

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 02 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 03 August through 2359z 03 August

The largest values of aerosol optical thickness could be found over southern BC and AB, eastern AB, northern SK, south and west of the Great Slave Lake, and the vicinity of Fort McPherson in the NWT. A low pressure system that developed at the edge of the front deteriorates weather conditions over most of AK. Precipitation begins to develop over central YKT and NWT, and the northern half of AB by mid-morning. Weather over AK continues to be overcast. Possible targets could be found in the vicinity of Whitehorse through the day, with the low cloud boundary near by in the afternoon. The vicinity of Inuvik will be cloudy through this period. The areas between the Great Bear Lake, Forth Simpson, and Fort Liard could be possible targets in the morning. The BC area continues to be mostly cloud-free, while the SK region becomes overcast by mid-morning.

Day-2 Outlook

Valid 1500z 04 August through 2359z 04 August

Large values of aerosol optical thickness will be found over southern BC and AB, and the northern and southern most points of SK. Areas south of the Great Slave Lake will also be affected by large values of aerosol optical thickness, due to a fire near Fort Smith. Another fire in the vicinity of Fort McPherson will bring smoke/haze over the Great Bear Lake and points north through this period. Precipitation continues over western and interior AK through this day, associated with a low pressure system moving along the coast and an occluded front over Nunavut. Additional precipitation develops over most of the NWT, AB, north and central YKT, and northern SK through this forecast. Sporadic clearing might be possible over south-eastern and north-eastern AK, with the areas east of Anchorage and in the vicinity of PASC mostly cloud free. The vicinity of Whitehorse could also see clear conditions in the morning, while the northern most points of YKT up to Inuvik will become clear in the afternoon. Cloud-free conditions continue over most of the BC area, with clouds increasing over north-eastern BC by late-morning.

Day-3 Outlook**Valid 1500z 05 August through 2359z 05 August**

The mission areas over AK will continue to be mostly free of smoke/haze through this period. Large values of aerosol optical thickness are predicted to affect the vicinity of Fort McPherson and southern BC. A fire in the vicinity of Fort Smith will continue to bring smoke/haze to areas south of the Great Slave Lake and northern SK. An improvement in the weather conditions over interior and eastern AK is seen through this forecast, while heavy precipitation continues over the most western and northern points of AK. Conditions over southern YKT and most of the NWT also improve through this period. Heavy precipitation will move to northern AB, north-eastern BC, and some northern areas of SK. The mission targets over south-eastern and interior AK will be clear through this period. The PAFA vicinity and points south, and some points along the Yukon Flats could be possible areas to fly. A very small window for flying with some sporadic clouds over the Yukon Delta could be possible mid-morning, becoming cloudy in the afternoon. Conditions over YKT will be overcast through this period. Depending on the proximity of the low cloud boundary, the vicinity of Inuvik, Normal Wells, Fort Simpson, and Fort Liard could be mostly clear.

