

**ABOVE Regional Weather Briefing**

Based on the GMAO GEOS meteorology and aerosol forecast fields  
Model Initialized 00z 04 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 05 August through 2359z 05 August**

On Saturday there will be three low pressure centers that will affect some parts of the mission region. One will be located over the Beaufort Sea which will have a band of frontal clouds and precipitation extending from it sweeping down into northwest Alaska, but this will be confined to the northwest corner of Alaska (west of 150W and north of 65N). Another low will be found spinning off the central Aleutian Islands that will affect mainly the far southwest mainland and Aleutians. The third low will be found over western Nunavut, with a trailing frontal band of thick cloud cover and heavy precipitation bisecting the NWT roughly aligned with Great Slave Lake. Any major smoke restrictions will be confined on Saturday to the far southeast corner of the NWT and over southern BC. Light, to at times, moderate smoke haze may be seen over much of SK. A few isolated fires are seen just northwest of Bear Lake.

On Saturday, much of Alaska between 60-65N should see only scattered to broken high clouds with clear below. The far northeast corner (including PASC) should still be clear out ahead of the advancing cloud cover from the frontal system sweeping northwest Alaska.

Most of the YKT looks clear and on into the Inuvik area. Clouds become more prominent further east into the NWT associated with the third low pressure system listed above. The Seward Peninsula appears to have scattered to broken low clouds.. and broken to overcast high clouds Saturday.

**Day-2 Outlook****Valid 1500z 06 August through 2359z 06 August**

\* Sunday could be on of the clearest days of the mission area-wide according to recent runs of the GEOS model \*

The Nunavut low pressure center advances its cold front through the far eastern NWT, into northern SK and central AB. Here, expect multi-layer clouds and showers/t'storms. Most of the NWT from the Great Slave Lake on northward looks mainly clear. The YKT looks mainly clear.

Regarding Alaska, only the Aleutians and the far southwest mainland (south of about 62S) should see widespread high cloud-cover of any consequence. Over the north slope there could be scattered to broken deck of low clouds. The remainder of the state is looking remarkably cloud-free on Sunday. Later in the day, some more clouds will pop up over the far northwest (north of 67N and west of 155W). The Seward Peninsula looks mainly clear through the day (just a few scattered high clouds central Seward Pen.). A small band of clouds and light showers may pop up in the late day over the terrain of the Arctic National Wildlife Refuge.

Localized moderate smoke haze near Ft. McPherson NWT, moderate to high smoke optical depths in and around the Athabasca Lake region. No other smoke restrictions for Sunday (keep away from southern BC!)

### **Day-3 Outlook**

**Valid 1500z 07 August through 2359z 07 August**

High pressure continues to keep things mainly sunny and clear over western Canada. A weak pressure pattern is maintained over Alaska. This will keep most of the state settled with some diurnally driven showers and storms over interior and western mainland Alaska. These pop up type showers and storms should be located 64-67N and west of 150W, but the Seward Peninsula continues to look clear to partly cloudy on Monday. The North Slope looks generally clear except for right along and just offshore the Arctic coastline.

An area just south of Athabasca Lake may see some moderate smoke haze (outside of southern BC).

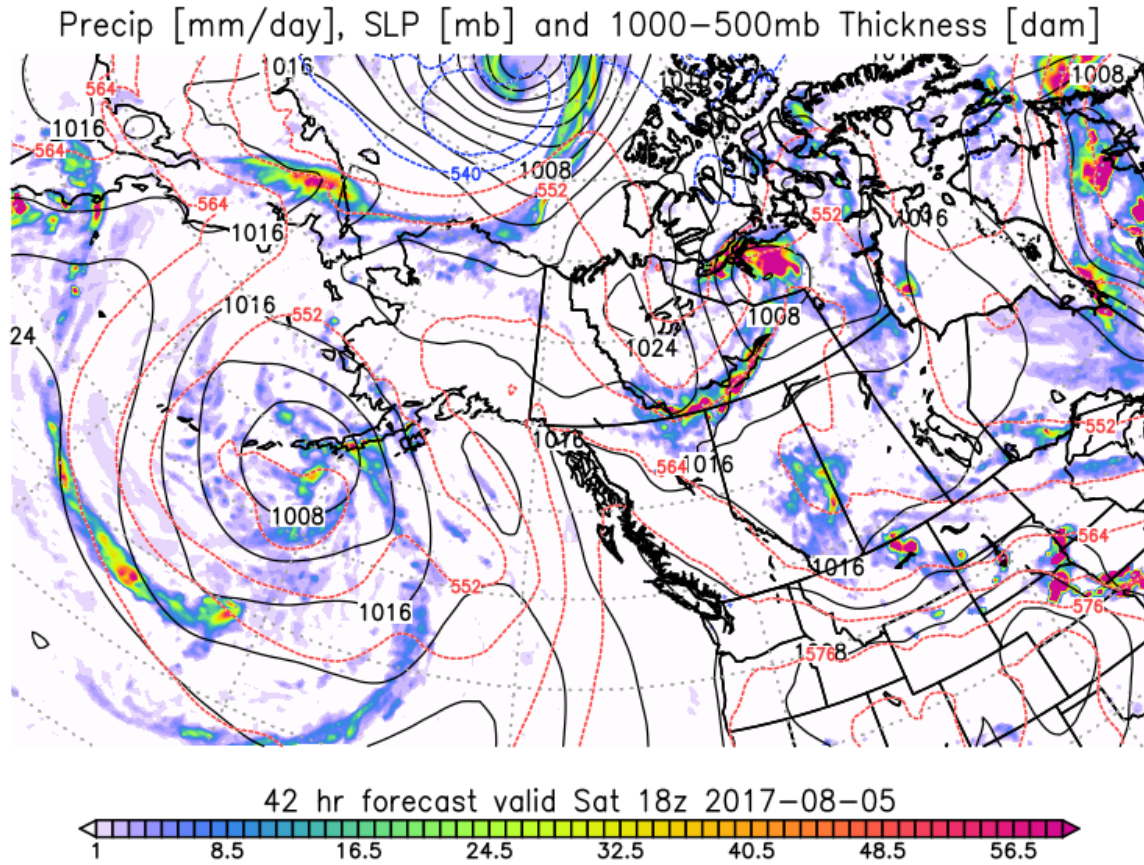
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Gary Partyka

