

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 10 August 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 Outlook**Valid 1500z 11 August through 2359z 11 August**

Large aerosol optical depth values are seen in most of BC except extreme east and west parts of the province. Smoke from fires surrounding Dawson City will produce locally large values of aerosol optical depth in west YKT. Smoke from Russian fires is concentrated in a thin band ahead of a frontal system in northwest Alaska. NWT will see locally high values of aerosol optical depth between Lake Athabasca and eastern Great Slave Lake. Heavy rains and clouds approach the northwest part of AK as a series of fronts moves through the area. PABR will be rainy and cloudy while PASC will be in and out of the clouds during the period. Heavy showers and thunderstorms will be possible near and to the east of PAFA early spreading and moving north to along the Alaska Canada border including Yukon Flats and Old Crow. Radar transit Yellowknife to PAFA is possible, however it may be necessary to dodge occasionally strong thunderstorms between Whitehorse and Delta Junction. Yellowknife looks good early with clouds and showers present between Yellowknife and Great Bear Lake late in the period.

Day-2 Outlook**Valid 1500z 12 August through 2359z 12 August**

A small area near Dawson City will be impacted by local fires and the large aerosol optical depth produced there. A larger area west of Cambridge Bay in northwest Nunavut will see large aerosol optical depth values. Most of BC except the northwest corner will also see large values of aerosol optical depth. Heavy rains approach BC from west with clouds and rain along the entire west coast. Clouds and rain are likely in and around PAFA, most of southern AK, and through most of western AK. Most of southern NWT especially Mackenzie River Valley looks mostly clear near and south of Great Bear Lake. Old Crow and Inuvik look marginal with low clouds in and out most of period. AB and western portions of SK look cloud and rain free.

Day-3 Outlook**Valid 1500z 13 August through 2359z 13 August**

Moderate to large values of aerosol optical depth cover much of YKT including Great Bear Lake and Mackenzie River Valley, the western two thirds of AB, and near Prince George in BC.

Seward Peninsula looks clear early becoming cloudy late in the period. With few exceptions most of AK will see cloudy and rainy conditions through most of the period. Rain will be heavy

at times especially from Galena and McGrath through PAFA and through the Yukon Flats. Heavy Rain will be seen also in YKT near and south of Old Crow through just east of the Mackenzie River Valley. Grand Prairie AB starts off cloudy and rainy and is expected to see heavy rain by end of the period. The eastern two thirds of AB and most of SK look promising. If the line of clouds and rains stays to the east, Great Bear and Great Slave Lakes also look promising.

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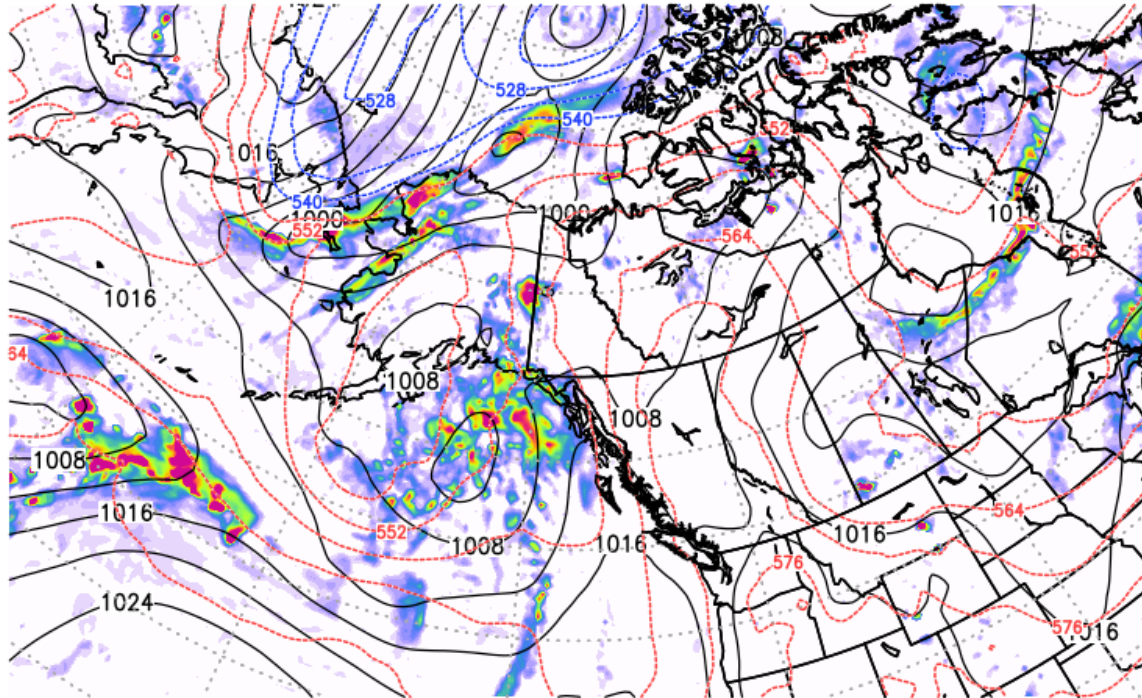
Austin.L.Conaty@nasa.gov

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

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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-10

