

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields

Model Initialized 00z 25 June 2017

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

Day-1 Forecast**Valid 1500z 26 June through 2359z 26**

The large scale weather features across the mission region on Monday will include a broad area of low pressure across western Canada surface and aloft and retreating high pressure over the Prairie Provinces. Within the broad low pressure over western Canada, the heaviest precipitation will be focused west of the Mackenzie River over western NWT and into north-central YKT. There will also be scattered showers and thunderstorms over the northern half of BC.

Skies on Monday will be clear or mainly clear over nearly all of SP except for some cloud layers that spill in from central AP into west-central SP. There will also be clear sky scenes over the eastern semi-circle of Gr. Slave Lake. The transect from Yellowknife up to Inuvik including station Inuvik appear to be within multi-layer cloud cover. If there is any need to be over the southern halves of AP and BC, there will be clear skies here.

Smoke/aerosol: GEOS indicating concentrated smoke areas over the border between YKT and Alaska between 65-67N with smoke advecting southward into central YKT. The Canadian Fire Weather Services does not seem to indicate active fires here, however, They do indicate modest fires in the NWT west of the Mackenzie River between Norman Wells and Fort Good Hope. Elsewhere, thinner aerosol optical depths seen from central NWT down into central AP and SP.

Day-2 Forecast**Valid 1500z 27 June through 2359z 27 June**

On Tuesday low pressure along with multi-layer clouds and precipitation will be stretched from the border between YKT/NWT and down south into SP and MP. A ridge of high pressure will clear the skies over far western Canada including most of the YKT and BC. A ridge of high pressure over the Canadian Archipelago will start to bridge westward into the northern latitudes of the NWT and YKT...and will play an important role in clearing the skies here come Wednesday.

Prospects for large stretches of clear skies have faded for a good portion of the region Tuesday. The GEOS model indicates a solid line of clouds stretching on either side of a line from 70N/130W then south to 50N/105W. Again, the best chances for clear views will be the YKT, BC, 60-70N east of 115W, and far southern AP.

Smoke/aerosol: the thickest smoke confined to Alaska. Elsewhere, once again the line from Gr Bear Lake - Gr. Slave Lake -to Lake Athabasca - to Saskatoon will see some thin aerosol from smoke.

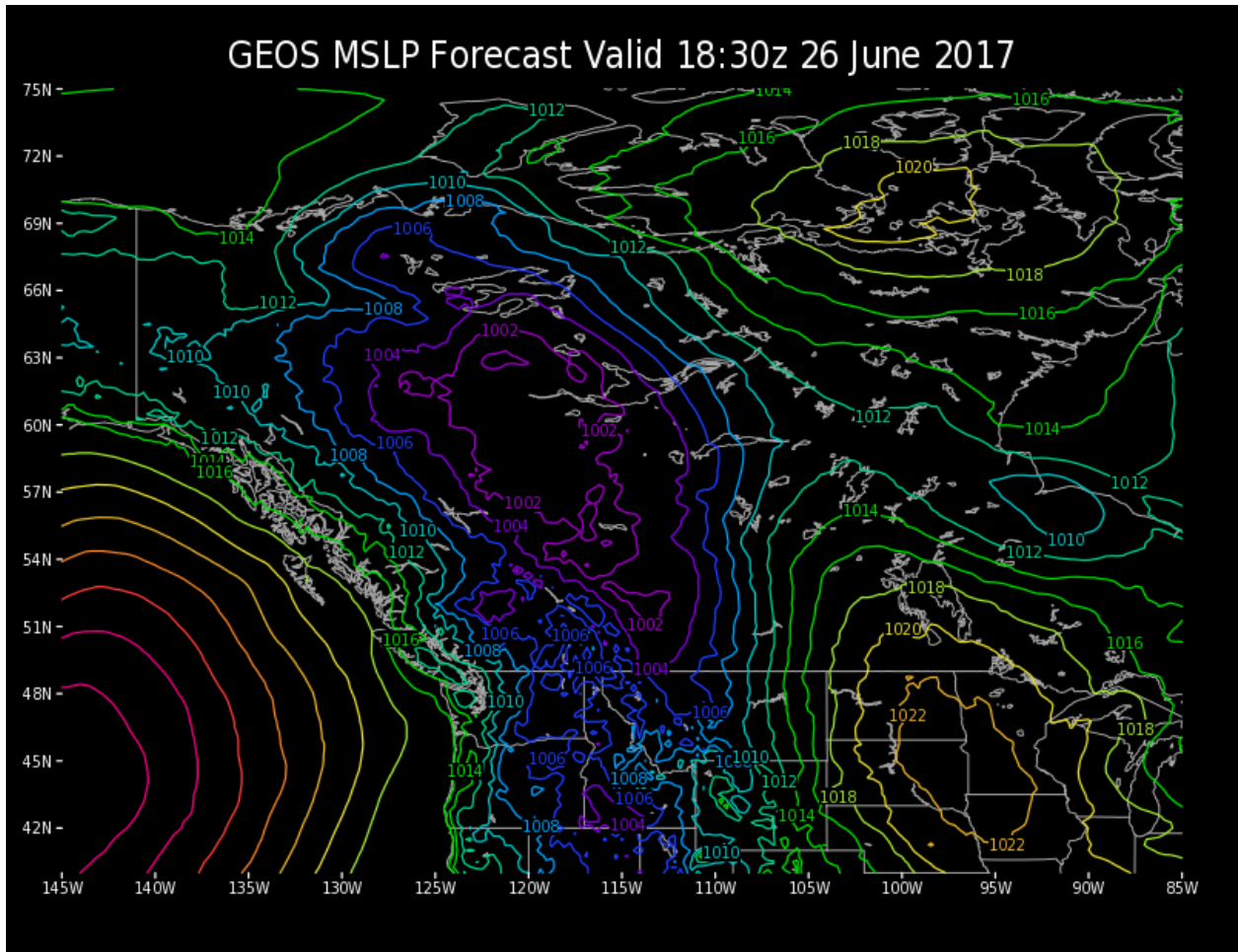
Day-3 Outlook**Valid 1500z 28 June through 2359z 28 June**

