

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 13 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 14 August through 2359z 14 August**

On Monday, a low pressure trough will be stretched across central Alaska, into the Canadian Yukon Provinces and then trail down through the central portions of AB and SK. This will be the axis for which poor weather conditions will be most likely. More specifically, from PAFA northward over the Brooks Range and North Slope looks to have multi-layer clouds and precipitation, and then running down the border between YKT and NWT, and finally trailing down north-central AB and central SK.

Yellowknife - Fort McMurray - Saskatoon: Mainly clear skies Monday for Yellowknife especially before 21z, but moderate smoke haze likely from local NWT fires as well as smoke being advected from both major BC fires. Fort McMurray and Saskatoon run higher chances of cloud cover and precipitation with the low pressure trough draped in the vicinity.

East Trout Lake area: May be an opportunity for flight earlier in the day than later as both clouds and smoke should stay clear of this area between 14-18z with increasing amounts of both restriction after that time

PAFA/Delta Junction: Pretty soaked in all day with clouds/rain/fog. Heavy rainfall or thunder is not anticipated at PAFA, however.

Day-2 Outlook**Valid 1500z 15 August through 2359z 15 August**

Not a great deal of change in the large-scale pattern Tuesday. The elongated trough over Alaska and Yukon moves slightly north.

Yellowknife - Fort McMurray - Saskatoon: Morning showers and thunderstorms for Yellowknife, then weather improving during the afternoon hours. Same with smoke, Yellowknife will see

heavy morning smoke haze but improving visibility in the afternoon with the least aerosol found just west of Yellowknife. Further south towards Fort McMurray there will be partly cloudy skies with afternoon showers possible. Light to moderate smoke haze there. Saskatoon will be mostly sunny, also with light to at times moderate smoke haze.

East Trout Lake area: Variably cloudy with a better chance of showers and thunderstorms. Moderate smoke haze.

PAFA/Delta Junction: Continued generally overcast with shower chances. No heavy precipitation or thunder anticipated here.

Day-3 Outlook

Valid 1500z 16 August through 2359z 16 August

Improving weather for PAFA/Delta Junction. A low pressure center will be found over Inuvik with another weaker low over northern SK.

PAFA/Delta Junction: Partly cloudy, no smoke. A scattered shower possible. Near zero chance of heavy rainfall.

Yellowknife: Mostly sunny, smoke clears out. Fort McMurray: Mostly sunny, light smoke haze.

Saskatoon: Good weather but moderate to at times heavy smoke haze from BC fires. East Trout

Lake: Partly cloudy, good visibility with light smoke haze or less.

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Gary Partyka

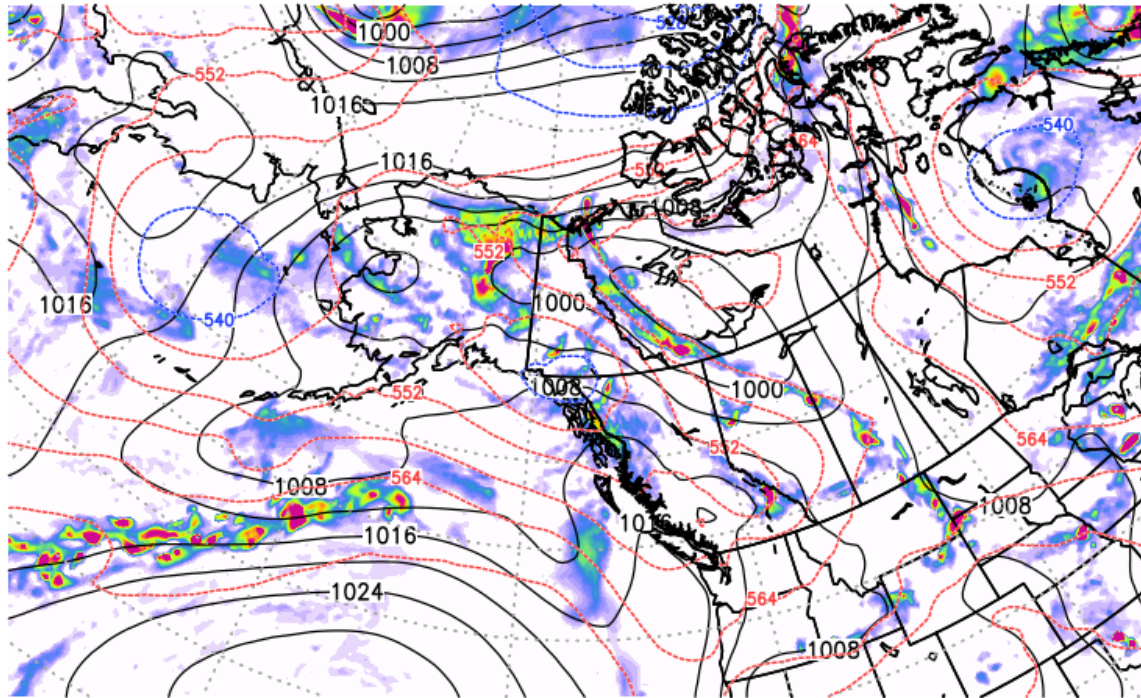
GMAO at NASA's Goddard Space Flight Center

