

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 12 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 13 July through 2359z 13 July**

There is a fire burning in the South Fork Salcha region to the east-southeast of PAFA. Other fires in the northeast and southwest quadrants of the state continue to burn. The largest values of aerosol optical thickness will be found between PAFA and the southern slopes of the Brooks Range. An area of clouds and precipitation are near PAFA and further north along the southern slopes of the Brooks Range. Although the state is mostly cloudy, many of these clouds are optically thin high clouds. Bethel might be possible second half of the period while far western Seward peninsula looks favorable for most of the period becoming cloudy late. North Slopes and the PASC and PABR regions look mostly clear. Yukon Flats look possible especially the eastern section closest to the state line.

Day-2 Forecast**Valid 1500z 14 July through 2359z 14 July**

Aerosol optical thickness levels are forecast to be lower than earlier this week but some large values of aerosol optical thickness can still be found in the northeast corner and the western half of the state south of the Brooks Range through Bethel. The clouds and rain are minimal at the beginning of the period with increasing cloud cover and showers as the day advances. In and around PAFA and Yukon Flats look good most of the day while western Seward Peninsula begins the period looking good but becomes mostly cloudy late in the period. PASC and PABR look good provided the optically thick low clouds just off shore to the north do not drift on shore.

Day-3 Outlook**Valid 1500z 15 July through 2359z 15 July**

There are isolated areas of large values of aerosol optical thickness in the northeast part of the state and widespread areas of significant aerosol optical thickness in much of the western part of the state. The forecast shows a trough that extends from the Seward Peninsula to the southeast. Clouds and rain associated with this system cover most of the southern half of the state, southern half of YKT and much of northern BC. The clouds and rain increase throughout the period as the area of cloud and rain moves north. The PAFA area will be mainly cloudy and rainy during this period. As this system moves towards the north, clouds and showers form

along the southern slopes of the Brooks Range. Early on in the period local flying in the PAFA and Yukon Flats area may be possible.

--

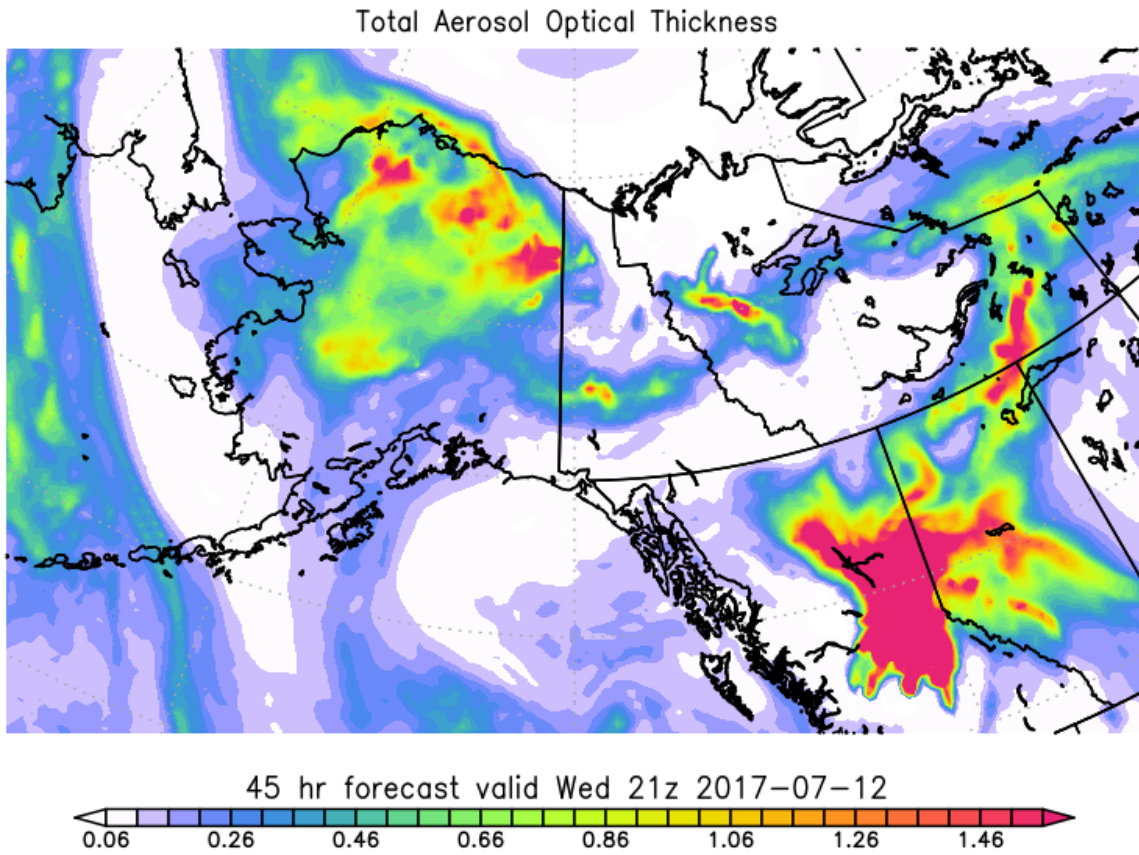
Austin Conaty, SSAI Global Modeling and Assimilation Office
301-614-6149 (ph) NASA Goddard Space Flight Center
301-614-6297 (fax) Code 610.1 Greenbelt, MD 20771