GMAO at the Goddard Space Flight Center

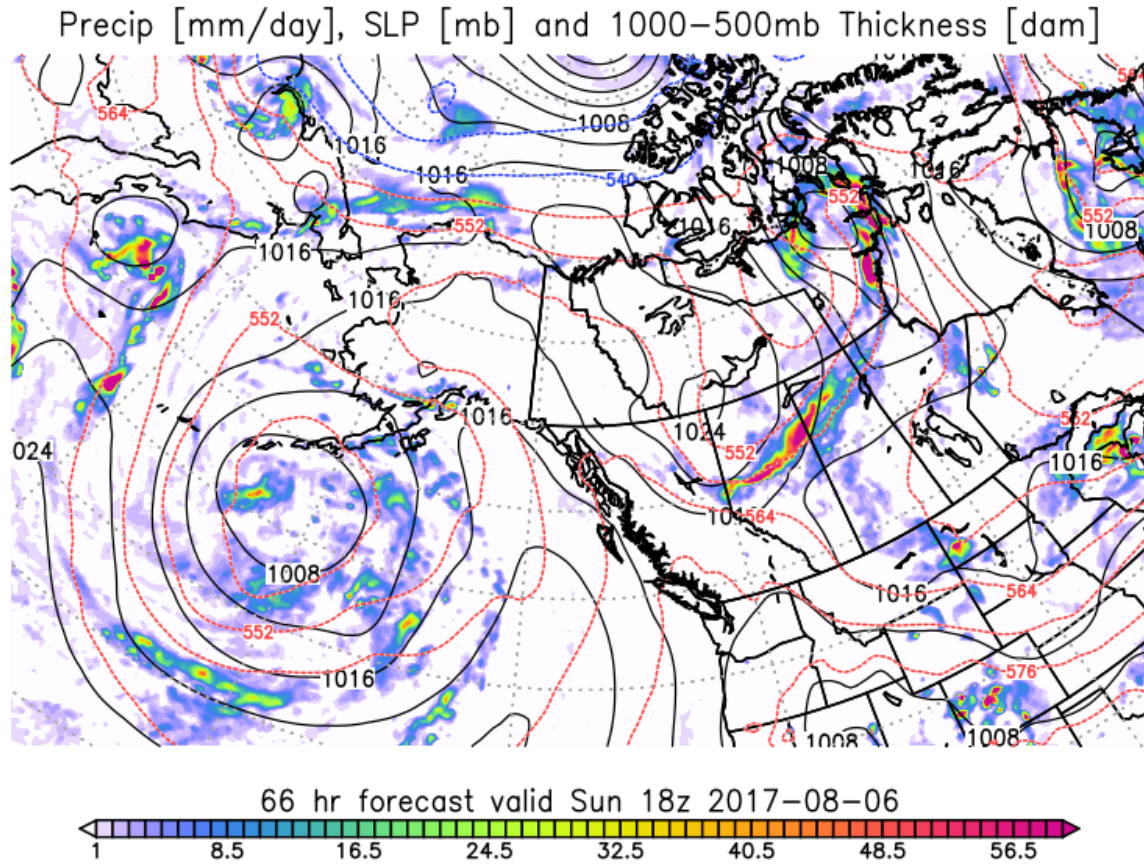
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-04