Greenbelt, MD

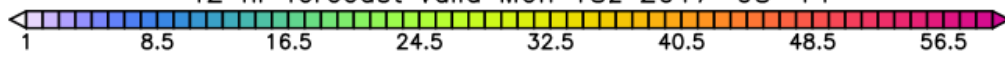
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-13

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

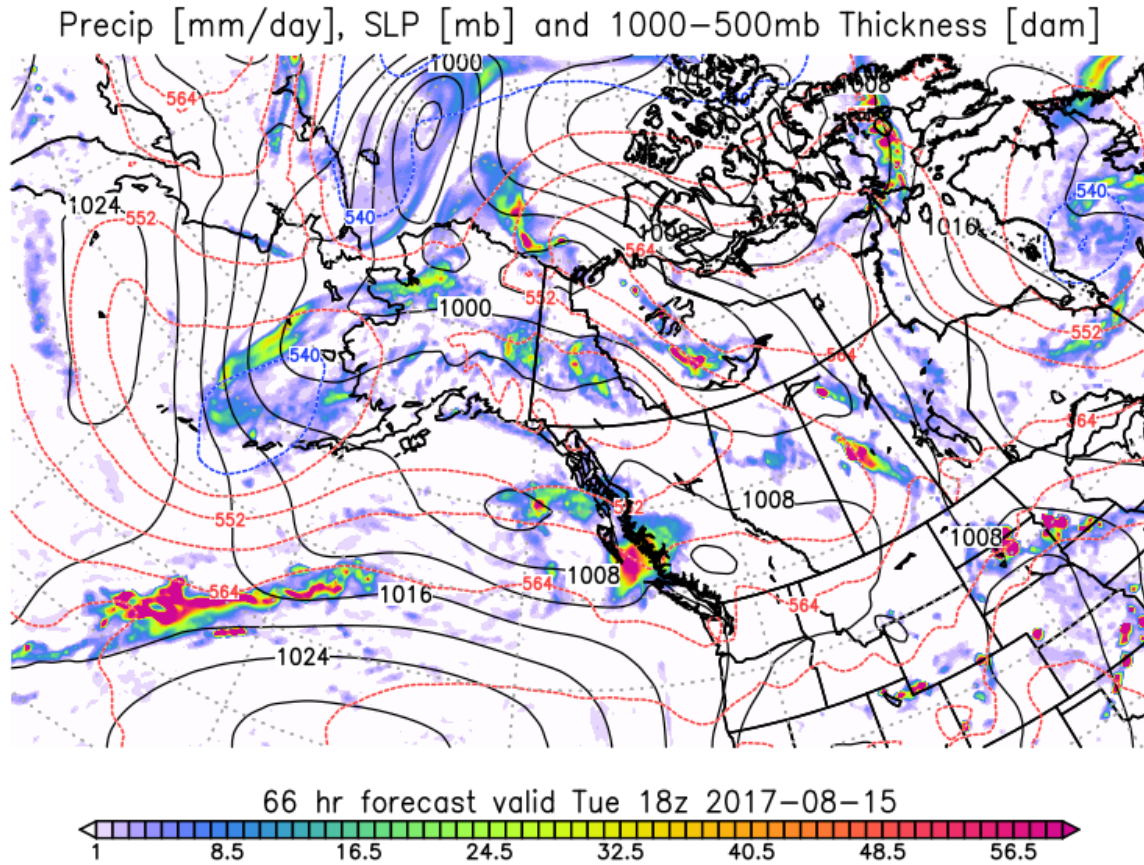


