

**ABOVE Regional Weather Briefing**

Based on the GMAO GEOS meteorology and aerosol forecast fields  
Model Initialized 00z 15 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 16 August through 2359z 16 August**

Two low pressure centers along a trough will be found near Bear Lake and L. Ath. on Wednesday. These lows will be lifting northward through the day. The Yellowknife region should remain mostly sunny in between these two lows. Further south into central and south SK, skies should clear or scattered, although varying degrees of light to moderate smoke haze advecting from BC fires will affect this area.

Yellowknife: Clear to scattered clouds throughout the day. No aerosol concerns as most of the haze stays south and east of Gr. Slave Lake.

L. Ath./northeast AB: GEOS model showing clouds and showers most prevalent to the east of the 110W longitude line. The clouds and showers there will continue to move to the northeast through the afternoon. The western portion of L. Ath. looks to have scattered to briefly broken clouds Wednesday. Local fires over north-central AB may advect some into the target zone occasionally Wednesday. Heavier smoke haze from non-local fires seems to stay over northern SK.

Saskatoon/Trout Lake: Mainly clear to scattered cloud cover. Varying amounts of light to moderate smoke from BC fires.

PAFA: Scattered showers with a couple of pop-up thunderstorms possible. Widespread heavy rainfall not expected. No aerosol issues.

**Day-2 Outlook****Valid 1500z 17 August through 2359z 17 August**

Thursday is shaping up to be a fine weather day for most of the targets. Weather systems bringing widespread clouds and precipitation will be noticeably absent on Thursday.

Yellowknife: Clear to scattered clouds. Smoke haze from non-local fires should remain east and south of the immediate region.

L. Ath./northeast AB: Scattered clouds. Local AB fires advecting some light to modest smoke

haze. Non-local fires' smoke remains further east.

Saskatoon/Trout Lake: Mainly clear early. Scattered to occasionally broken clouds later in the day. Light smoke haze from BC fires.

PAFA: Widely scattered showers, an isolated storm can not be ruled out. No widespread heavy precipitation.

### **Day-3 Outlook**

**Valid 1500z 18 August through 2359z 18 August**

A weather impulse/compact low may touch off some showers or a thunderstorm over the Yellowknife/Gr. Slave Lake region on Friday. Otherwise, continued good to excellent weather for the remainder of the target areas anticipated Friday.

Yellowknife: Broken to overcast at times. Showers and a thunderstorm possible.

L. Ath/ne AB/Saskatoon/Trout Lake: Clear to occasionally scattered clouds. Light smoke aerosol or less. Thicker haze stays confined to southeast of Slave Lake and well north of L. Ath.

PAFA: No weather issues. Near zero chance of heavy precipitation.

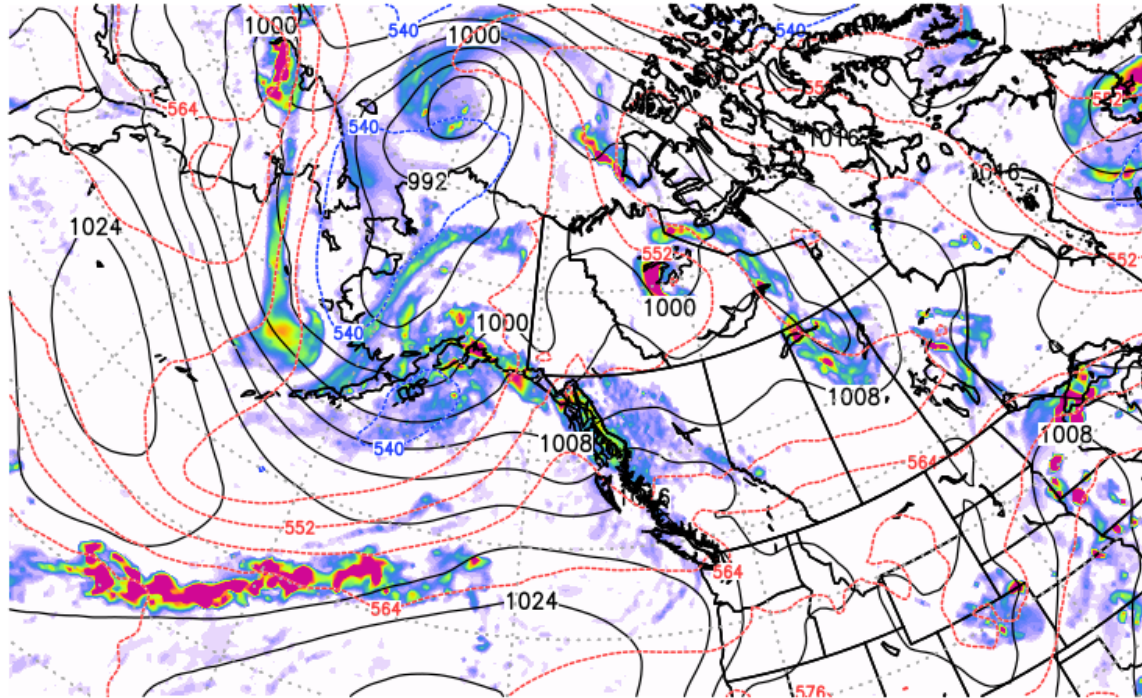
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Gary Partyka  
GMAO at NASA's Goddard Space Flight Center  
Greenbelt, MD