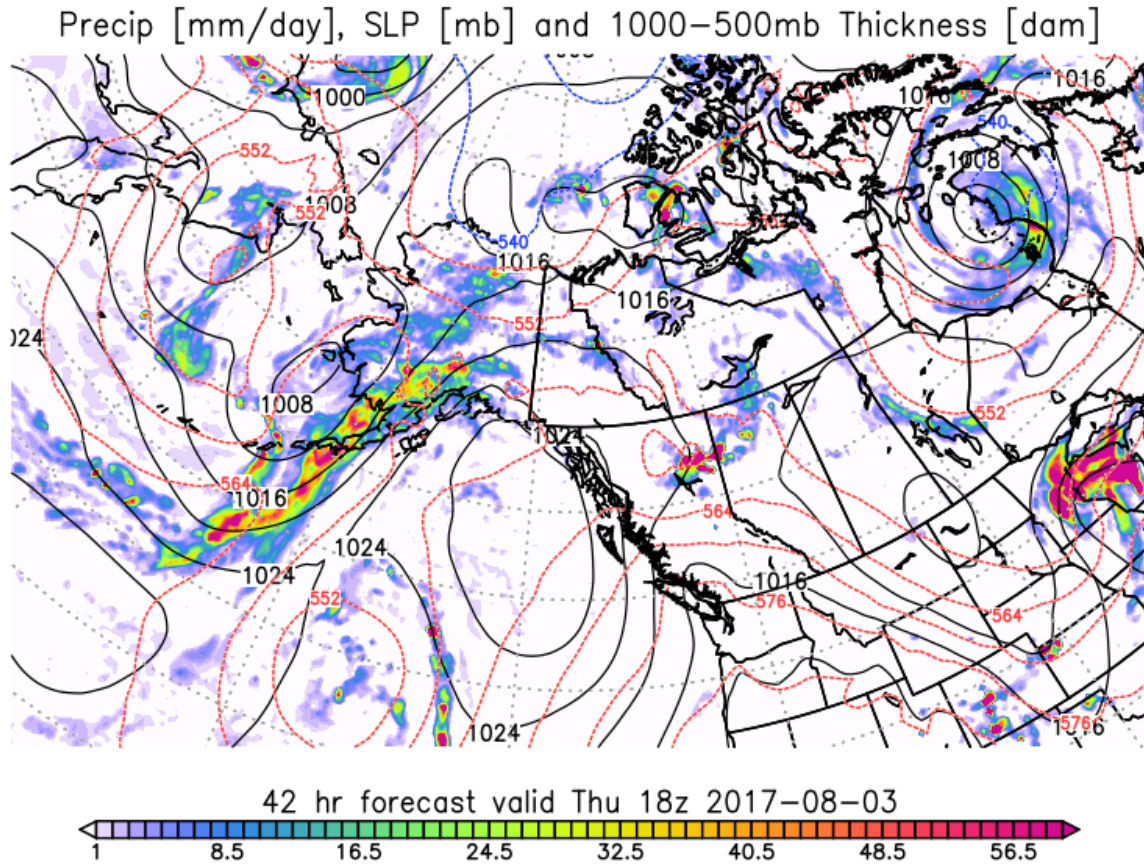
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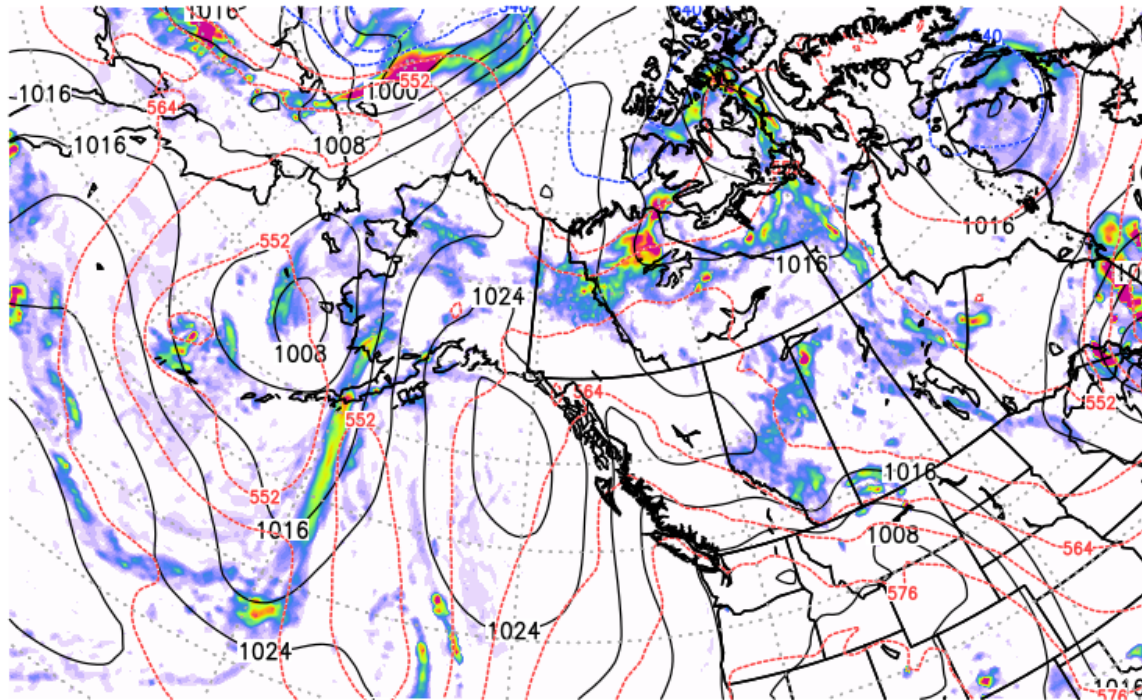
NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-02



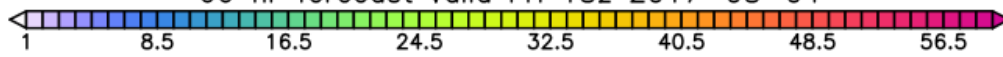
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-02

