

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 17 August 2017

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

L. Ath. = Lake Athabasca

PAFA = Fairbanks Airport, Alaska

Day-1 Outlook**Valid 1500z 18 August through 2359z 18 August**

A broad low pressure circulation will persist over Alaska on Friday. This will induce scattered showers and isolated thunderstorms throughout much of the interior of the state. Favored times for this activity will be during the afternoon with greatest chances over higher terrain. A small upper level cold core will progress over the Seward Peninsula on Friday, and that too will generate some shower activity, although neither heavy amounts nor thunder is expected over the Seward Peninsula.

Over Canada, a weather system will organize over the YKT/NWT border early Friday and then advance to the east affecting the Yellowknife region and down towards the PAD/L. Ath region. Flying should be wrapped up early in the day in these areas as bands of multi-layer clouds and precipitation approaches during the afternoon hours. The southern segments...Saskatoon/BERMS/Trout Lake look excellent with regard to limited cloud cover, and good in terms of low aerosol/smoke haze.

Day-2 Outlook**Valid 1500z 19 August through 2359z 19 August**

A deep low pressure center occludes over the large lakes of the NWT on Saturday. The cloud and precipitation shield associated with this cyclone will come down as far south as the PAD/L. Ath. vicinity. South of about 57N, the airmass will be dry and clear on northwesterly flow behind the weather system to the north. This will continue to bring mainly clear, and now haze-free, skies over the southern targets (Saskatoon/BERMS/Trout Lake). It should be noted that a frontal passage will have crossed this area with scattered convection overnight Friday into Saturday morning.

Over Alaska, the pocket of colder air aloft will remain over the west-central part of the state including the Seward Peninsula. This will touch off scattered showers, though with not heavy amounts predicted. Over PAFA, the Yukon Flats and Delta Junction, conditions will be variably cloudy with more isolated showers. A pop-up storm can not be ruled out, especially near higher terrain.

Day-3 Outlook**Valid 1500z 20 August through 2359z 20 August**

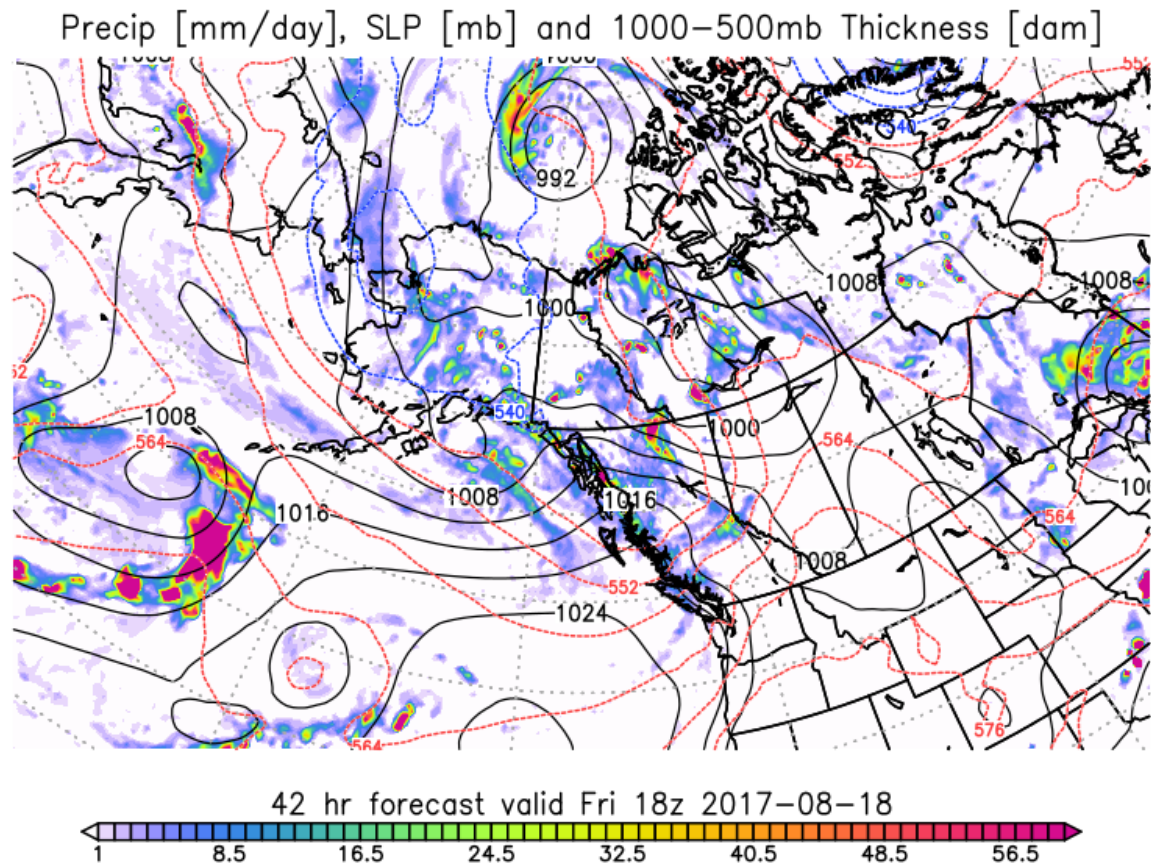
The occluded low pressure cyclone moves little over the NWT. The GEOS model indicates that the cloud and precipitation shield with this low remains just north of L. Ath, leaving pretty much all of the provinces of AB and SK south of 58/59N mainly clear on Sunday. Yellowknife will remain in the cloud and precipitation shield of this weather system on Sunday. Only some light smoke haze from BC fires should advect across the far southern AB/SK provinces.