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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-15

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

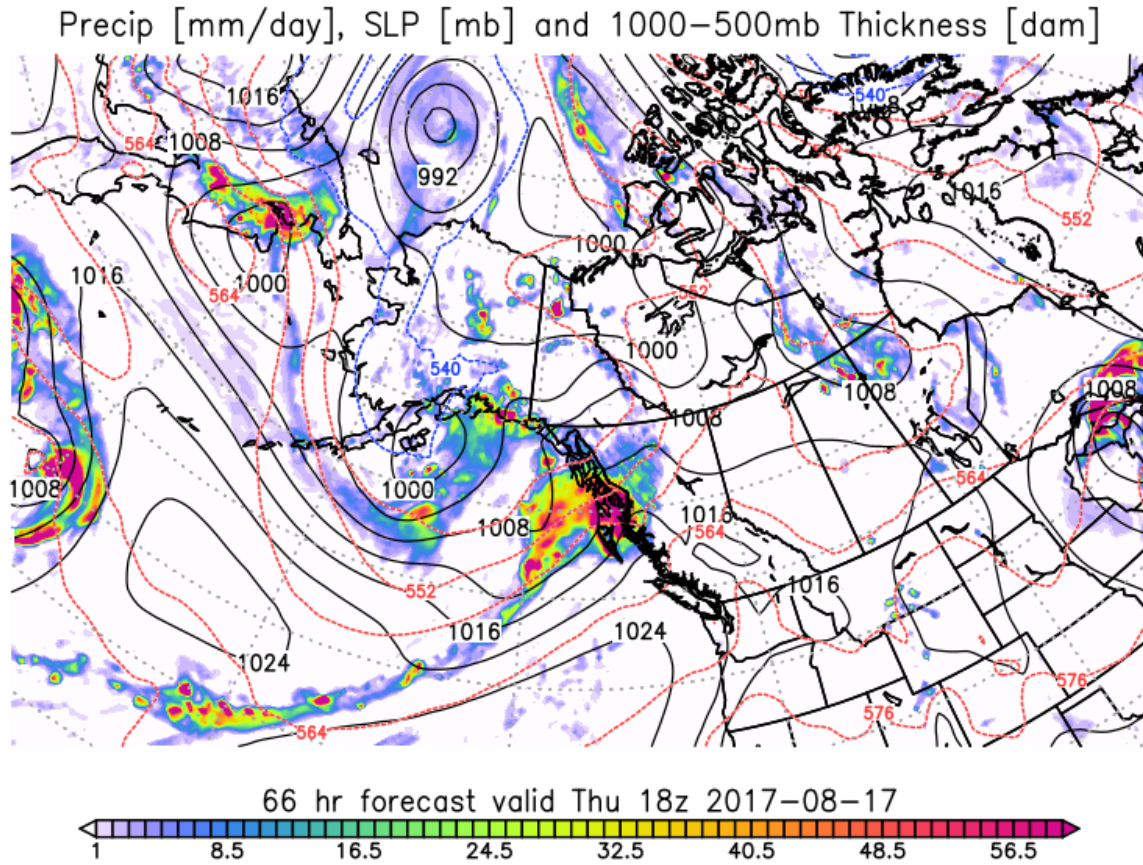


42 hr forecast valid Wed 18z 2017-08-16



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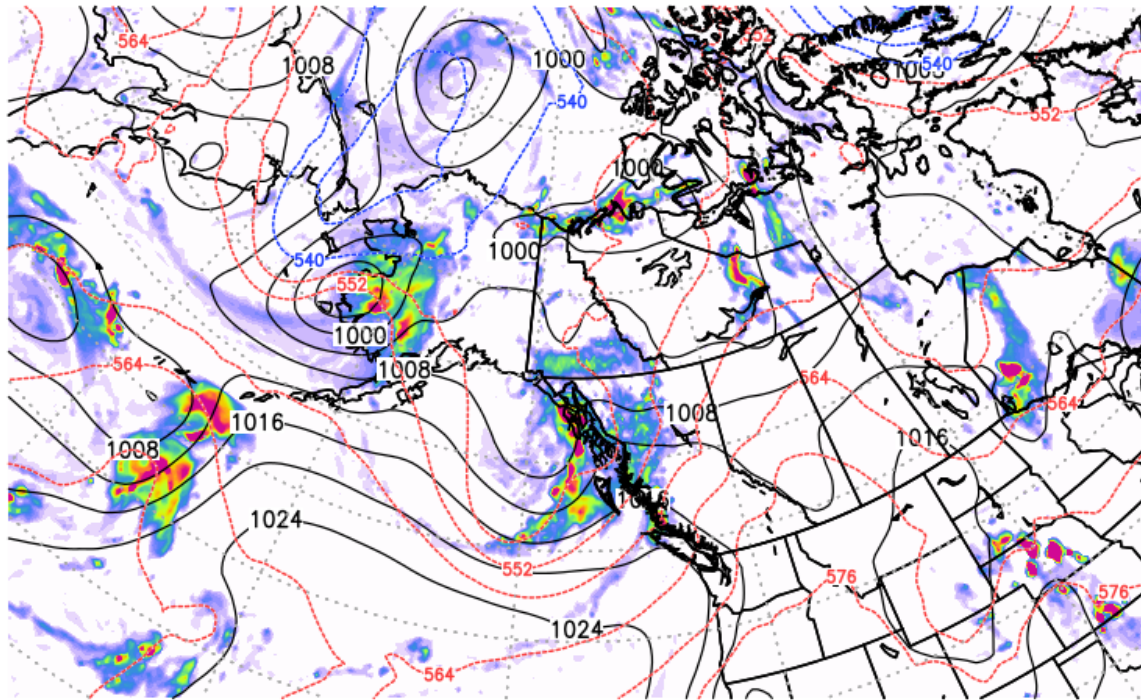
NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-15



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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-15

