OMPS LP Aerosol extinction coefficient measurements at 675 nm

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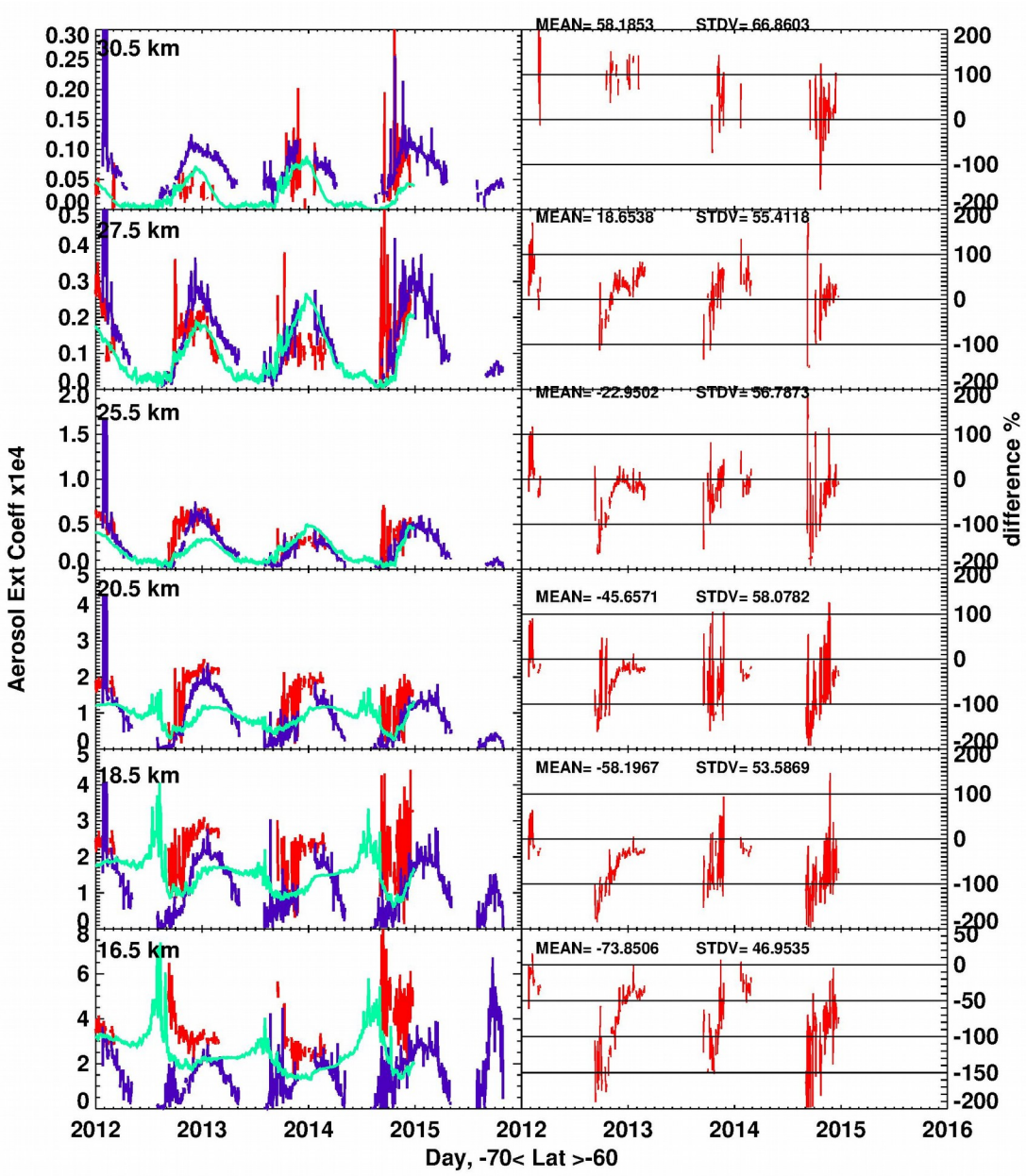
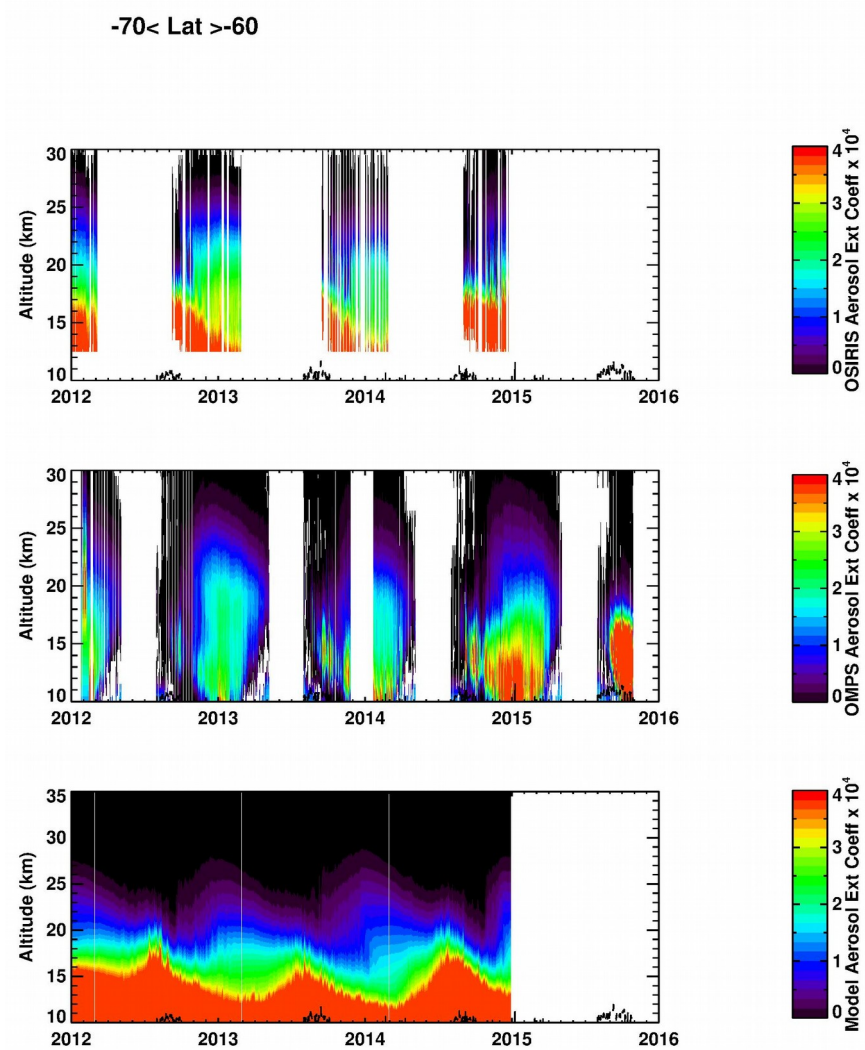
Outline

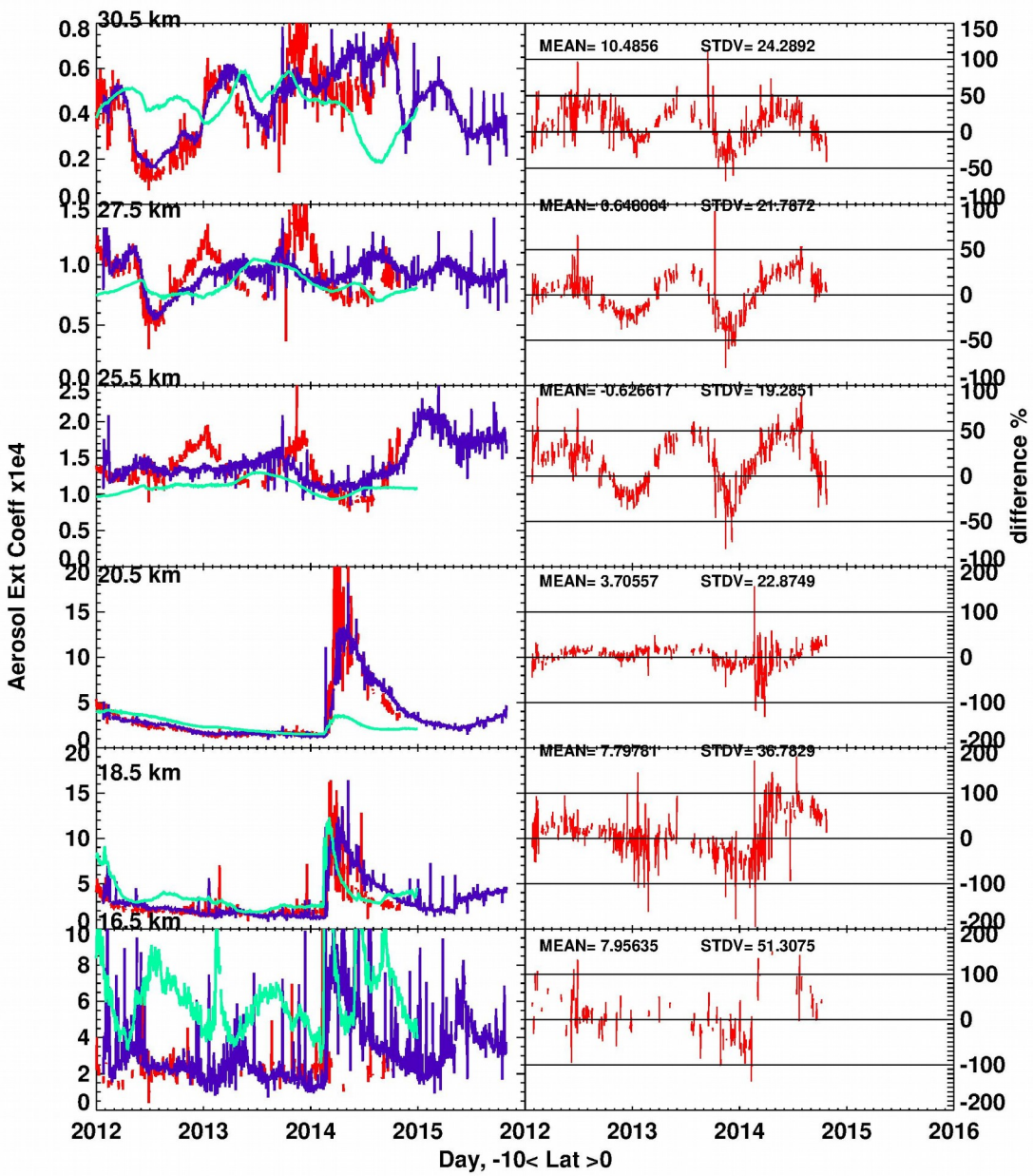
- Newly processed Aerosol extinction coefficient at 675 nm, left slit only.
- Construct daily zonal mean averages (10° latitude) of OMPS, OSIRIS and GEOSCCM Model at 750 nm
- Comparison at selected altitudes
  - Zonal comparison
- Total stratospheric column comparison
- QBO signature in OMPS, OSIRIS, and SCIAMACHY
- Weekly maps of Kelut and Calbuco at 20.5km

