



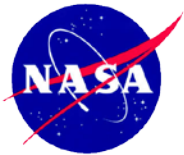
CAM/WACCM Joint WG Discussion

Feb 2014



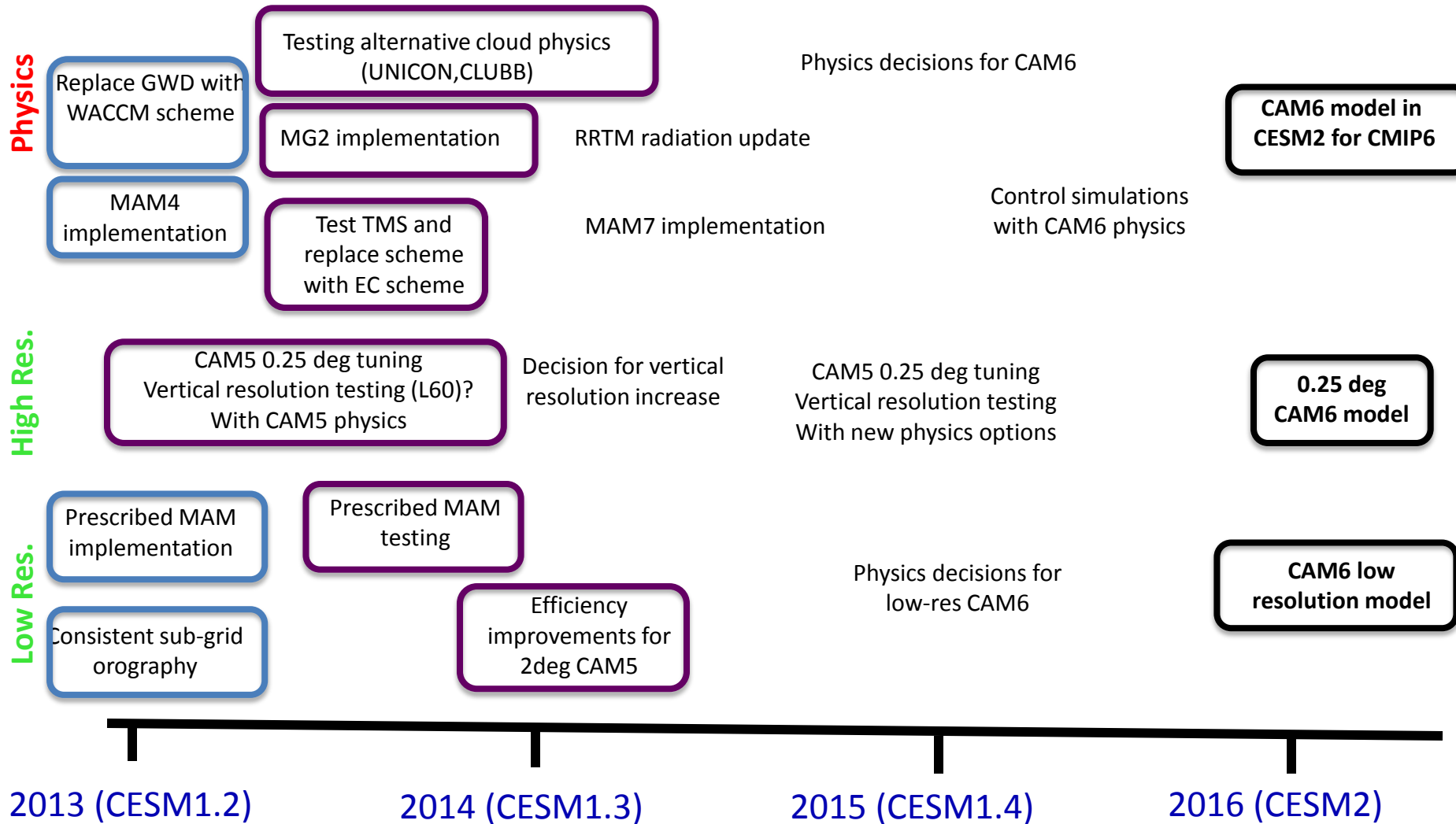
