

**ABOVE Regional Weather Briefing**

Based on the GMAO GEOS meteorology and aerosol forecast fields  
Model Initialized 00z 16 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 17 August through 2359z 17 August**

A weak weather system will race across the southern portions of AB and SK early in the day on Thursday and should be clear of the BERMS and Saskatoon vicinity after 18z. With that, mainly clear skies are expected later in the day...however a moderate amount of haze from BC fires is being indicated by the GEOS model to move across southern AB and SK. Aerosol haze will be less of an issue further north towards the PAD/L. Ath. region, but even here some varying amounts of smoke haze is possible Thursday from local AB fires.

Weather conditions for the PAD/L. Ath. vicinity should be mainly cloud-free before 21z and scattered to occasionally broken coverage from 21z on.

Over Alaska, a broad gyre of low pressure will be over the state. Model quantitative precipitation forecasts are in excellent agreement with light amounts over the PAFA/Delta Junction and Yukon Flats segments. Amounts of 0.10-0.25" are possible in any pop-up shower here. Amounts of 0.25-0.50" are possible over parts of the Seward Peninsula, mainly western half.

**Day-2 Outlook****Valid 1500z 18 August through 2359z 18 August**

A ridge of high pressure will be located over the Prairie Provinces. With that, mainly cloud-free skies. A period of broken middle or high clouds may be possible approaching the PAD/L. Ath region. Saskatoon/BERMS should be mostly sunny and no significant smoke haze expected on Friday at any site.

PAFA/Delta Junction: Any precipitation will be very light (around 0.10" or less).

Yukon Flats: Will likely remain to the south of heavier precipitation amounts expected over far northeast Alaska. Be mindful of precipitation amounts north and northeast of the Flats up to 1.00"-1.50".

Seward Peninsula: Continued mid-range precipitation chances but with amounts expected to remain light, averaging less than 0.25", isolated pockets of higher amounts possible for the far

eastern Peninsula.

**Day-3 Outlook****Valid 1500z 19 August through 2359z 19 August**

A weak trough moving through the westerlies will focus showers and thunderstorms early day Saturday in clusters across central SK including the BERMS area. This system should have moved out of the area by afternoon leaving behind mainly clear and clean skies (from about 18z on).

Some late day broken to overcast conditions are possible over PAD/L. Ath. vicinity as a moist northwesterly flow becomes established. Best flying weather for clear skies before 21z Saturday. Generally clean atmosphere.

A weak pressure pattern over the state of Alaska. No large-scale forcing indicated to be strong enough to produce widespread heavy precipitation threats over Alaska. Favored areas of topography and upslope flow may see a pop-up shower or thunderstorm. The Seward Peninsula continues to carry a chance of rain with mainly light amounts of under 0.50".

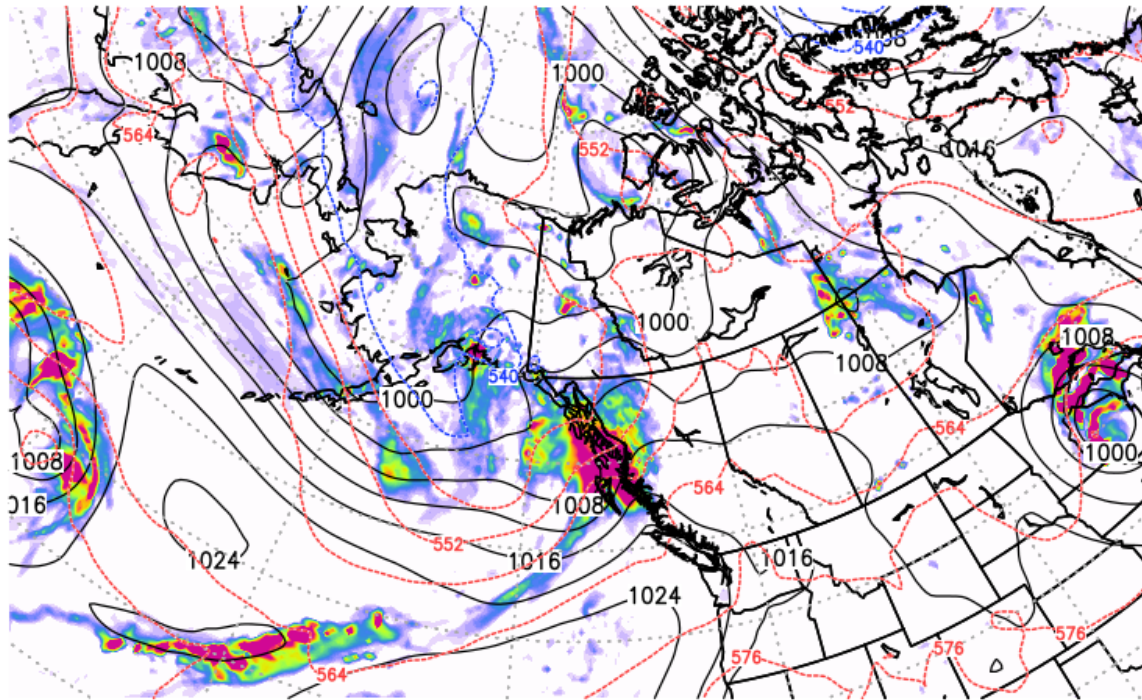
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Gary Partyka  
GMAO at NASA's Goddard Space Flight Center  
Greenbelt, MD

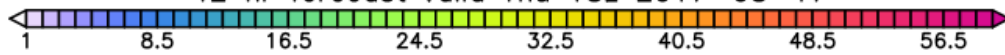
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-16

