

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields

Model Initialized 00z 22 June 2017

Note: Saskatchewan Province (SP), Alberta Province (AP), Manitoba Province (MP), Northwest Territory (NWT), Yukon Territory (YKT), Alaska (AK)

Day-1 Forecast**Valid 1500z 23 June through 2359z 23 June**

A ridge of high pressure will be centered over the YKT. At the same time, a potent upper-level low pressure system will spin down from north to south through the eastern half of SP. Widespread precipitation (some of it heavy) will be confined to east-central SP and then stretching east towards Lake Winnipeg. Showers, more scattered in nature can be expected along the southern NWT/YKT border, with a few showers also possible near the shores of Great Slave Lake.

Fairly good chances of getting clear scenes or just thin high clouds for a large area on Friday. This favorable area will be located over the western half of SP (especially south of 56N). Nearly all of AP will be generally clear. A band of multi-layer clouds will be found 60-63N and 140-110W (this includes around Great Slave Lake)...further north of this band, up towards Inuvik, skies should be mainly clear.

Smoke/aerosol: GEOS indicates an active fire in the vicinity of Eagle Plains NWT, and optically very thin aerosol matter over Lake Winnipeg. All other locales free of aerosol visibility restrictions.

Day-2 Forecast**Valid 1500z 24 June through 2359z 24 June**

On Saturday, the weather looks very good for the majority of the mission region. A weak surface trough will stretch from the central YKT and down towards northern SP. This area will be the focus for additional clouds and scattered showers/isolated thunderstorms. Otherwise, a weak pressure pattern exists across the ABOVE mission region.

Clear to mainly clear (mainly clear meaning few low clouds and thinner high clouds only) areas include all longitudes south of 55N. Up north, the favorable area includes north of 60N and west of 110W and then all the way to the NWT/YKT border. The Inuvik vicinity will be mainly clear.

Smoke/aerosol: Light smoke along and just east of the central YKT/NWT border. Elsewhere clear.

Day-3 Outlook**Valid 1500z 25 June through 2359z 25 June**

On Sunday, GEOS indicates showers and scattered thunderstorms over YKT and the western

NWT (including Inuvik). All locations further south and east appear to be mainly clear. This includes all of SP and a couple hundred mile wide radius around Great Slave Lake/Yellowknife. Here, a large dome of high pressure over the north-central US will influence well into Canada.

A patch of clouds/light showers is noted over west-central SP.

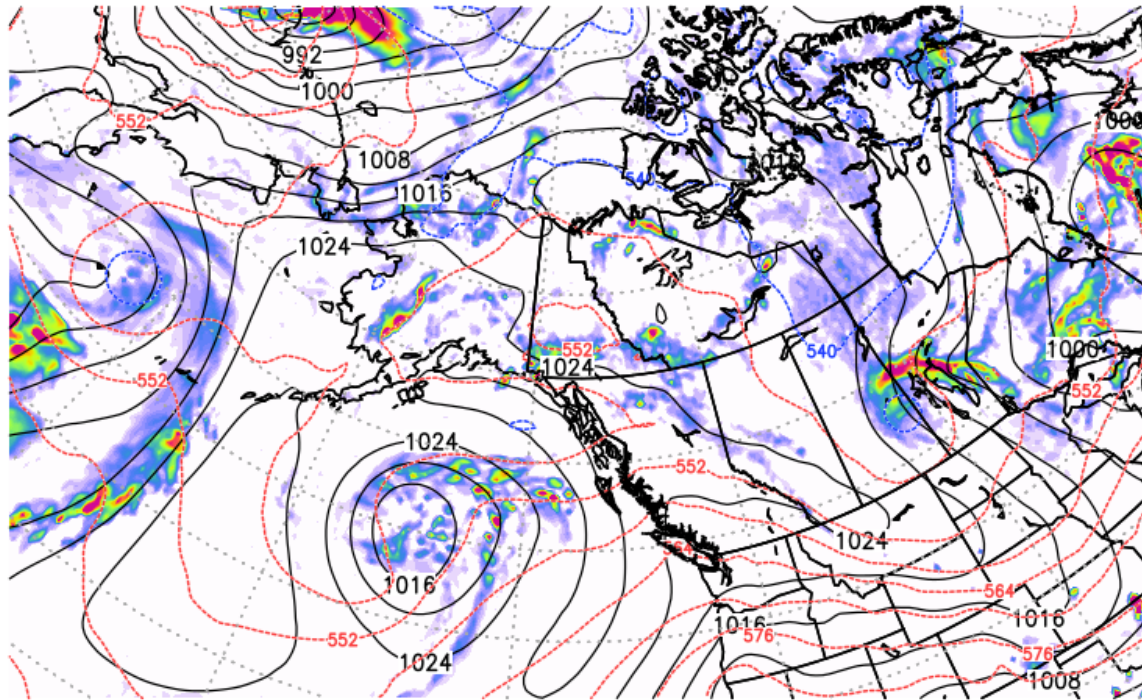
Some smoke possible between Gr. Bear Lake and Inuvik.