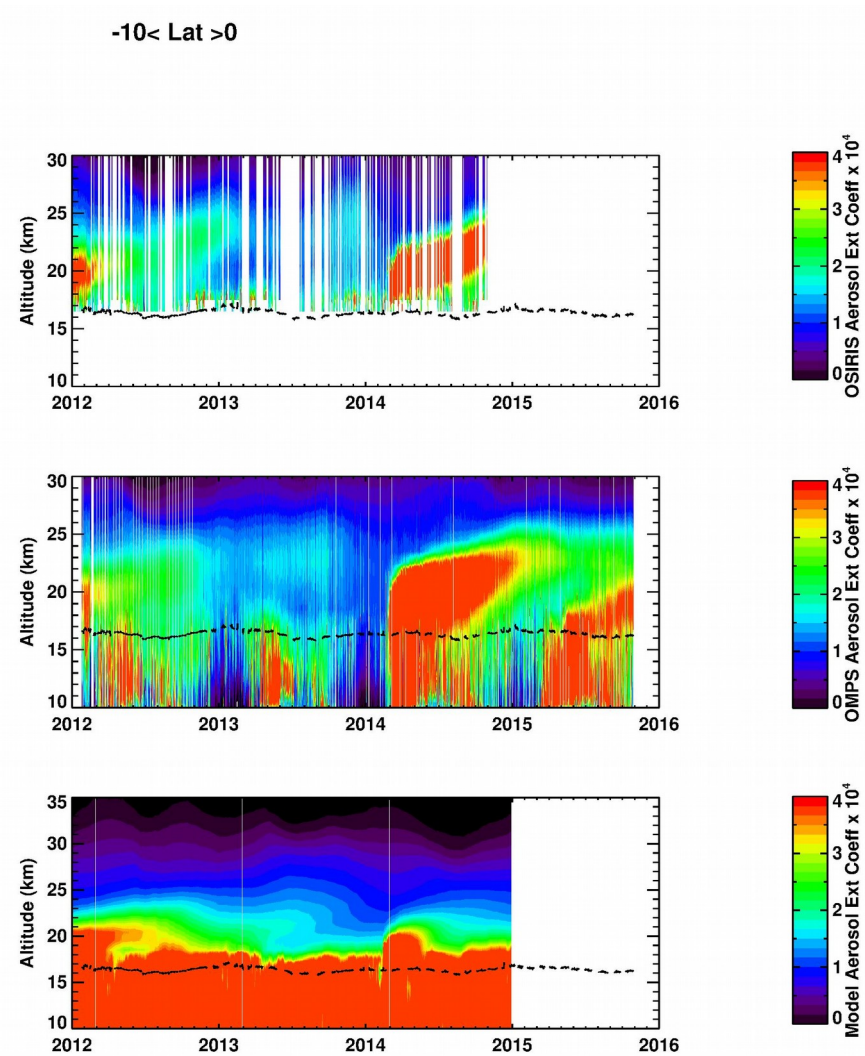
Southern Hemisphere



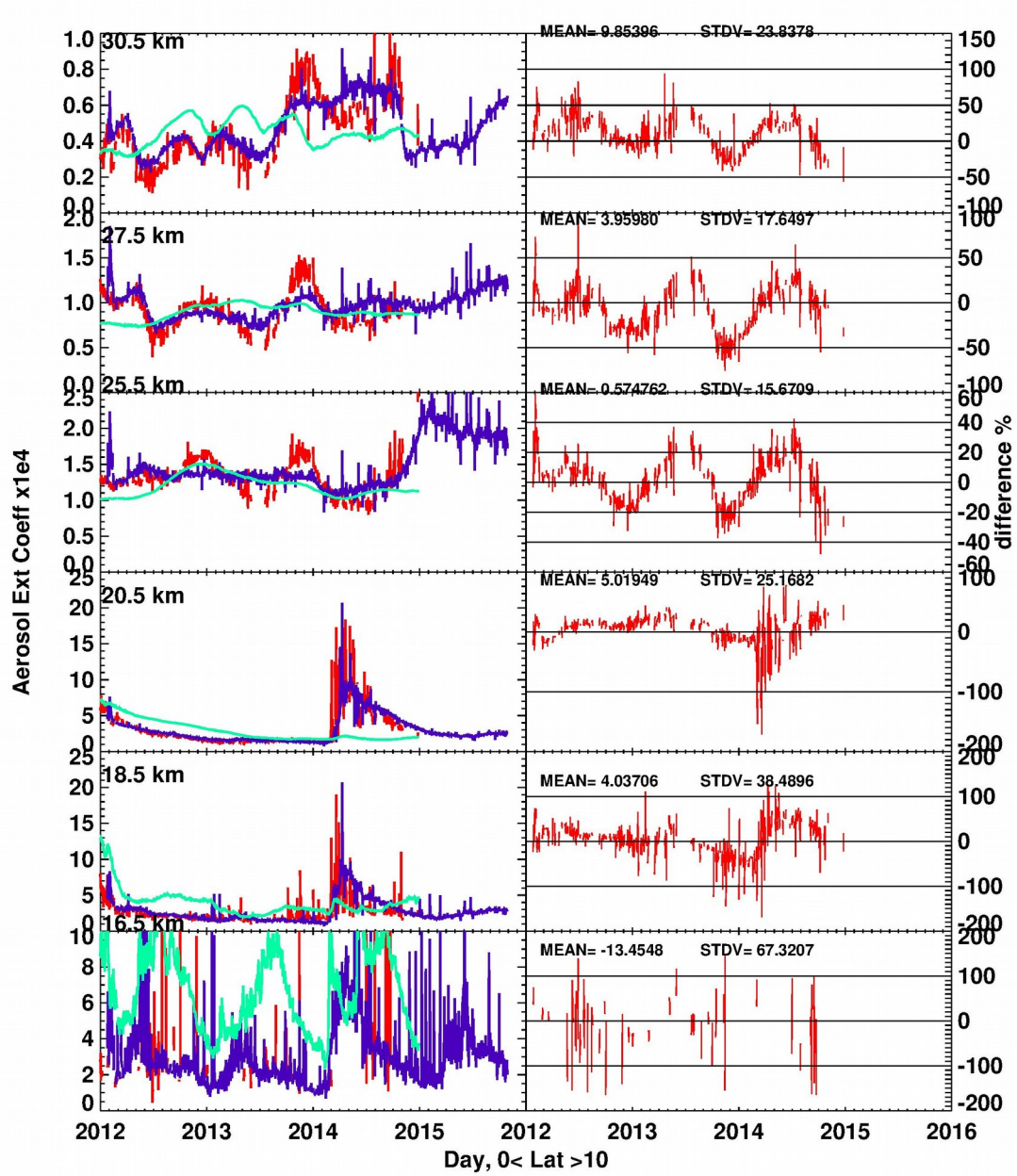


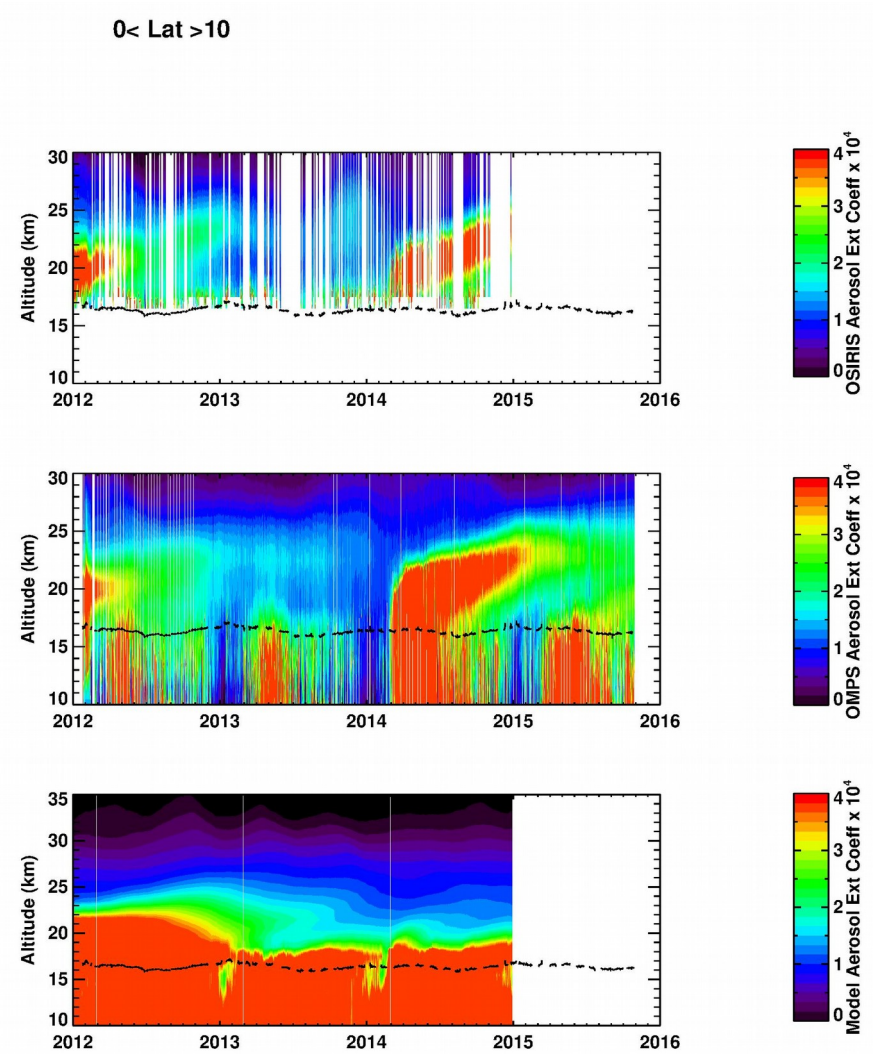
Tropics (-10 – 0) Latitude



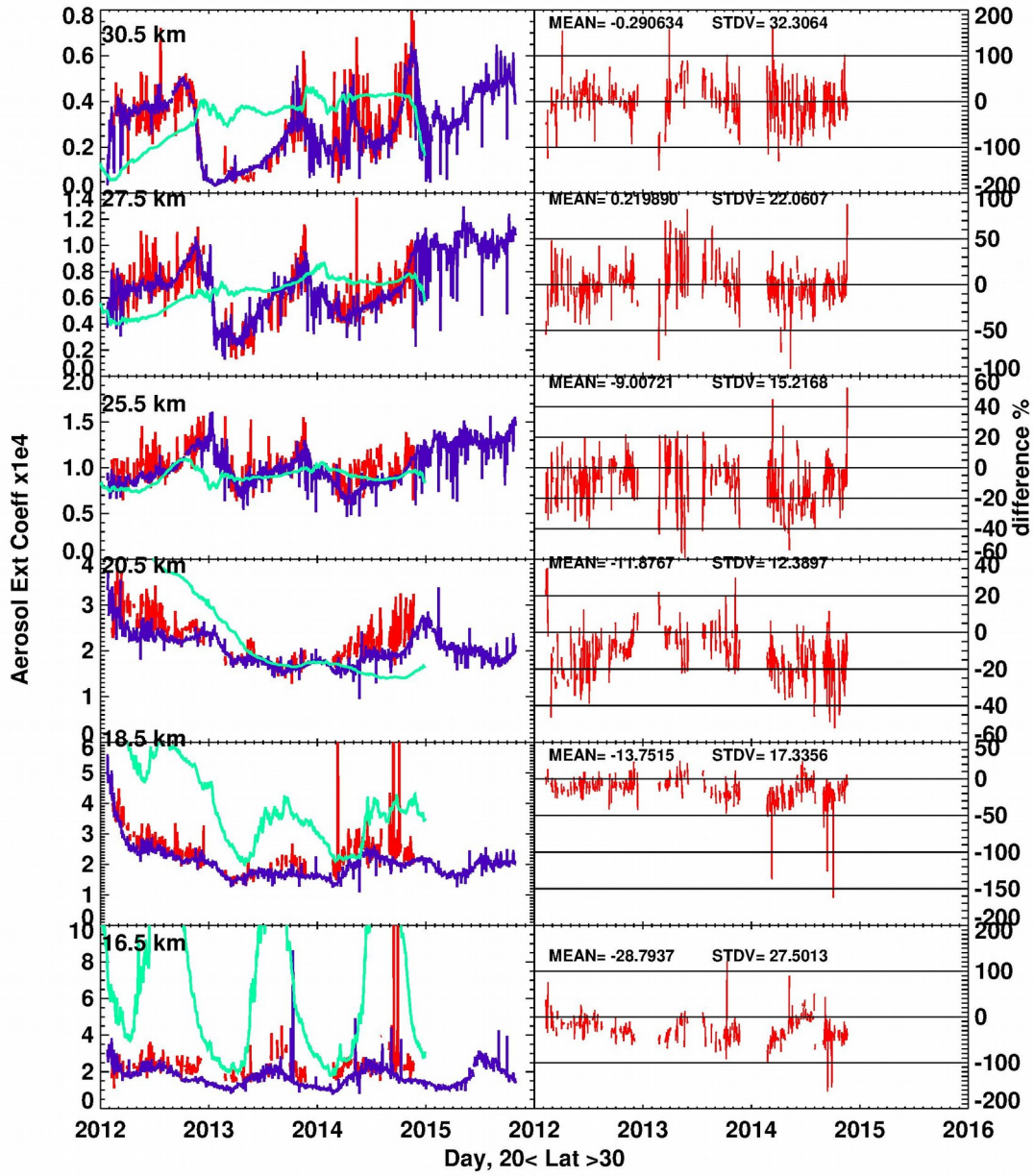


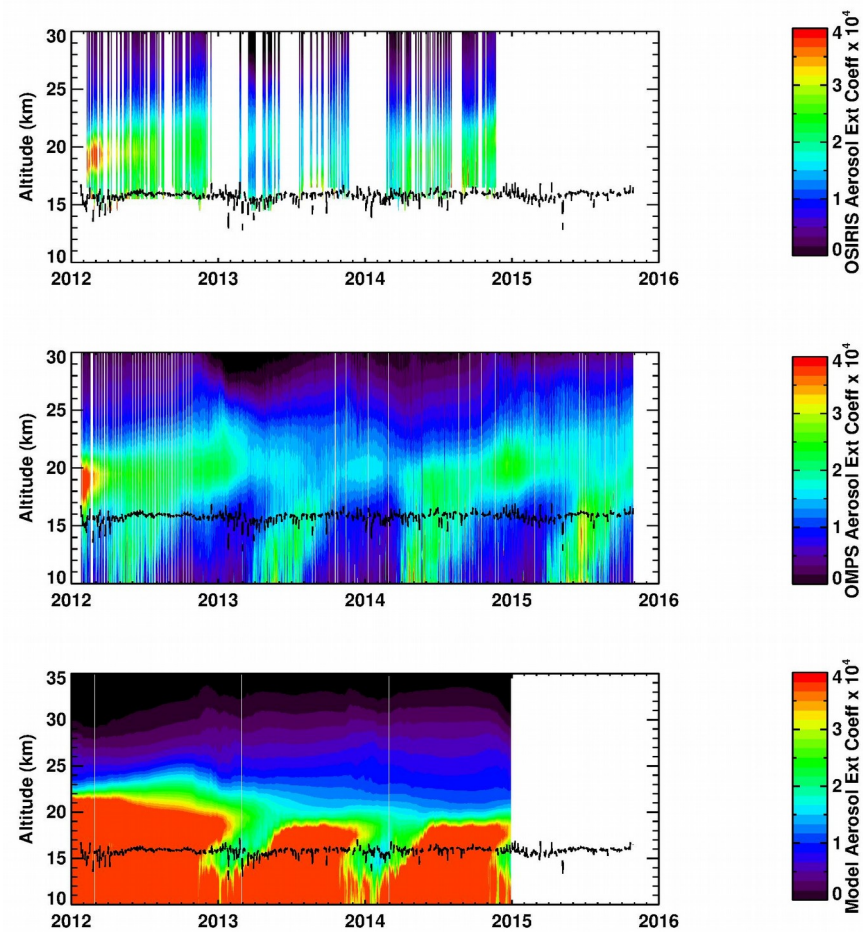