Austin.L.Conaty@nasa.gov

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

f516_fp.7totaot.045.above_sm.png

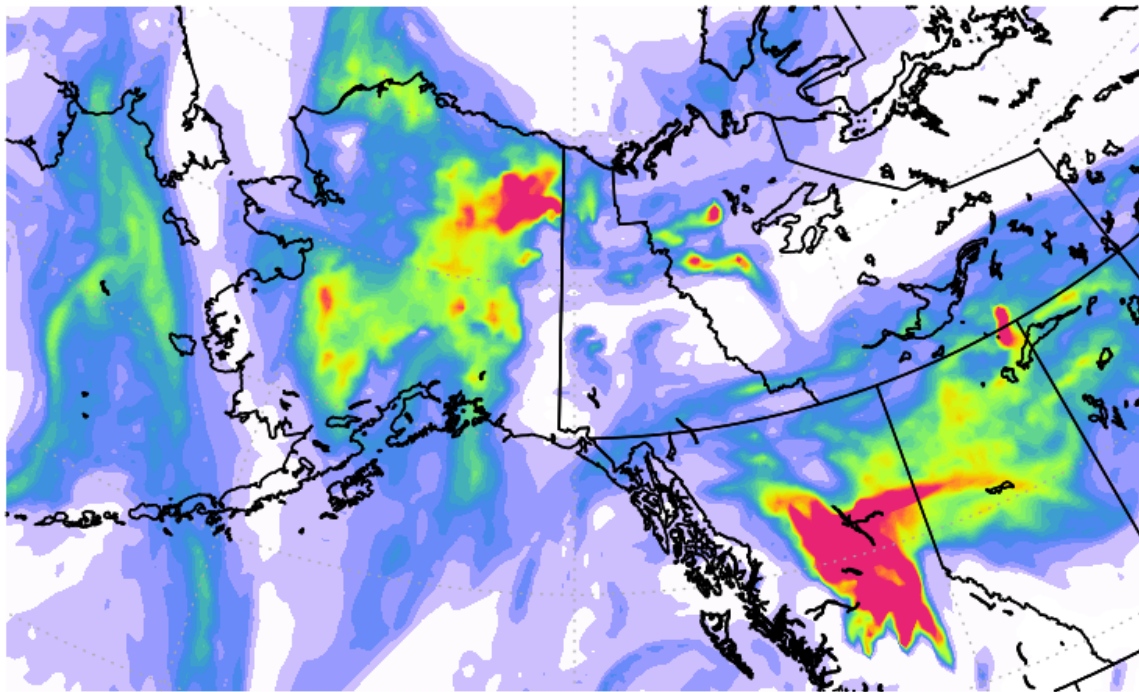
NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-11



