ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 11 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 12 July through 2359z 12 July
The number of fires in YKT and Alaska remains high with newer fires now seen in the southwest region of Alaska. The highest values of aerosol optical thickness are seen in the northern two thirds of the state with very high values along the north shore early in the period and then high values in the northeast corner late in the period. A trough of low pressure and associated clouds and rain approach the PABR region moving southward over the Brooks Range by end of period. Light rain and low clouds in the PAFA region early move to the south. PABR, PASC, and PAFA all start out cloudy and rainy, but all experience clearing that may allow for nearby flights.

Day-2 Forecast
Valid 1500z 13 July through 2359z 13 July
Aerosol optical thickness values are increasing in the southwest section of Alaska and remain high especially in the eastern half of the state with highest values in the northeast quadrant of the state. A trough of low pressure is extending from southeast Alaska through the Anchorage region. This brings cloud and rain just south of PAFA increasing in area and moving south through the period. Flights over the Seward Peninsula and from PASC to PABR may be possible provided the low clouds are not too widespread or too nearby.

Day-3 Outlook
Valid 1500z 14 July through 2359z 14 July
The area with largest aerosol optical thickness stretches from southwest AK near Bethel up to the northeast corner of the state and across the Canadian border near Inuvik. A weak low pressure system over the Anchorage area brings clouds and rain to the southwest portion of the state. Early flights over western Seward Peninsula look possible with conditions becoming cloudy late in the period. PABR is cloudy early. PASC looks cloudy through the period. Flights in and around PAFA may be possible.
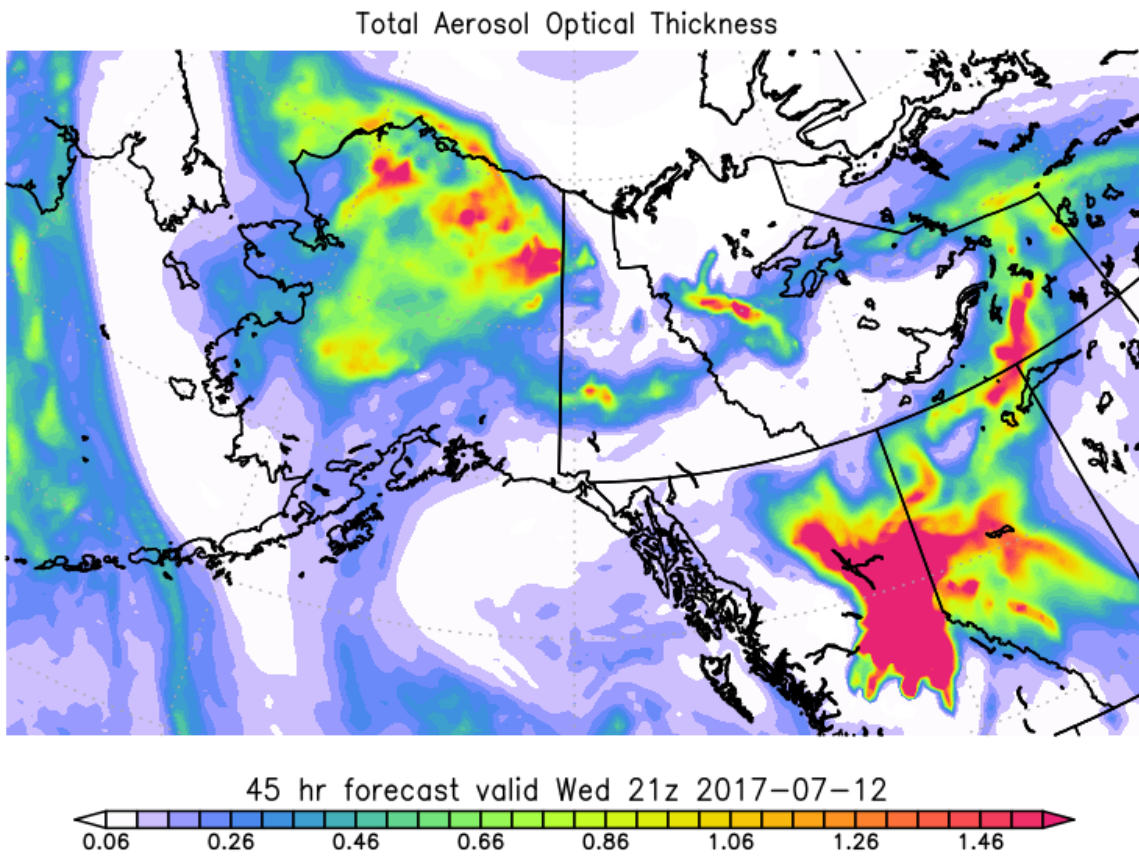
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Austin Conaty, SSAI   Global Modeling and Assimilation Office
301-614-6149 (ph)   NASA Goddard Space Flight Center
301-614-6297 (fax)   Code 610.1 Greenbelt, MD 20771