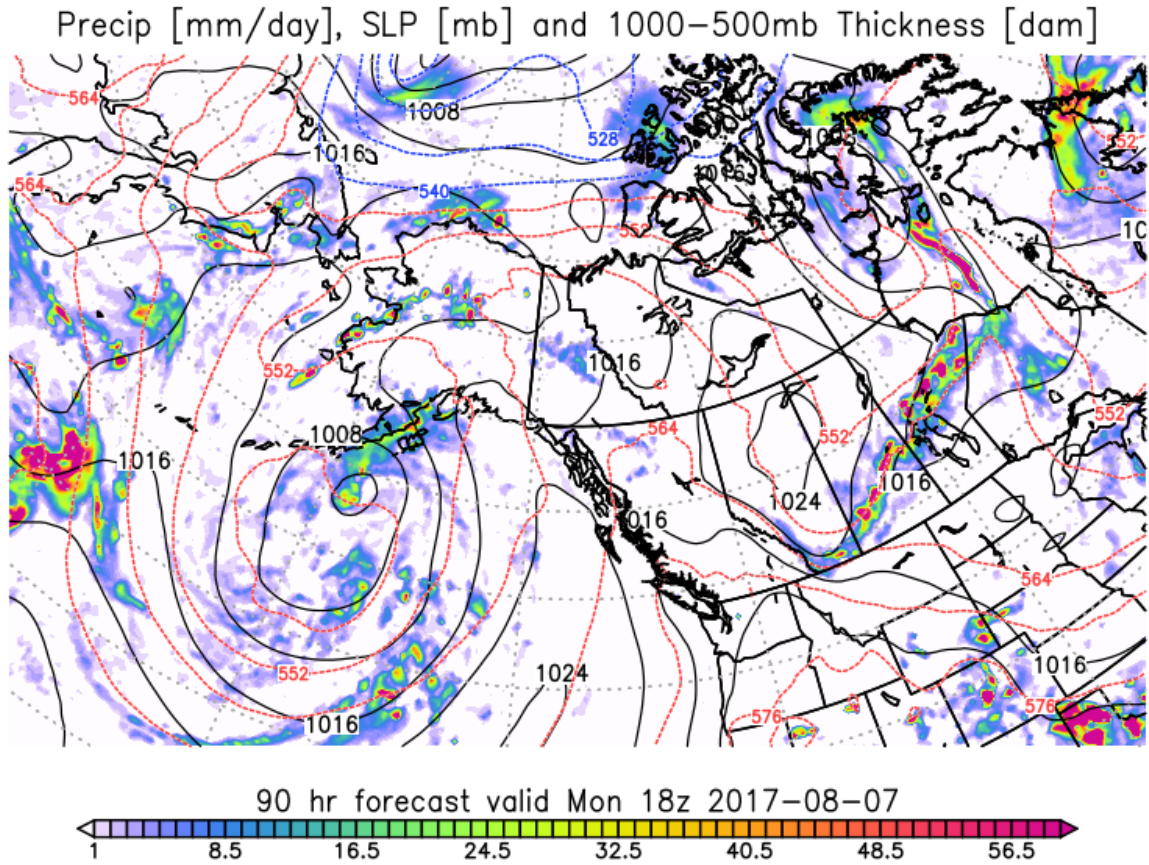
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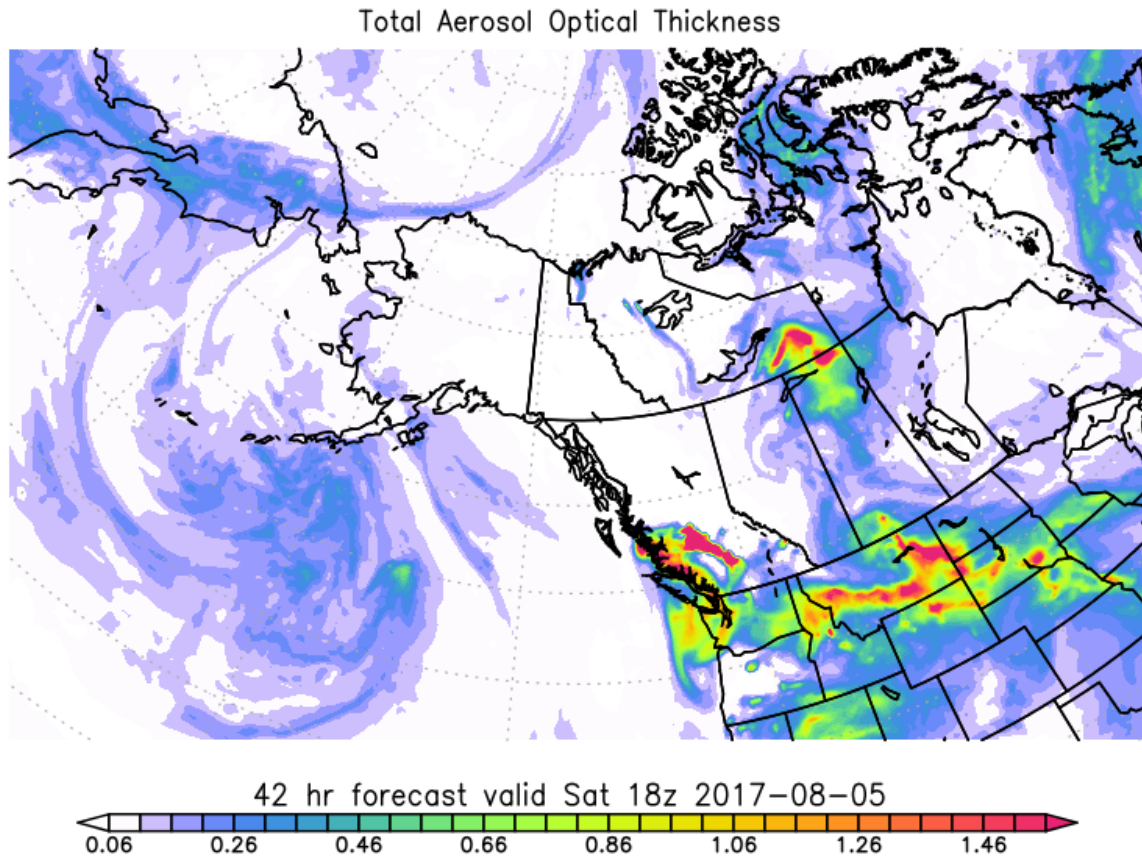
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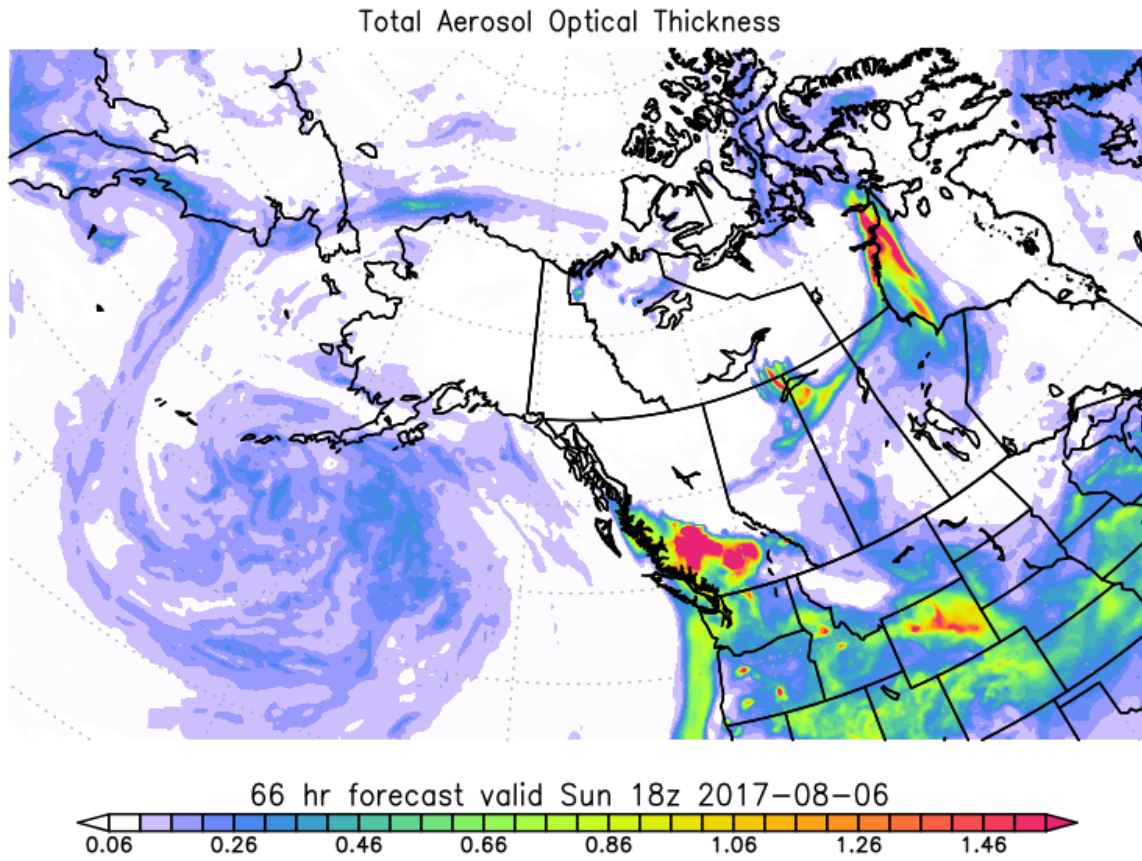