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

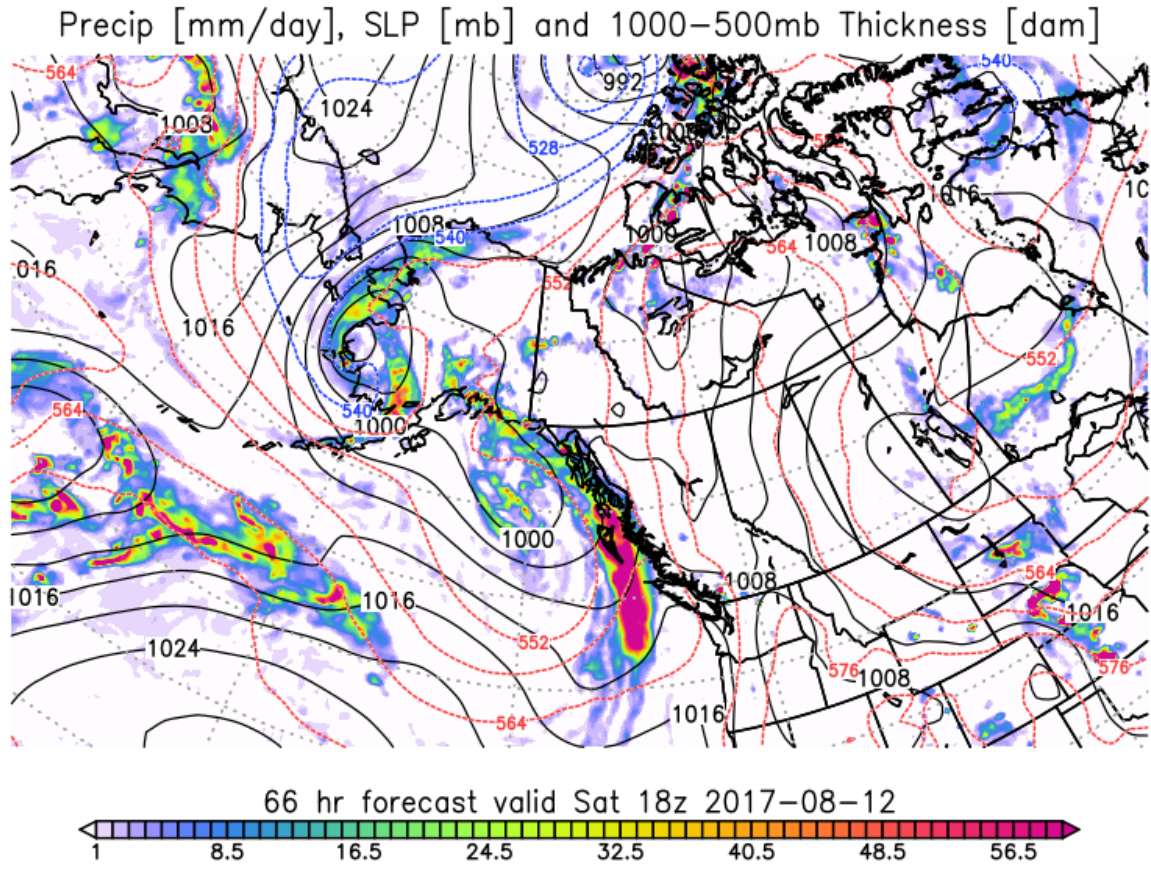


42 hr forecast valid Fri 18z 2017-08-11



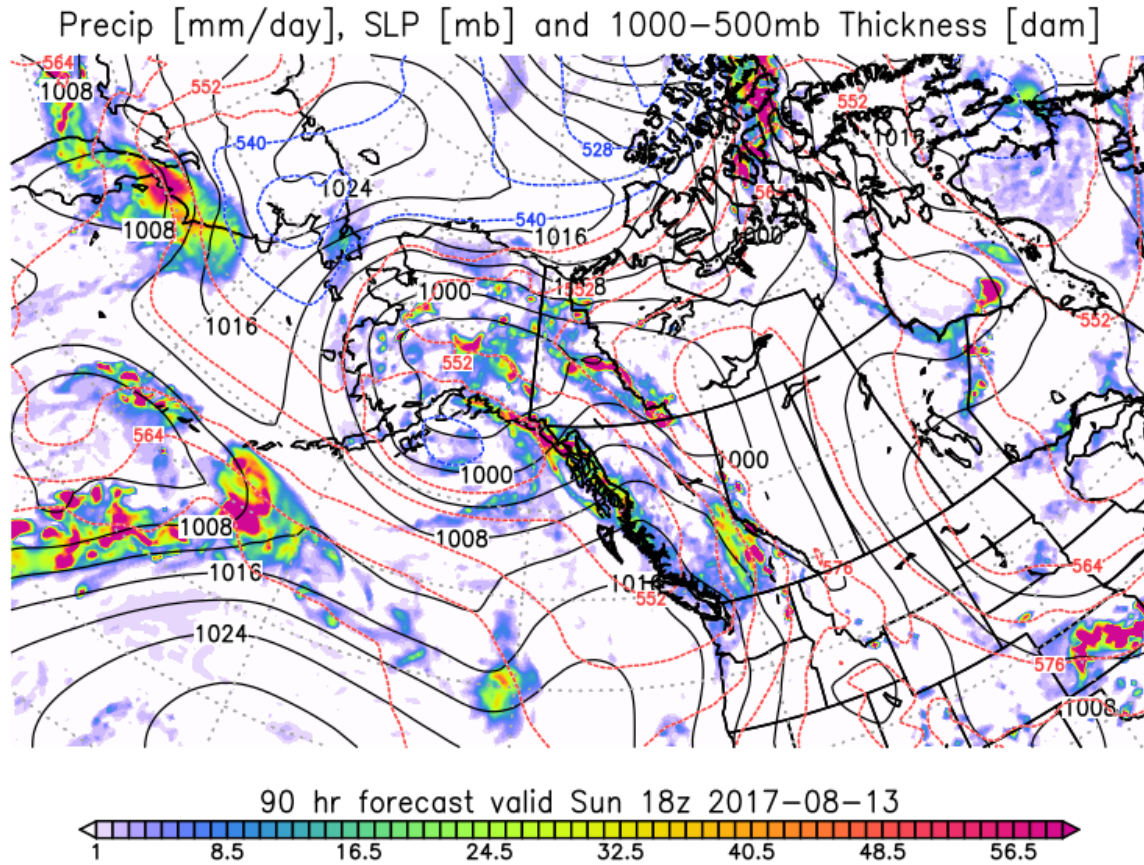
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