

**ABOVE Regional Weather Briefing**

Based on the GMAO GEOS meteorology and aerosol forecast fields  
Model Initialized 00z 11 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 12 August through 2359z 12 August**

Large aerosol optical depth values can be seen stretching from northern NWT south through Great Bear Lake, through Great Slave Lake and northern AB and through the southern two thirds of BC. Western Hudson Bay near the border of MB will also have large values of aerosol optical depth. Low pressure systems in western AK and the Gulf of AK come together bringing clouds and rain which will stretch from western AK through the AK range and Kenai Peninsula south and east along southeast AK and western BC. Rain could be heavy at times. Showers and thunderstorms will be in and around PAFA though there may be a chance for a flight through Yukon Flats to PASC. Showers and thunderstorms will be passing through Old Crow, Inuvik and near Cambridge Bay.

**Day-2 Outlook****Valid 1500z 13 August through 2359z 13 August**

Smoke from fires near Ft. Yukon, Old Crow and Dawson are concentrated across interior Alaska and through Yukon Flats and areas north of PAFA. Large aerosol optical depth is also seen in southern BC, through much of AB and NWT including the Mackenzie River Valley, Great Slave and Great Bear Lakes, and from NWT to north of Cambridge Bay. PAFA area starts the day with clouds and heavy rain and stays in the cloud and rain much of the day. Other areas with heavy rain include western central AB, southern BC, along the YKT NWT border near and south of Ft. McPherson and near the Mackenzie Mountains.

**Day-3 Outlook****Valid 1500z 14 August through 2359z 14 August**

Moderate to large values of aerosol optical depth stretch across northern Nunavut and northern NWT, through the Mackenzie River Valley area over Great Slave Lake and Lake Athabasca and south through the western half of SK including just west of Saskatoon. Fires in southeastern BC continue to produce large values of aerosol optical depth in that region and western AB. Low pressure center has moved eastward to central NWT. Heavy Rain in the shape of a large comma can be seen from Tok through PAFA north through Yukon Flats and Old Crow, through Inuvik and south just west of the Mackenzie River west of Great Slave Lake and south

along the western border of SK.

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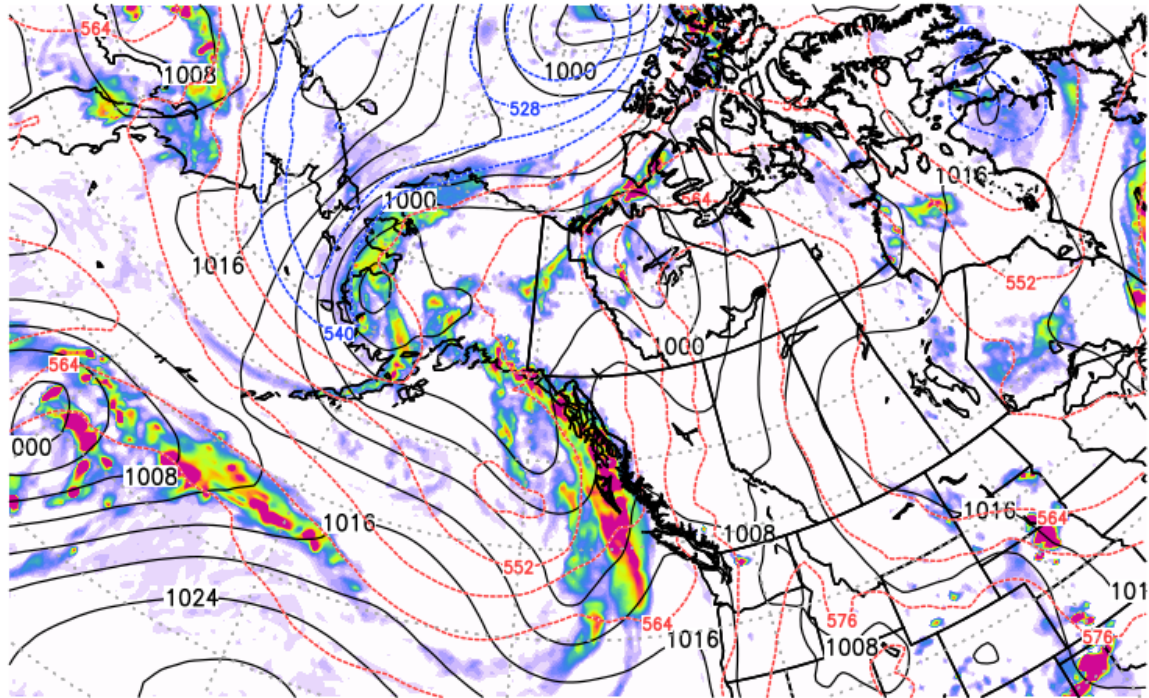
Global Modeling and Assimilation Office  
NASA Goddard Space Flight Center  
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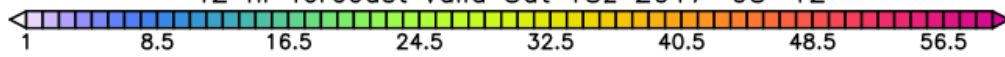
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-11