42 hr forecast valid Mon 18z 2017-08-14



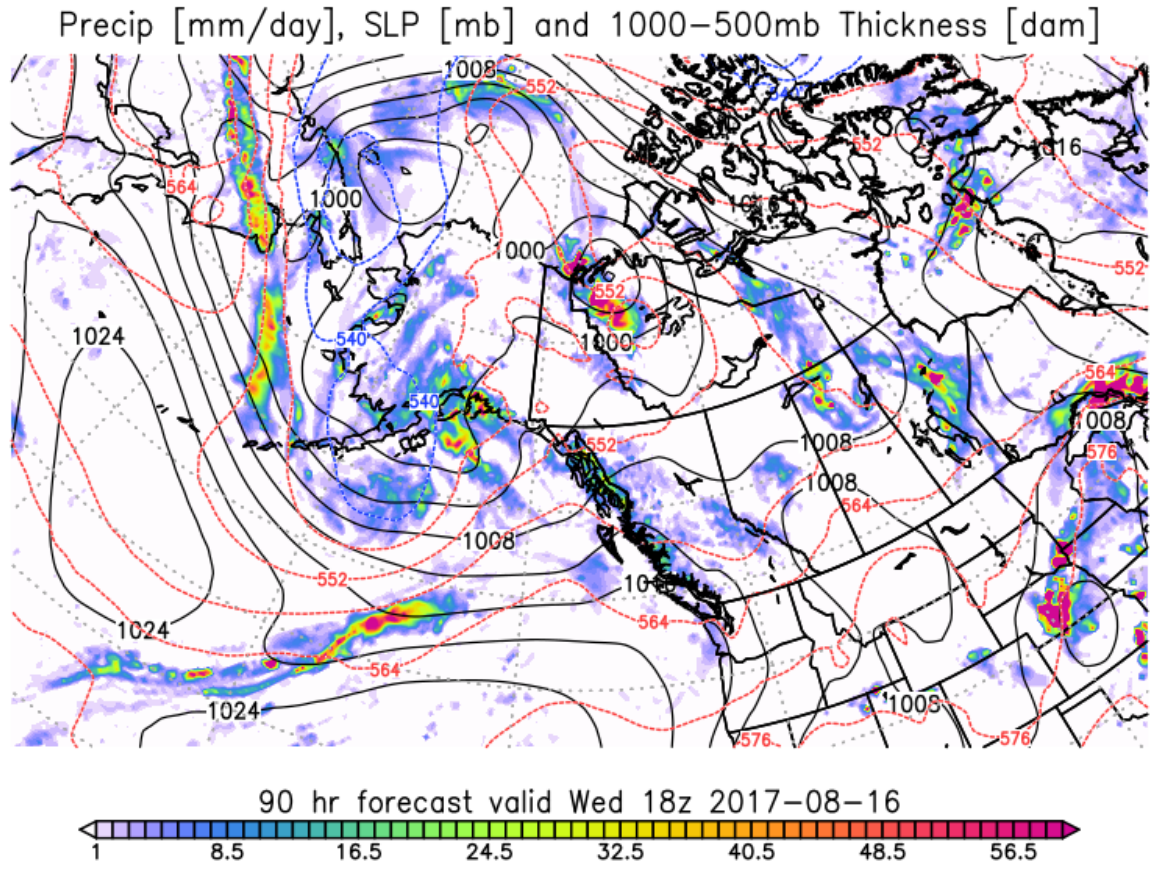
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-13



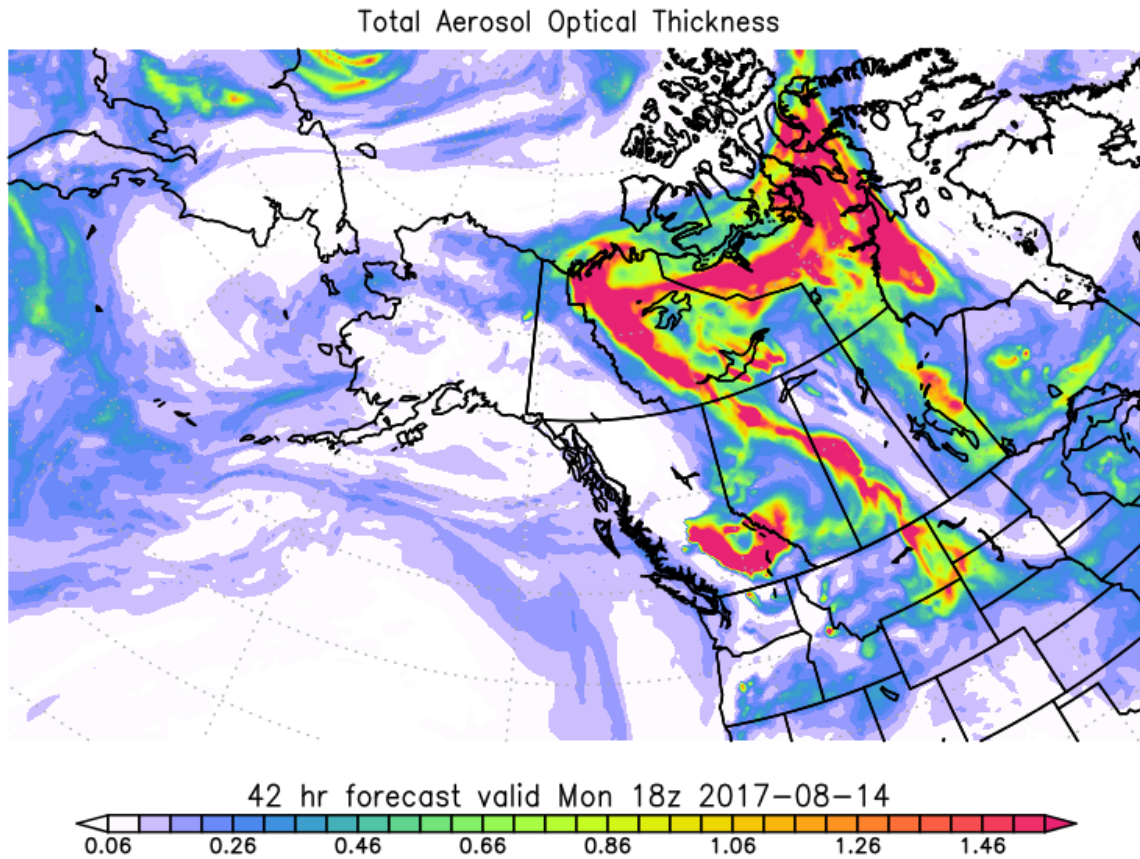
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-13



