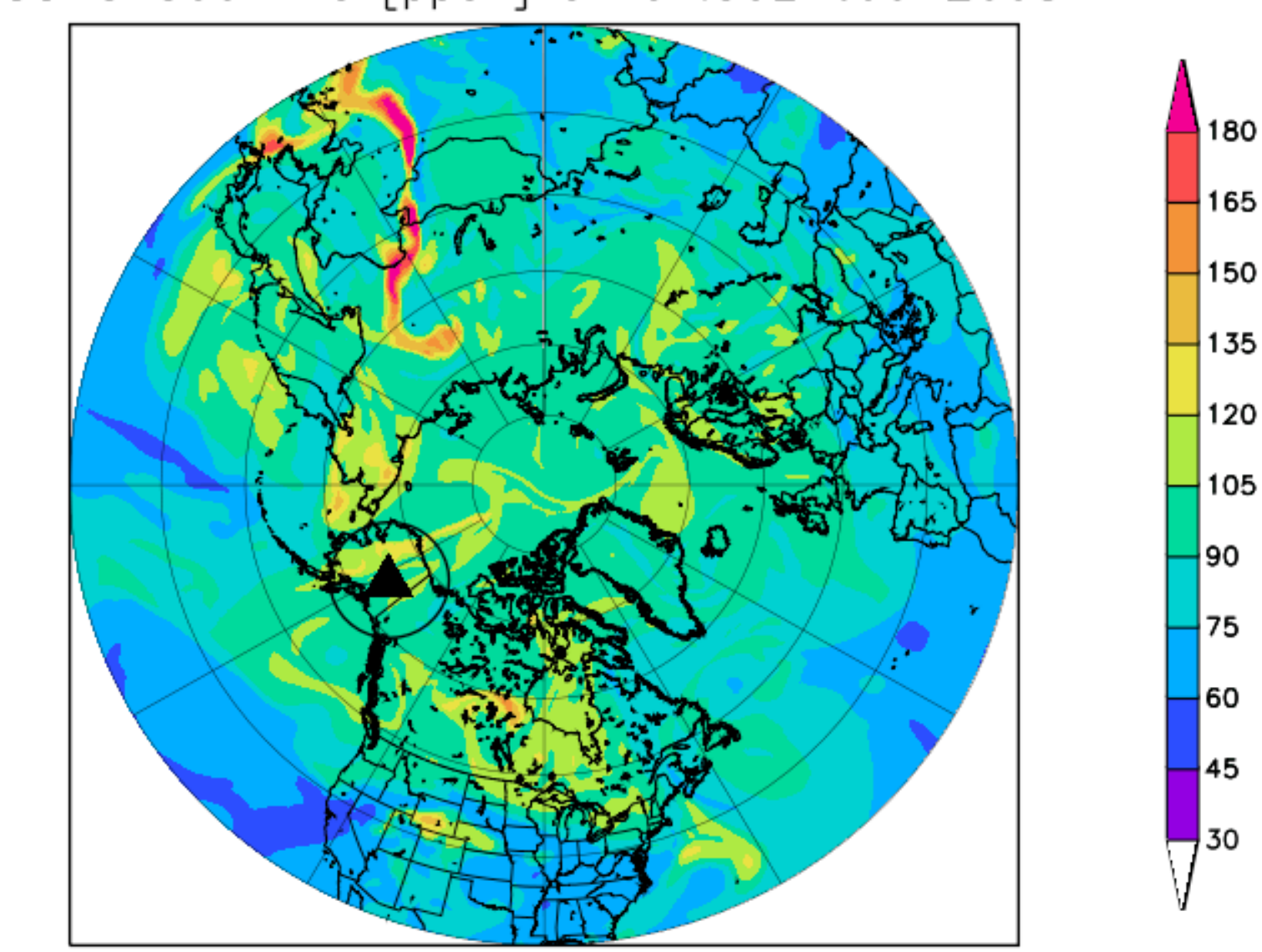
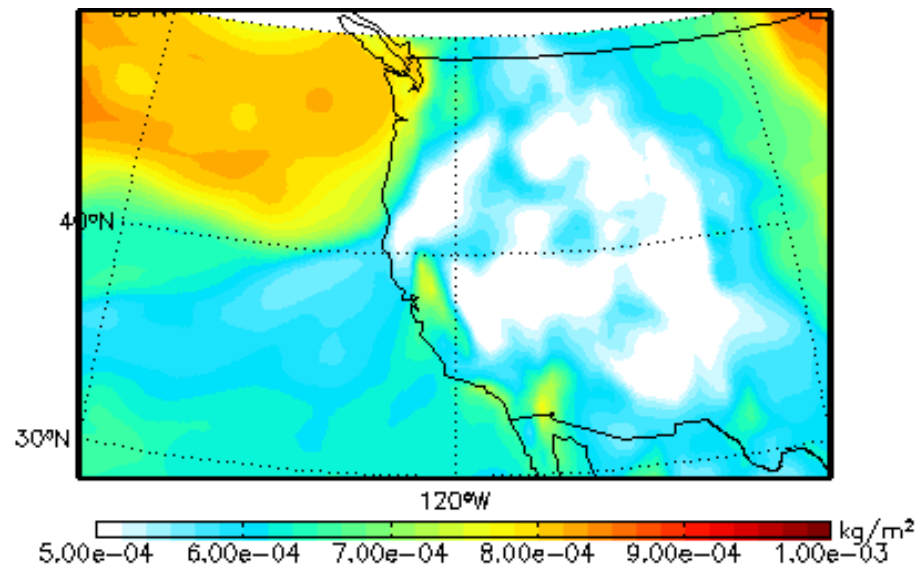
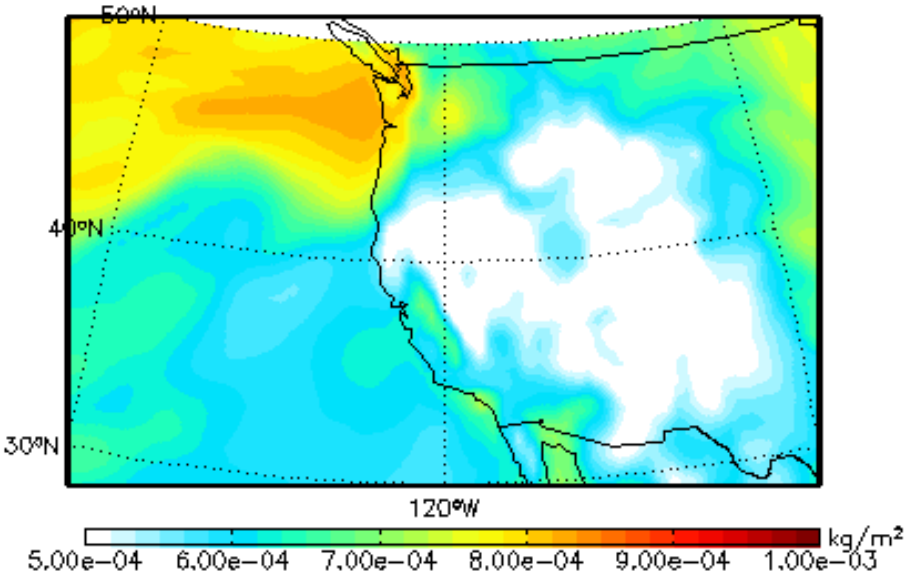