Gary Partyka
Global Modeling and Assimilation Office - GSFC

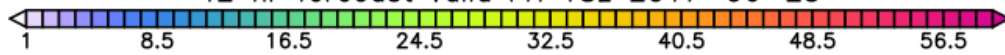
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-06-22

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

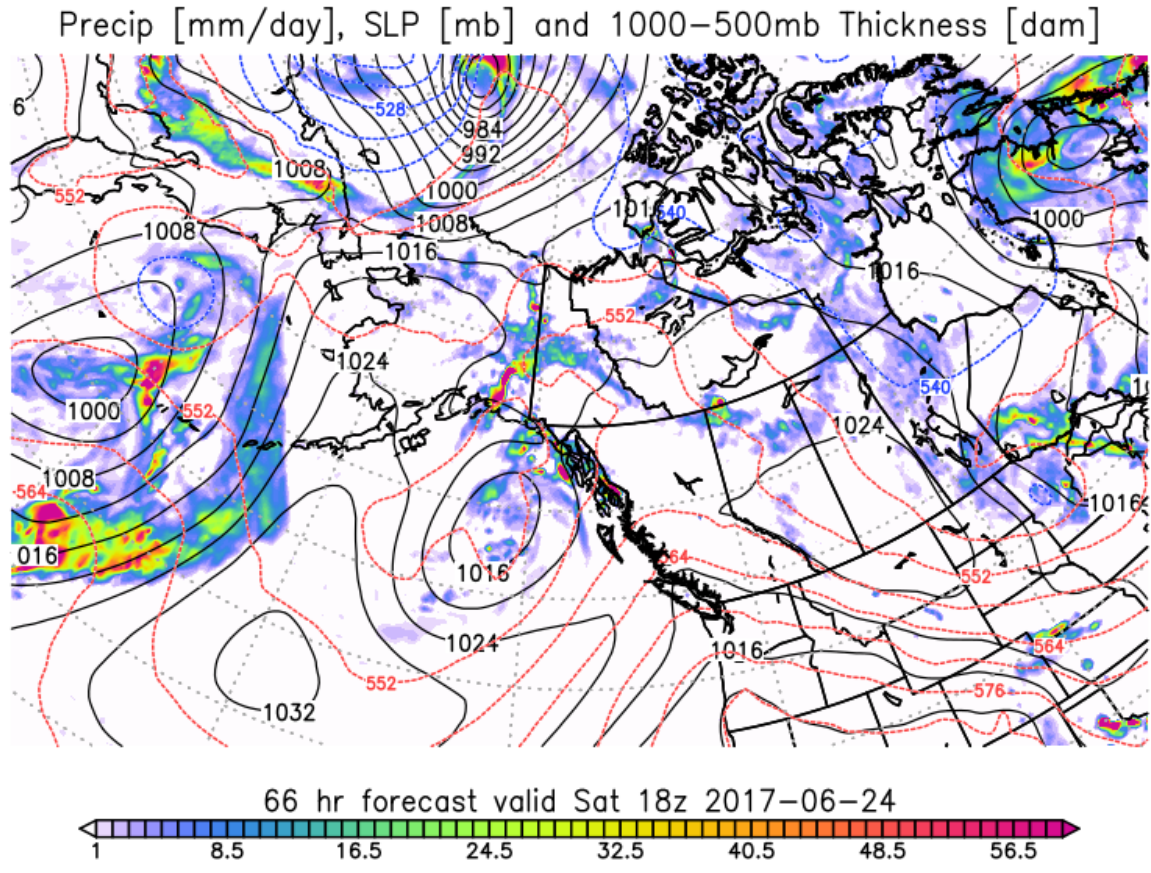