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



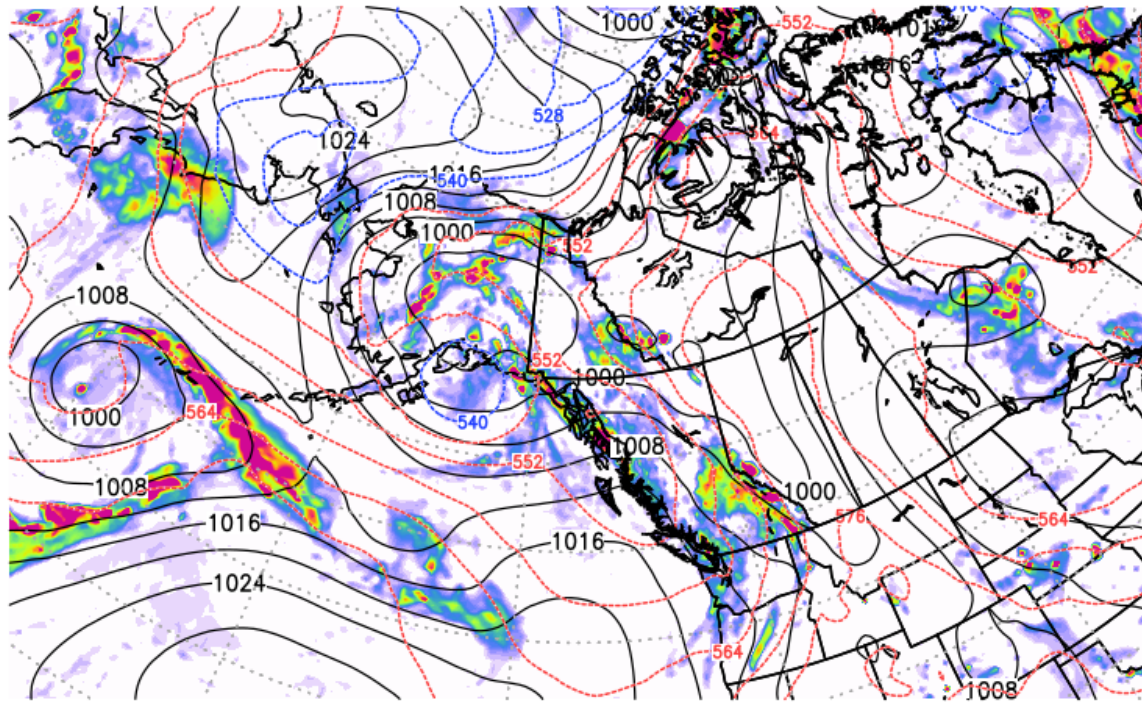
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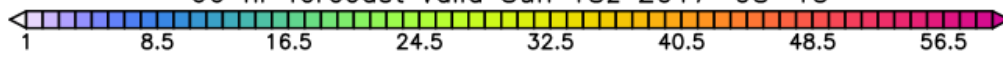
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-11

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



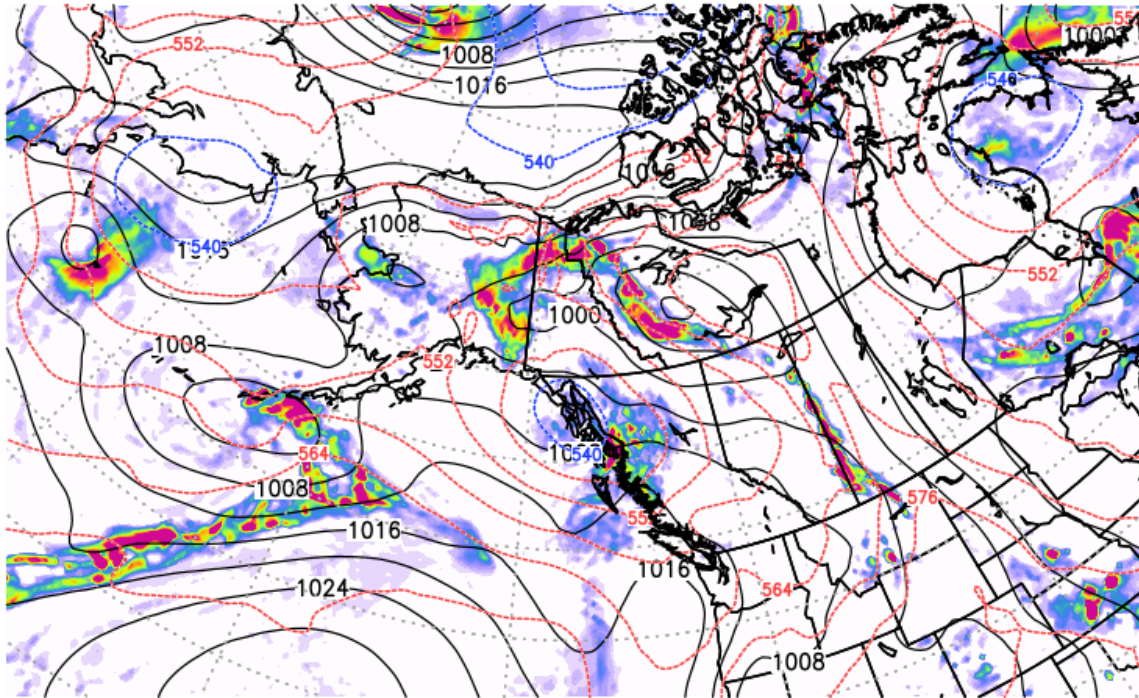
66 hr forecast valid Sun 18z 2017-08-13



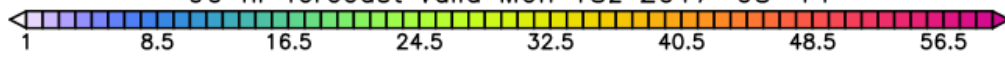
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-11

