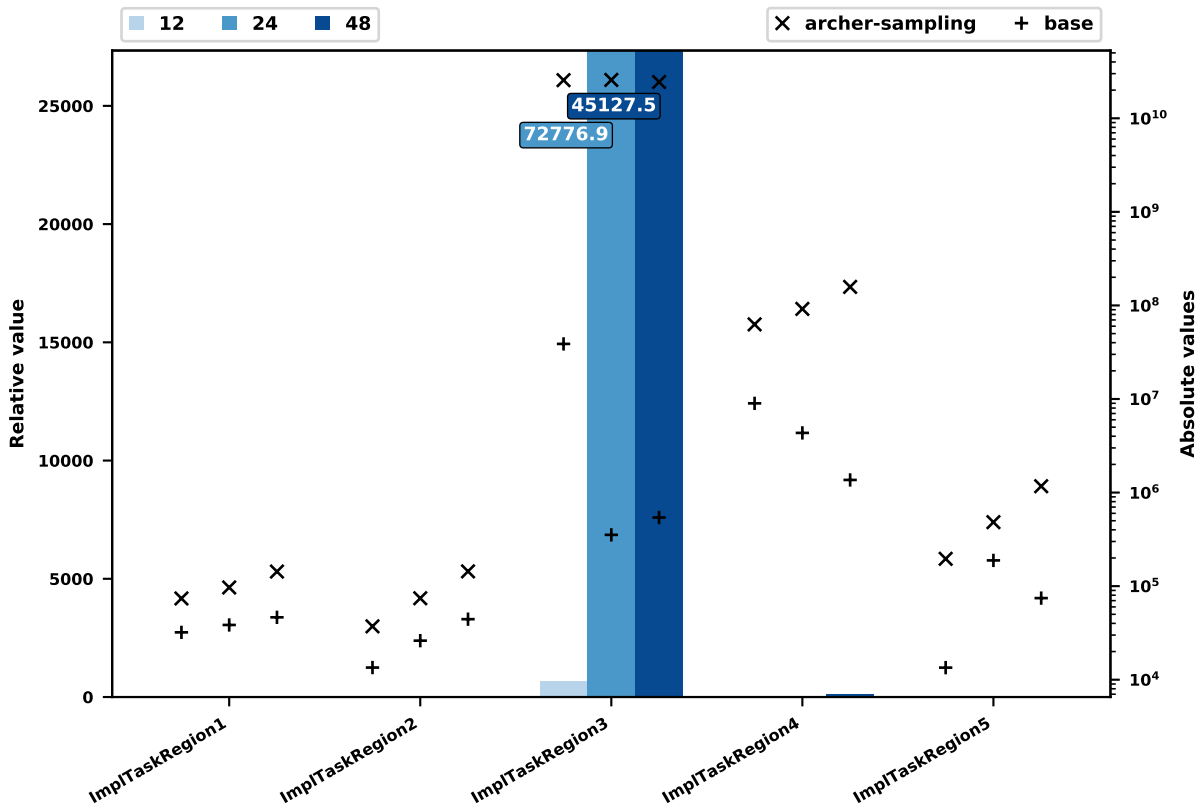
## B. Comparing 372.smithwa-archer-noread variant with base for metric LLC\_REFERENCES



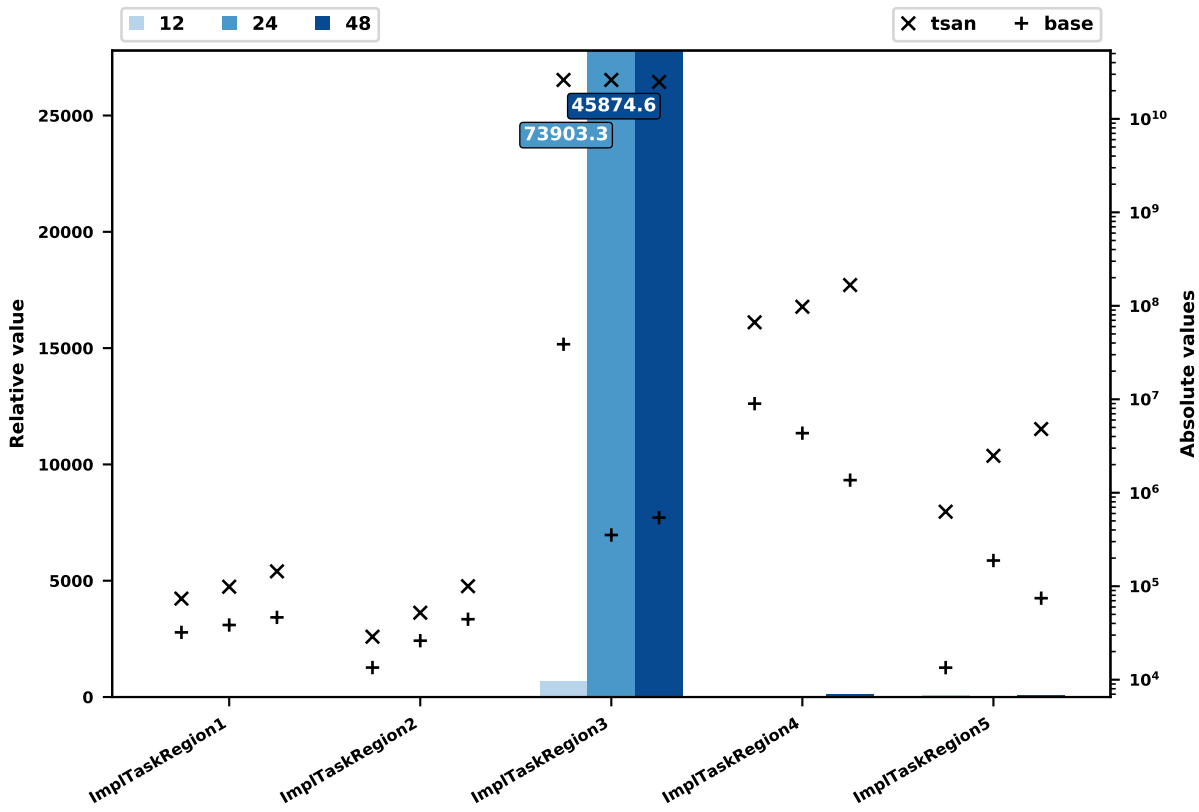
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric LLC\_REFERENCES



## B. Comparing 372.smithwa-archer-sampling variant with base for metric LLC\_REFERENCES

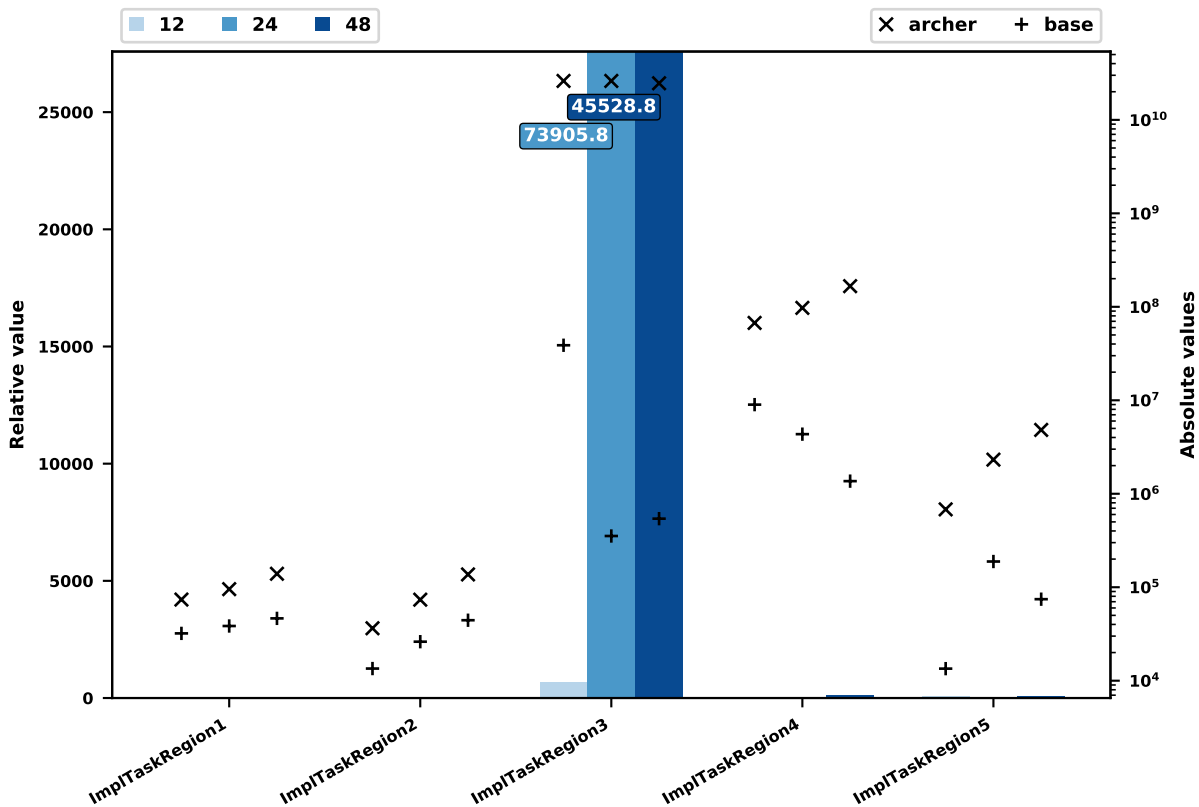


## B. Comparing 372.smithwa-tsan variant with base for metric LLC\_REFERENCES

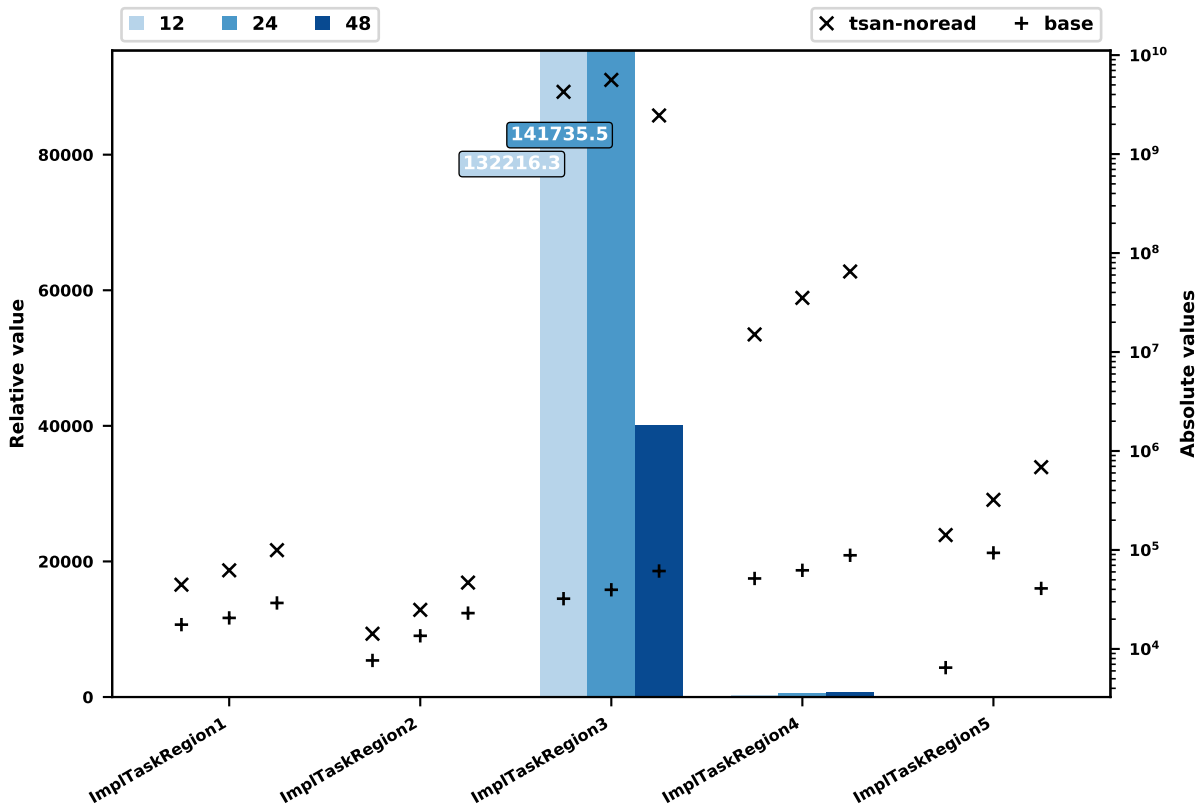




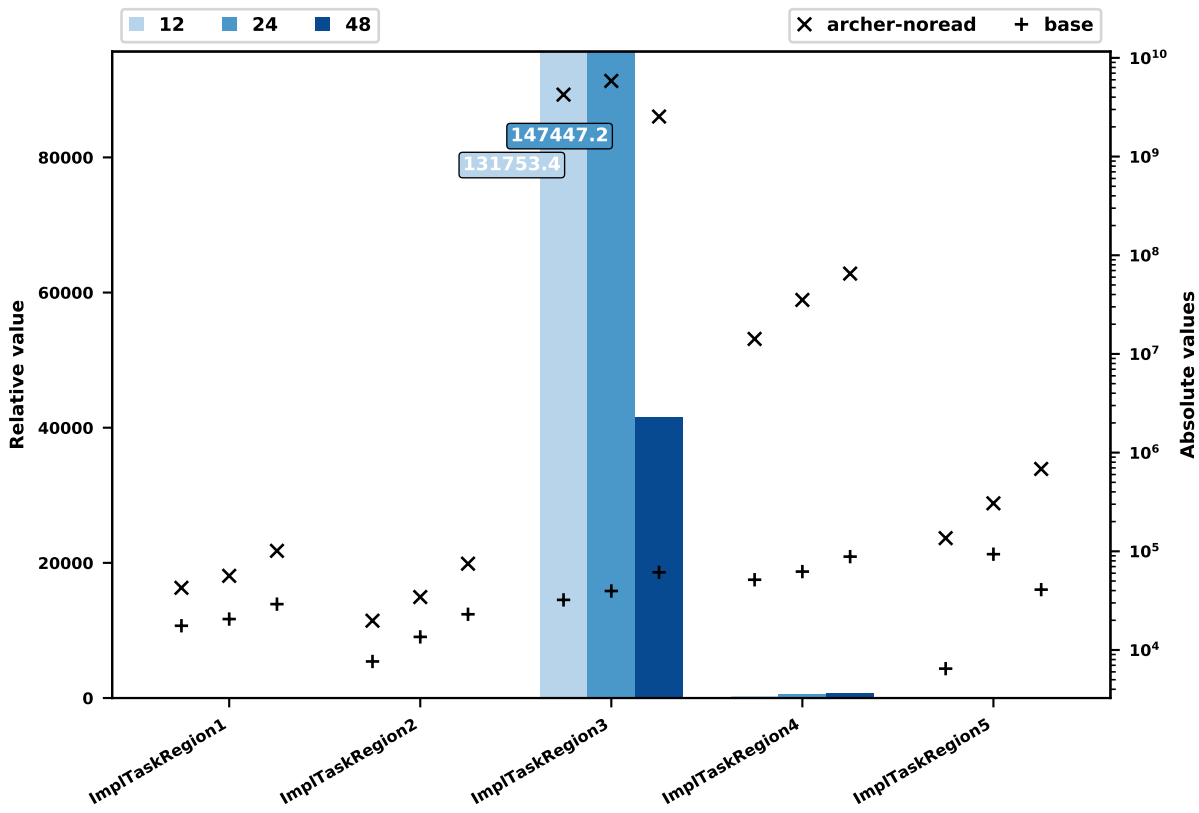
## B. Comparing 372.smithwa-archer variant with base for metric LLC\_REFERENCES



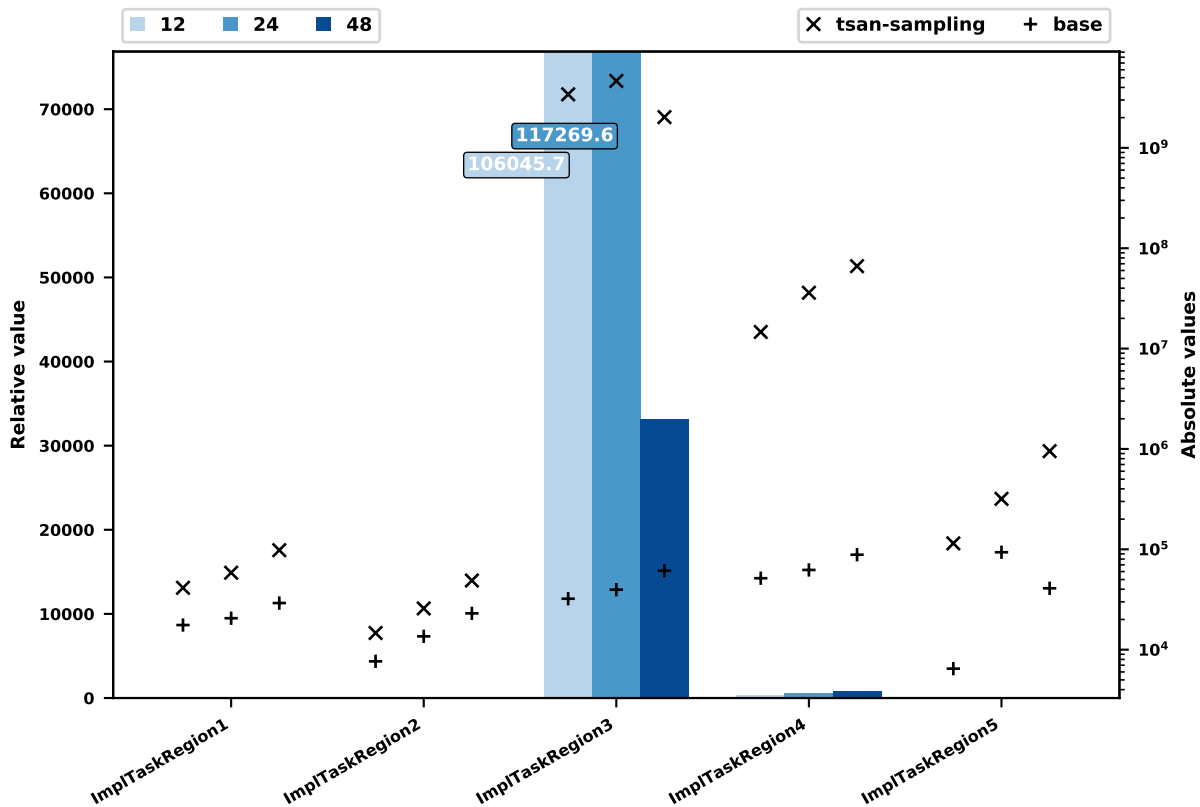
**B. Comparing 372.smithwa-tsan-noread variant with base  
for metric LLC\_MISSES**



