

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 14 July 2017

Note: Saskatchewan (SK), Alberta (AB), Manitoba (MB), Northwest Territory (NWT), Yukon Territory (YKT), British Columbia (BC)

PAFA = Fairbanks Airport, Alaska

PASC = Deadhorse Airport, Prudhoe Bay Alaska

PABR = Barrow

Day-1 Forecast**Valid 1500z 15 July through 2359z 15 July**

The fire count remains high with much of the ABoVE region under the cover of smoke haze of varying thickness. Aerosol optical thickness values are largest in 1) the western half of the state, 2) the northeast area of AK through Inuvik to near Great Bear Lake, and 3) northeastern and central eastern BC. Slight chance to thread the needle in a narrow cloud free region near Yukon Flats early in the period but low clouds and showers are all around PAFA. Whitehorse looks cloudy and rainy with conditions worsening through the period. Inuvik starts the period partly cloudy ahead of a frontal system and then cloudy and rainy through the period as the front passes through. Yellowknife area looks clear becoming partly cloudy. Showers and thunderstorms are expected in northern half of BC and AB and extreme southern AB. SK and especially Saskatoon look cloud and rain free through the end of the period.

Day-2 Forecast**Valid 1500z 16 July through 2359z 16 July**

Aerosol thickness values are highest near northern Yukon Flats through Old Crow, in southern half of BC and northern half of AB. A frontal system with clouds and rain will push it's way south through northern NWT and Nunavut. A high pressure ridge will build in behind and bring very clean air with it. The northern two thirds of NWT will be mostly cloud free and rain free by end of the period. The forecast calls for a very cloudy and rainy day for most of Alaska. There may be opportunities between Inuvik and Great Bear Lakes region. Southern portions of SK and AB look fairly rain and cloud free but showers and thunderstorms are expected in the northern half of BC, AB, and SKT.

Day-3 Outlook**Valid 1500z 17 July through 2359z 17 July**

The largest values of aerosol optical thickness are seen near Old Crow in the northern section of YKT and the southern half of BC. The frontal system that came through in the last period continues it's southward movement and has carved out a large area of clean air with very low aerosol optical thickness values for all of NWT and the northern half of BC, AB, and SK. Clouds and rain associated with this frontal system stretch from east of the Hudson Bay through northern parts of MB, SK, AB and BC. There may be a chance for an early short trip to Yukon

Flats before conditions deteriorate. Inuvik looks clear of clouds and rain for the period. Great Bear Lake looks partly cloudy becoming mostly clear through the period. So flights along the McKenzie River through Norman Wells should be good with conditions worsening just south of Norman Wells by the end of the period. Areas to the south of the frontal system in southern AB and SK (including Saskatoon) look fairly clear.

--

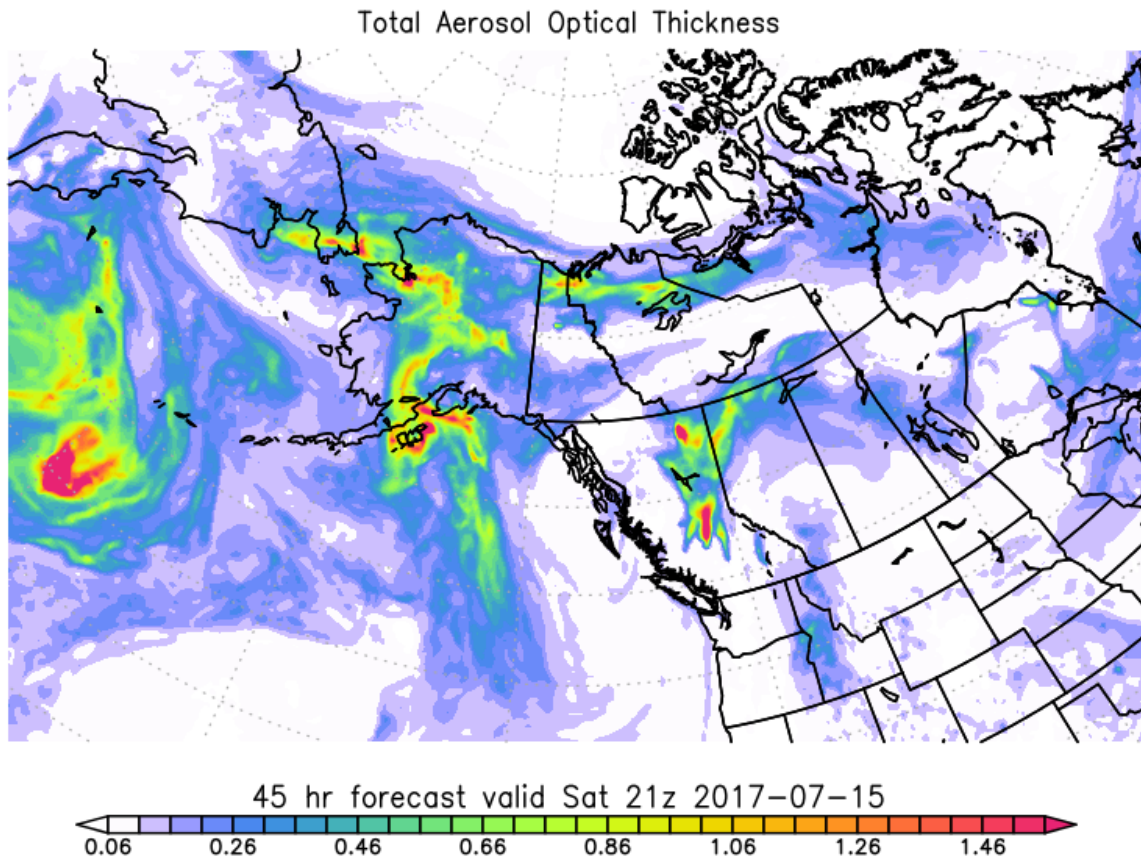
Austin Conaty, SSAI Global Modeling and Assimilation Office
301-614-6149 (ph) NASA Goddard Space Flight Center
301-614-6297 (fax) Code 610.1 Greenbelt, MD 20771