CO @ 500 hPa [ppbV] on 01:30Z16JUN2008
180
165
150
135
120
105
90
75
60
45
30

GEOS-5 Outlook: Total Column CO at 19:30Z

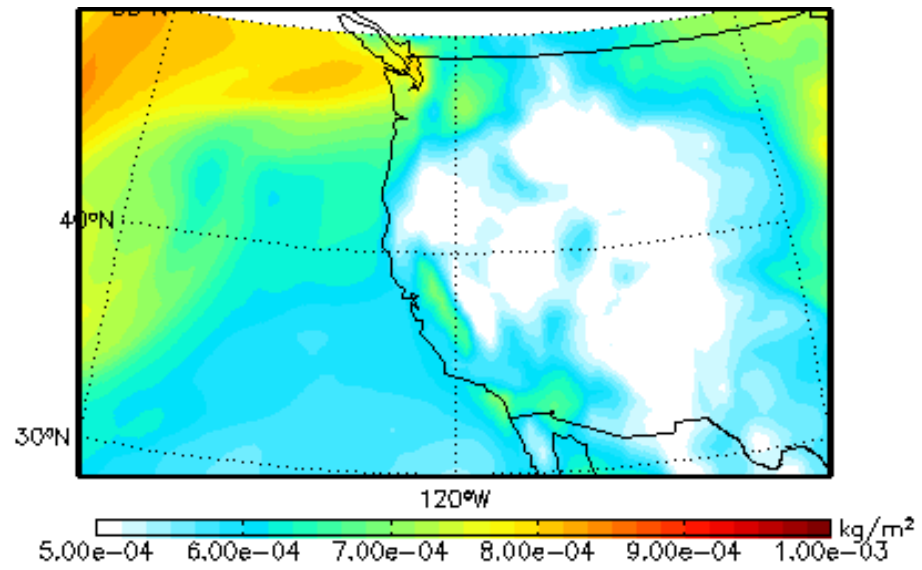
June 17



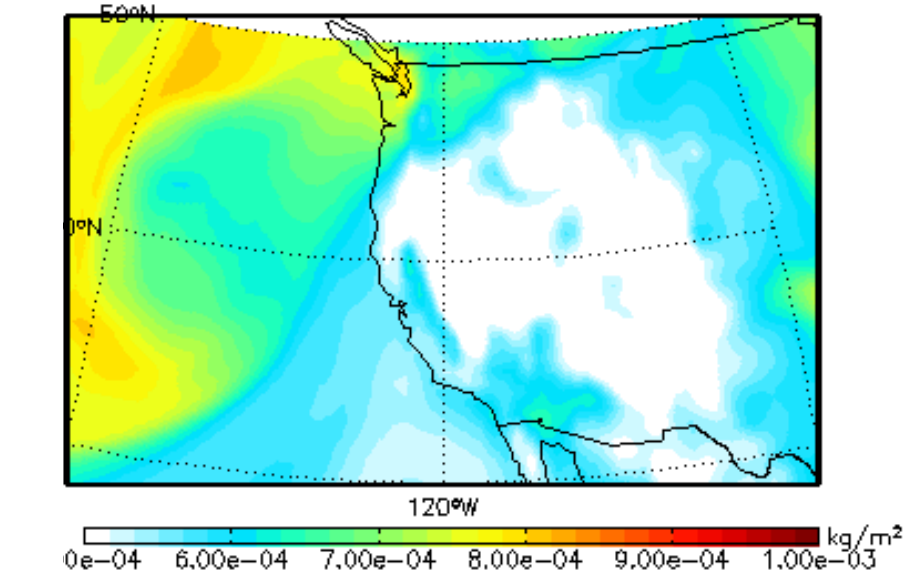
June 18



June 19



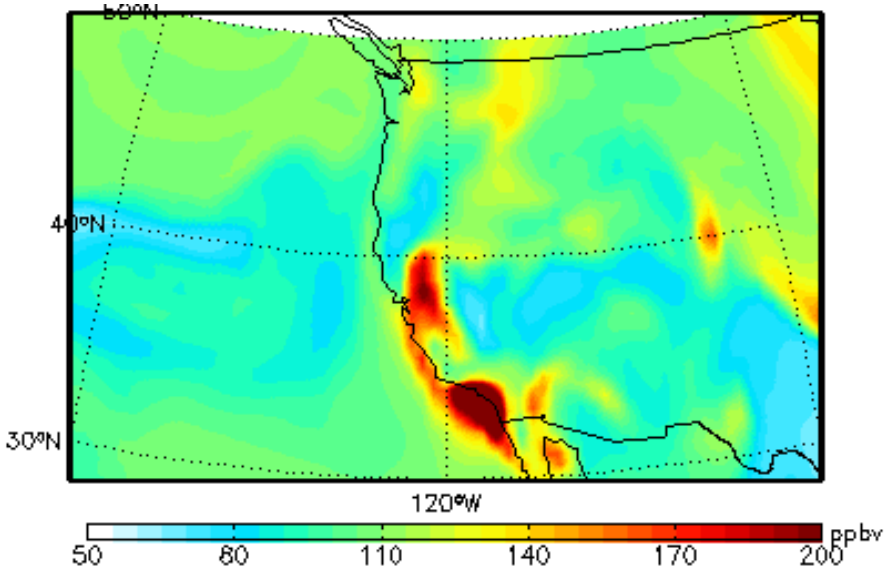
June 20



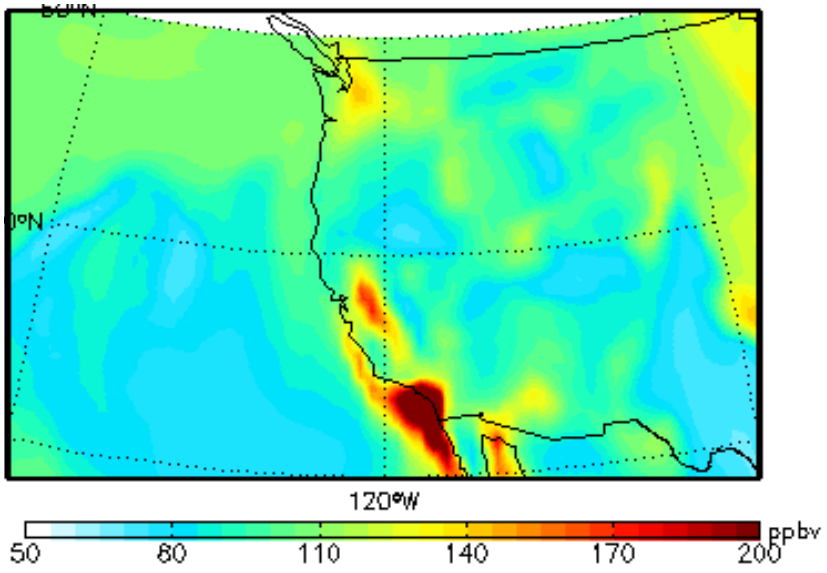
Initialized 20080616 – 00Z

GEOS-5 Outlook: CO at Surface at 19:30Z

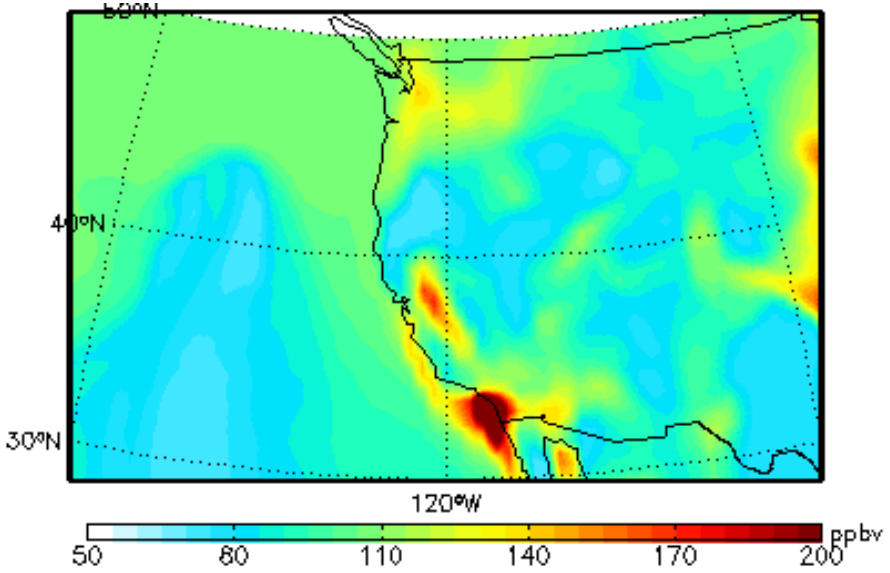
June 17



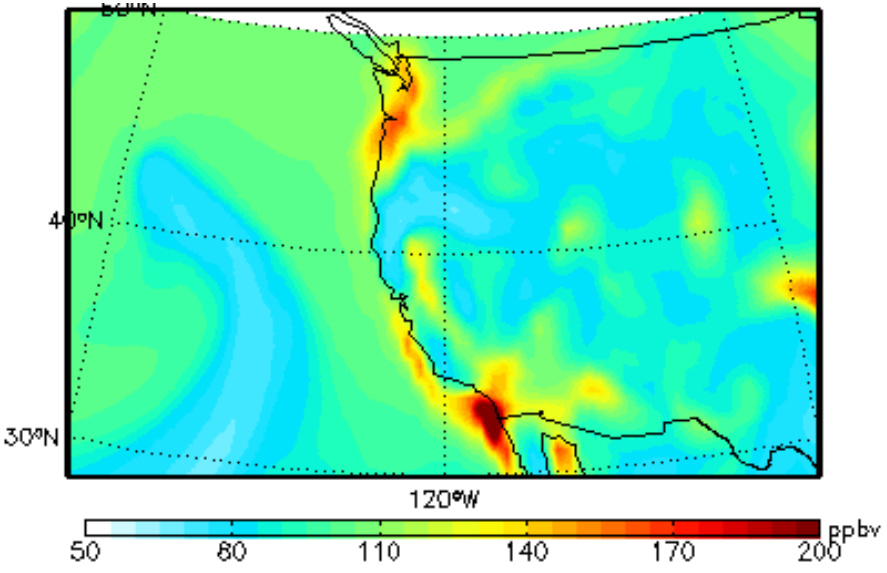
June 18



June 19



June 20



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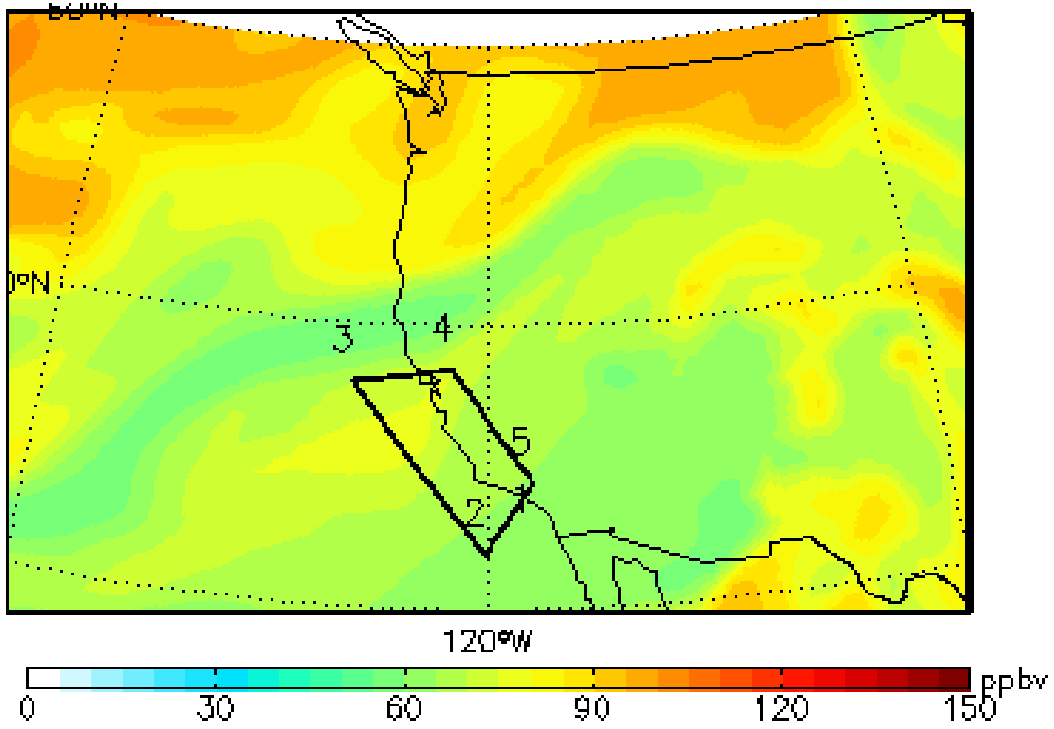