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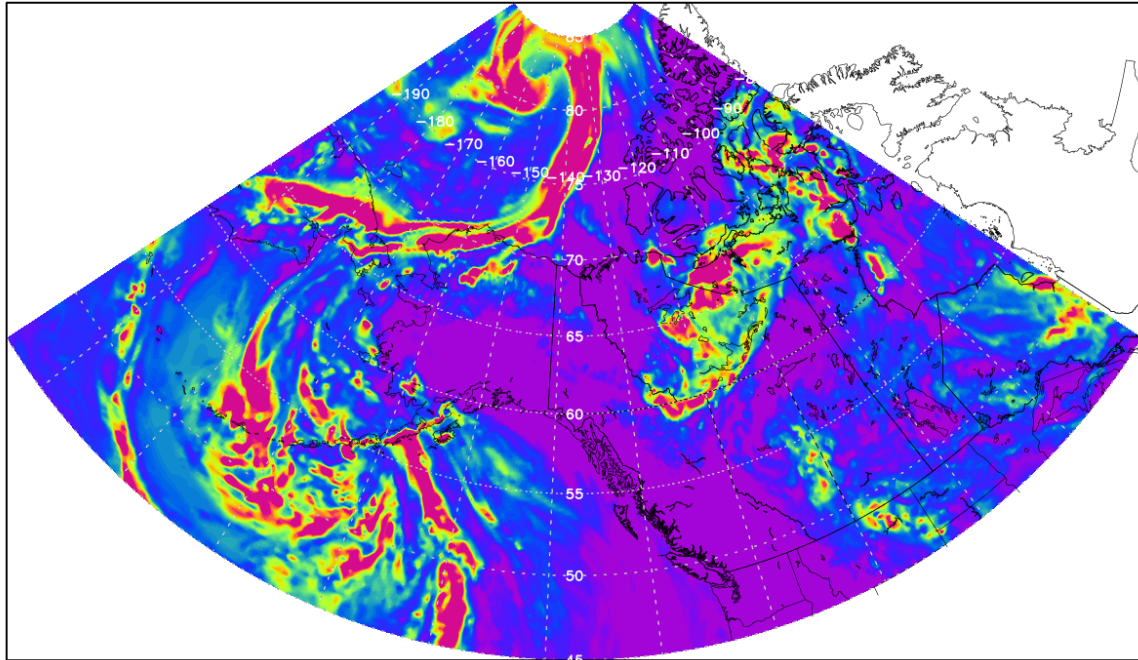
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NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-08-04