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

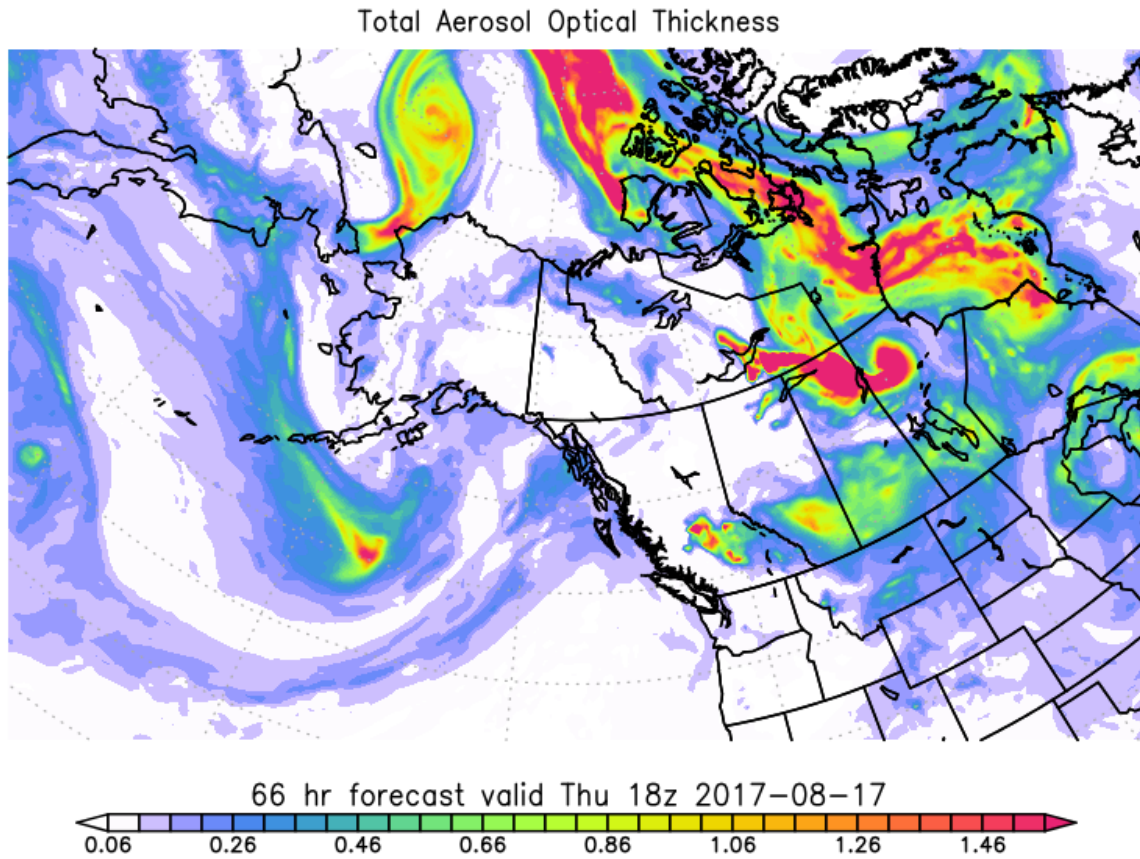


90 hr forecast valid Fri 18z 2017-08-18



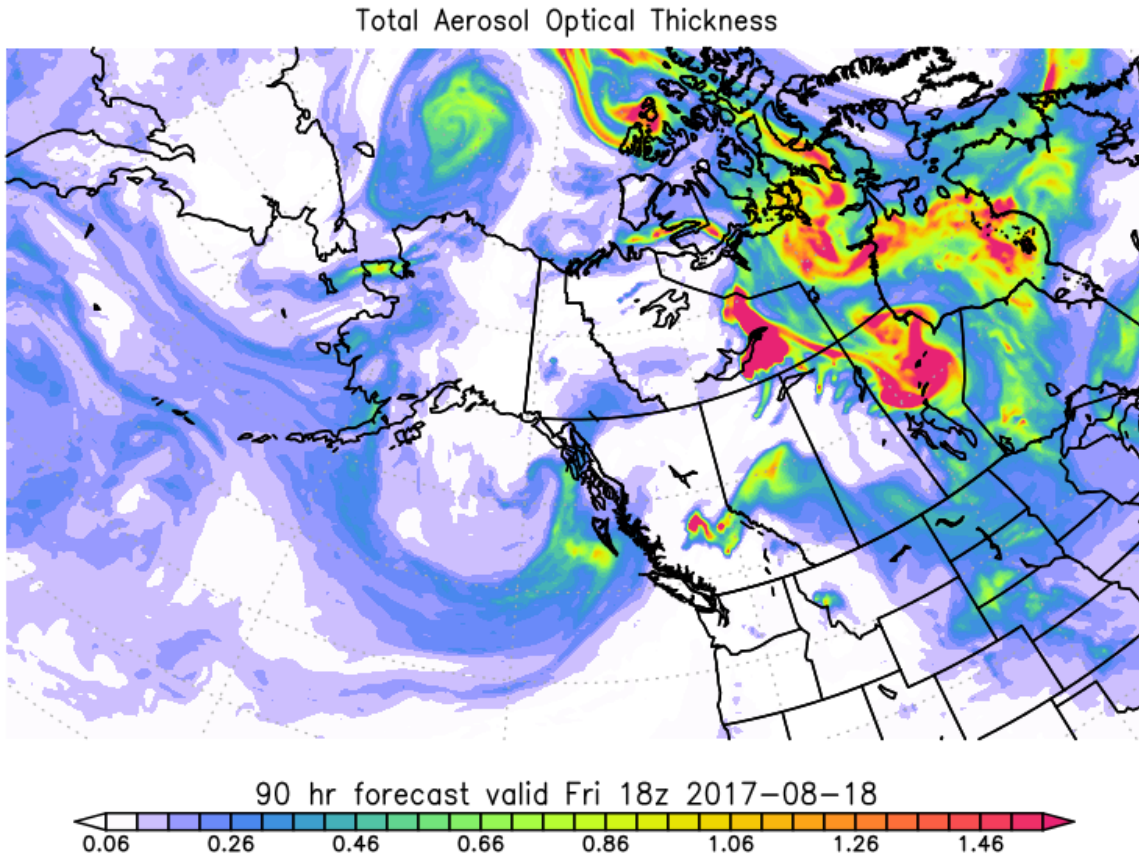