On Wednesday, low pressure further intensifies over AP and SP with significant cloud cover and precipitation chances over much of these two provinces. However, further north high pressure bridges much of the NWT and YKT. Our model is indicating just a thin stripe of clouds along roughly 120W up to the Arctic Ocean, but mainly clear skies for the remainder of the mission region north of 60N (including the segment from Yellowknife to Inuvik....except near longitude 120W as stated).

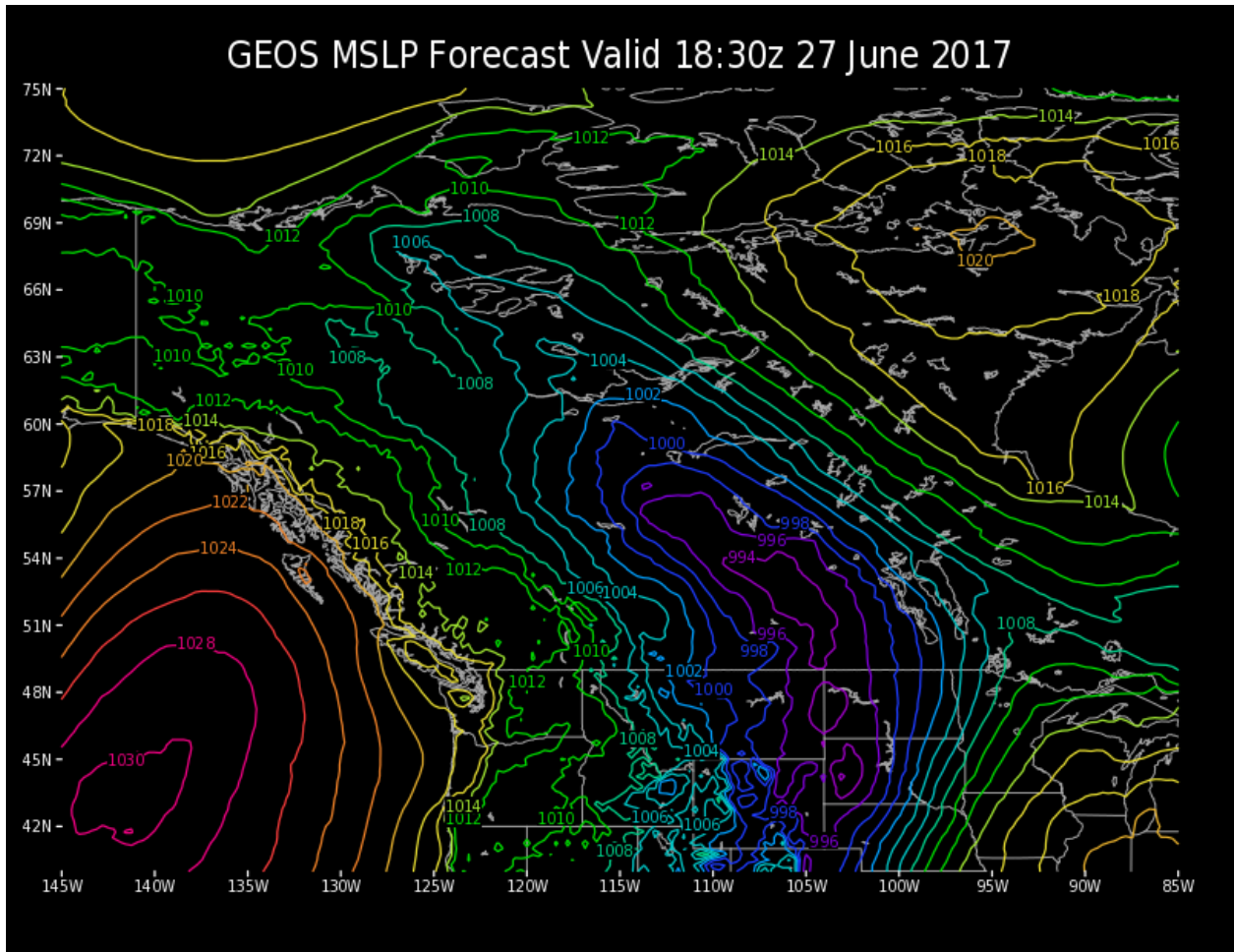
Gary Partyka

Global Modeling and Assimilation Office - GSFC

abv1.png

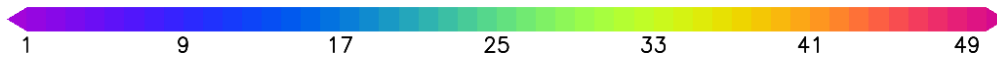
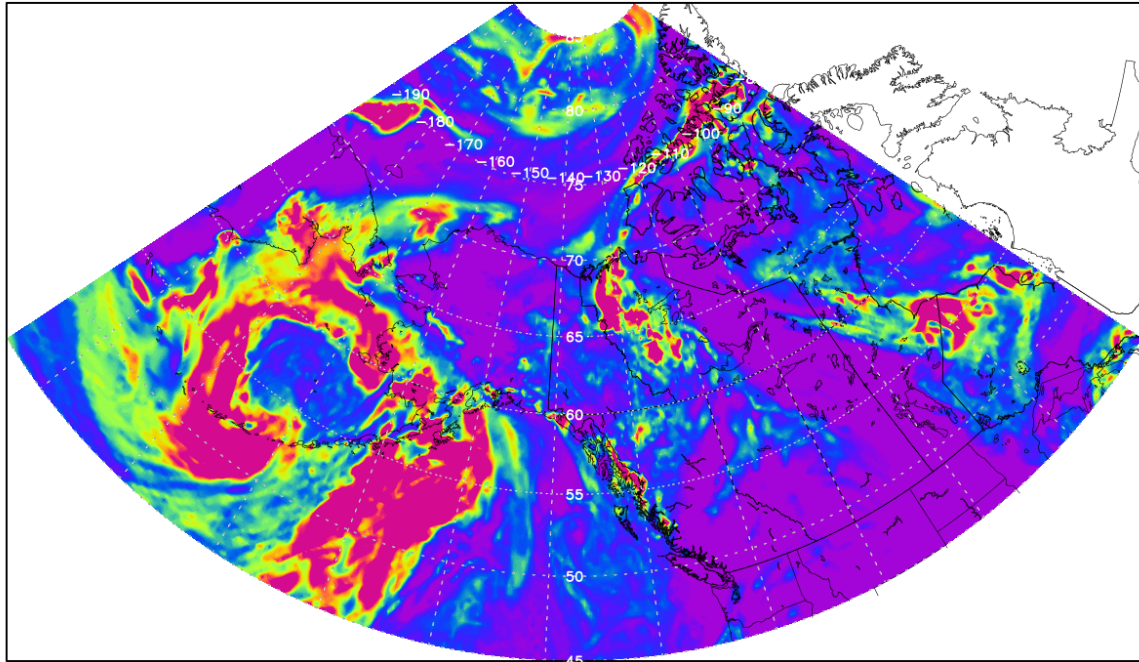