Austin.L.Conaty@nasa.gov

<http://gmao.gsfc.nasa.gov>

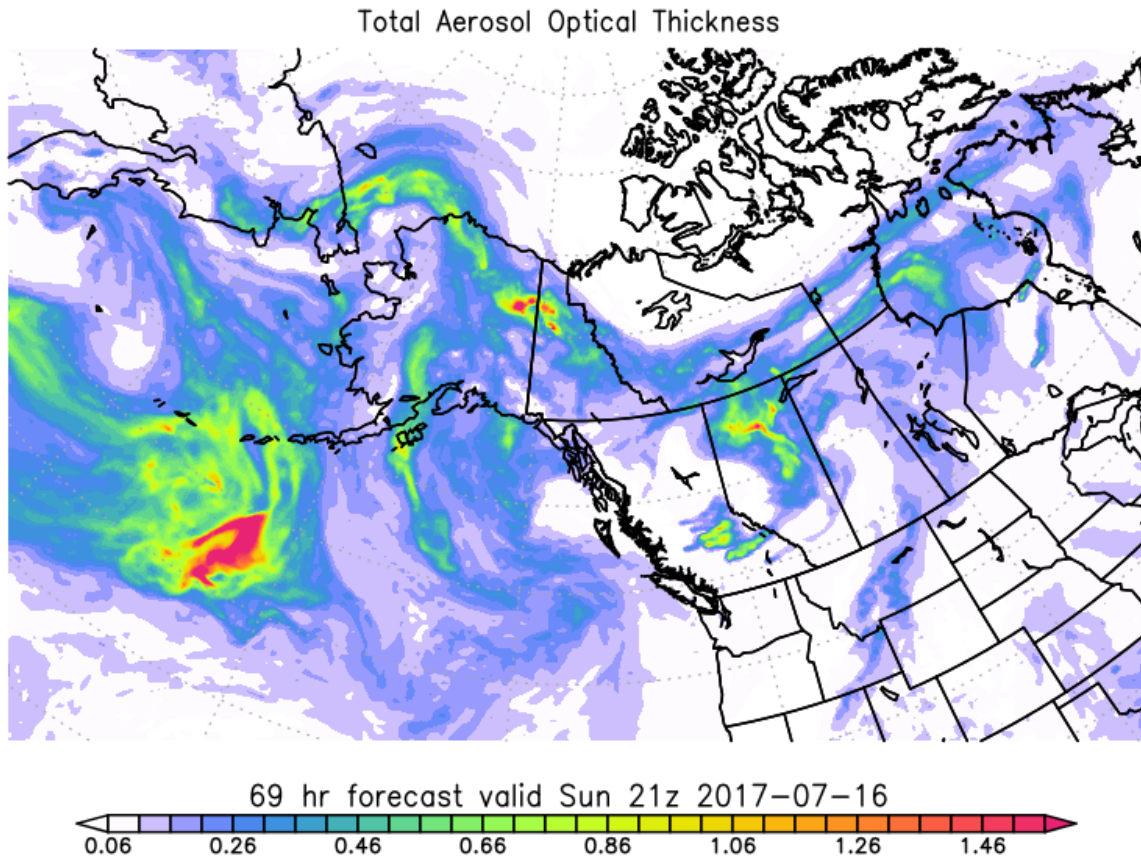
f516_fp.7totaot.045.above_lg.png

NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-14



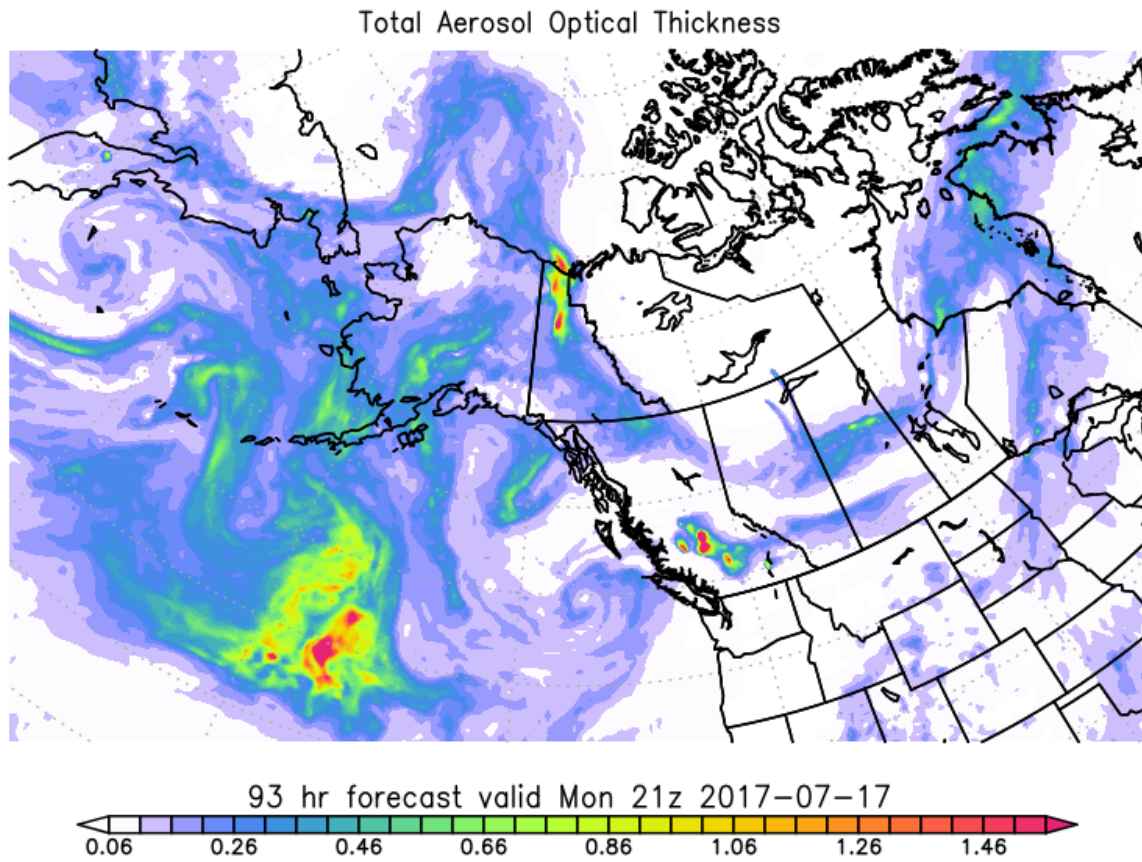
f516_fp.7totaot.069.above_lg.png

NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-14



