

CAM4 & CAM5 Aquaplanet Experiments

Brian Medeiros [brianpm -at-ucar.edu]
+ D. Coleman, R. Neale, D. Williamson

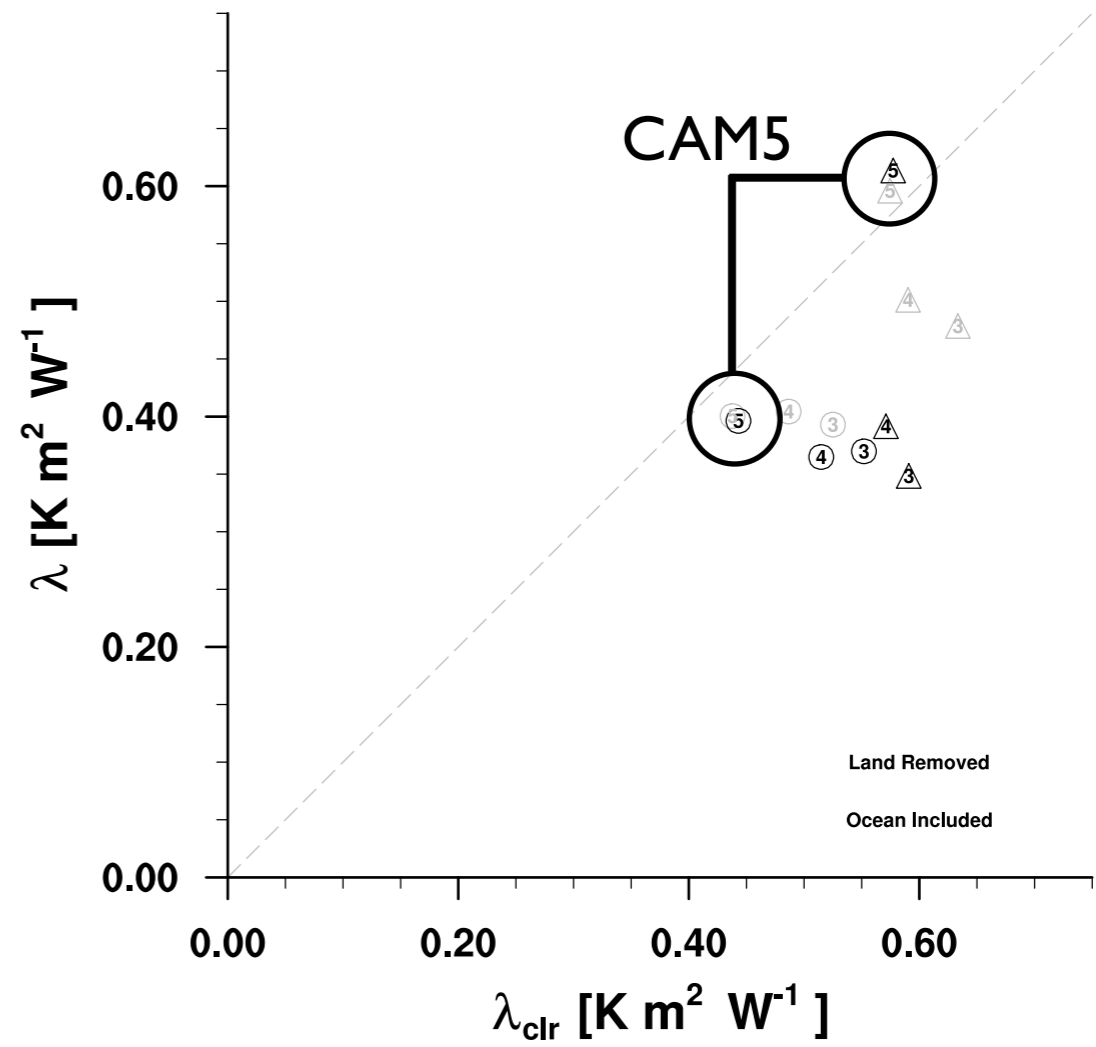
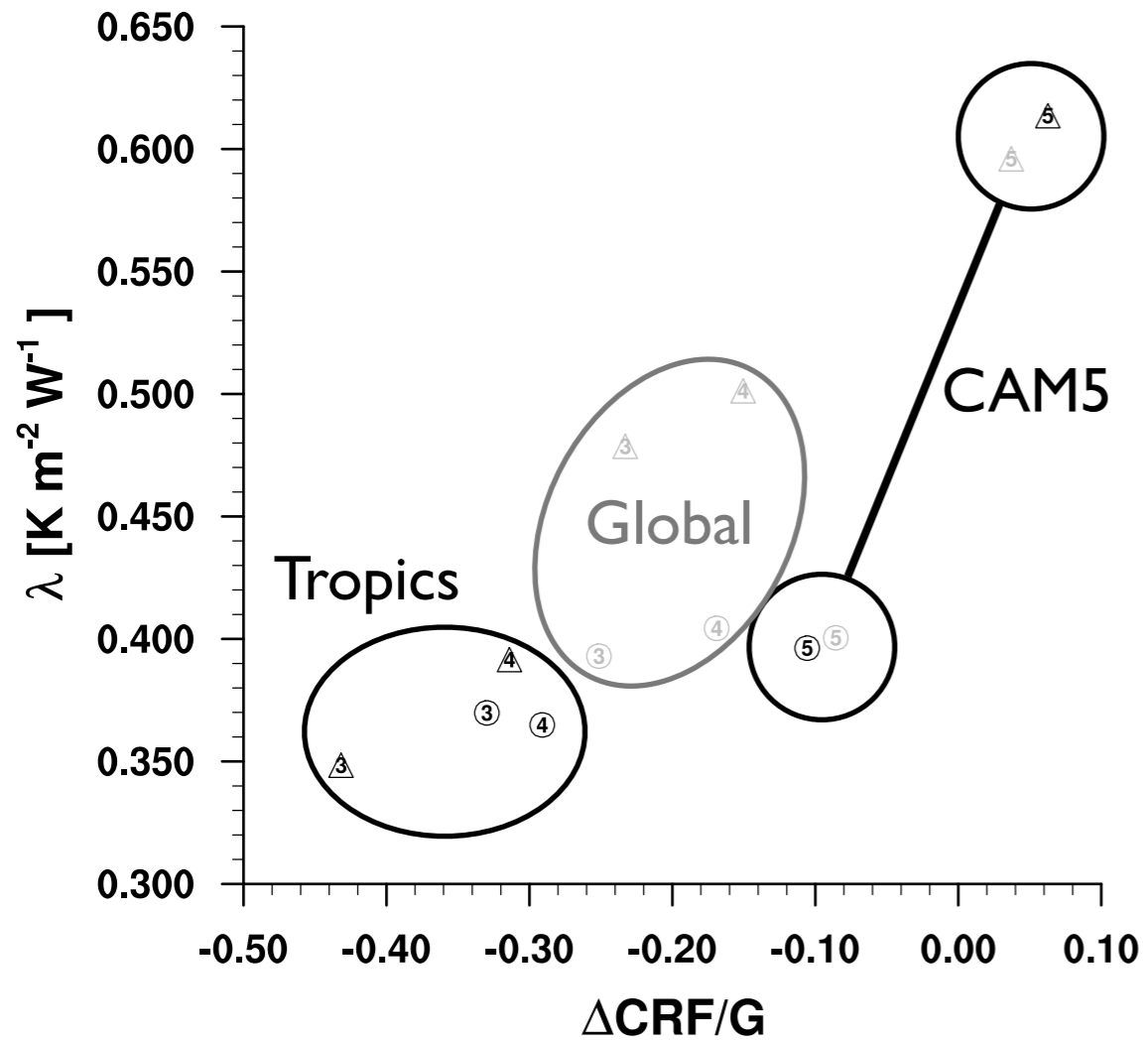


