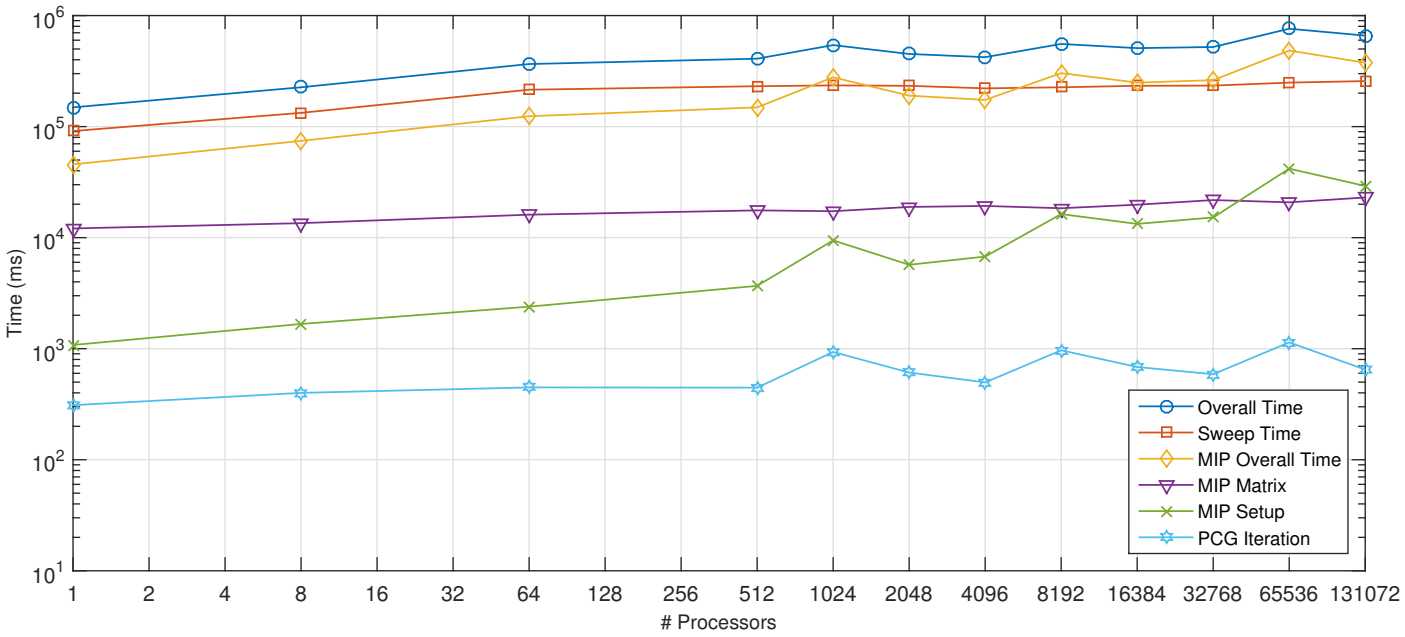
MIP DSA Timing Data with PDT on Vulcan using HYPRE



Problem Description

- Modified Zerr problem - used optimal sweep aggregation parameters
  - homogeneous cube - about 500 mfp and c=0.9999
  - $S8$ level-symmetric quadrature
- pointwise convergence tolerance of 1e-8
- SI preconditioned with MIP DSA using HYPRE PCG and AMG