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-15



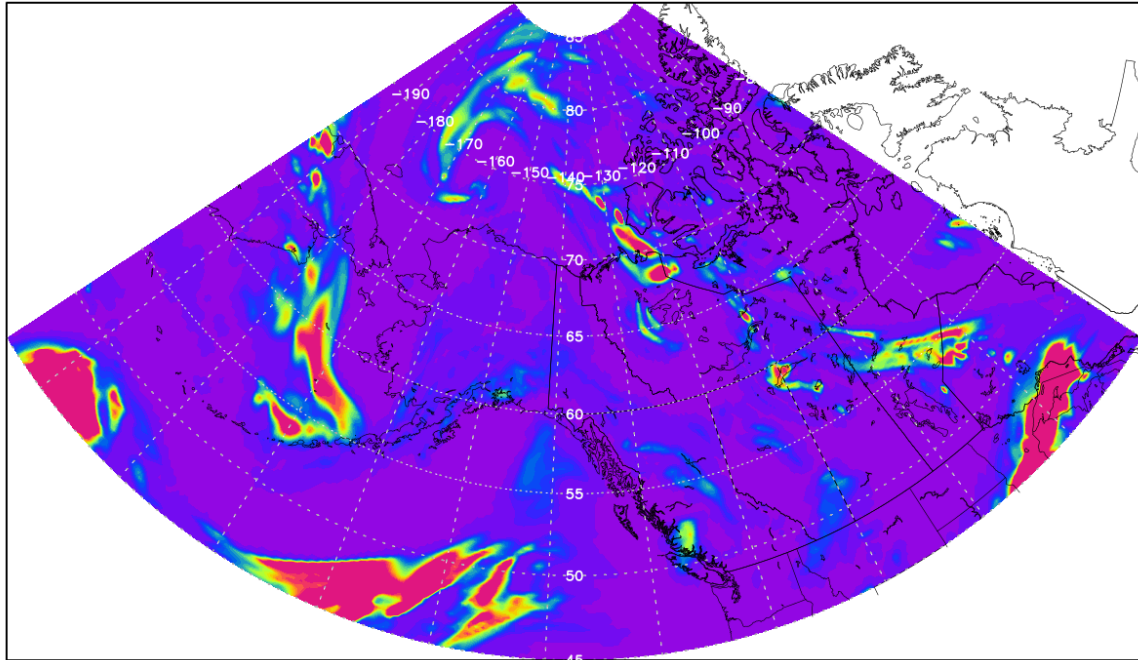
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-08-15