Another weather system dives into the northwest quadrant of Alaska (including the Seward Peninsula) with rain on Sunday. This is being shown by the GEOS model and is not necessarily indicated by the current National Weather Service forecast. The PAFA/Delta Junction/Yukon Flats region continues to have partly to mostly cloudy skies with chances of showers. Near zero chances of heavy precipitation, although an isolated pop-up t'storm possible.

Gary Partyka
GMAO at NASA's Goddard Space Flight Center
Greenbelt, MD

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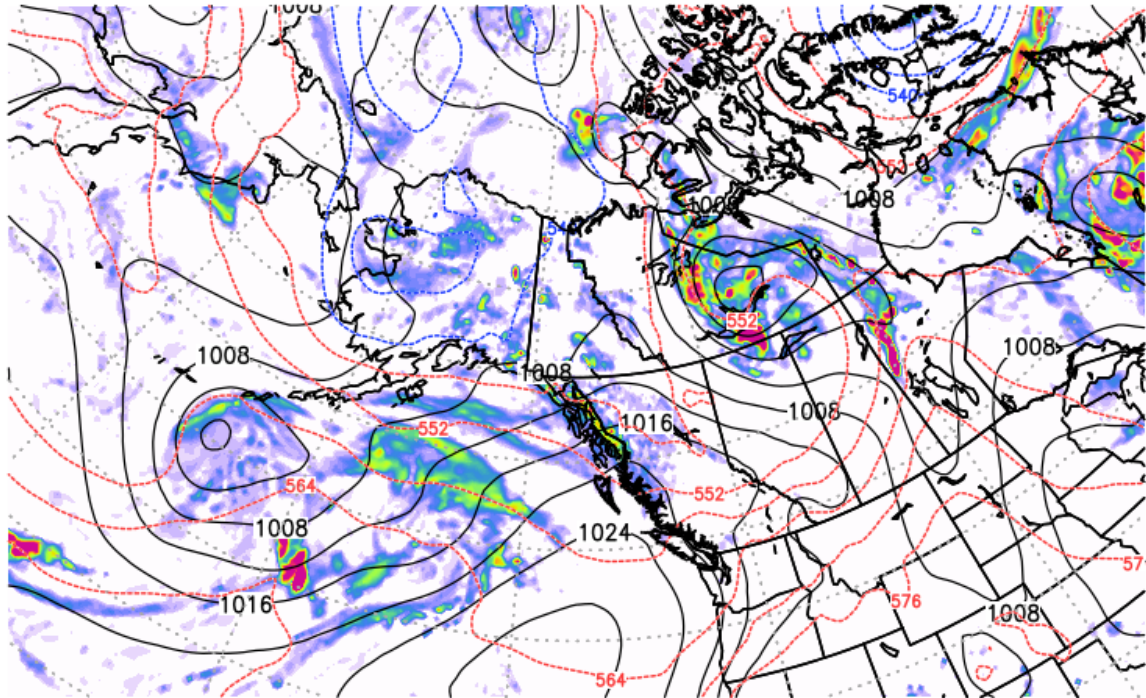
NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-17



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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-17