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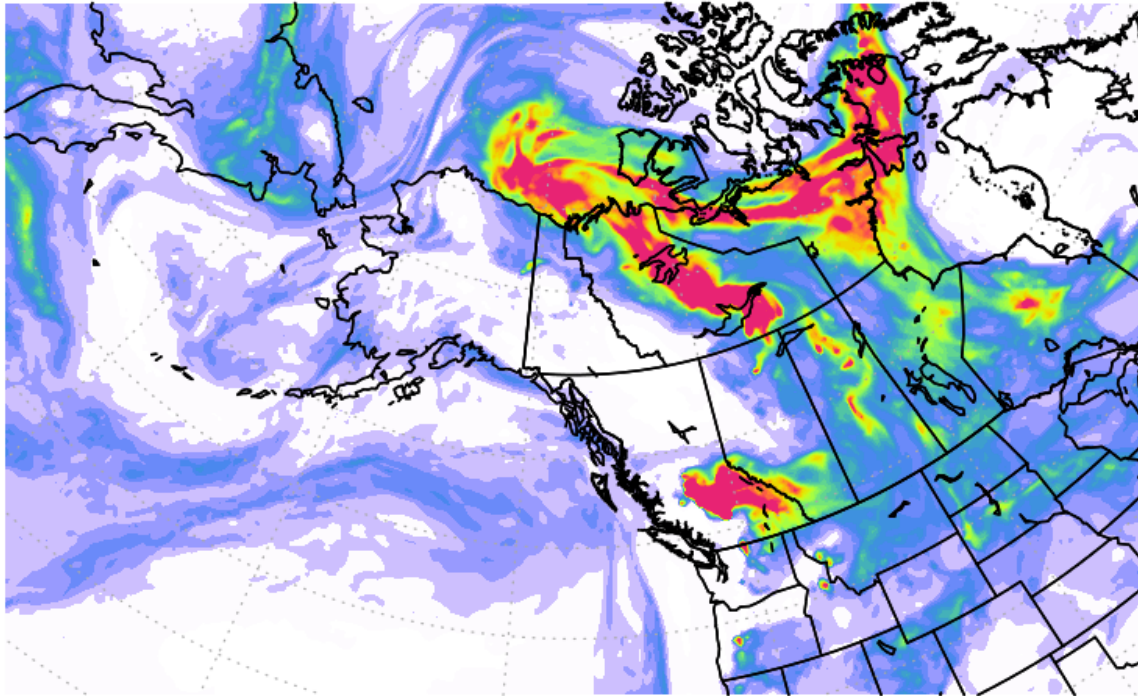
NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-13



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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-13

Total Aerosol Optical Thickness

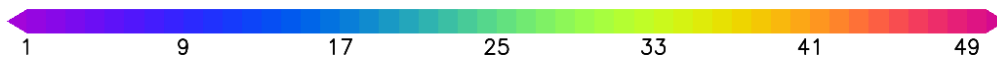
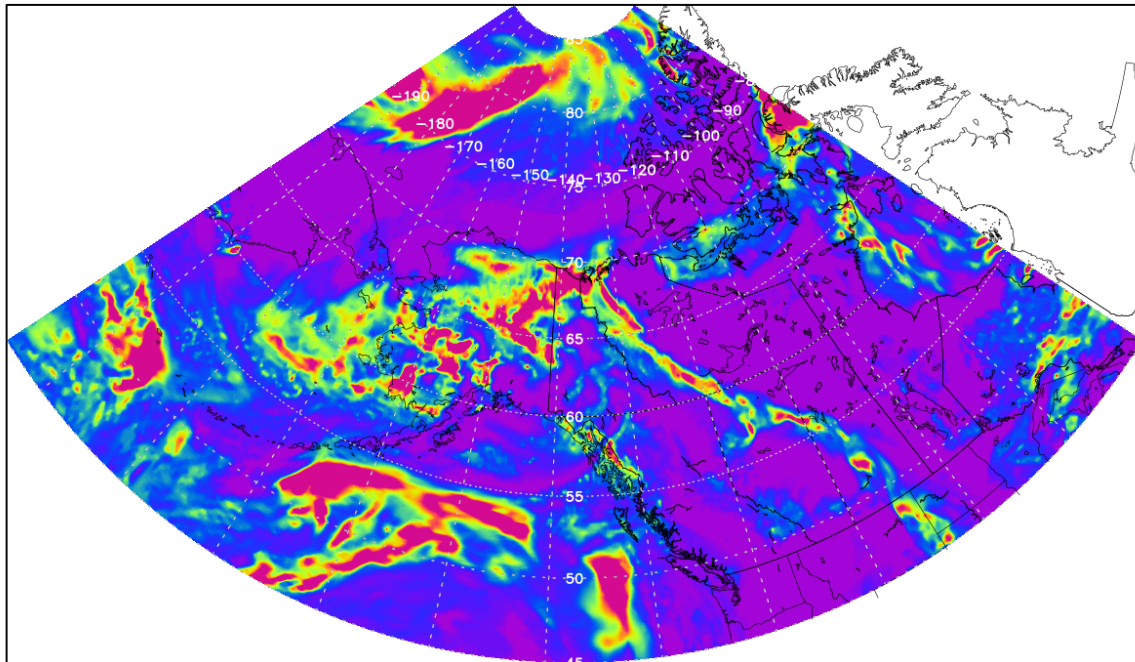