ABOVE\_High\_Cloud\_Optical\_Depth\_IT\_00z15AUG\_VT\_18z16AUG.png

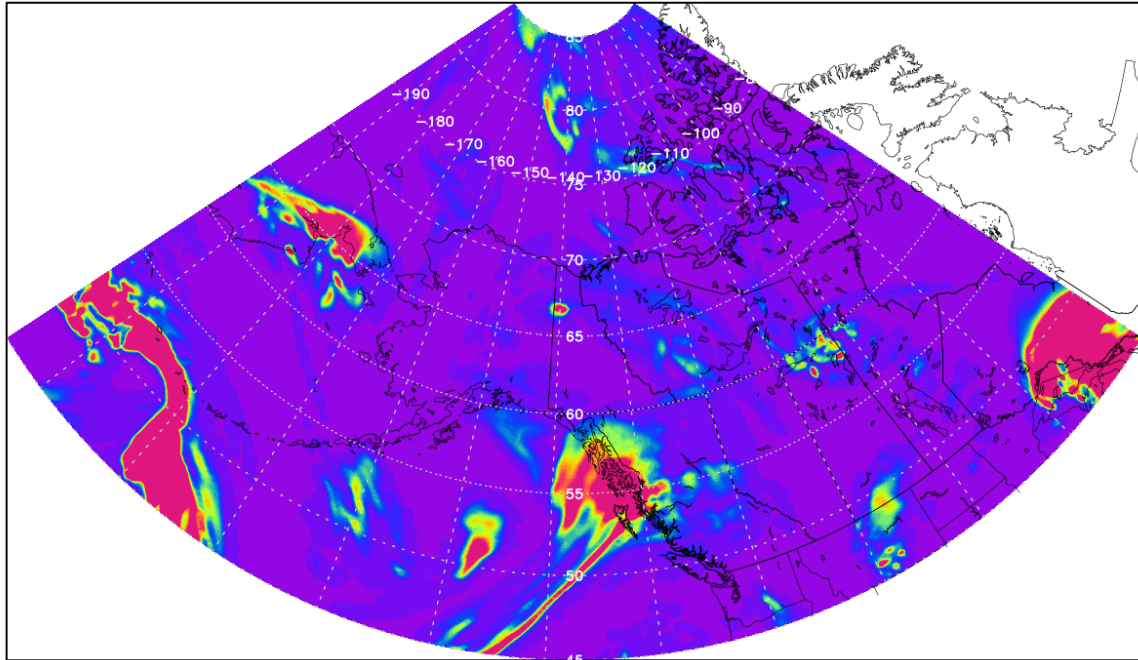
GEOS High Cloud Optical Depth  
Initial time 15 AUG. 00z  
Valid time 16 AUG. 18z