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



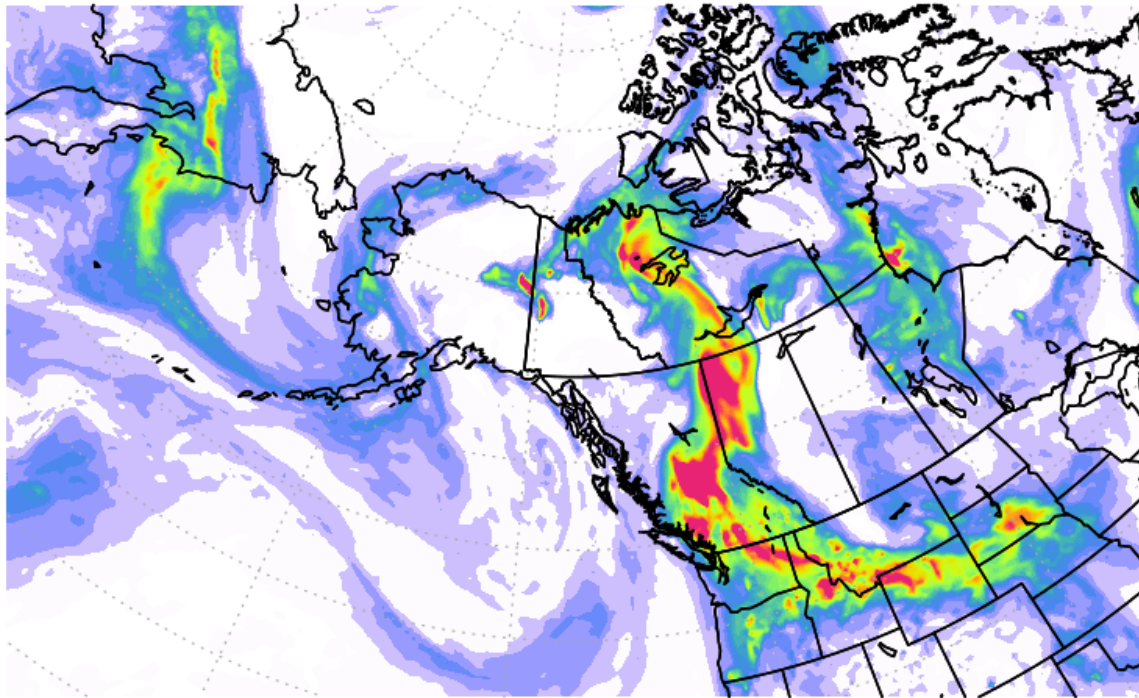
90 hr forecast valid Mon 18z 2017-08-14



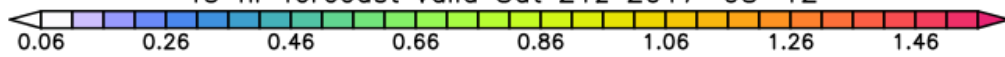
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-11