f516_fp.7totaot.069.above_sm.png

NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-11

Total Aerosol Optical Thickness



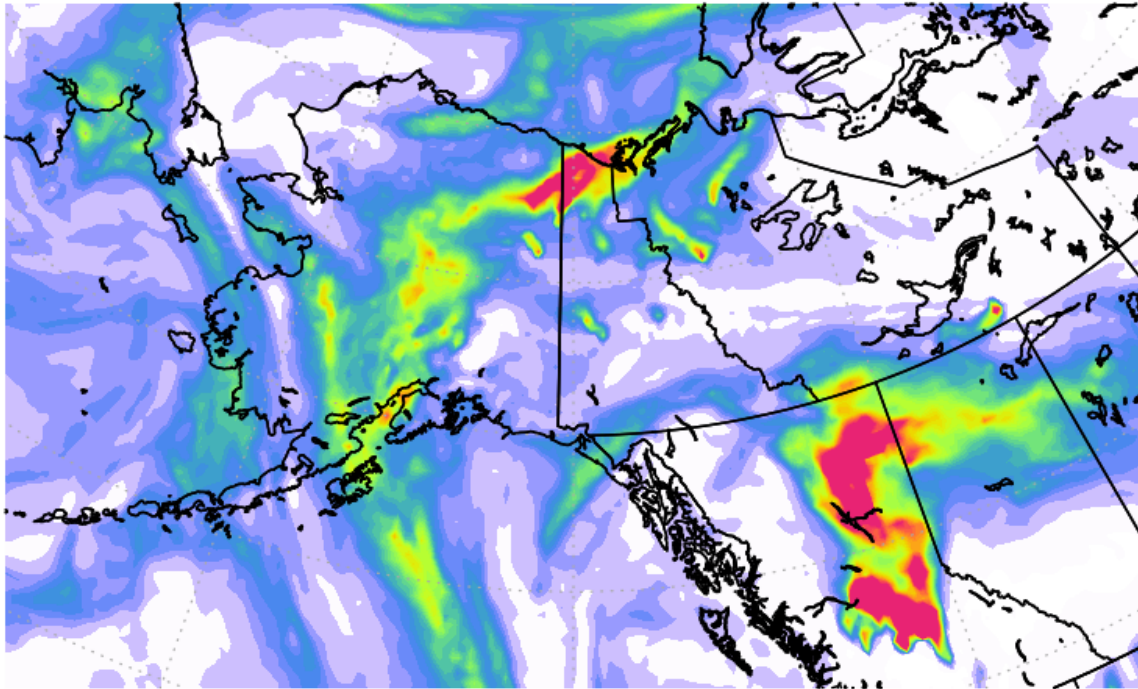
69 hr forecast valid Thu 21z 2017-07-13



f516_fp.7totaot.093.above_sm.png

NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-07-11

Total Aerosol Optical Thickness