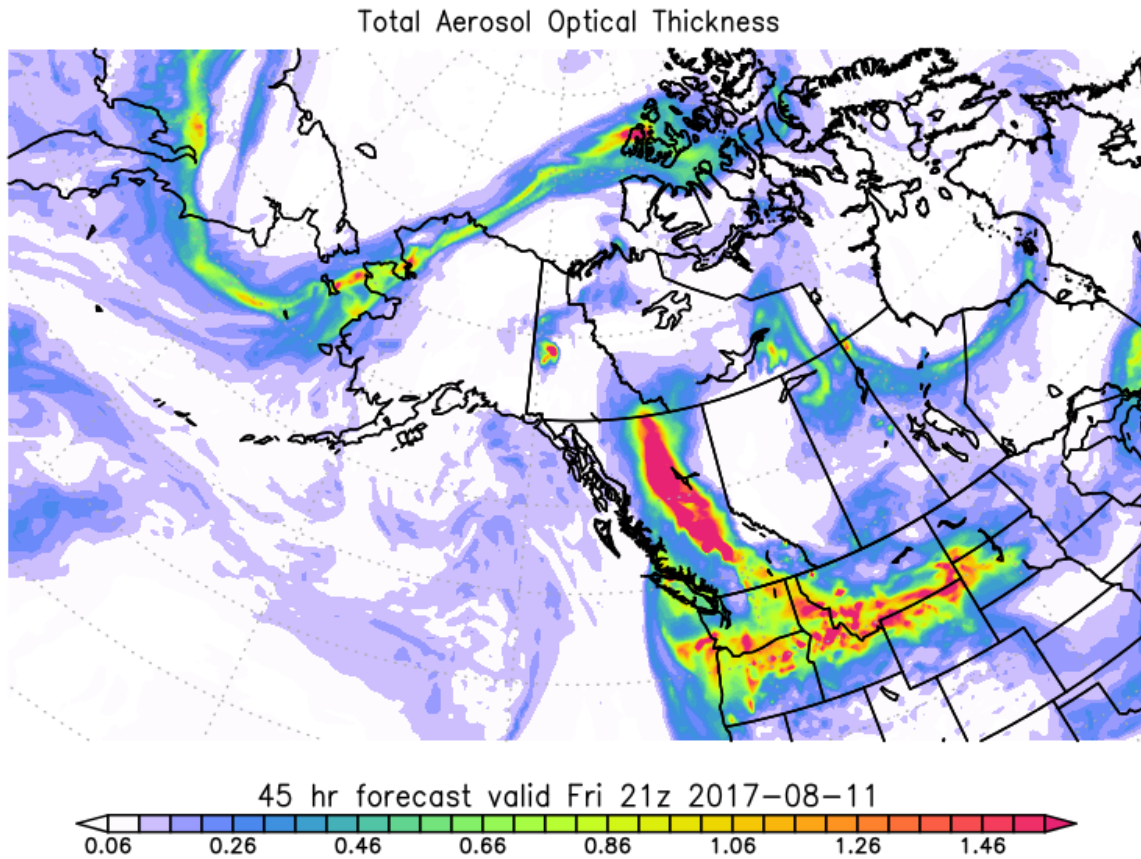
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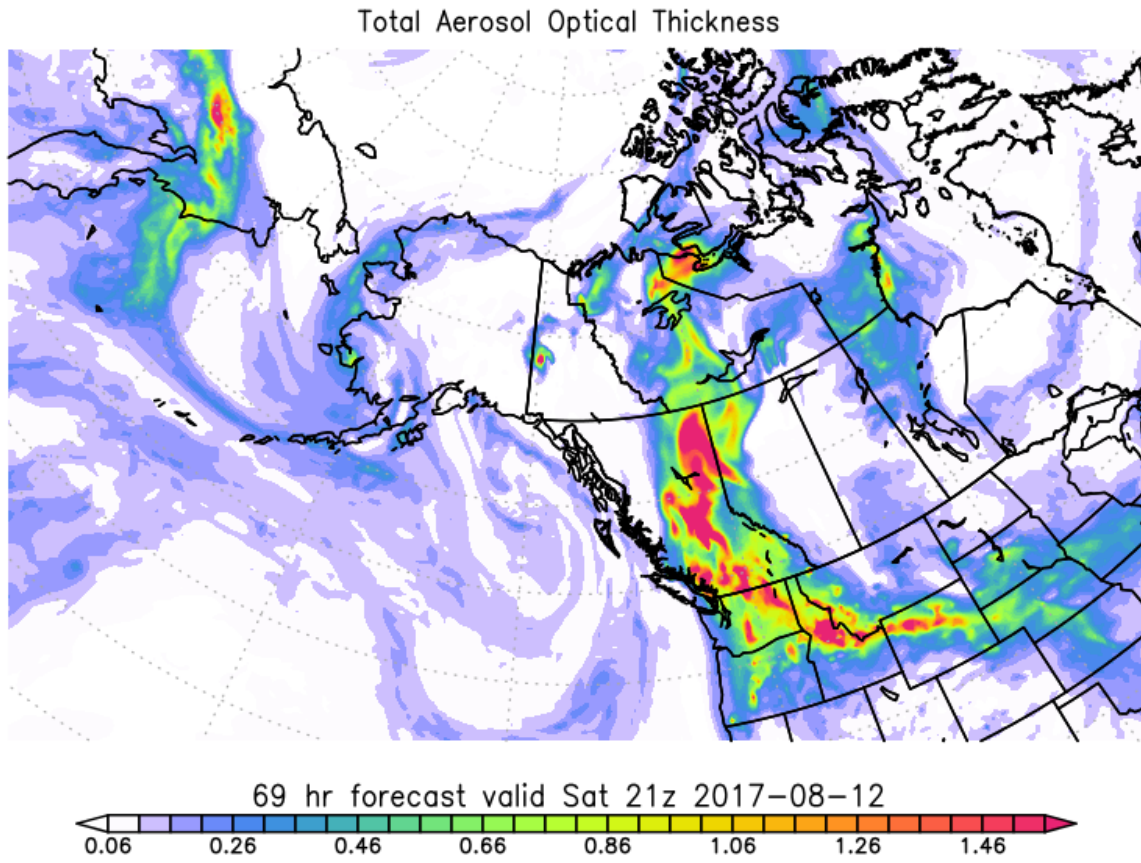
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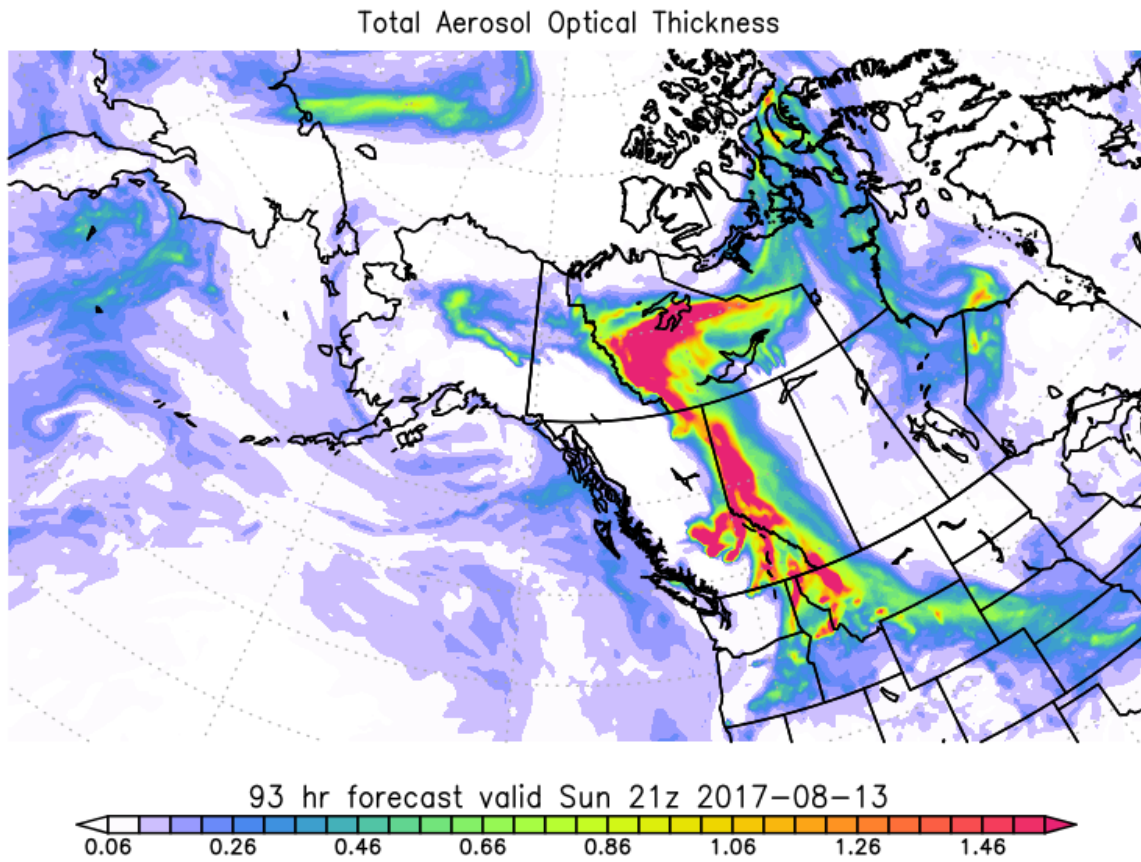
