CCSM on BlueGene

CCSM on BlueGene Project

This collects notes, info and current status on getting all configurations of CCSM to run on the IBM BlueGene system.

Goals

- 1. Run CCSM with full models at all resolutions that don't require parallel I/O and check performance.
- Add parallel I/O to all components and run high resolution case on 10K processors.
 Old CCSM-on-BG-L work moved to a separate page. This page now focuses on BG/P and CCSM4alpha

Status (7/9/08)

CCSM4alpha

unless indicated, all runs are on Argonne BG/P.

- · with full models
 - core dump in atm init.
- other cases
 - Gcase: runs with normal I/O at x1.
 - o Fcase: core dump in atm init.
 - Acase: runs with normal I/O at 1.9x2.5_gx1v5
 - Xcase: runs with normal I/O at 1.9x2.5_gx1v5

Component models (as standalone)

- POP2:
- CLM:
- · CSIM:
- CAM:
 - o cam3_5_51: includes support for BG/P provided by Pat Worley and tested on ORNL BG/P. T42, T85 and FV 1.9x2.5 cases all run.

Parallel I-O status.

Related project. Necessary for high resolution.

Results