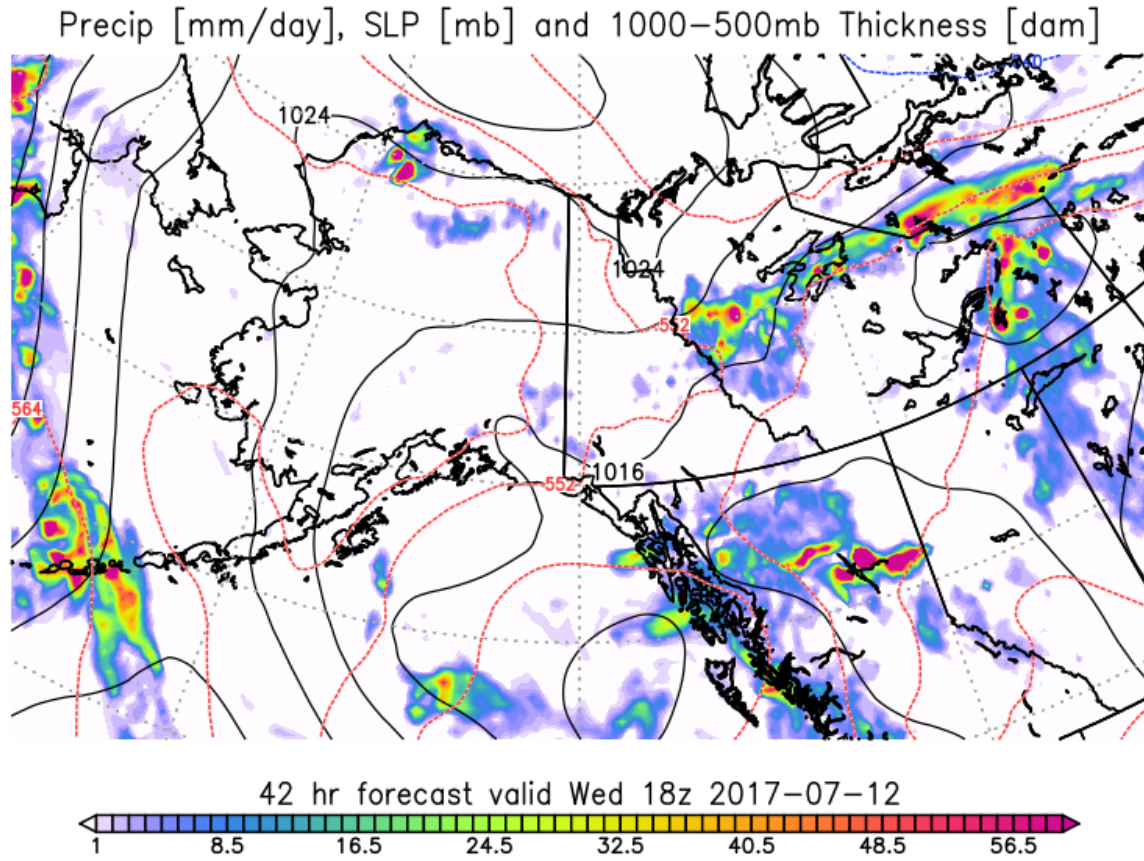


93 hr forecast valid Fri 21z 2017-07-14



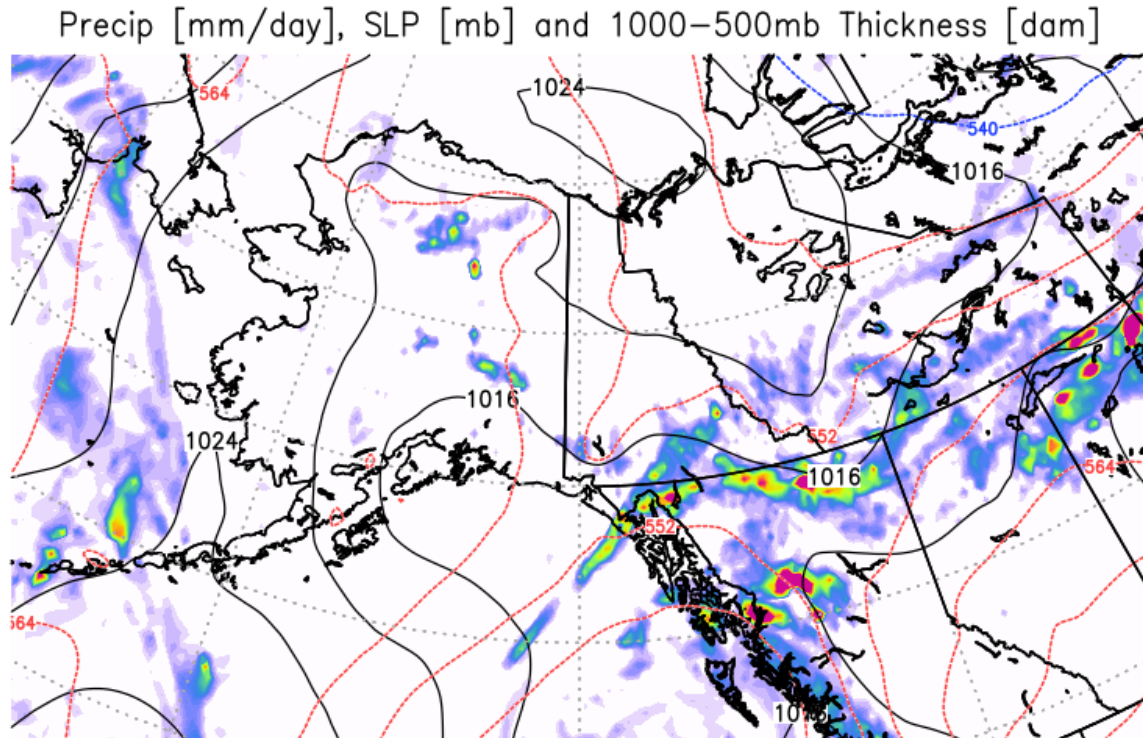
fp.8prec.sfc.042.above_sm.png

NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-11



fp.8prec.sfc.066.above_sm.png

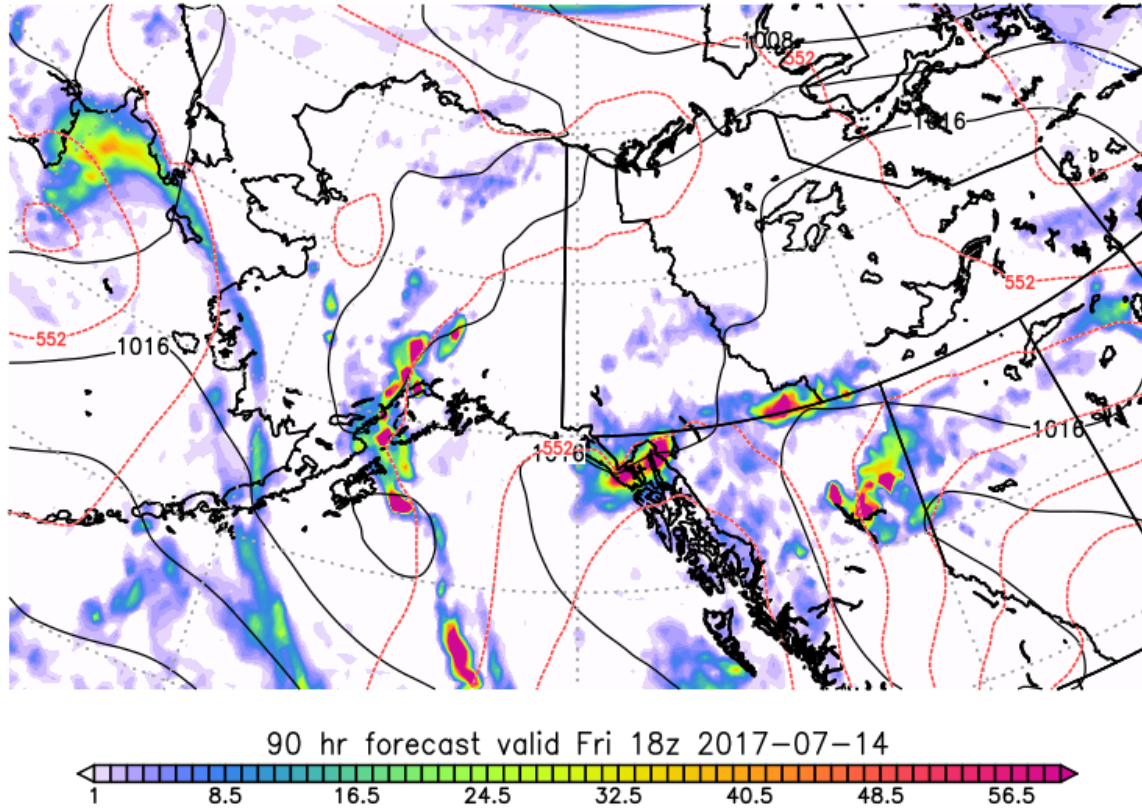
NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-11