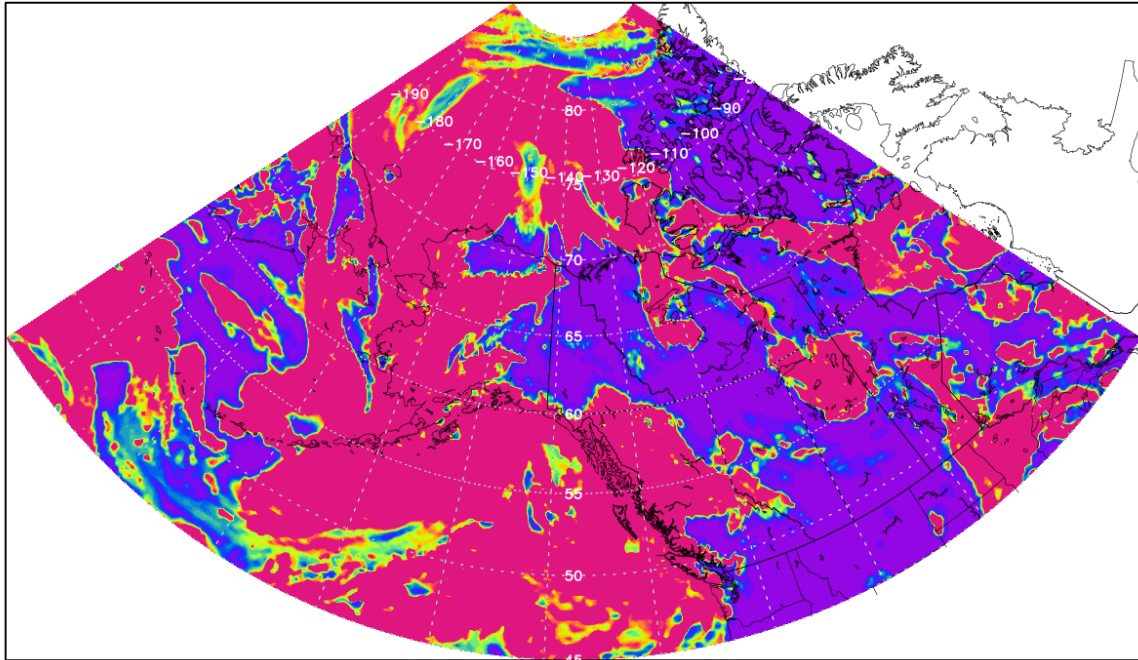
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GEOS High Cloud Optical Depth  
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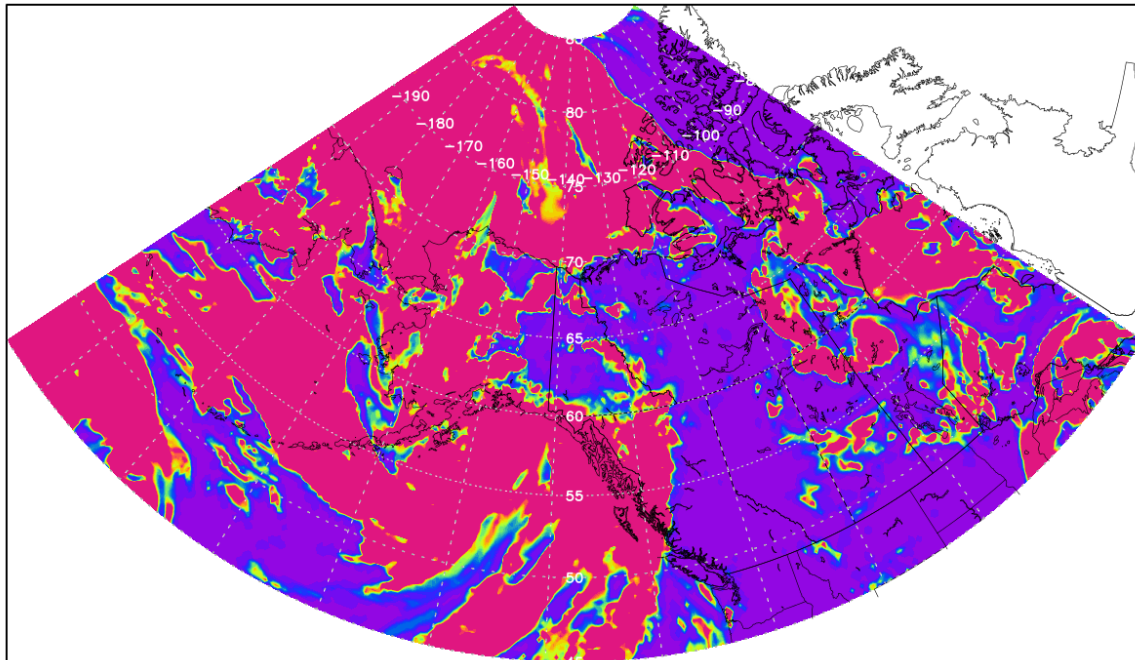
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GEOS Low Cloud Optical Depth  
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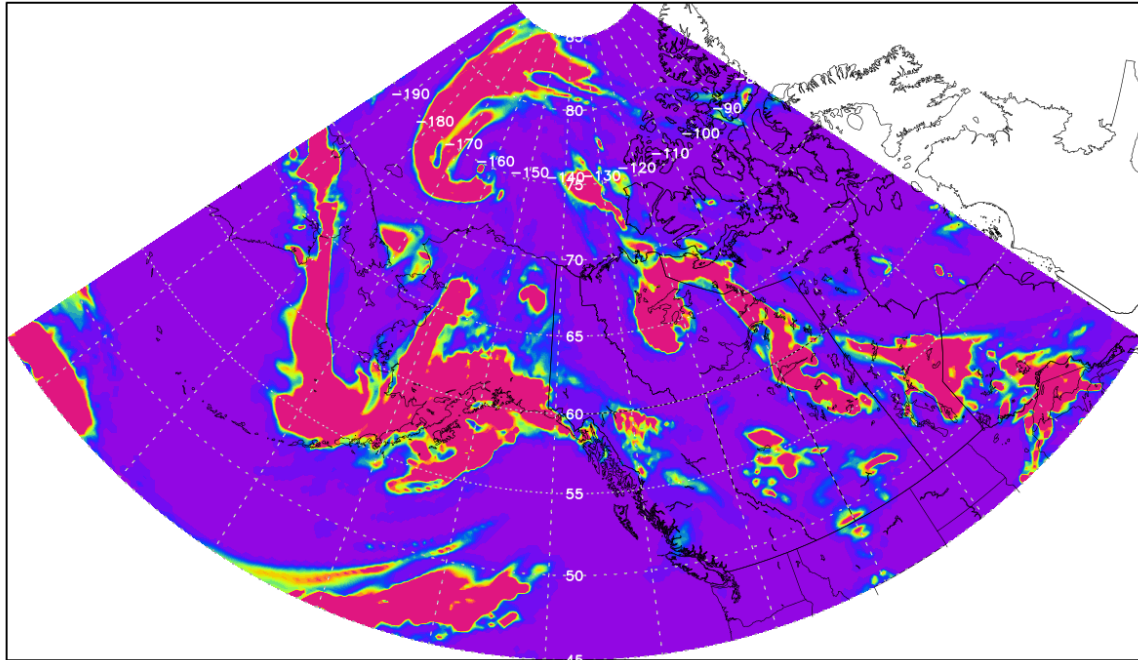
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GEOS Low Cloud Optical Depth  
Initial time 15 AUG. 00z  
Valid time 17 AUG. 18z