66 hr forecast valid Tue 18z 2017-08-15



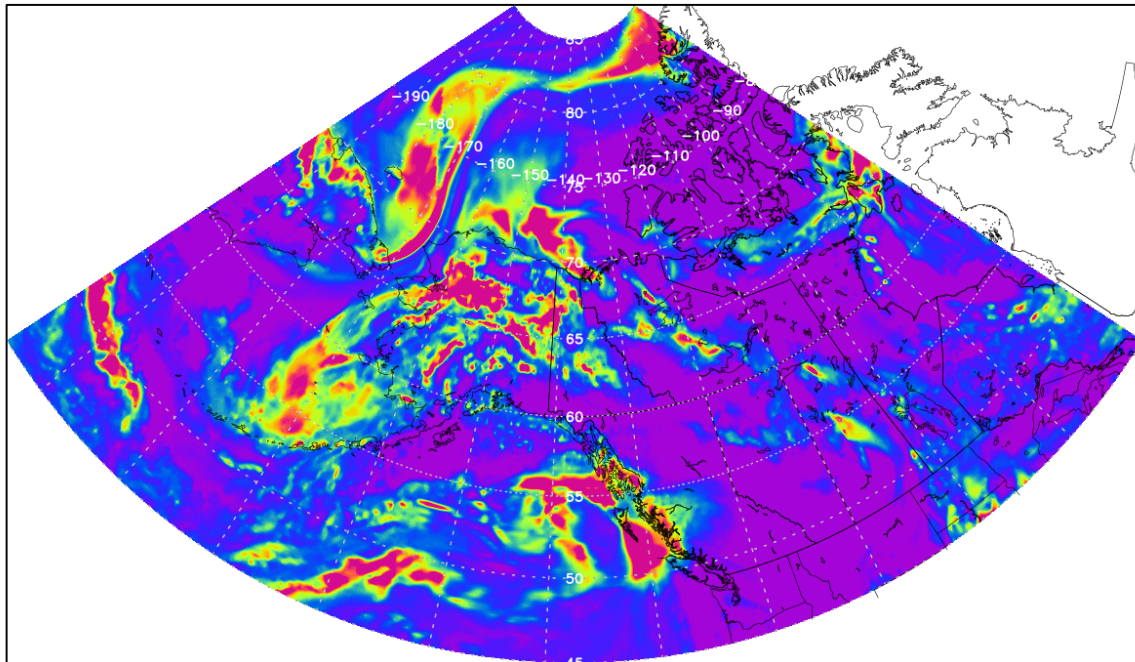
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GEOS Total Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 14 AUG. 18z