fp.8prec.sfc.090.above_sm.png

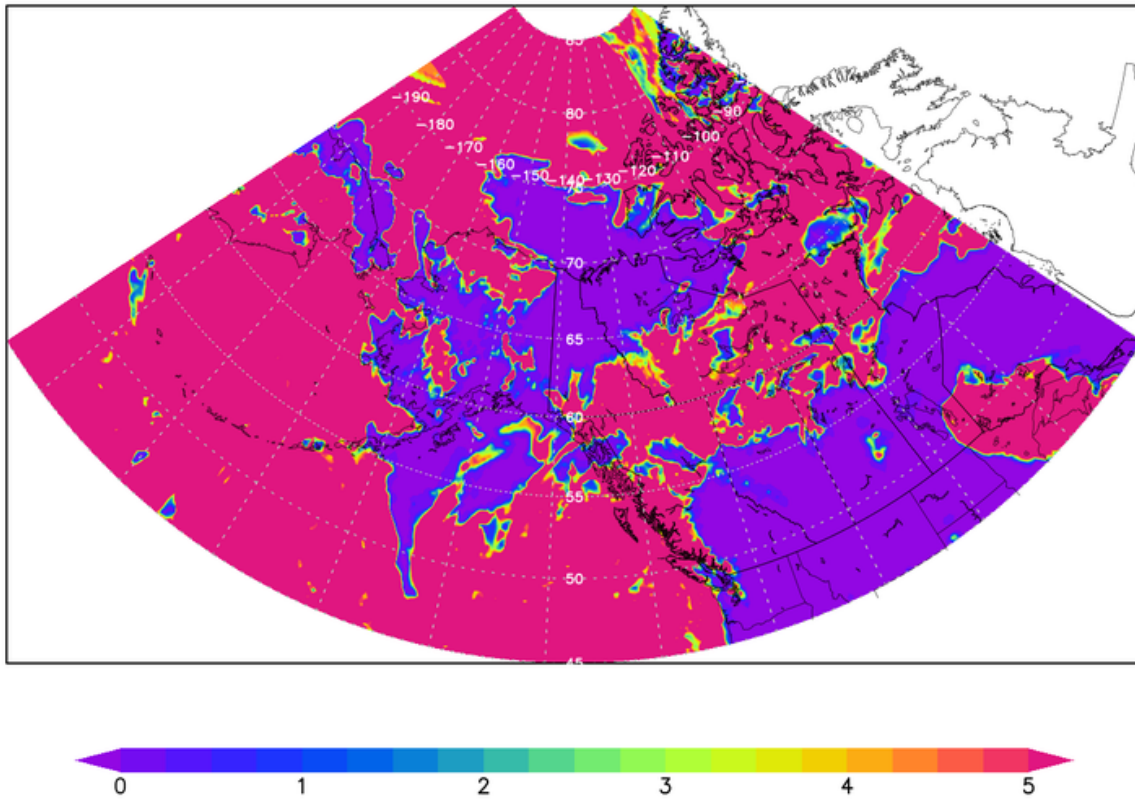
NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-07-11

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



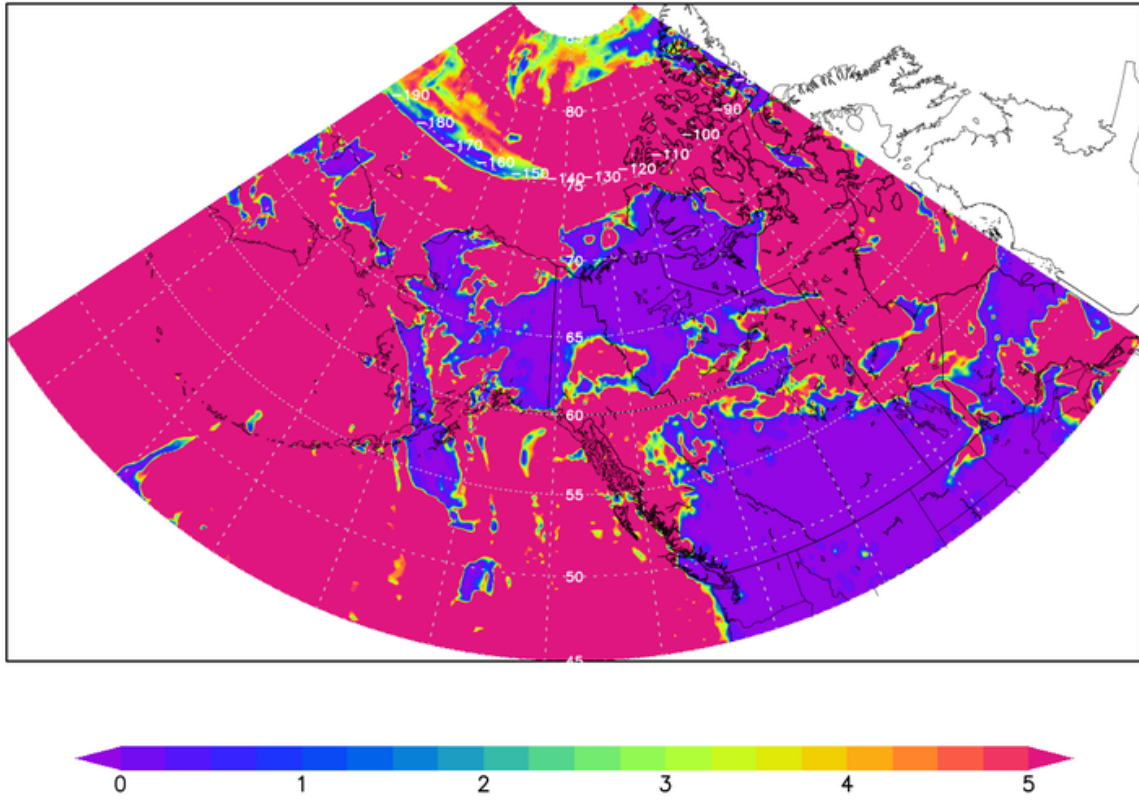
ABOVE_Low_Cloud_Optical_Depth_IT_00z11JUL_VT_18z13JUL.png