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

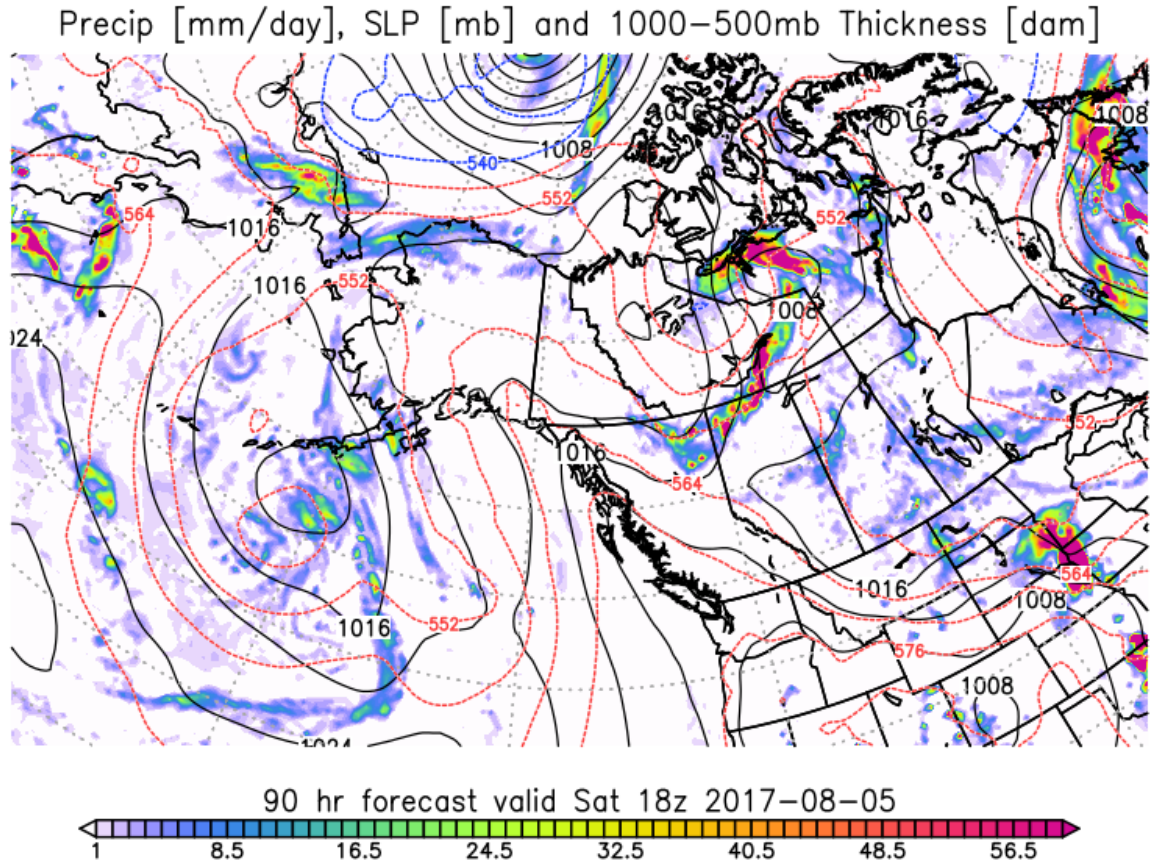


66 hr forecast valid Fri 18z 2017-08-04



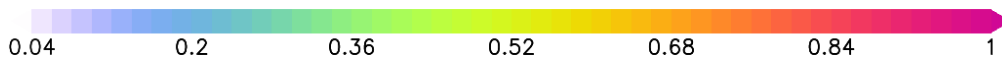
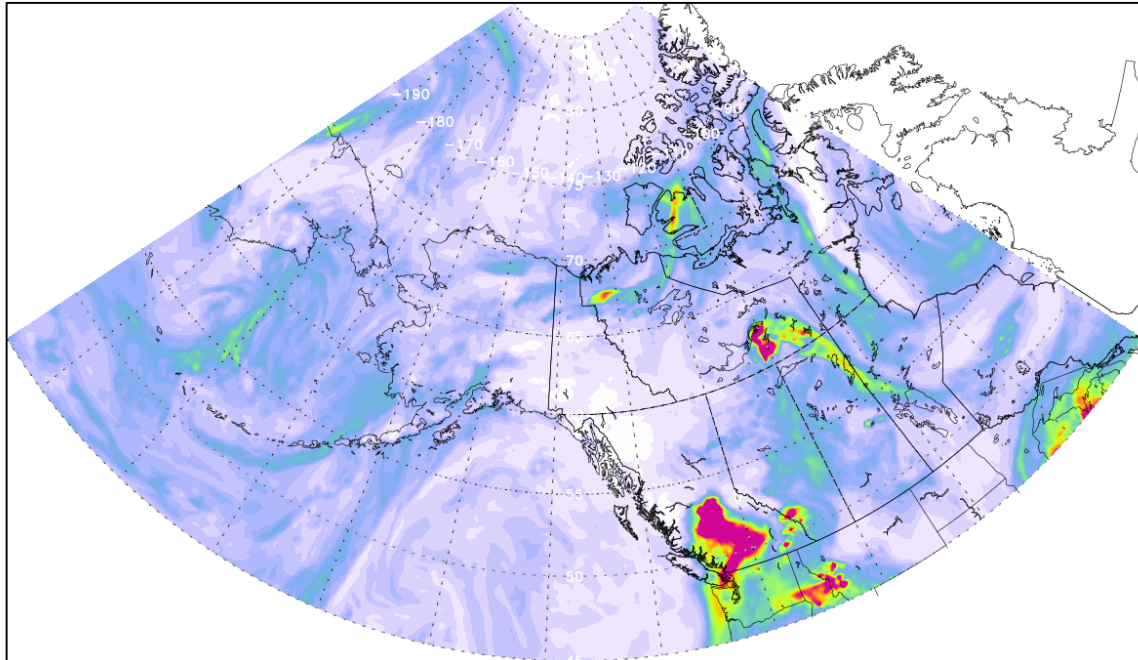
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-02