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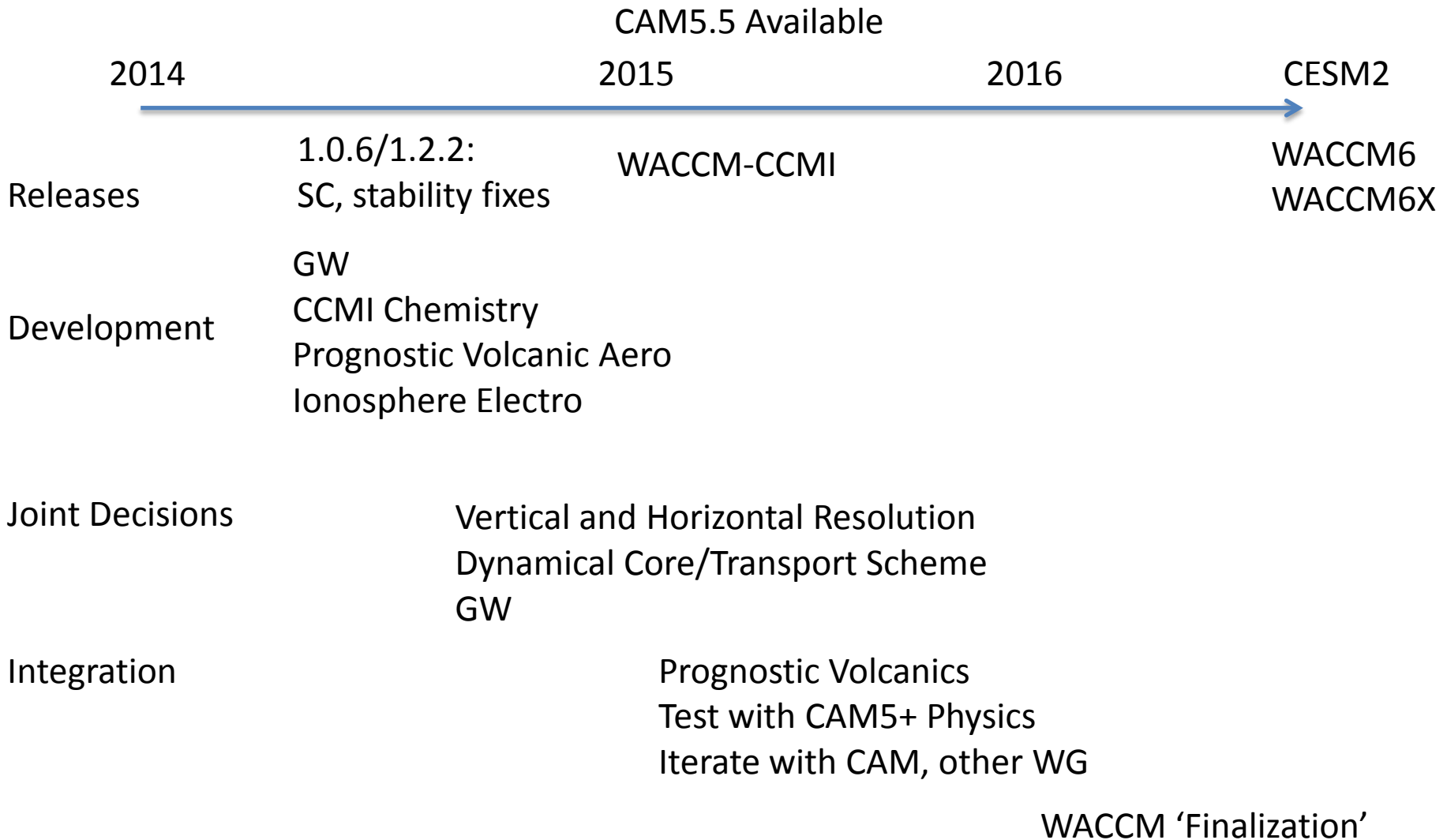