Austin.L.Conaty@.nasa.gov

http://gmao.gsfc.nasa.gov

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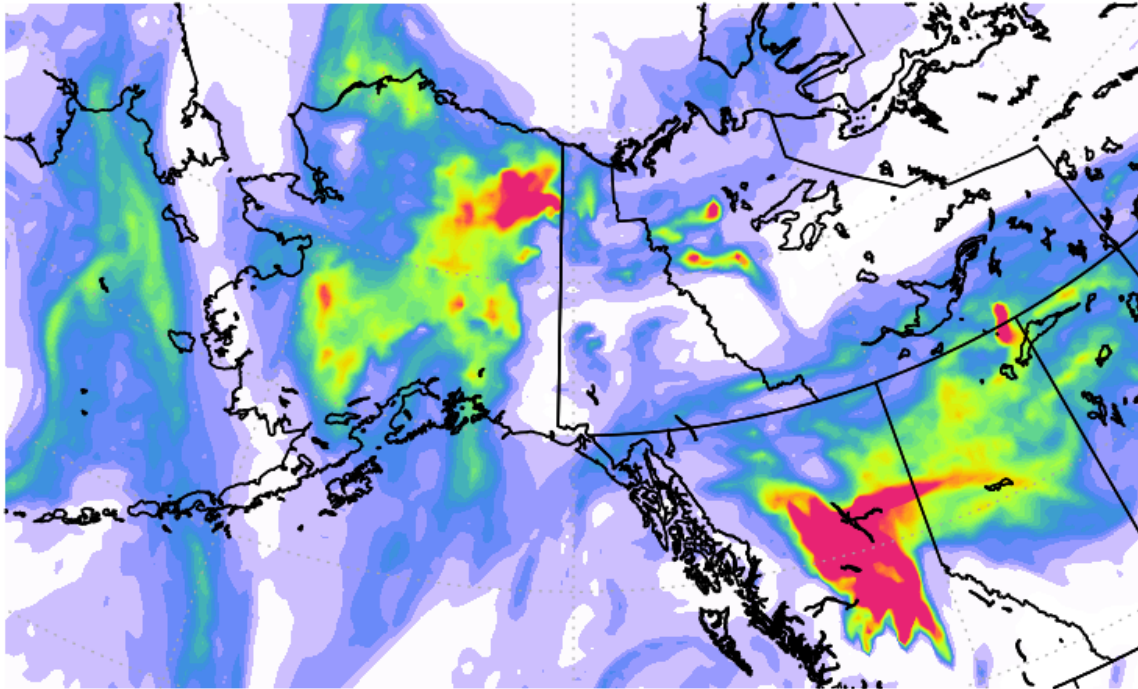
NASA/GMAO − GEOS−5 Forecast Initialized on 00z 2017−07−11

Total Aerosol Optical Thickness

45 hr forecast valid Wed 21z 2017−07−12
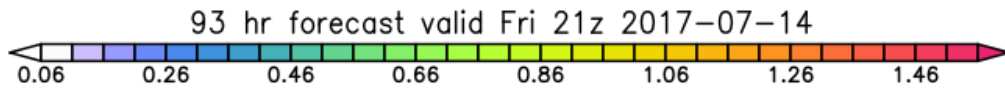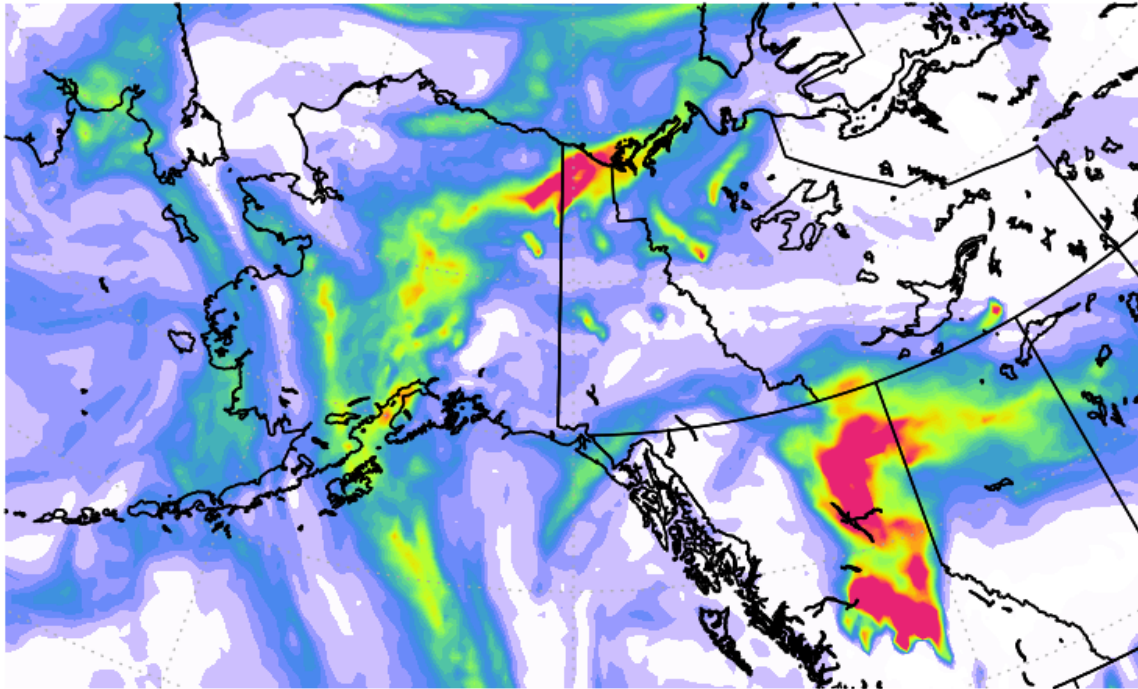
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NASA/GMAO – GEOS–5 Forecast Initialized on 00z 2017–07–11