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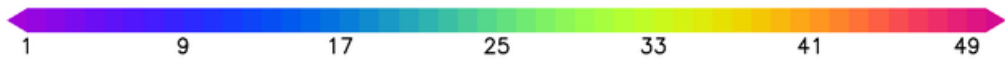
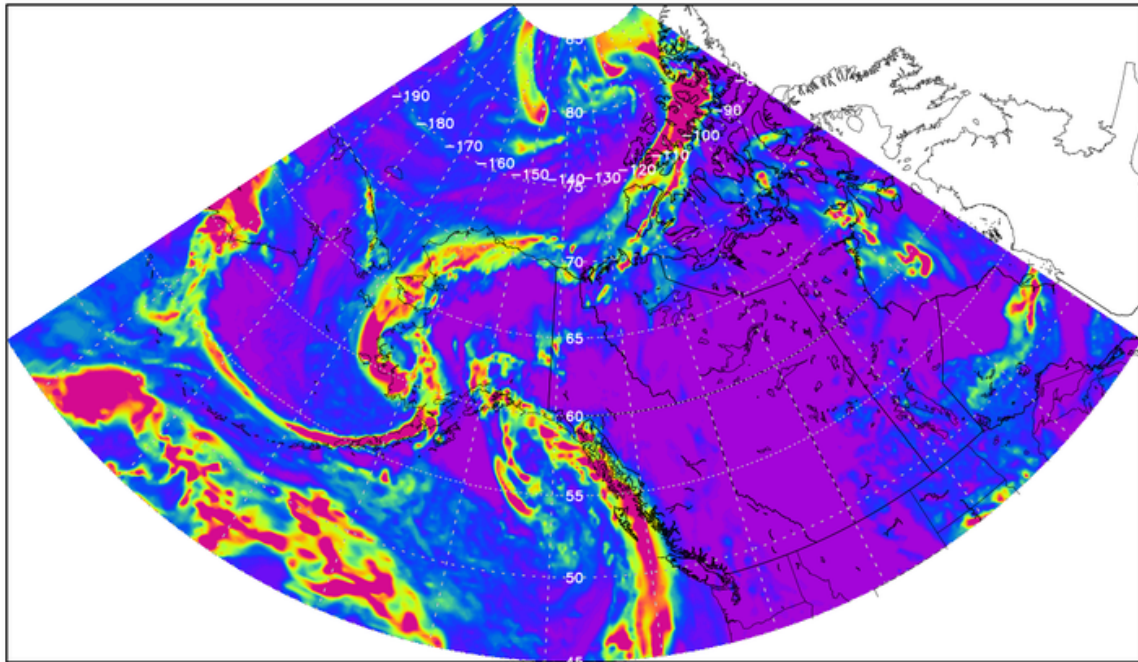
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-10