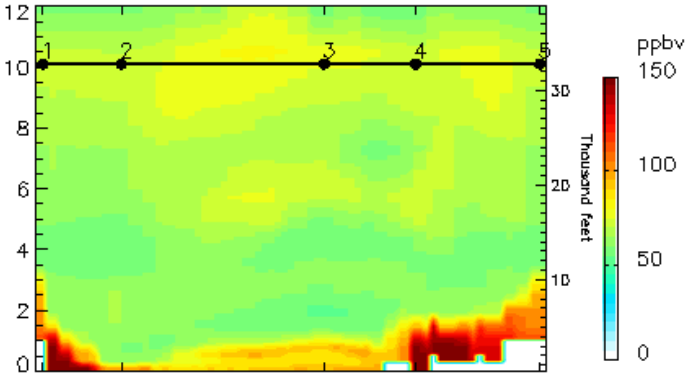
June 18th: Potential flight over ocean or San Joaquin Valley

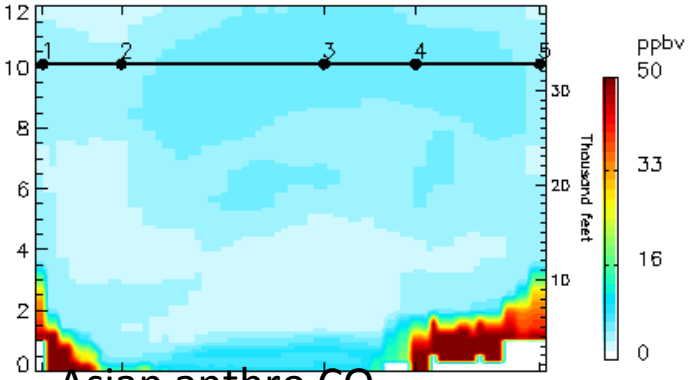
Total CO at 500 hPa (all at 19:30Z)



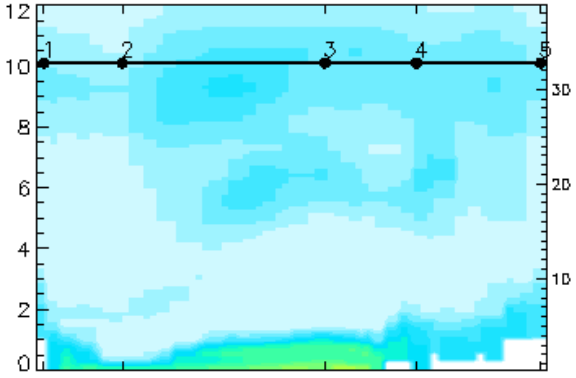
Total CO



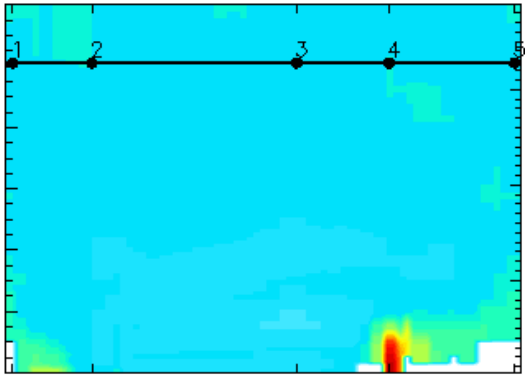
N.Am. anthro CO



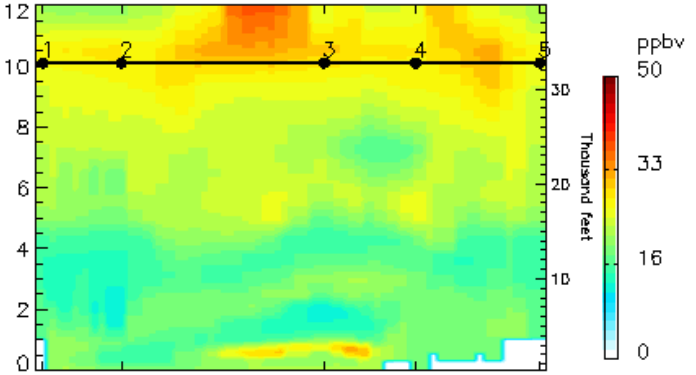
Boreal BB CO



Non-Boreal BB CO



Asian anthro CO



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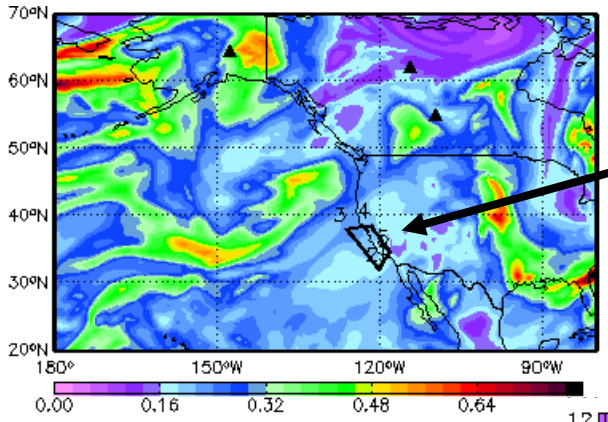
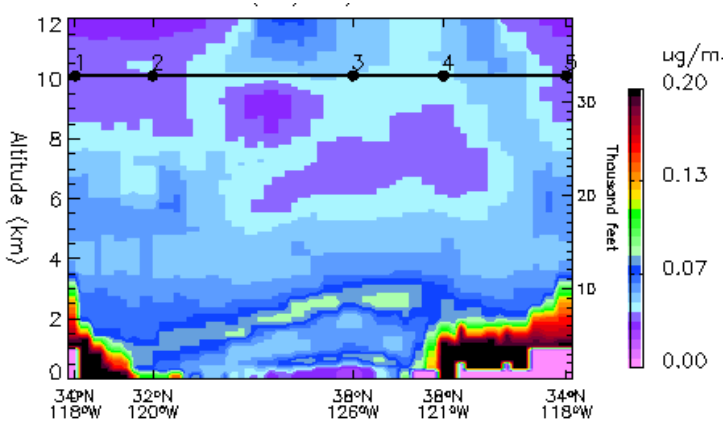
GEOS-5 forecast 6/18/2008 19:30Z – Aerosols