abv2.png



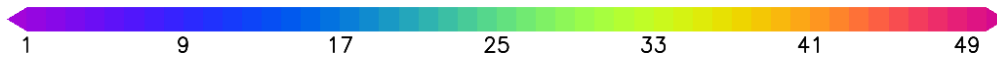
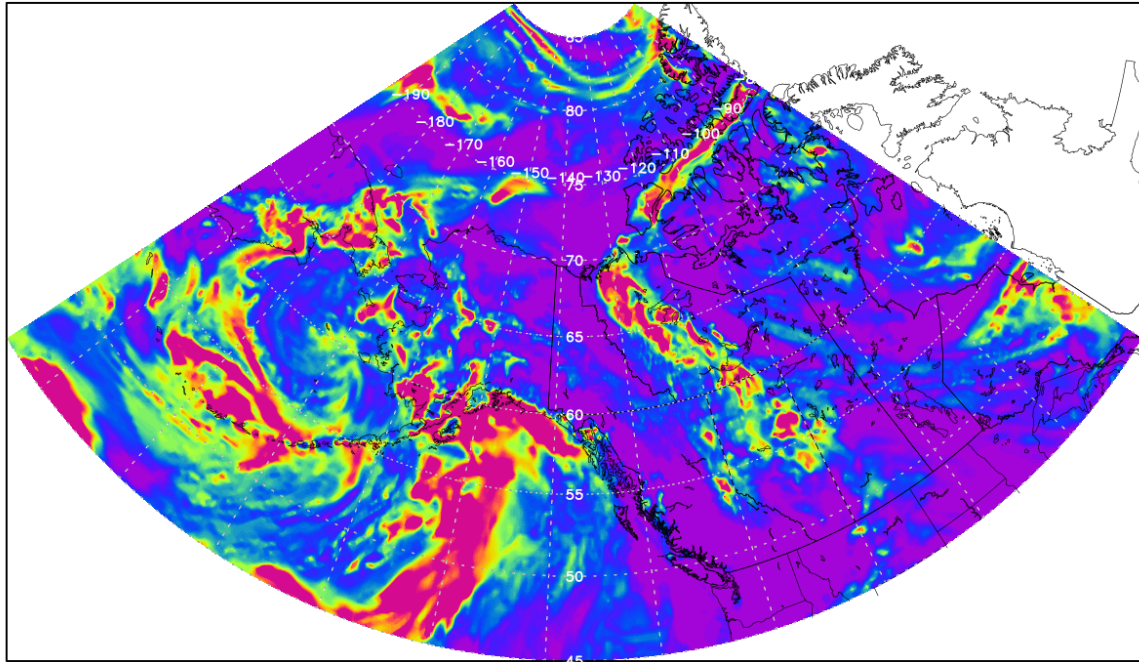
ABOVE_Total_Cloud_IT_00z25JUN_VT_18z26JUN.png