Total Aerosol Optical Thickness



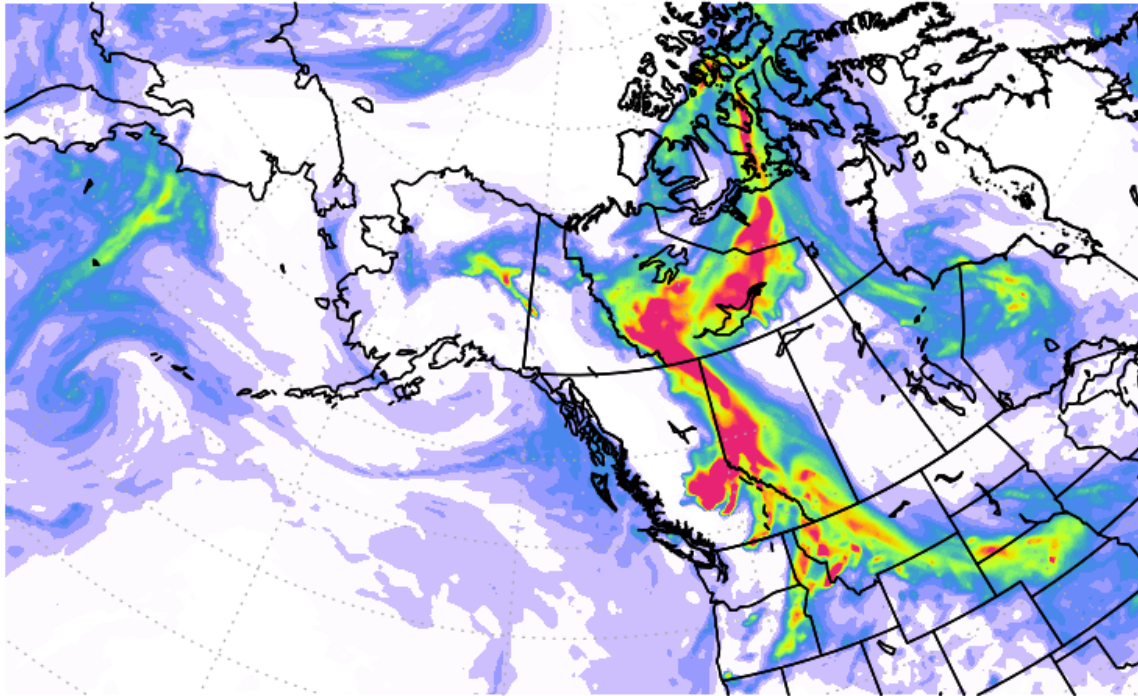
45 hr forecast valid Sat 21z 2017-08-12



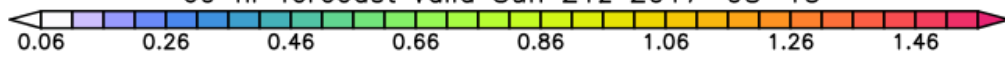
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-11