Total AOD 550 nm

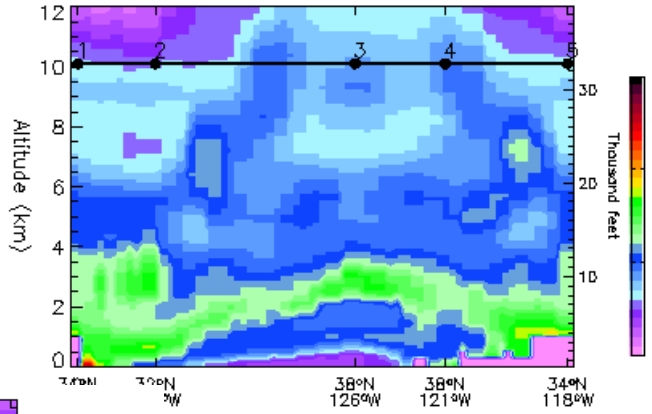


No big long-range transport events on 18th.

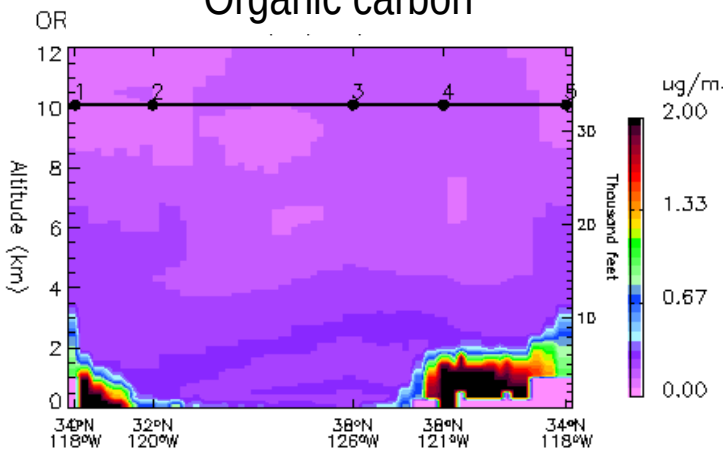
Black carbon



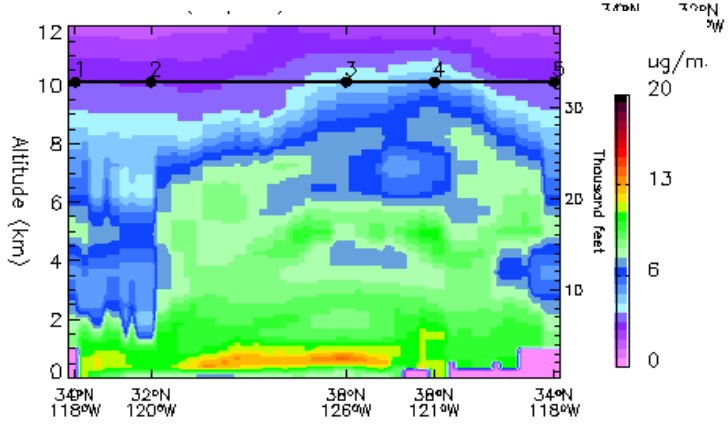
Sulfate



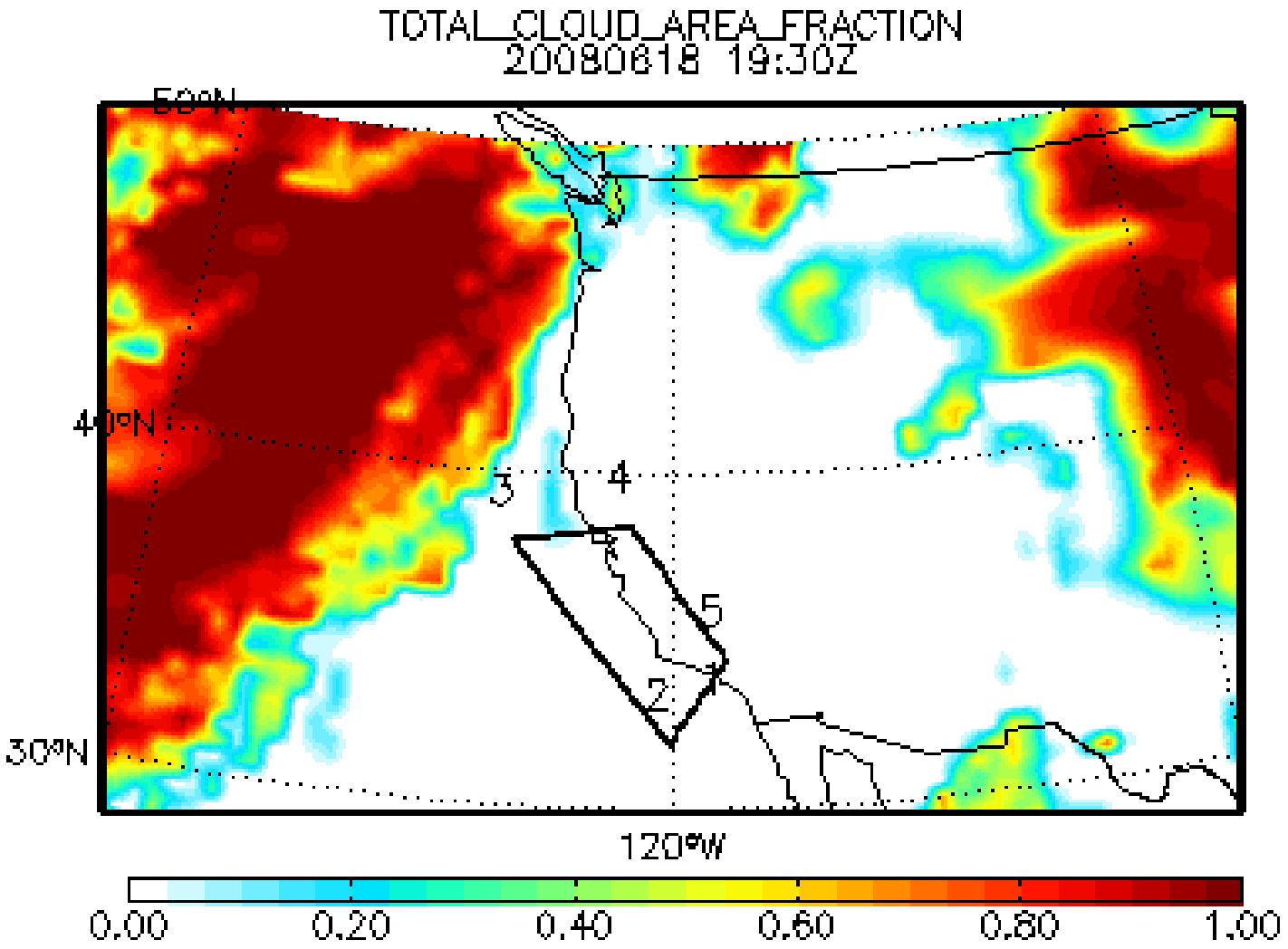
Organic carbon



Dust



GEOS-5 Clouds on June 18th



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NCAR Forecasts

Louisa Emmons, Avelino Arellano, et al.