CAM Development Timelines

The path towards CMIP6



WACCM Graphical Timeline



Vertical Resolution

- Increased vertical resolution?
 - CAM?
 - WACCM?
- How high should the model top be for CAM?

Momentum Parameterizations

- Can we unify CAM and WACCM Gravity Wave Drag parameterizations?

Dynamical Core/Transport

- What will be the dy core for 1 deg CAM?
- What are target horizontal resolutions?
 - CAM
 - WACCM

Volcanic Aerosols

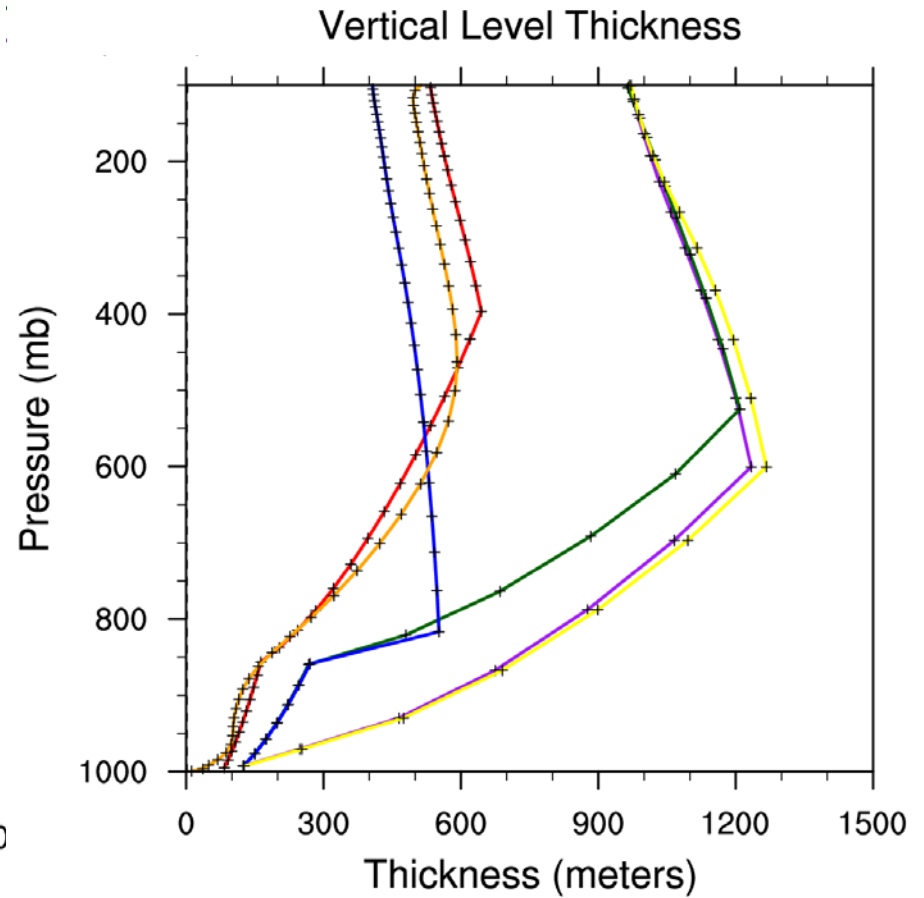
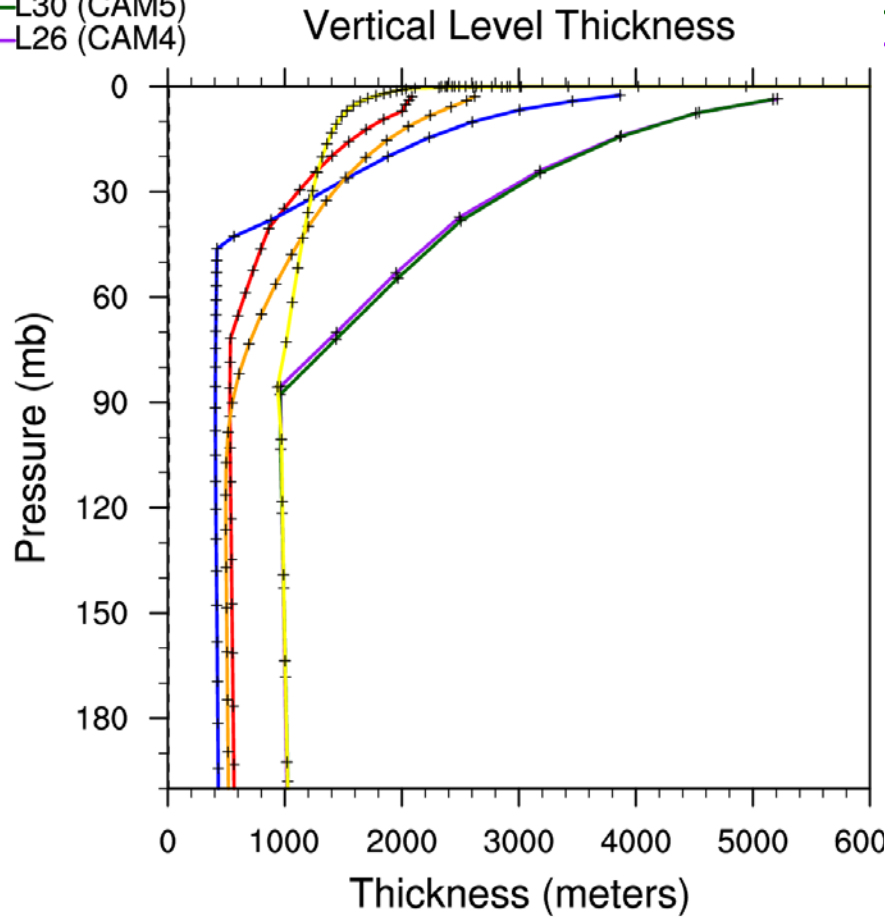
- Preferred aerosols:
 - Prescribed Volcanic file?
 - Prognostic MAM Volcanic Aerosols?