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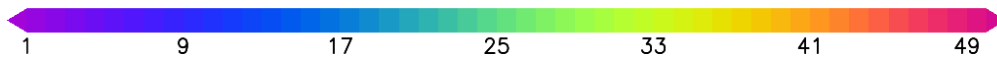
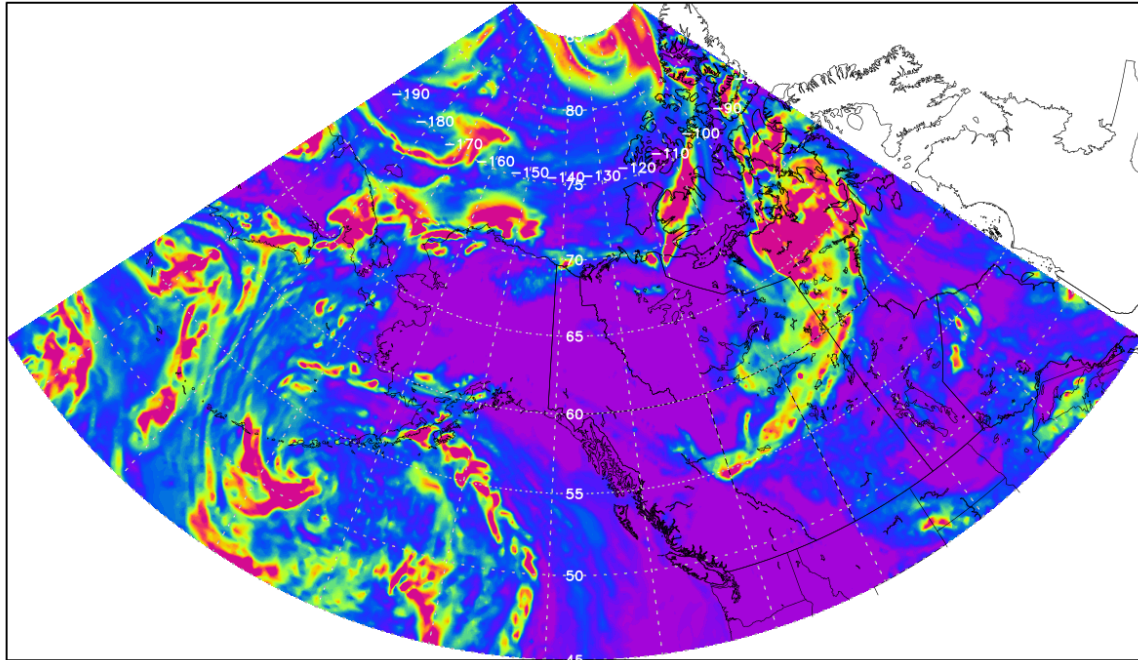
GEOS Total Cloud Optical Depth  
Initial time 04 AUG. 00z  
Valid time 05 AUG. 18z