Tropics (0 – 10) Latitude



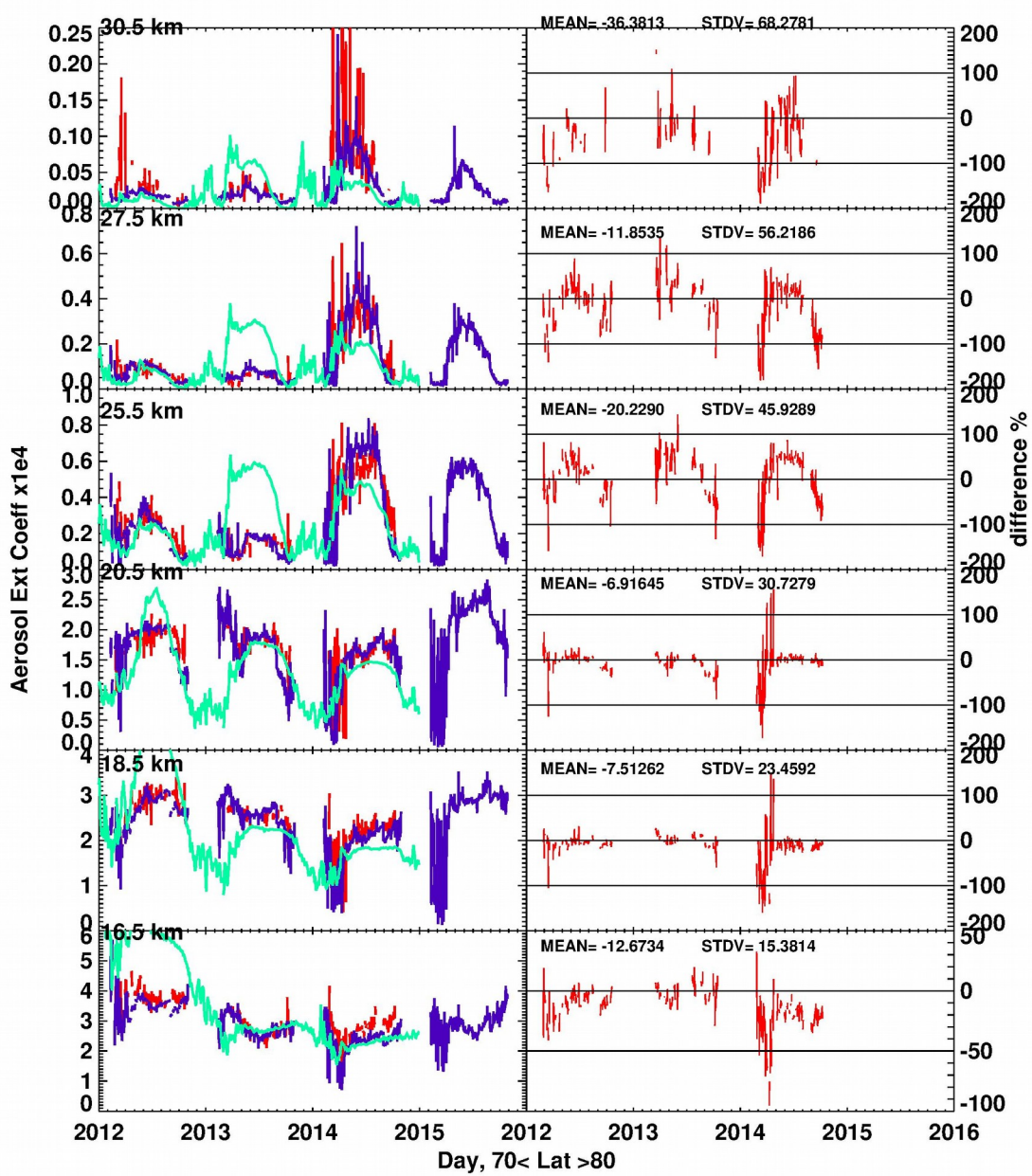


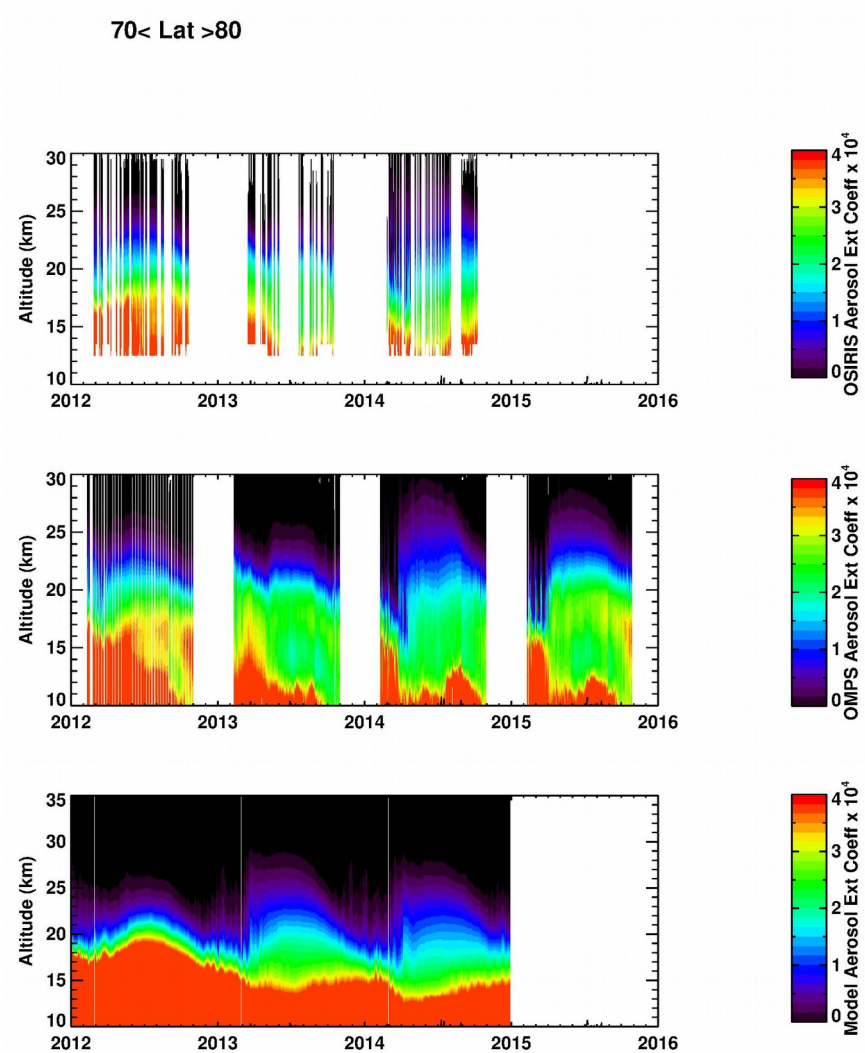
Tropics (20 – 30) Latitude



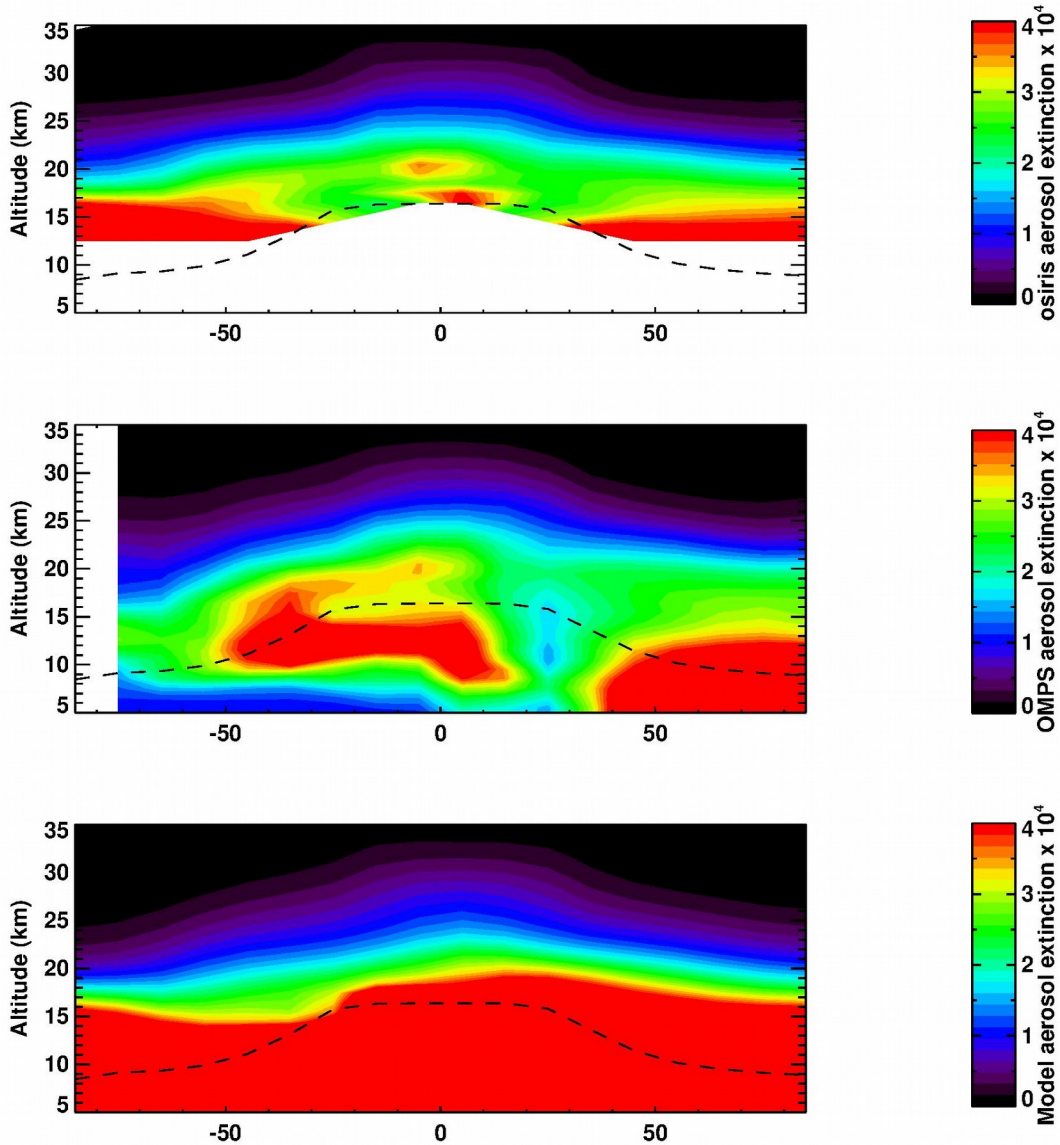


Northern Hemisphere

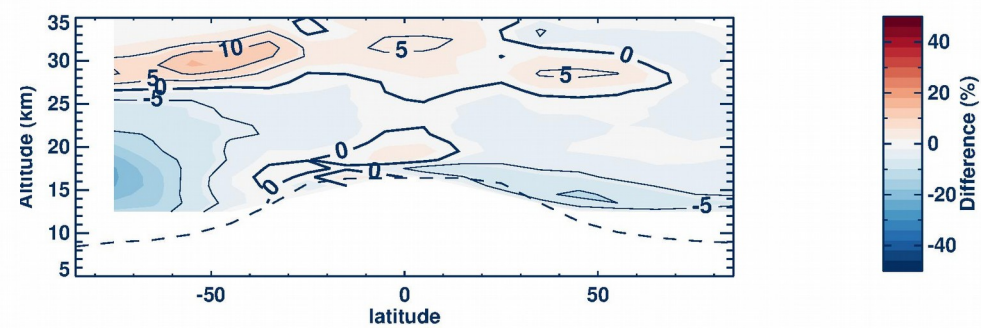