42 hr forecast valid Fri 18z 2017-06-23



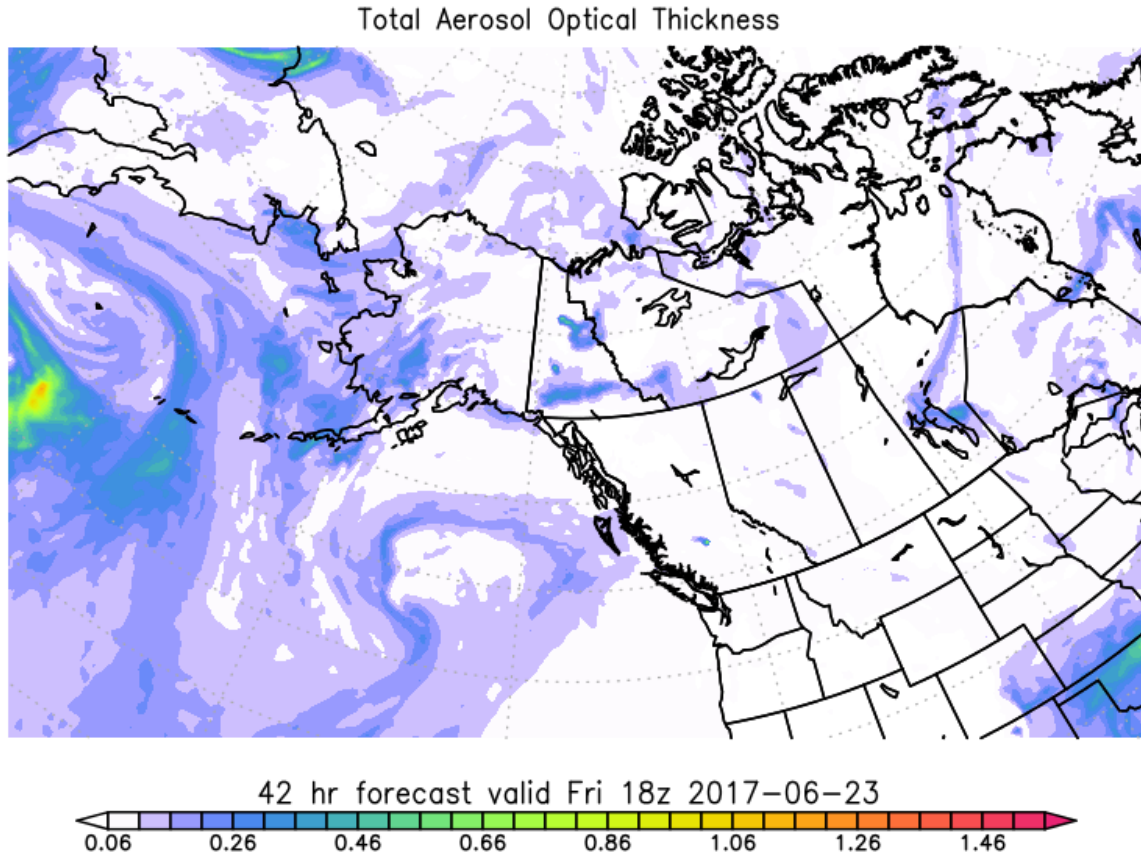
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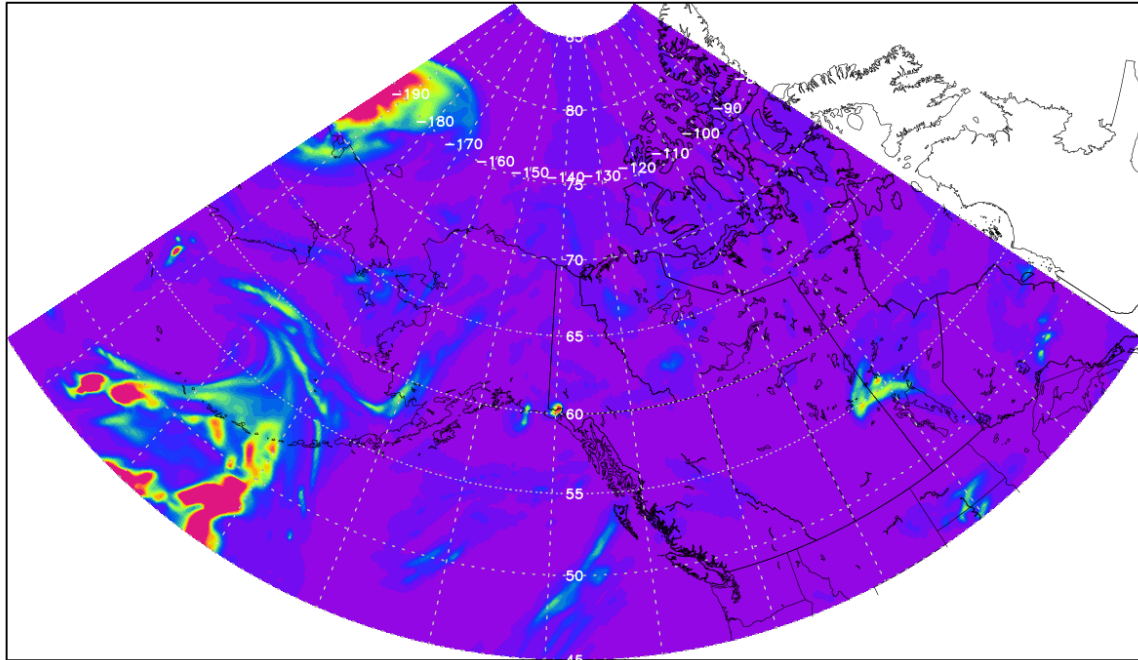
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-06-22