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

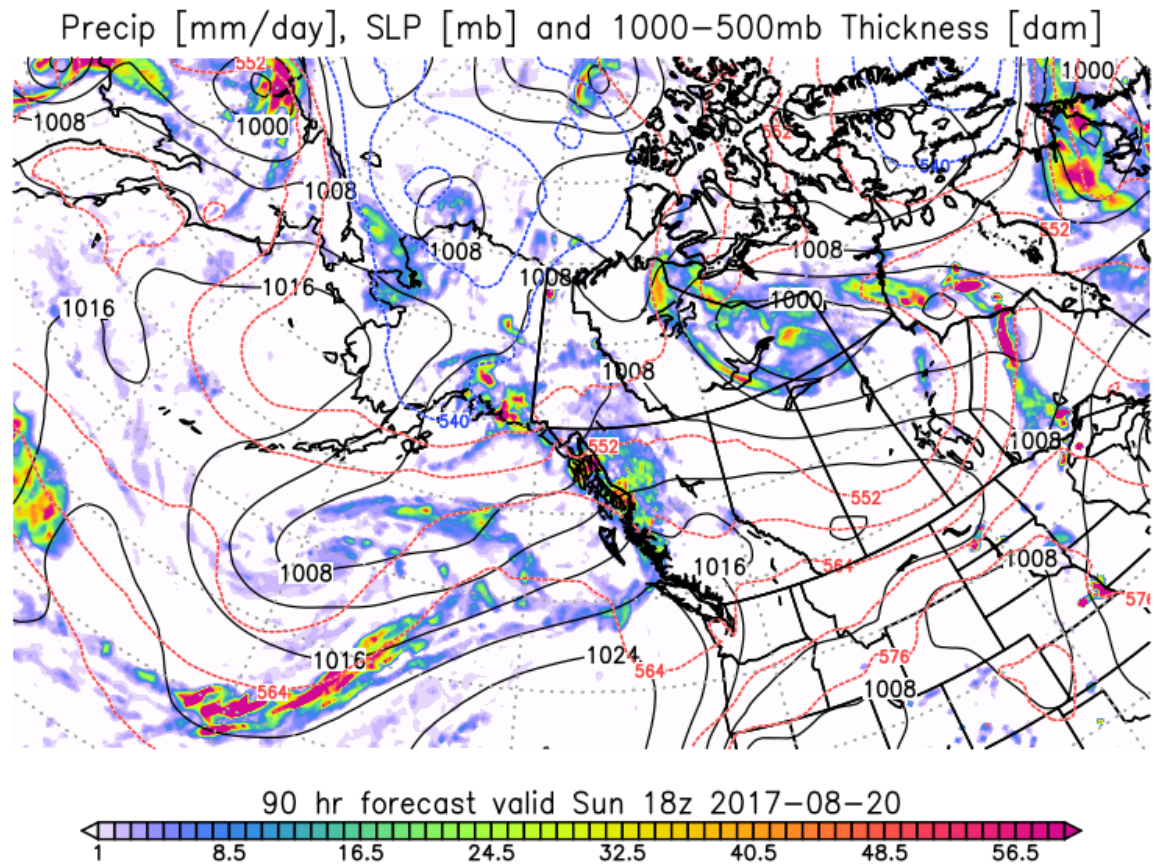


66 hr forecast valid Sat 18z 2017-08-19



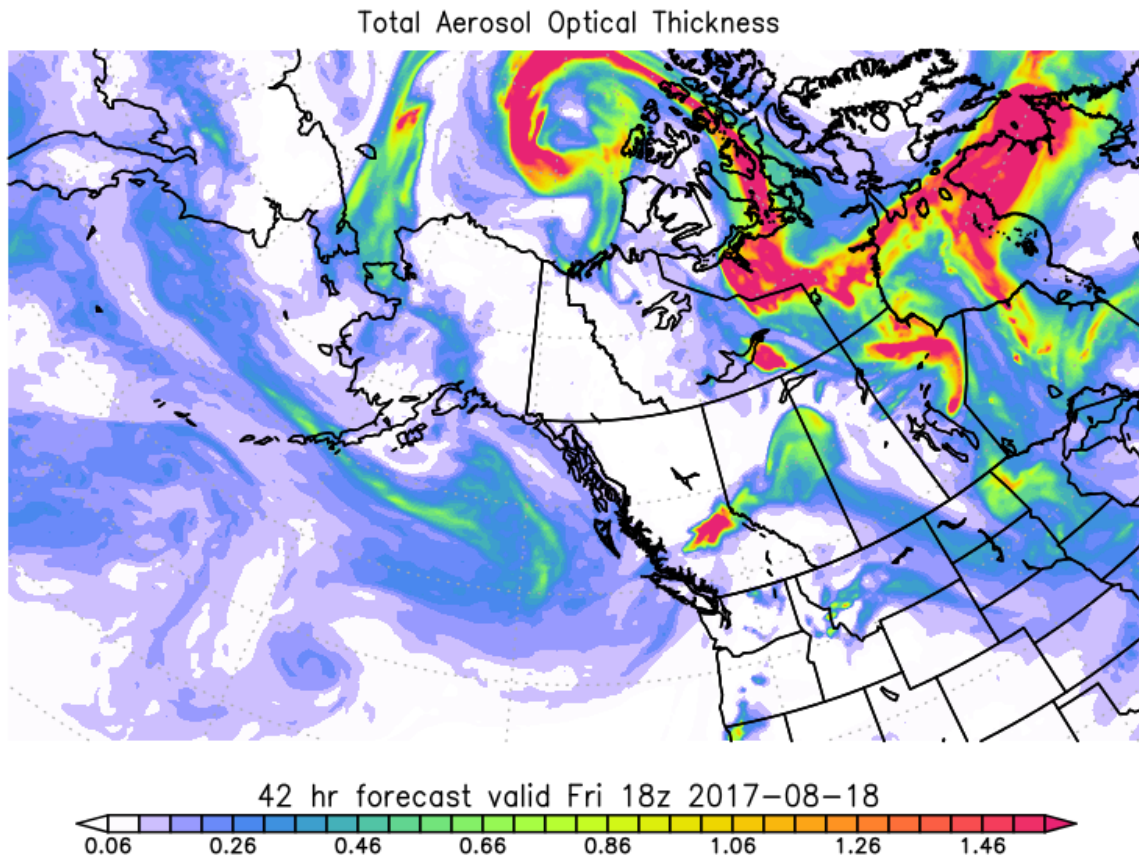
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-17