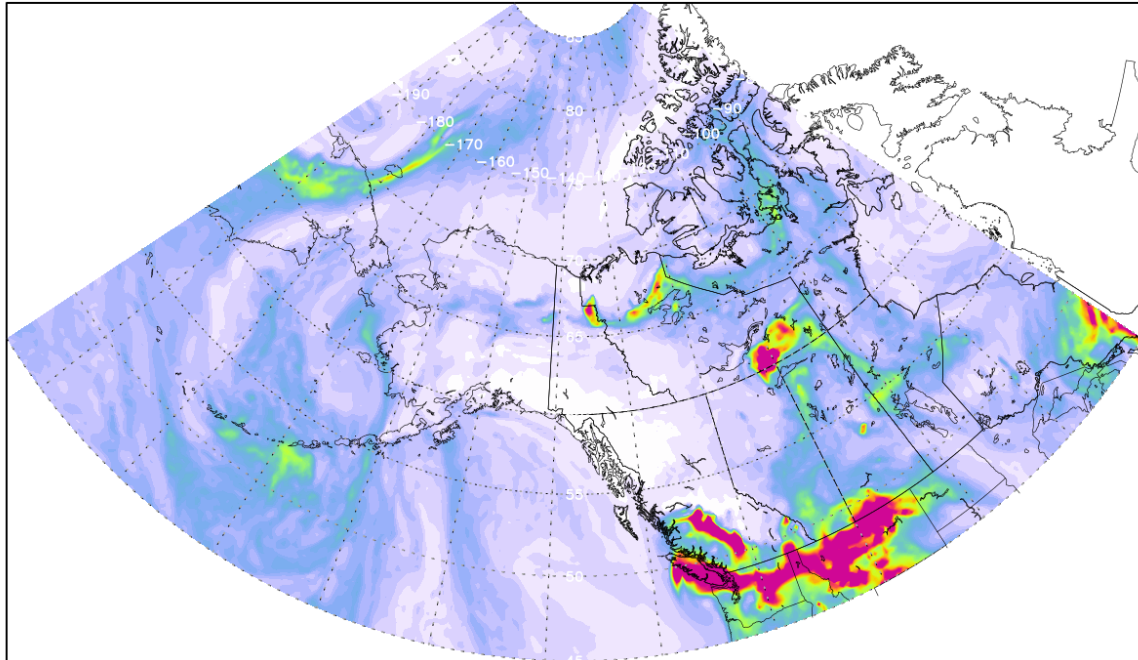
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GEOS Aerosol Optical Depth
Initial time 02 AUG. 00z
Valid time 03 AUG. 21z



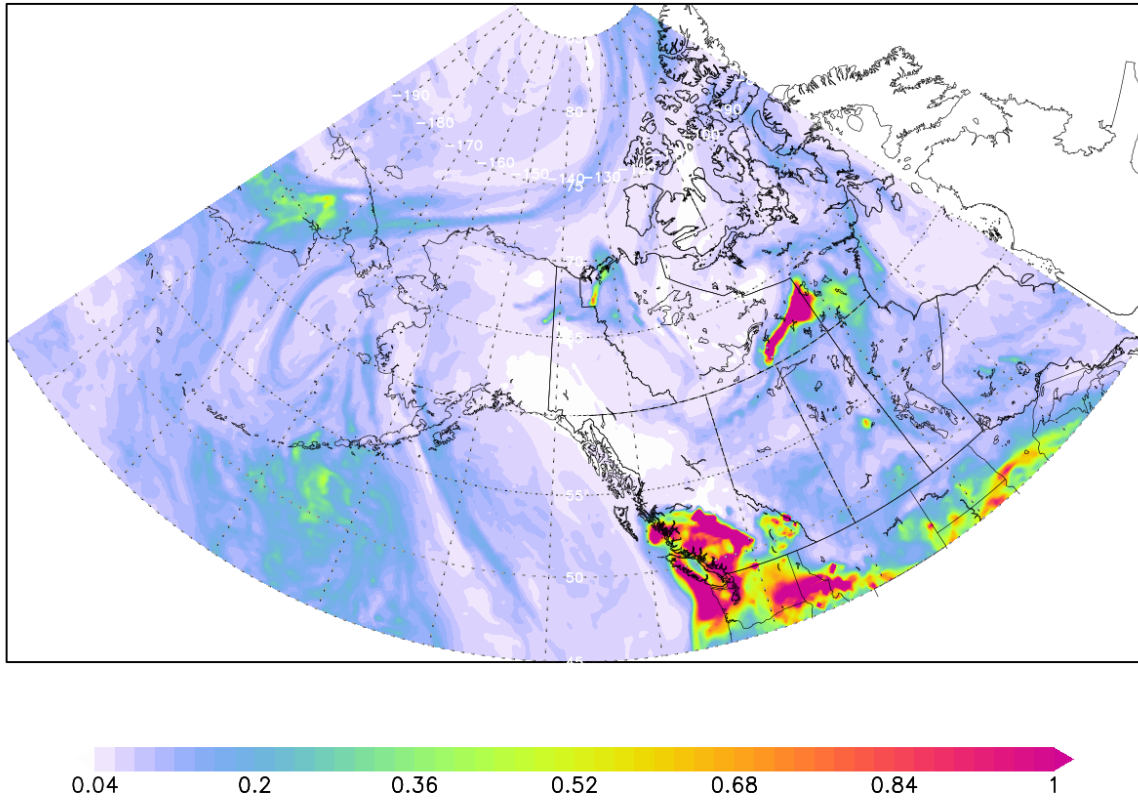
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GEOS Aerosol Optical Depth
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Valid time 04 AUG. 21z