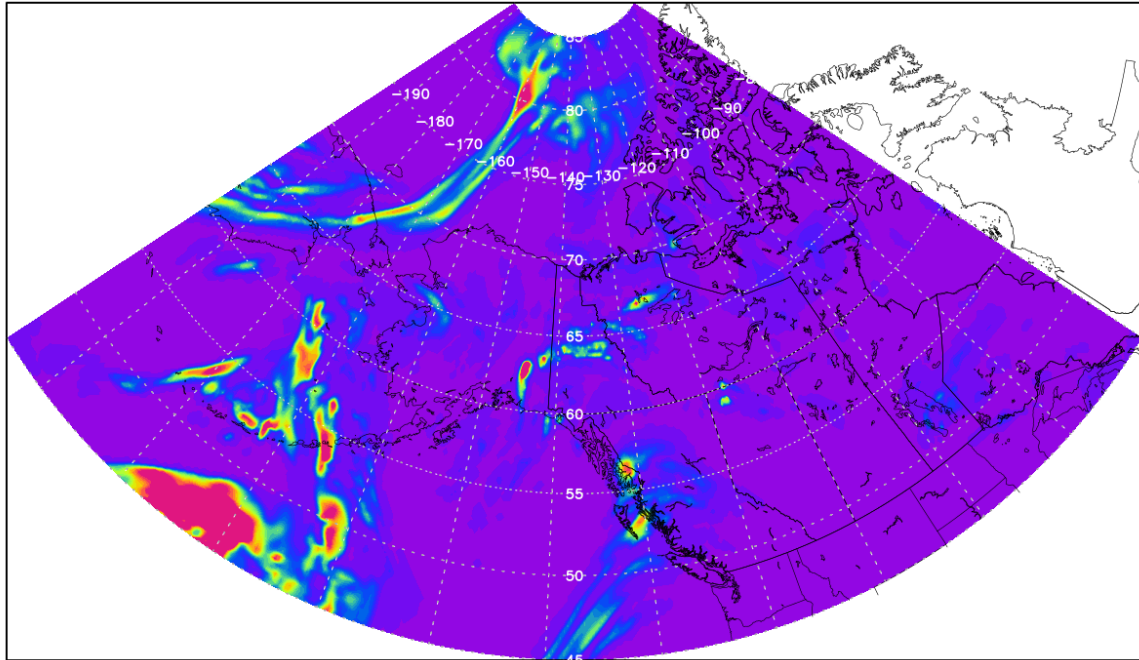
ABOVE_High_Cloud_Optical_Depth_IT_00z22JUN_VT_18z23JUN.png