f516_fp.7totaot.093.above_lg.png

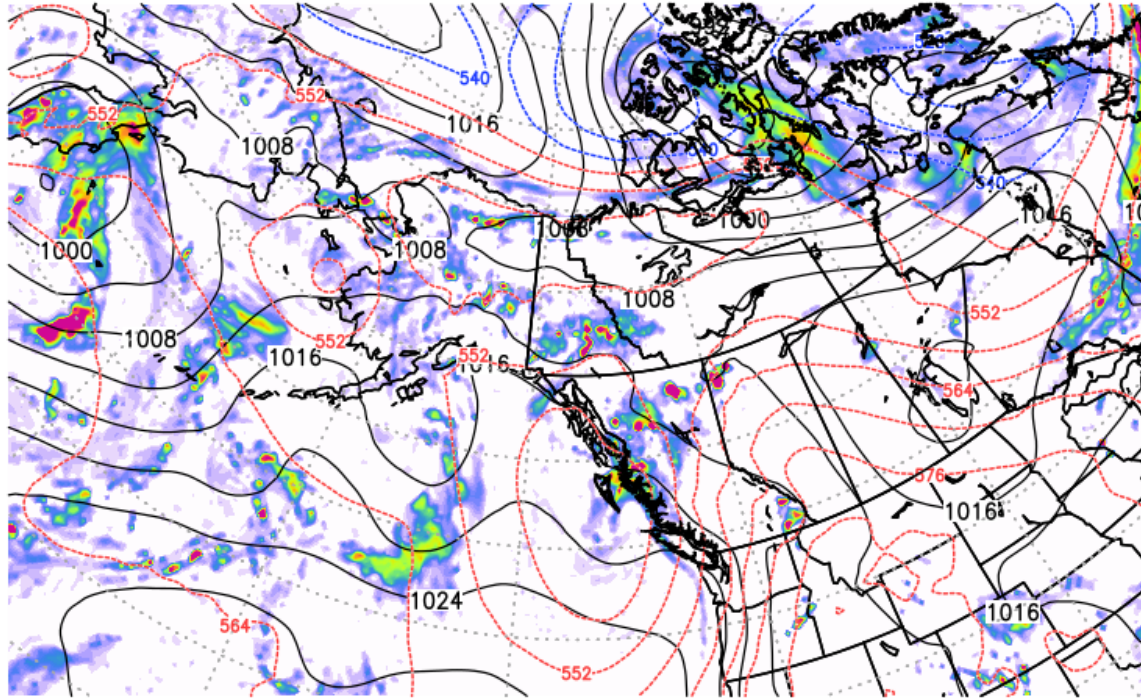
NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-07-14



fp.8prec.sfc.042.above_lg.png

NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-14

Precip [mm/day], SLP [mb] and 1000–500mb Thickness [dam]