GEOS Total Cloud Optical Depth
Initial time 25 JUN. 00z
Valid time 26 JUN. 18z



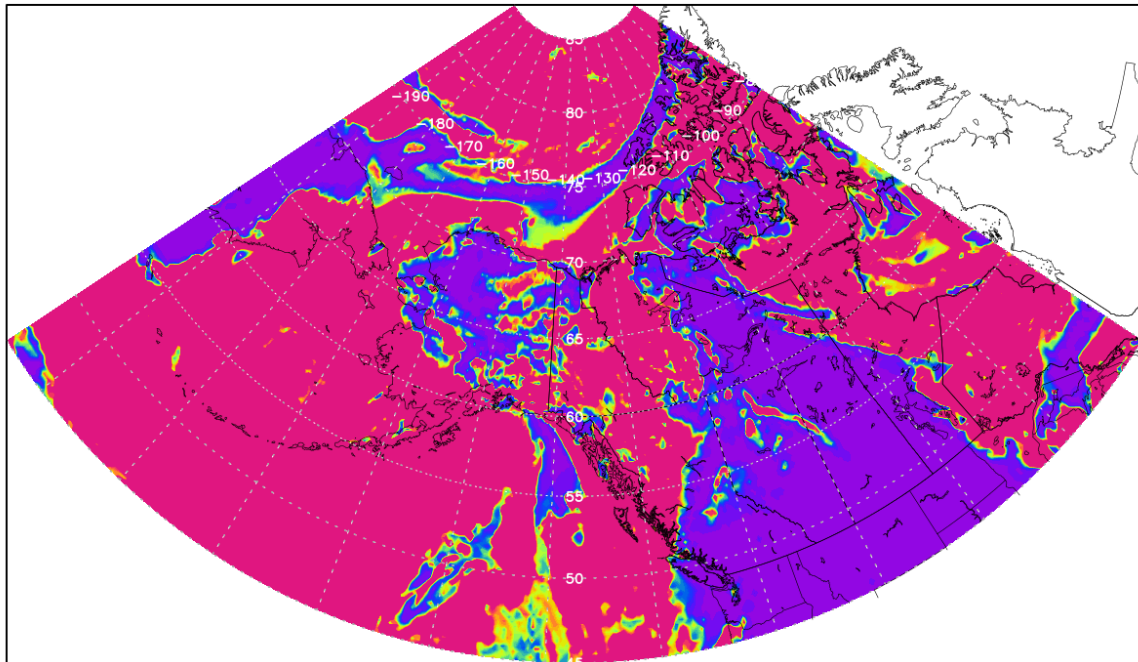
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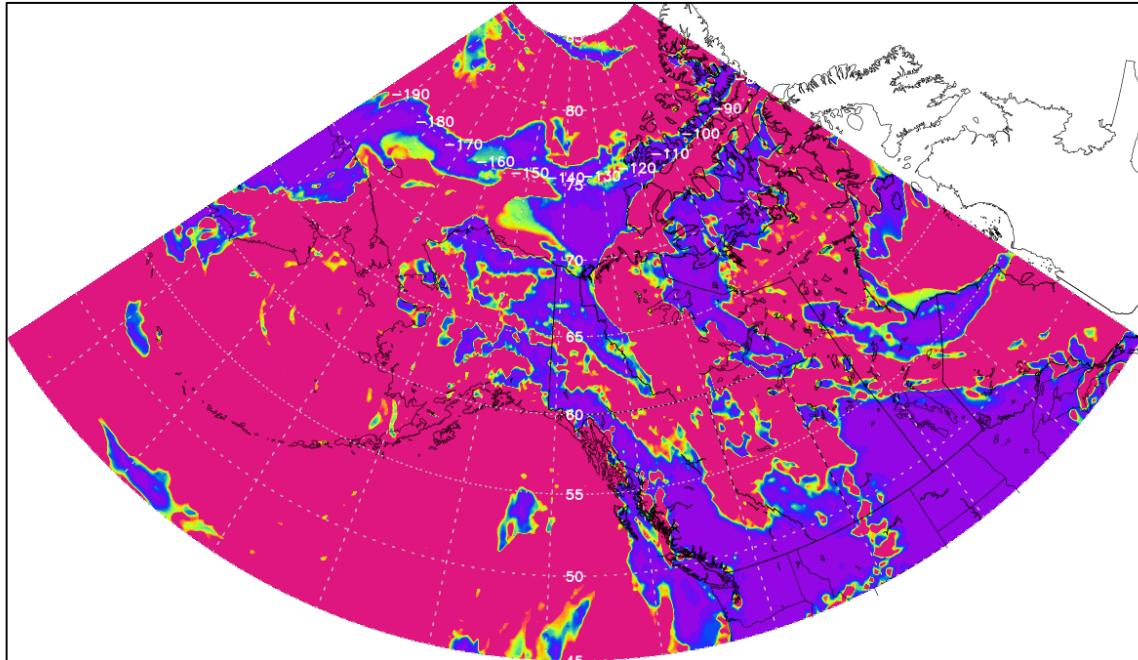
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GEOS Low Cloud Optical Depth
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Valid time 26 JUN. 18z