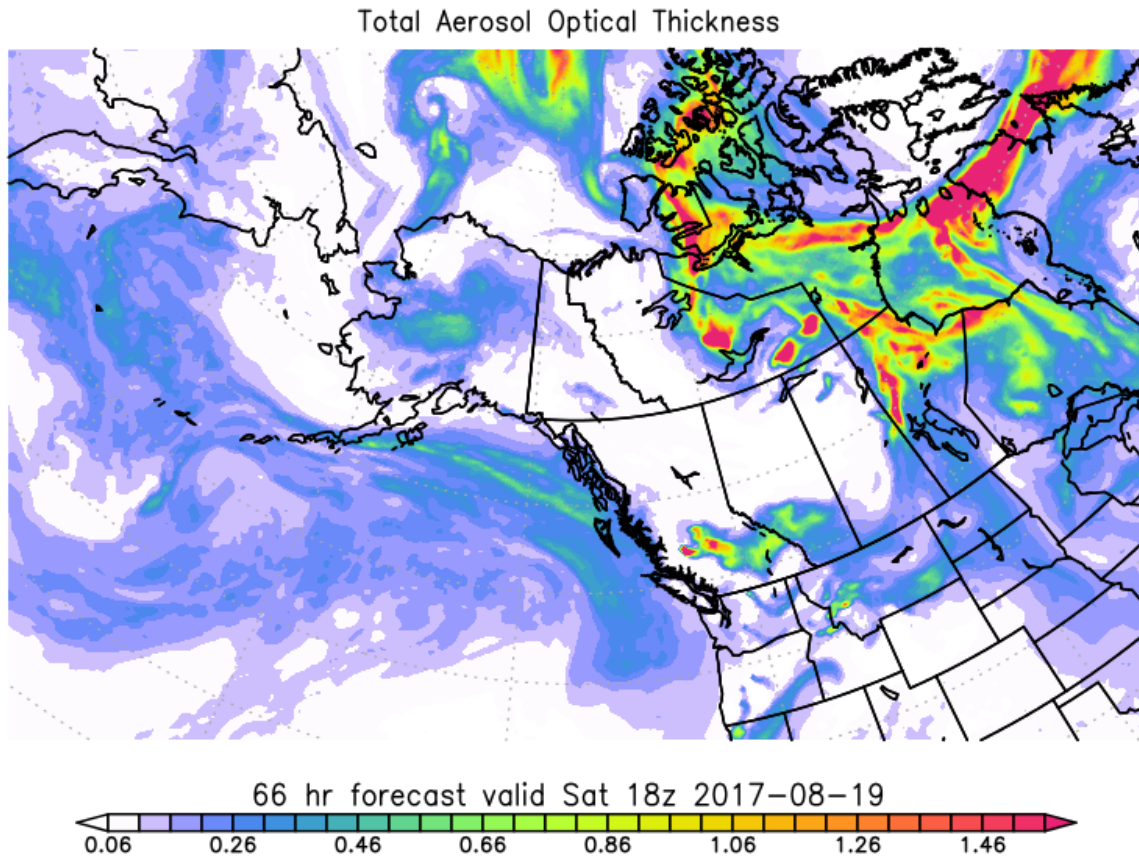
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-17



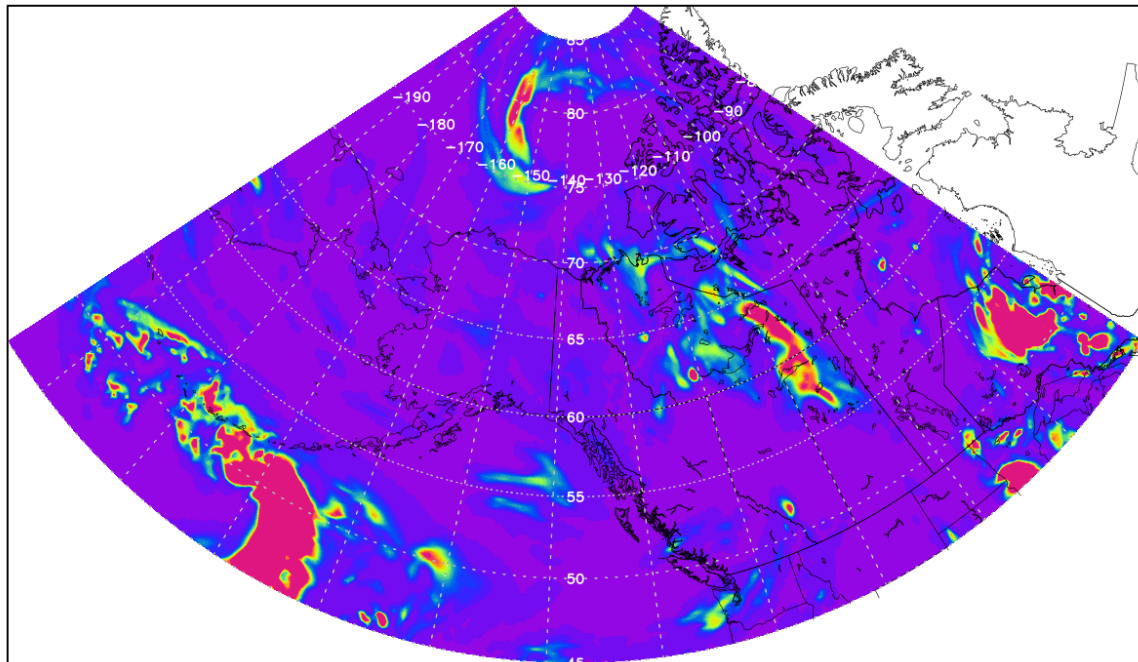
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-17