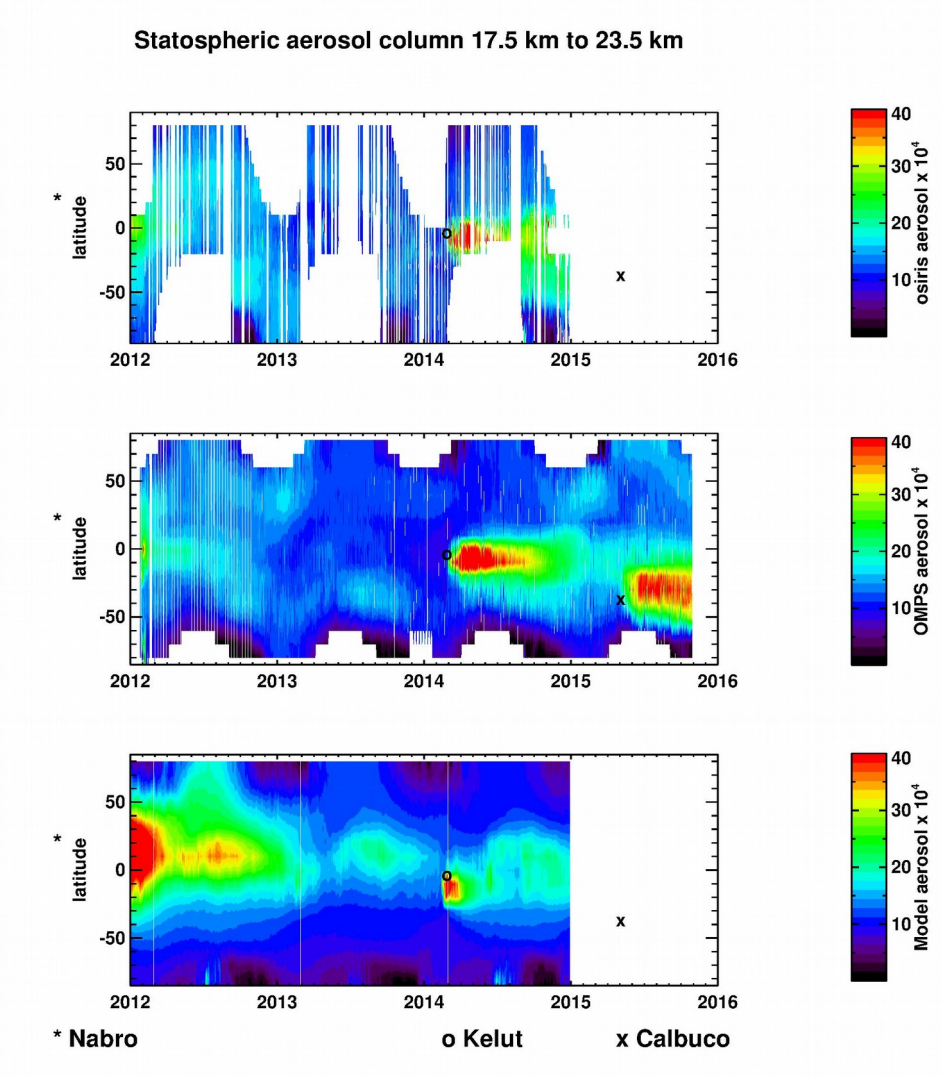
Global zonal mean

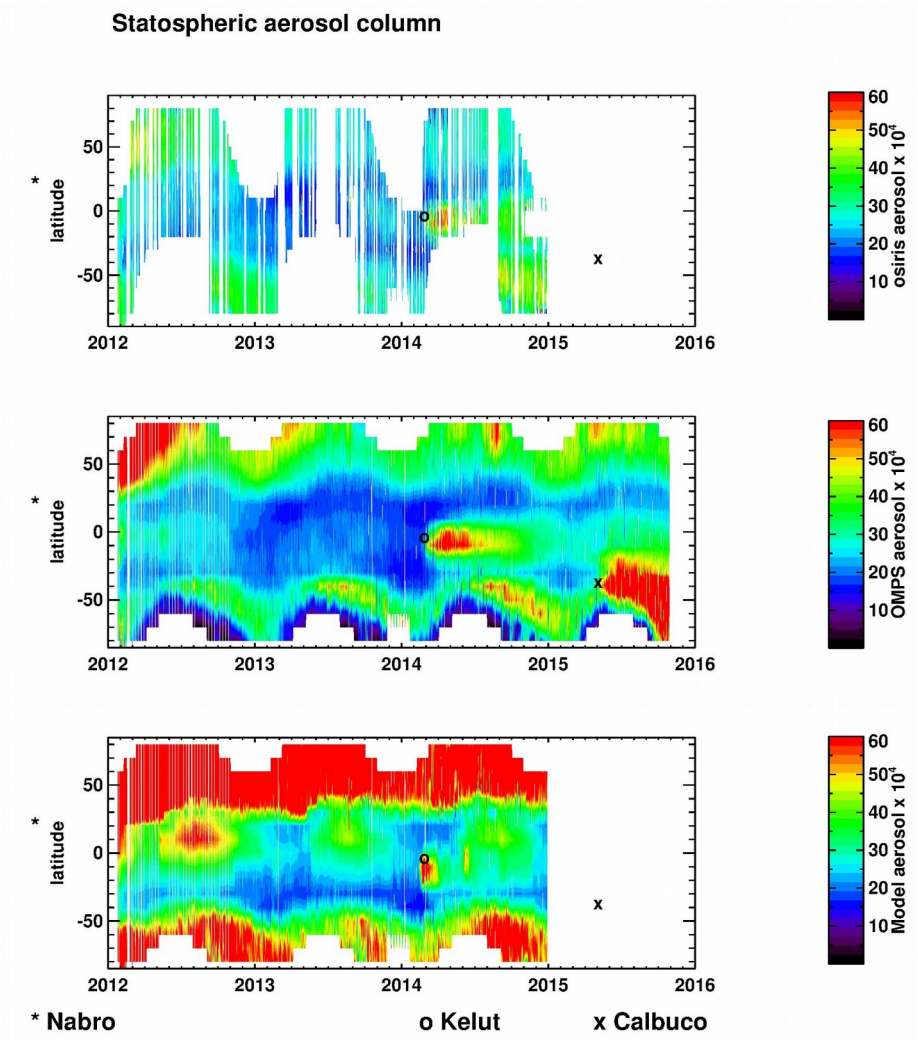


OMPS – OSIRIS %

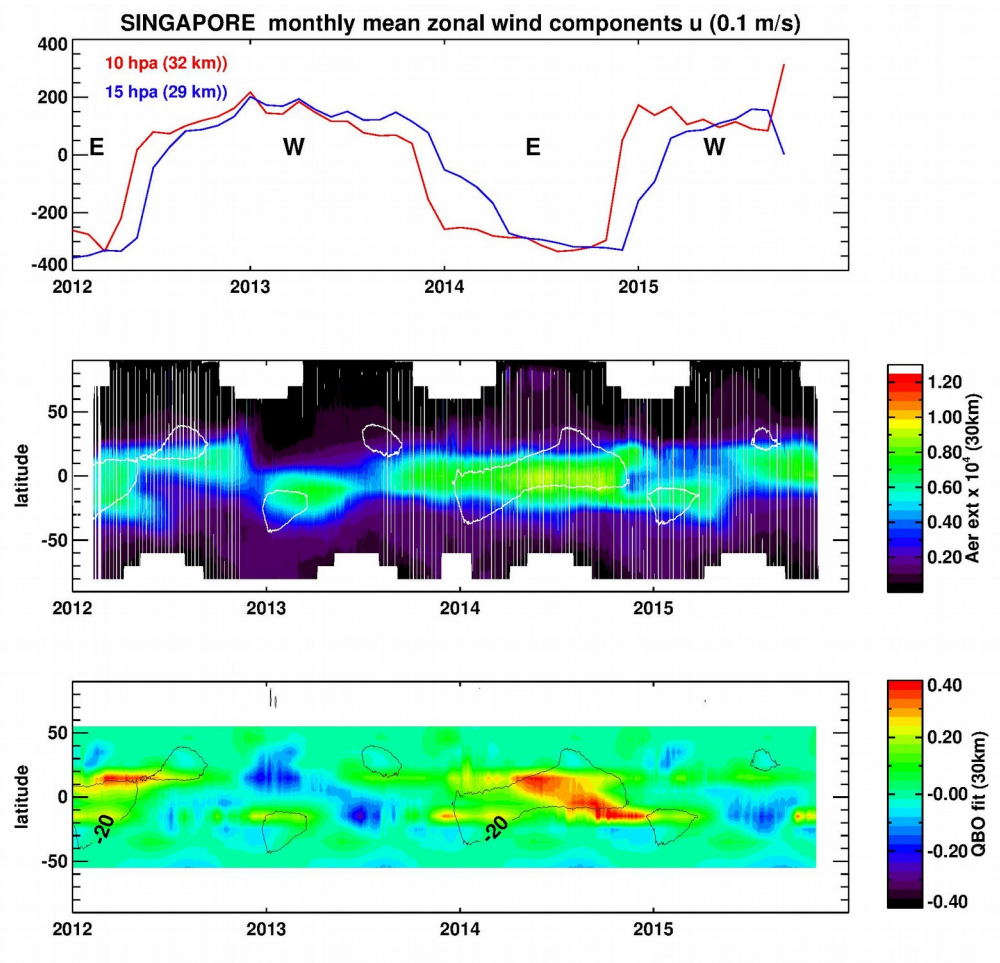


Stratospheric Column





Quasi-Biennial Oscillation (QBO) signature -OMPS LP