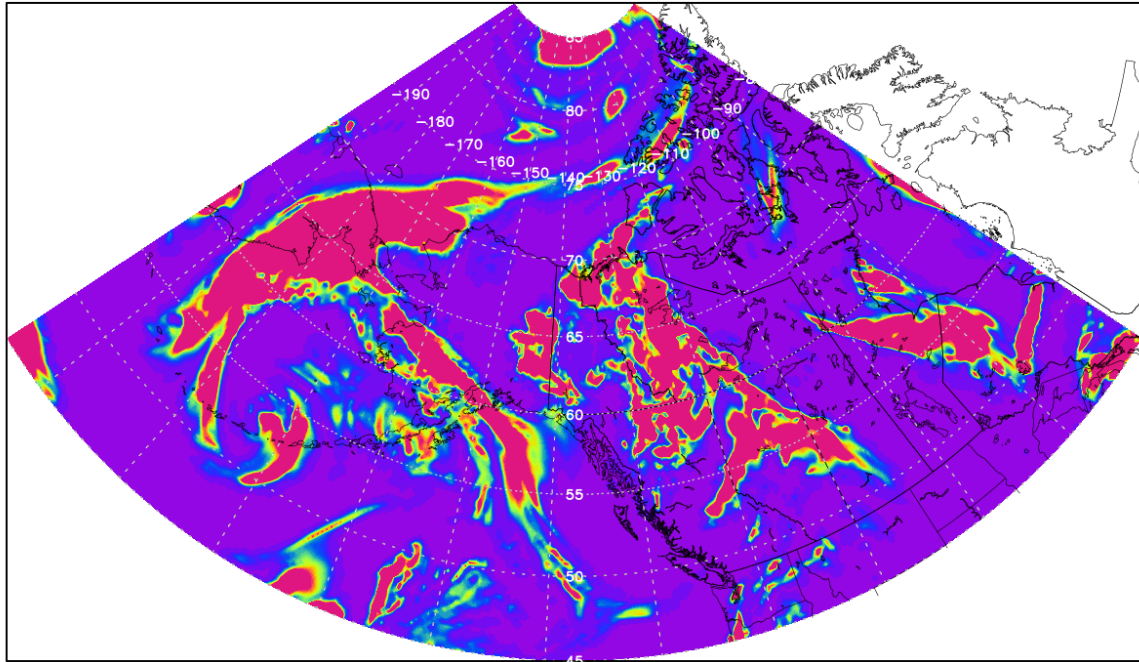
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GEOS Low Cloud Optical Depth
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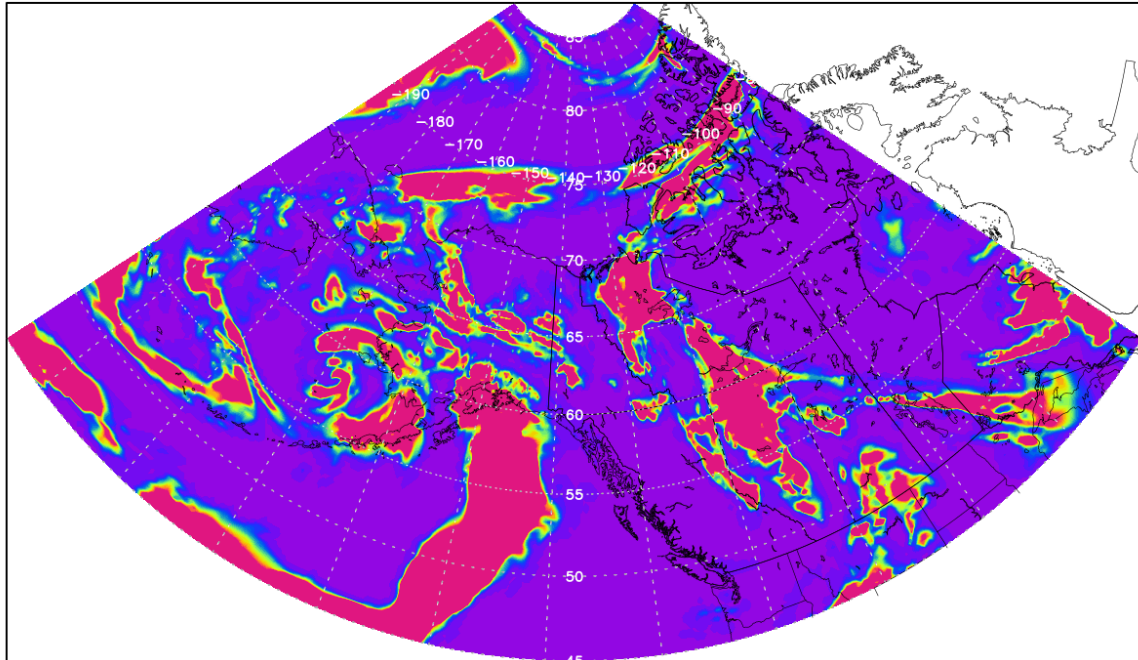
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GEOS Mid Cloud Optical Depth
Initial time 25 JUN. 00z
Valid time 26 JUN. 18z