NCAR Earth System Laboratory,
Climate & Global Dynamics Division,
Atmospheric Modeling & Predictability



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Climate sensitivity

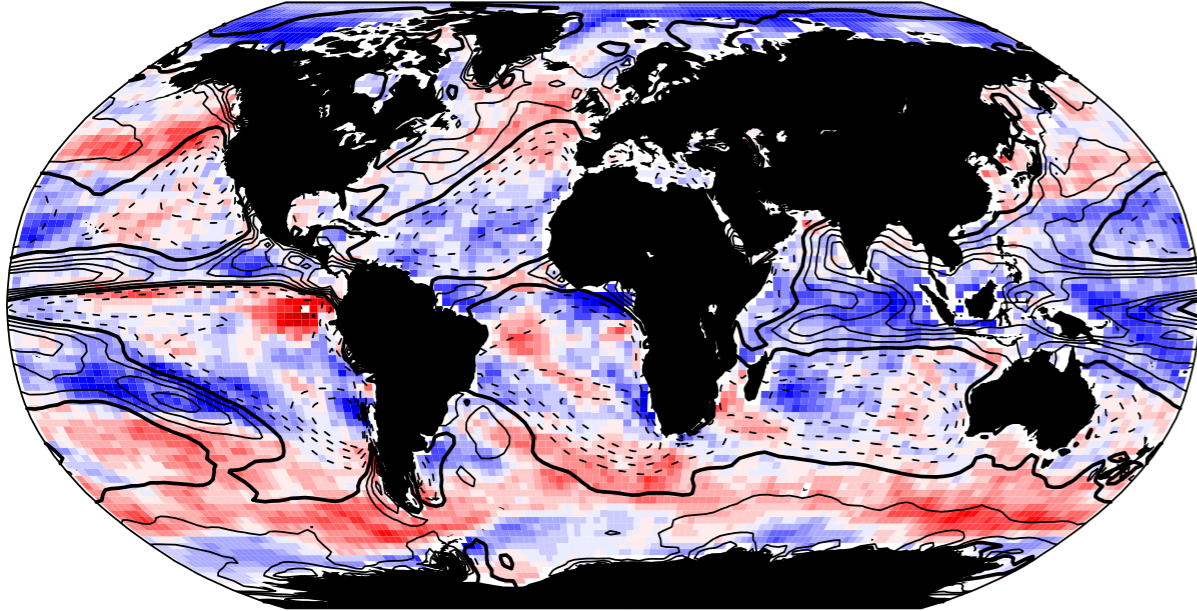


Cloud response

CAM4

Δ CRF

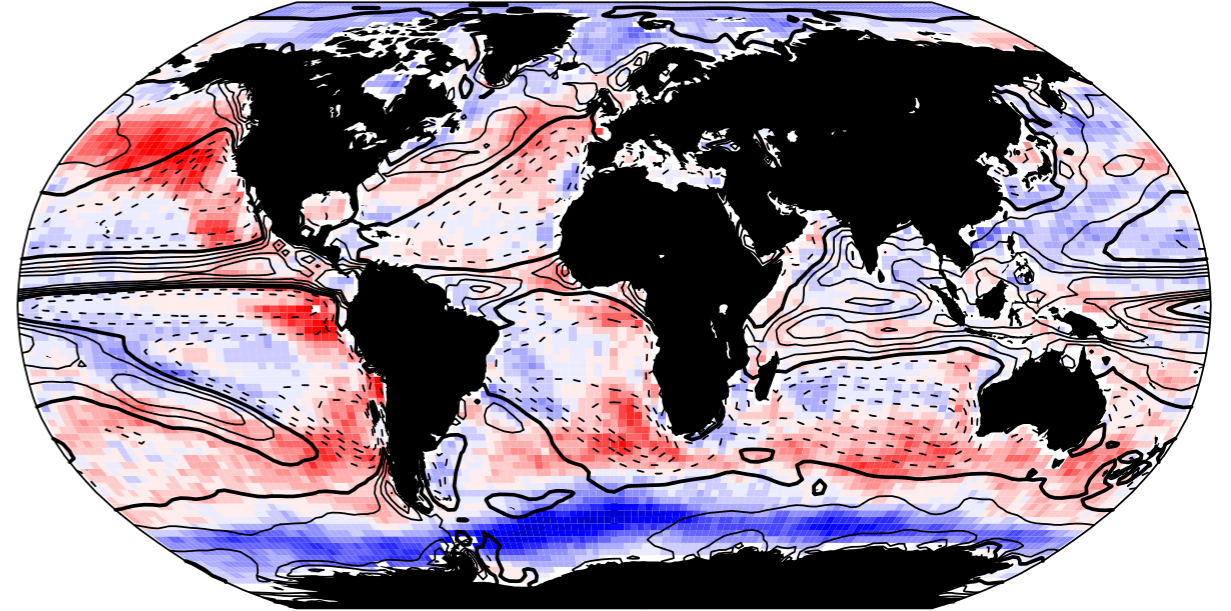