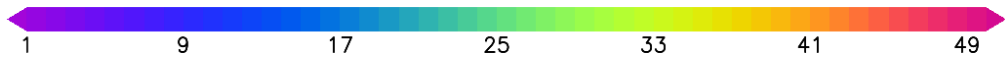
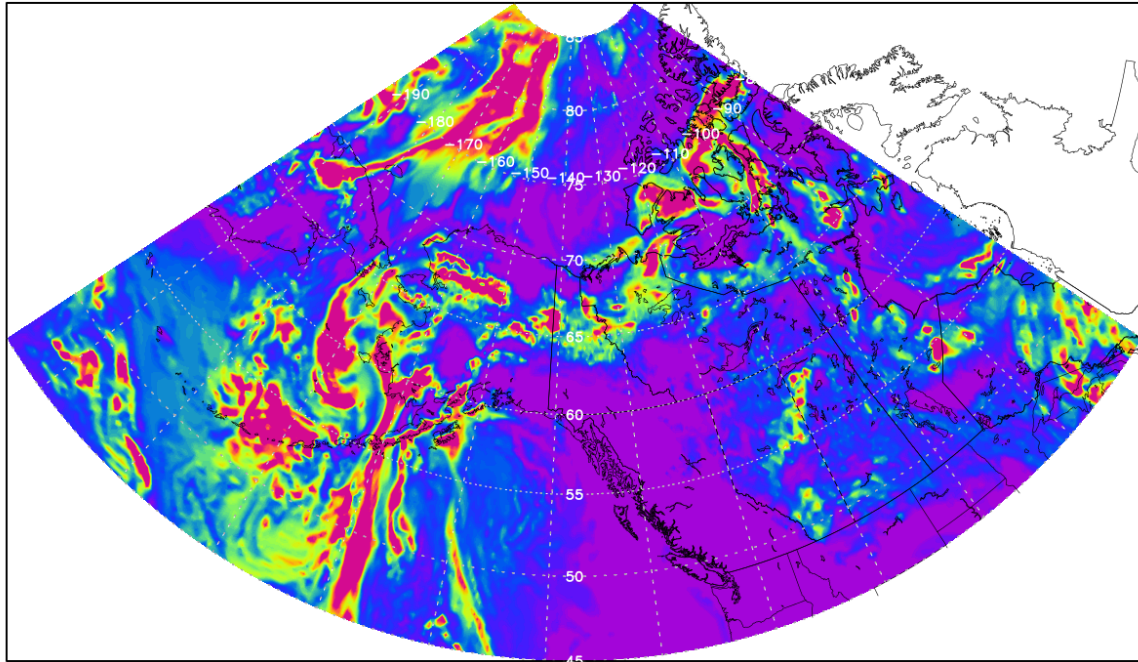
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GEOS Aerosol Optical Depth
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Valid time 05 AUG. 21z