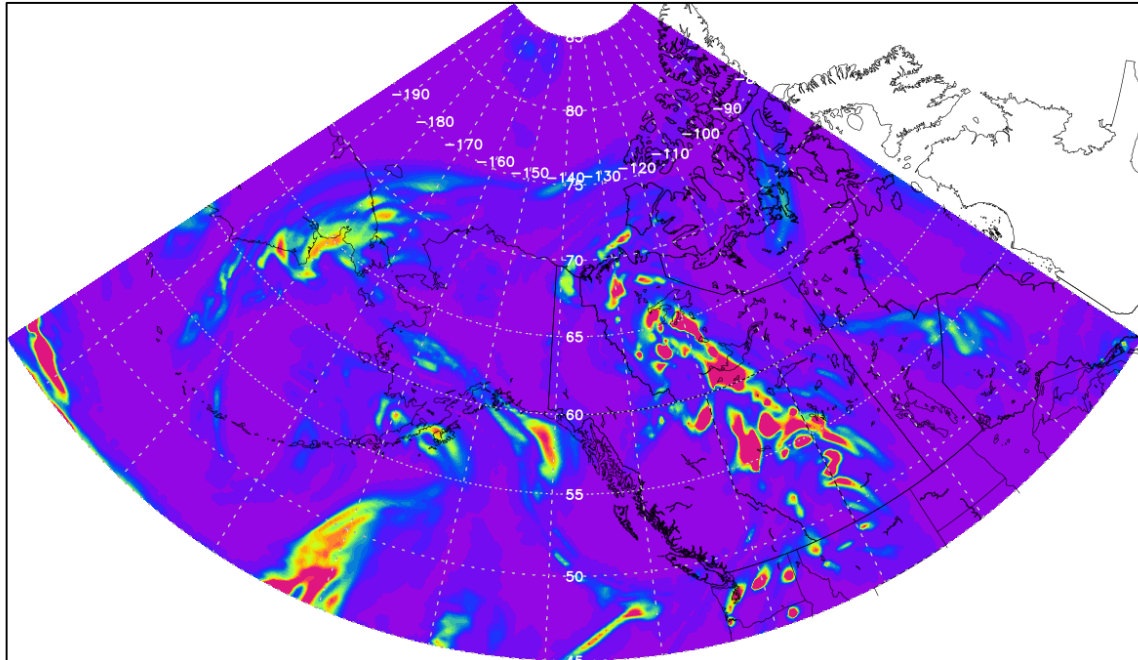
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GEOS Mid Cloud Optical Depth
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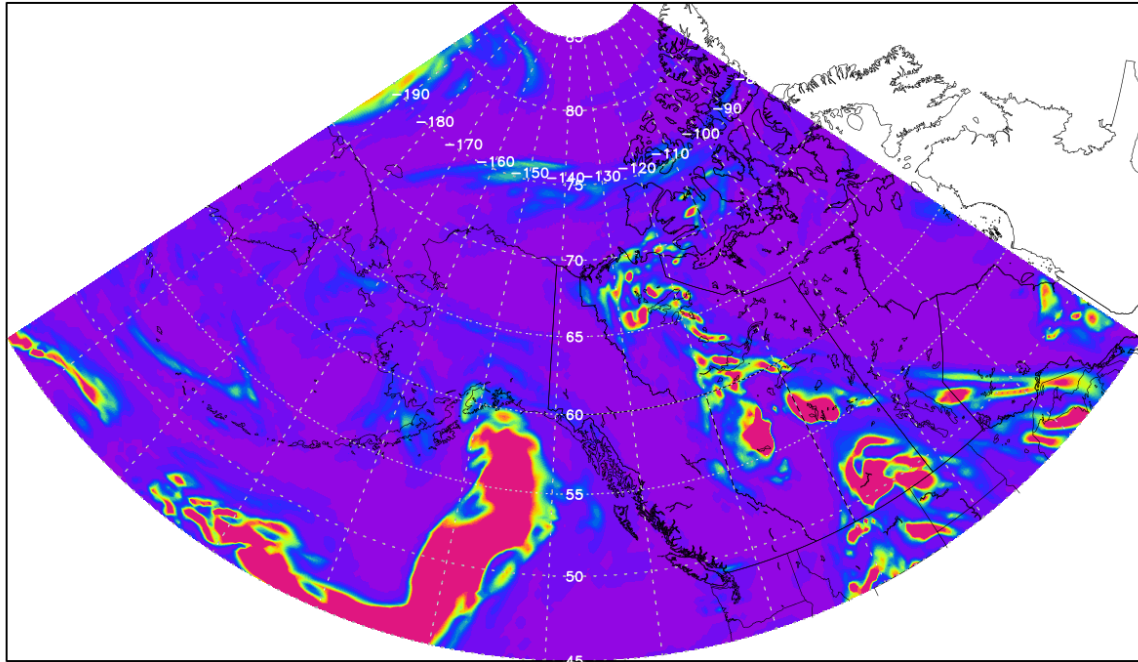
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GEOS High Cloud Optical Depth
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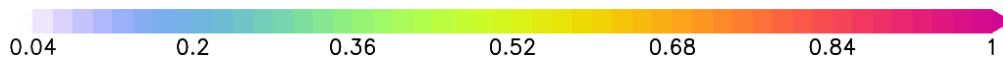