Total Aerosol Optical Thickness

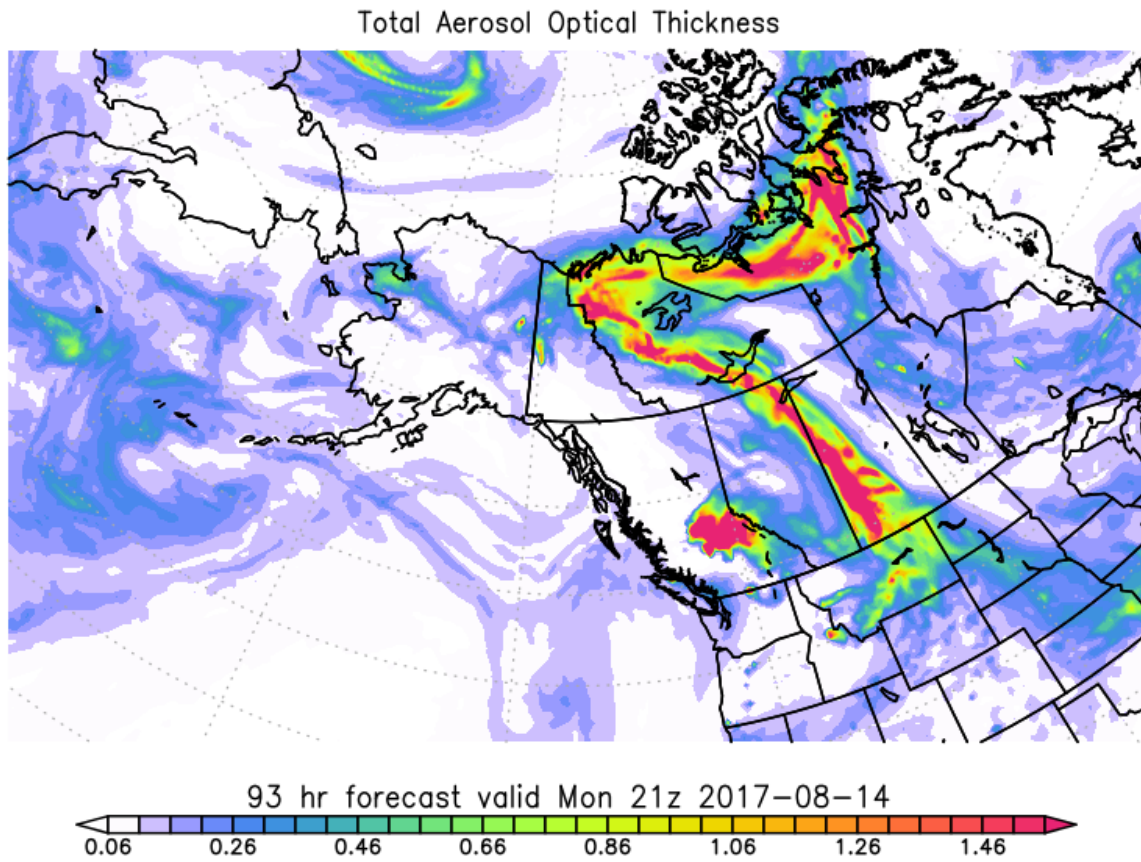


69 hr forecast valid Sun 21z 2017-08-13



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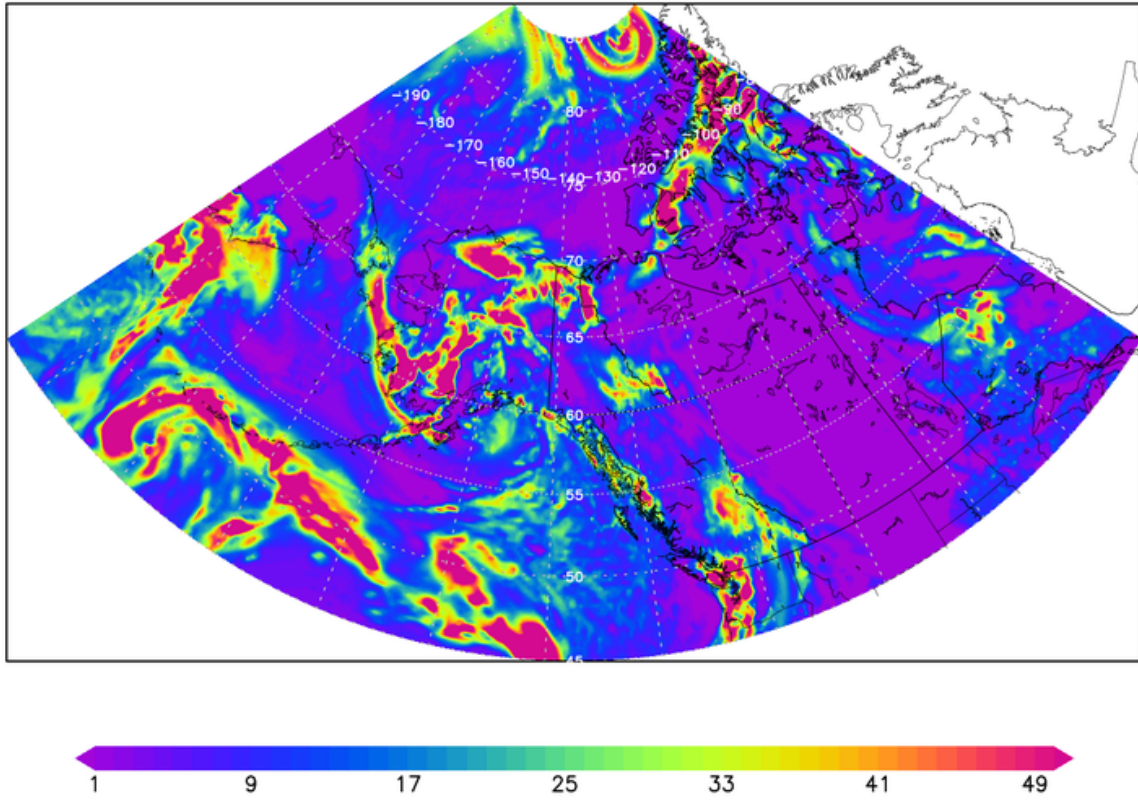
NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-11



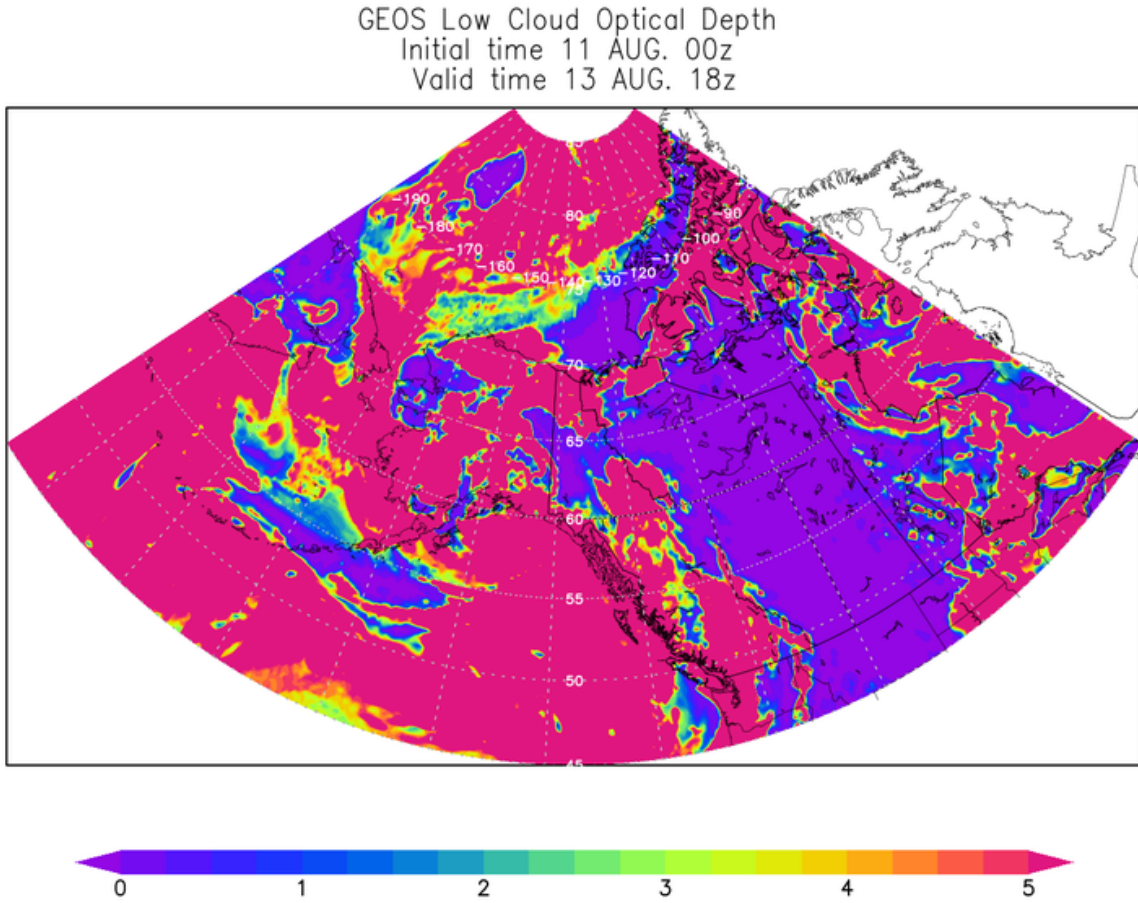


ABOVE\_Total\_Cloud\_IT\_00z11AUG\_VT\_18z13AUG.png

GEOS Total Cloud Optical Depth  
Initial time 11 AUG. 00z  
Valid time 13 AUG. 18z

