Old CCSM-on-BG-L work

Status of CCSM on BG/L. Effort now focuses on BG/P and CCSM4alpha

CCSM3 concurrent

- CCSM with full models (single executable)
  - build supported on frost and suny
  - run completed T31_gx3v5 compset B on 32 procs with output.

- CCSM with dead models (single executable)
  - Works for many cases.
  - See CCSM with dead models
  - See cpl_map_mod problems
- CCSM with data models (single executable)
  - not attempted

CCSM4 (sequential)

- with dead models
  - Using 32 procs and all models with identical resolution
    - FV2x2.5: runs
    - T62: decomposition error
    - T85: runs but "end of main loop" message doesn't appear in output
    - FV1x1125: as for T85.
    - T170: as for T85.
- with full models
  - high res simulation (0.5 atmosphere and 0.1 ocean) runs on BG/L at SUNY but has no output and crashes after a couple of days (sea ice error)

Component models (as standalone)

- POP2: Compiles and runs. JohnD has version with some mods for BlueGene.
- CLM:
- CSIM:
- CAM:
  - Current Work
    - Latest CAM compiles and runs on Argonne BlueGene
    - Eulerian T42 ran ok up to 64 proc limit both co/vn
      - Eulerian T85 ran ok up to 128 proc limit co; vn has memory problems
      - FV 1x1.25: CO runs on 32,64,128,256, and 480
      - FV 1x1.25: all VN runs (8-128) fails. Allocation errors.
  - Old Work
    - Sidd Gosh Notes Used 3.3.31. T31 and T42 ran with little mdifications in co and vn mode. 1x1.25 ran fine in co mode.
      - Sidd's and Yu Heng's parallel I/O mods will not be ported. Will wait for PIO instead.
    - pilgrim memory fixed as of 3.3.35.

Results

CCSM with dead models:

- 2/21/07
- 5-16-07

cpl_map_mod problems a history of what we had to do with cpl_map_mod