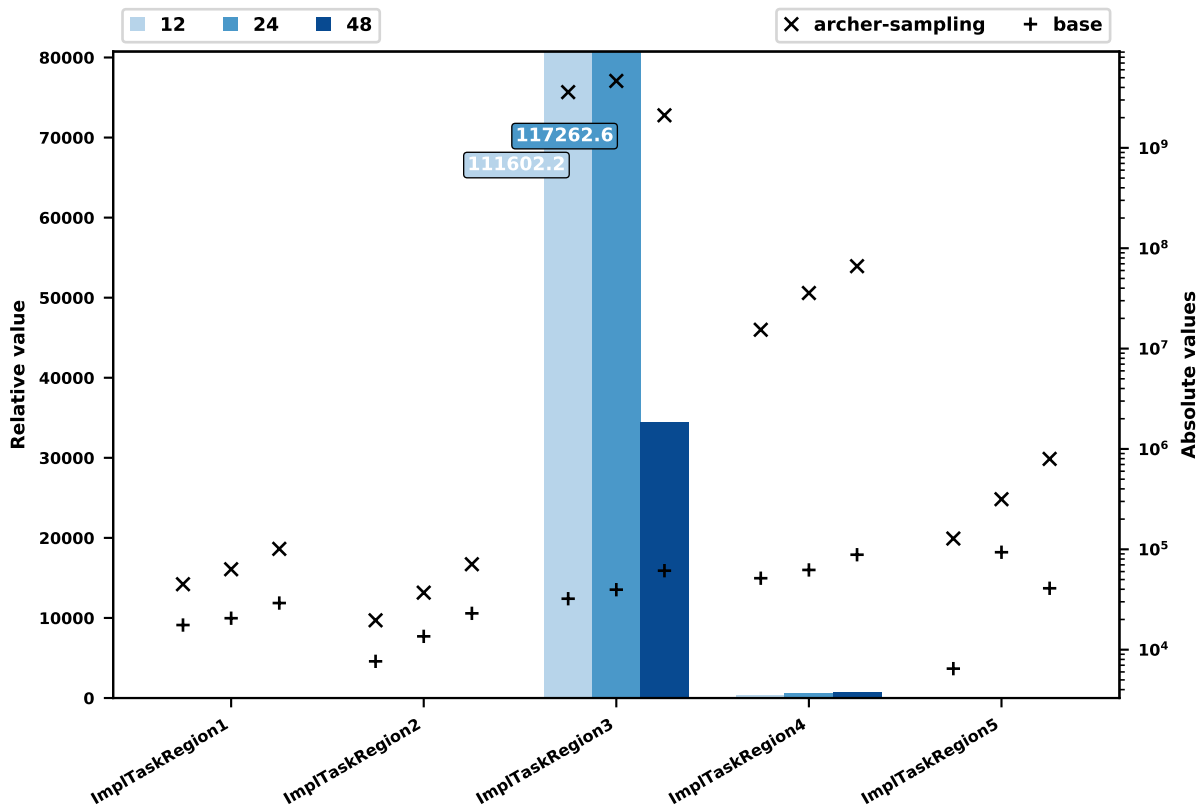
## B. Comparing 372.smithwa-archer-noread variant with base for metric LLC\_MISSES



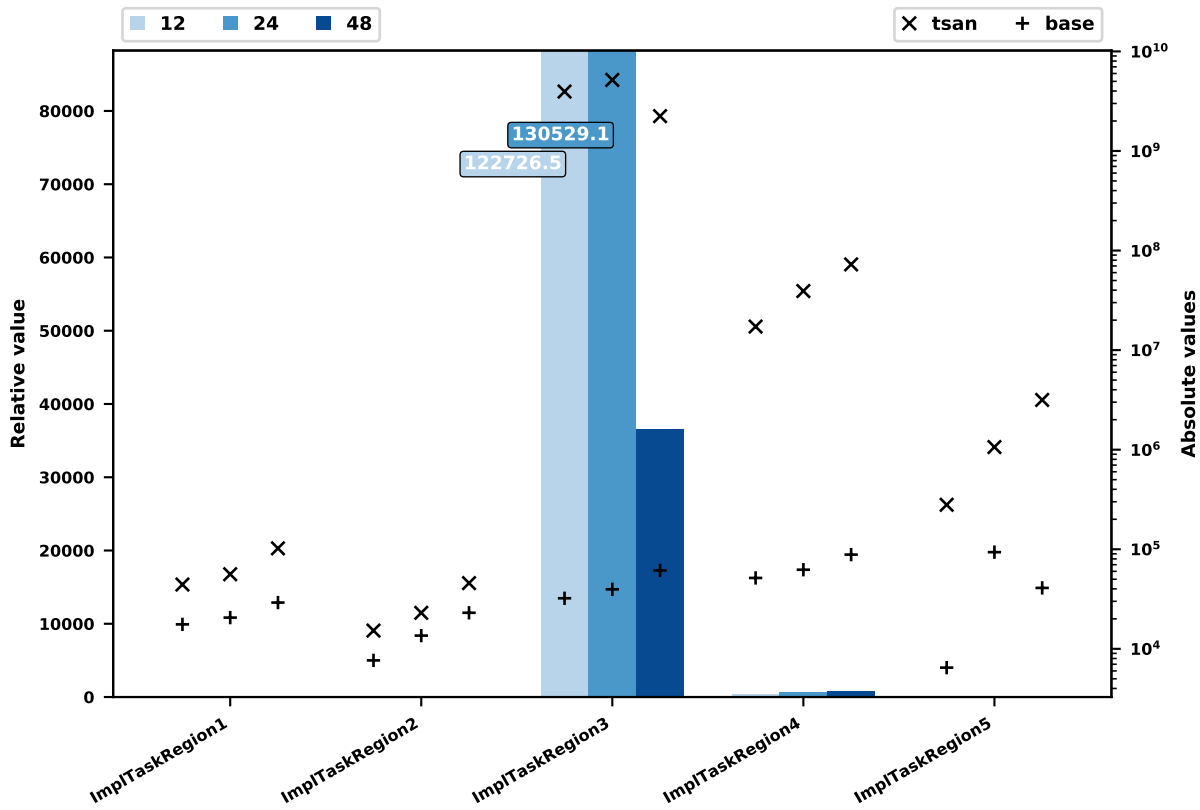
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric LLC\_MISSES



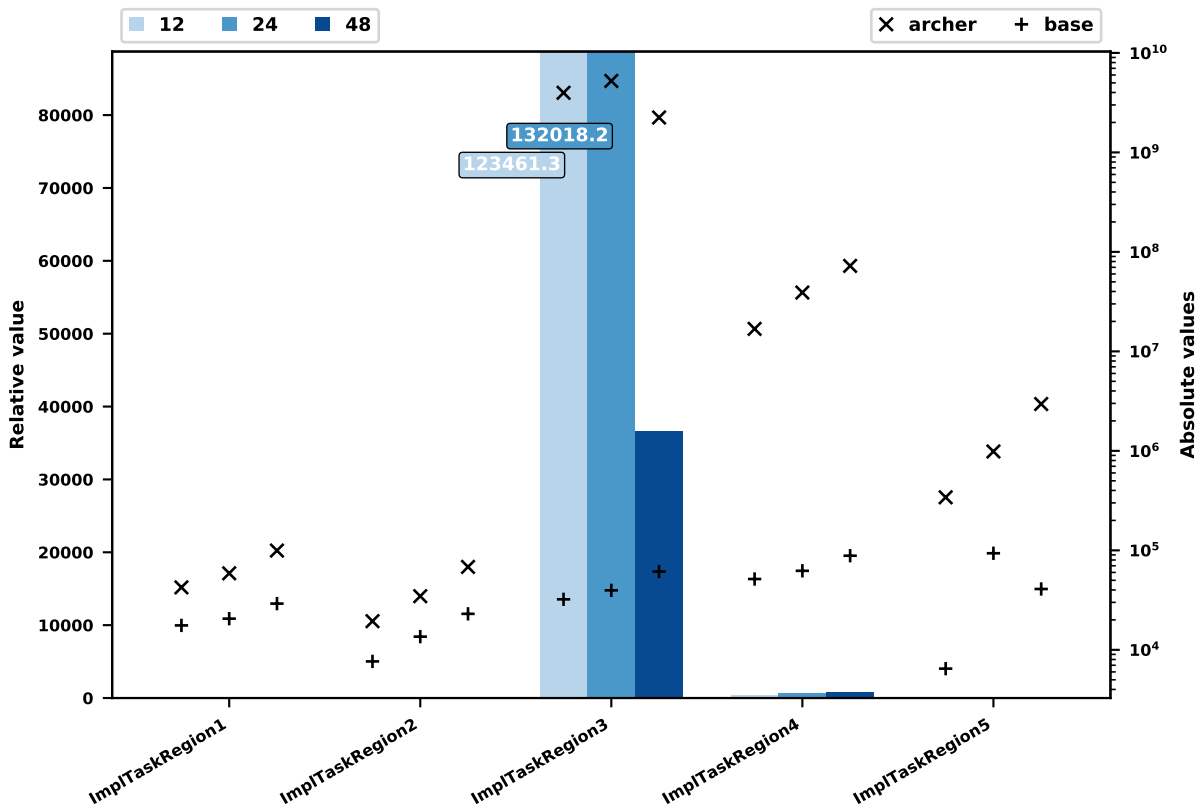
## B. Comparing 372.smithwa-archer-sampling variant with base for metric LLC\_MISSES



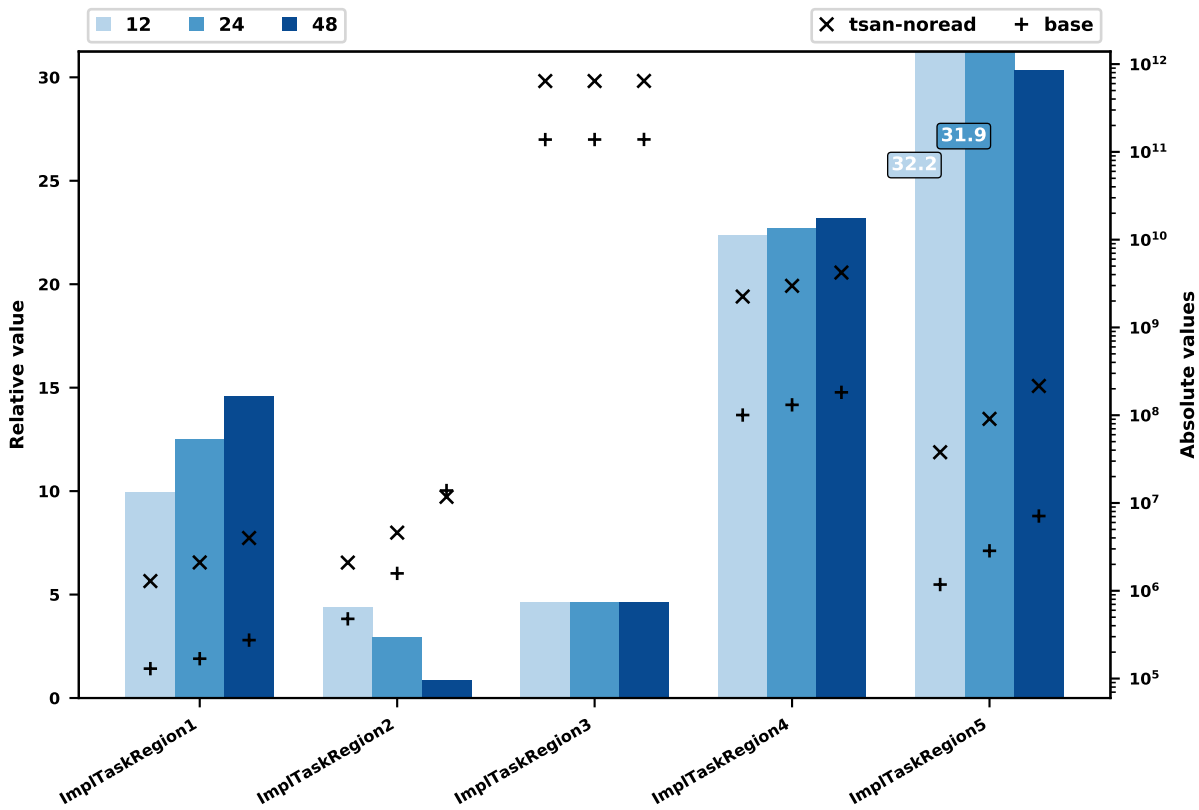
**B. Comparing 372.smithwa-tsan variant with base  
for metric LLC\_MISSES**