Other CAM/WACCM Discussion

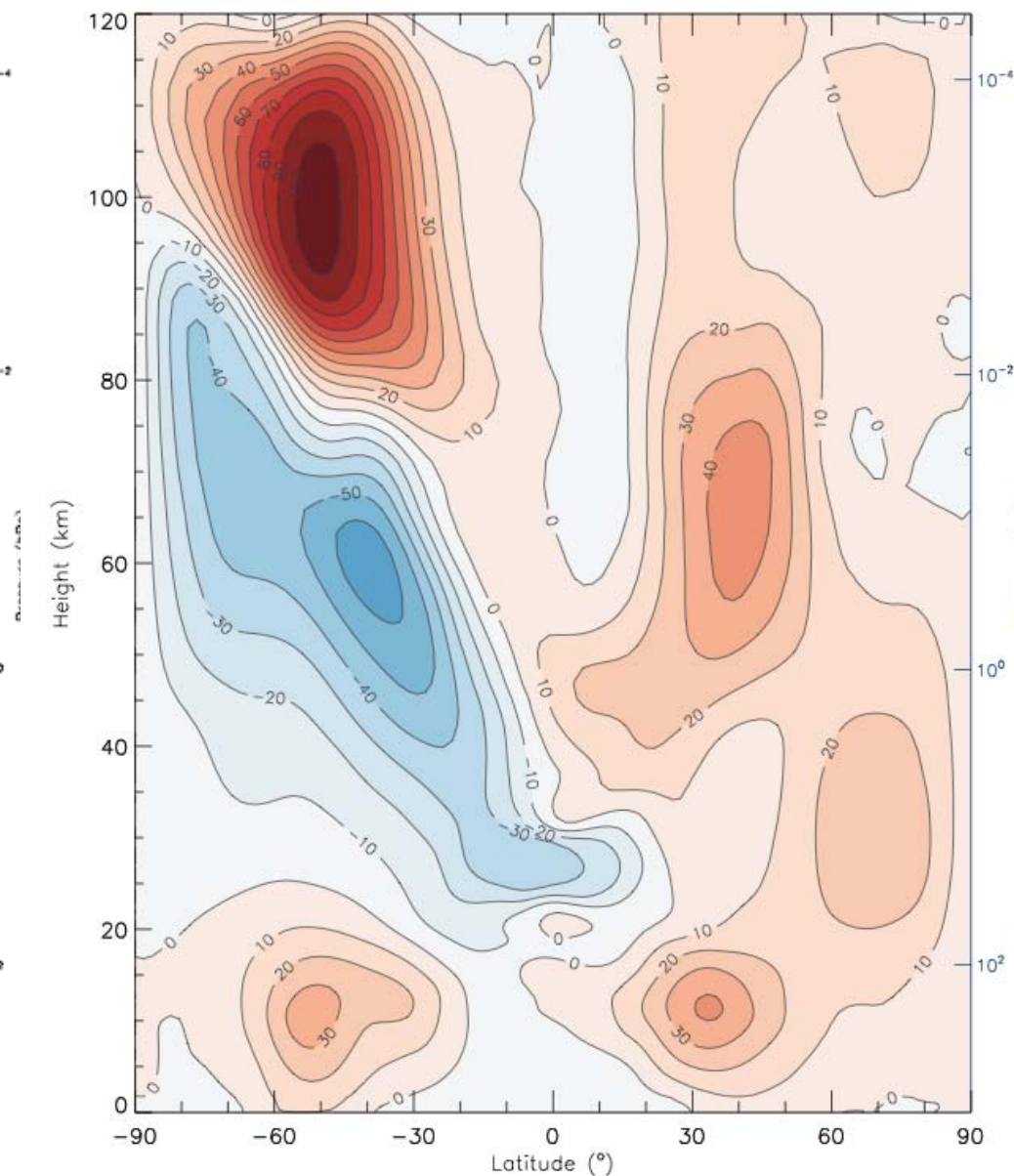