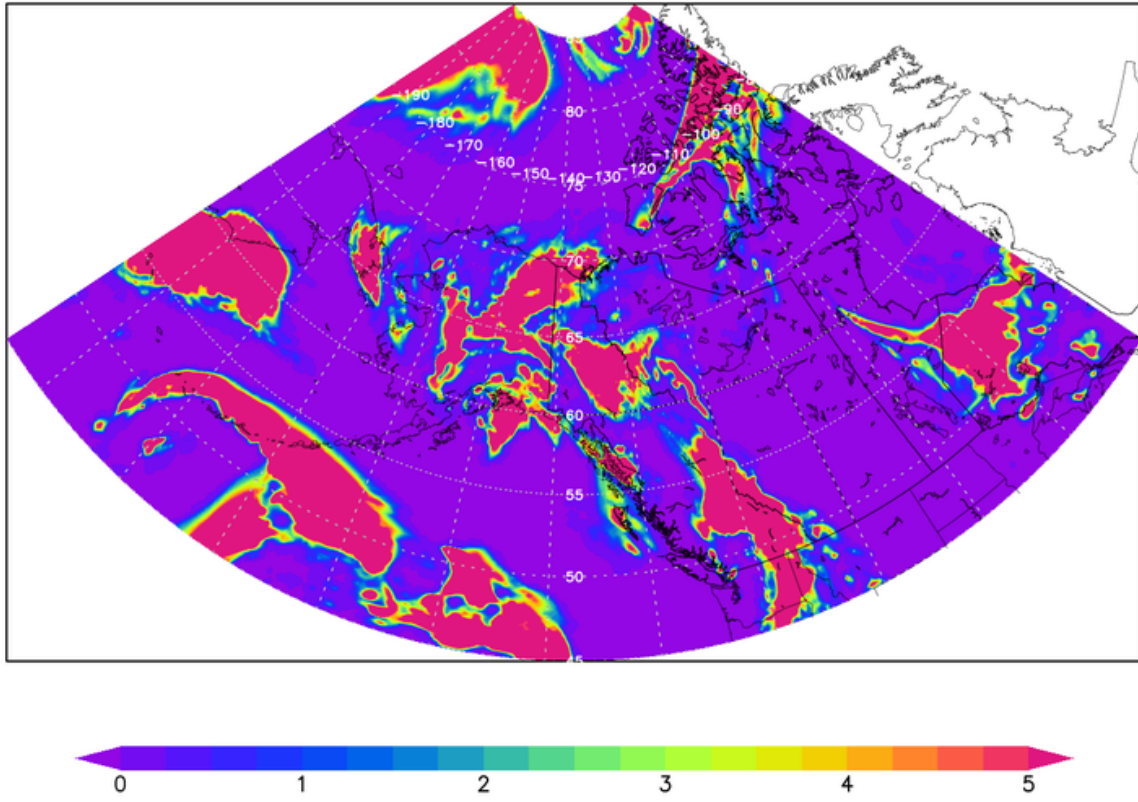


ABOVE\_Low\_Cloud\_Optical\_Depth\_IT\_00z11AUG\_VT\_18z13AUG.png



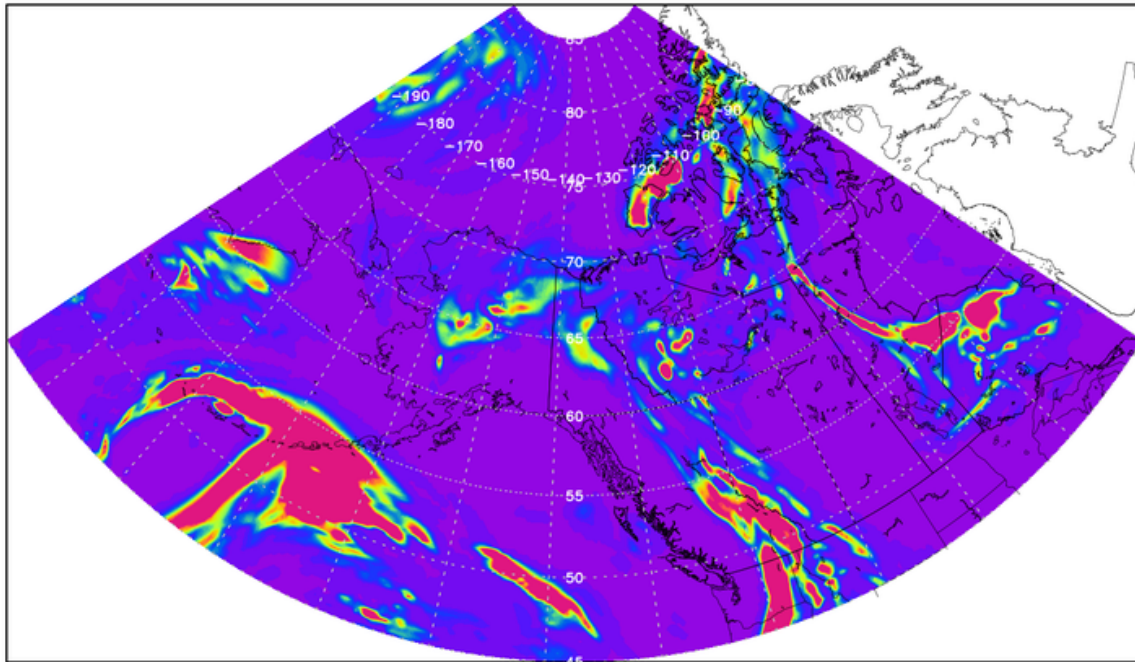
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GEOS Mid Cloud Optical Depth  
Initial time 11 AUG. 00z  
Valid time 13 AUG. 18z