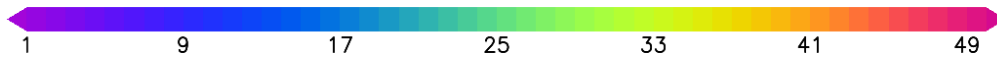
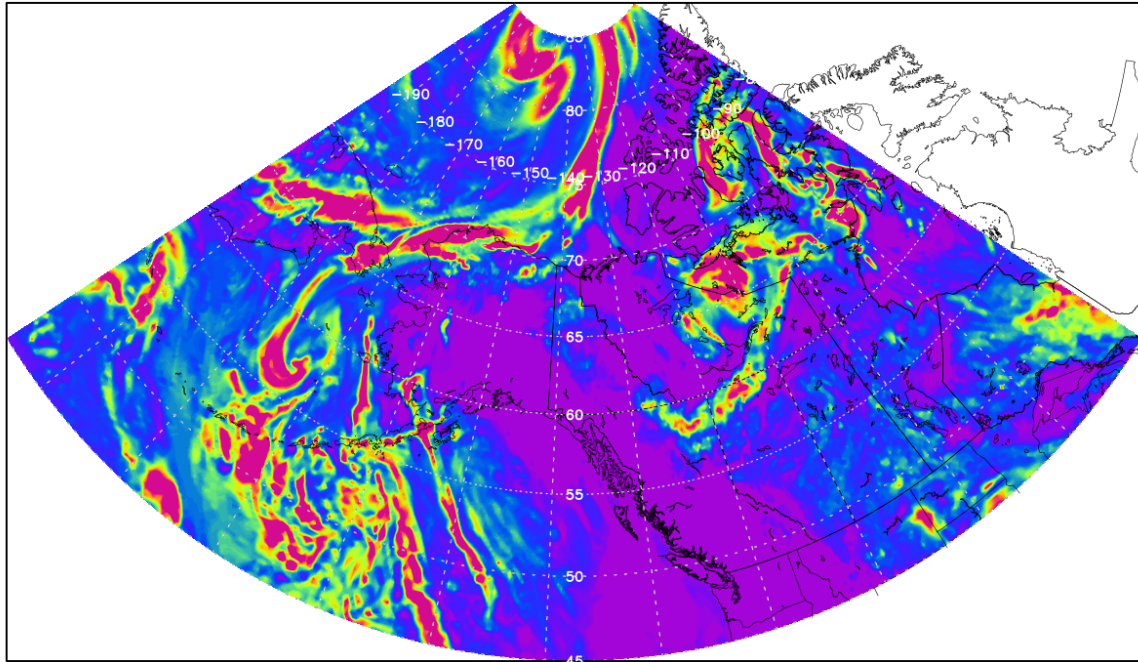
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GEOS Total Cloud Optical Depth
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Valid time 04 AUG. 18z



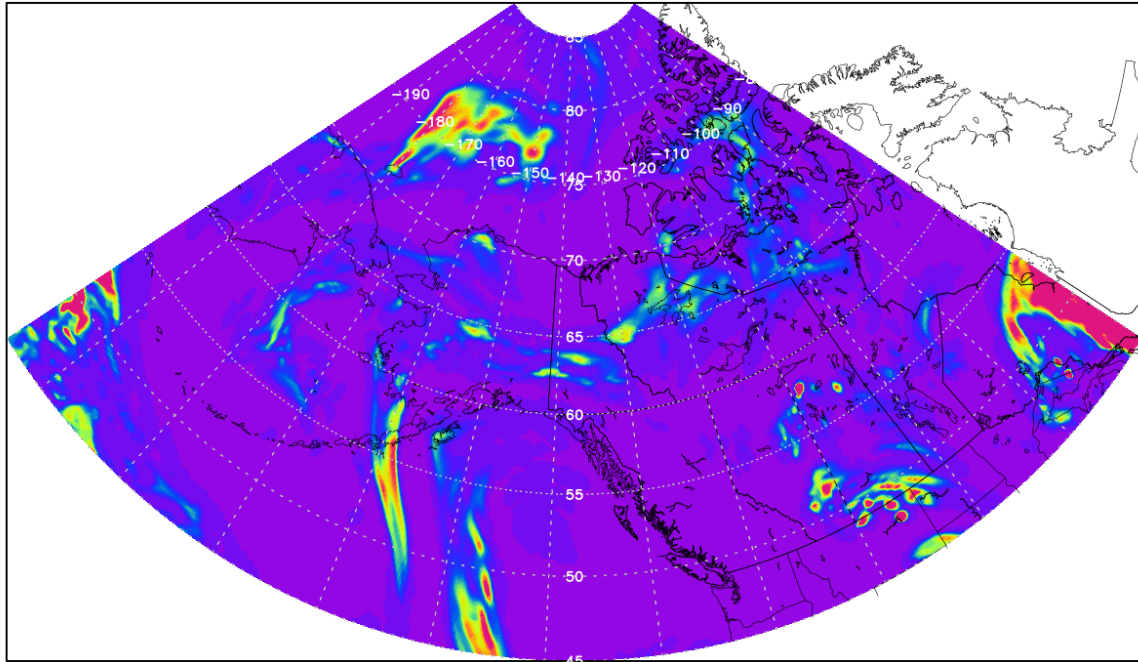
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GEOS Total Cloud Optical Depth
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Valid time 05 AUG. 18z