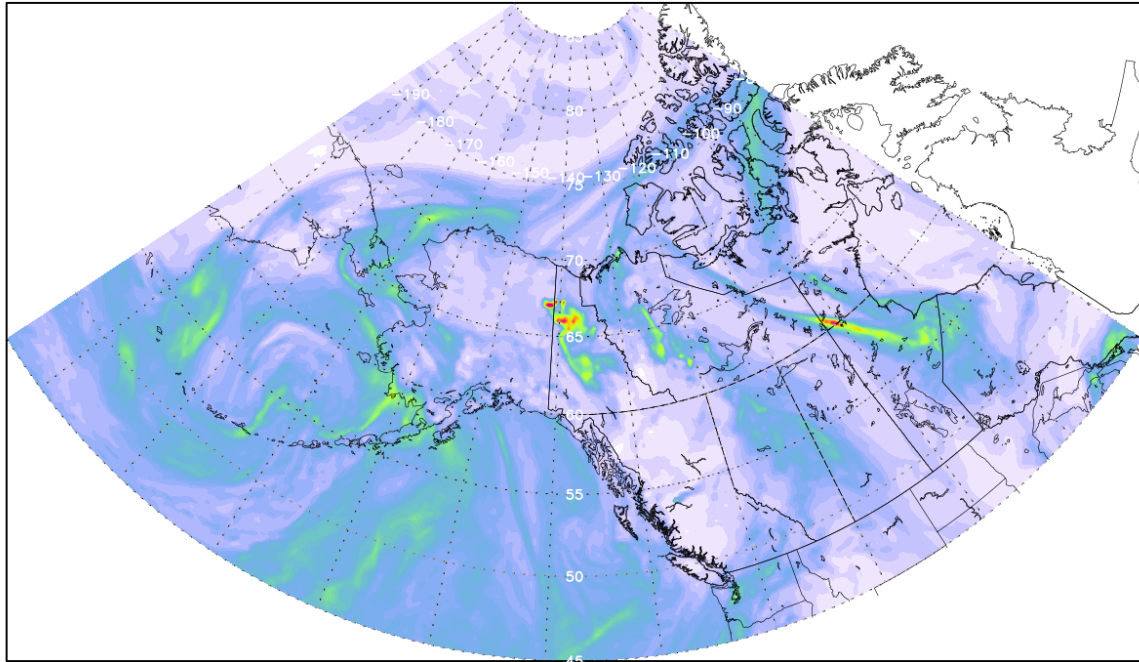
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GEOS High Cloud Optical Depth
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ABOVE_Total_AOD_IT_00z25JUN_VT_18z26JUN.png

GEOS Aerosol Optical Depth
Initial time 25 JUN. 00z
Valid time 26 JUN. 18z



ABOVE_Total_AOD_IT_00z25JUN_VT_18z27JUN.png

GEOS Aerosol Optical Depth
Initial time 25 JUN. 00z
Valid time 27 JUN. 18z