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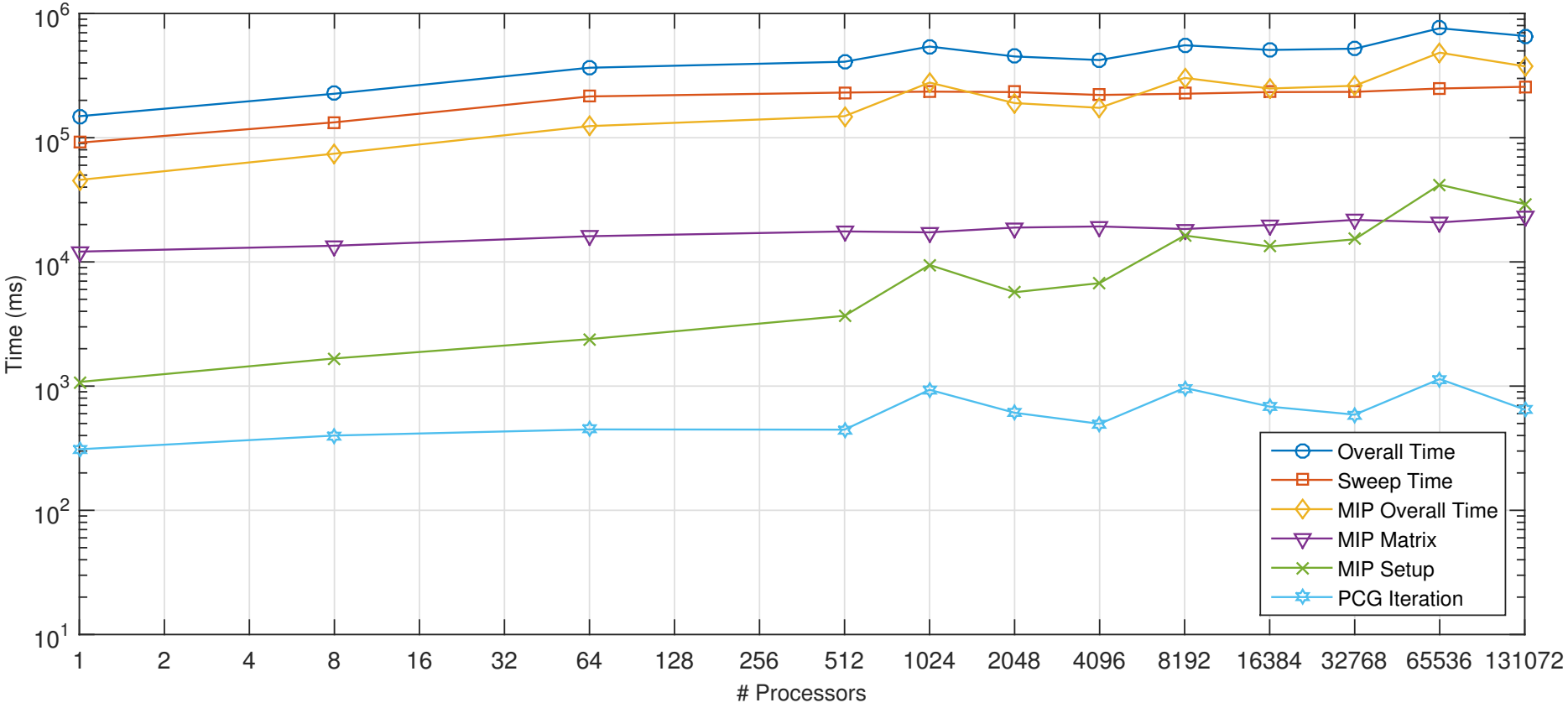
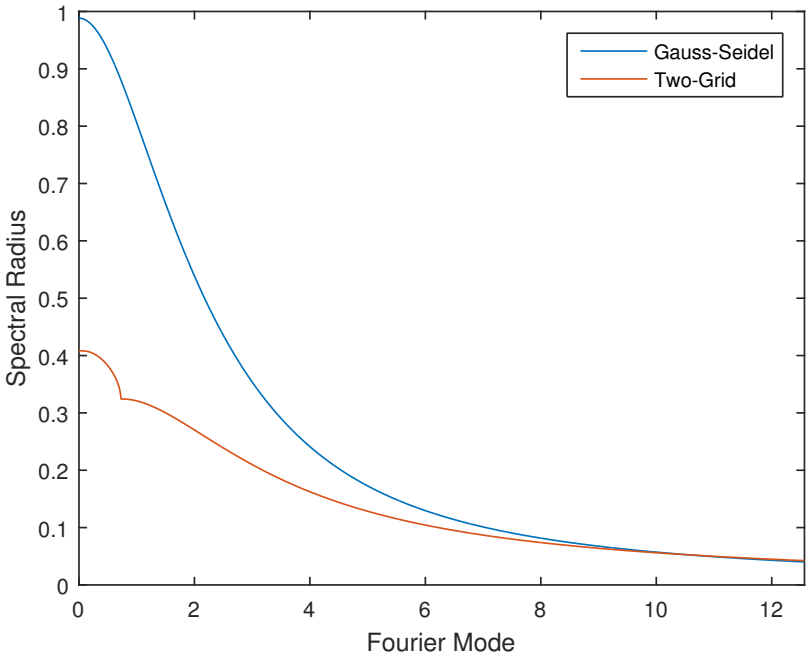
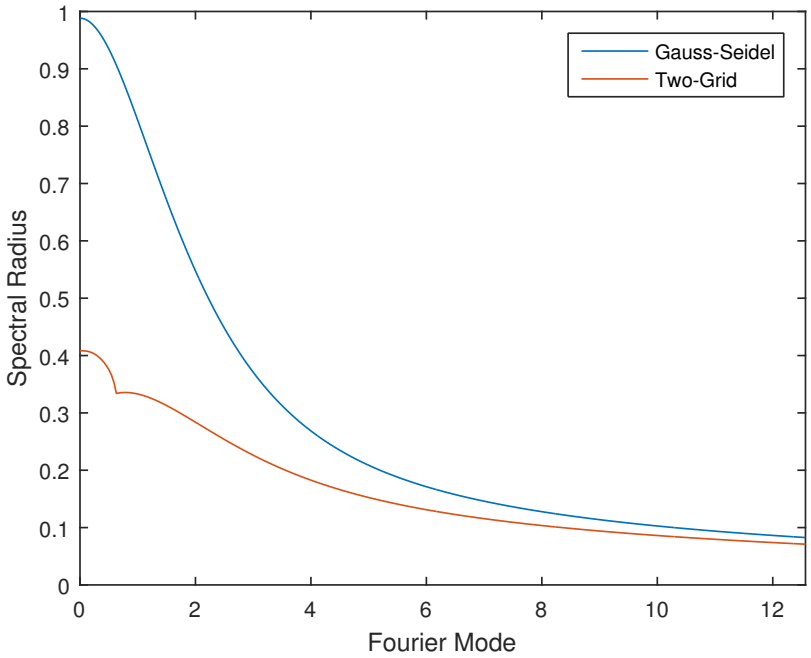


Two-grid fourier analysis on 99G graphite: P0 (left) and P1 (right)





Preliminary PDT two-grid results

Materials	Unaccelerated Iterations	Accelerated Iterations
Graphite Only	2027	21
Graphite + Air Duct	2138	23

Materials	Unaccelerated Solve Time	Accelerated Solve Time
Graphite Only	51.67 hours	31.23 minutes
Graphite + Air Duct	54.5 hours	35.56 minutes