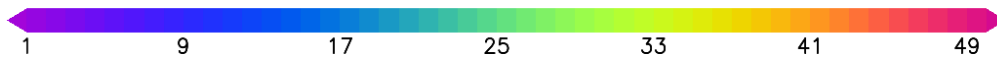
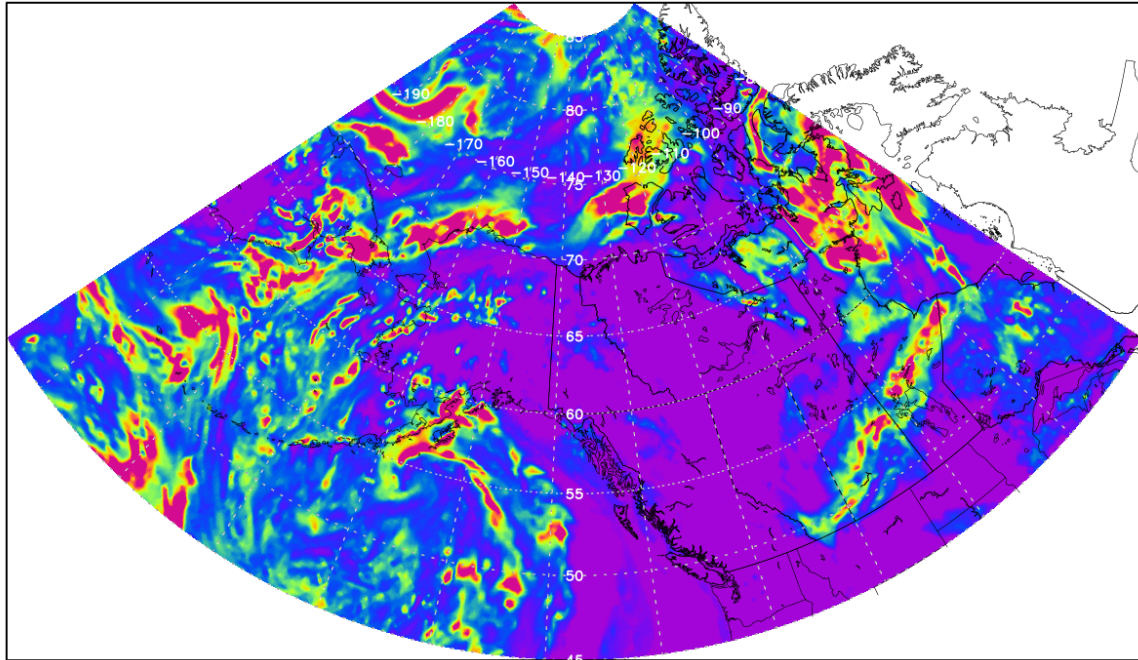
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GEOS Total Cloud Optical Depth  
Initial time 04 AUG. 00z  
Valid time 06 AUG. 18z