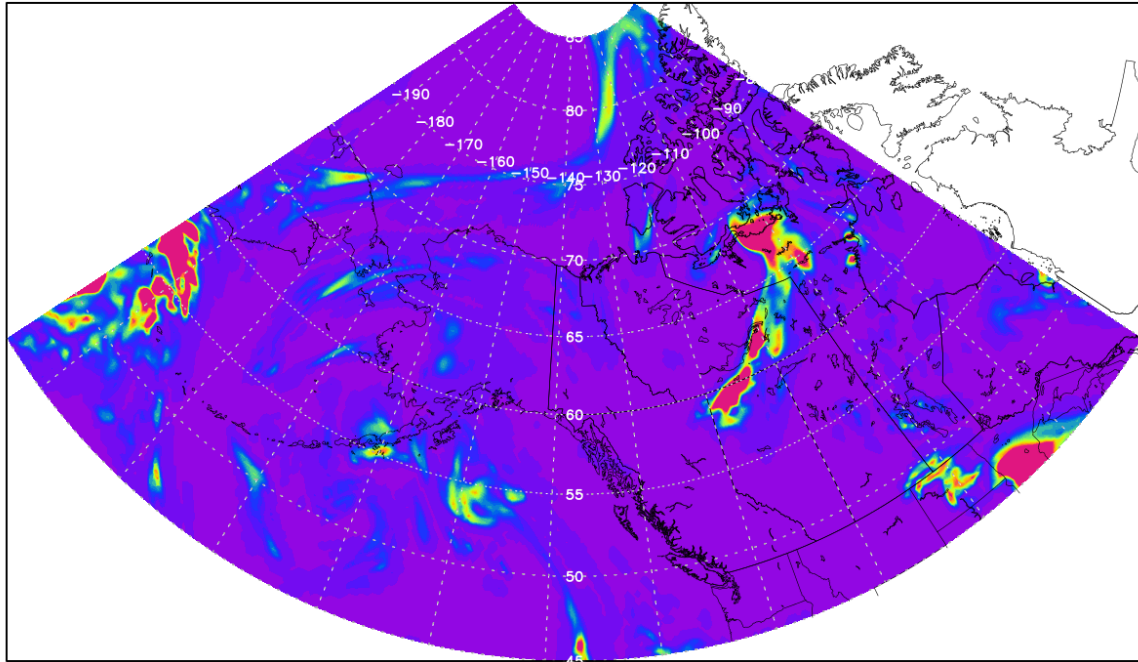
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GEOS High Cloud Optical Depth
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Valid time 04 AUG. 18z