## B. Comparing 372.smithwa-archer variant with base for metric LLC\_MISSES

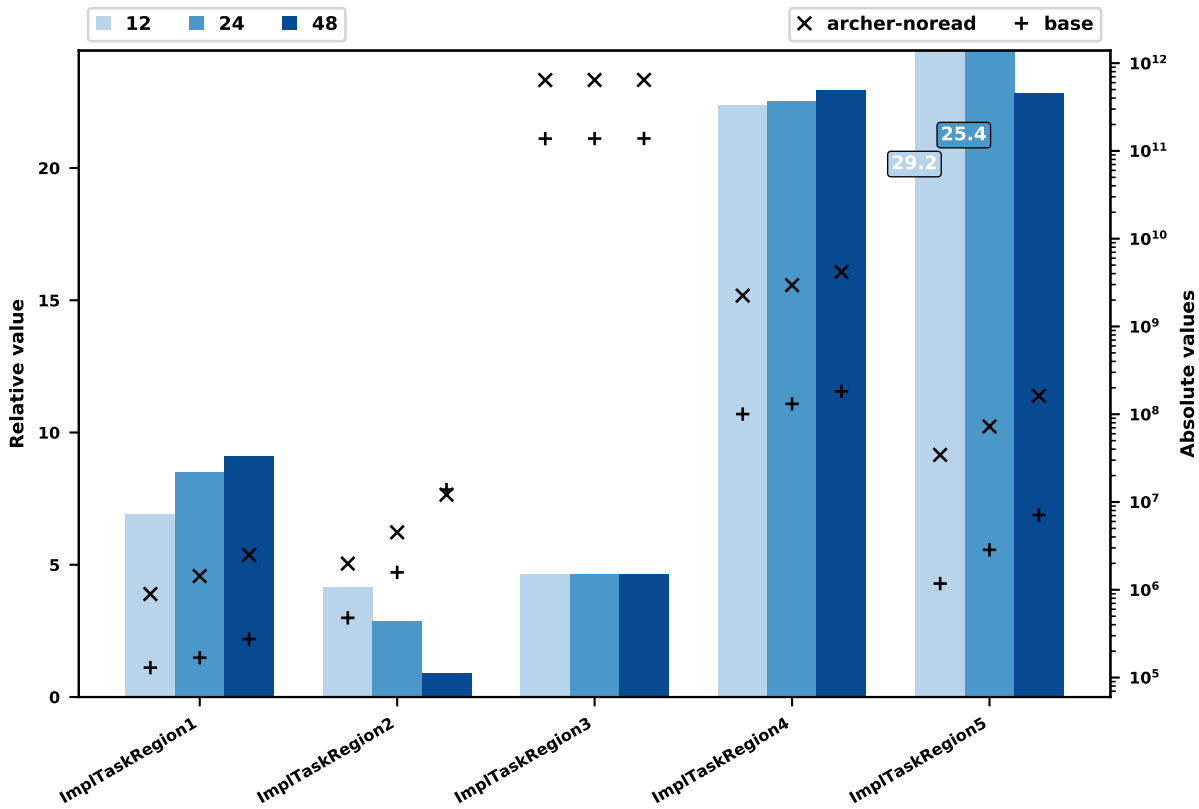


## B. Comparing 372.smithwa-tsan-noread variant with base for metric L1D\_W\_A = L1D\_W\_H

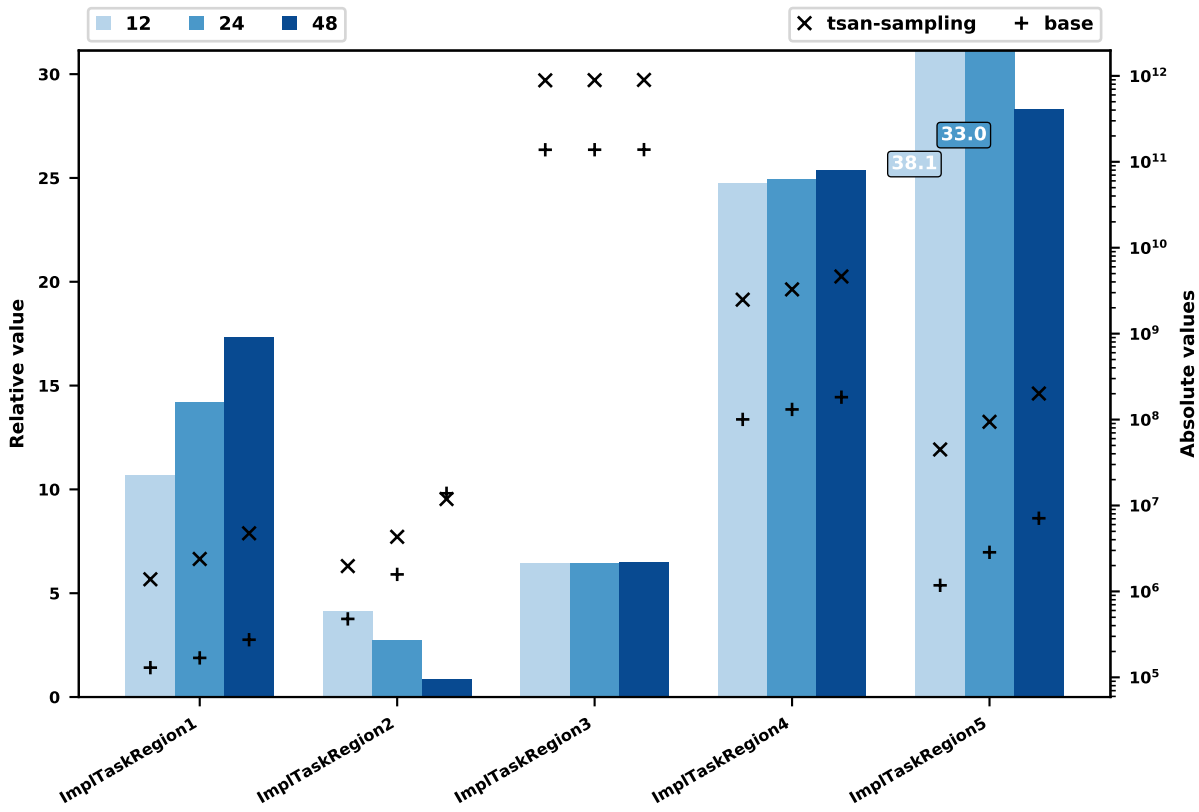




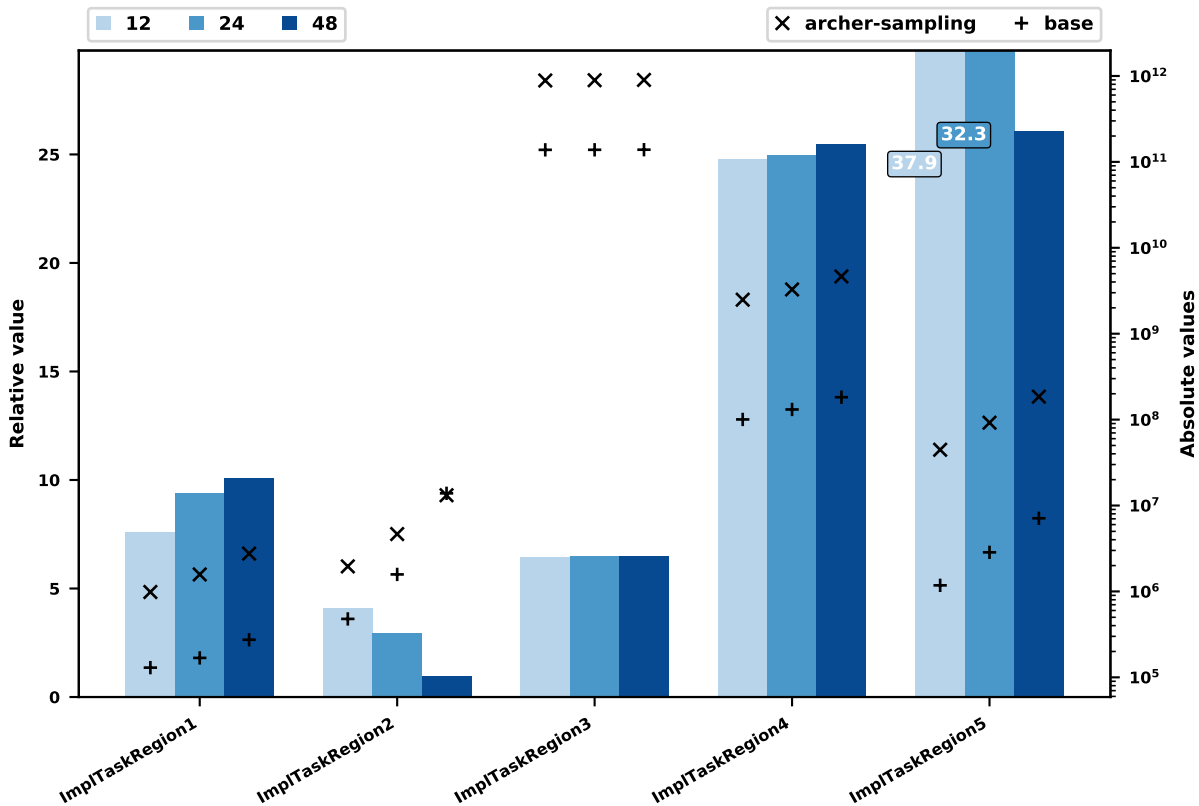
**B. Comparing 372.smithwa-archer-noread variant with base  
for metric L1D\_W\_A = L1D\_W\_H**



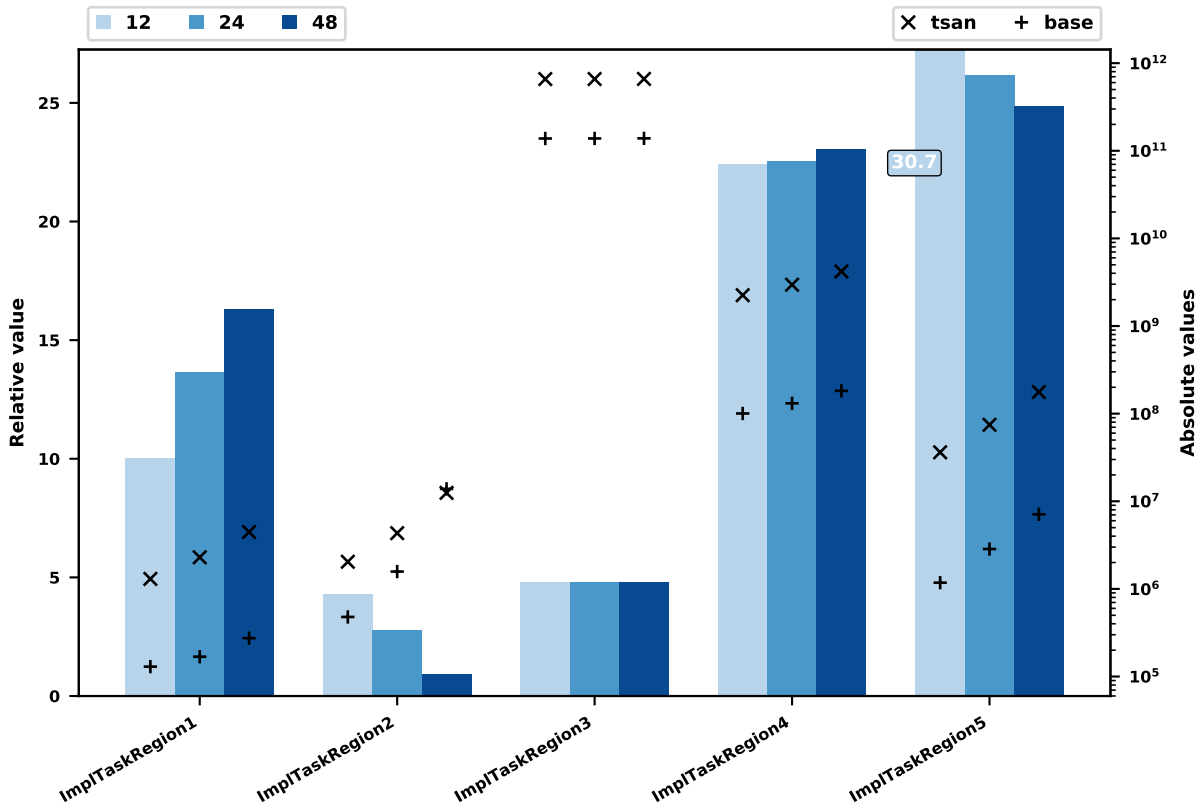
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric L1D\_W\_A = L1D\_W\_H



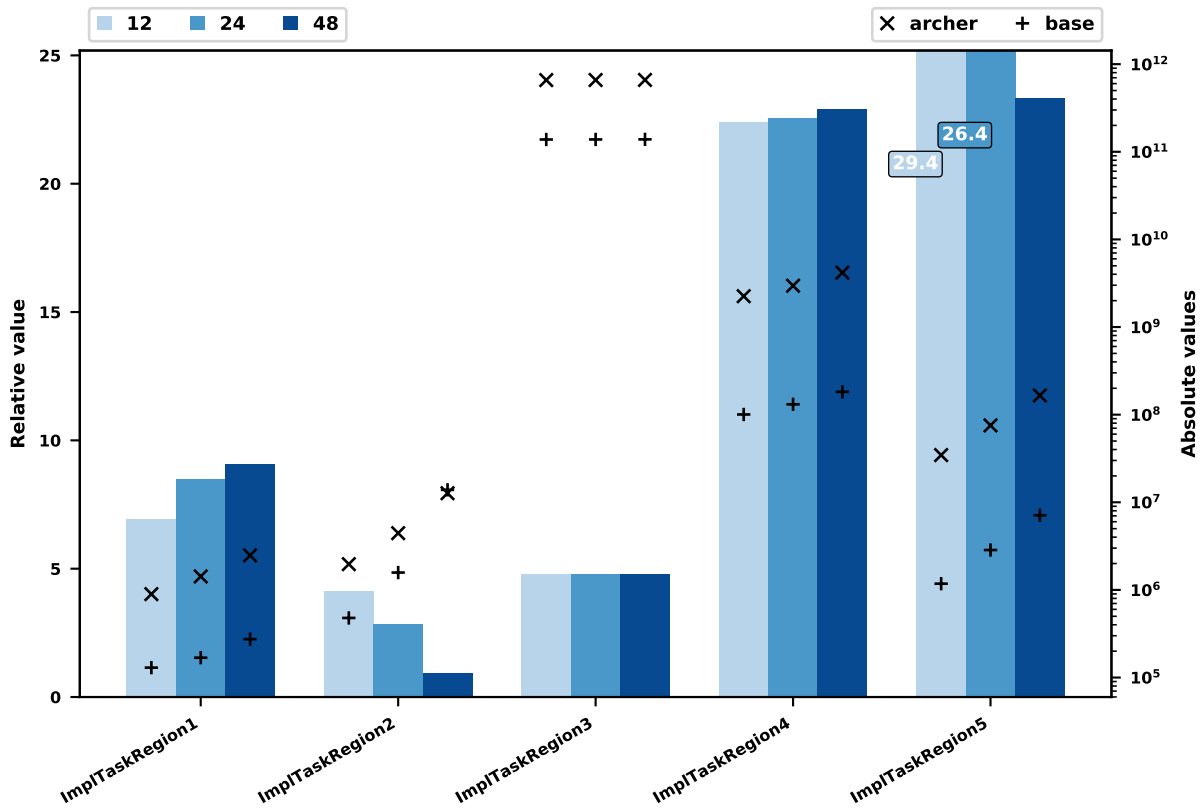
## B. Comparing 372.smithwa-archer-sampling variant with base for metric L1D\_W\_A = L1D\_W\_H



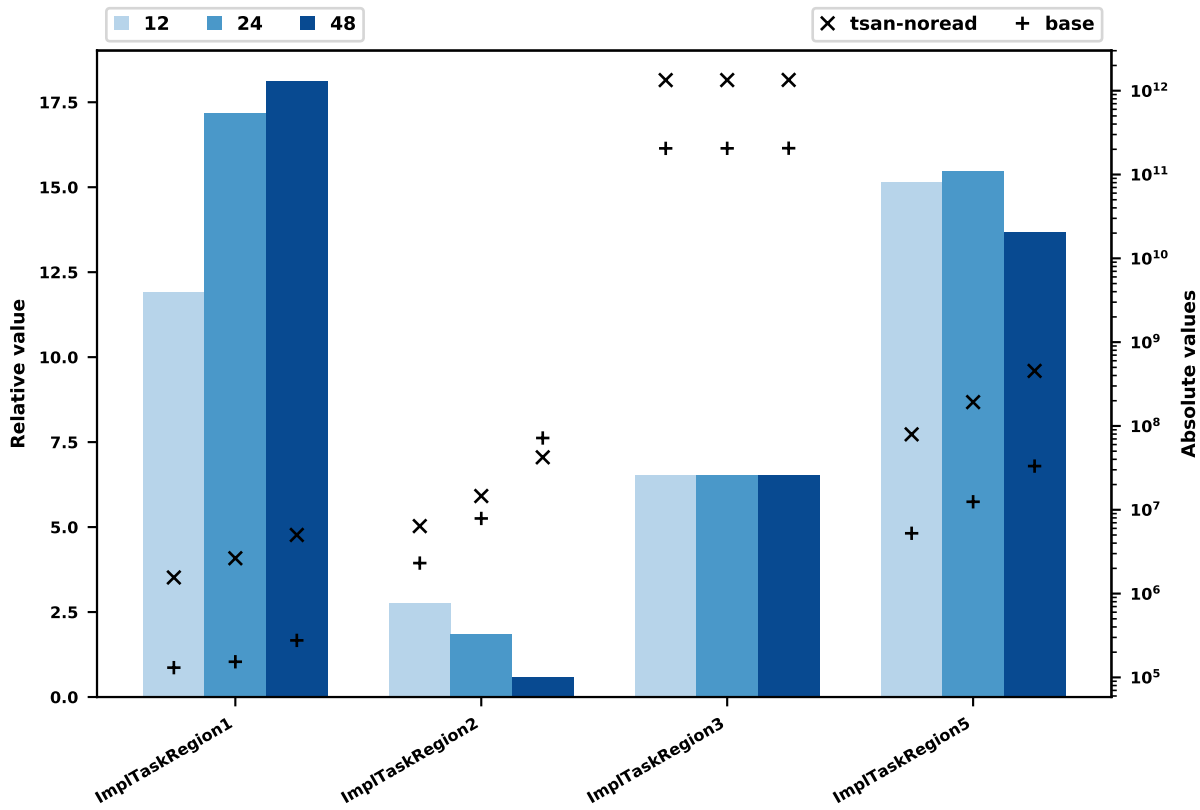
## B. Comparing 372.smithwa-tsan variant with base for metric L1D\_W\_A = L1D\_W\_H



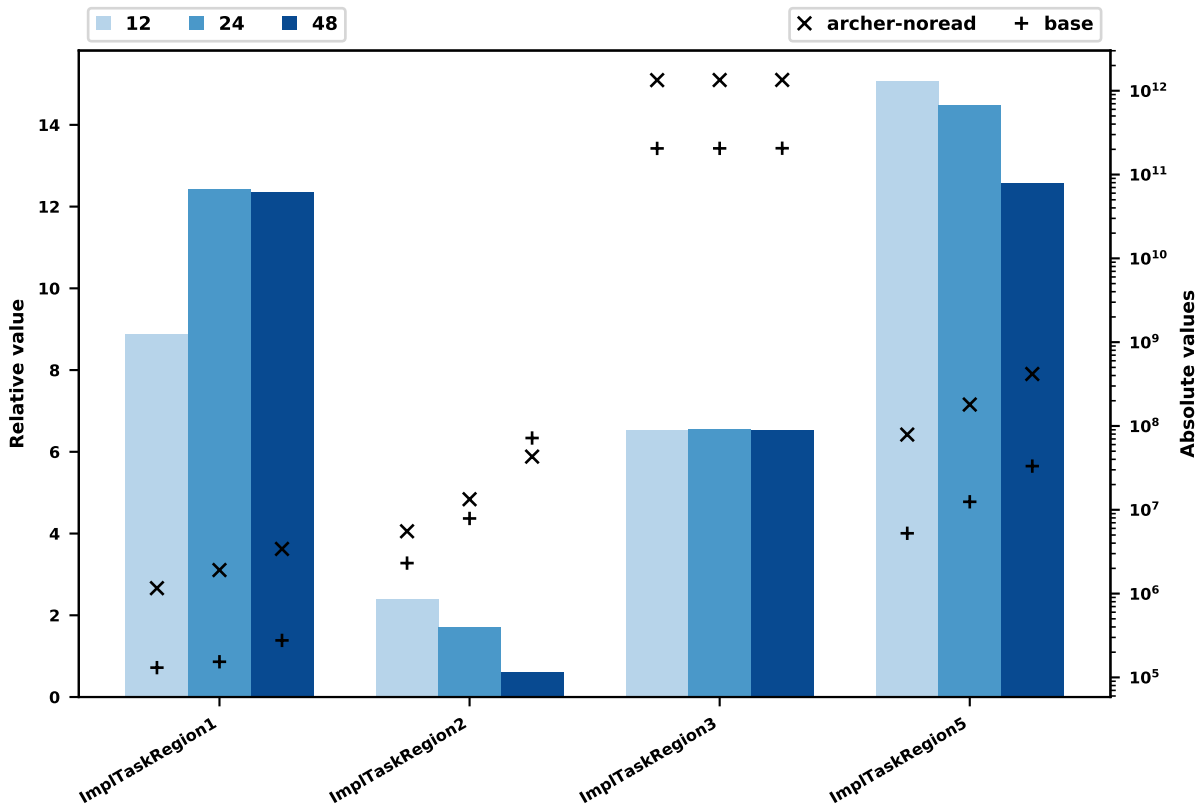
## B. Comparing 372.smithwa-archer variant with base for metric L1D\_W\_A = L1D\_W\_H