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

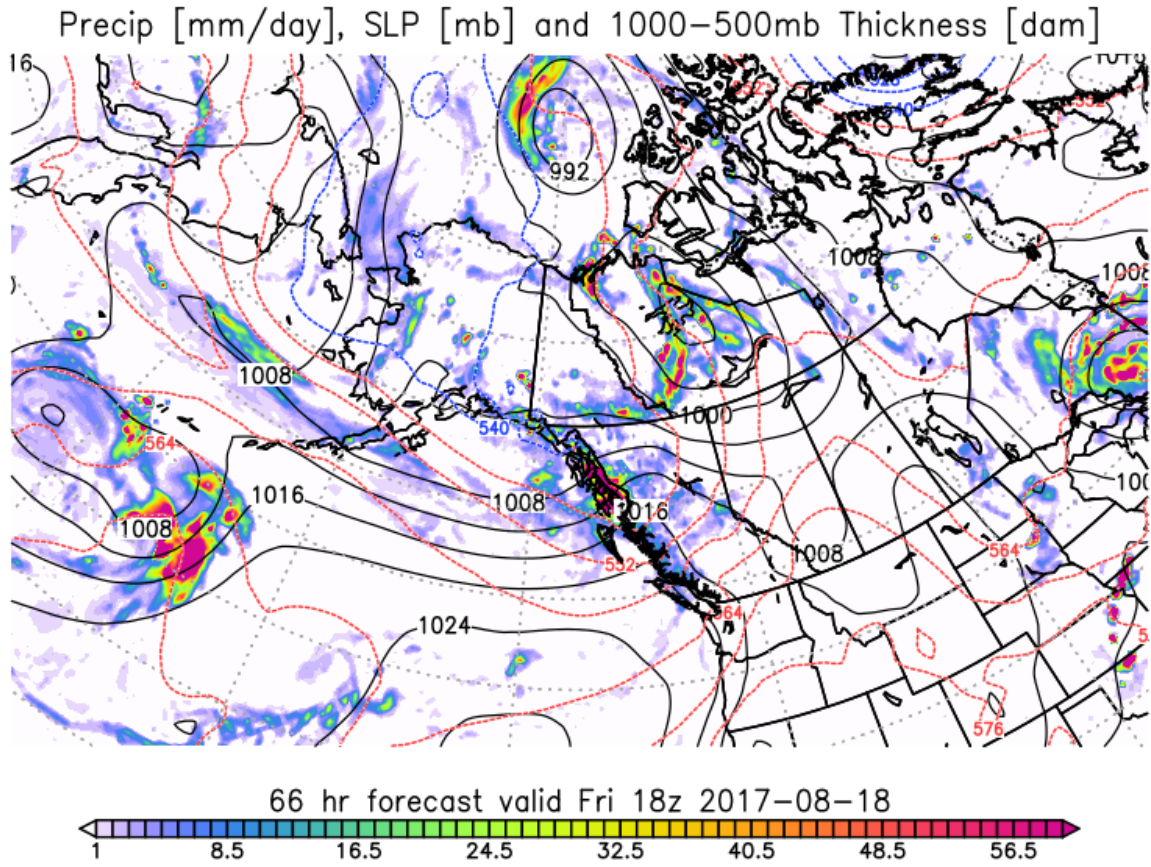


42 hr forecast valid Thu 18z 2017-08-17



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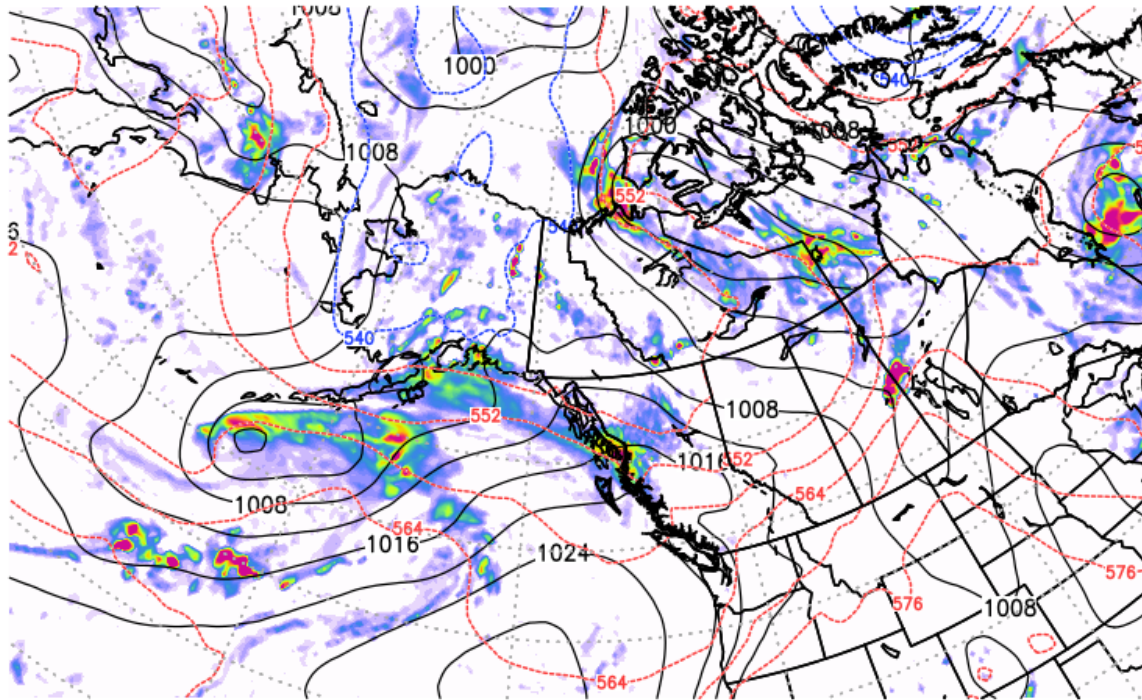
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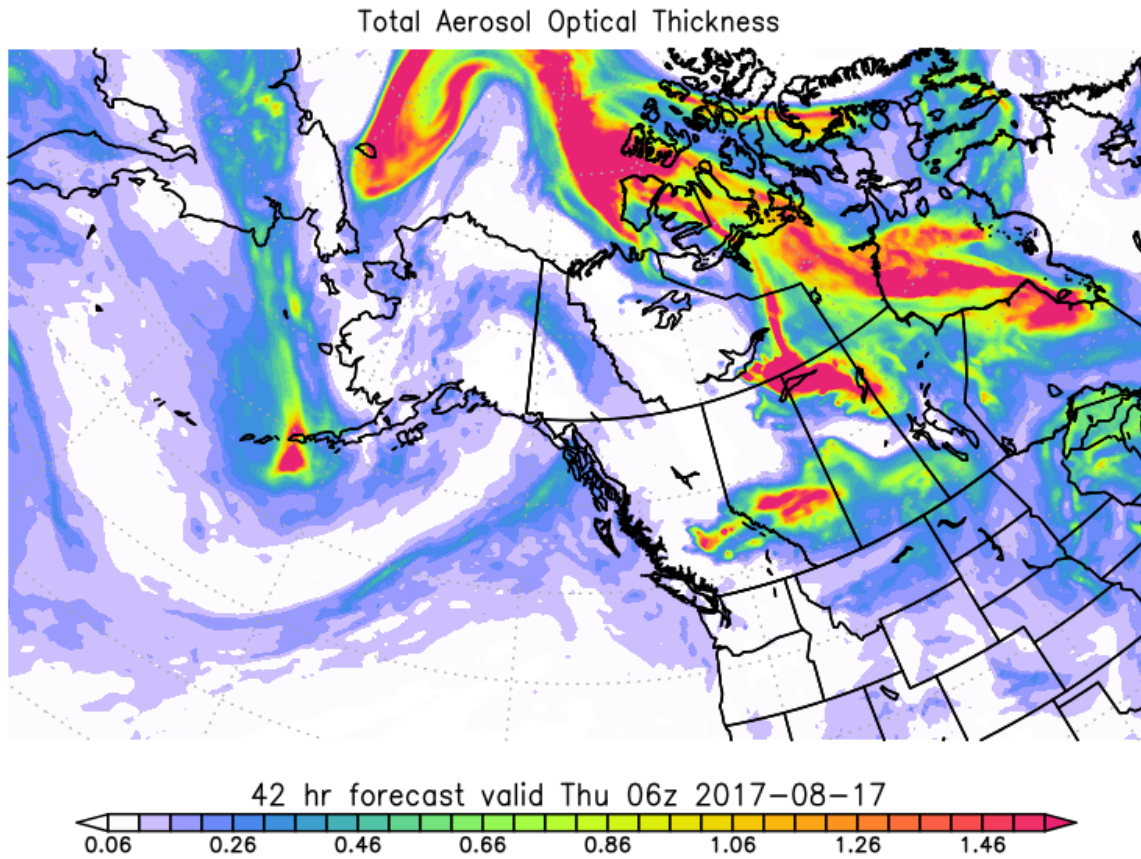
NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-16