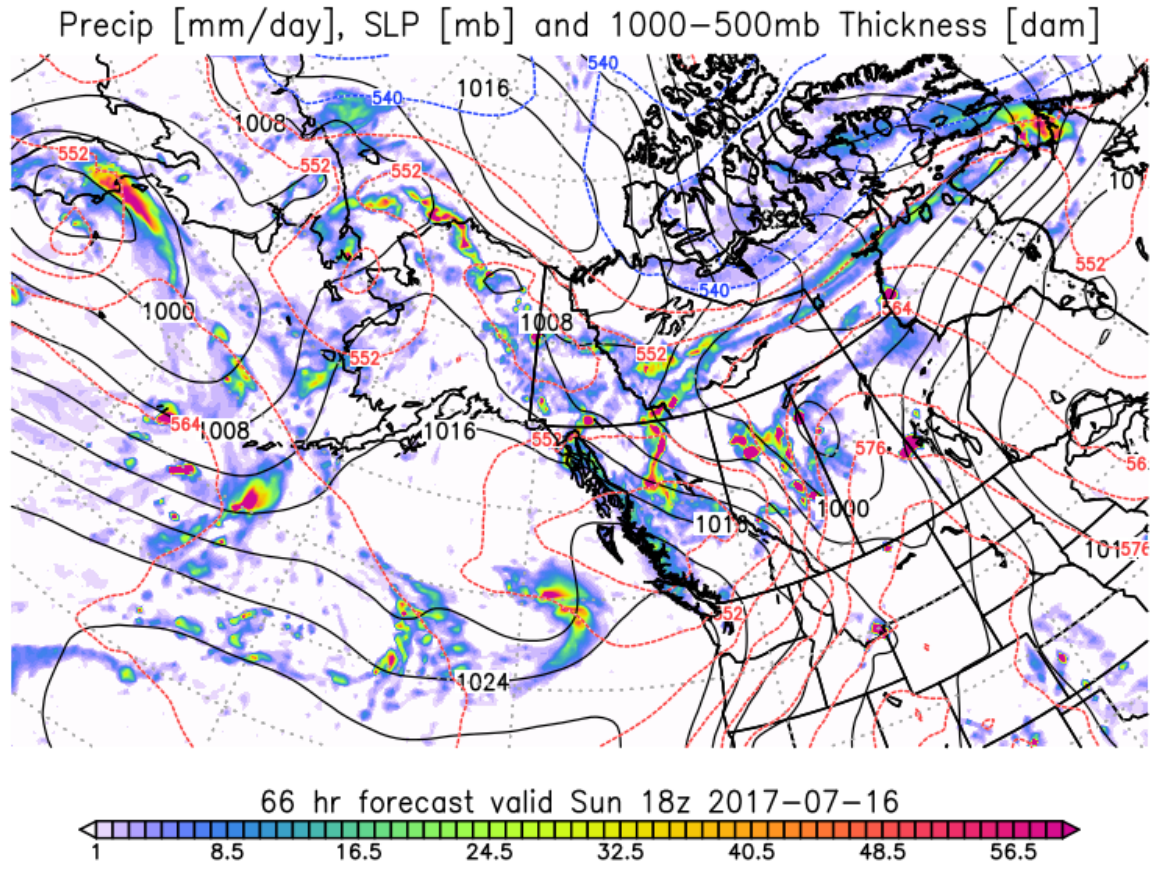


42 hr forecast valid Sat 18z 2017-07-15



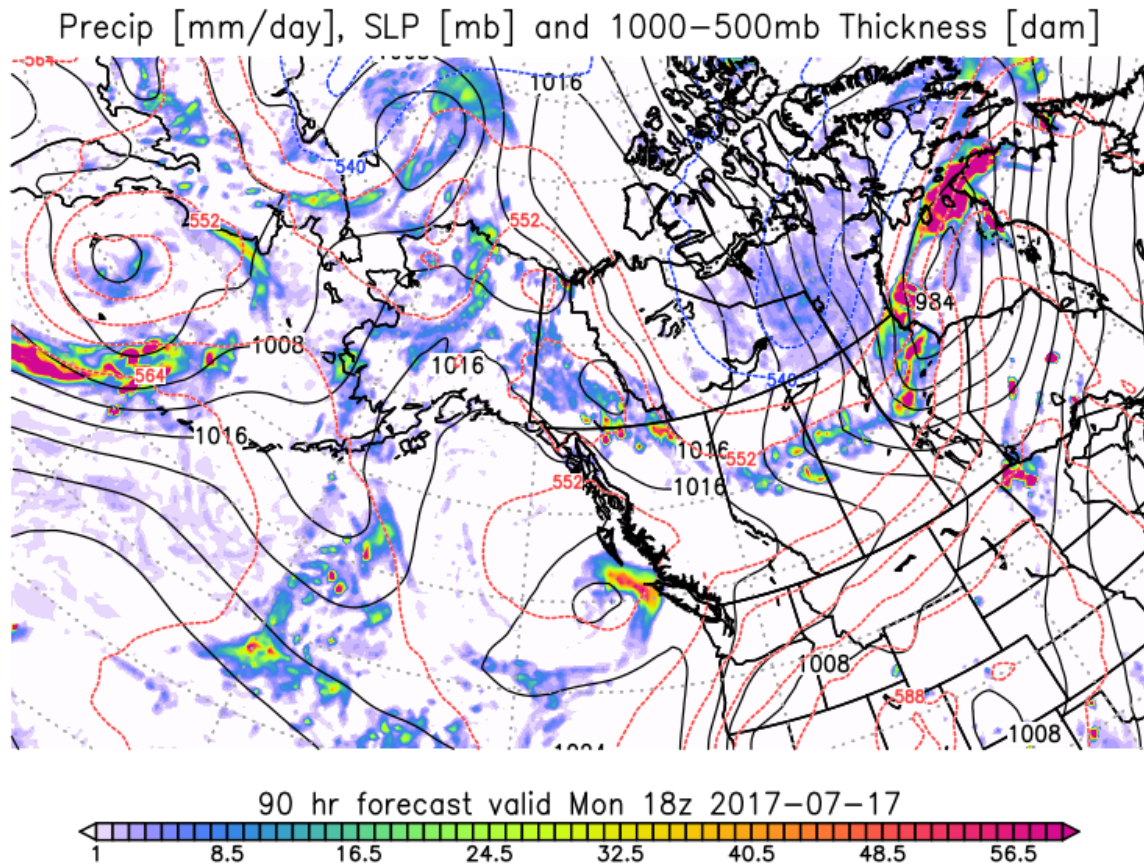
fp.8prec.sfc.066.above_lg.png

NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-14