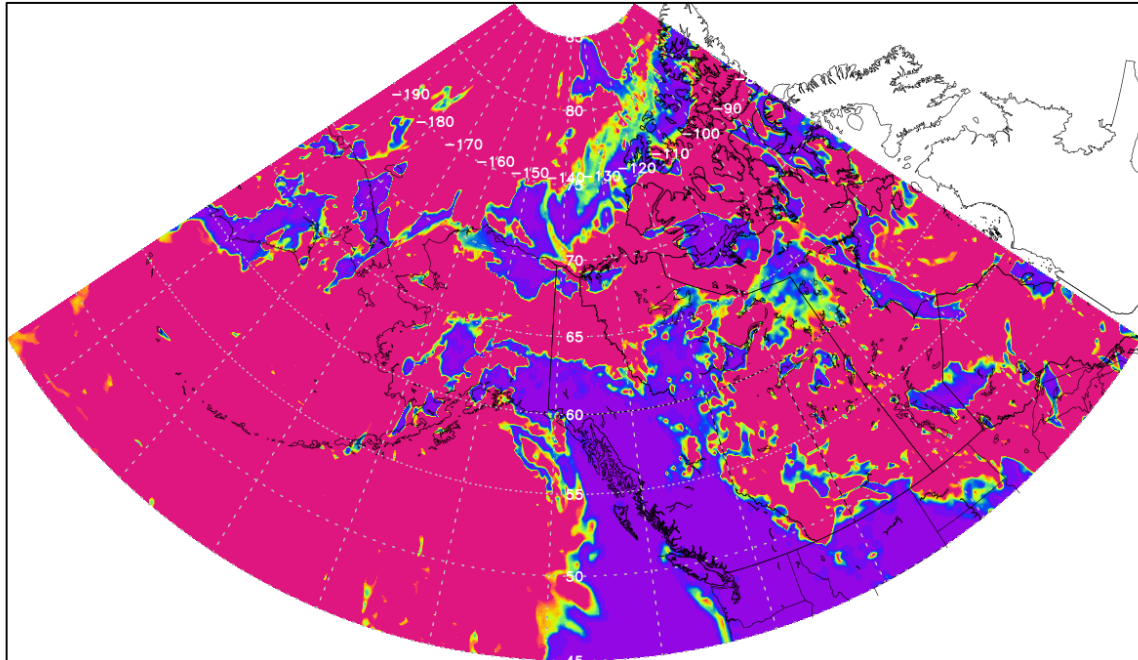
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GEOS High Cloud Optical Depth
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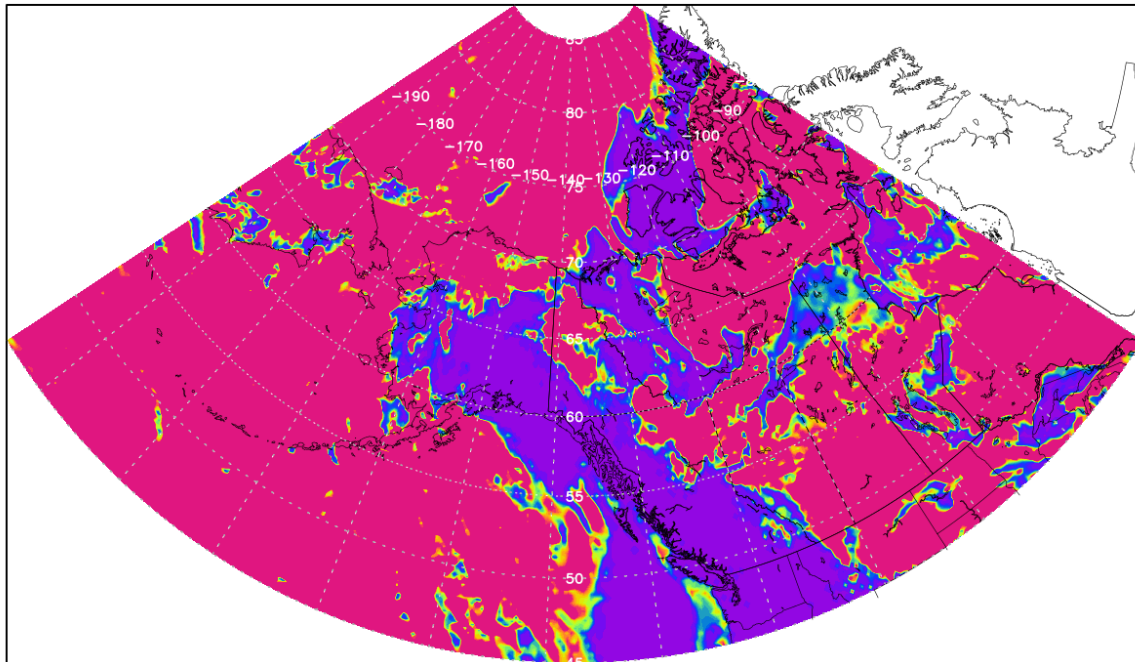
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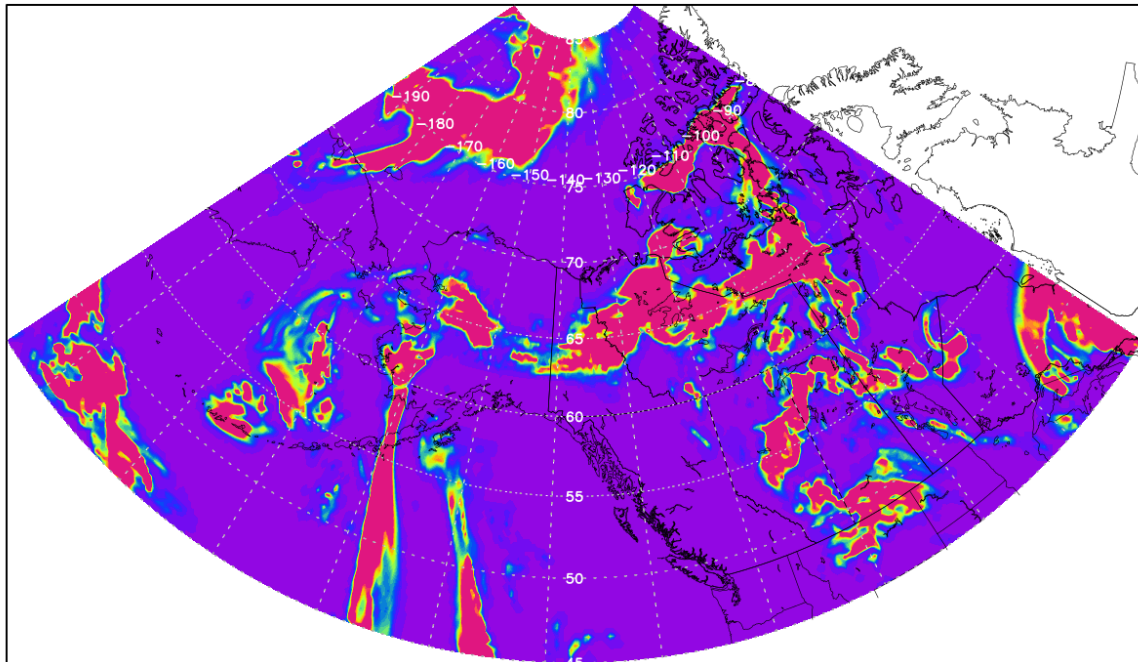
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GEOS Low Cloud Optical Depth
Initial time 02 AUG. 00z
Valid time 05 AUG. 18z



ABOVE_Mid_Cloud_Optical_Depth_IT_00z02AUG_VT_18z04AUG.png

GEOS Mid Cloud Optical Depth
Initial time 02 AUG. 00z
Valid time 04 AUG. 18z



ABOVE_Mid_Cloud_Optical_Depth_IT_00z02AUG_VT_18z05AUG.png

GEOS Mid Cloud Optical Depth
Initial time 02 AUG. 00z
Valid time 05 AUG. 18z