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



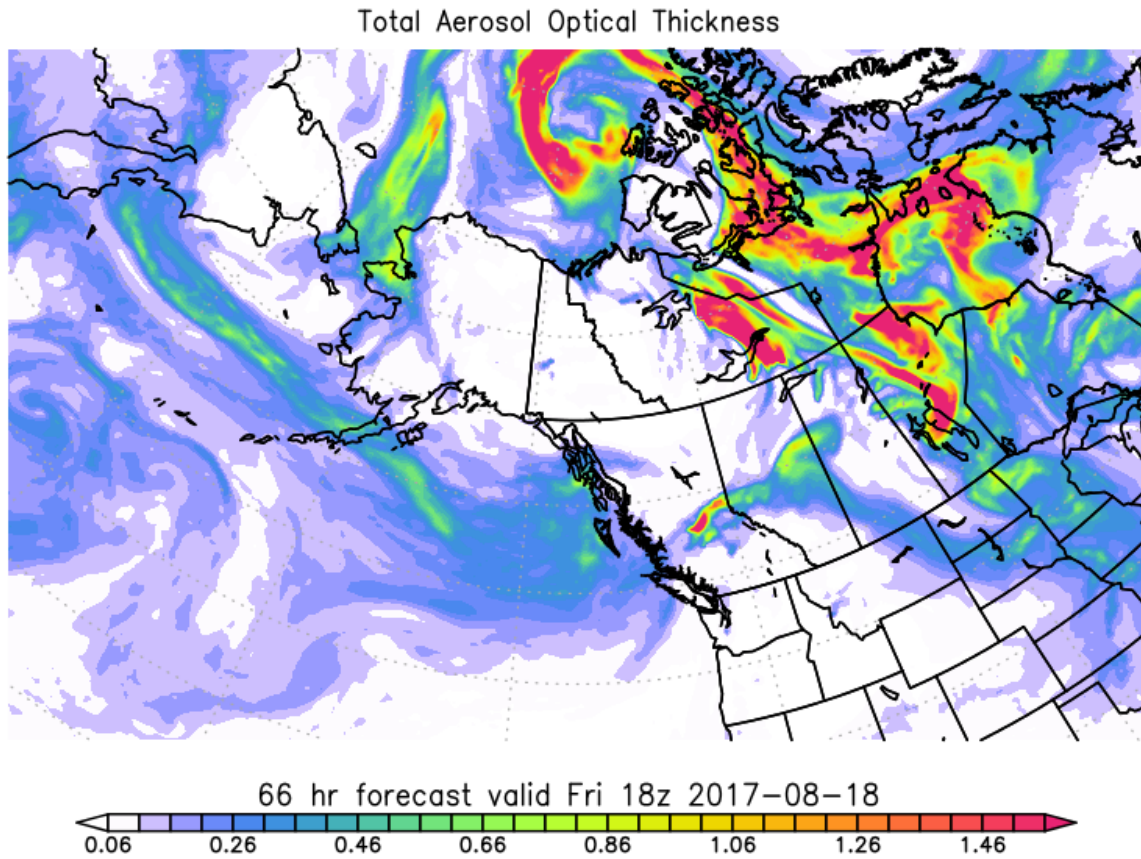
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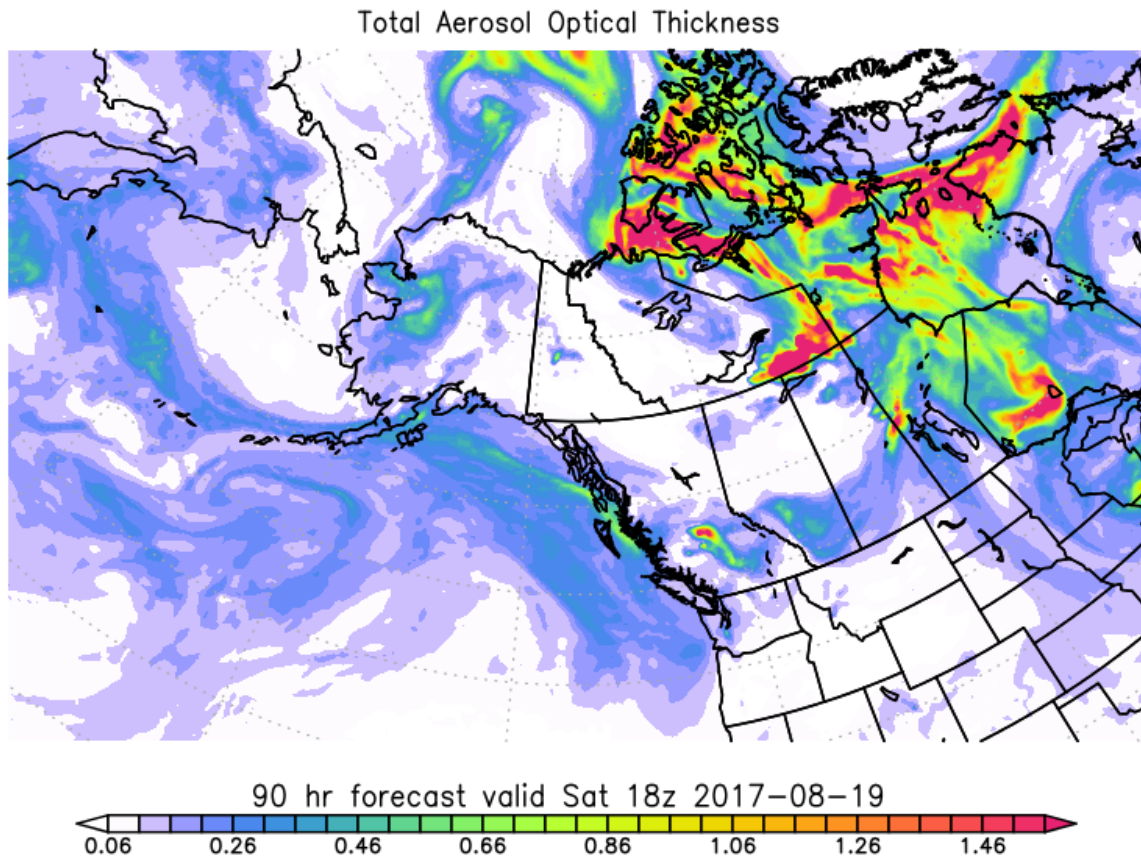
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-16