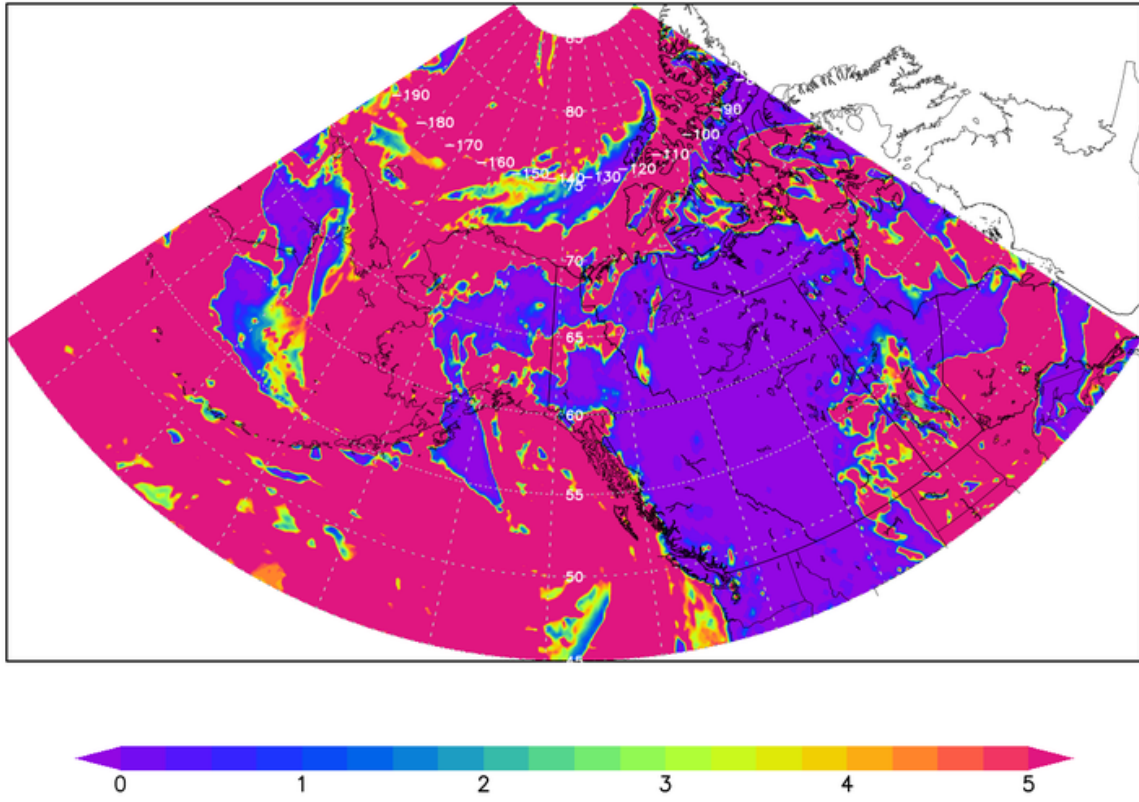
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GEOS Total Cloud Optical Depth
Initial time 10 AUG. 00z
Valid time 12 AUG. 18z