GEOS Low Cloud Optical Depth
Initial time 11 JUL. 00z
Valid time 13 JUL. 18z

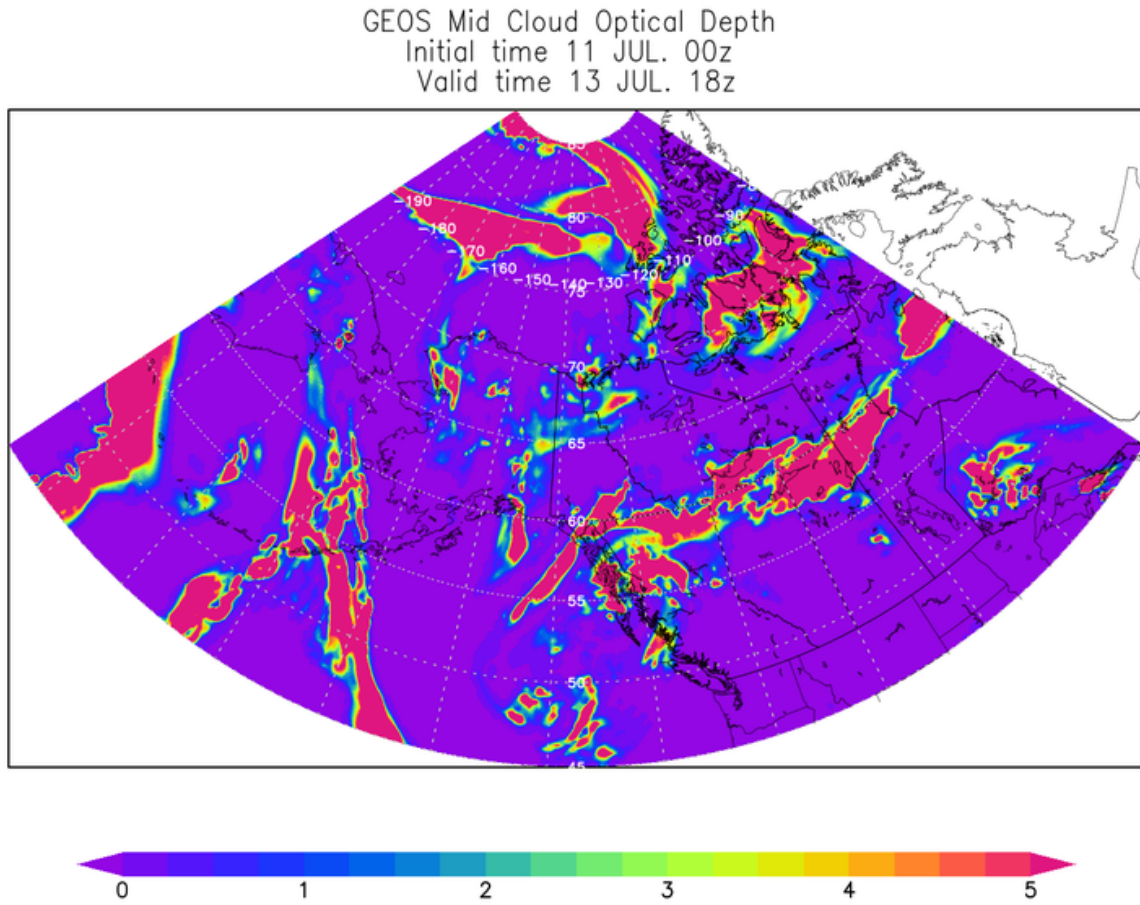


ABOVE_Low_Cloud_Optical_Depth_IT_00z11JUL_VT_18z14JUL.png

GEOS Low Cloud Optical Depth
Initial time 11 JUL. 00z