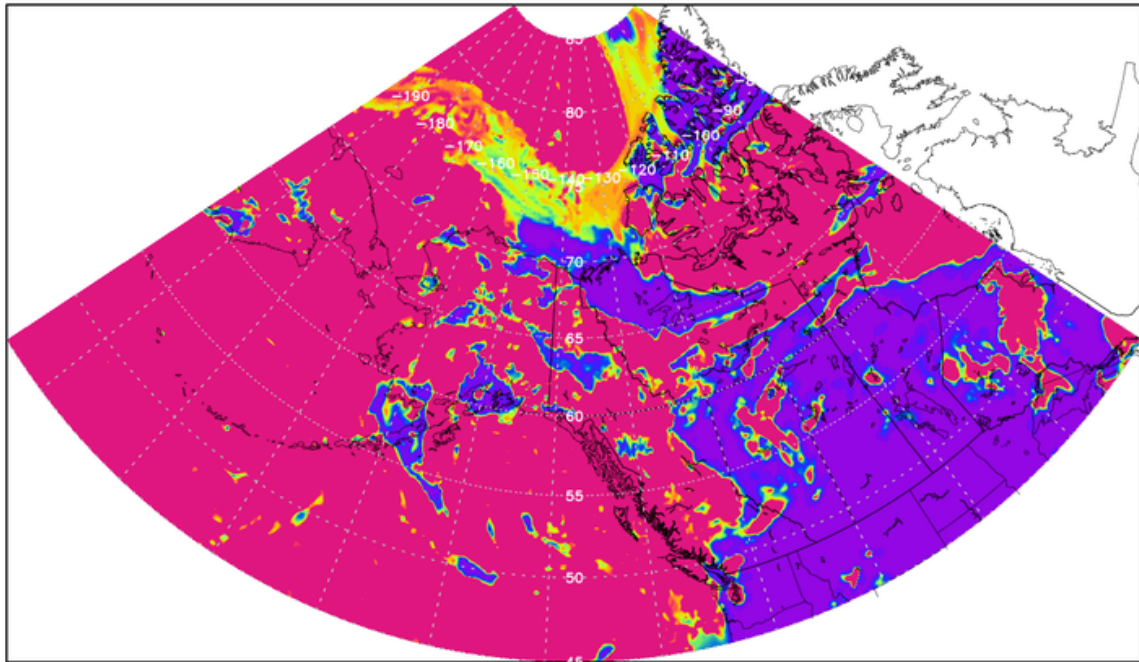
fp.8prec.sfc.090.above_lg.png

NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-07-14



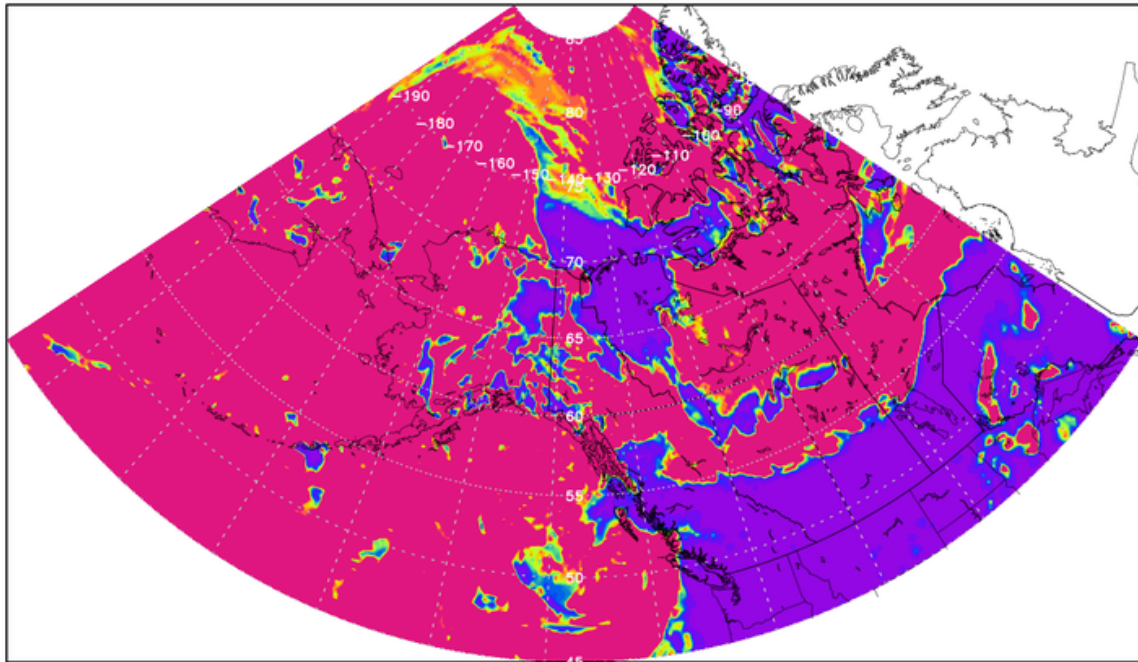
ABOVE_Low_Cloud_Optical_Depth_IT_00z14JUL_VT_18z16JUL.png