MOPITT CO

CAM-Chem/DART – assimilation of met obs., MOPITT CO, MODIS AOD

MOZART-4/GFS

Fire emissions for CAM & MOZART: MODIS NRT daily fire counts scaled by GFED-v2 climatology, no vertical distribution

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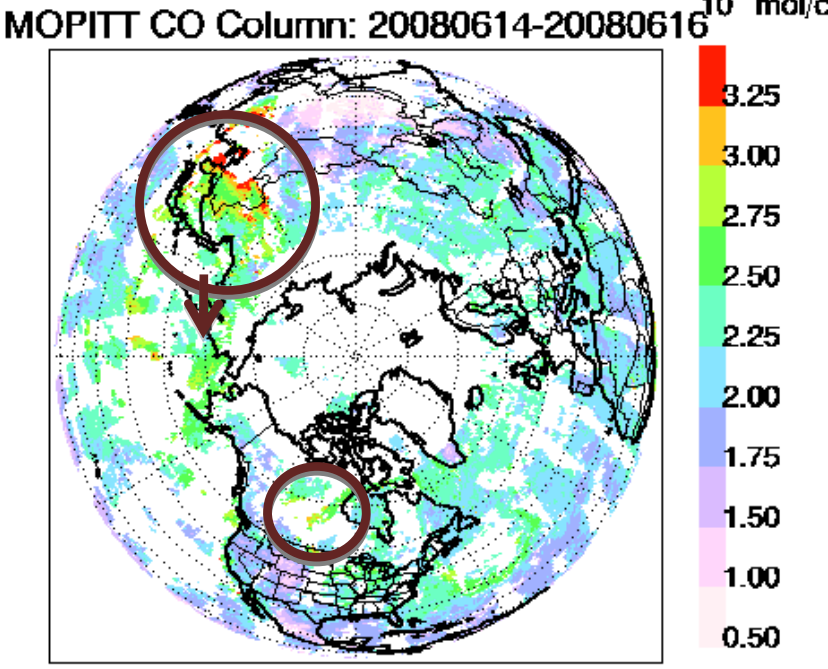
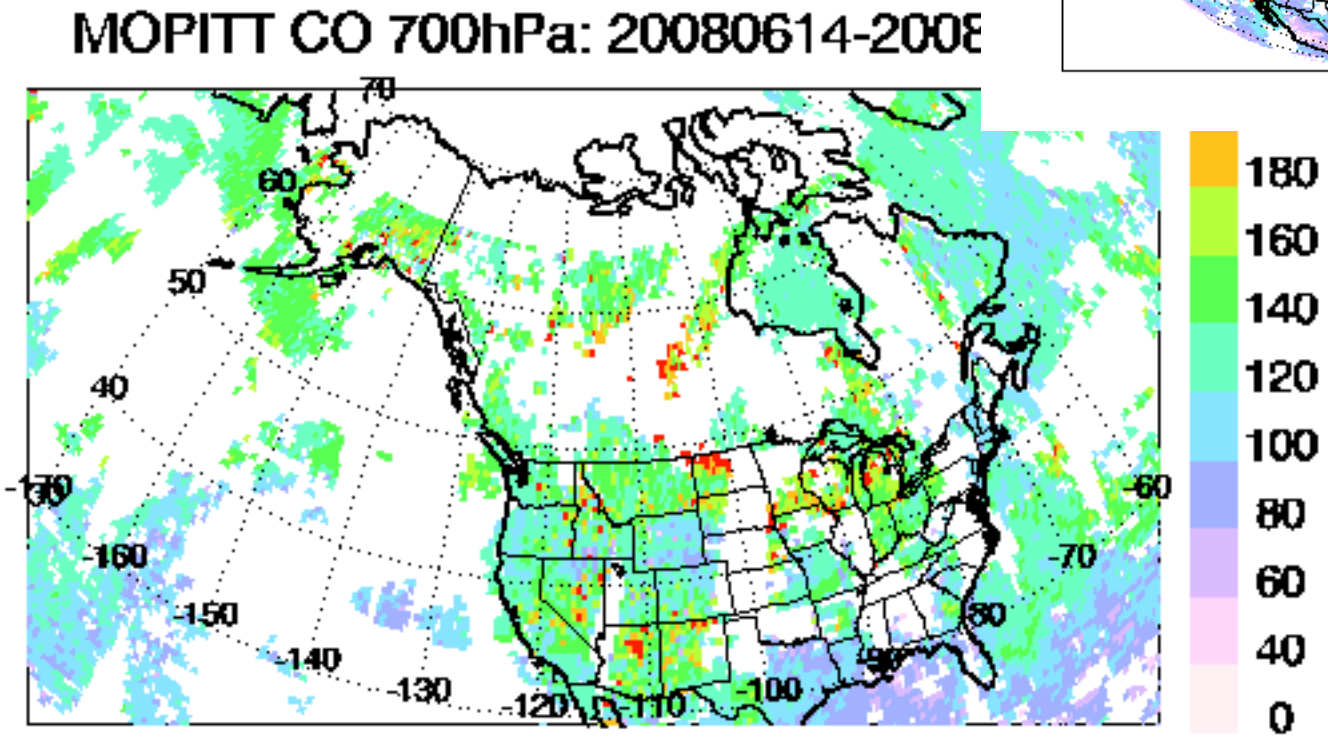
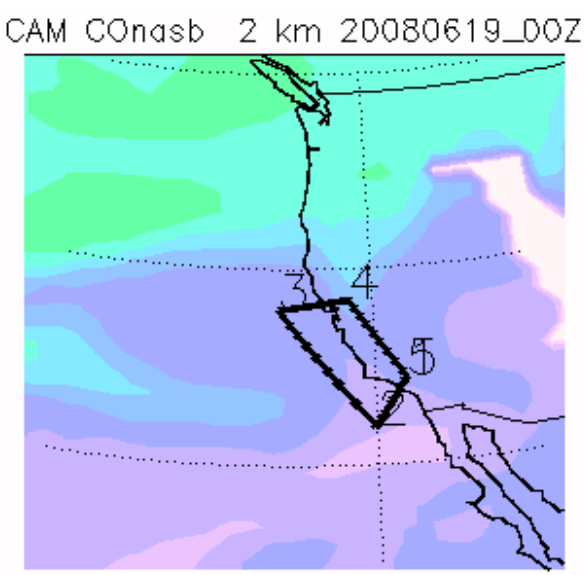
MOPITT CO

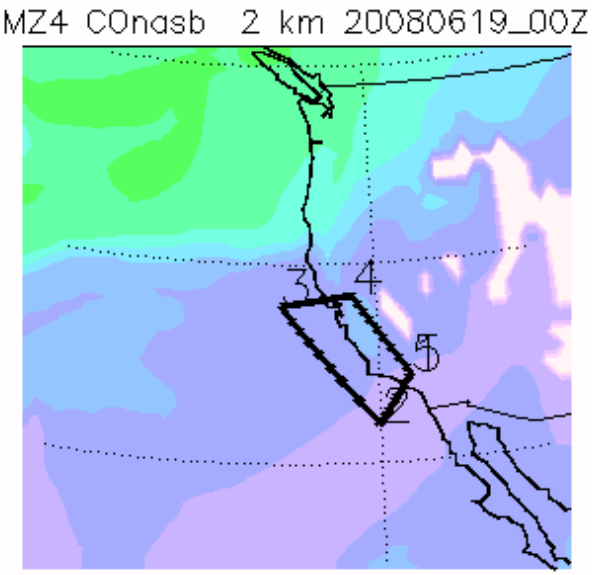
Big fires in northern China and in Alberta and Saskatchewan