Total Aerosol Optical Thickness

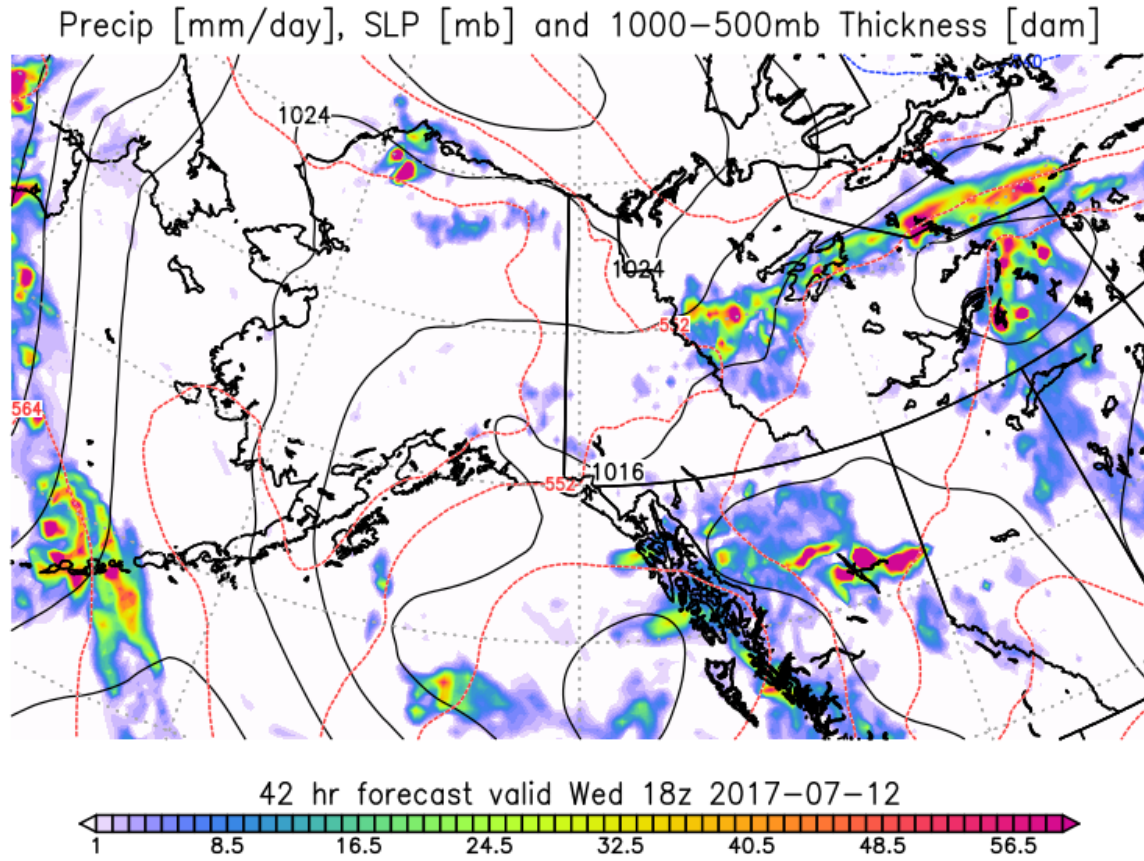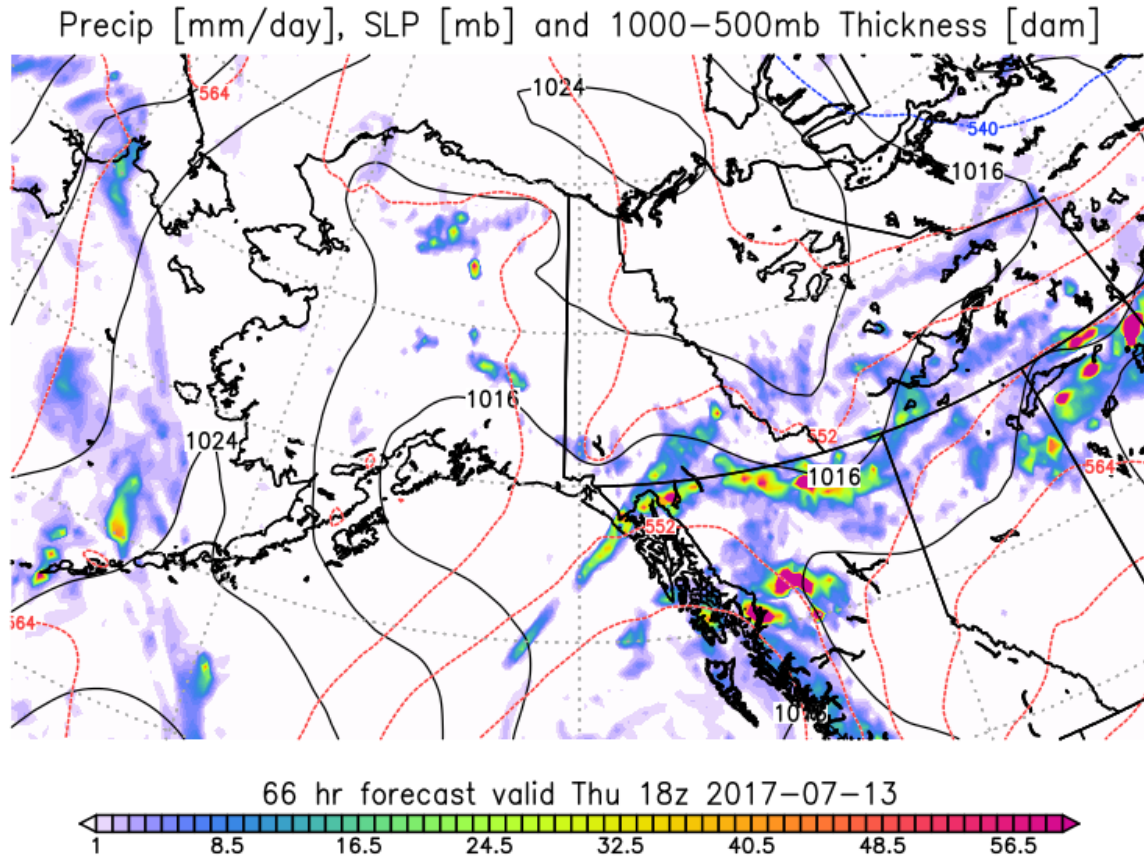69 hr forecast valid Thu 21z 2017–07–13