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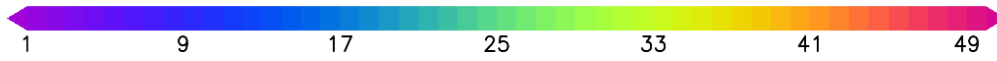
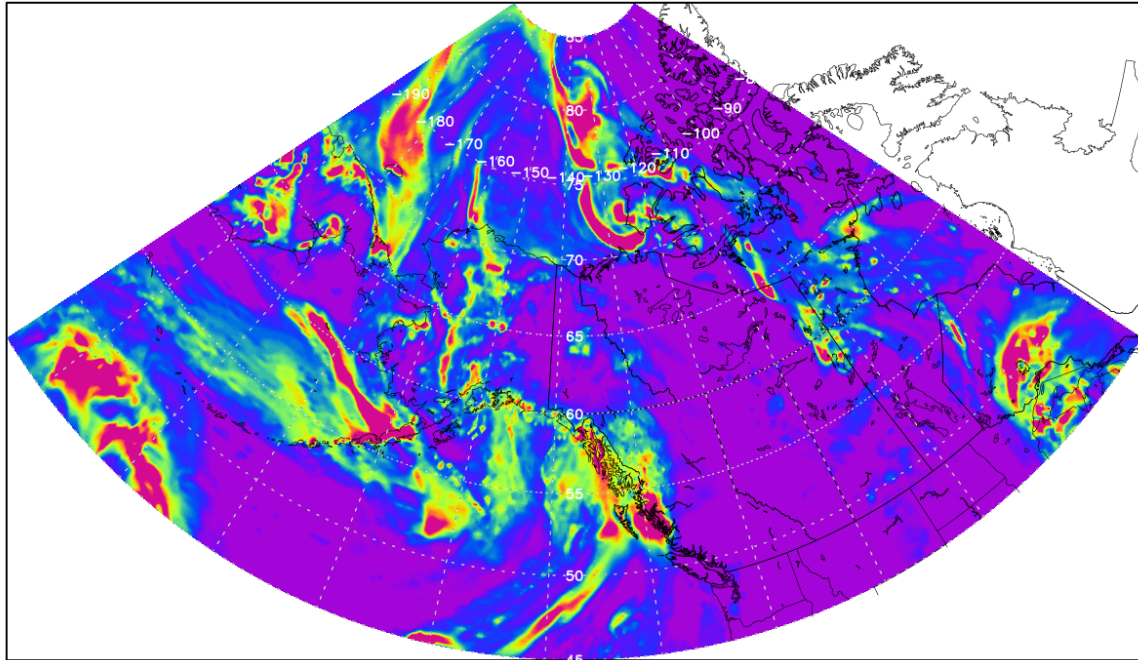
NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-16