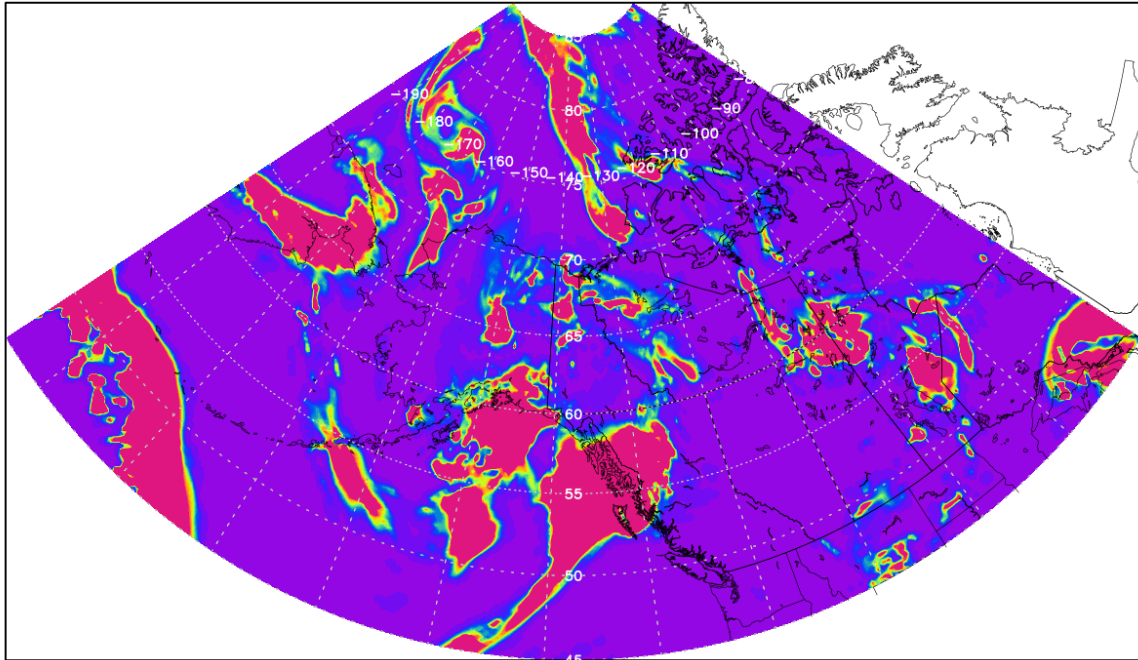
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GEOS Mid Cloud Optical Depth  
Initial time 15 AUG. 00z  
Valid time 16 AUG. 18z