tr1_earth



CAM5

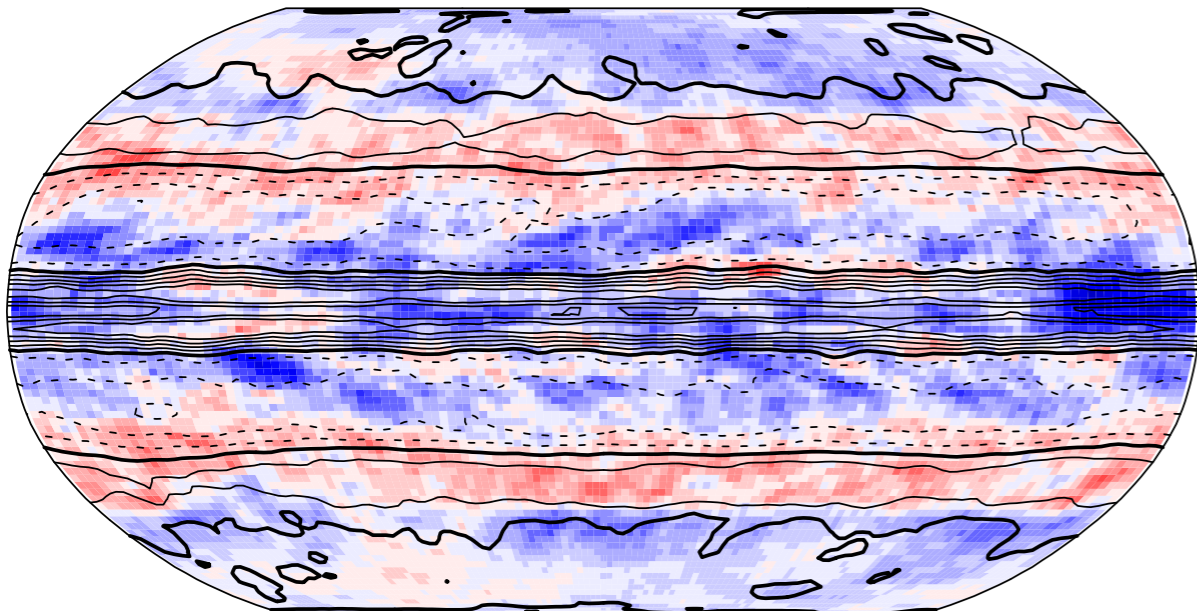
Δ CRF

cam5_cntl



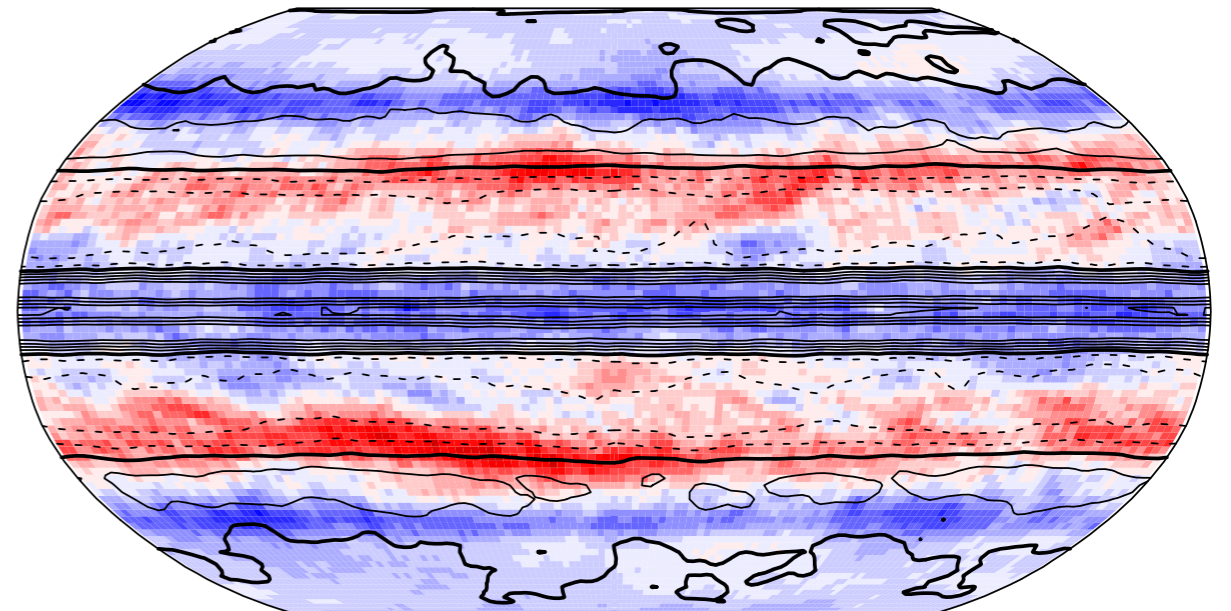
Δ CRF

tr1aqua