Valid time 14 JUL. 18z

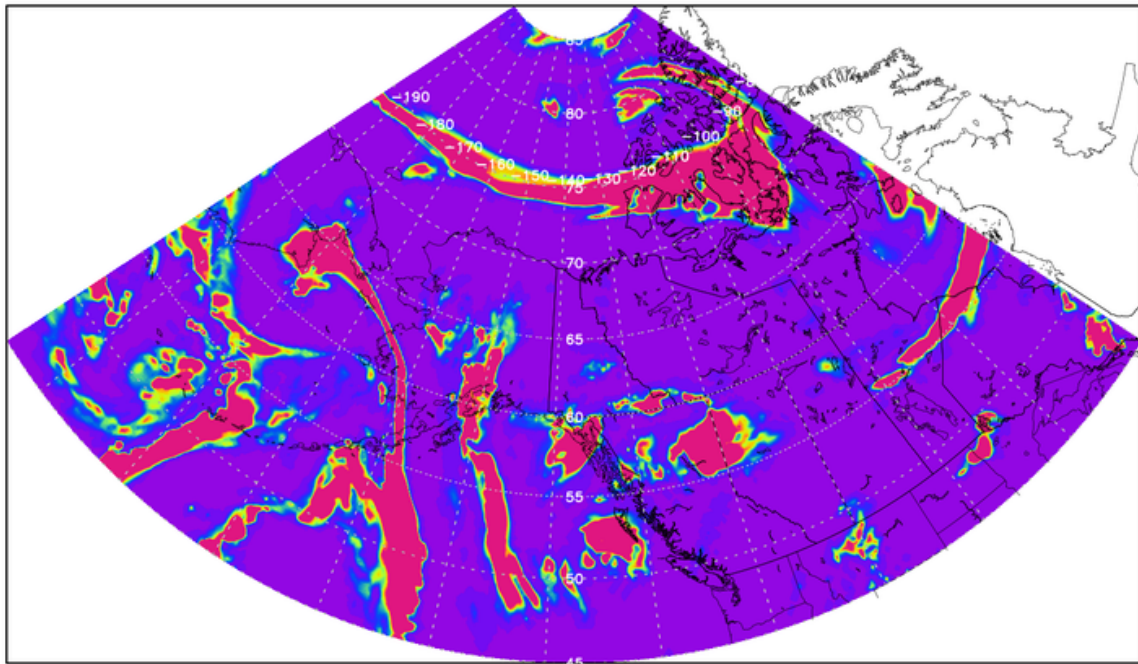


ABOVE_Mid_Cloud_Optical_Depth_IT_00z11JUL_VT_18z13JUL.png



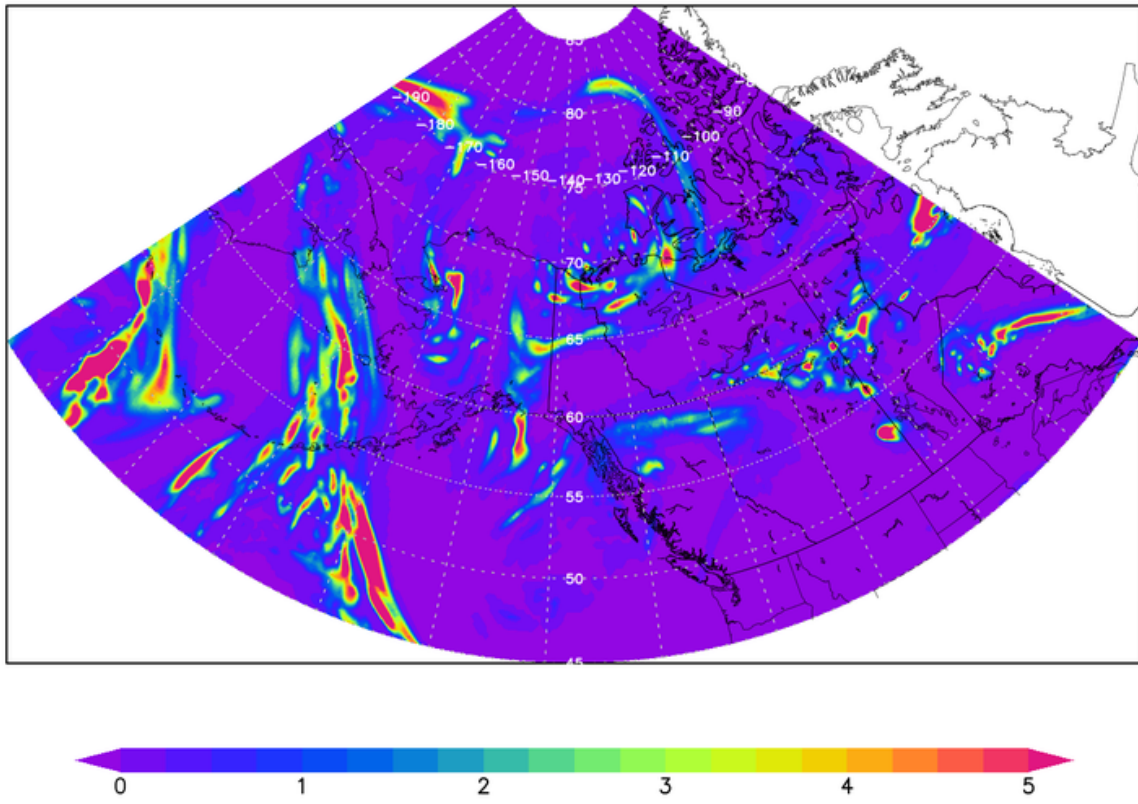
ABOVE_Mid_Cloud_Optical_Depth_IT_00z11JUL_VT_18z14JUL.png