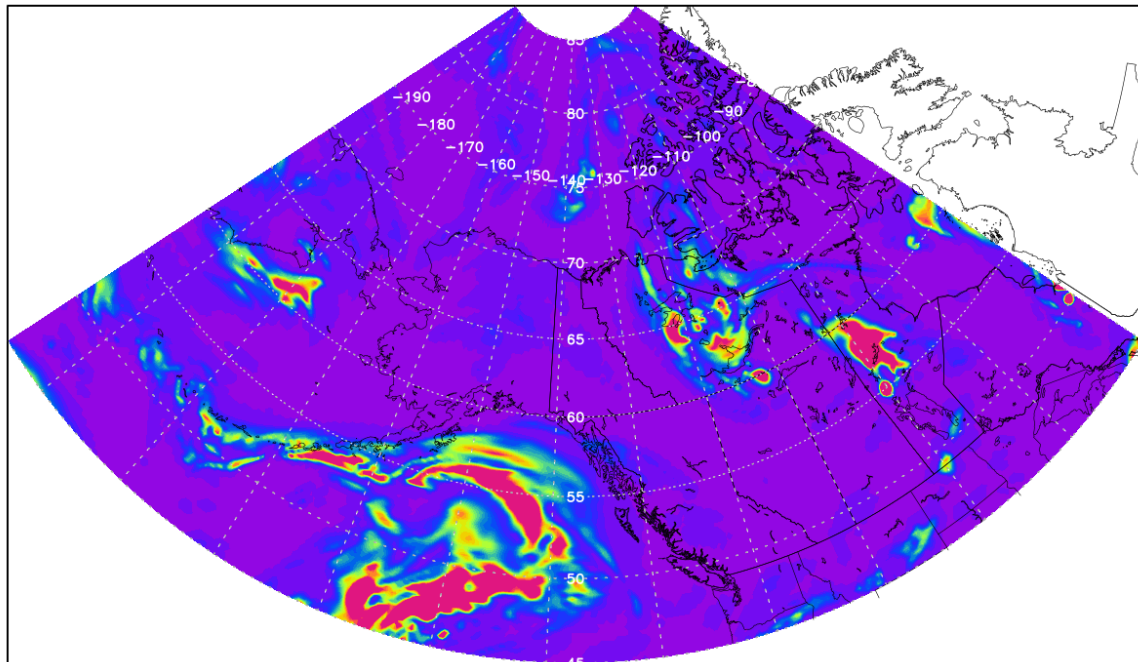
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GEOS High Cloud Optical Depth
Initial time 17 AUG. 00z
Valid time 18 AUG. 18z