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

Total Aerosol Optical Thickness

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

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

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

42 hr forecast valid Wed 18z 2017-07-12

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

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

66 hr forecast valid Thu 18z 2017-07-13

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

Precip [mm/day], SLP [mb] and 1000-500mb Thickness [dam]
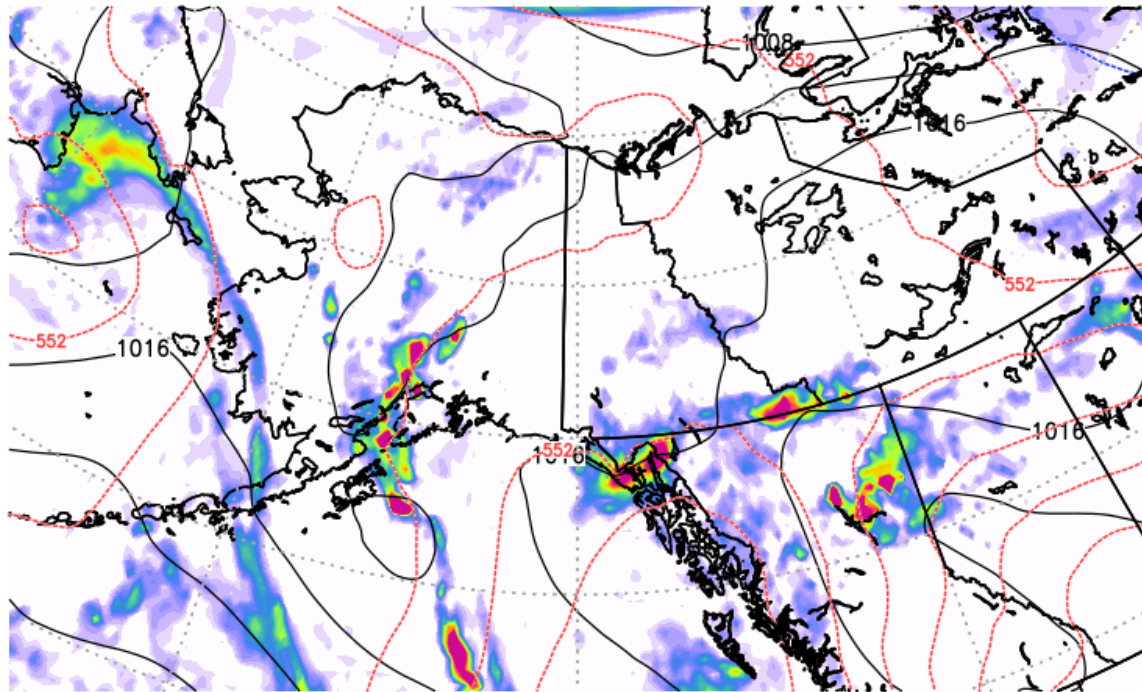
90 hr forecast valid Fri 18z 2017-07-14