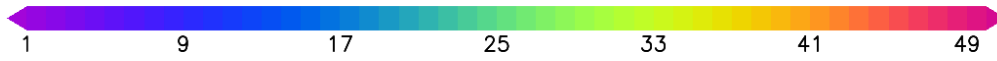
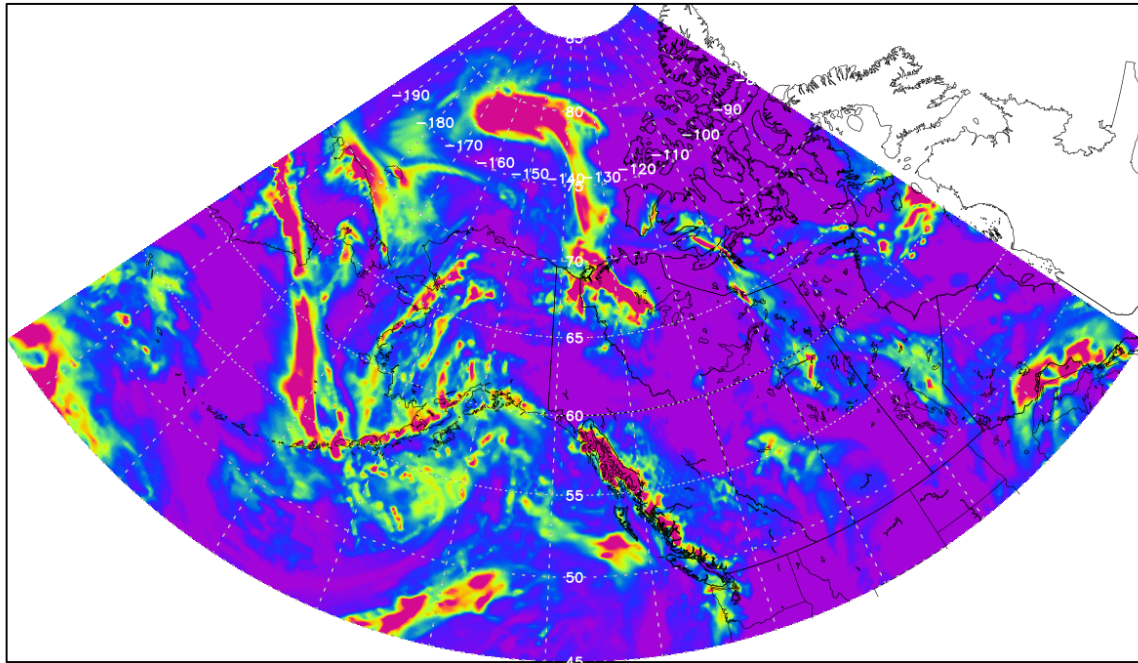
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GEOS Total Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 15 AUG. 18z



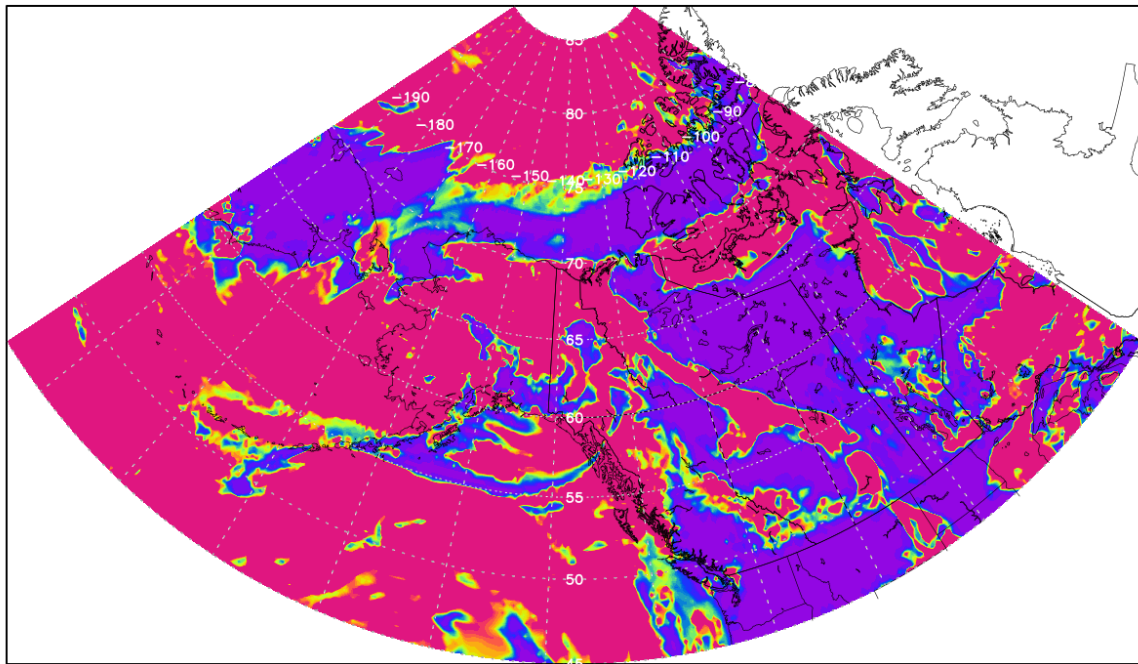
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GEOS Total Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 16 AUG. 18z