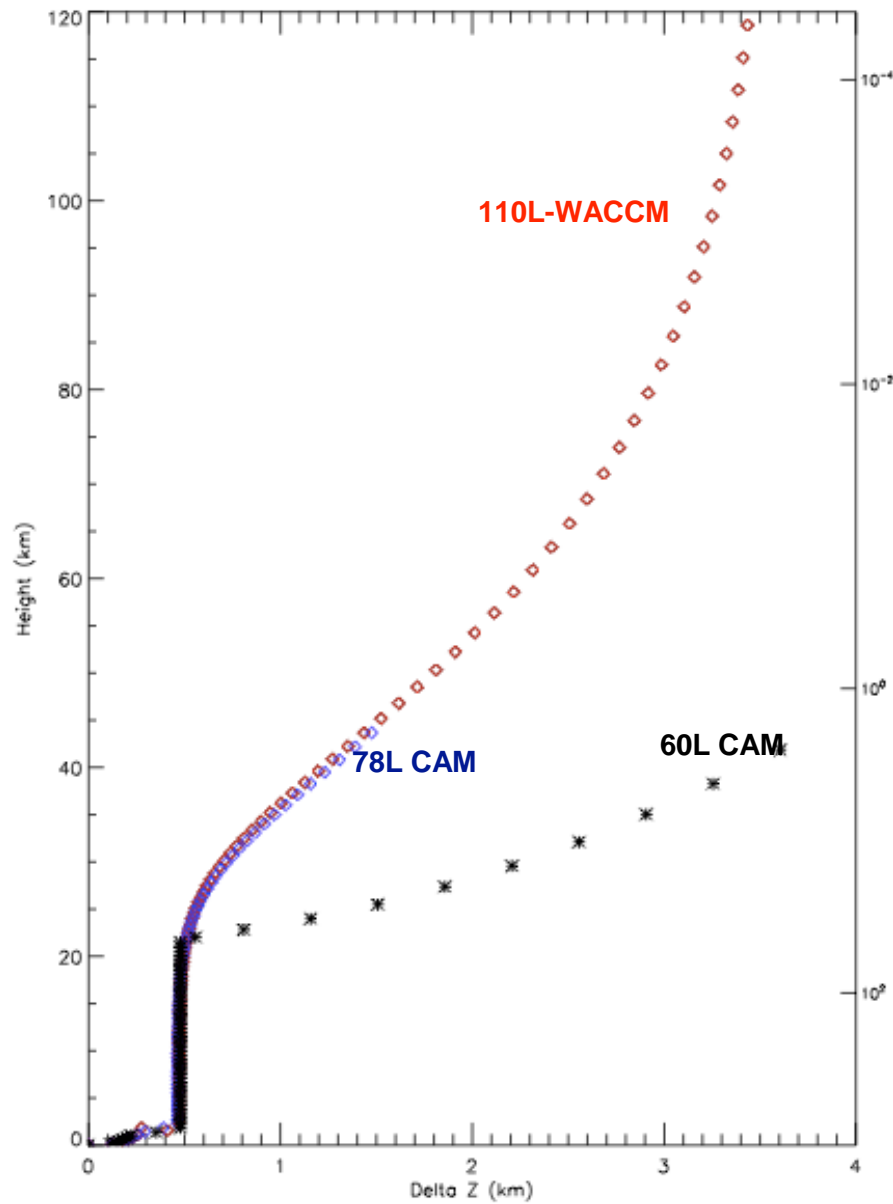
- Timelines? Does 'tentative' plan work?