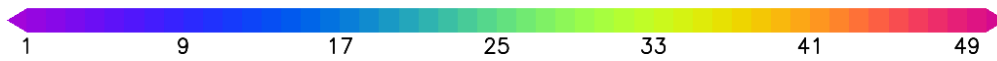
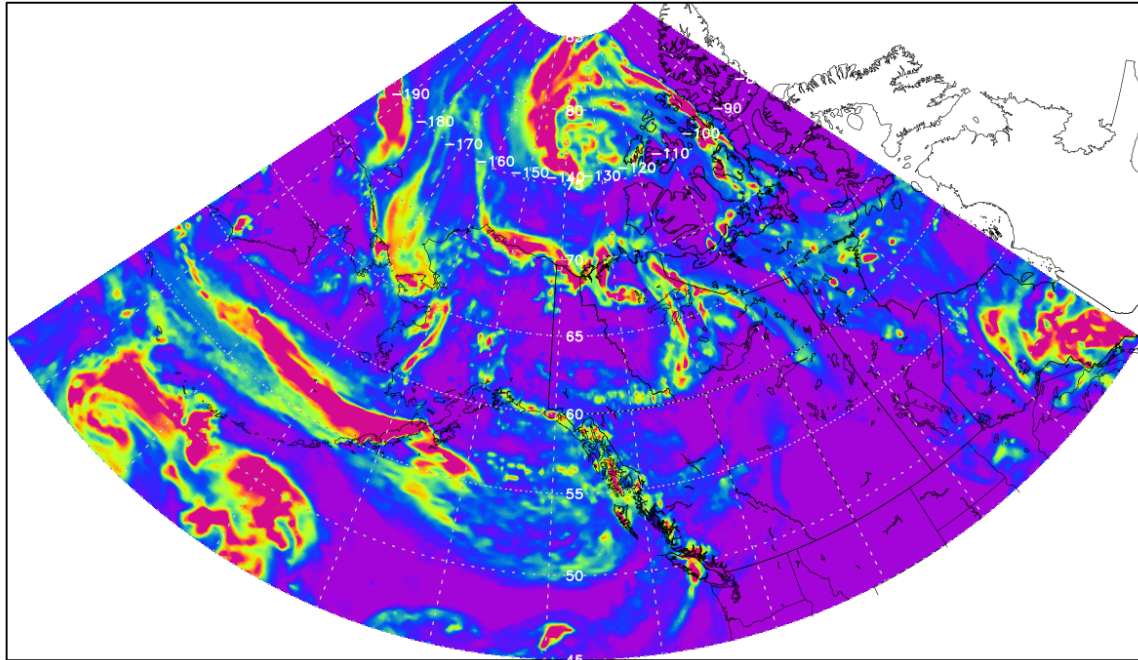
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GEOS Total Cloud Optical Depth  
Initial time 16 AUG. 00z  
Valid time 17 AUG. 18z



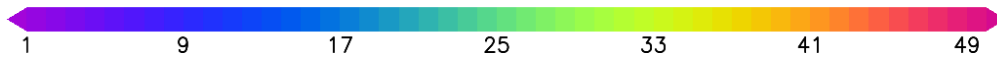
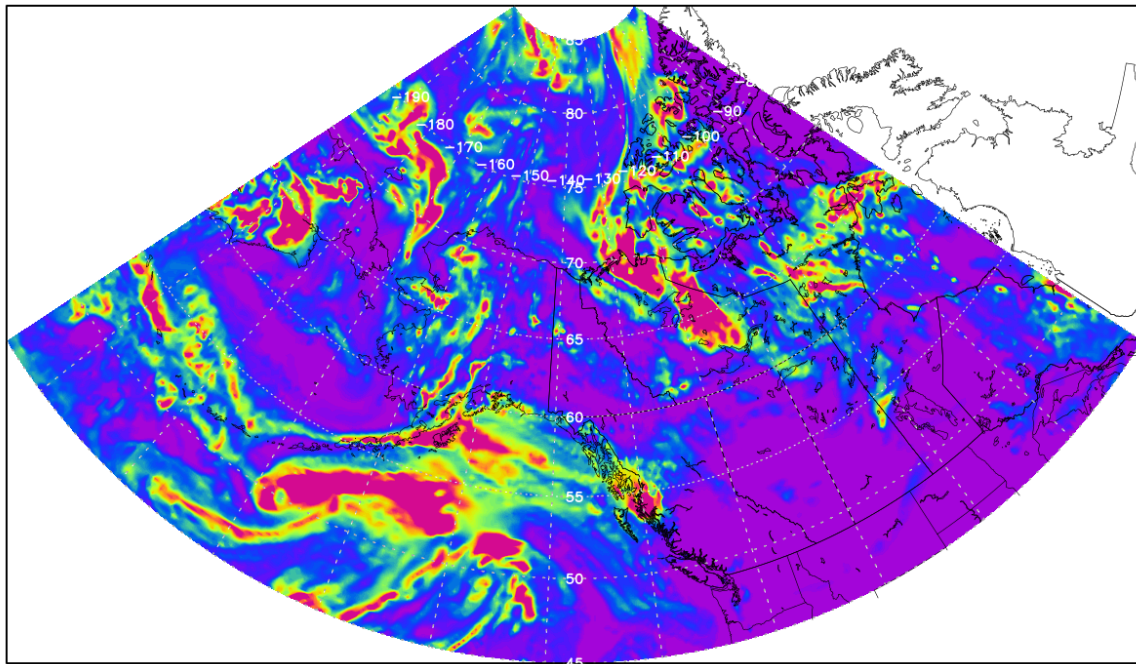
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GEOS Total Cloud Optical Depth  
Initial time 16 AUG. 00z  
Valid time 18 AUG. 18z