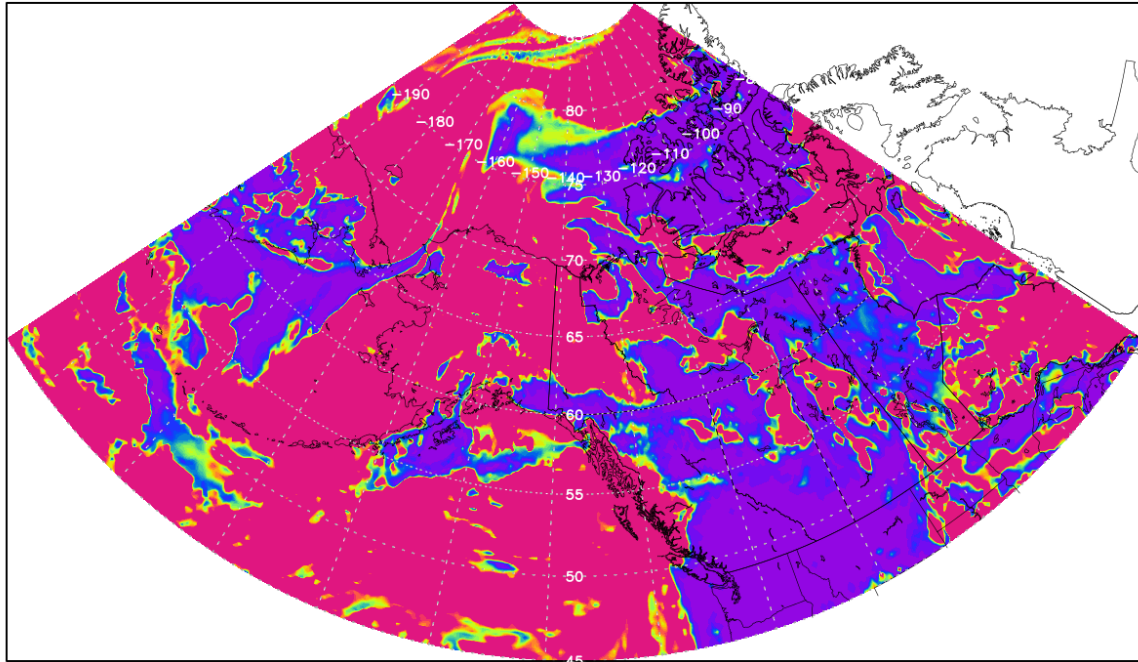
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GEOS Low Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 14 AUG. 18z



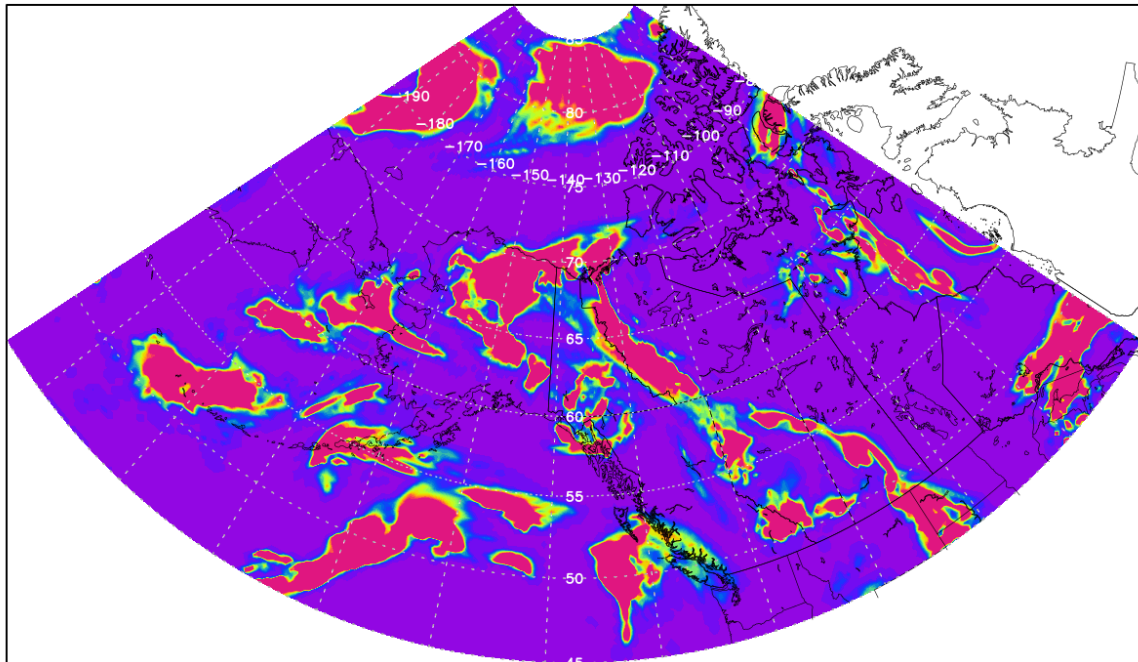
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GEOS Low Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 15 AUG. 18z