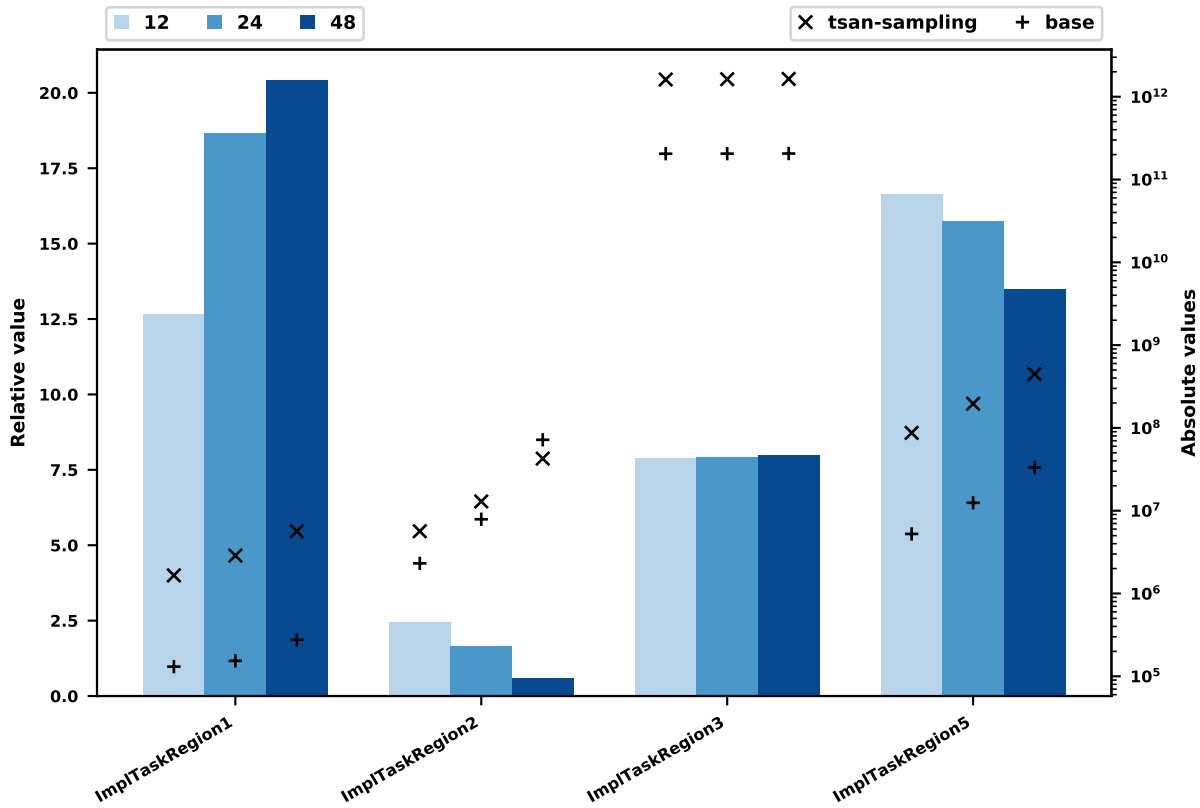
## B. Comparing 372.smithwa-tsan-noread variant with base for metric L1D\_R\_H



## B. Comparing 372.smithwa-archer-noread variant with base for metric L1D\_R\_H

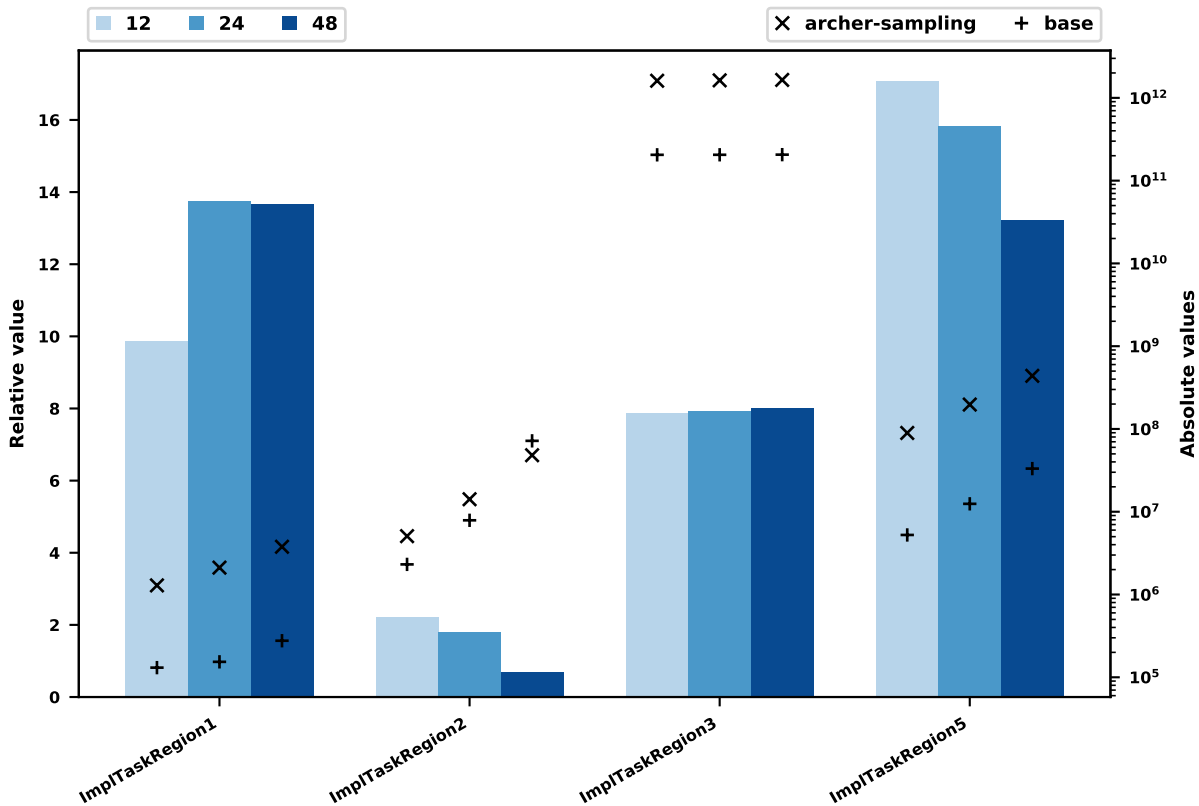


## B. Comparing 372.smithwa-tsan-sampling variant with base for metric L1D\_R\_H

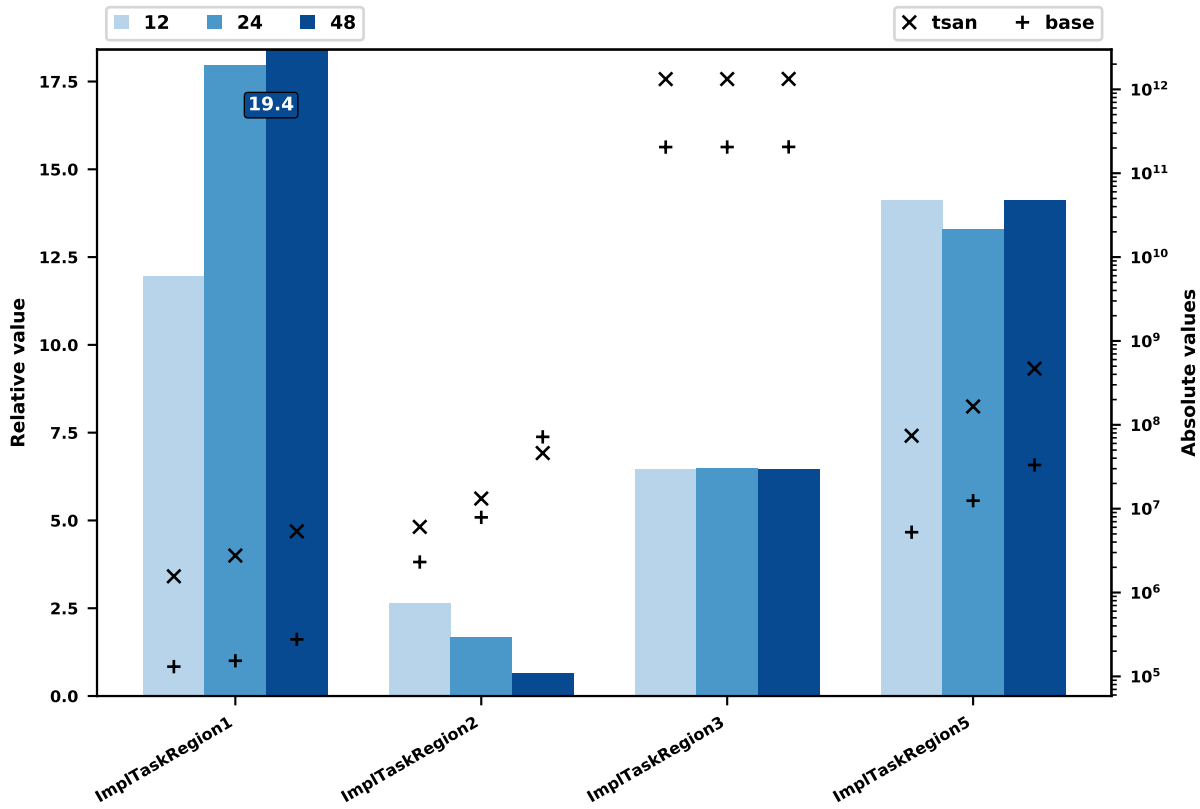




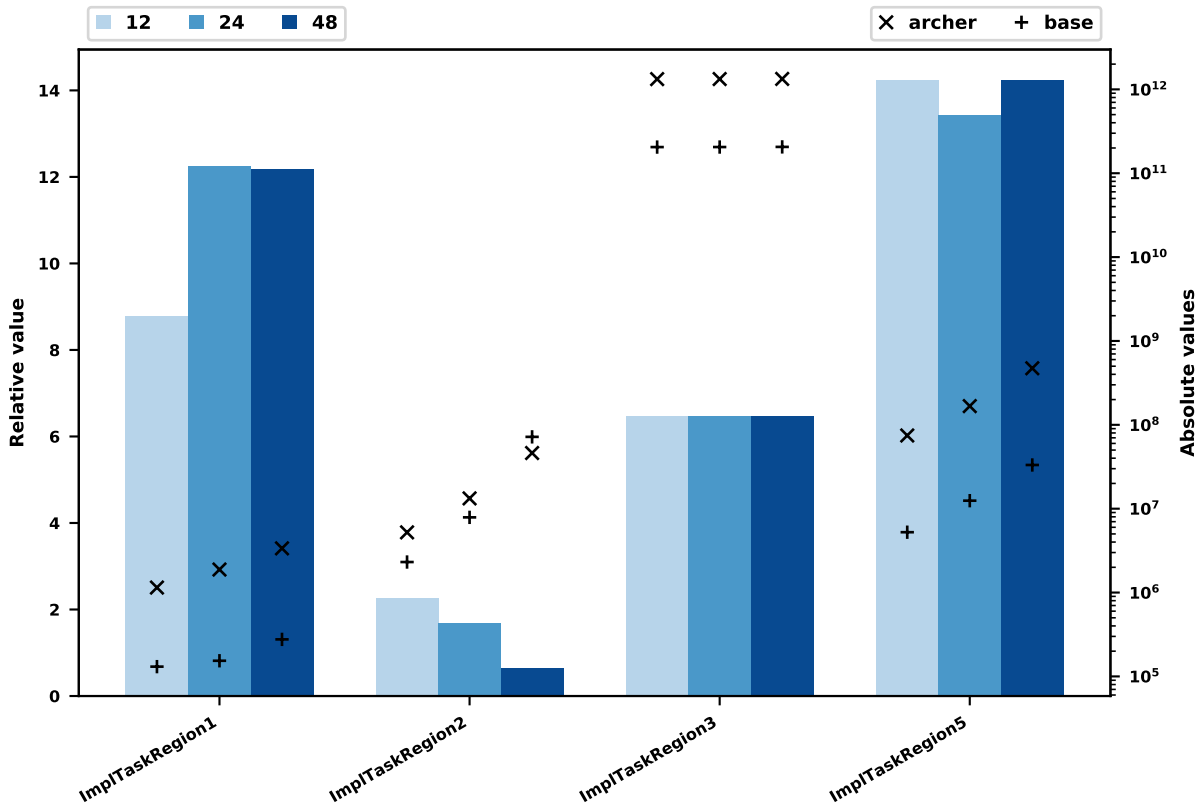
## B. Comparing 372.smithwa-archer-sampling variant with base for metric L1D\_R\_H



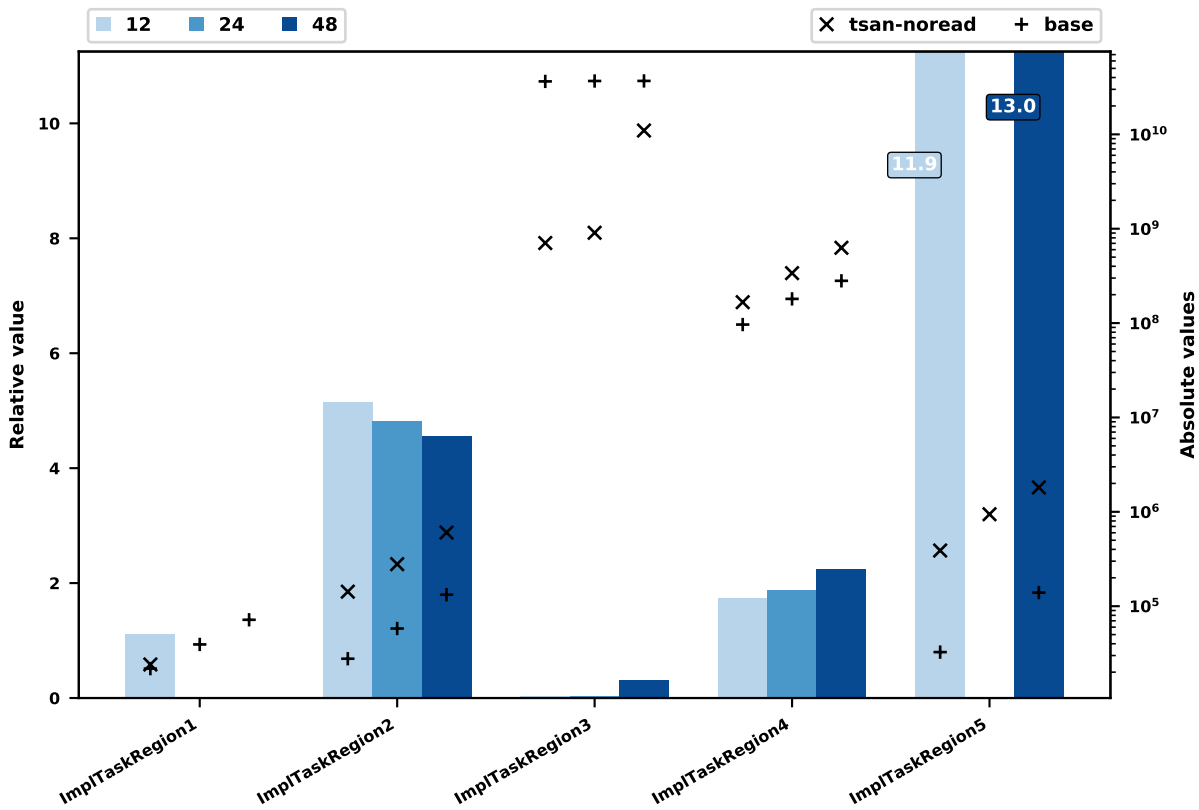
## B. Comparing 372.smithwa-tsan variant with base for metric L1D\_R\_H



