

# Status of CAM

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16 March 2005

# Overview

- CAM-3.0.p1 patch release
- CAM-3.1 release
- Plans for near future

# CAM-3.0.p1 Patch Release

- Control simulations identical to CAM-3.0
- Resolved bugs:
  - Non-default vertical resolutions (above 1mb)
  - Non-default load balancing w/ additional constituents
- Linux/Intel build
- PGI compiler issues
  - Optimization changed from `-fast` to `-O2`
  - `-O2` still too aggressive \*\*\* USE `-O1` \*\*\*

# CAM-3.1 Release

- Same climate as CAM-3.0
- New science features
  - Writing initial files is more flexible
  - Initial radiation calculation frequency
  - Add diagnostics for energy and water budgets
  - Add CRM and improvements to SCAM
  - 30 second topographic variance
  - WACCM configuration
  - Add FV offline driver

# CAM-3.1 Release – cont.

- New software features
  - Generic physics interfaces
  - Radiation-constituent interface
  - Re-factored vertical diffusion module
  - Read topography fields from separate file
  - New timing library
  - New SPMD communication options
  - Cray X1 optimizations
  - Changes to support IA64 cluster

# Plans for near future

- Improve testing
- Add tropospheric MOZART chemistry
- Improve modularity of radiation code
- Incorporate CAM's configure and build-namelist into CCSM's build/run scripts
- Stage 1a of CCSM-ESMF evaluation plan
- Implement generic dycore interfaces
- Move source code into subversion repository