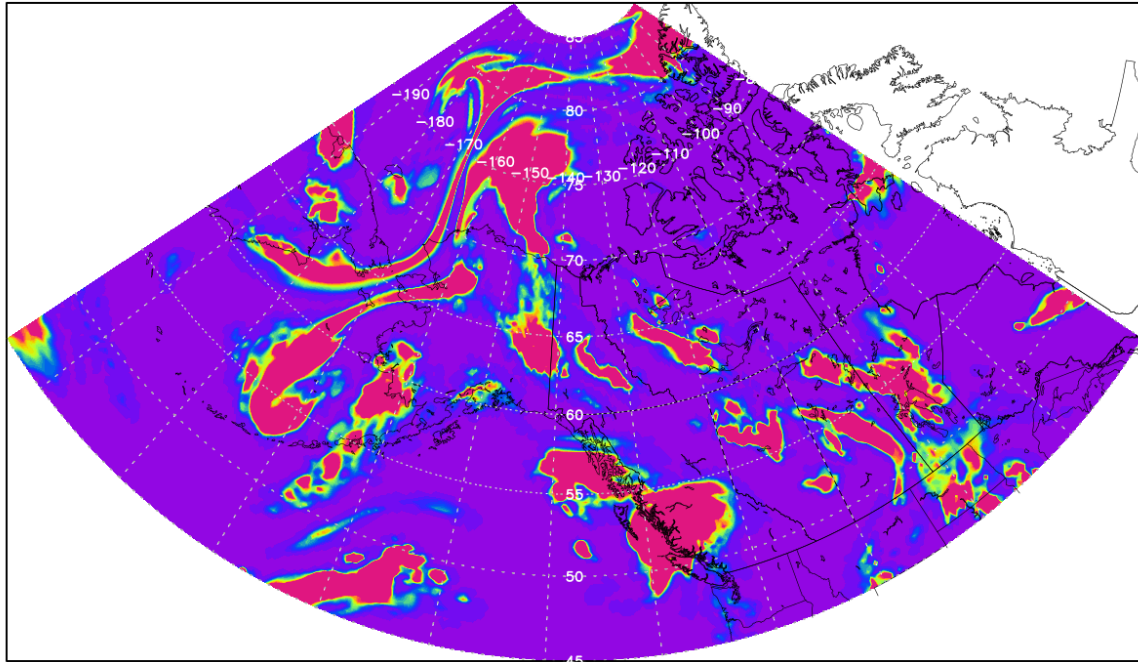
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GEOS Mid Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 14 AUG. 18z



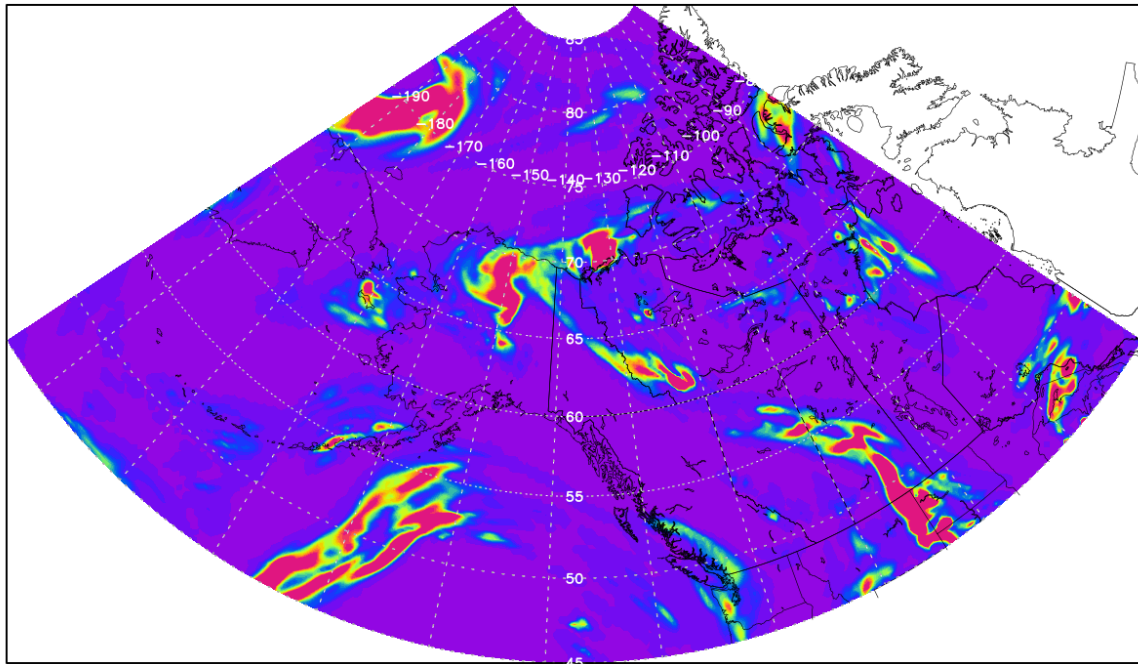
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GEOS Mid Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 15 AUG. 18z



ABOVE_High_Cloud_Optical_Depth_IT_00z13AUG_VT_18z14AUG.png

GEOS High Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 14 AUG. 18z



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GEOS High Cloud Optical Depth
Initial time 13 AUG. 00z
Valid time 15 AUG. 18z