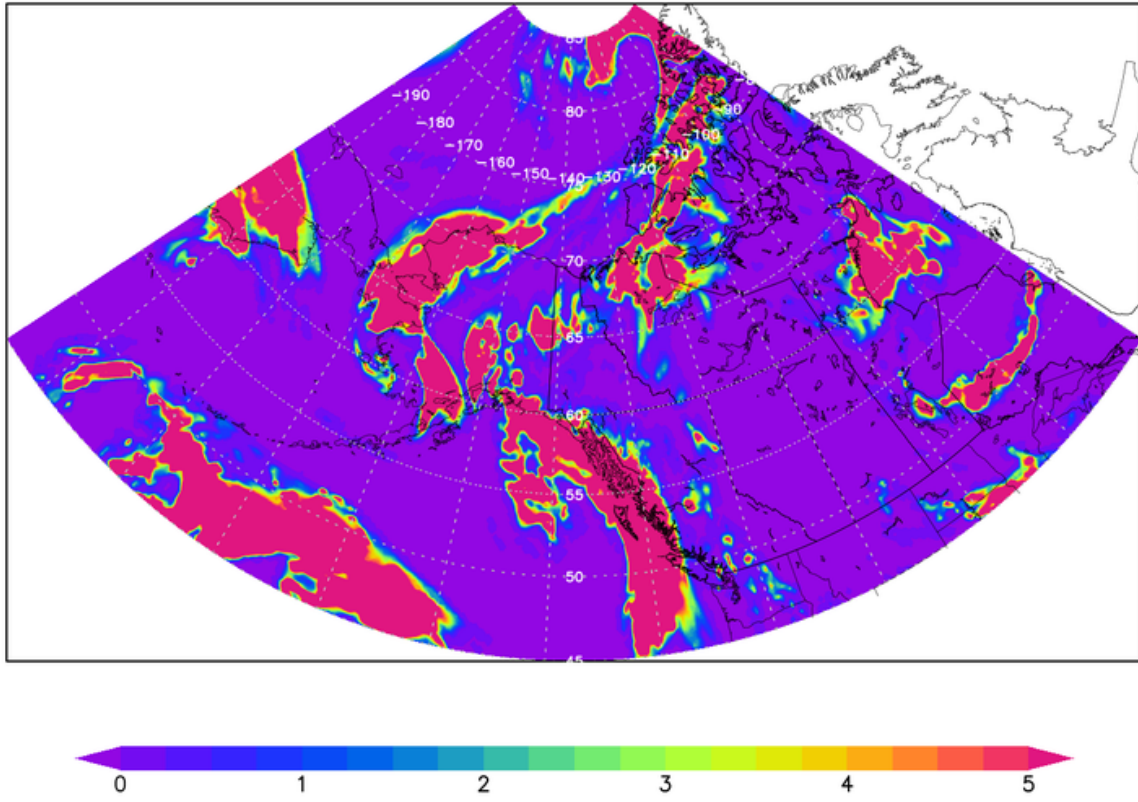
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GEOS Low Cloud Optical Depth
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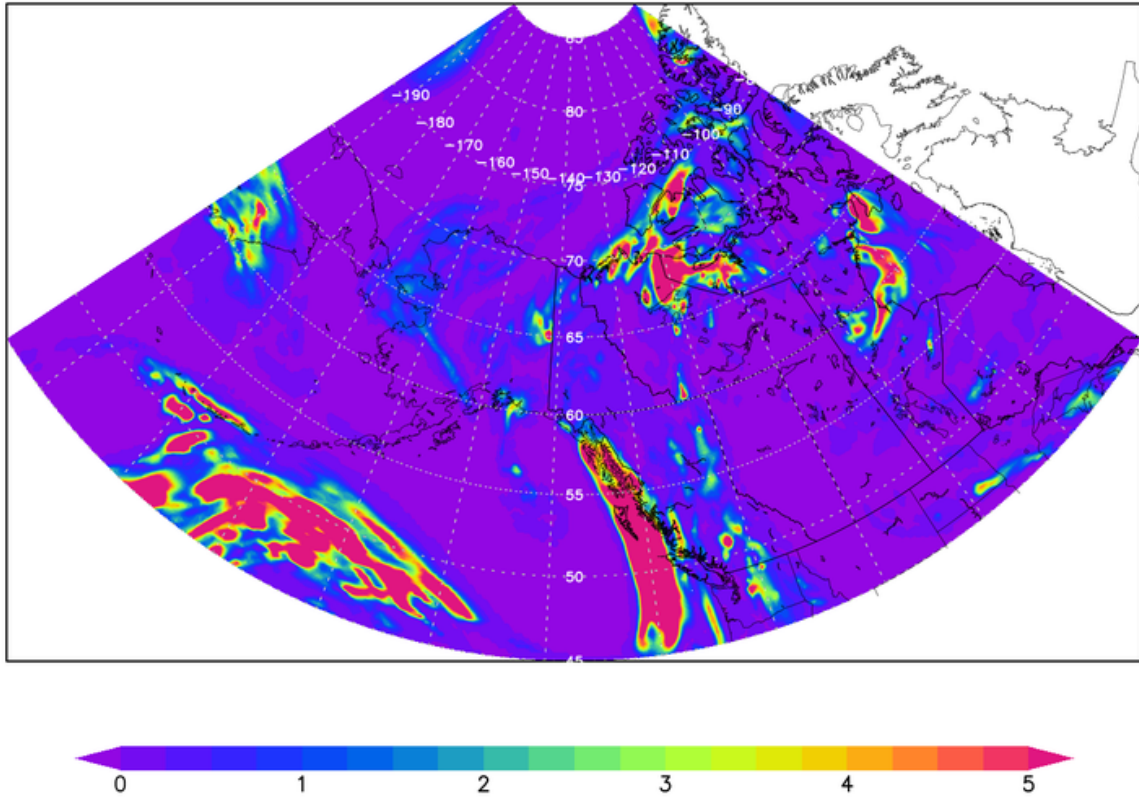
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GEOS Mid Cloud Optical Depth