Δ CRF

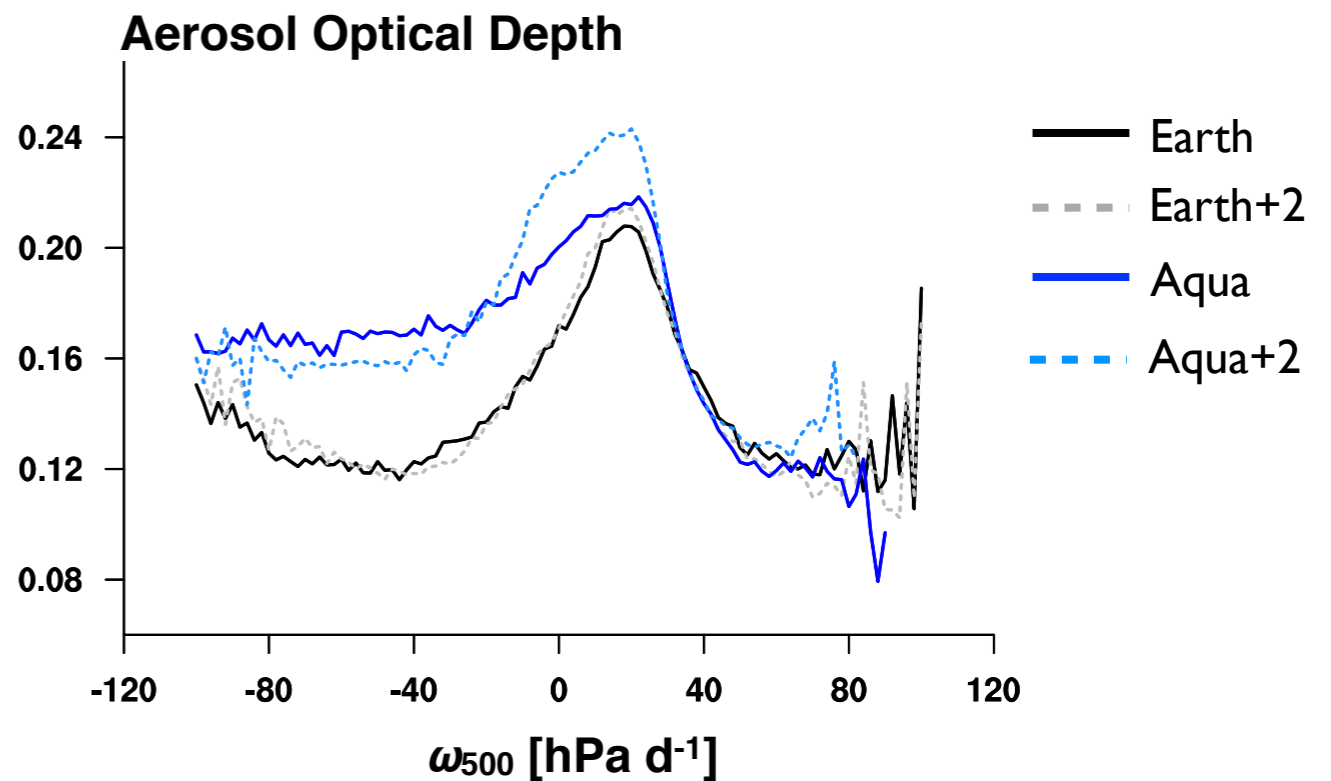
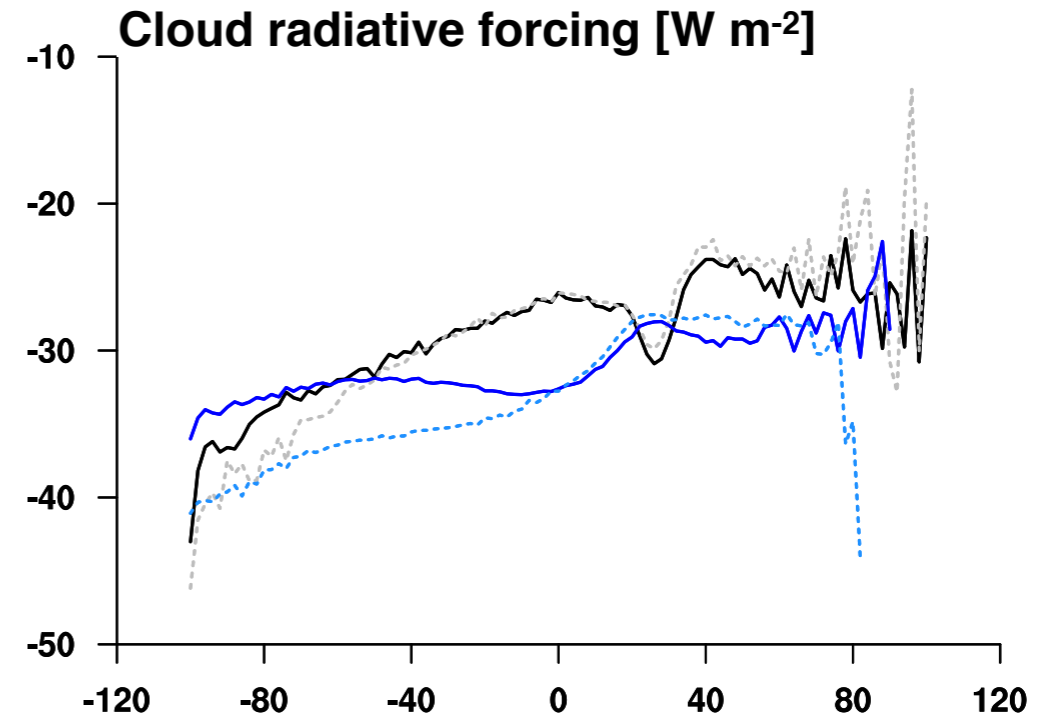
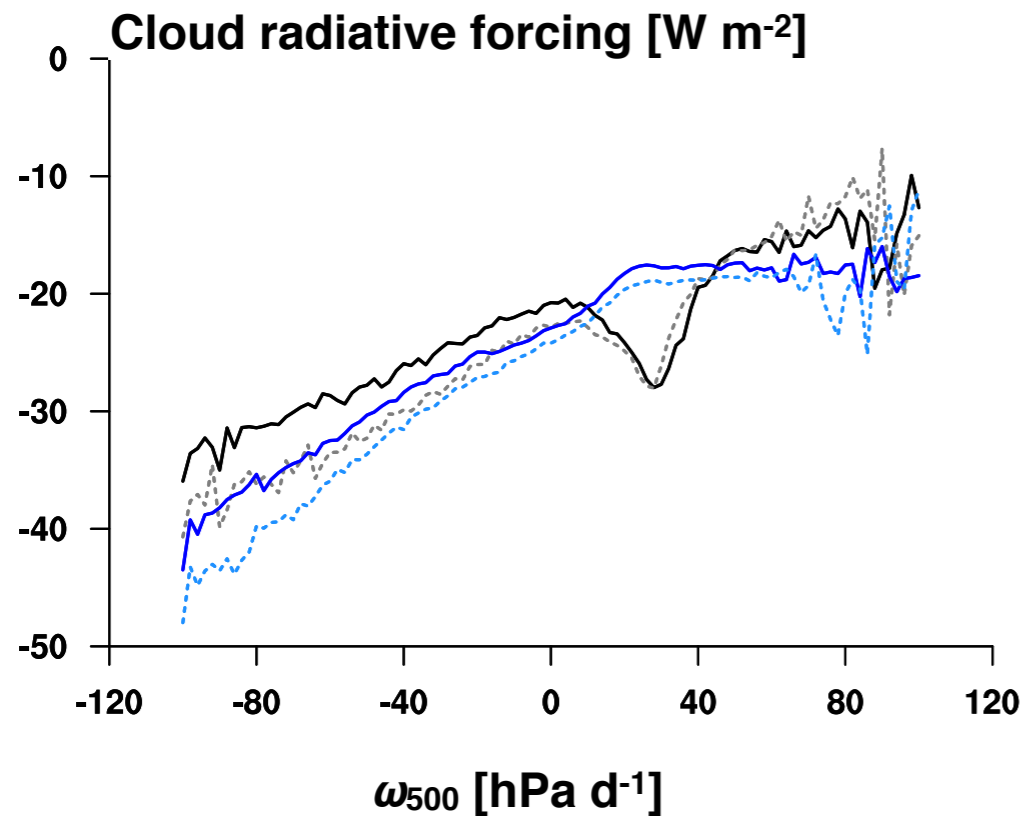
cam5_aqua