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
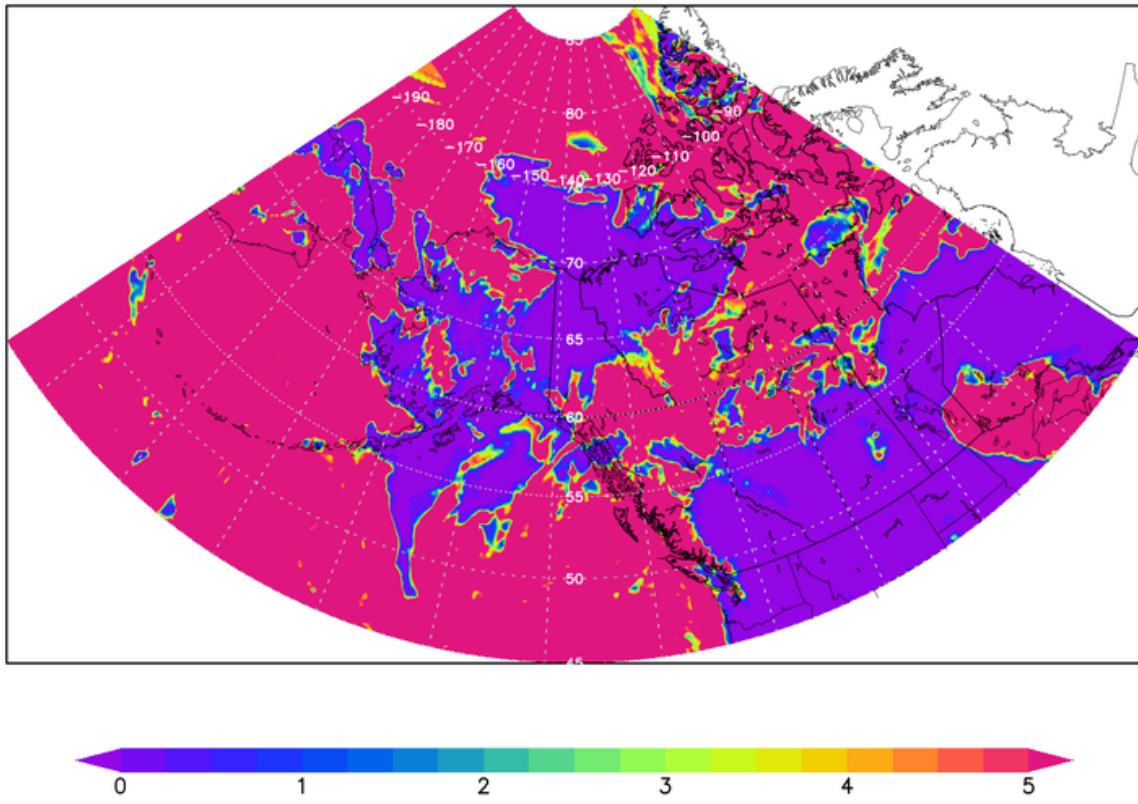
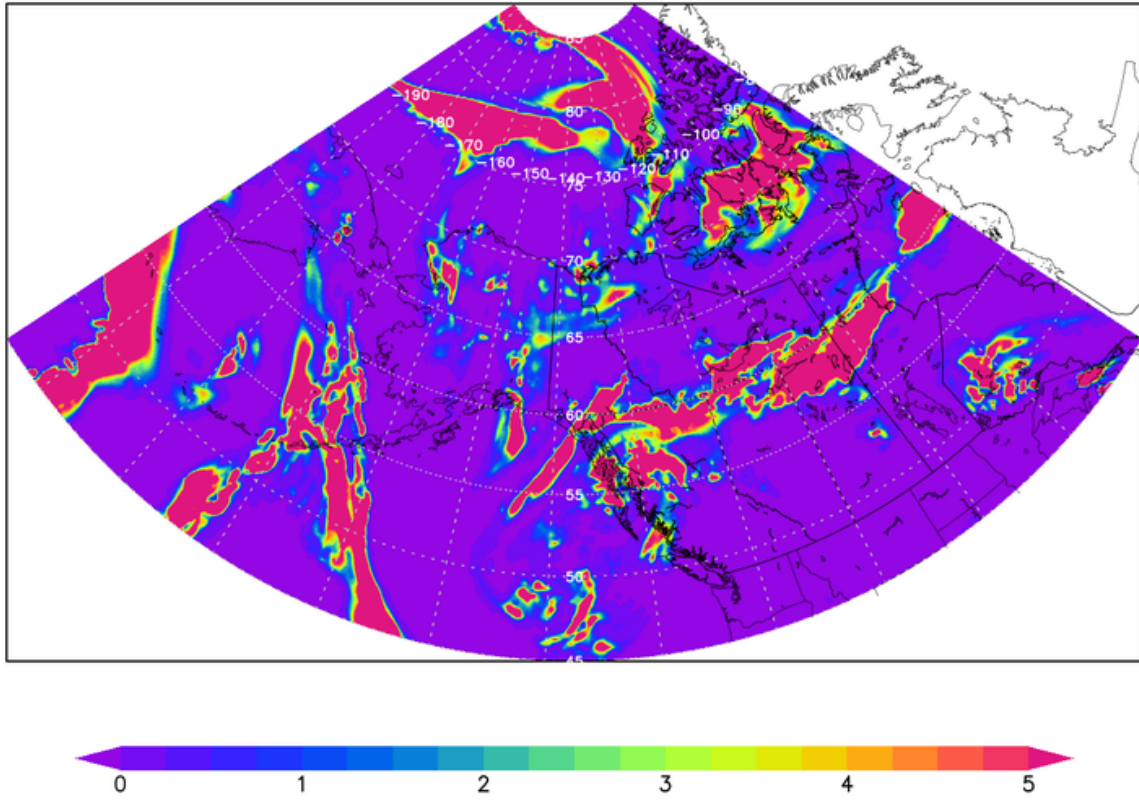ABOVE_Low_Cloud_Optical_Depth_IT_00z11JUL_VT_18z14JUL.png