GEOS Low Cloud Optical Depth
Initial time 14 JUL. 00z
Valid time 16 JUL. 18z



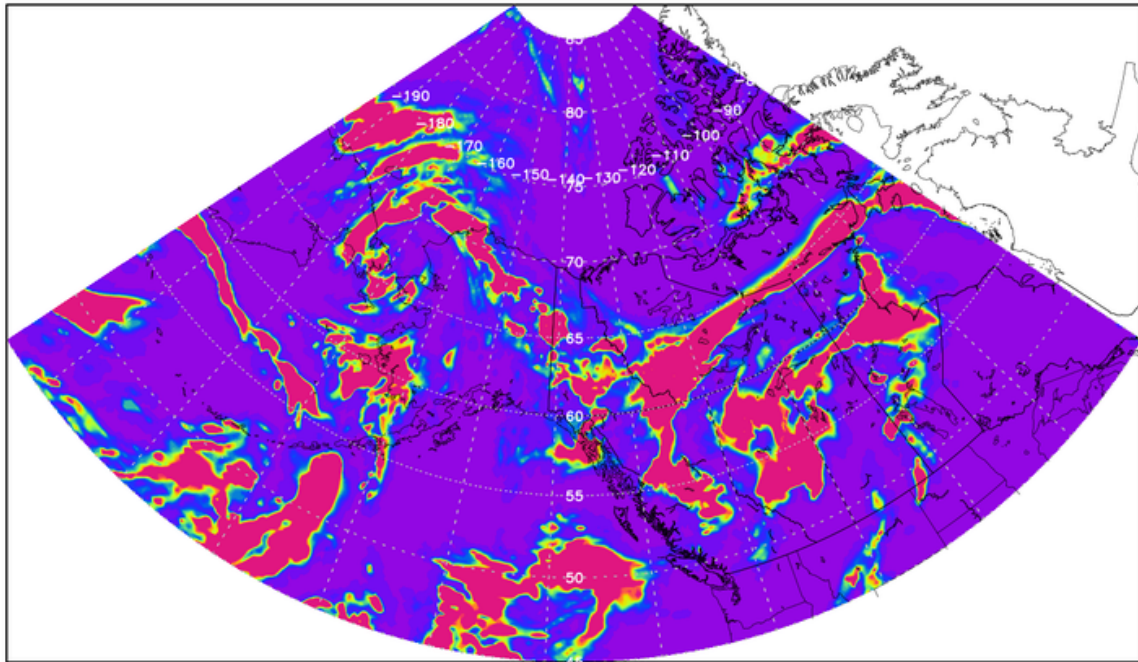
ABOVE_Low_Cloud_Optical_Depth_IT_00z14JUL_VT_18z17JUL.png

GEOS Low Cloud Optical Depth
Initial time 14 JUL. 00z
Valid time 17 JUL. 18z



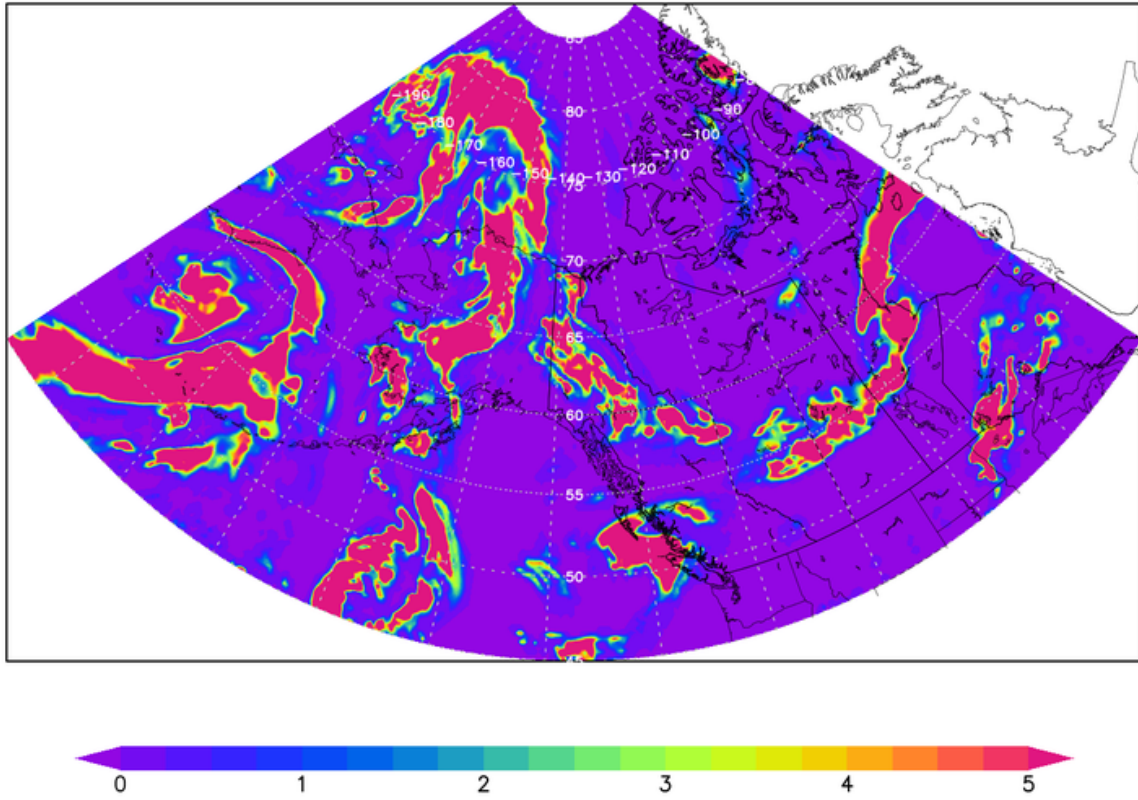
ABOVE_Mid_Cloud_Optical_Depth_IT_00z14JUL_VT_18z16JUL.png

