Spartan Parallelization and Augustus Time Dependent Results

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for the presentation
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Available on-line at
http://www.lanl.gov/Spartan

Spartan SP_N Parallelization Strategies

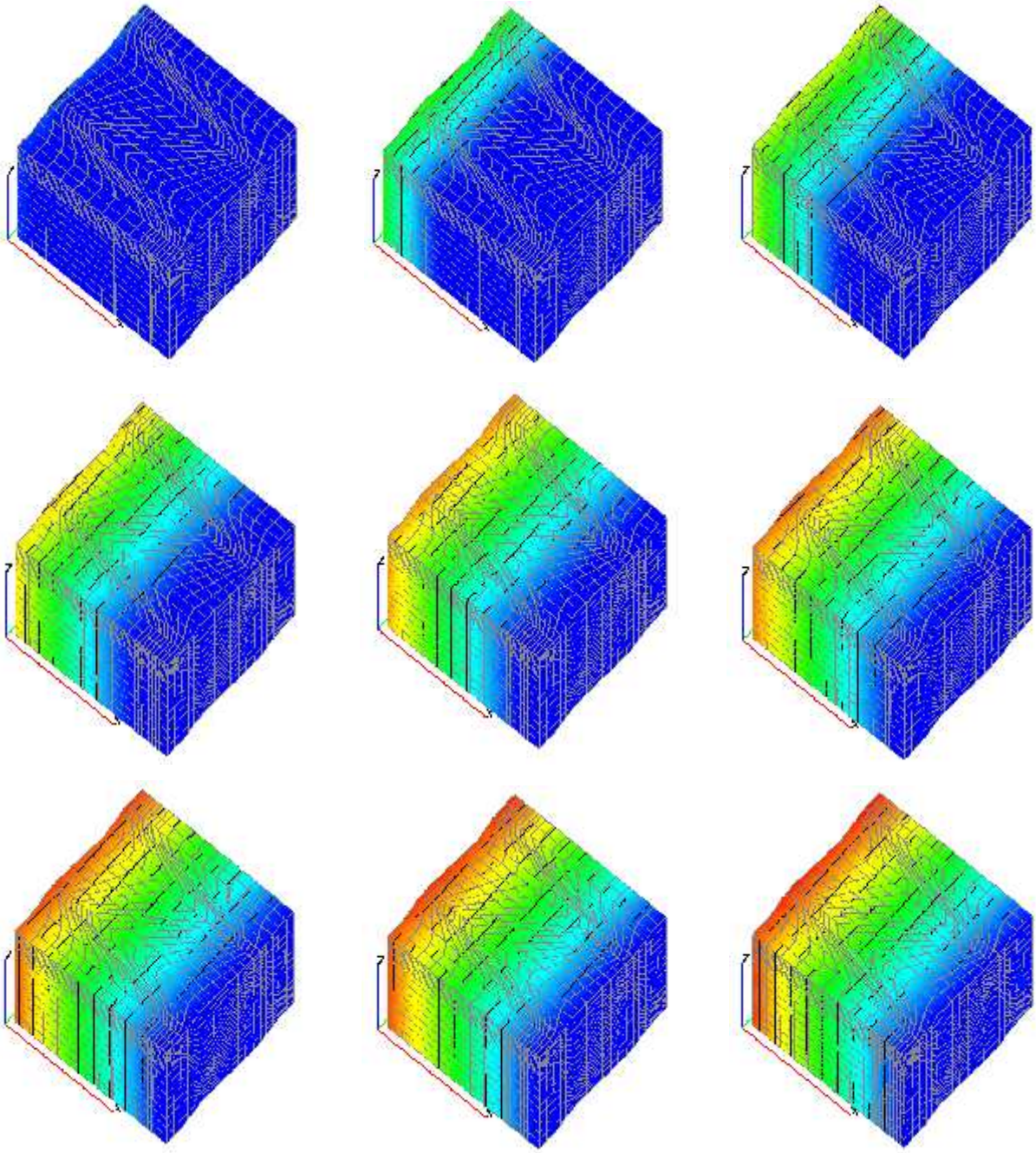
- Strategy I: serial structure with spatial domain decomposition

- Strategy II: one diffusion solve per box (energy-angle parallelization), domain decomposition within a box

- Strategy III: serial structure, spatial domain decomposition, local on-box Krylov preconditioner

- Other Strategies:
  - Newton-Krylov instead of source iteration
  - DSA/LMFG preconditioning
  - coarse processor-level multigrid

Augustus Time-Dependent Kershaw-Squared Mesh Results



Augustus Diffusion Results