GEOS Mid Cloud Optical Depth
Initial time 11 JUL. 00z
Valid time 14 JUL. 18z



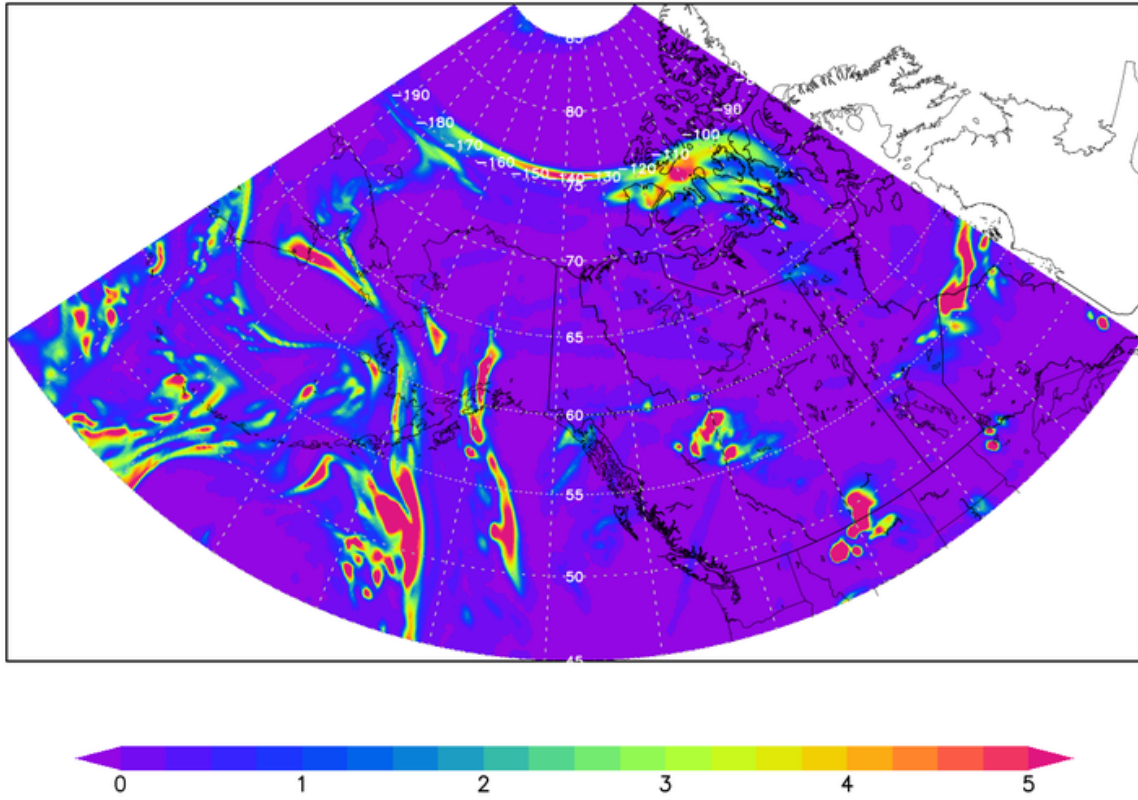
ABOVE_High_Cloud_Optical_Depth_IT_00z11JUL_VT_18z13JUL.png

GEOS High Cloud Optical Depth
Initial time 11 JUL. 00z
Valid time 13 JUL. 18z



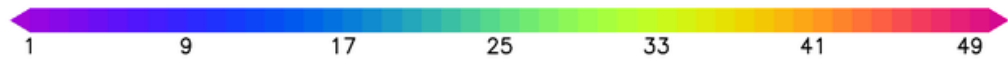
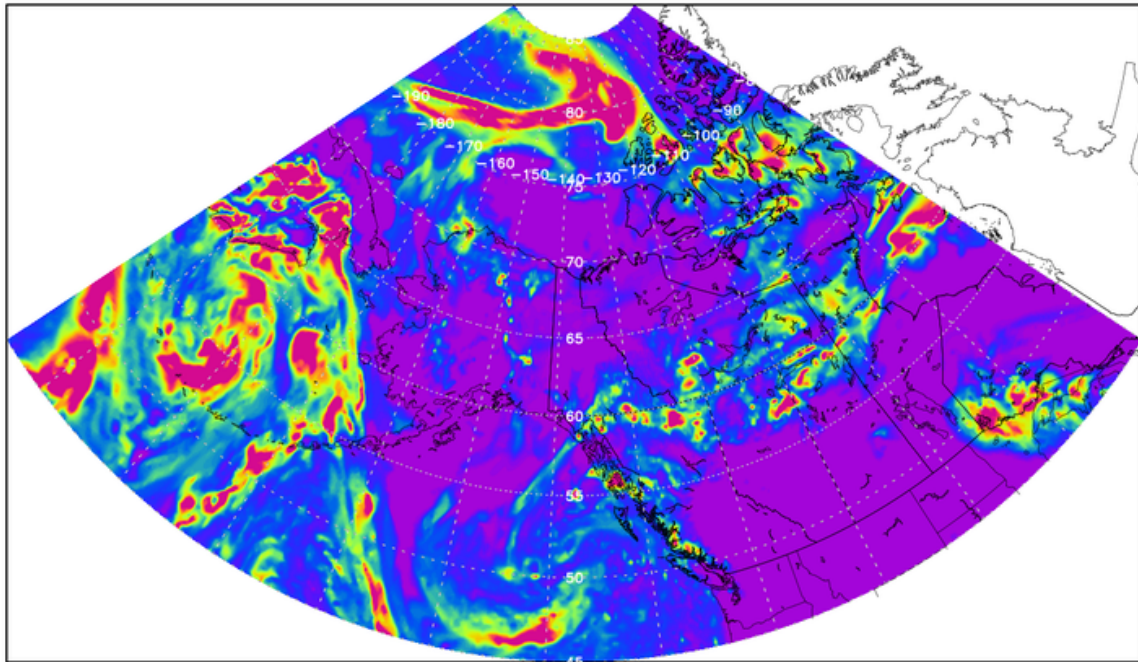
ABOVE_High_Cloud_Optical_Depth_IT_00z11JUL_VT_18z14JUL.png

GEOS High Cloud Optical Depth
Initial time 11 JUL. 00z
Valid time 14 JUL. 18z



ABOVE_Total_Cloud_IT_00z11JUL_VT_18z13JUL.png

GEOS Total Cloud Optical Depth
Initial time 11 JUL. 00z
Valid time 13 JUL. 18z



ABOVE_Total_Cloud_IT_00z11JUL_VT_18z14JUL.png

GEOS Total Cloud Optical Depth
Initial time 11 JUL. 00z
Valid time 14 JUL. 18z