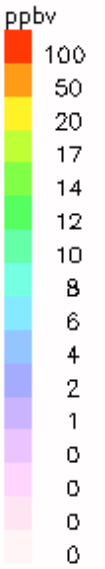


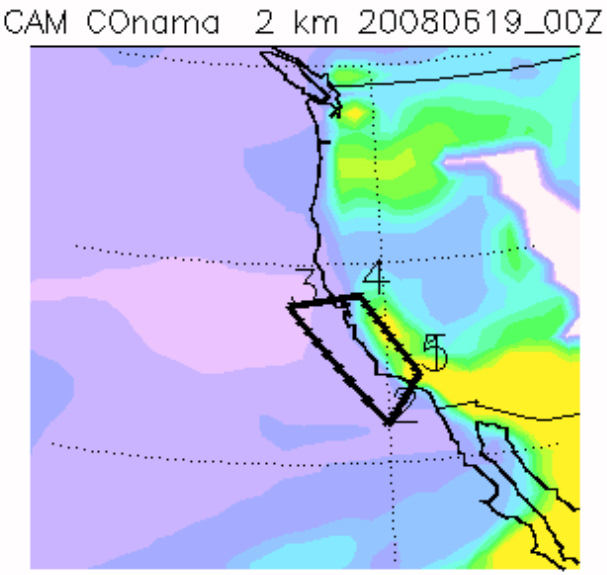


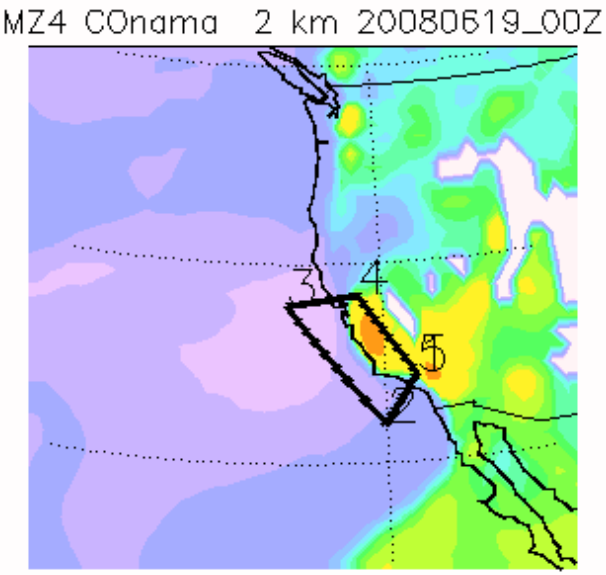
CAM & MZ4 2008-06-16 21Z

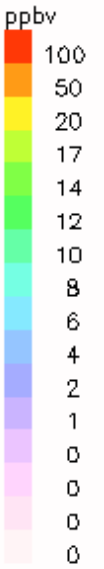






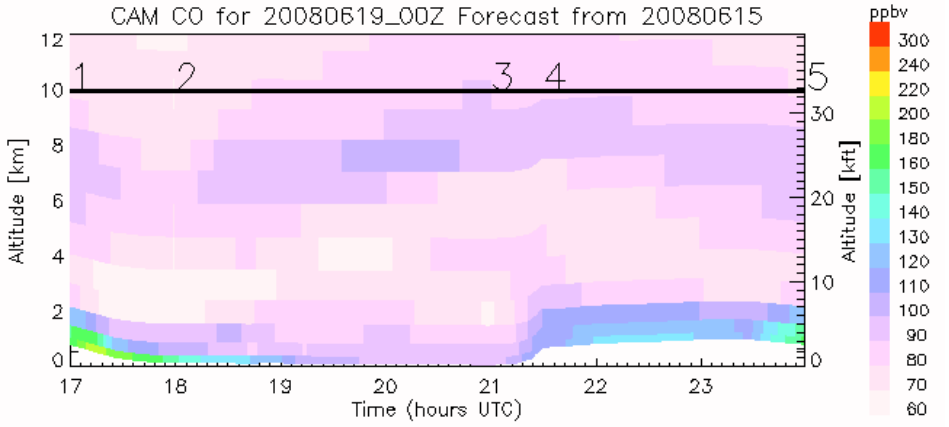


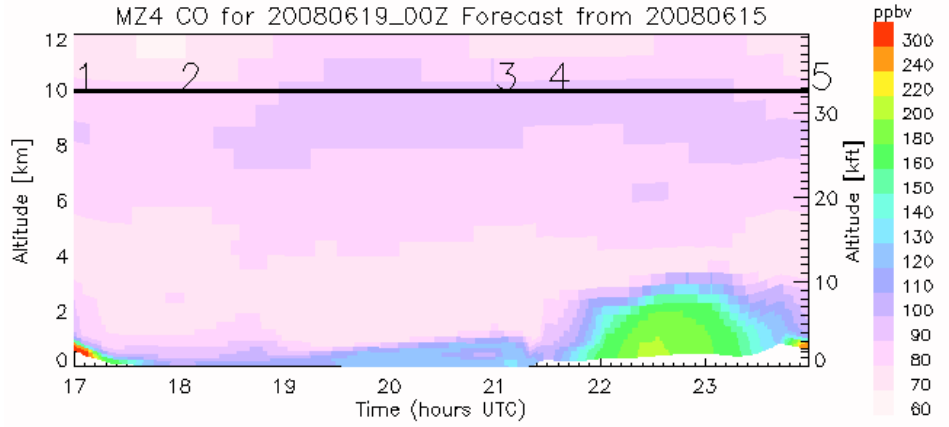


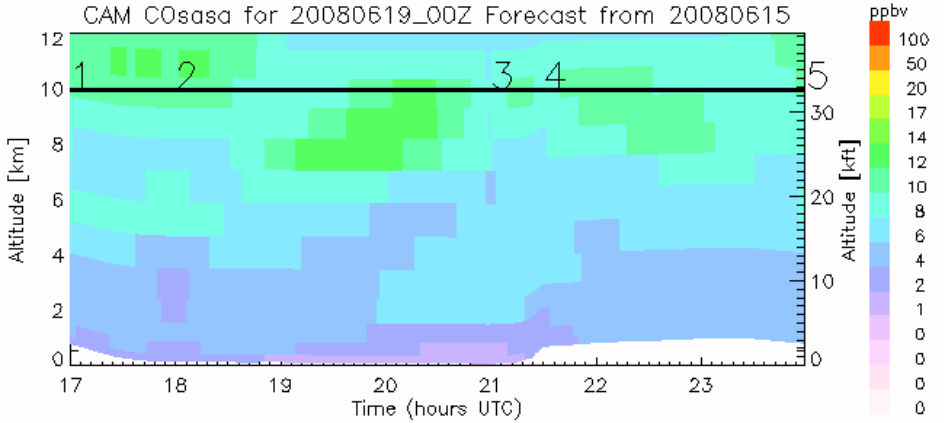


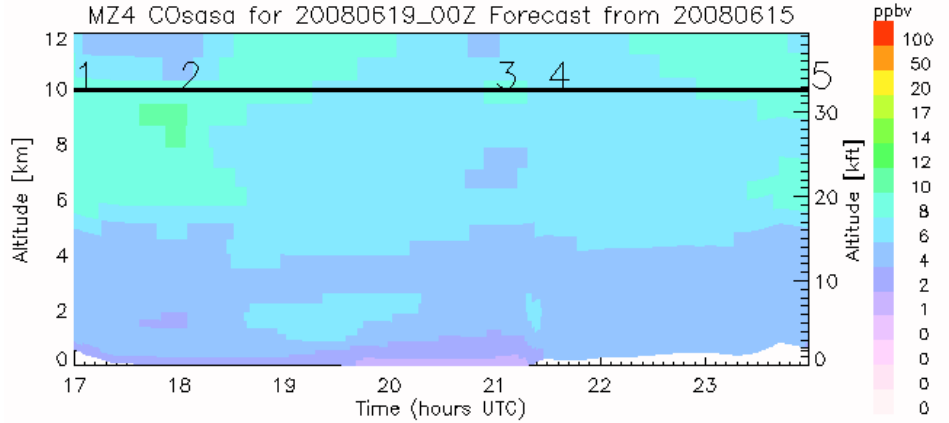
Initialized 2(

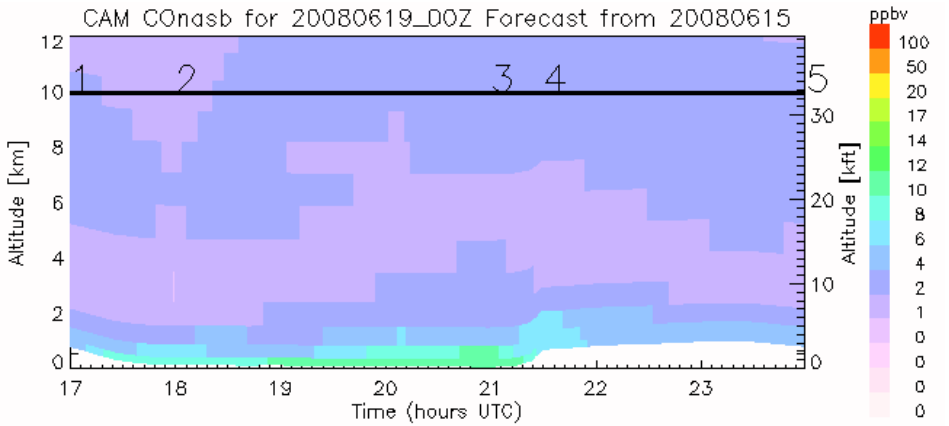
CAM & MZ4 2008-06-16 21Z