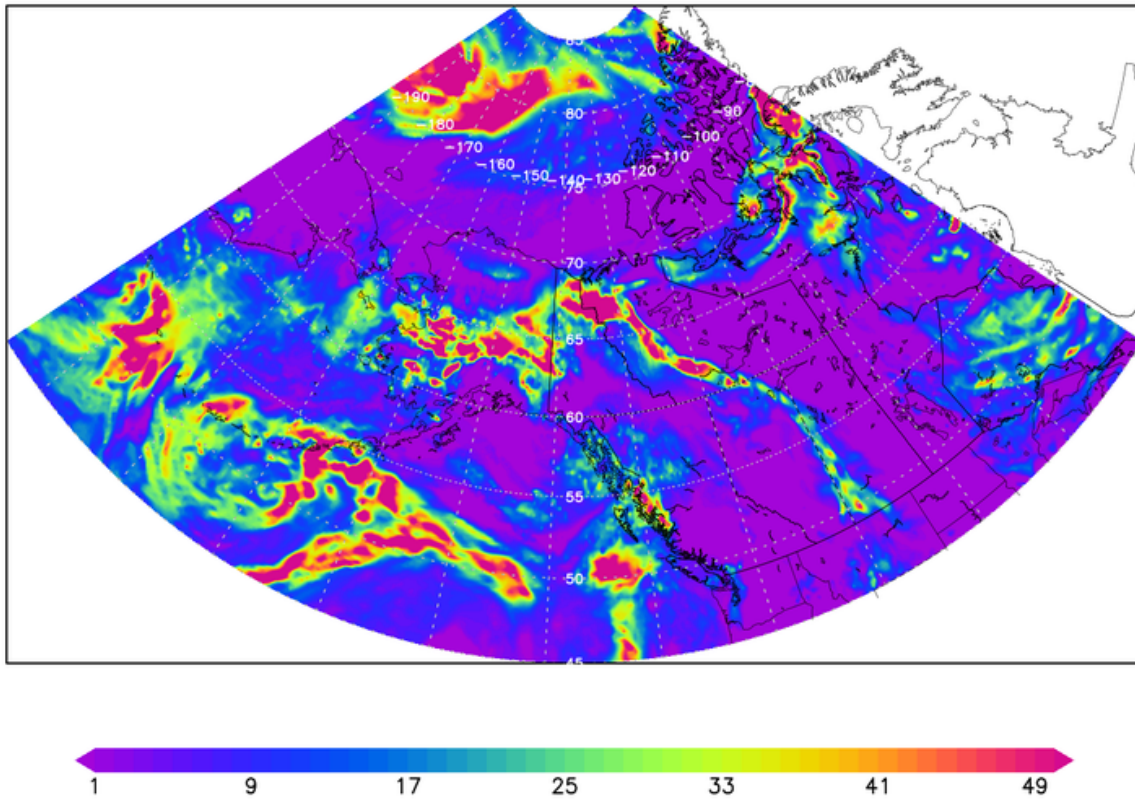
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GEOS High Cloud Optical Depth  
Initial time 11 AUG. 00z  
Valid time 13 AUG. 18z