GEOS Mid Cloud Optical Depth
Initial time 14 JUL. 00z
Valid time 16 JUL. 18z



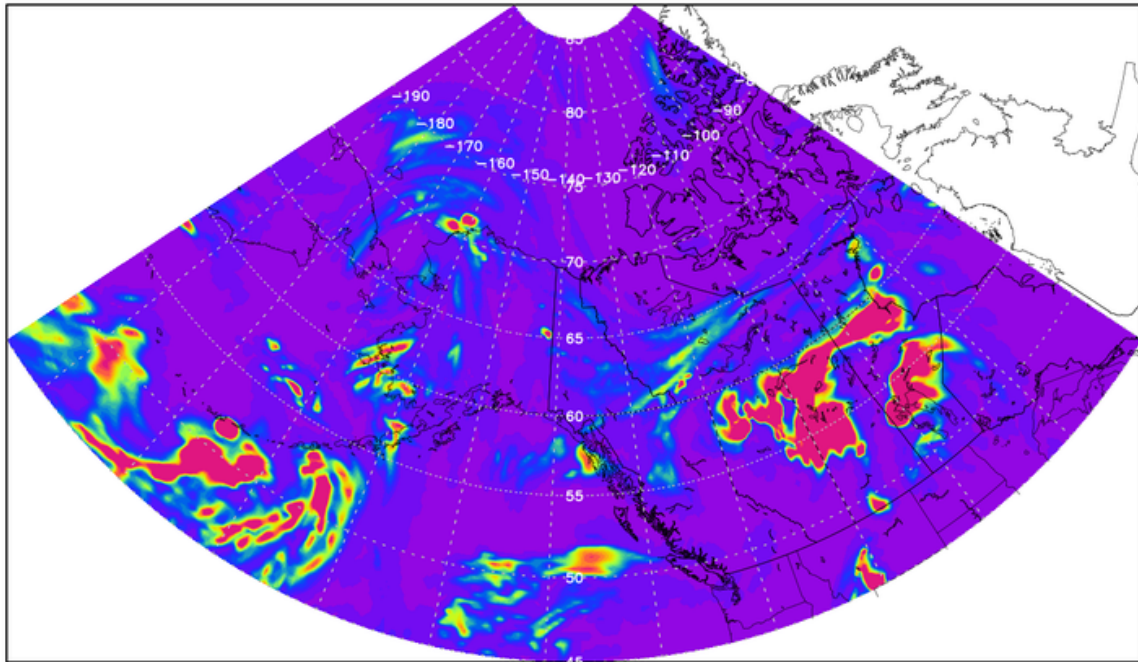
ABOVE_Mid_Cloud_Optical_Depth_IT_00z14JUL_VT_18z17JUL.png