GEOS High Cloud Optical Depth
Initial time 22 JUN. 00z
Valid time 23 JUN. 18z



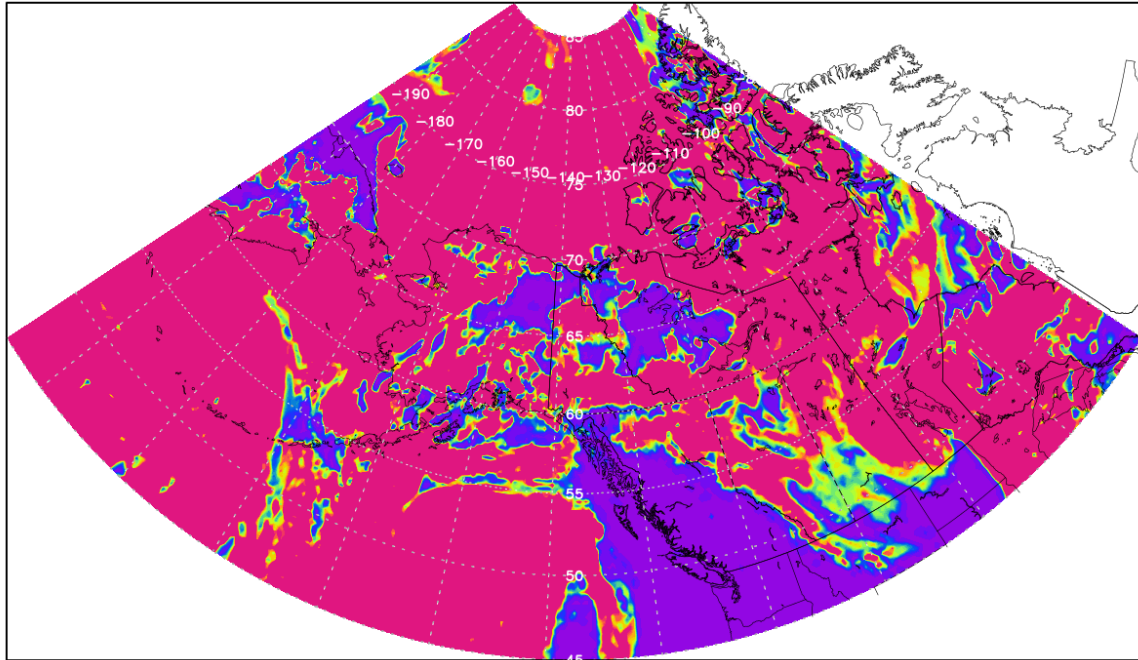
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GEOS High Cloud Optical Depth
Initial time 22 JUN. 00z
Valid time 24 JUN. 18z