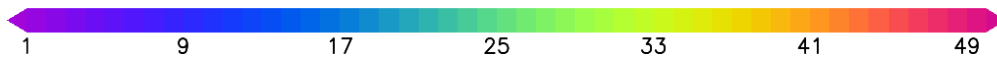
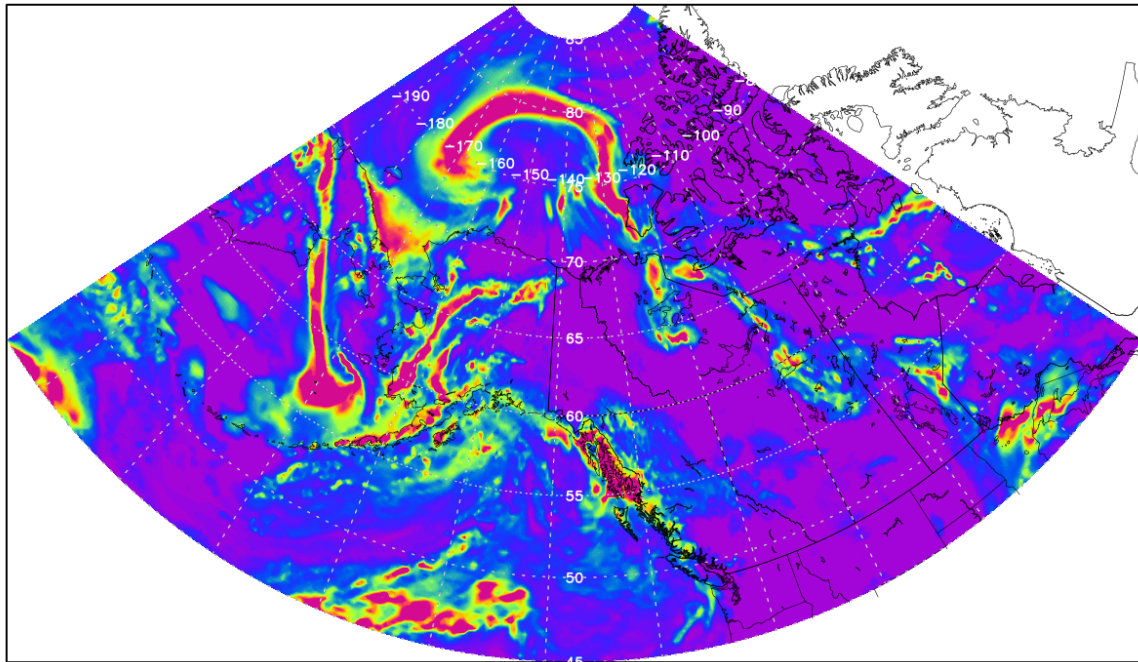
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GEOS Mid Cloud Optical Depth  
Initial time 15 AUG. 00z  
Valid time 17 AUG. 18z



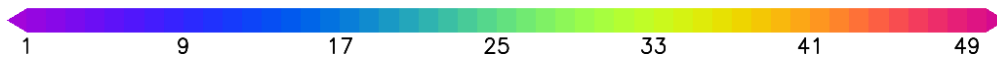
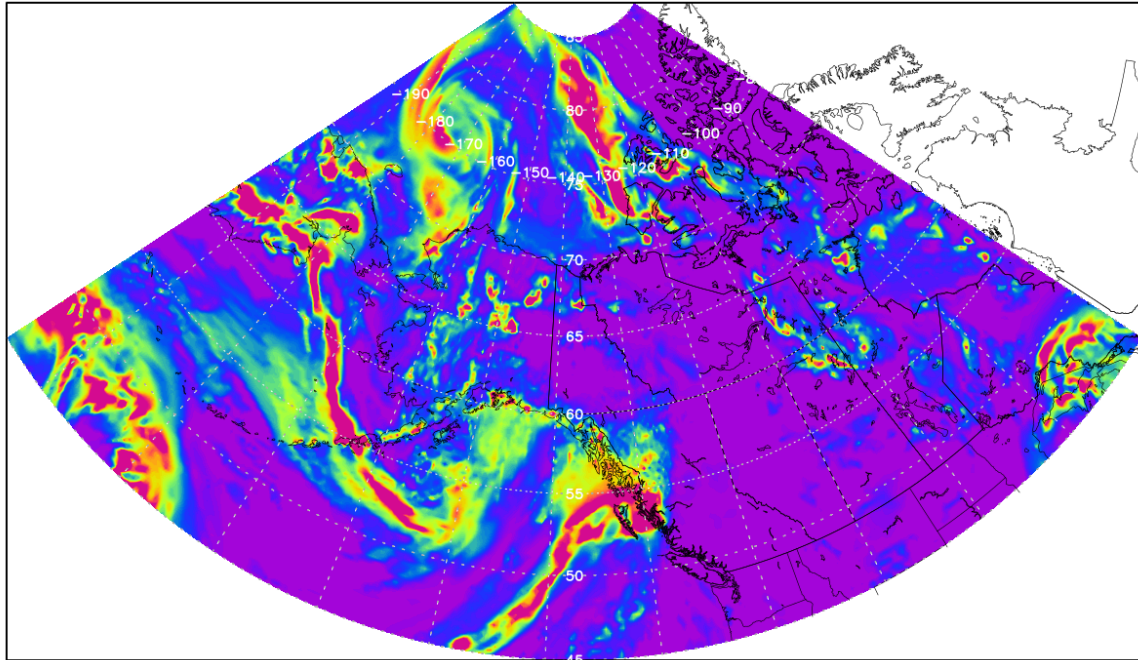
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GEOS Total Cloud Optical Depth  
Initial time 15 AUG. 00z  
Valid time 16 AUG. 18z



ABOVE\_Total\_Cloud\_IT\_00z15AUG\_VT\_18z17AUG.png

GEOS Total Cloud Optical Depth  
Initial time 15 AUG. 00z  
Valid time 17 AUG. 18z



ABOVE\_Total\_Cloud\_IT\_00z15AUG\_VT\_18z18AUG.png

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