Vertical velocity regimes

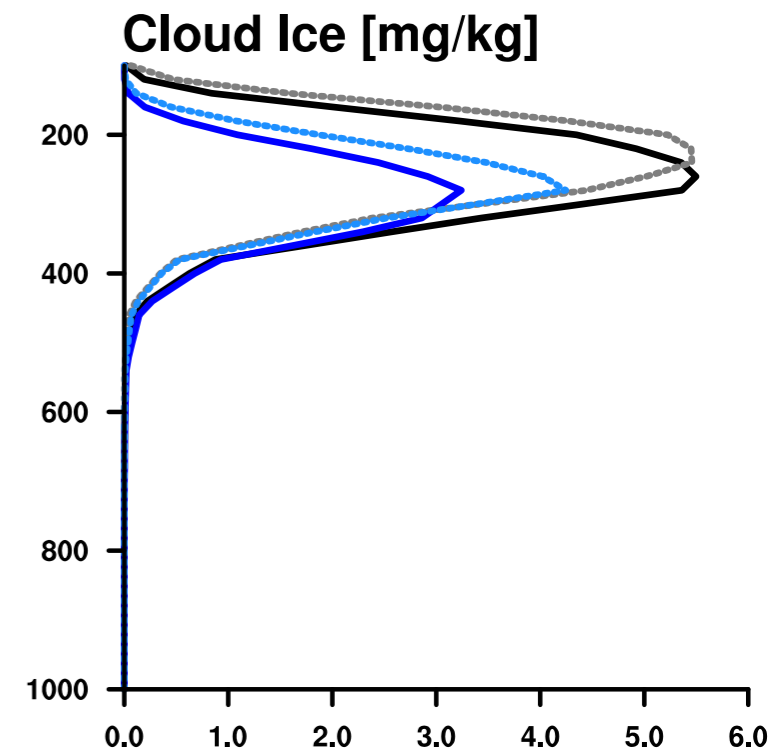
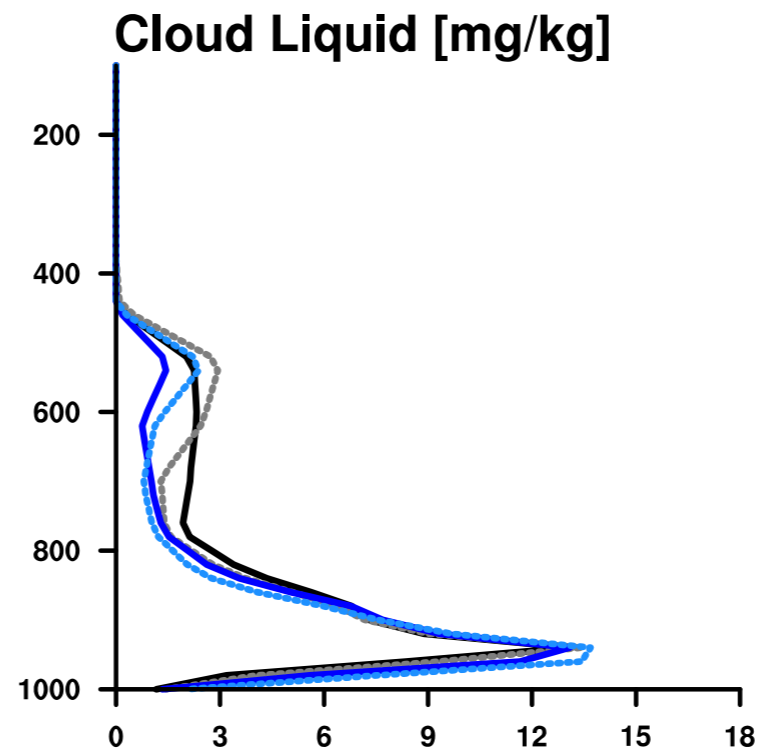
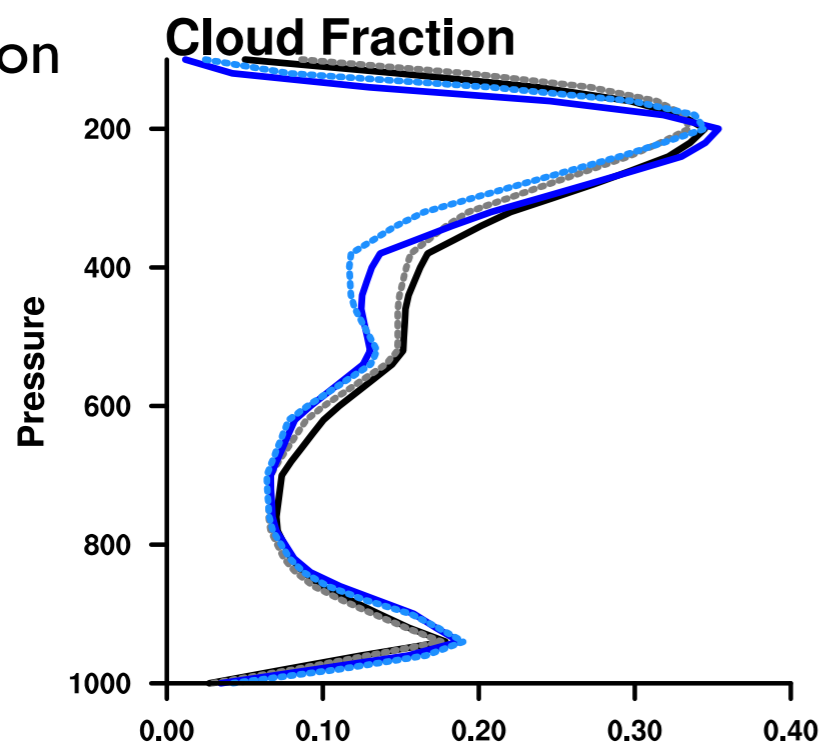
CAM4