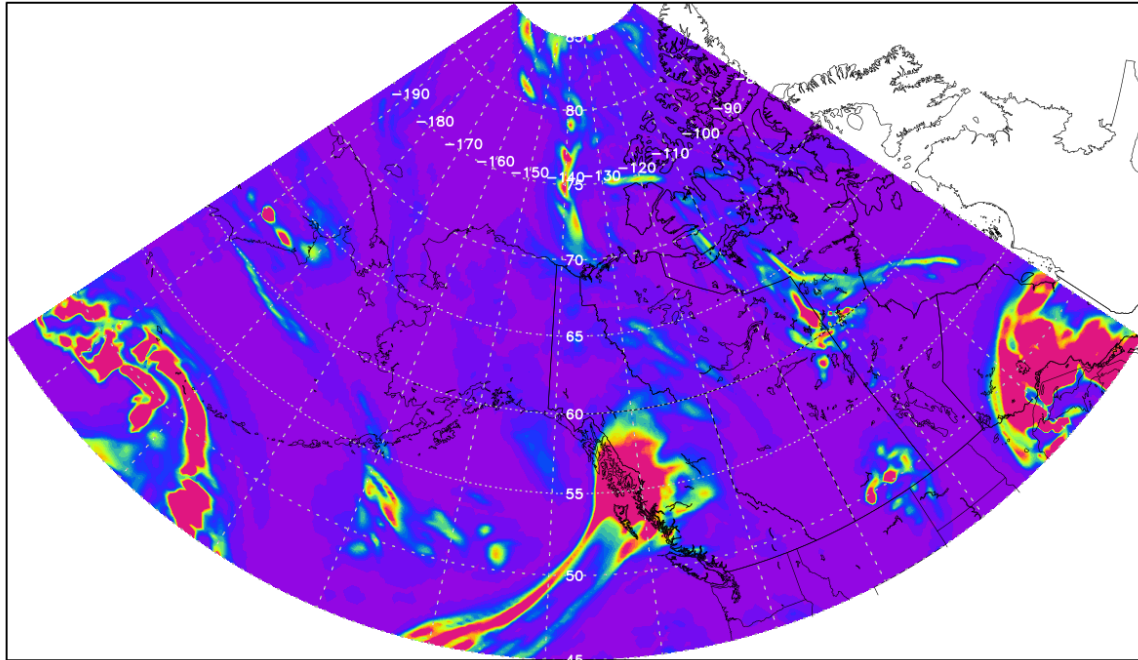
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GEOS Total Cloud Optical Depth  
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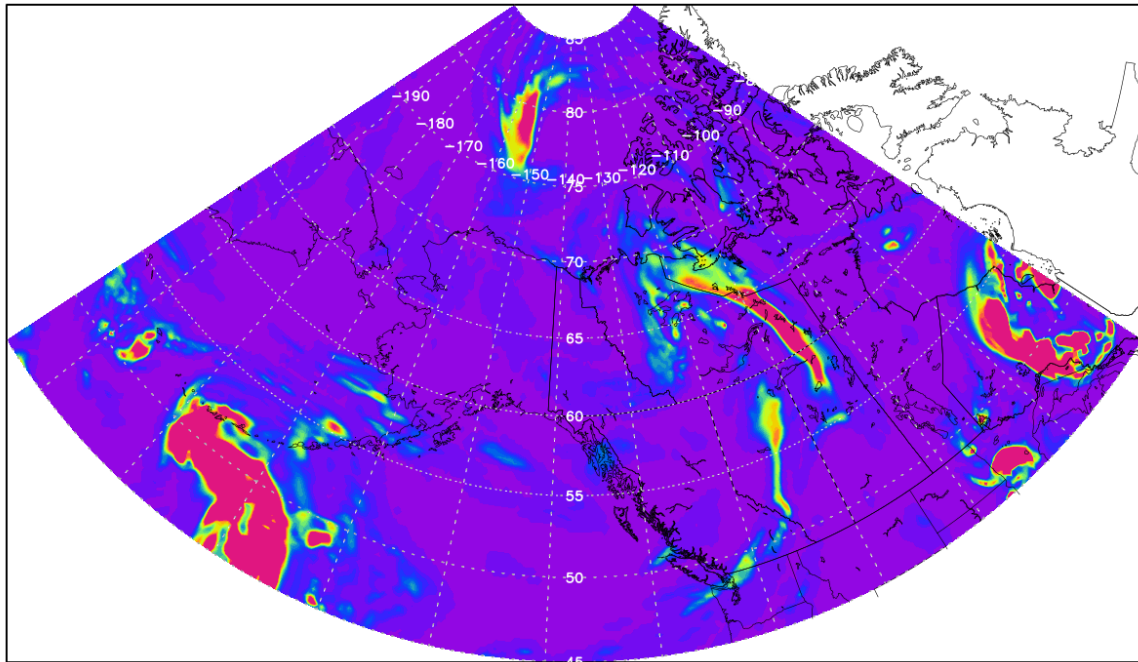
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GEOS High Cloud Optical Depth  
Initial time 16 AUG. 00z  
Valid time 17 AUG. 18z