CAM6 Dev Testing

- L66 (WACCM)
- L61
- L60_trop
- L60_pbl
- L30 (CAM5)
- L26 (CAM4)



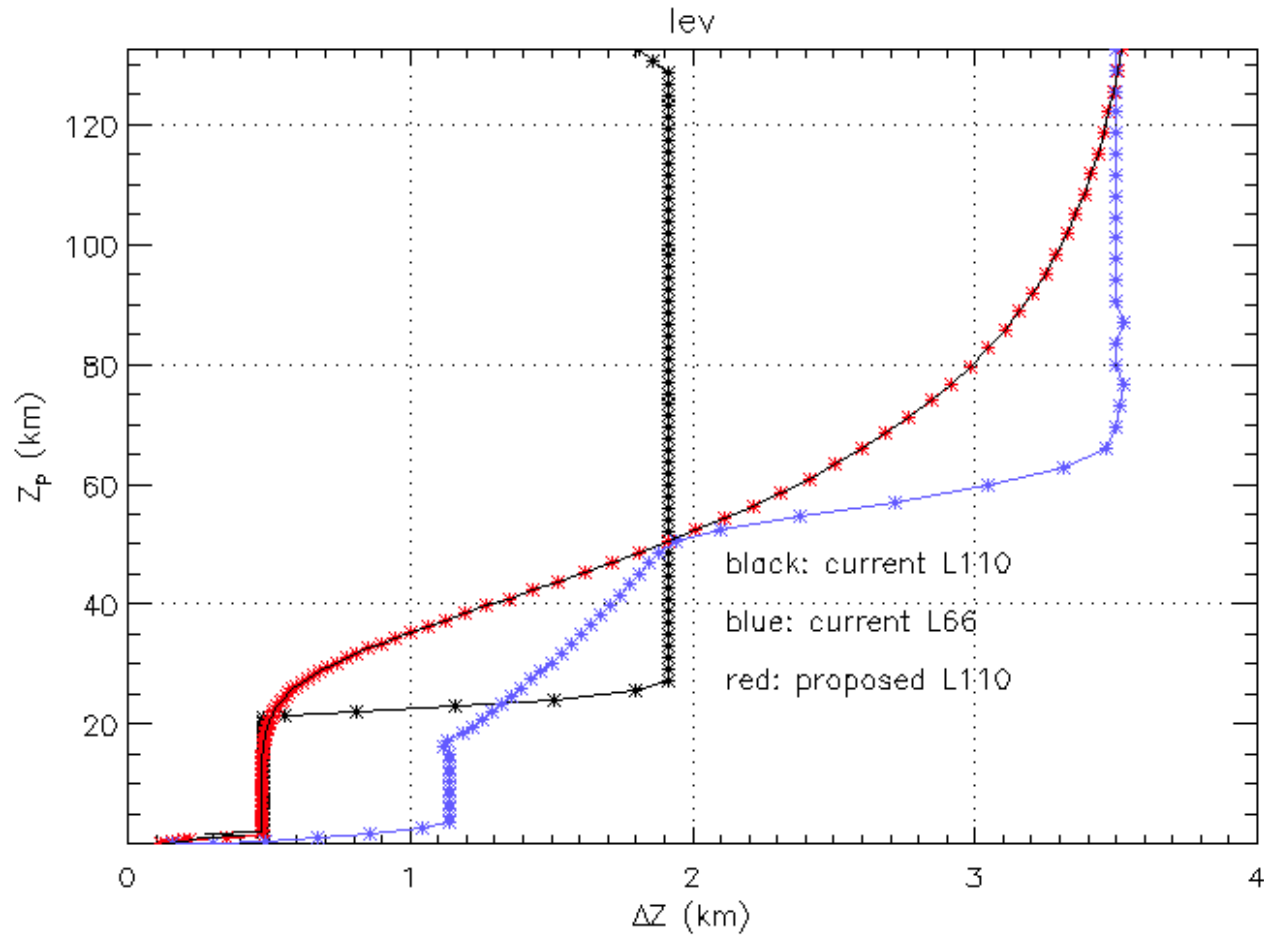
Vertical Grids & WACCM IC



vertical resolution and QBO tests in FV WACCM4

R. Garcia

vertical resolution as a function of altitude

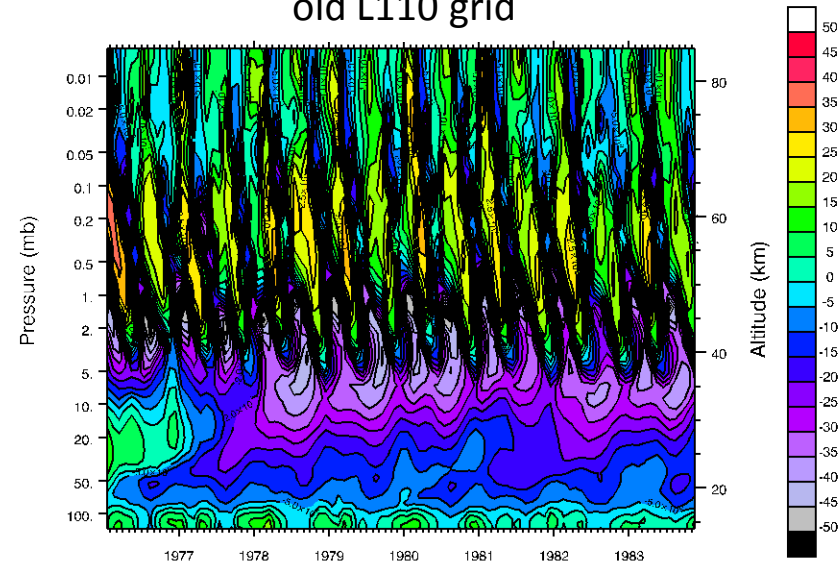