CAM5

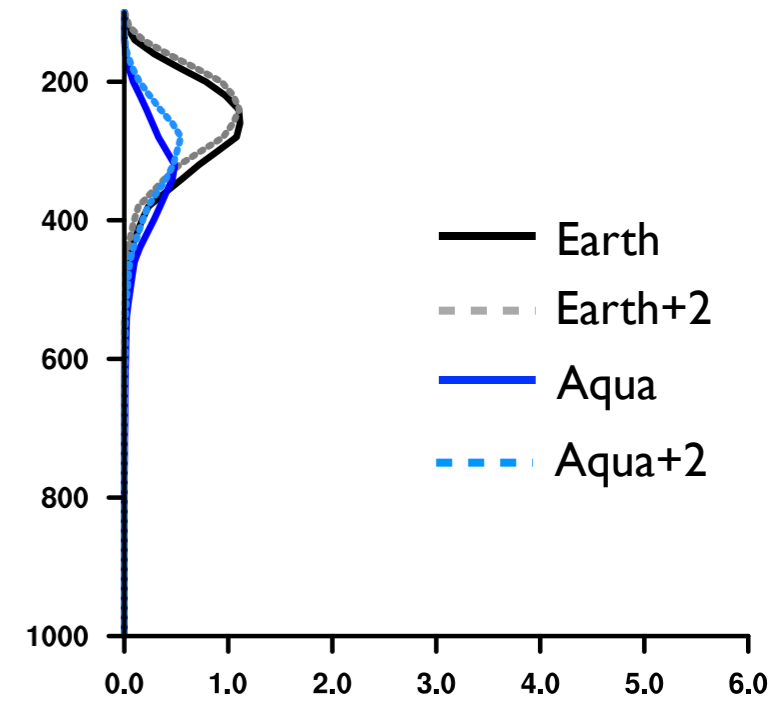
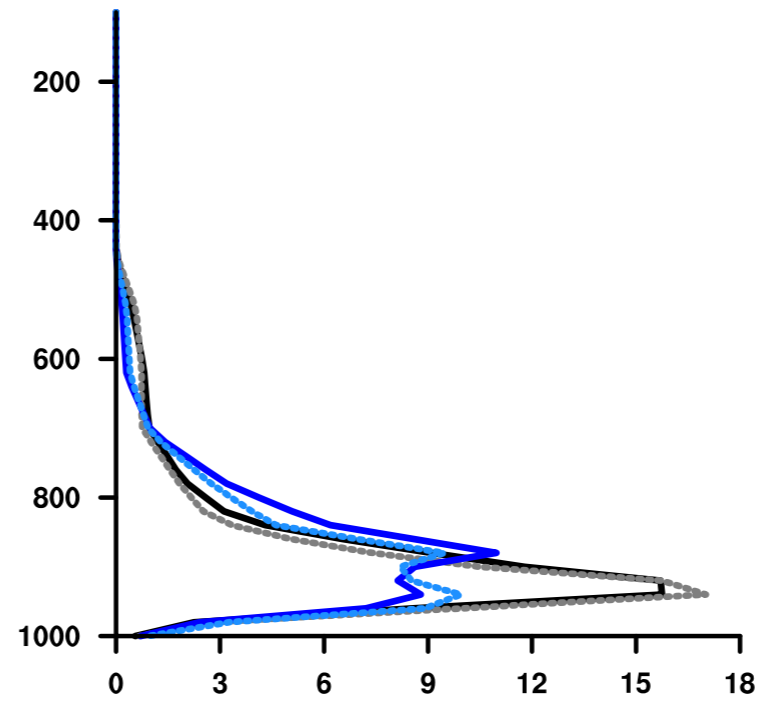
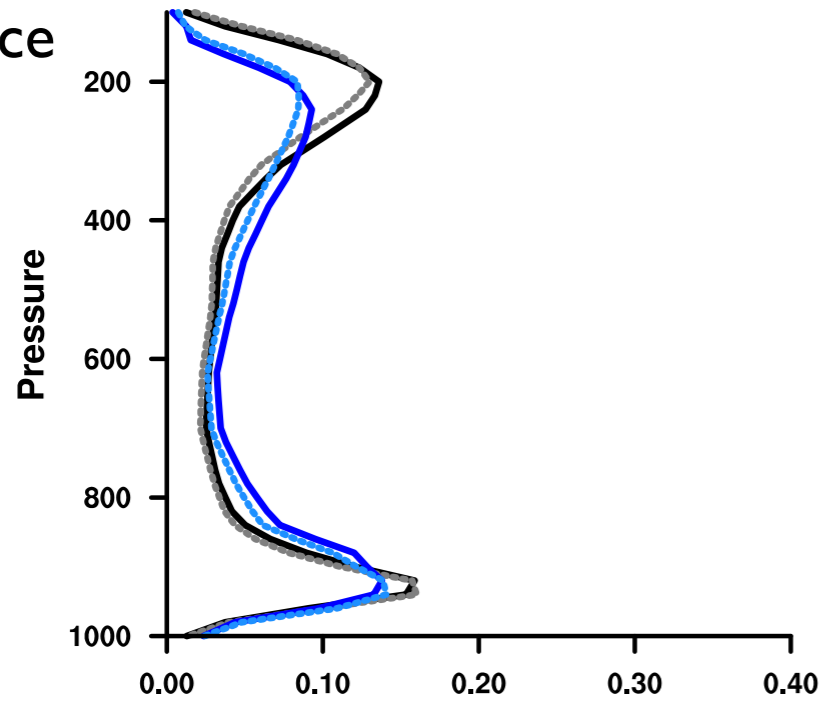


CAM5: Convecting v. Subsiding

Convection
Regimes



Subsidence
Regimes



- Earth
- - - Earth+2
- Aqua
- - - Aqua+2