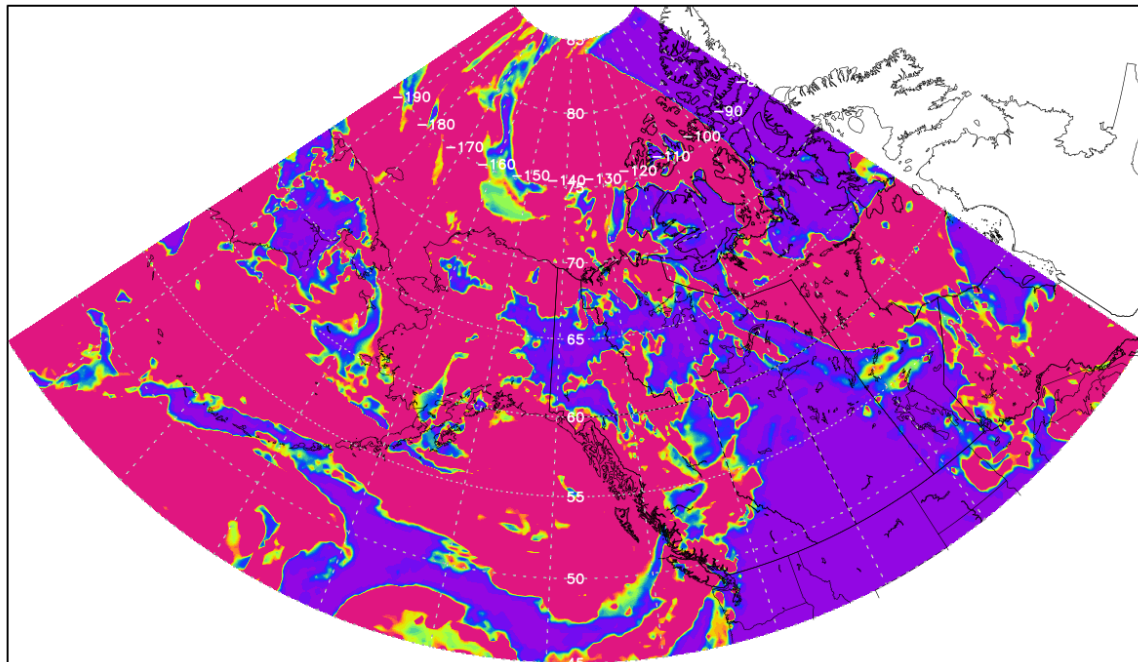
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GEOS High Cloud Optical Depth
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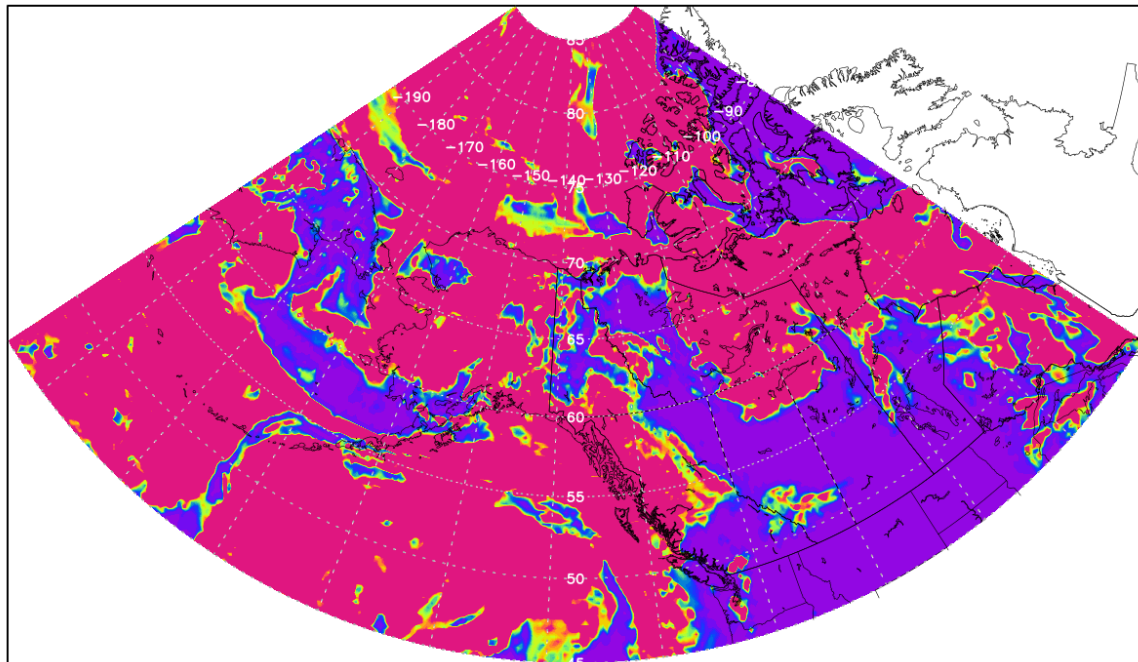
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GEOS Low Cloud Optical Depth
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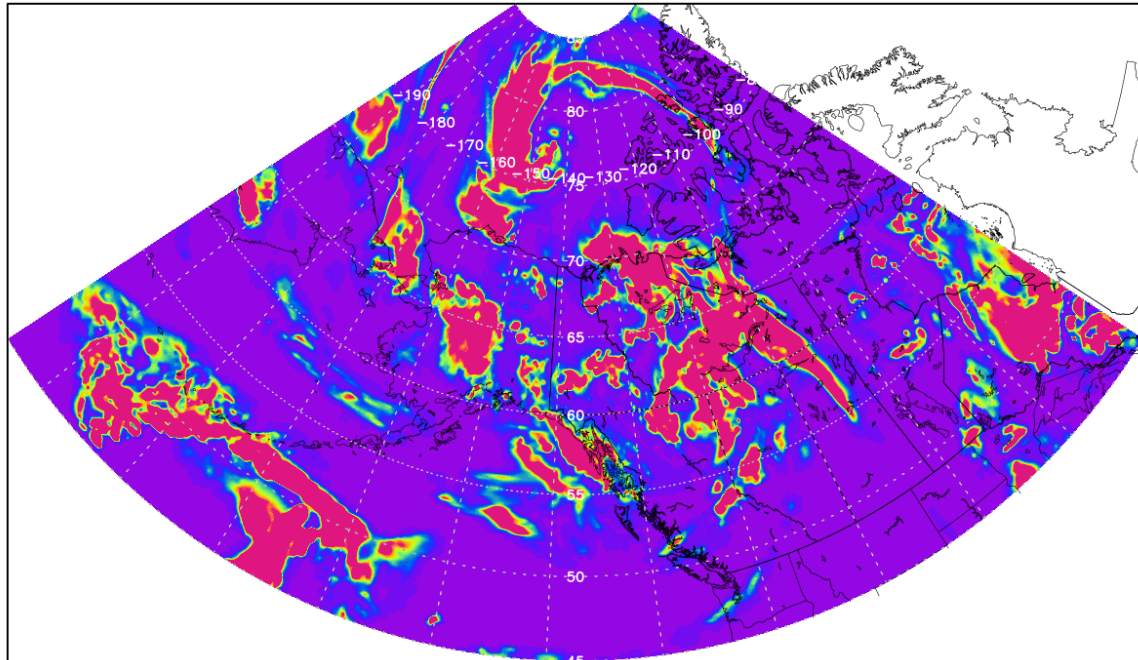
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GEOS Low Cloud Optical Depth
Initial time 17 AUG. 00z
Valid time 19 AUG. 18z