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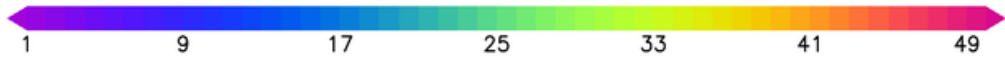
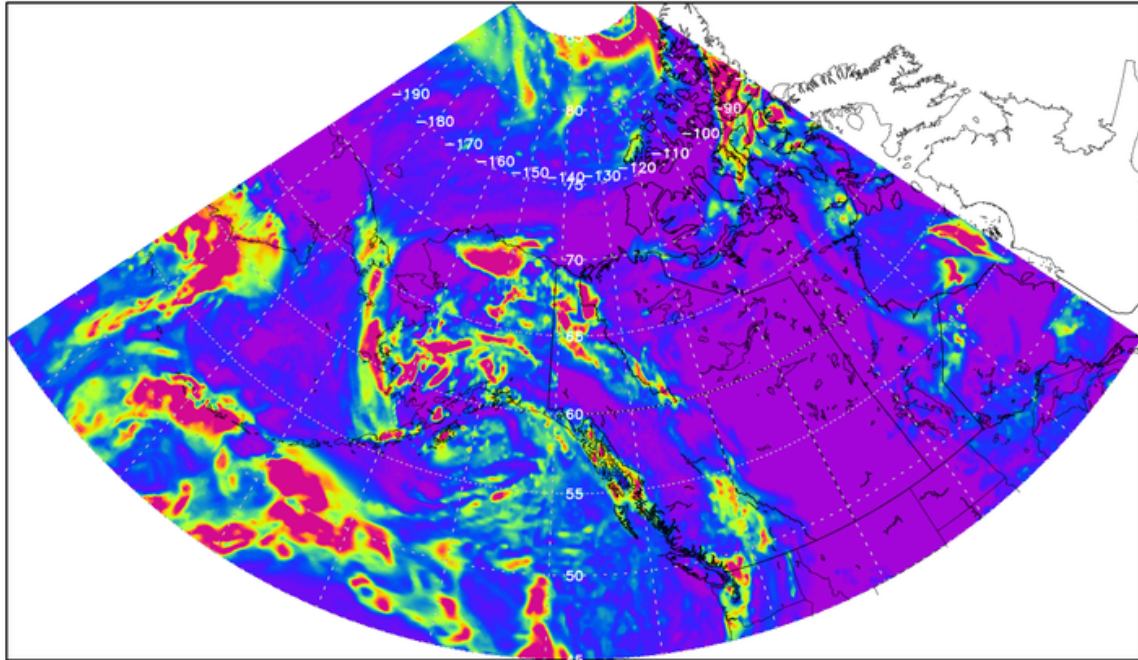
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GEOS High Cloud Optical Depth
Initial time 10 AUG. 00z
Valid time 12 AUG. 18z