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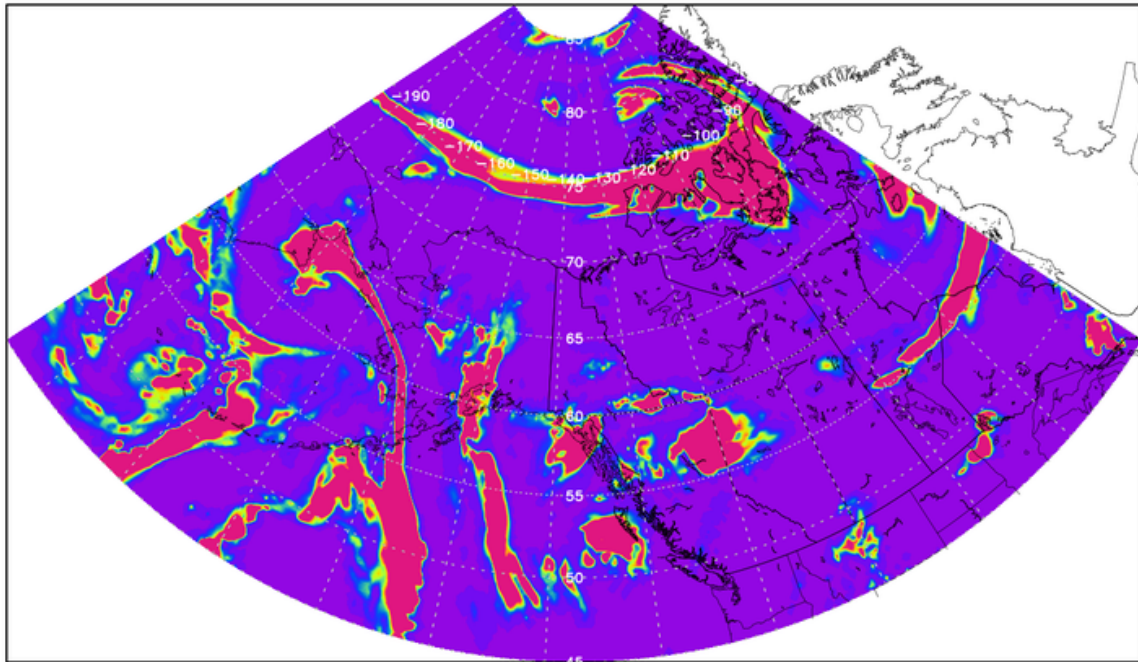Initial time 11 JUL. 00z
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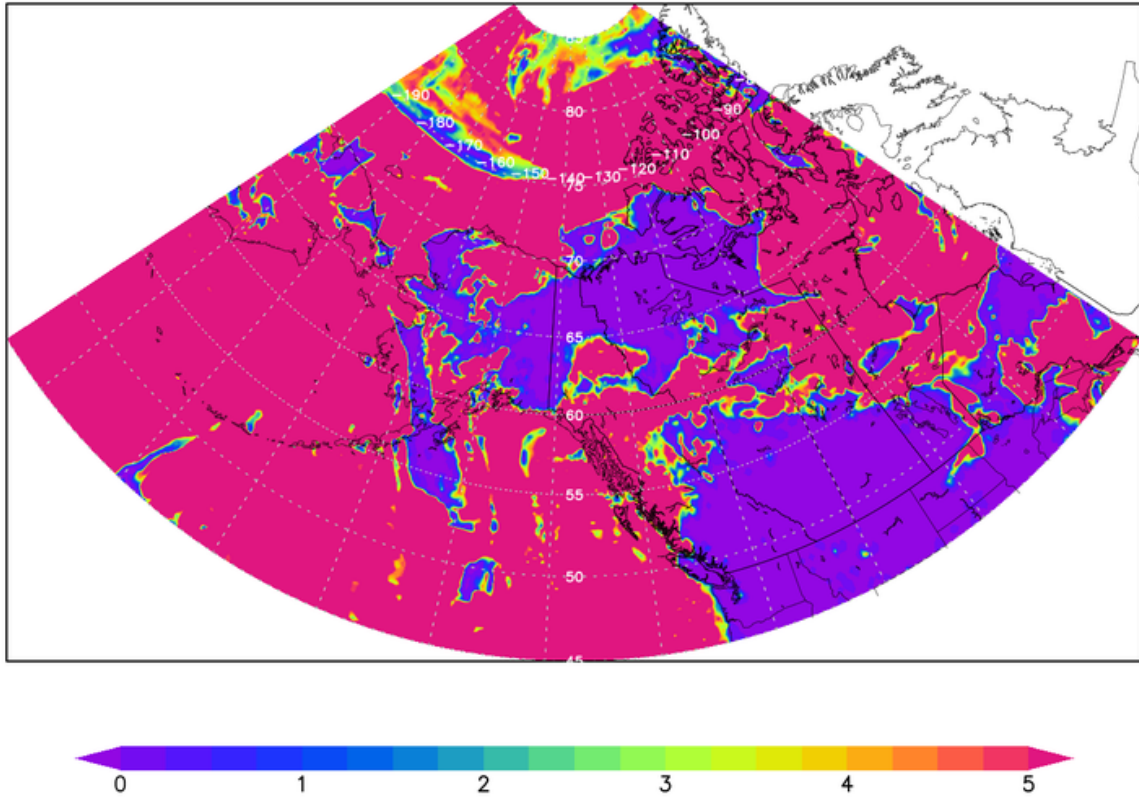
