Parallel Implementation of Linear System Solvers

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Introduction

Parallelization
Application in weather model output statistics

Direct and Iterative Solvers

Direct solver: normal method
Iterative solver: Jacobi method

Profiling

Shared memory parallelization: OpenMP
Distributed memory parallelization: OpenMPI

Serial and Parallel Implementation

Shared memory parallelization: OpenMP
Distributed memory parallelization: OpenMPI

Weather Model Output Statistics

Analog Ensemble explained.
Example results shown.

Access

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