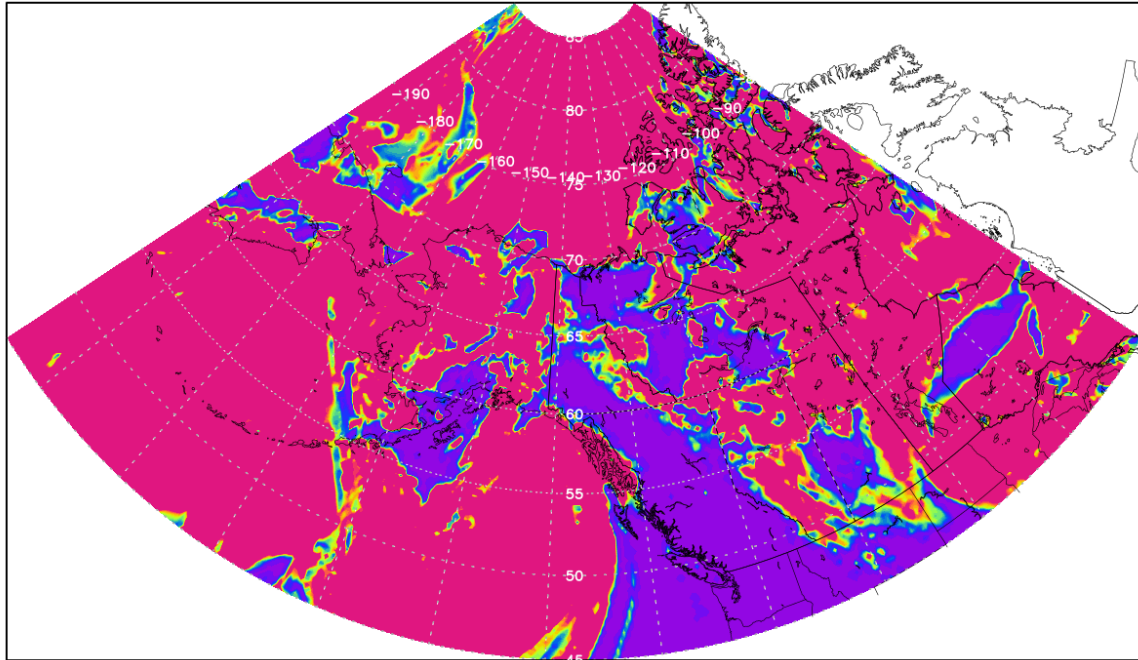
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GEOS Low Cloud Optical Depth
Initial time 22 JUN. 00z
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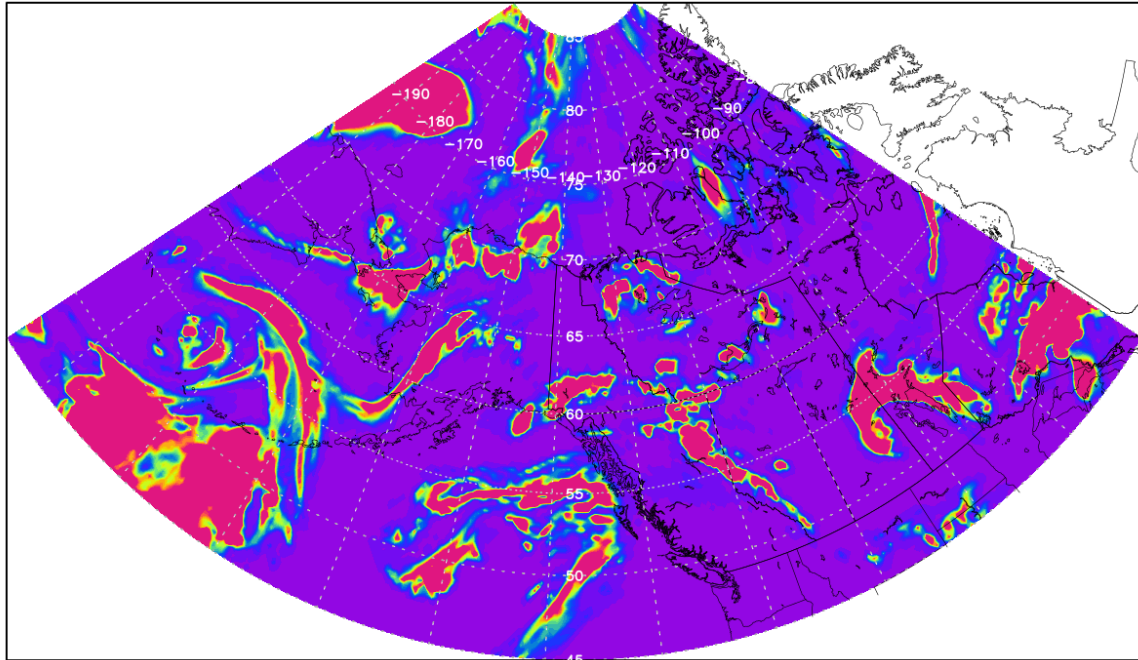
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GEOS Low Cloud Optical Depth
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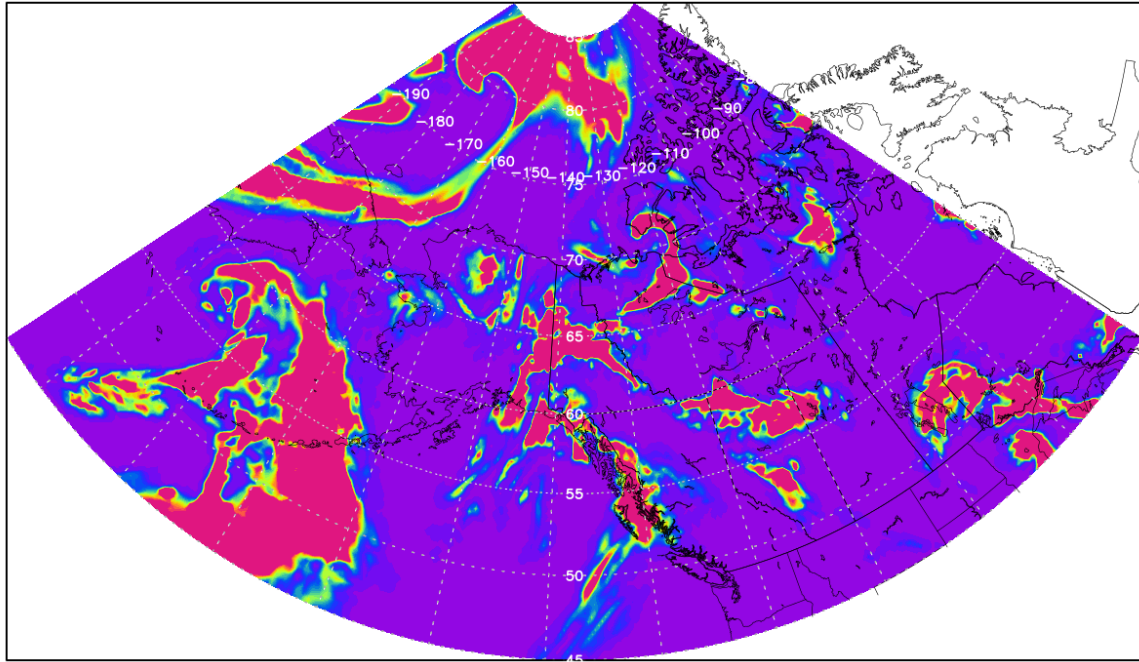
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GEOS Mid Cloud Optical Depth
Initial time 22 JUN. 00z
Valid time 23 JUN. 18z



