

Discussion

- **Hydro-climate testing**
 - New/targeted diagnostics
 - Missing from the current workflow (specific regions: USA, Western Pac, Amazon, G-land)
- **Getting from here to there**
 - Plan for CAM6 version (March 1)
 - Retuning of CLUBB (global radiation)
 - Retuning of ZM deep convection (tropical variability)
 - Reformulation of TMS/ridging (surface stress/Greenland/ACC)
 - Models: 1 deg, 2 deg, 0.25 (SE) deg. Current physics + variants
- **CESM2/CAM6 material (December)**
 - Publications: Configuration, variability, climate sensitivity, high-res., ??
 - Releasing simpler configurations: aqua-planet, moist Held-Suarez, RR grids
 - Scientific description, users' guide
- **Beyond CESM2**
 - Anything missing from the plans (e.g., model formulation, dy-core)?

CAM Development Timelines

The path towards CESM2 and beyond (as of February 2016)

2015 (CAM5.5)

- CAM5.4
- CLUBB
- New orography

CAM5.5

CESM1.5

CICE5

CLM5

POP2

- Focus on 1850/20th C simulations
- Simulation concerns

Building Coupled System

2016 (->CAM6)

- Coupled system tuning
- CLUBB tuning
- Auto-conversion
- Ridging/drag/momentum (TMS?)
- Convective gustiness
- ZM modifications
- Integration with WACCM
- Update sfc. components

CAM6 model in CESM2 for CMIP6

Release

2017 (CAM6+)

- Scale-aware physics
- CLUBB-SIHLS
- UNICON
- Convective microphysics
- Stochastic physics
- SE at low resolution
- CSLAM
- MPAS
- Increased vertical resolution
- Regionally-refined cases

0.25 deg SE

CMIP6 High-res MIP

1 deg FV

CMIP6 Deck

2 deg FV

CMIP6 Paleo+

Mar: CAM6 outline

Jul: Define CESM2

Sep: Code freeze

2015 (CESM1.5)

2016 (CESM2)

2017 (CESM2+)