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GEOS Mid Cloud Optical Depth
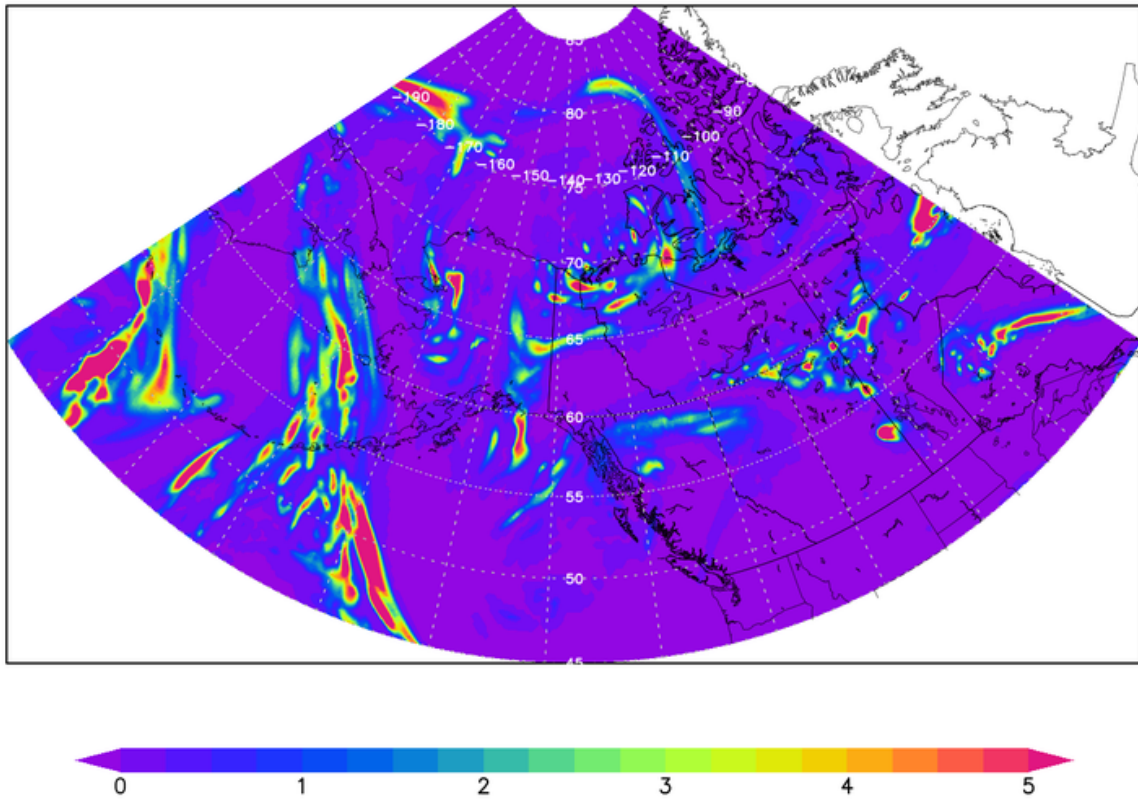Initial time 11 JUL. 00z
Valid time 13 JUL. 18z

