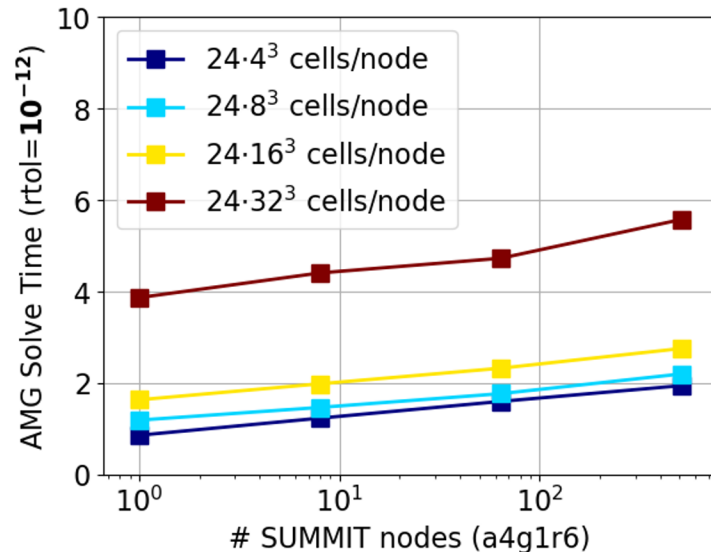
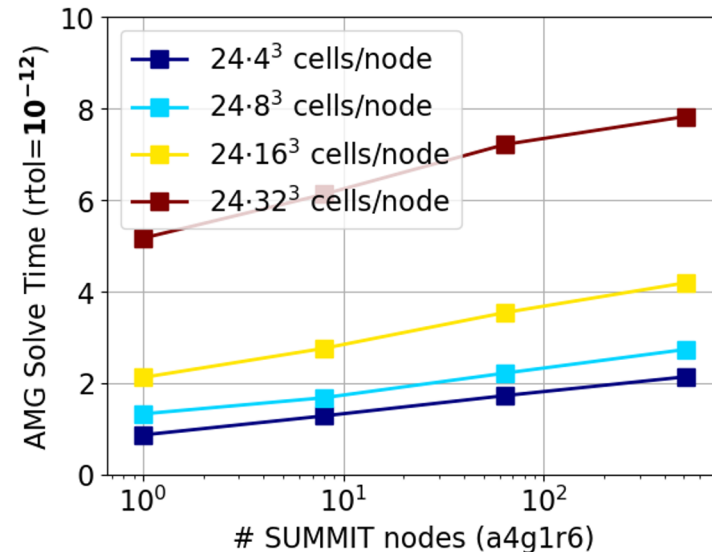


Summit Results – Algebraic Multigrid

3D Q2 Laplacian AMG solve, cuSparse - GPU aware MPI



3D Q2 Laplacian AMG solve, Kokkos kernels - Kokkos



Solve time for a 3D Laplacian with second-order elements. Larger grids are generated by uniform refinement. Runs are configured with six resource sets on each Summit node, each with one GPU and 4 MPI processes

- MPI parallel scaling is well
- Slower performance of Kokkos Kernels is due to computing a transpose for matrix transpose multiply, which is not natively supported
- Kokkos is faster when configured with cuSparse