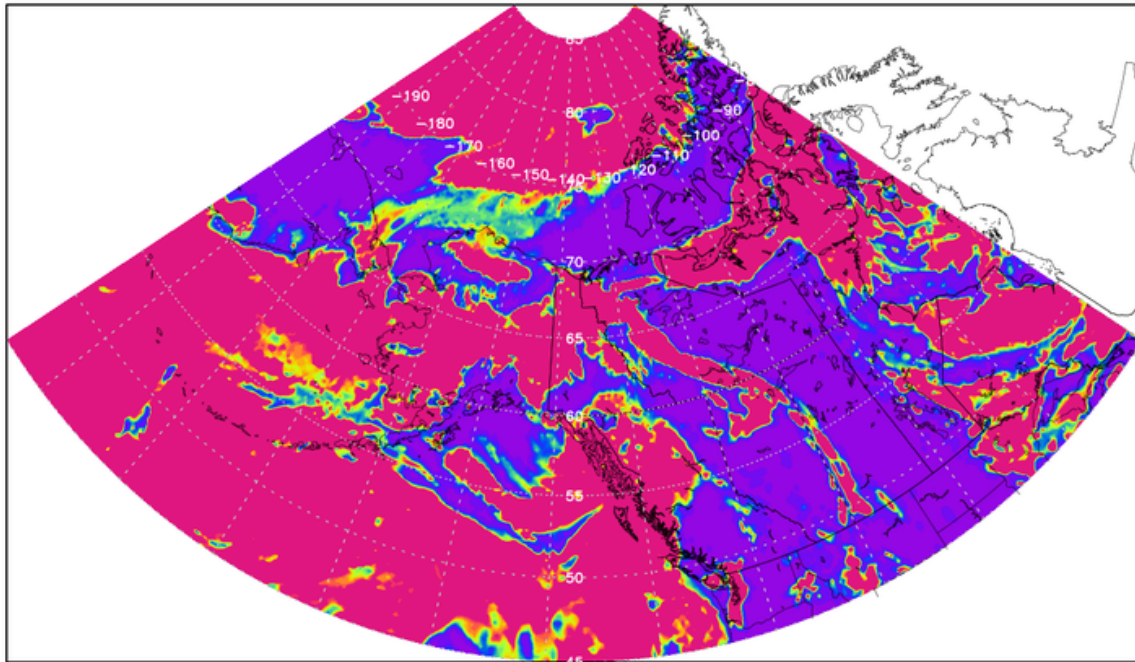
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GEOS Total Cloud Optical Depth  
Initial time 11 AUG. 00z  
Valid time 14 AUG. 18z



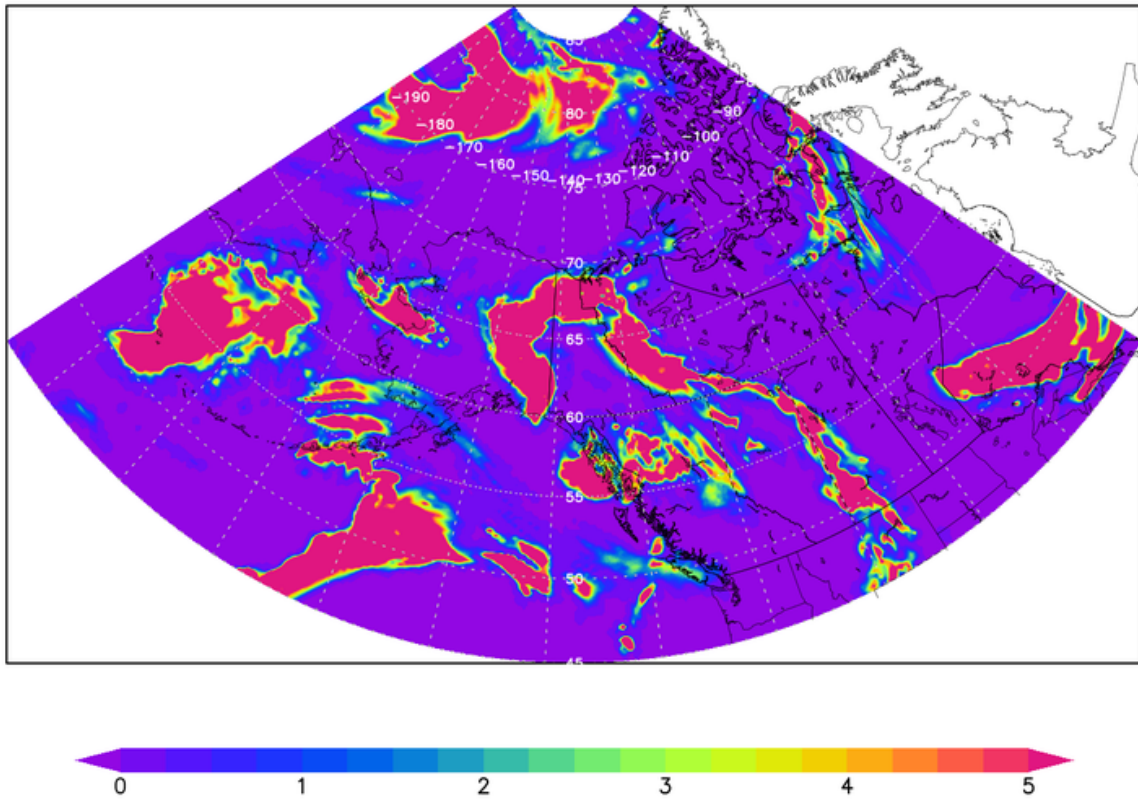
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GEOS Low Cloud Optical Depth  
Initial time 11 AUG. 00z  
Valid time 14 AUG. 18z



ABOVE\_Mid\_Cloud\_Optical\_Depth\_IT\_00z11AUG\_VT\_18z14AUG.png

GEOS Mid Cloud Optical Depth  
Initial time 11 AUG. 00z  
Valid time 14 AUG. 18z



ABOVE\_High\_Cloud\_Optical\_Depth\_IT\_00z11AUG\_VT\_18z14AUG.png

GEOS High Cloud Optical Depth  
Initial time 11 AUG. 00z  
Valid time 14 AUG. 18z