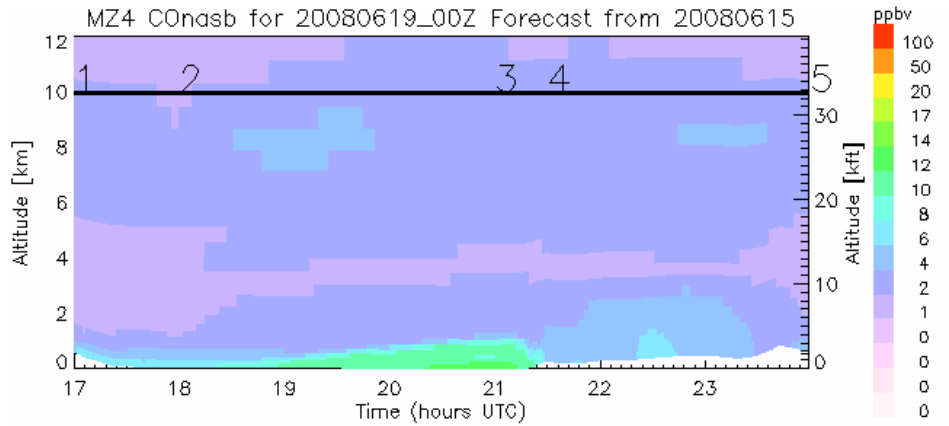






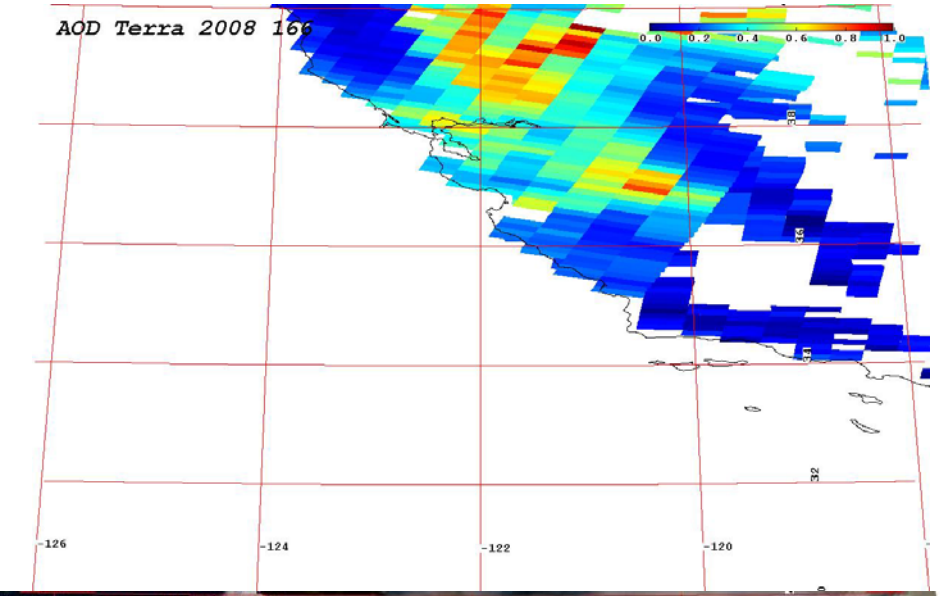


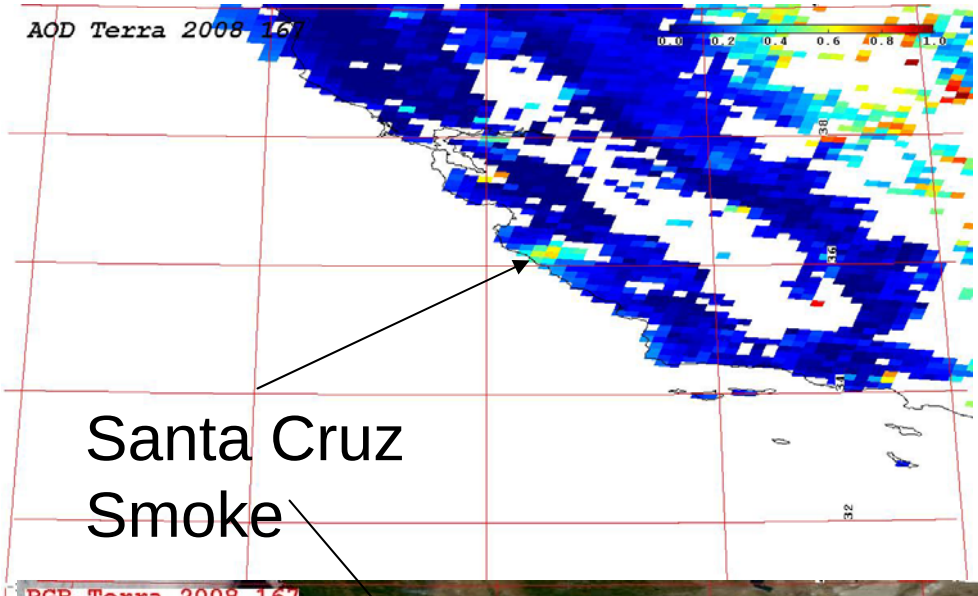




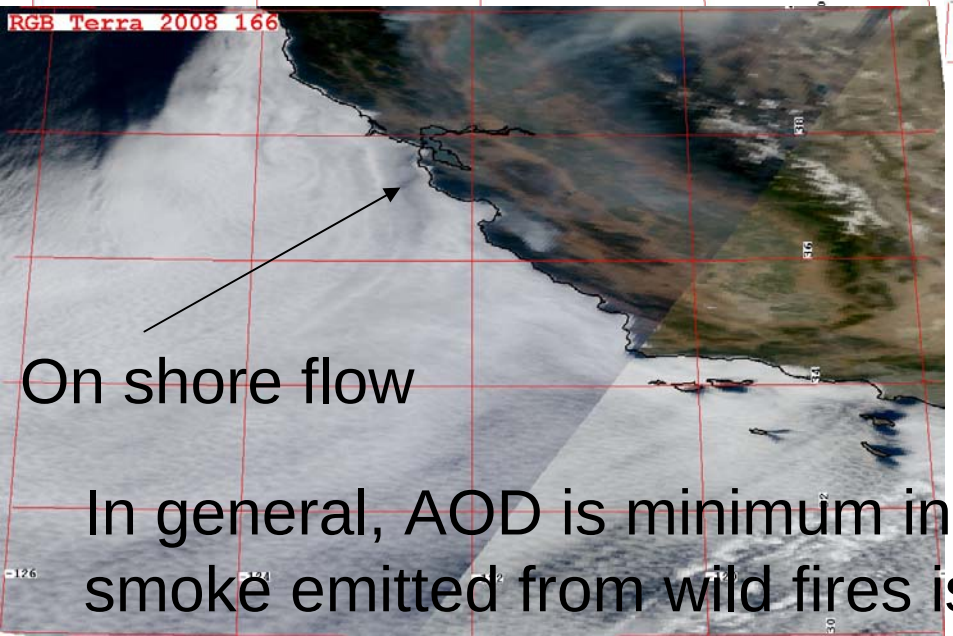
Day 166 & 167 (June 14 & 15) Sat. (Left) and Sun. (Right)

MODIS AOD Hot Spots in California





Santa Cruz Smoke

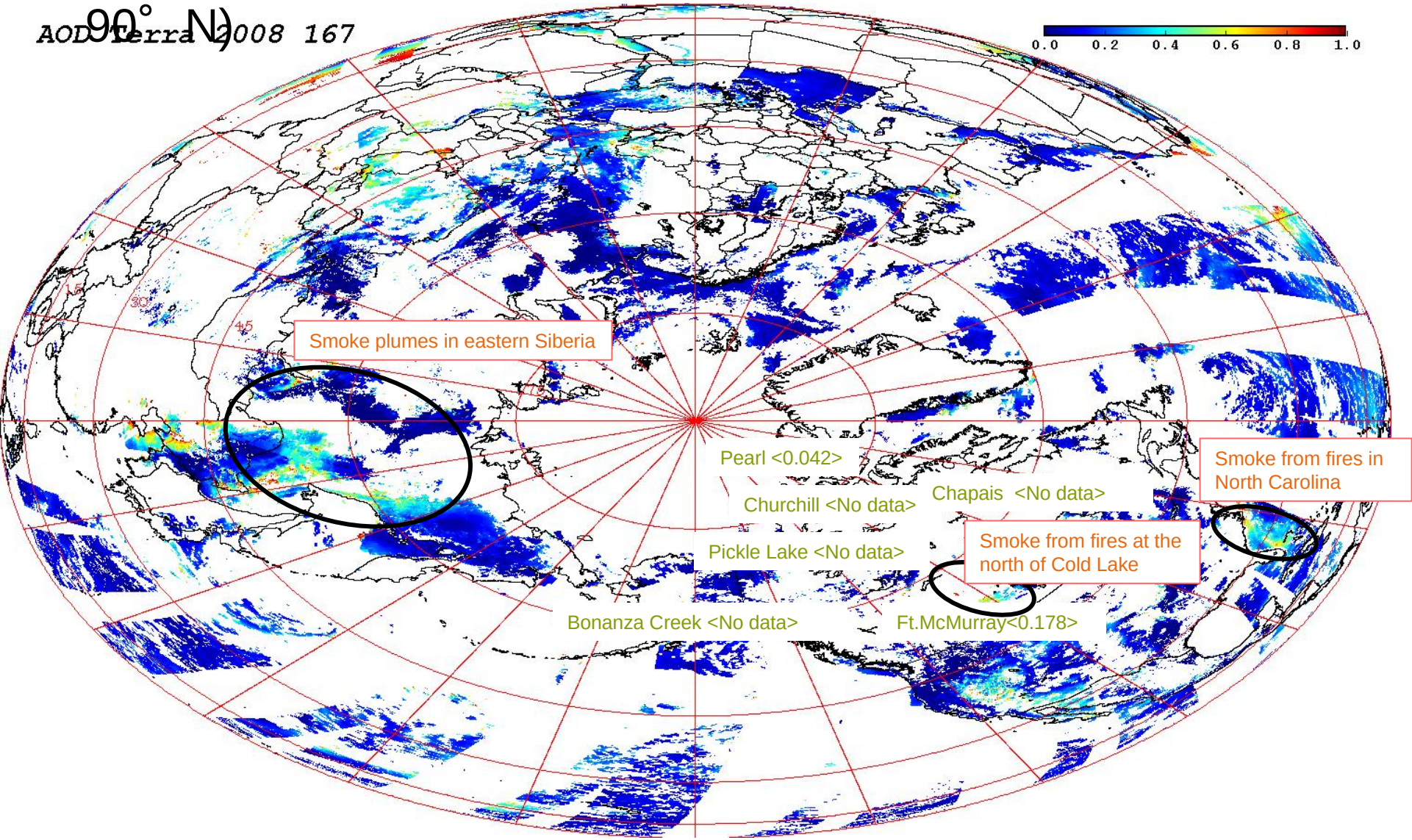


On shore flow

In general, AOD is minimum in the summer in central valley, smoke emitted from wild fires is the dominant one in AOD