-Enhanced tropical aerosol extinction values during easterlies (upward lofting) and drop in aerosol values during westerlies (downward descent).

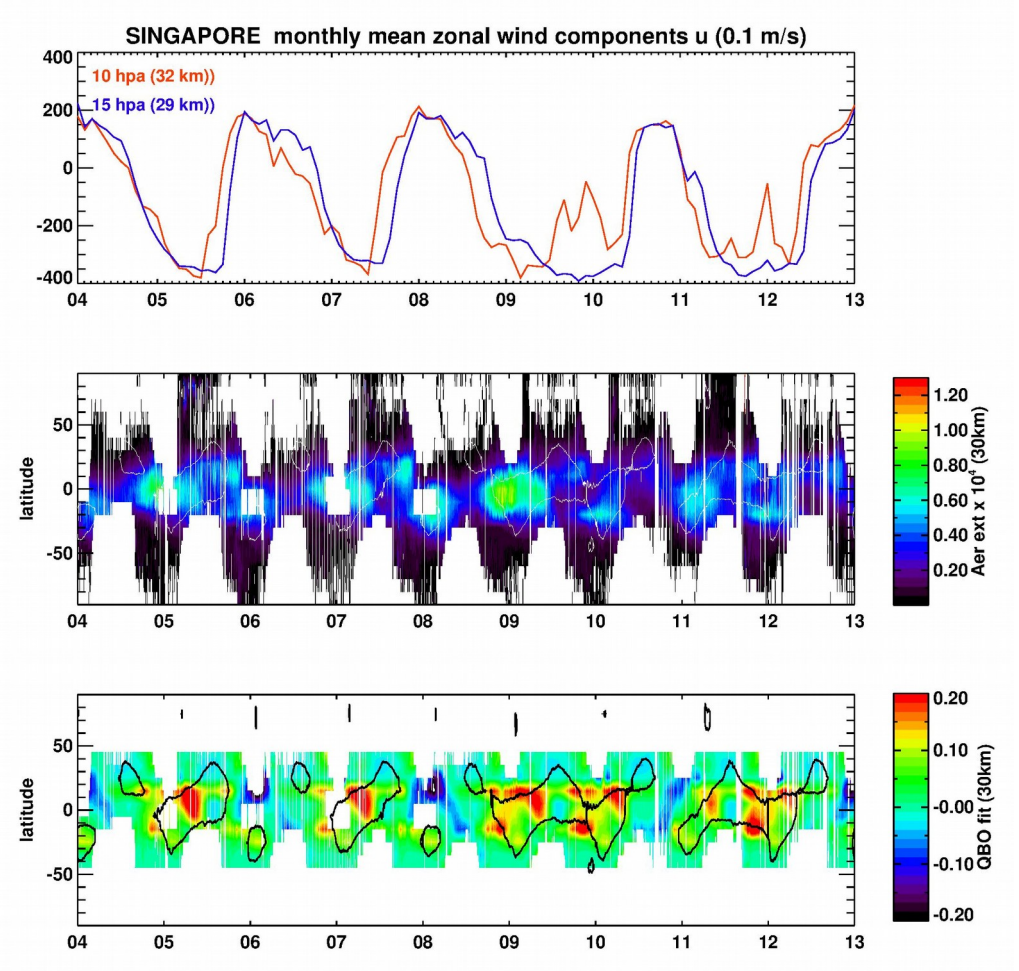
-Apply regression analysis using OMPS and NCEP zonal mean zonal wind.