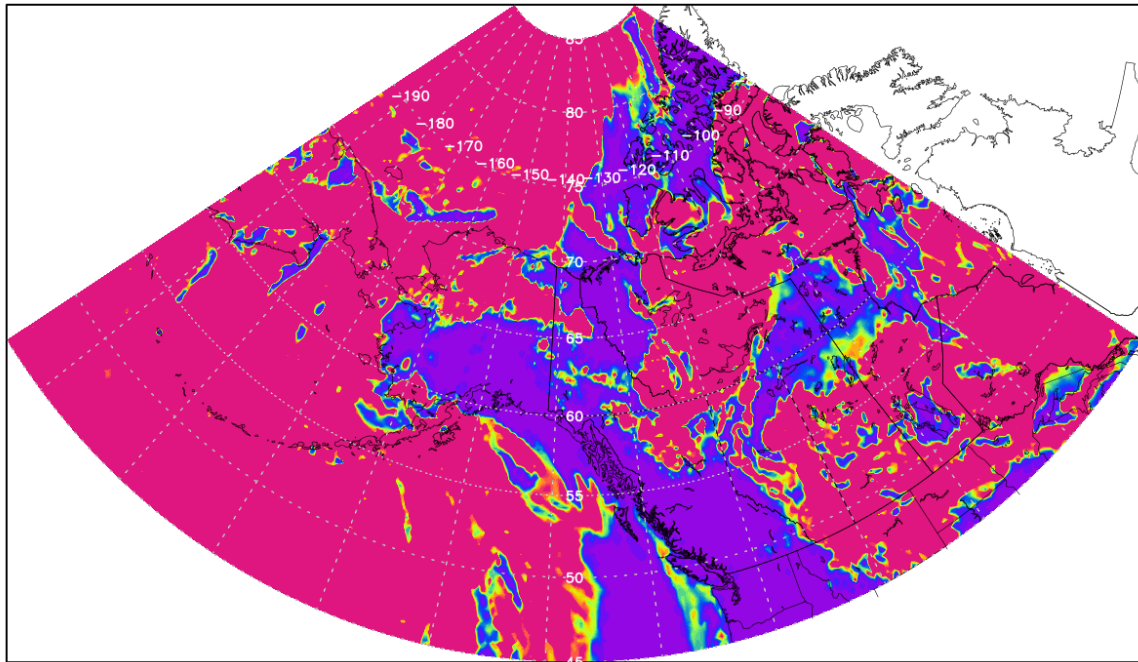
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GEOS Total Cloud Optical Depth  
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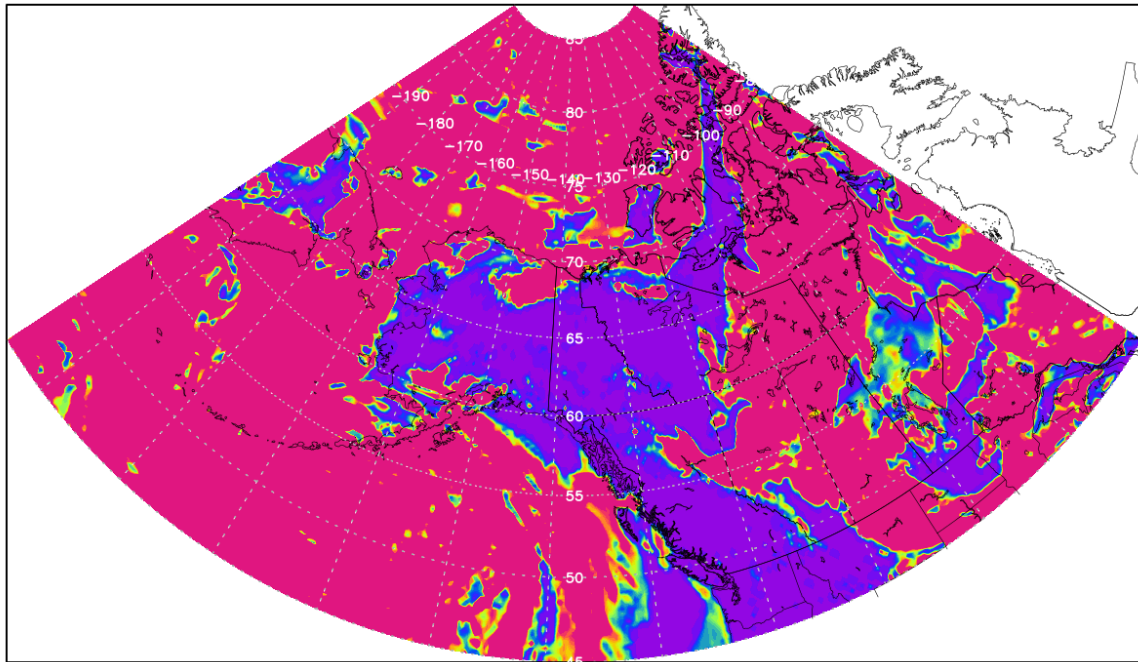
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Valid time 05 AUG. 18z