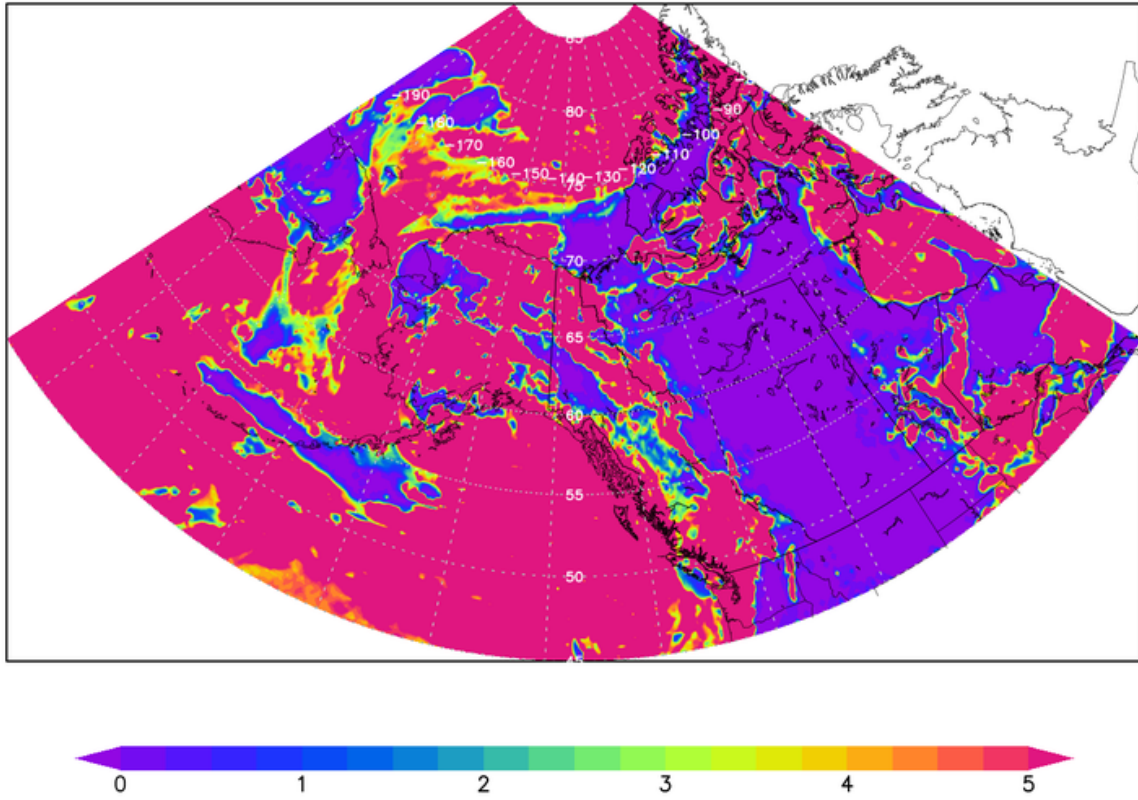
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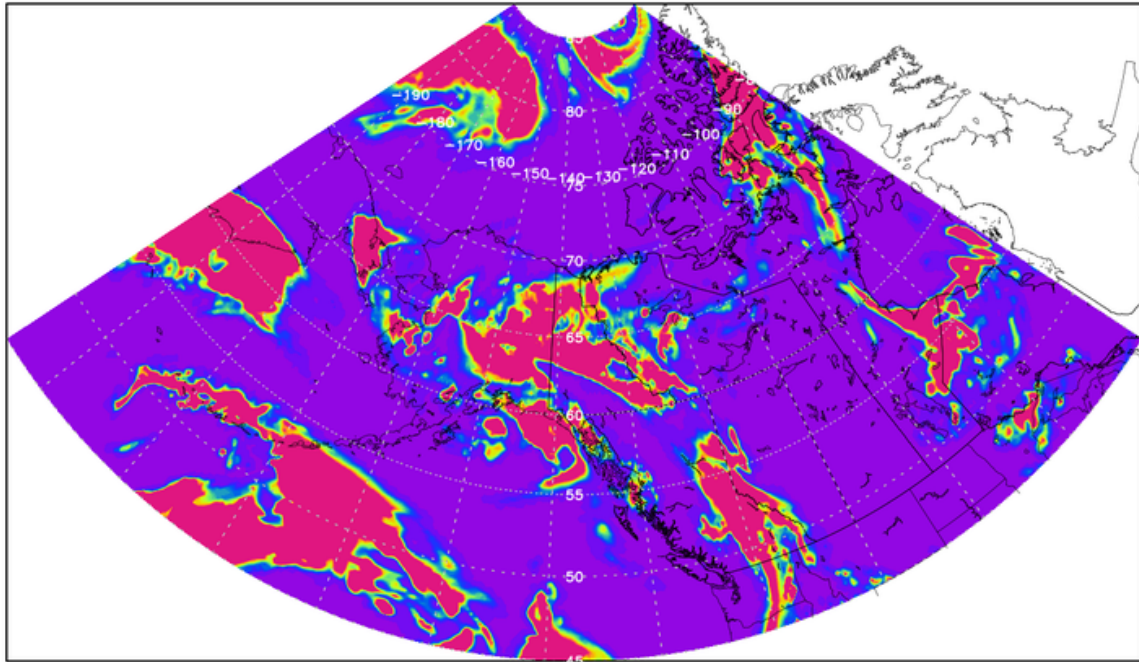
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ABOVE_Mid_Cloud_Optical_Depth_IT_00z10AUG_VT_18z13AUG.png

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Valid time 13 AUG. 18z



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