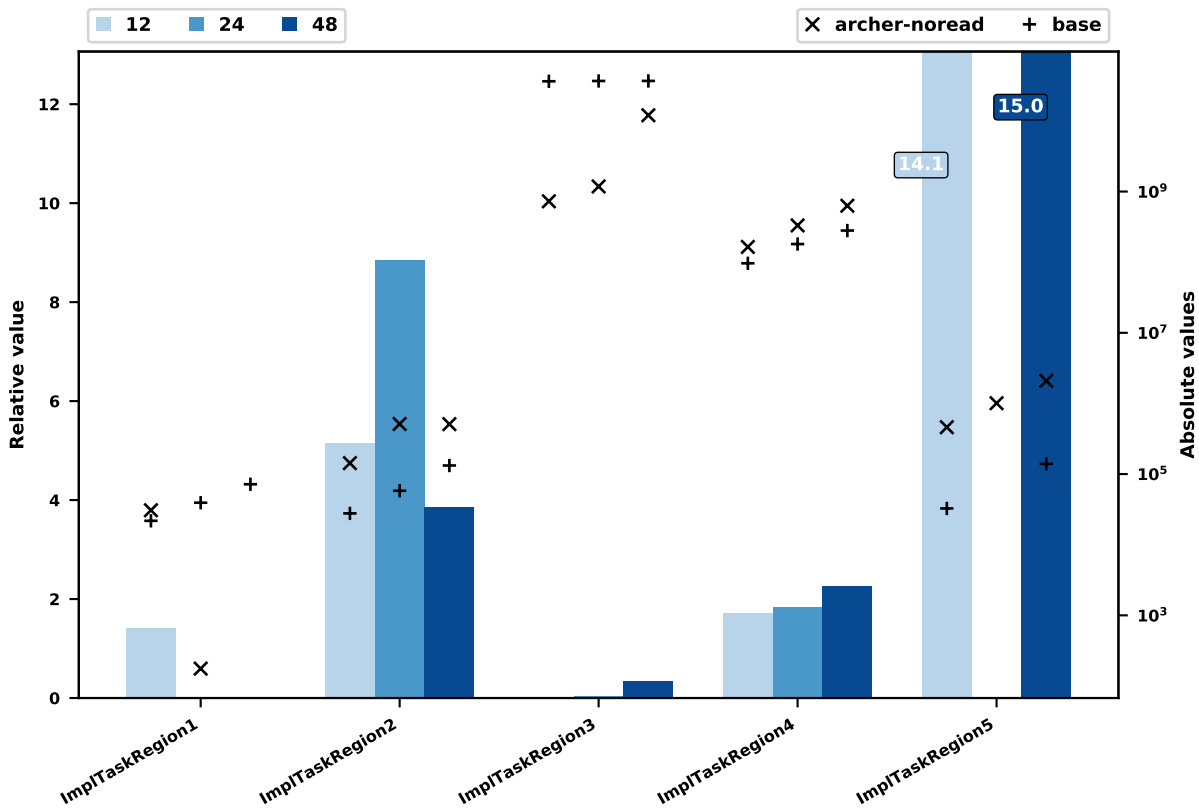
## B. Comparing 372.smithwa-archer variant with base for metric L1D\_R\_H



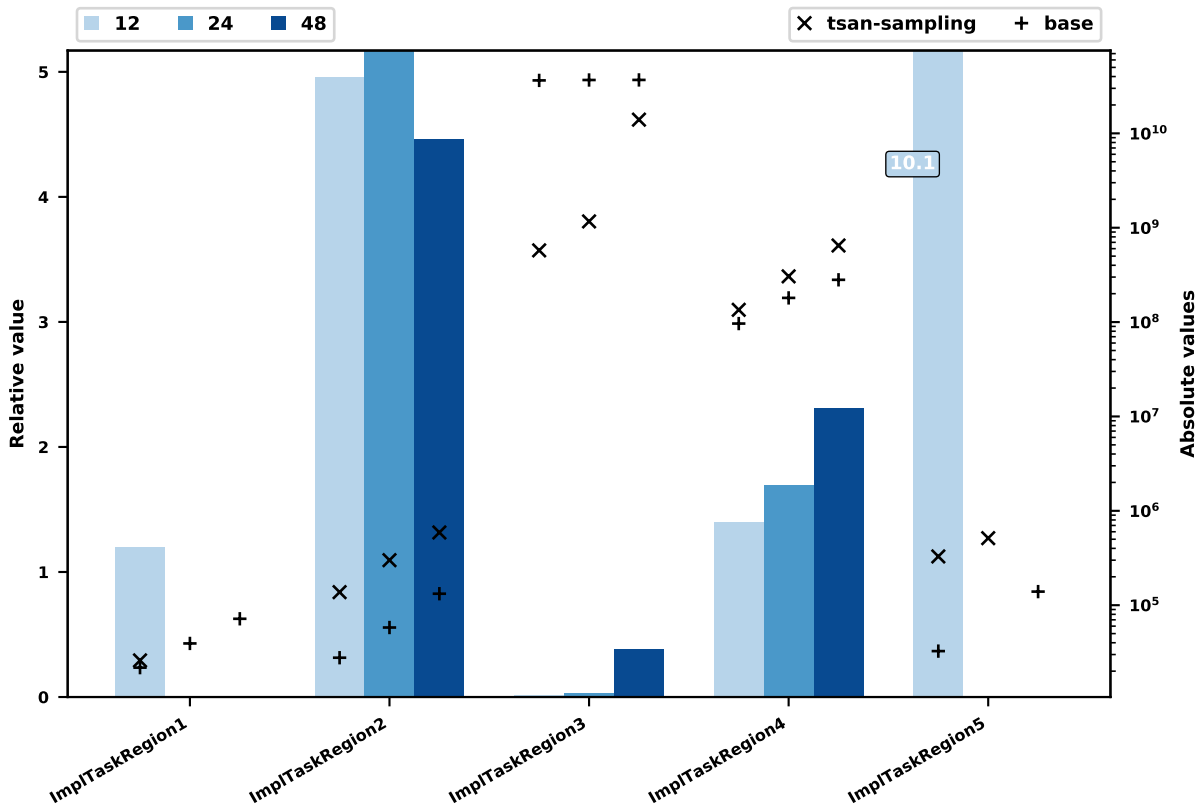
## B. Comparing 372.smithwa-tsan-noread variant with base for metric L2D\_H



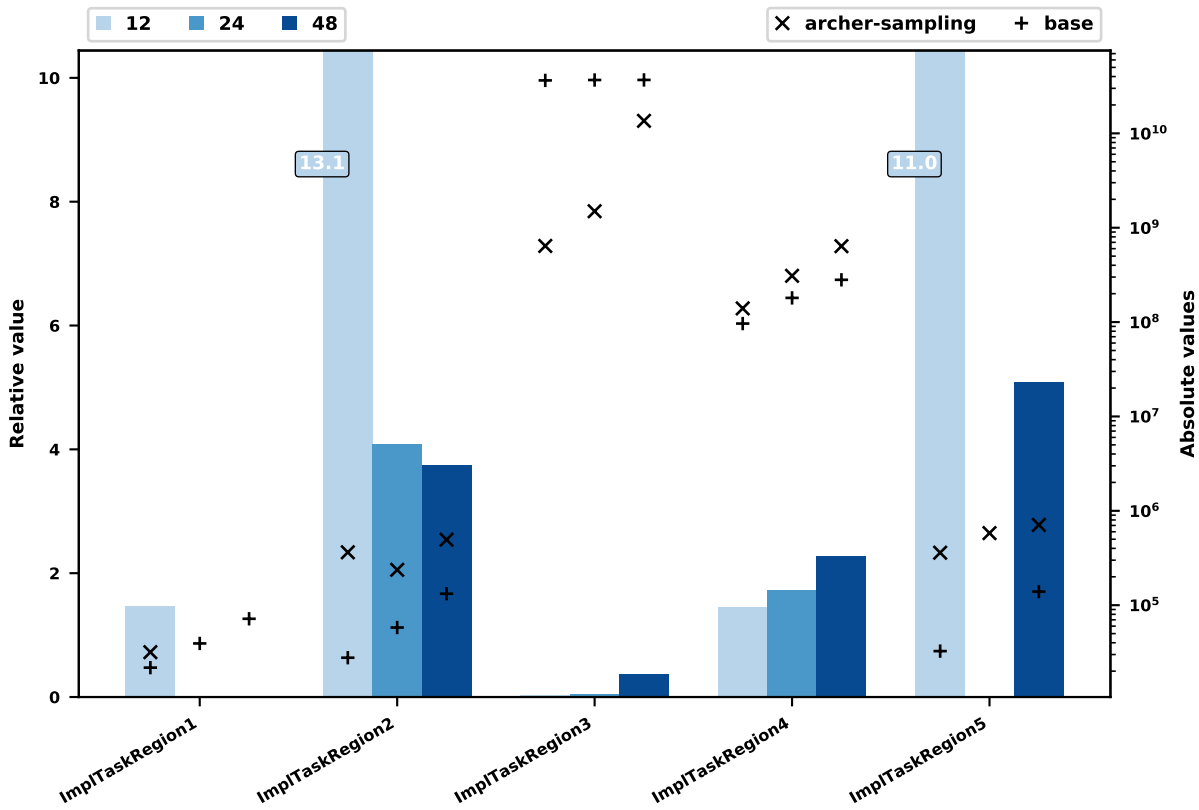
## B. Comparing 372.smithwa-archer-noread variant with base for metric L2D\_H



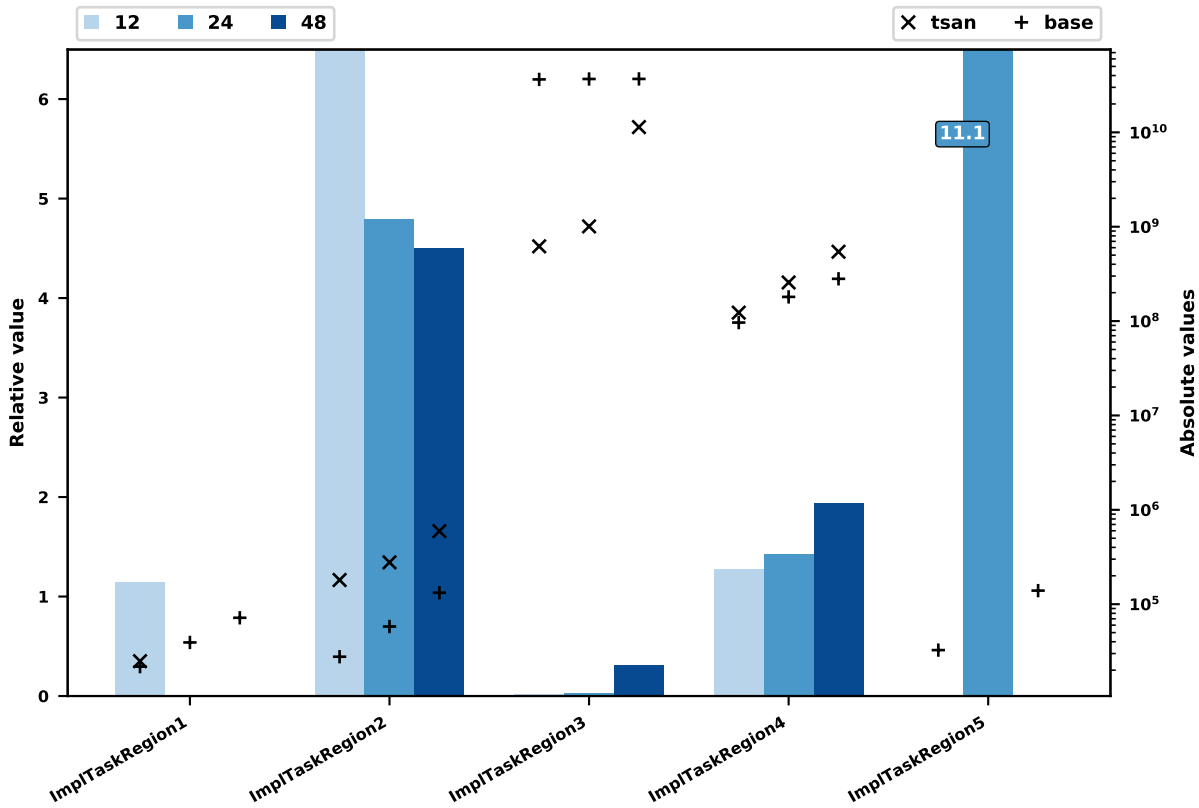
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric L2D\_H