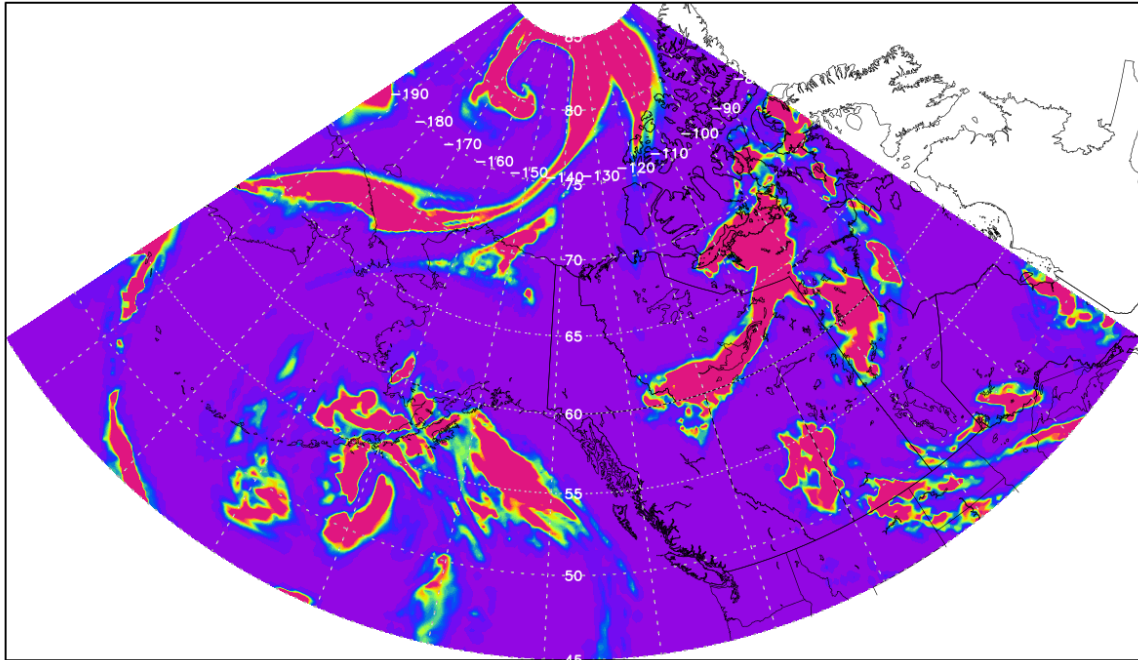
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GEOS Low Cloud Optical Depth  
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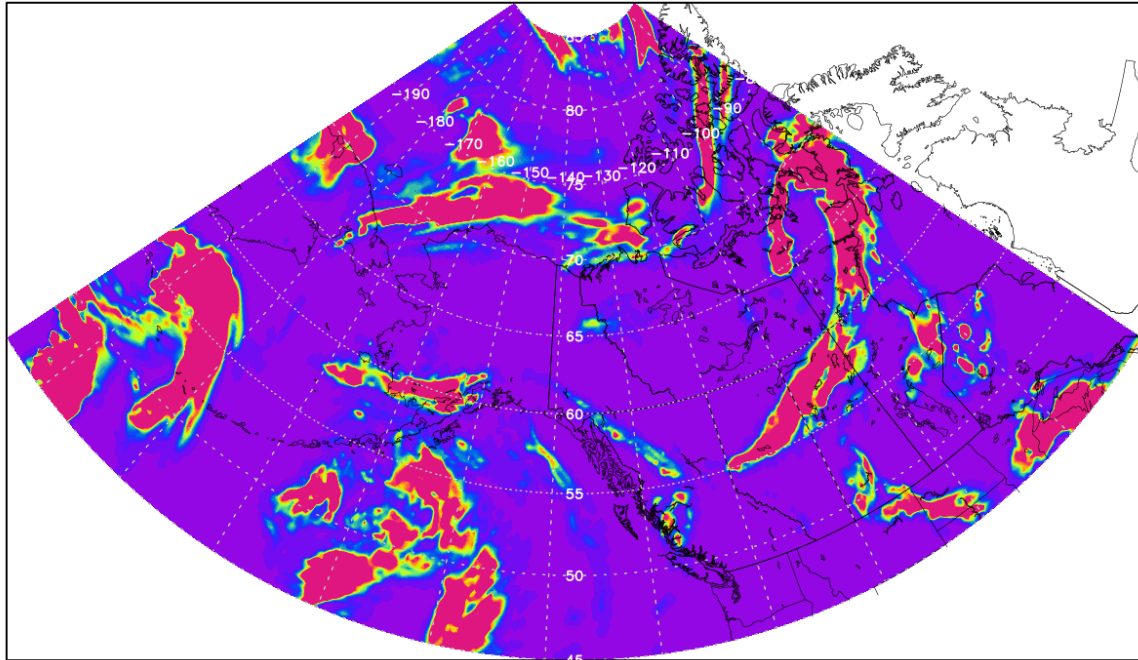
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GEOS Mid Cloud Optical Depth  
Initial time 04 AUG. 00z  
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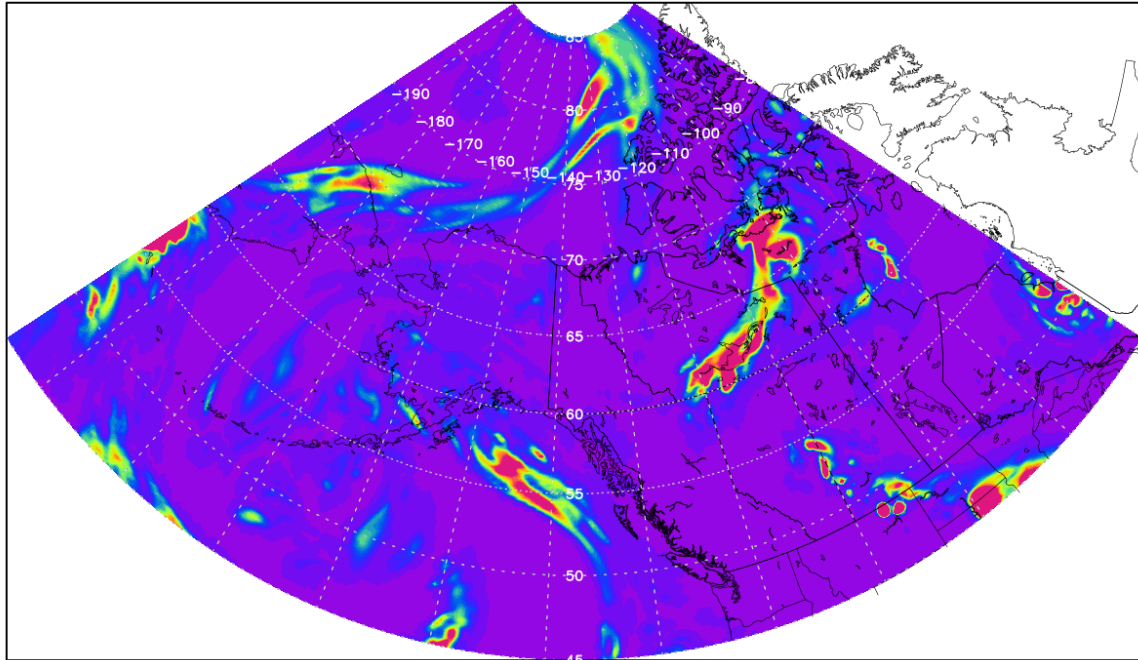
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GEOS Mid Cloud Optical Depth  
Initial time 04 AUG. 00z  
Valid time 06 AUG. 18z



ABOVE\_High\_Cloud\_Optical\_Depth\_IT\_00z04AUG\_VT\_18z05AUG.png

GEOS High Cloud Optical Depth  
Initial time 04 AUG. 00z  
Valid time 05 AUG. 18z



ABOVE\_High\_Cloud\_Optical\_Depth\_IT\_00z04AUG\_VT\_18z06AUG.png

GEOS High Cloud Optical Depth  
Initial time 04 AUG. 00z  
Valid time 06 AUG. 18z

