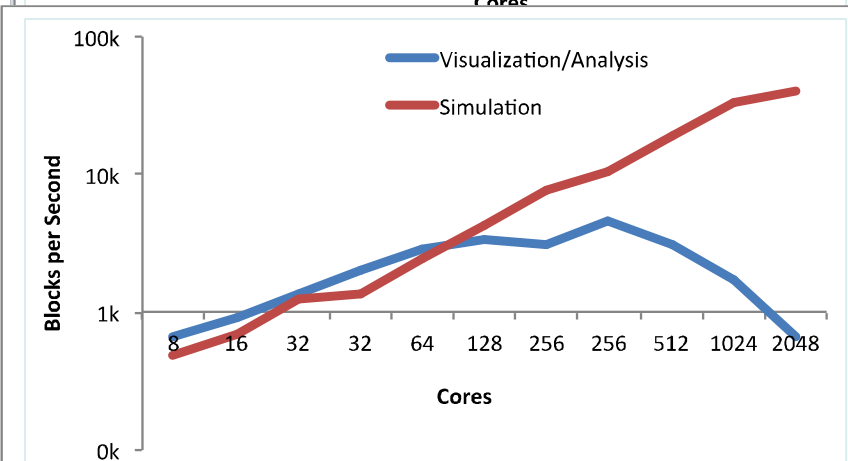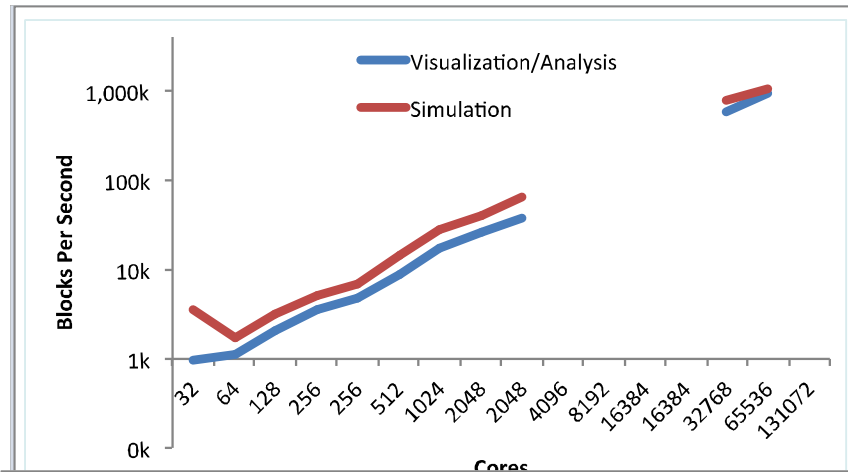# Paraview Coprocessing Scalability and Capability Testing

SAND2012-3442P

- Saving results to disk as simulation runs is expensive.

- ParaView CoProcessing alleviates the need by analysing data in memory

- ParaView must scale as well as the simulation

- ParaView is a large collection of capability

  - Not all will scale well

PI: Nathan Fabian
Code: CTH + ParaView
Run time: 1.2 Cielo Days

Comparison of two different filters scaling

Paraview Coprocessing Scalability and Capability Testing

- Some will scale
  - With extra information passed in
- Graph shows the filter and CTH modified to pass extra information about neighbors
  - Filter no longer needs an All-to-All to determine it

Same filter with access to more information
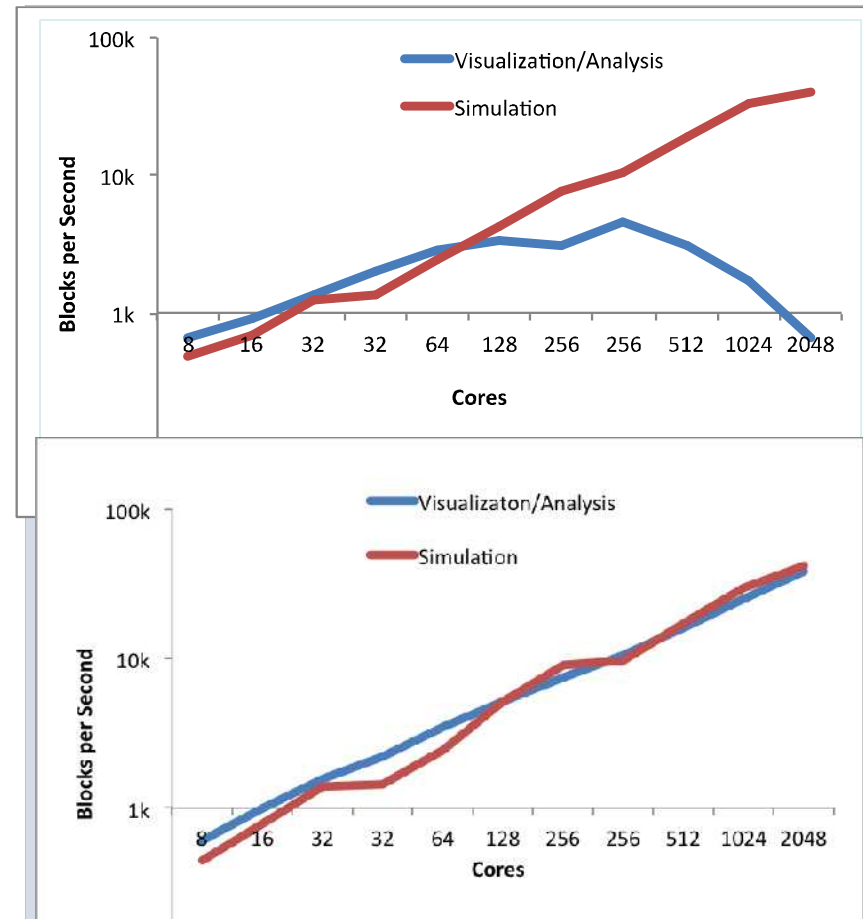
By modifying CTH to pass more information the filter can process more effectively.