-Middle panel is OMPS LP aerosol extinction, superimposed NCEP zonal winds, both at 30 km.

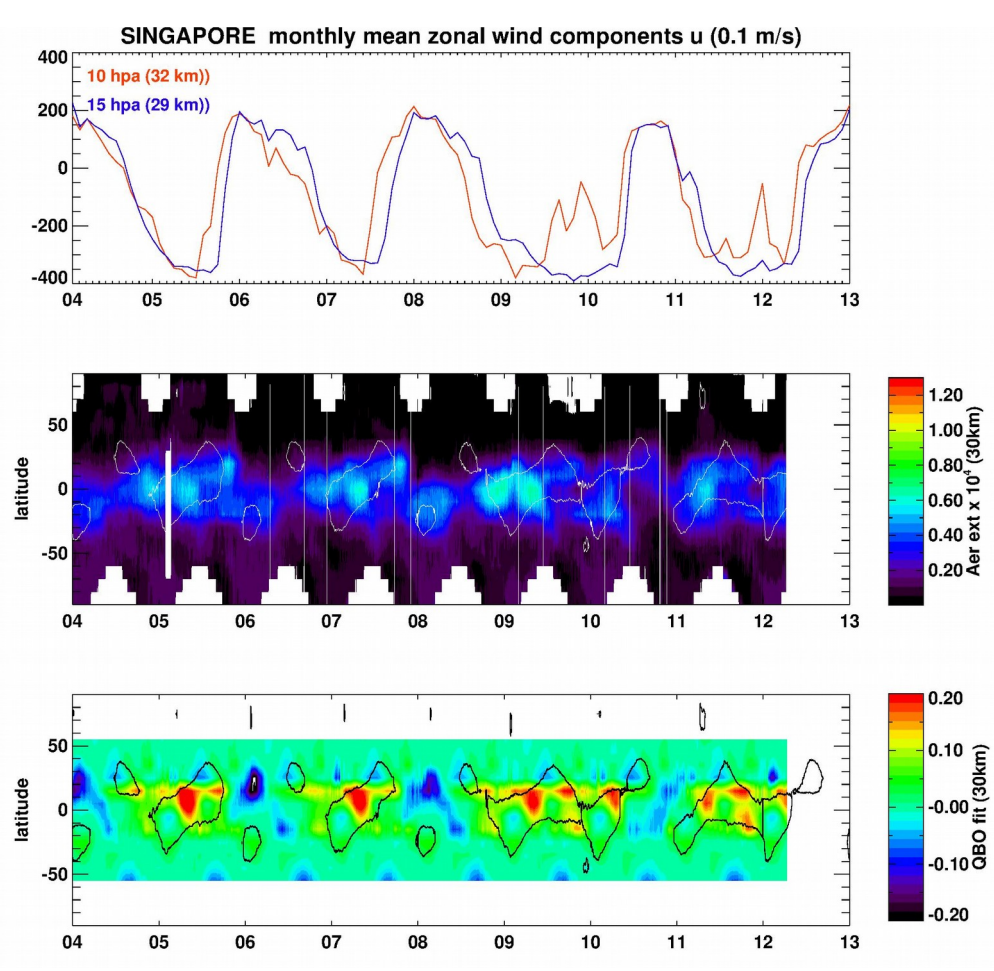
-Bottom panel is QBO fit of the regression, superimposed NCEP zonal winds, both at 30 km.