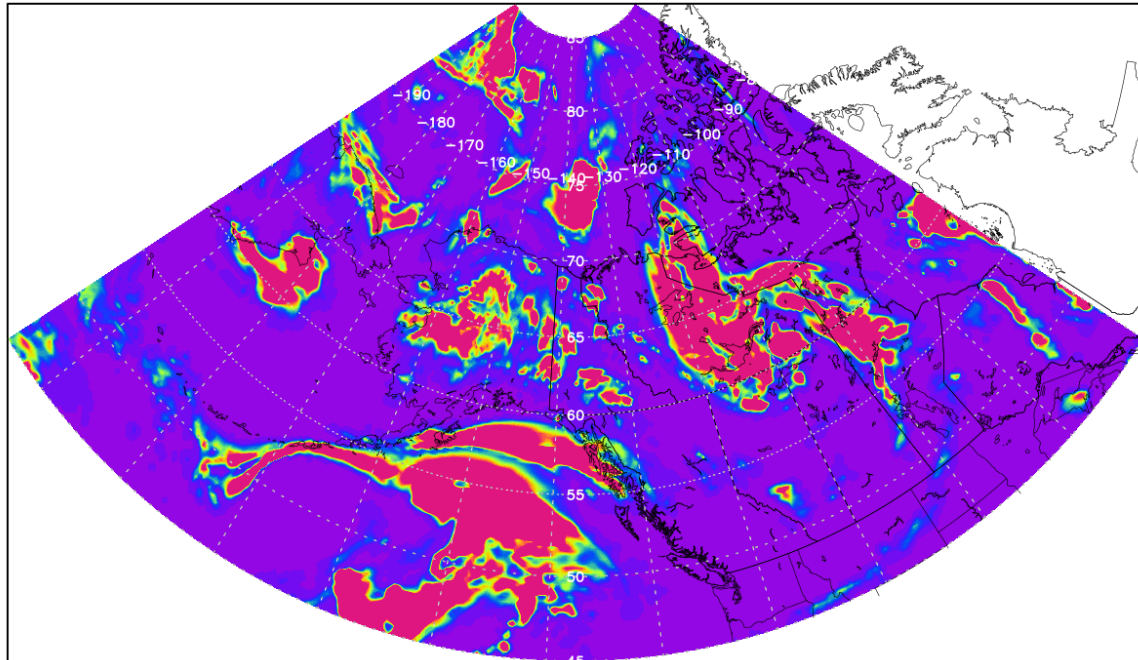
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GEOS Mid Cloud Optical Depth
Initial time 17 AUG. 00z
Valid time 18 AUG. 18z