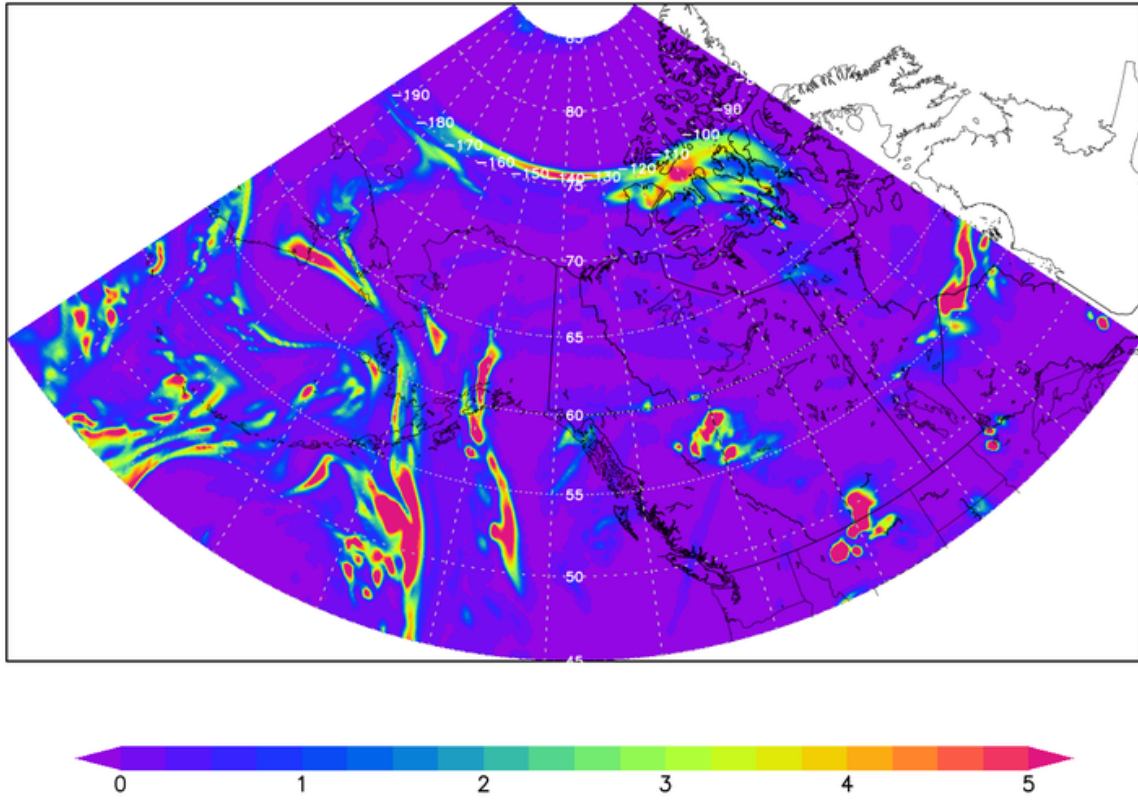ABOVE_Mid_Cloud_Optical_Depth_IT_00z11JUL_VT_18z14JUL.png
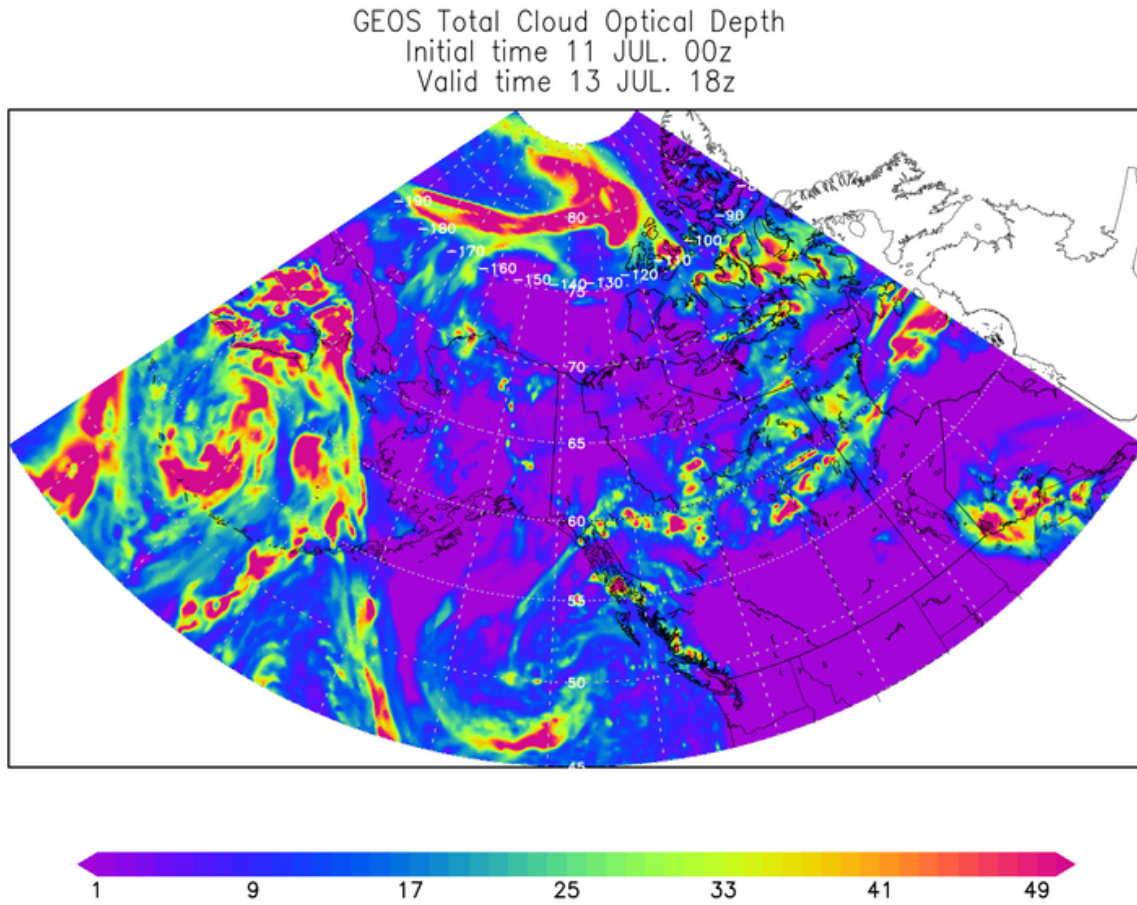
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ABOVE_High_Cloud_Optical_Depth_IT_00z11JUL_VT_18z14JUL.png

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