**B. Comparing 372.smithwa-archer-sampling variant with base for metric L2D\_H**

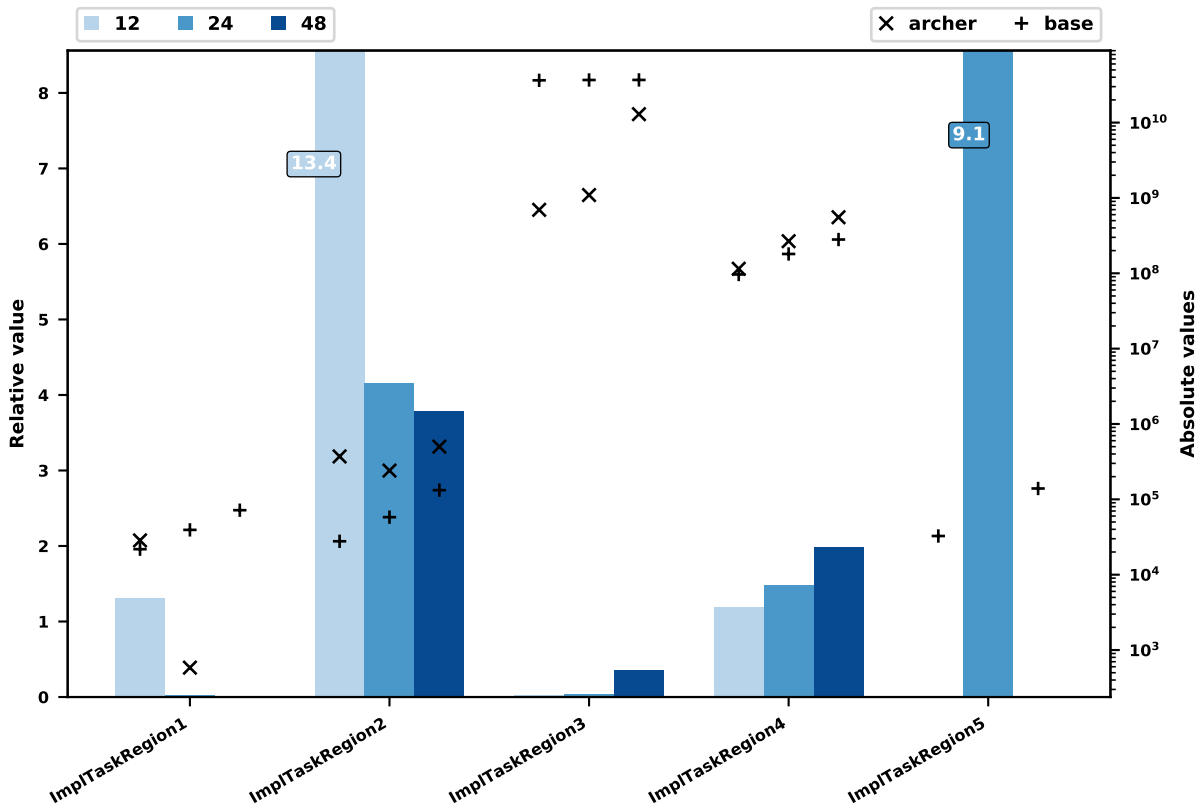


## B. Comparing 372.smithwa-tsan variant with base for metric L2D\_H

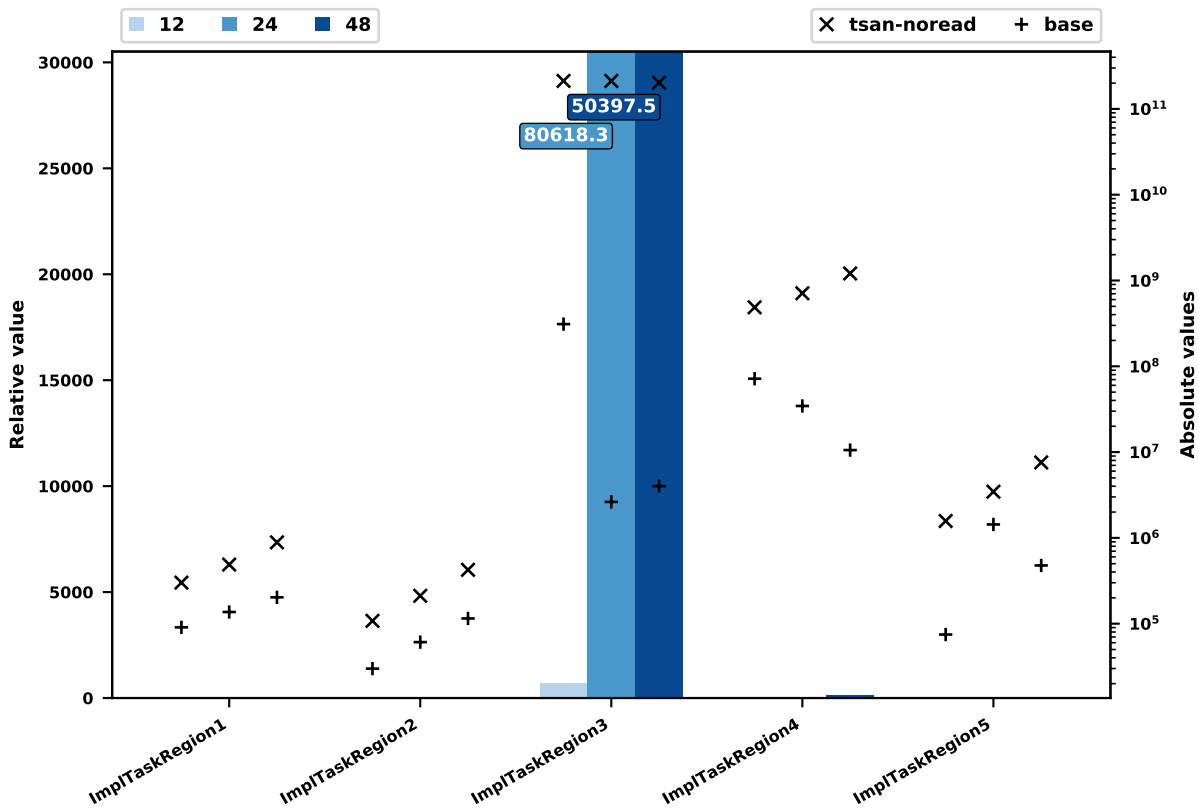




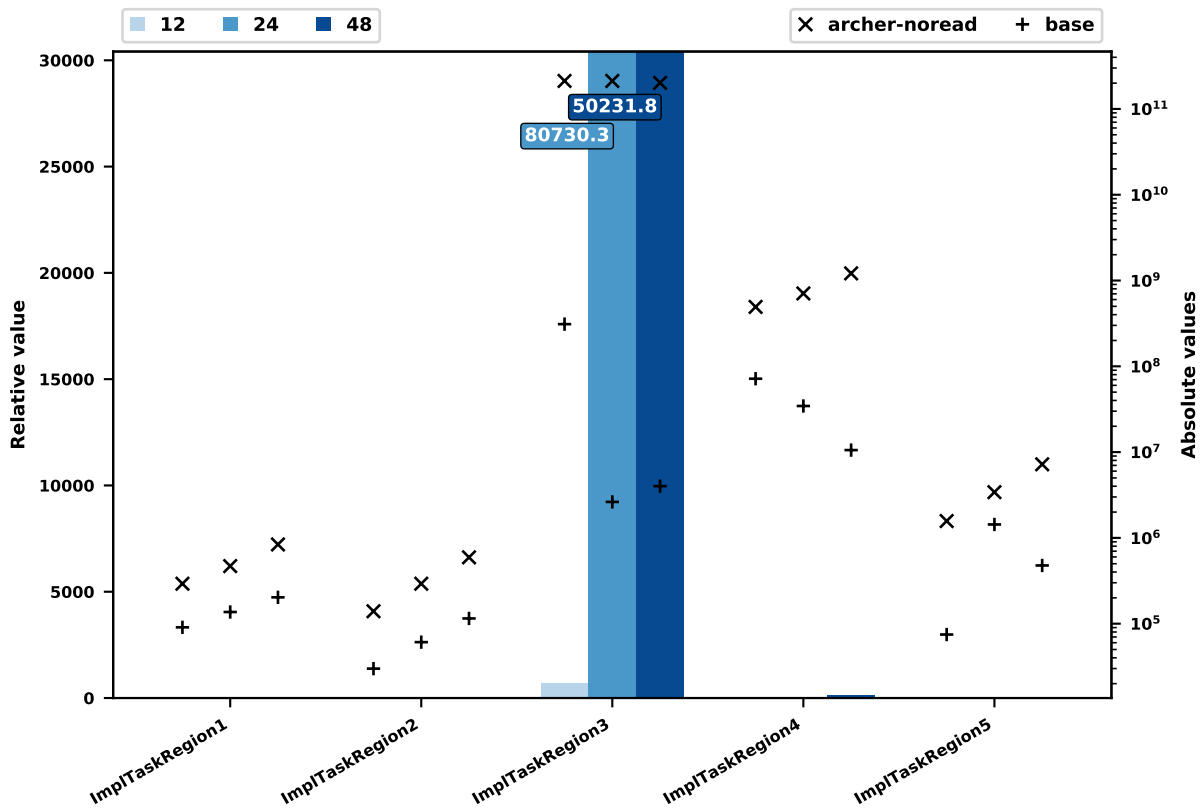
## B. Comparing 372.smithwa-archer variant with base for metric L2D\_H



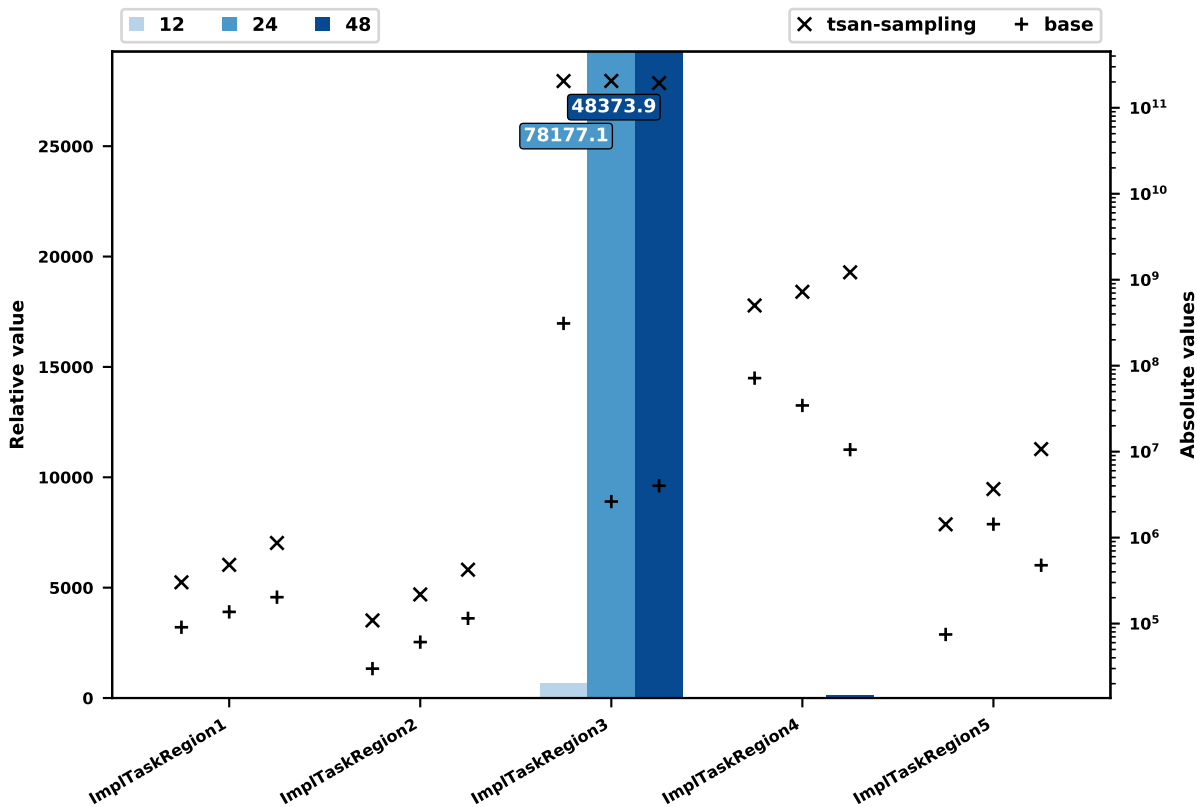
## B. Comparing 372.smithwa-tsan-noread variant with base for metric L3D\_A



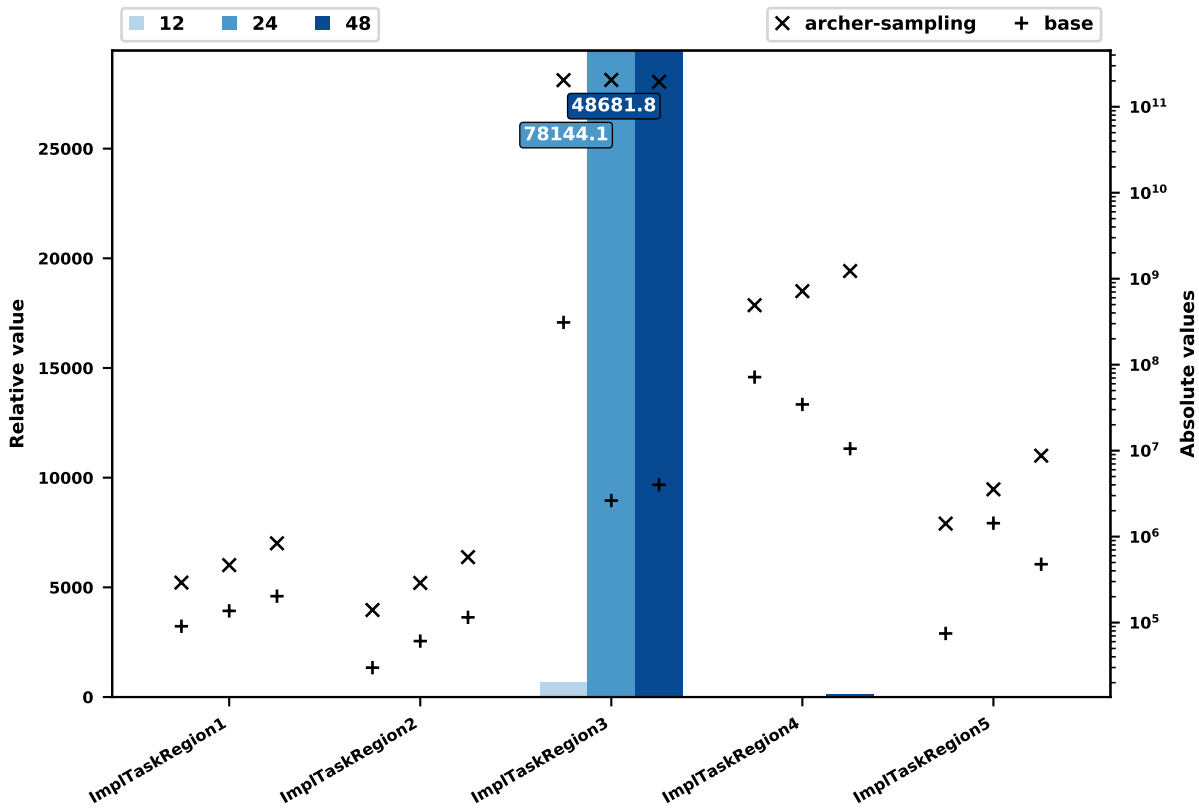
## B. Comparing 372.smithwa-archer-noread variant with base for metric L3D\_A



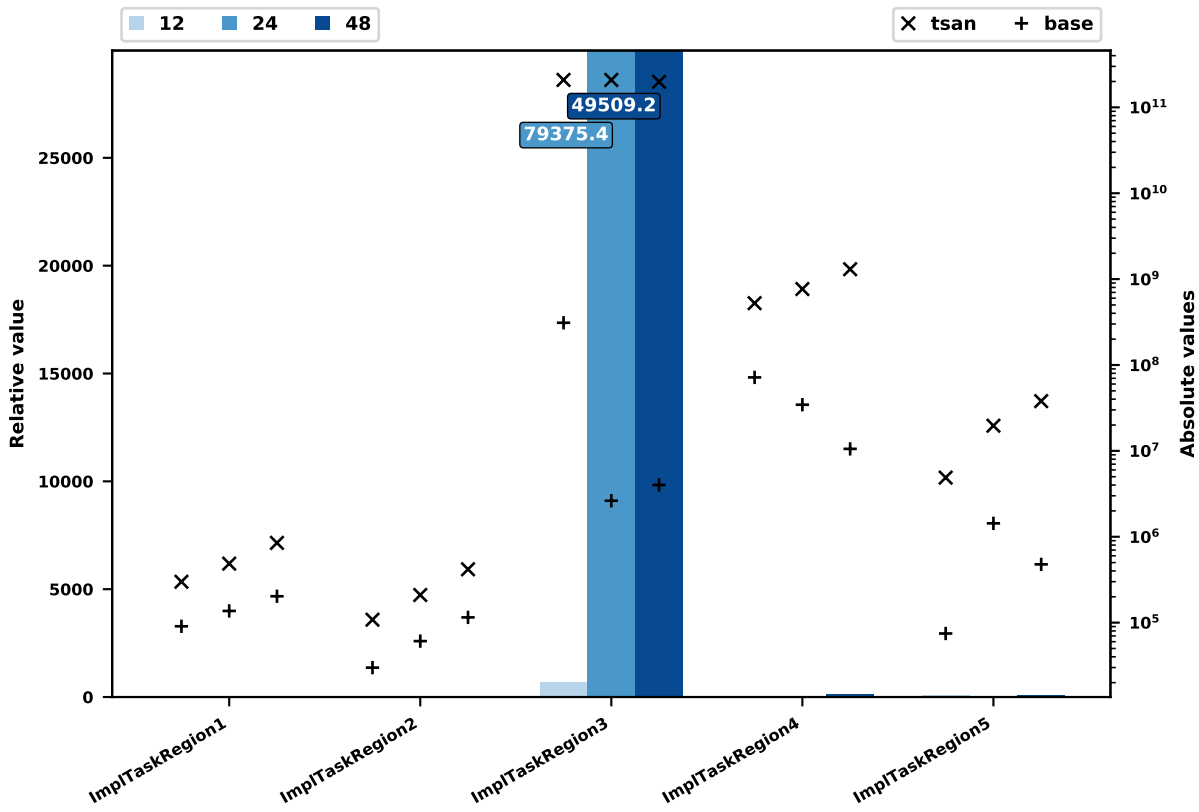
## B. Comparing 372.smithwa-tsan-sampling variant with base for metric L3D\_A



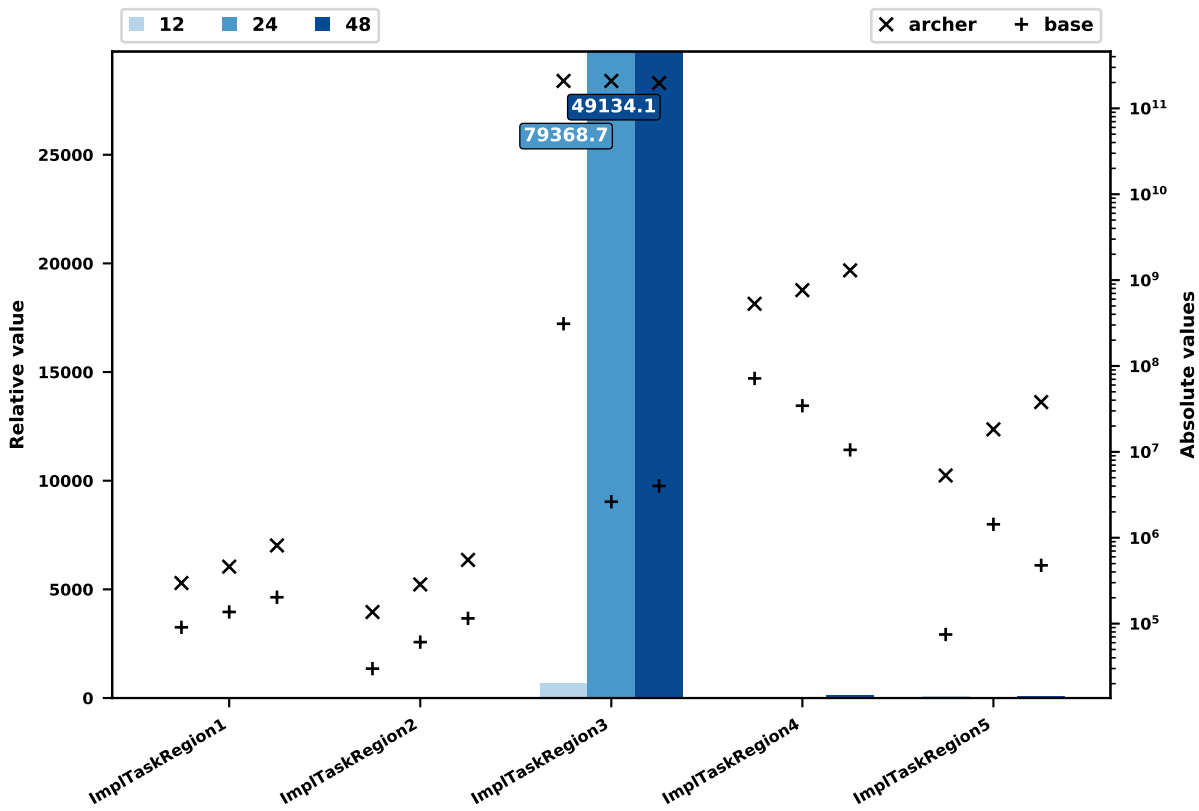
## B. Comparing 372.smithwa-archer-sampling variant with base for metric L3D\_A