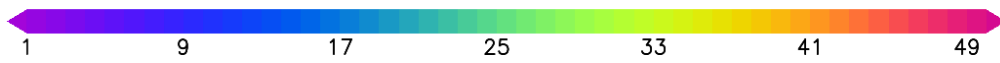
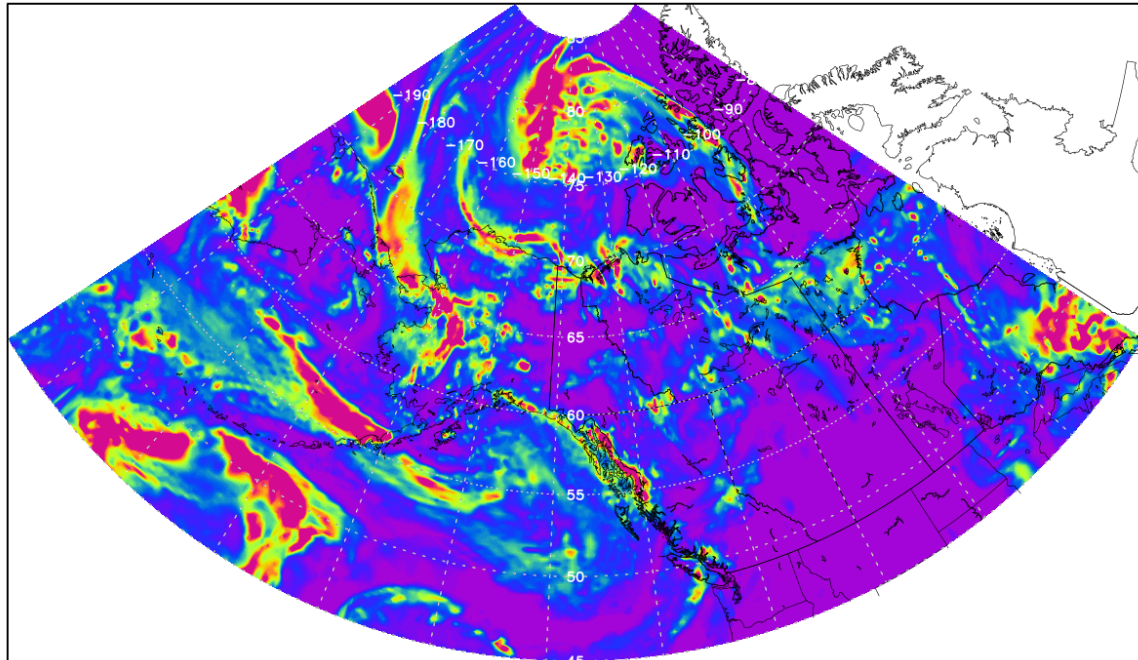
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GEOS Mid Cloud Optical Depth
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Valid time 19 AUG. 18z



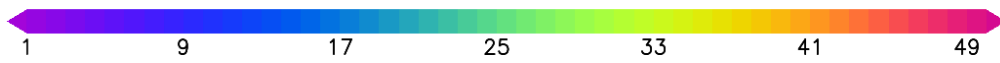
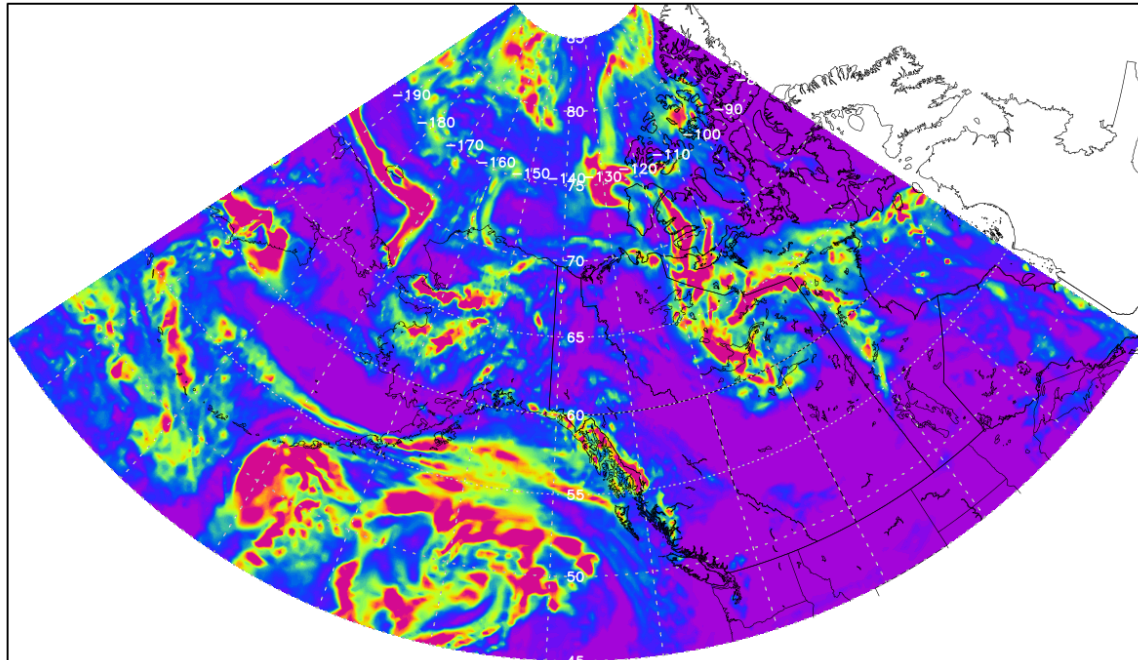
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GEOS Total Cloud Optical Depth
Initial time 17 AUG. 00z
Valid time 18 AUG. 18z



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