WACCM4 FV QBO /no QBO new and old L110 grid

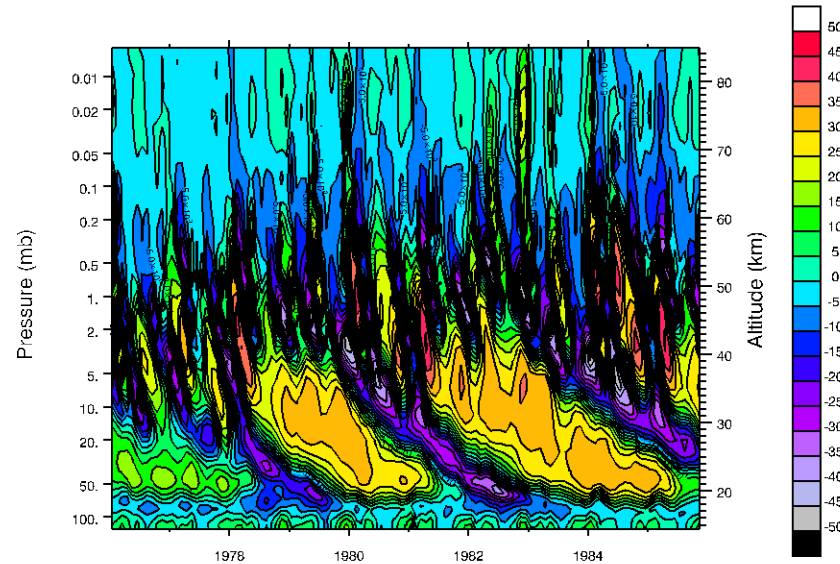
new L110 grid

old L110 grid

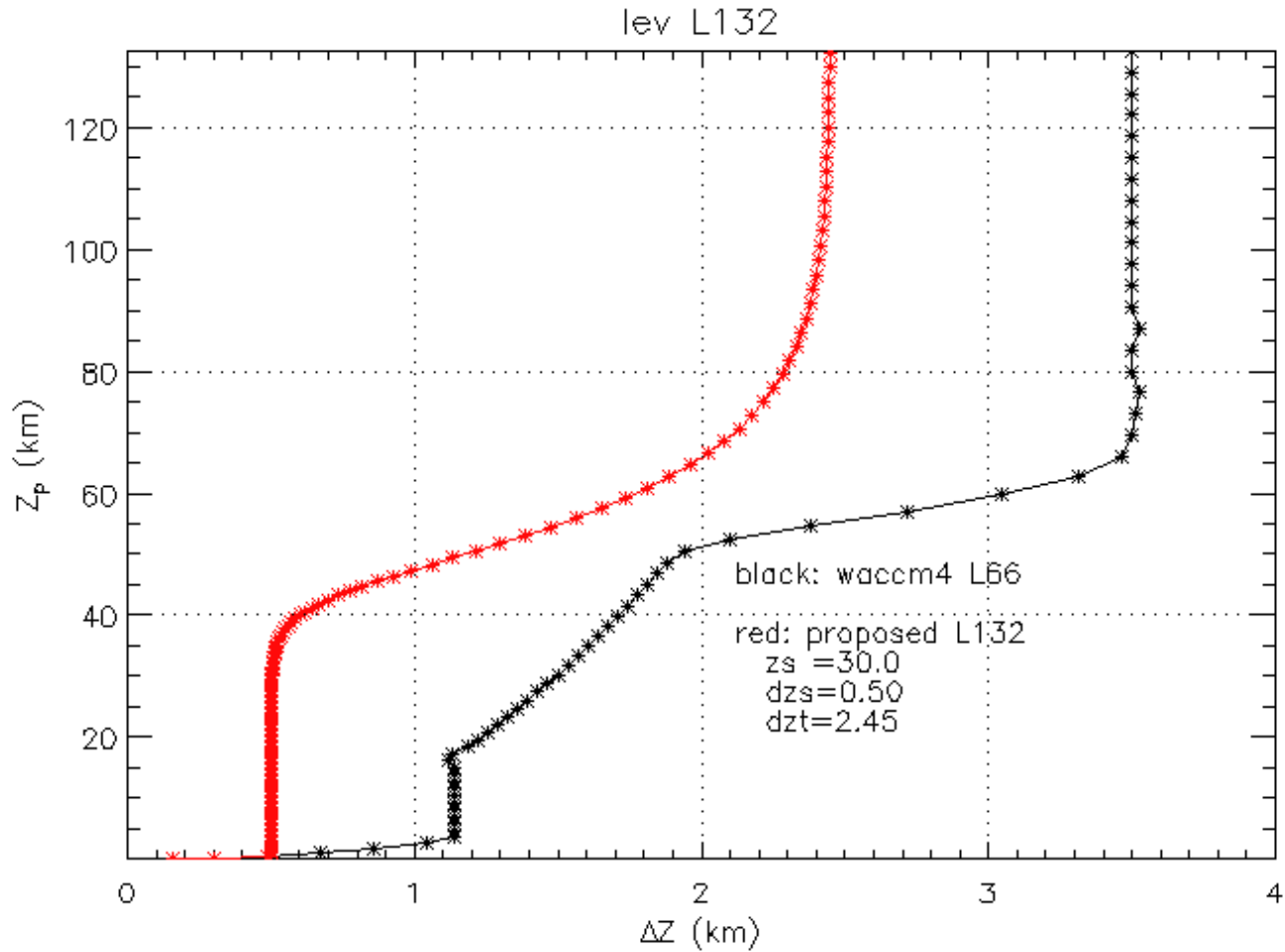
effgw_beres=0.1



effgw_beres=0.6



new L132 grid

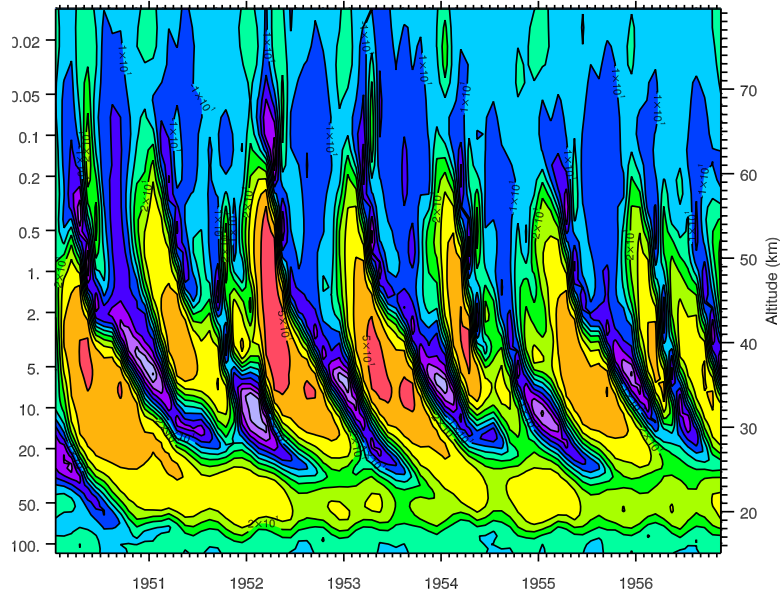