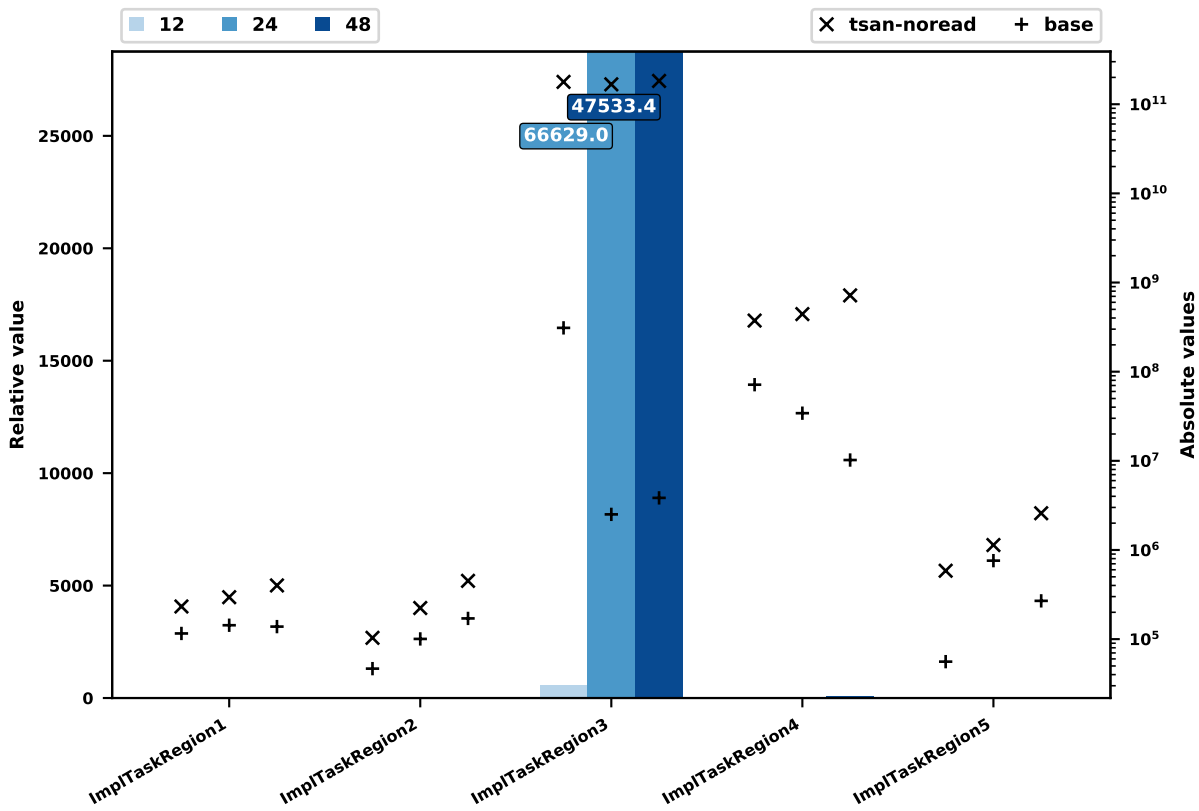
## B. Comparing 372.smithwa-tsan variant with base for metric L3D\_A



## B. Comparing 372.smithwa-archer variant with base for metric L3D\_A

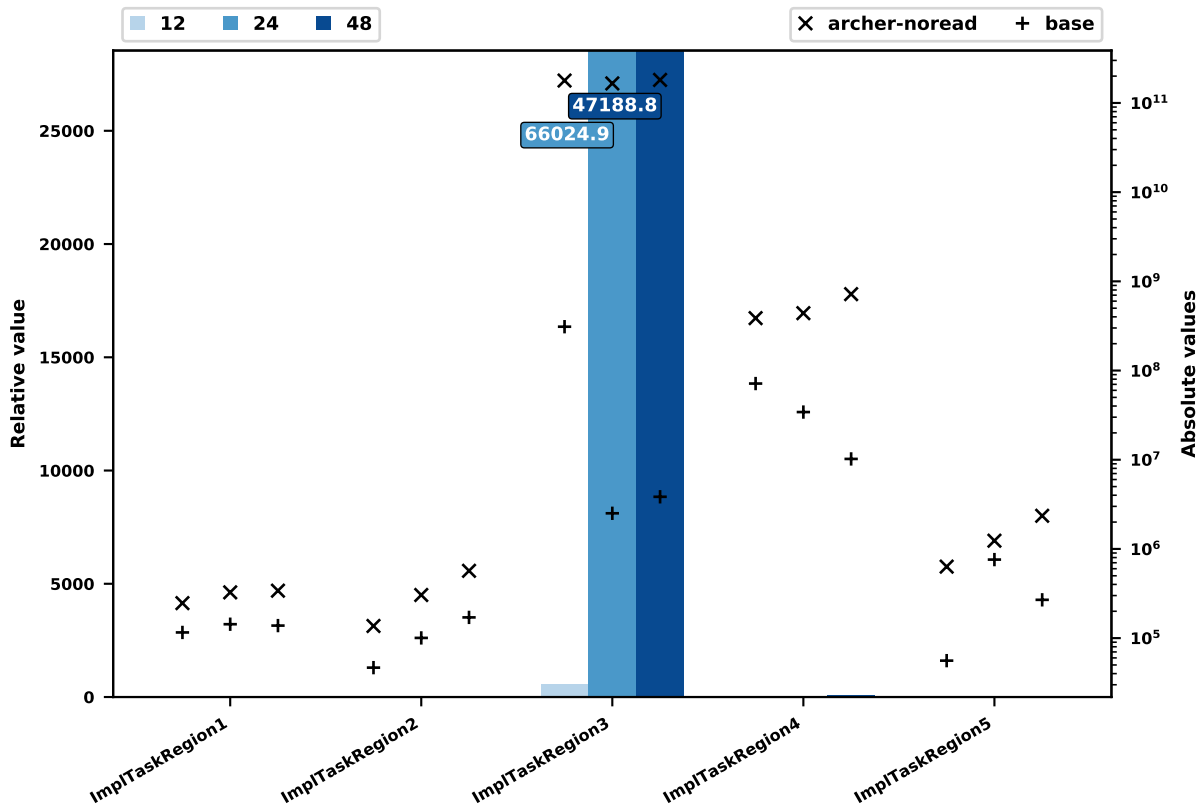


**B. Comparing 372.smithwa-tsan-noread variant with base  
for metric L3\_H**

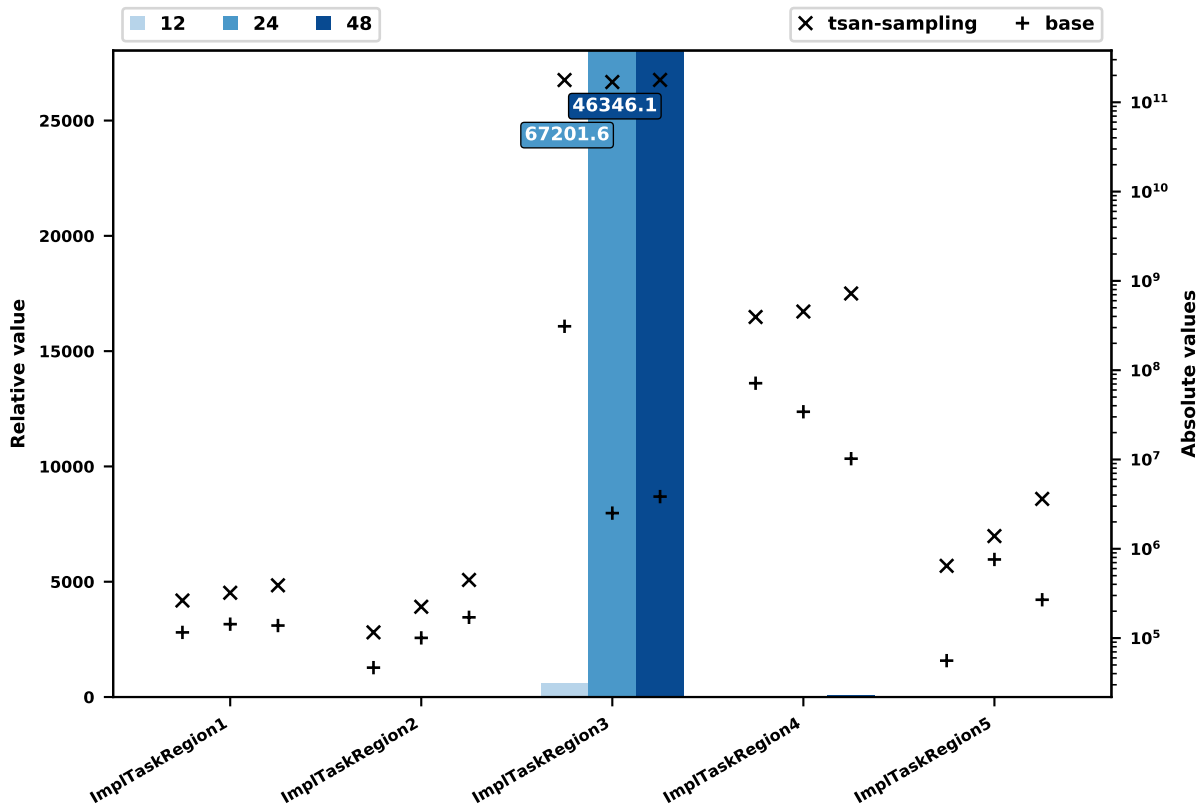




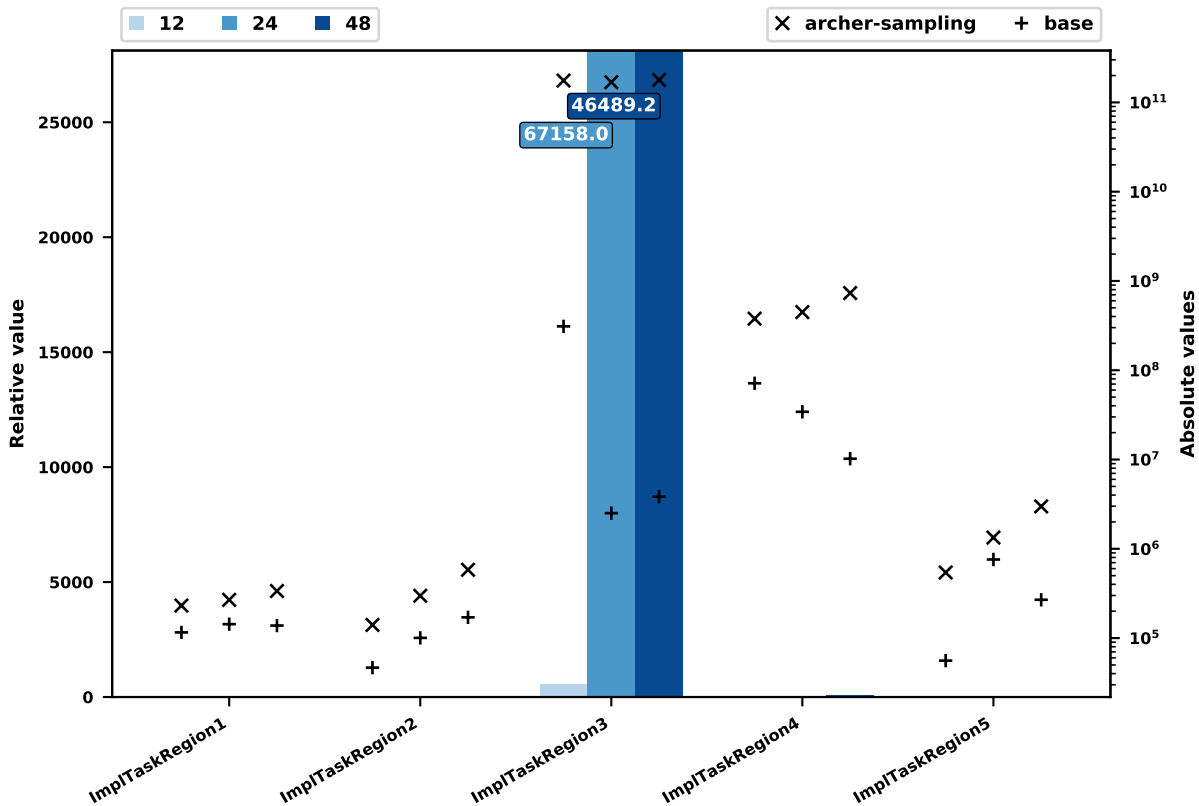
**B. Comparing 372.smithwa-archer-noread variant with base  
for metric L3\_H**



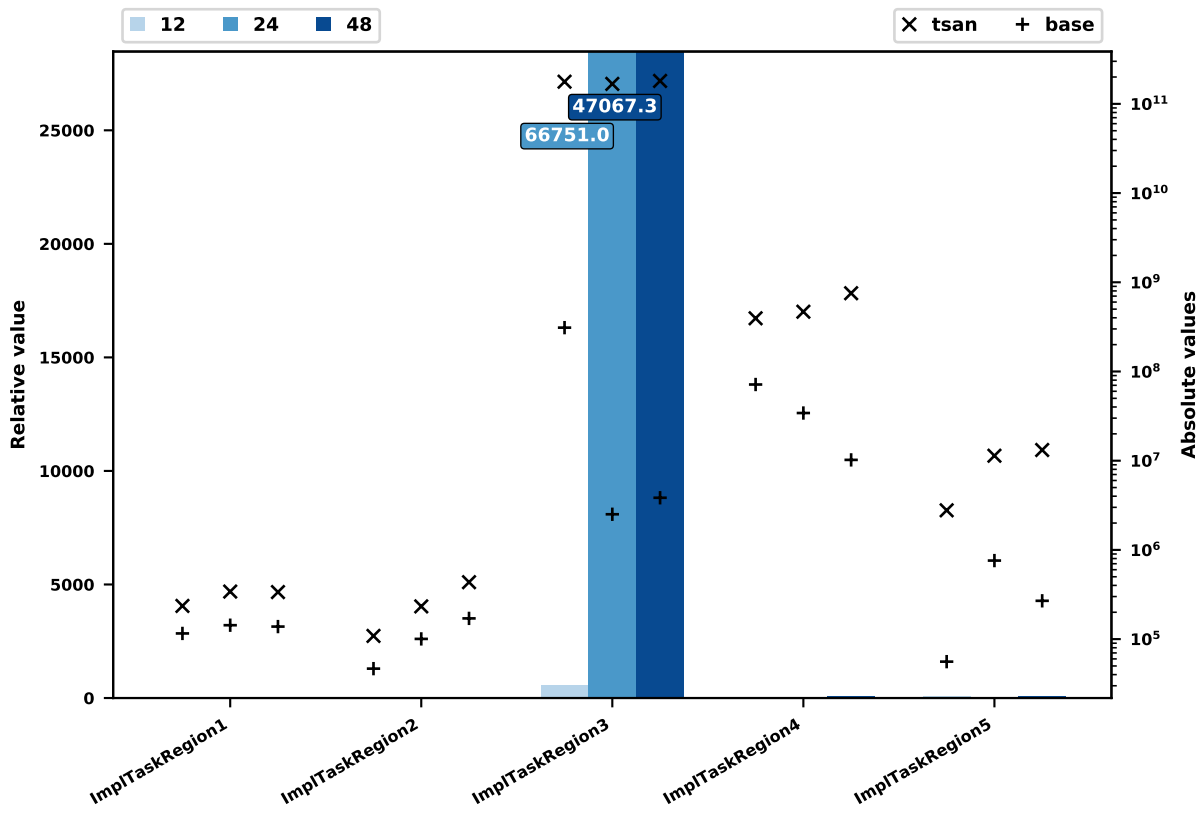
**B. Comparing 372.smithwa-tsan-sampling variant with base  
for metric L3\_H**



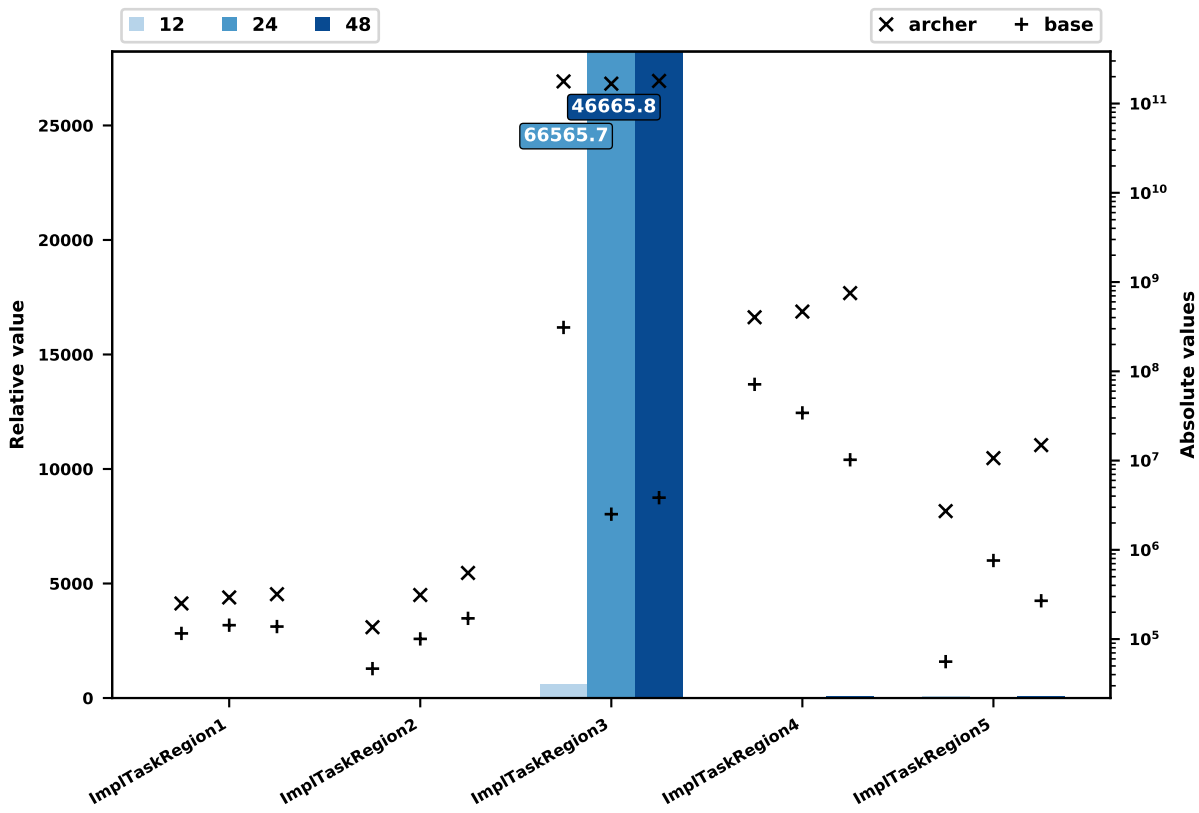
**B. Comparing 372.smithwa-archer-sampling variant with base for metric L3\_H**