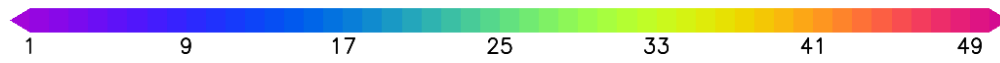
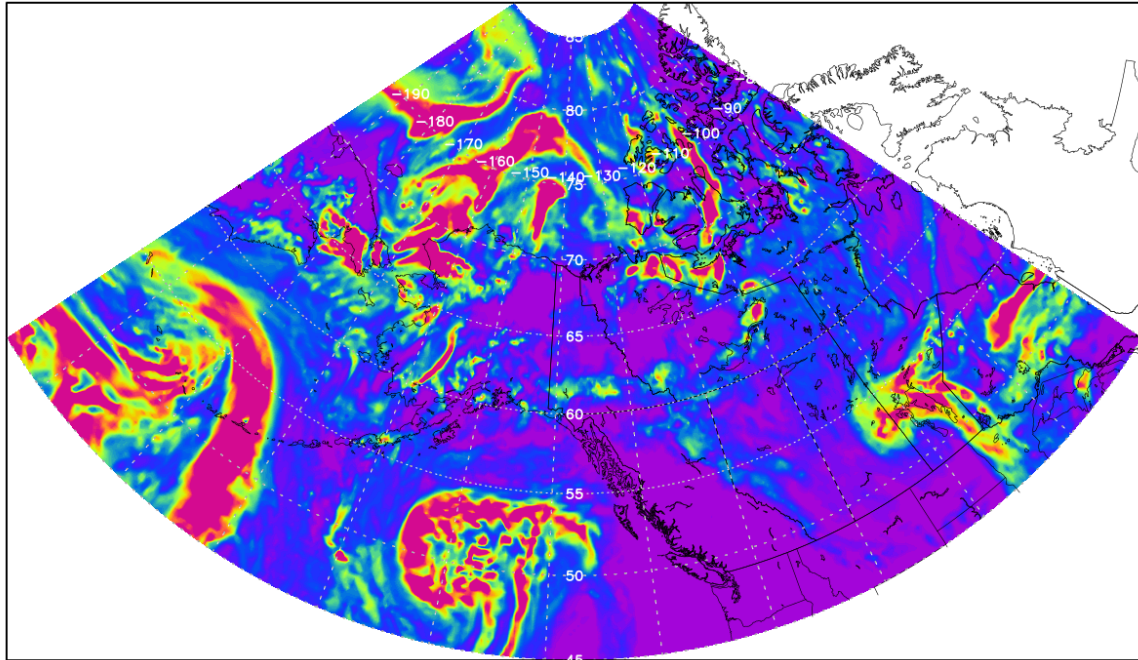
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GEOS Mid Cloud Optical Depth
Initial time 22 JUN. 00z
Valid time 24 JUN. 18z



ABOVE_Total_Cloud_IT_00z22JUN_VT_18z23JUN.png

GEOS Total Cloud Optical Depth
Initial time 22 JUN. 00z
Valid time 23 JUN. 18z



ABOVE_Total_Cloud_IT_00z22JUN_VT_18z24JUN.png

GEOS Total Cloud Optical Depth
Initial time 22 JUN. 00z
Valid time 24 JUN. 18z