high resolution (0.5 km) through most of the stratosphere (to 40 km)

QBO in L132 vs L110 run

L132

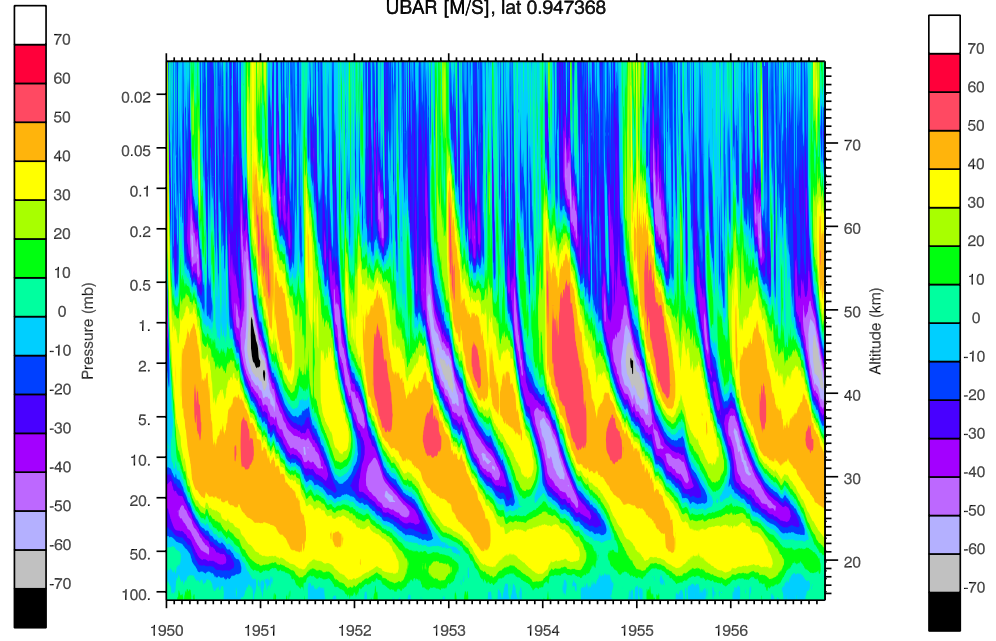
UBAR [M/S], lat 0.947368



tem_diag0_WA4_L132.nc

L110

UBAR [M/S], lat 0.947368



rgarcia 12.02.2014 10:54
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rgarcia 12.02.2014 11:03