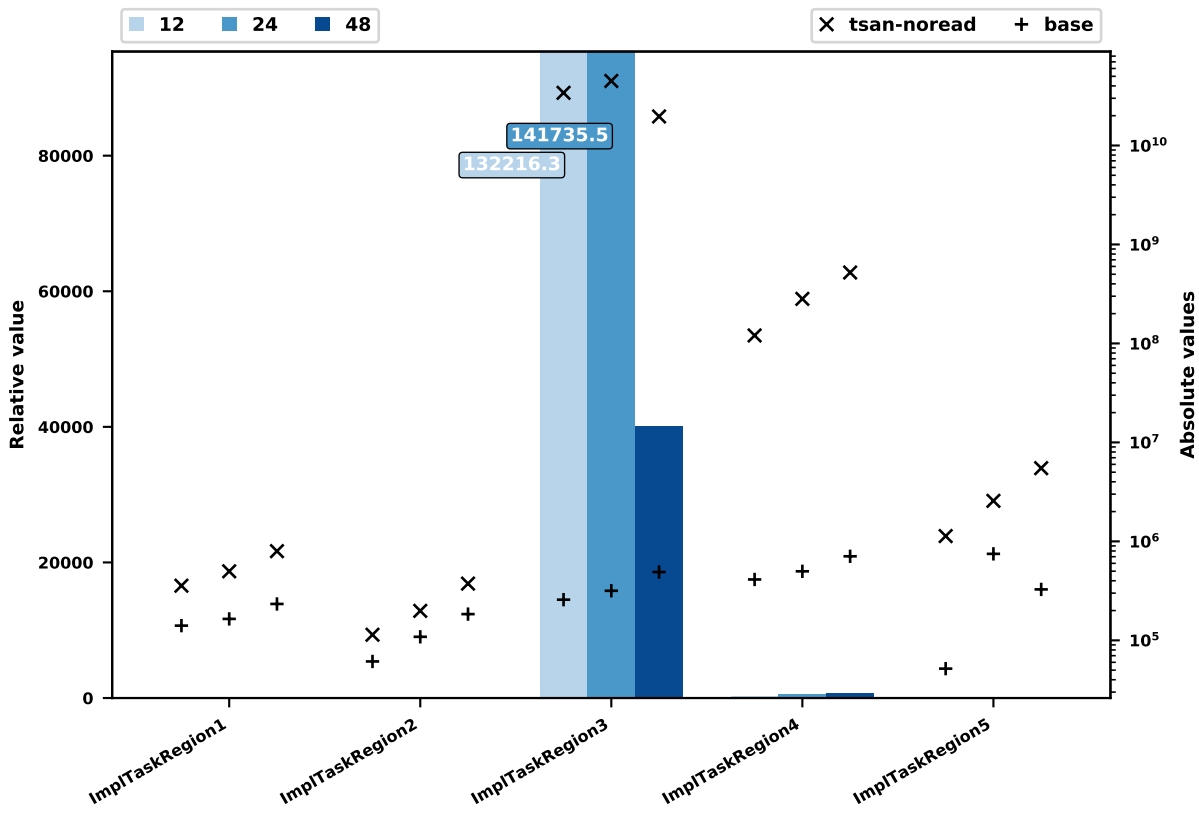
**B. Comparing 372.smithwa-tsan variant with base  
for metric L3\_H**



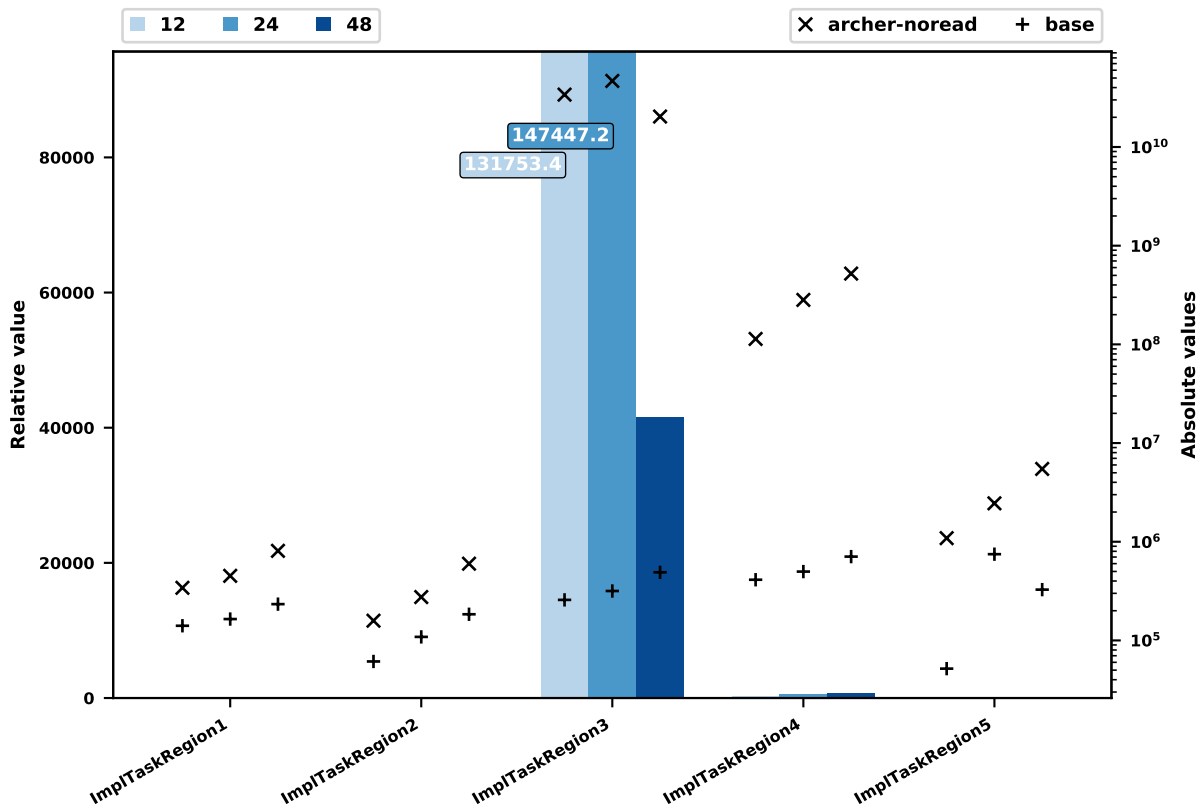
## B. Comparing 372.smithwa-archer variant with base for metric L3\_H



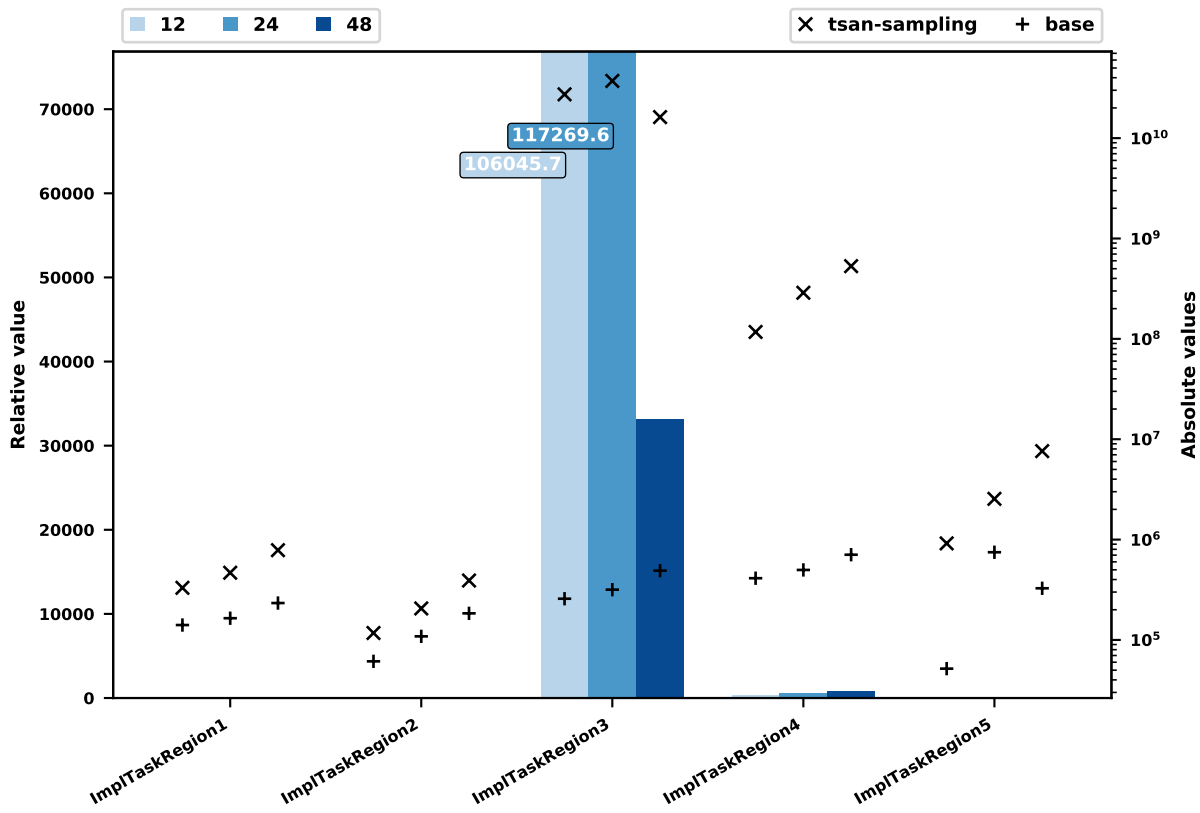
## B. Comparing 372.smithwa-tsan-noread variant with base for metric MEM



## B. Comparing 372.smithwa-archer-noread variant with base for metric MEM

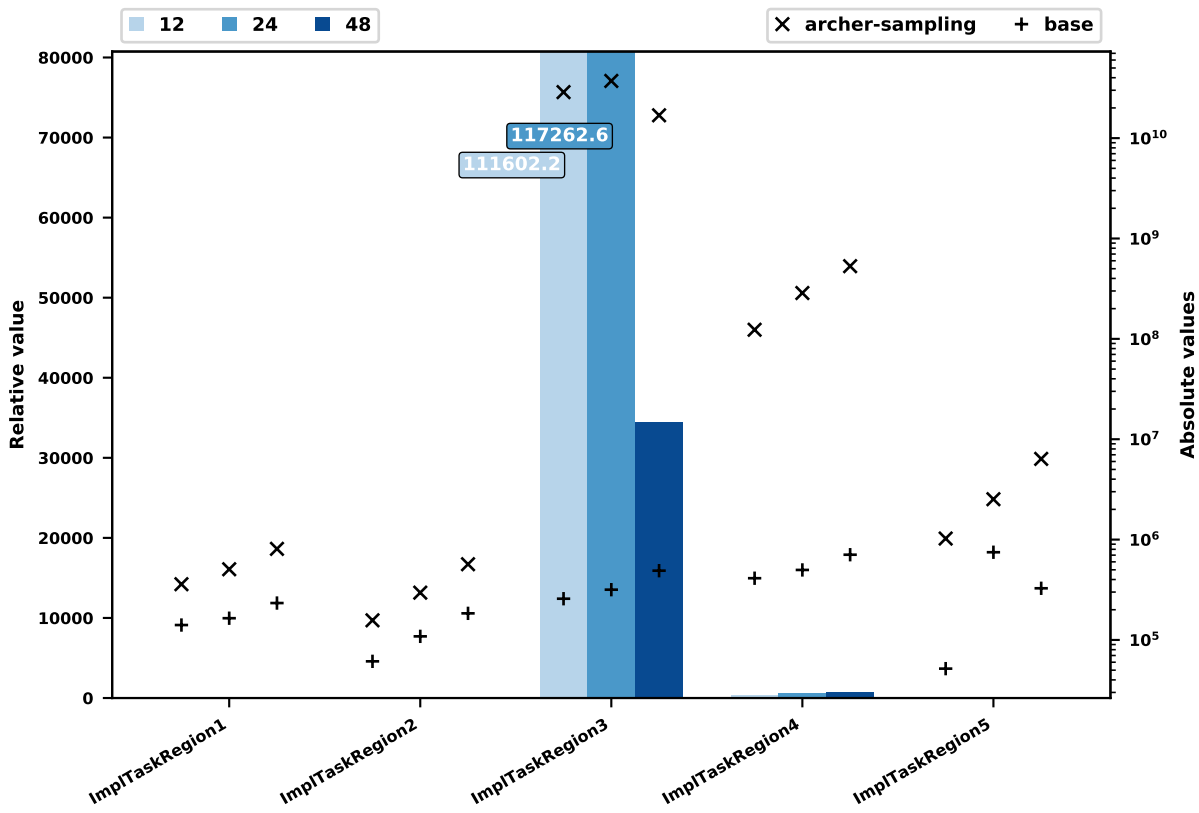


## B. Comparing 372.smithwa-tsan-sampling variant with base for metric MEM

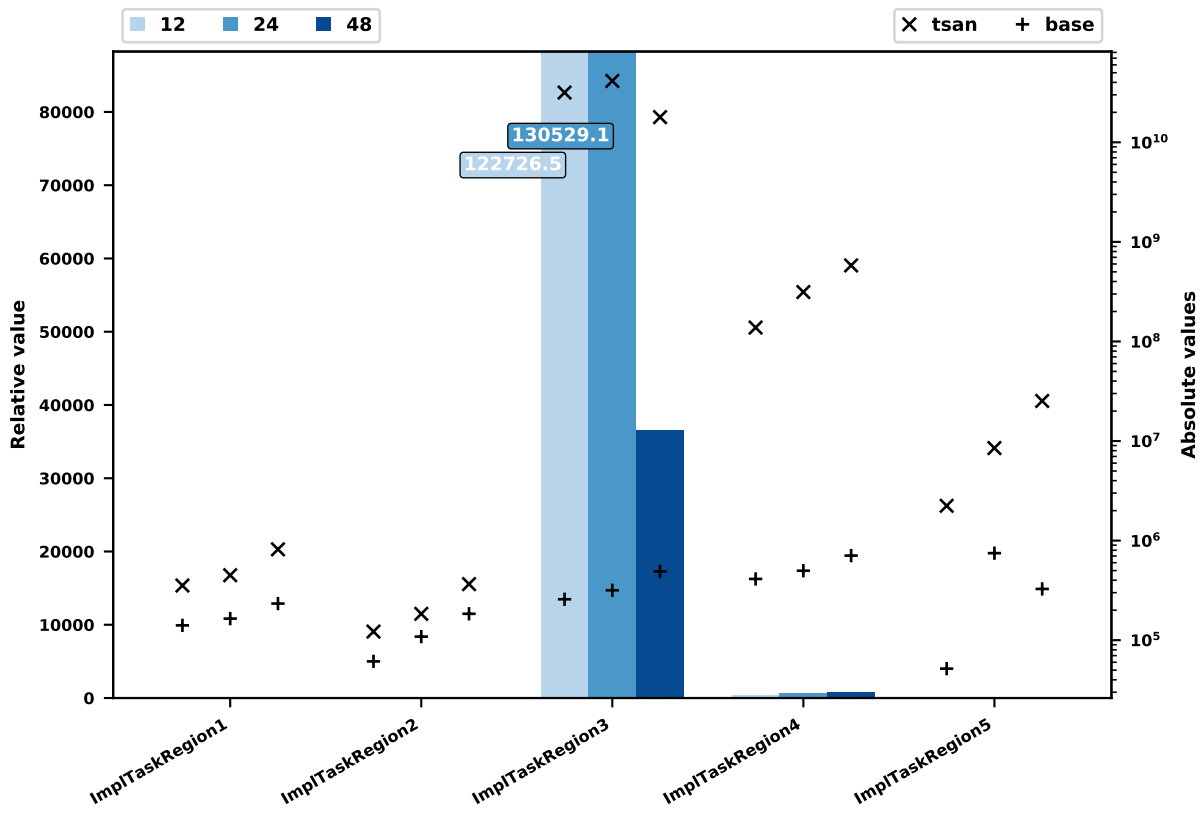




## B. Comparing 372.smithwa-archer-sampling variant with base for metric MEM



**B. Comparing 372.smithwa-tsan variant with base  
for metric MEM**



## B. Comparing 372.smithwa-archer variant with base for metric MEM