QBO signature

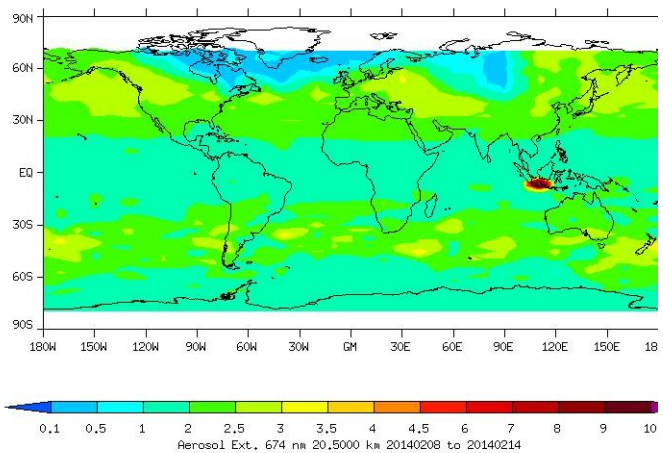
OSIRIS

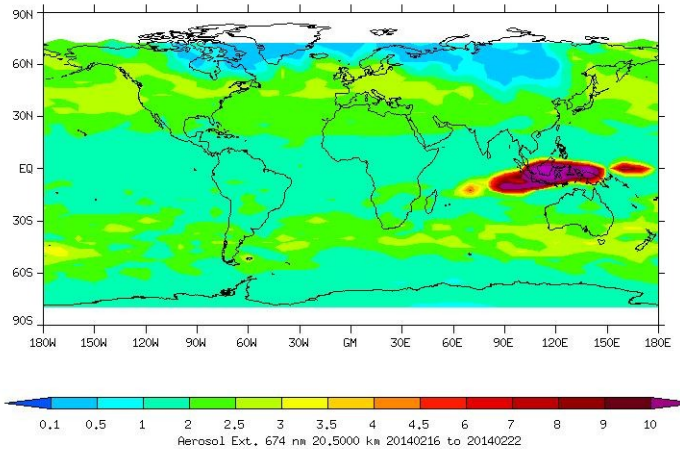


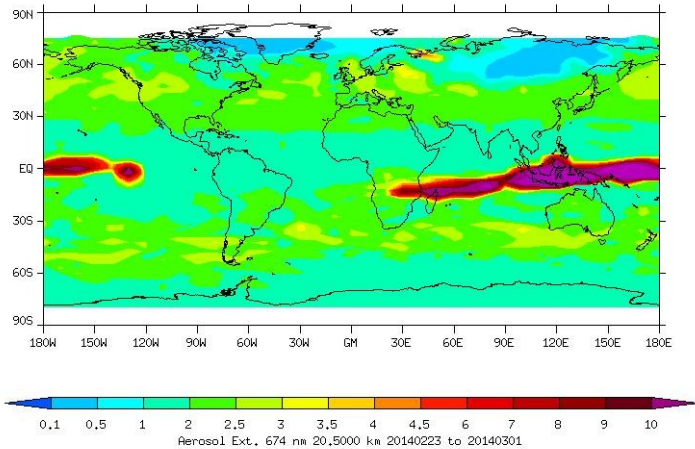
SCIAMACHY

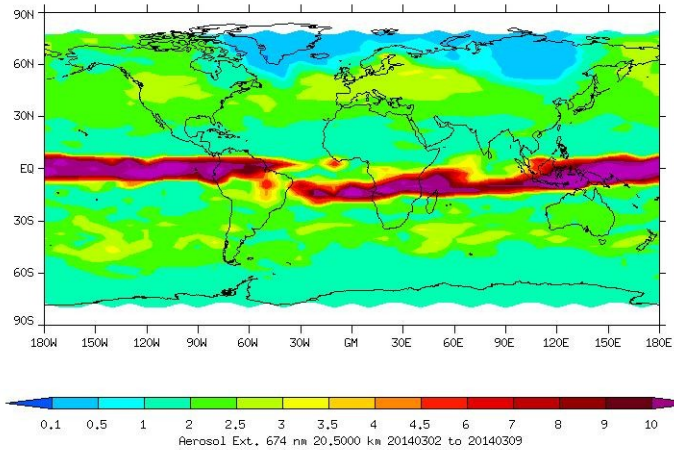


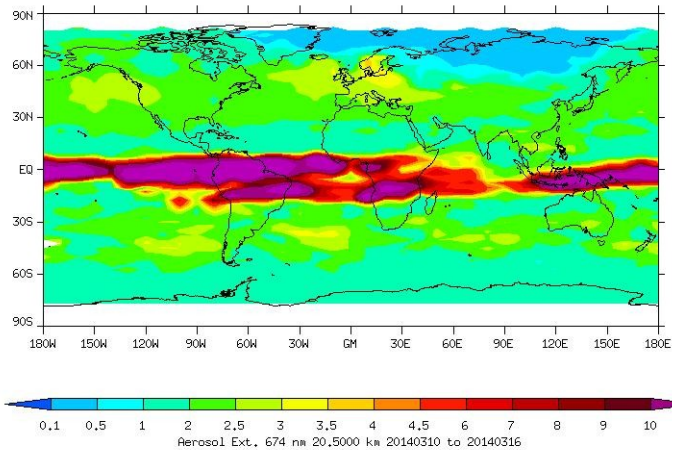
Kelut weekly maps 20.5 km

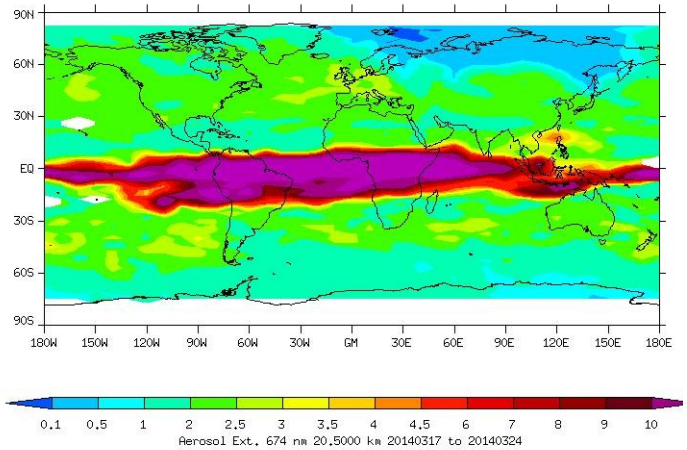


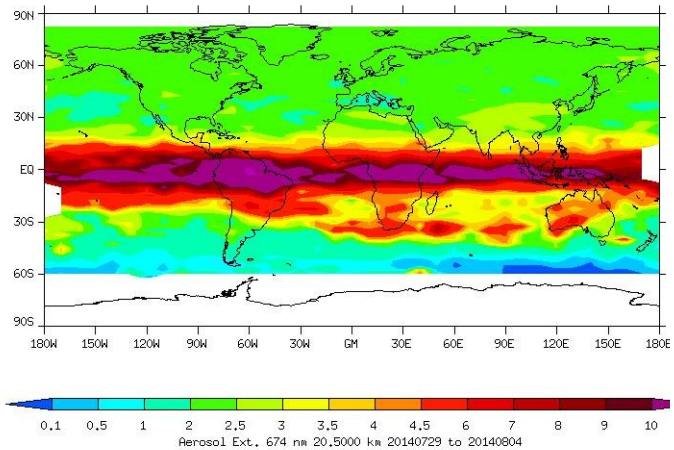


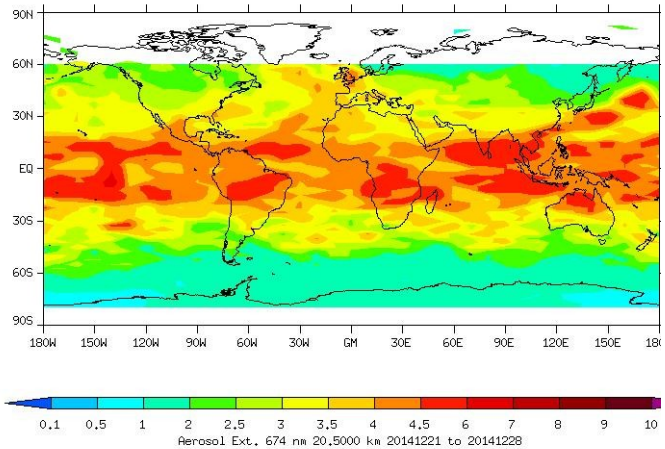


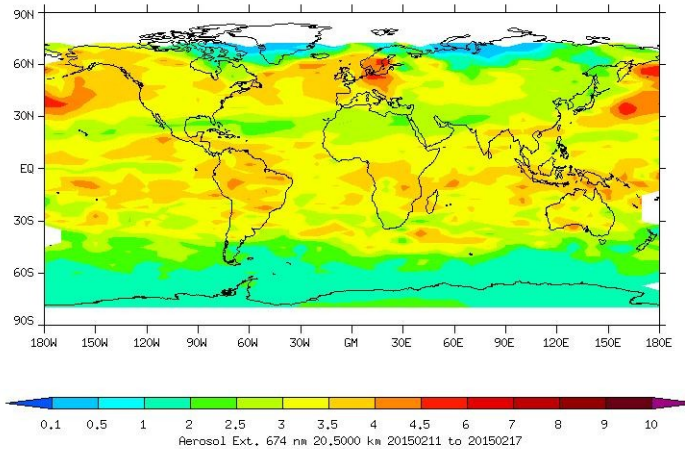