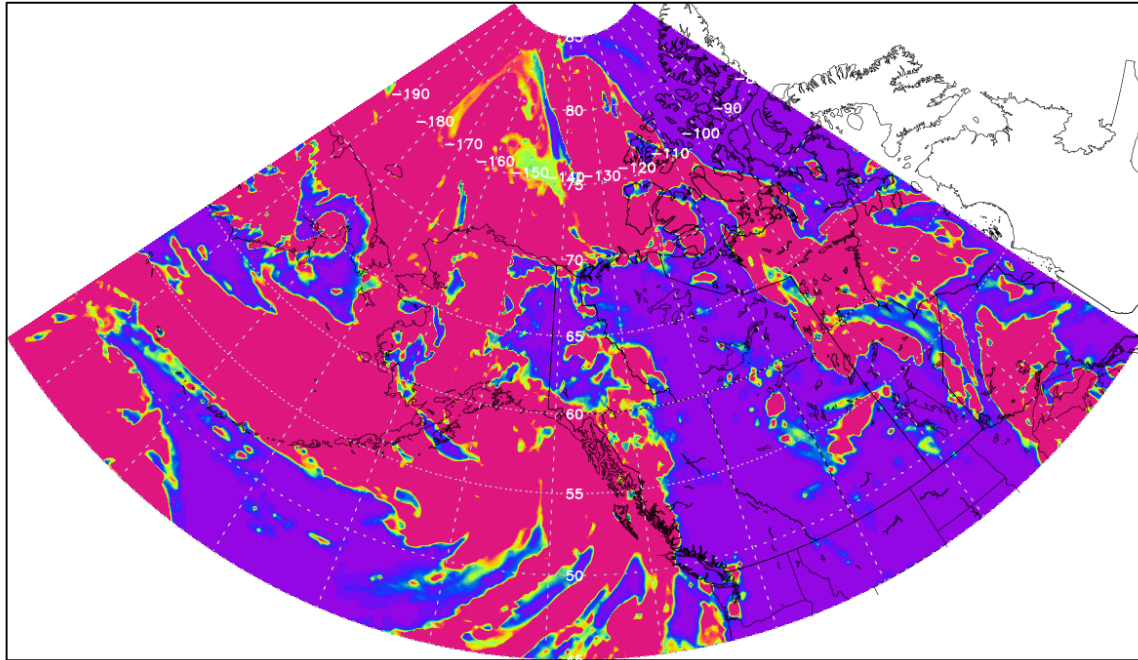
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GEOS High Cloud Optical Depth  
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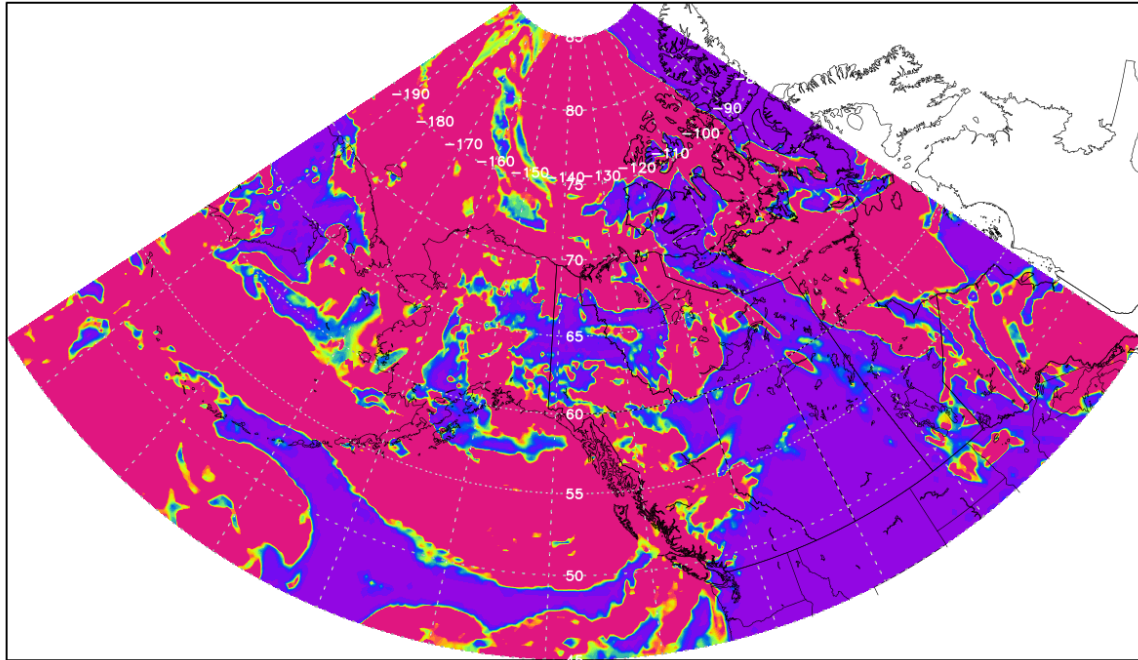
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GEOS Low Cloud Optical Depth  
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Valid time 17 AUG. 18z