GEOS Mid Cloud Optical Depth
Initial time 14 JUL. 00z
Valid time 17 JUL. 18z



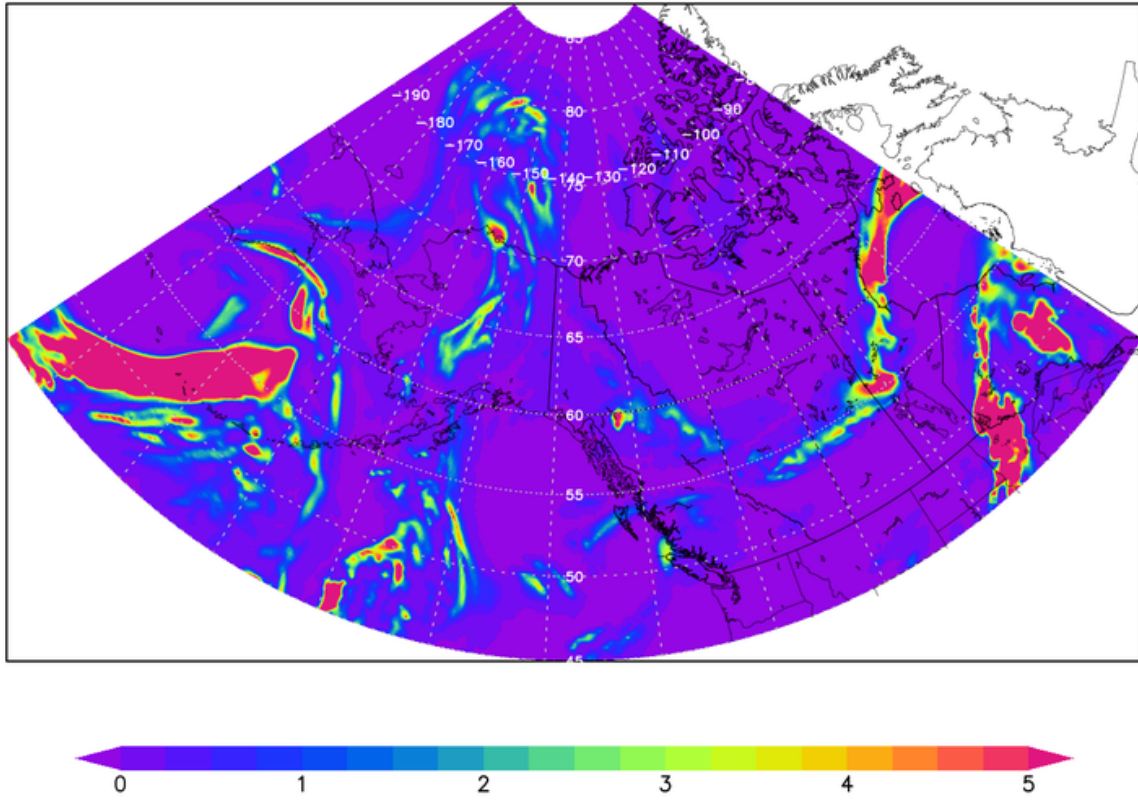
ABOVE_High_Cloud_Optical_Depth_IT_00z14JUL_VT_18z16JUL.png

GEOS High Cloud Optical Depth
Initial time 14 JUL. 00z
Valid time 16 JUL. 18z



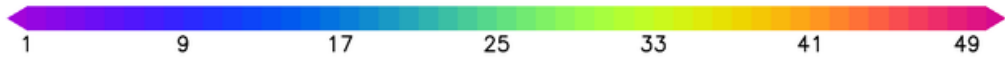
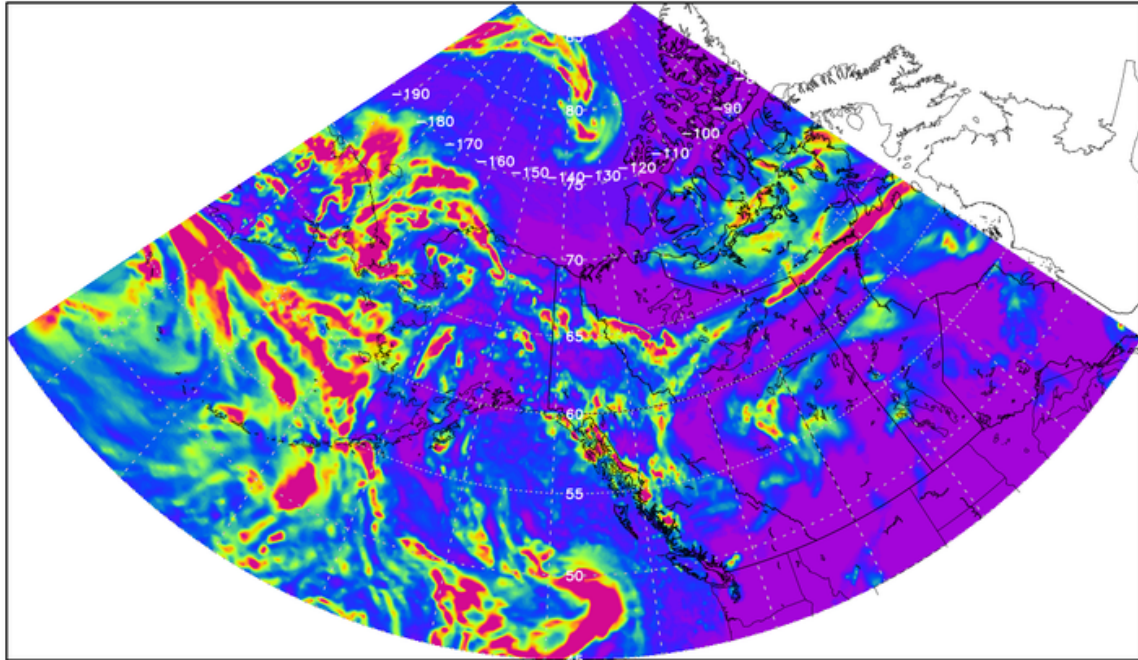
ABOVE_High_Cloud_Optical_Depth_IT_00z14JUL_VT_18z17JUL.png

GEOS High Cloud Optical Depth
Initial time 14 JUL. 00z
Valid time 17 JUL. 18z



ABOVE_Total_Cloud_IT_00z14JUL_VT_18z16JUL.png

GEOS Total Cloud Optical Depth
Initial time 14 JUL. 00z
Valid time 16 JUL. 18z



ABOVE_Total_Cloud_IT_00z14JUL_VT_18z17JUL.png

GEOS Total Cloud Optical Depth
Initial time 14 JUL. 00z
Valid time 17 JUL. 18z