Day 167 (June 15) Sunday

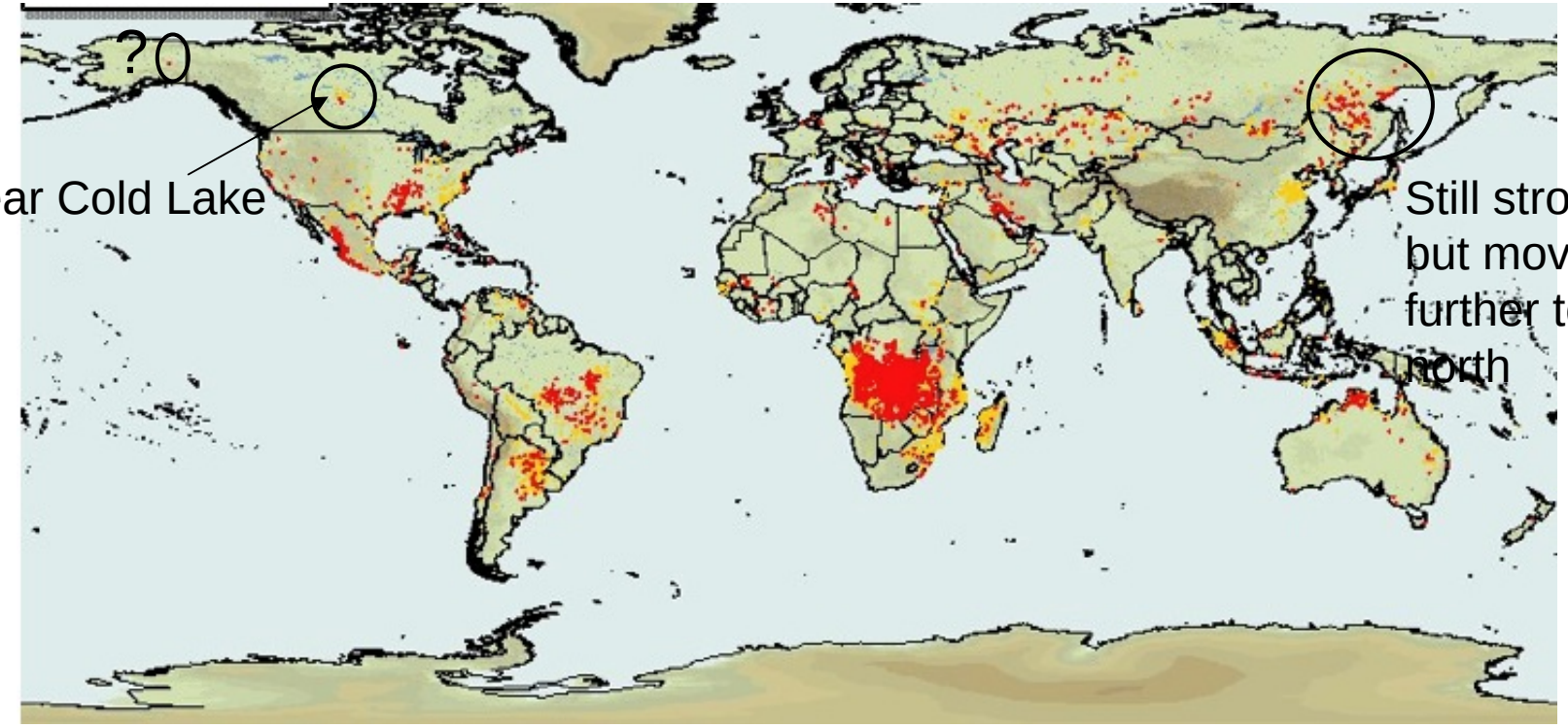
MODIS AOD Hot Spots in Northern Hemisphere (0° - 90° N)



Initialized 20080616 – 07 MODIS AOD at 550 nm and AERNOET daily mean <AOD> at 500 nm

MODIS Global Active Fire Count Map In Last 24 hours (Red) & 72 hours (Yellow)

(20080614 - 20080616)

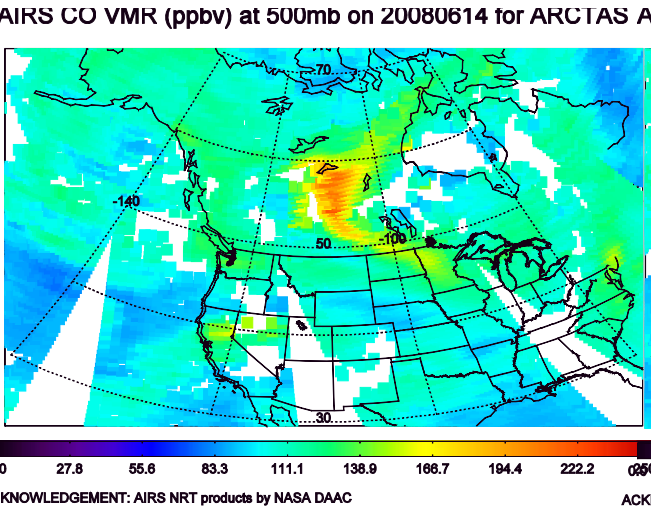


http://maps.geog.umd.edu/activefire_html

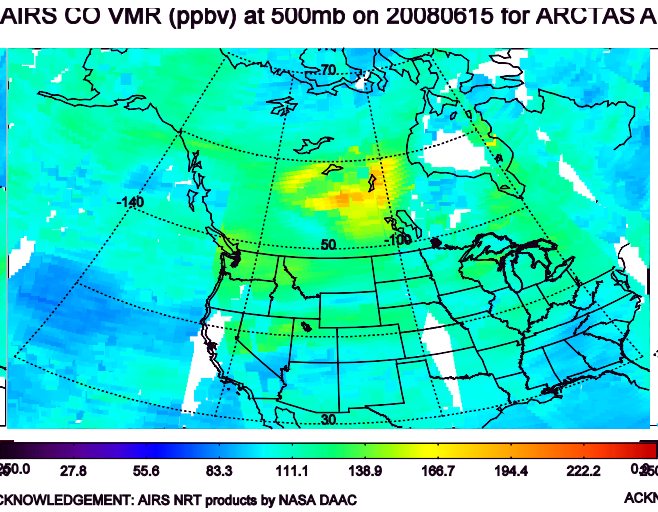
Initialized 20080616 – 00Z

AIRS Support for CARB

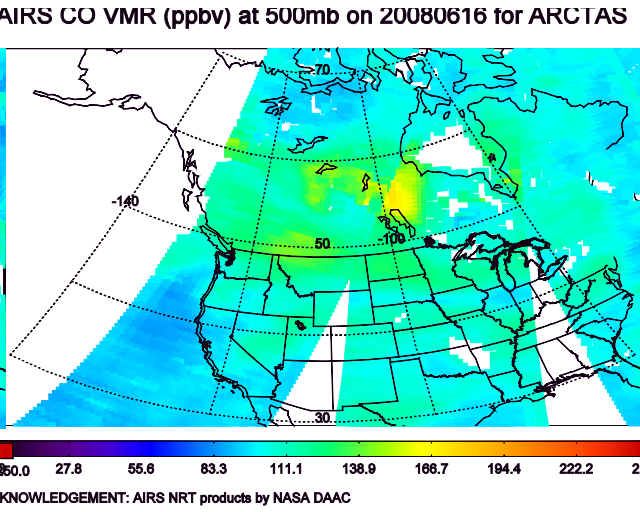
20080614



20080615



20080616



- Fire events over North America reduced intensity.
- California local CO concentrations are lower.

Initialized 20080616 – 00Z