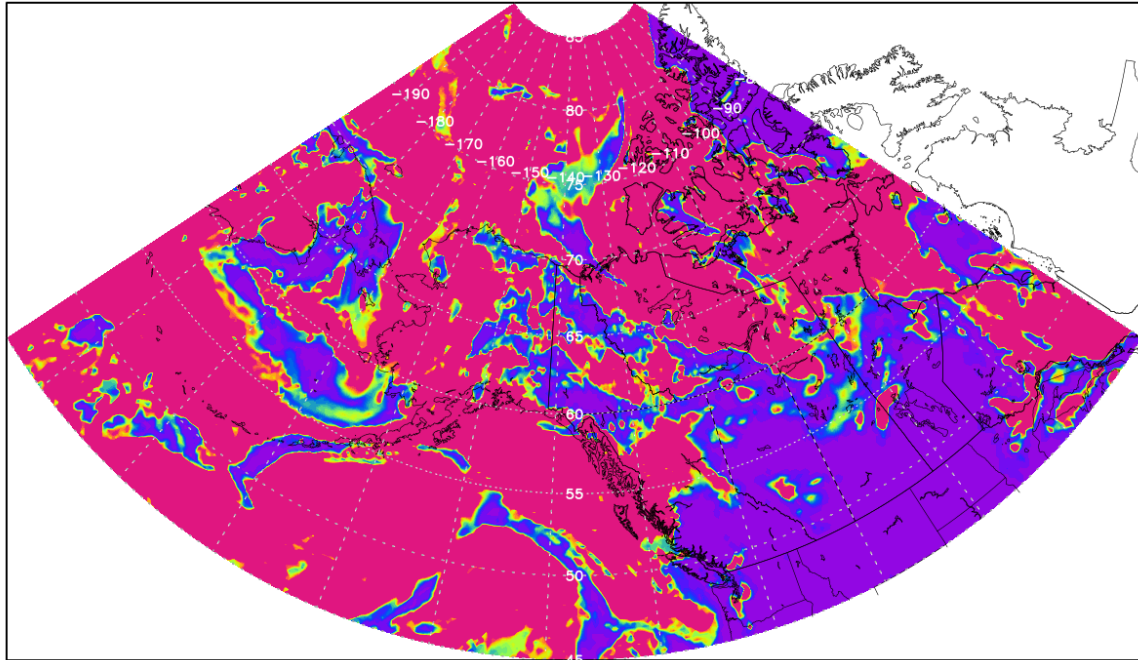
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GEOS Low Cloud Optical Depth  
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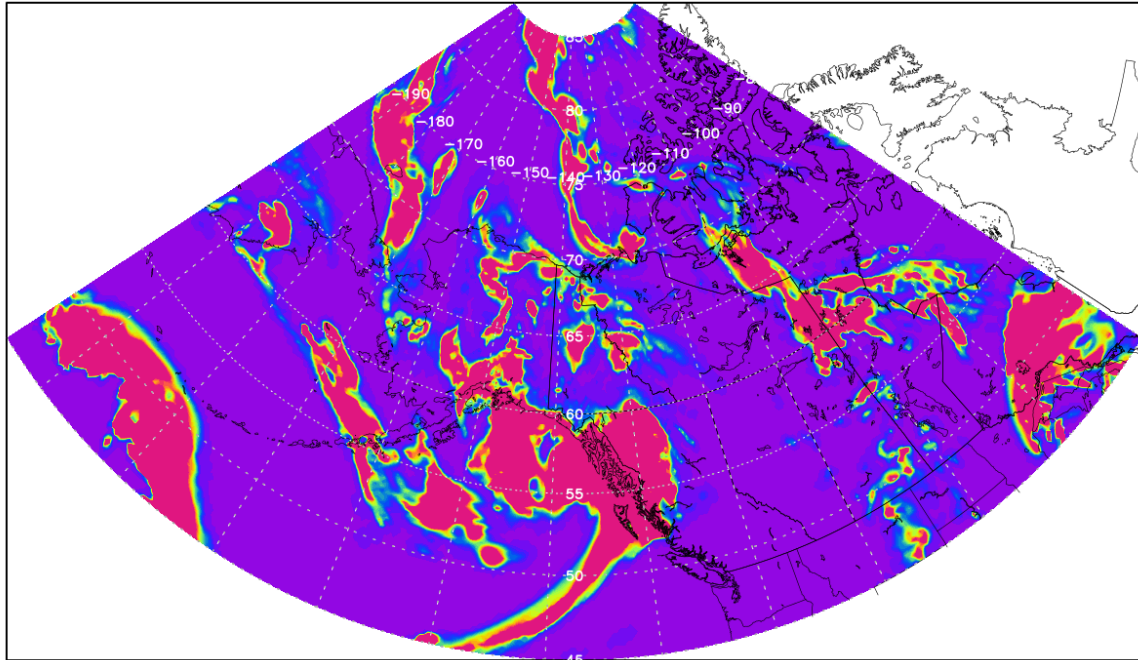
GEOS Low Cloud Optical Depth  
Initial time 16 AUG. 00z  
Valid time 19 AUG. 18z





ABOVE\_Mid\_Cloud\_Optical\_Depth\_IT\_00z16AUG\_VT\_18z17AUG.png

GEOS Mid Cloud Optical Depth  
Initial time 16 AUG. 00z  
Valid time 17 AUG. 18z



ABOVE\_Mid\_Cloud\_Optical\_Depth\_IT\_00z16AUG\_VT\_18z18AUG.png

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