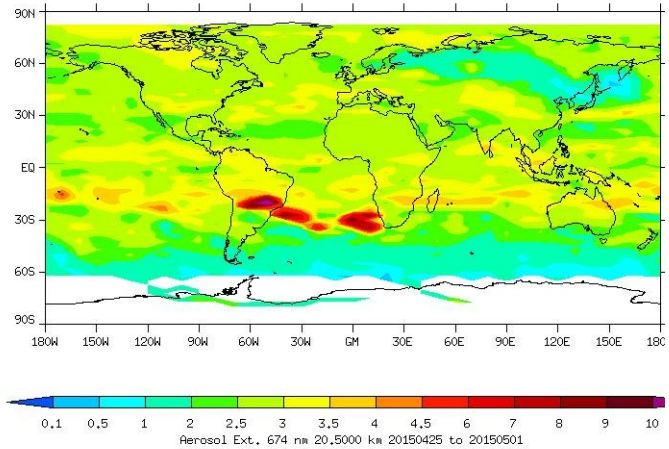
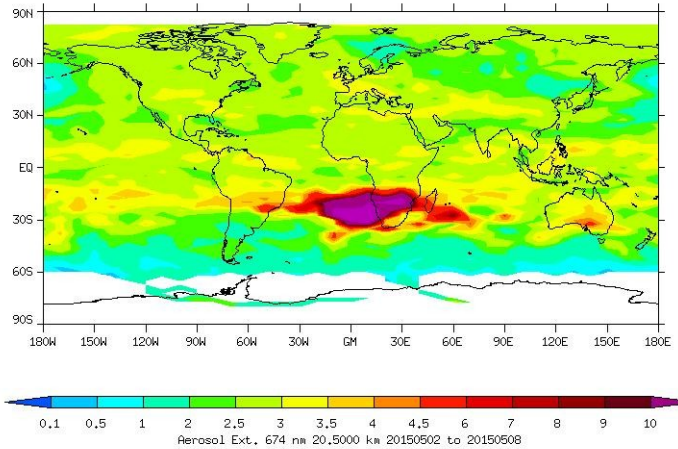
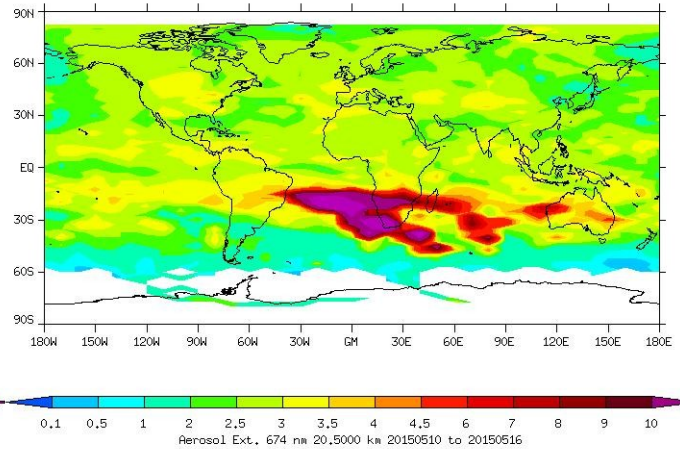
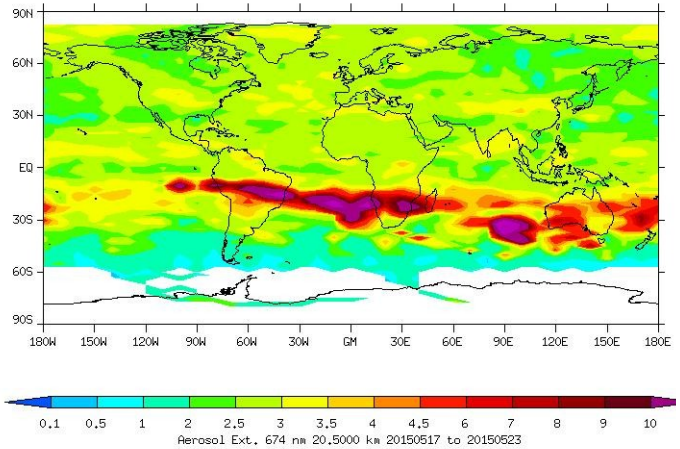
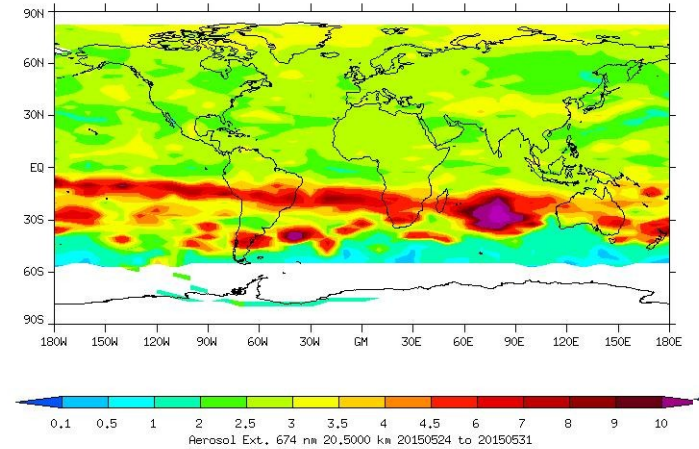
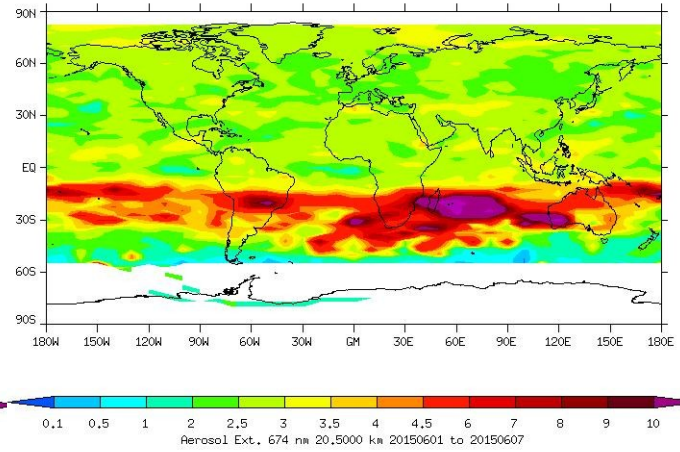
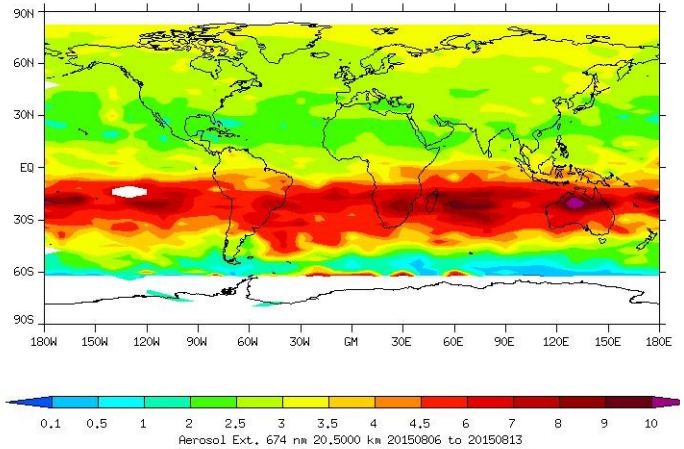
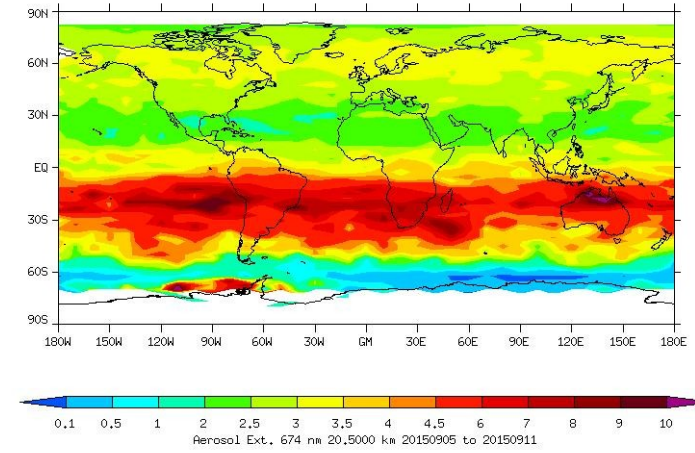
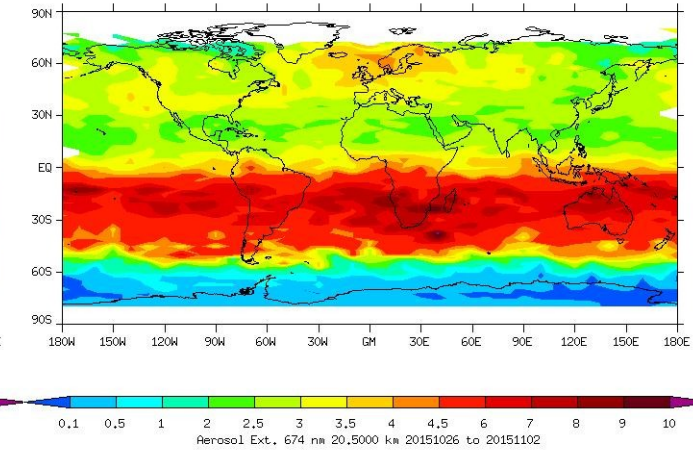












Calbuco weekly maps 20.5 km