

**ABOVE Regional Weather Briefing**

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

The largest values of aerosol optical thickness continue to be seen near Old Crow up to the Mackenzie Bay, and reaching Inuvik by the end of the period. Large aerosol optical thickness are also seen over the southern half of BC. Small areas of little haziness are seen over AK, AB, and SK. Precipitation along western AK and points south and east of PAFA continue through this period, associated with a low pressure system moving east and the frontal system that moved southward through the NWT in the last couple of days. Areas in northern NWT look to have the best opportunity to fly under clear conditions through this period; from Inuvik to the Great Bear Lake to Norman Wells. Flights to Fort Simpson could also be possible. Conditions over Yellowknife, PAFA, Daring Lake, and the Seward Peninsula will continue to be cloudy through this period. Flights could also be possible in the areas nearing PASC (early in the period), and southern AB and SK. Areas between Great Bear Lakes and Yellowknife will contain thick low clouds and possible precipitation through this period.

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

Areas with large values of aerosol optical thickness continue to be reduced over AK. Meanwhile, regions east and north of Old Crow, from Inuvik to Norman Wells, and along the southern half of BC show increasing amounts of aerosol optical thickness in their vicinity. Smaller fires appear to begin near two small regions in the NWT, Fort Smith and Warburton Bay. The mission regions over AK continue to be mostly clear of haze and smoke through this period. A low pressure system makes its way to western AK during this period, deteriorating conditions from the Seward Peninsula through Anchorage. Precipitation develops along central YKT by the end of this period. The best areas to flight with no clouds are again along northern NWT, from Inuvik to Norman Wells to Fort Simpson, but keep in mind that these areas could be affected by smoke through this period. A sporadic short clearing of the clouds near the PAFA area and the Yukon Flats could be possible early, becoming cloudy again in the afternoon. Flights could also be possible along southern AB and SK. Areas between Yellowknife, Great Bear Lake, and Daring Lake continue to be cloudy.

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

Several fires continue to affect the northern portion of the YKT to Inuvik, south-central BC and AB, and near Fort Smith through this period. Most of the ABoVE area over AK shows little to none aerosol optical thickness in the forecast. Precipitation along south-west AK up to the Anchorage area continues as a low pressure system makes its way south. Additional precipitation develops in central YKT. The best opportunity to flight with clear conditions is along the NWT; flights from Inuvik to Great Bear Lake to Daring Lake to Yellowknife to Fort Simpson should be clear of clouds and smoke. Some sporadic clearing could be seen in PAFA, Yukon Flats, and PASC early in the period. Flights can also be possible over southern BC, AB, and SK.

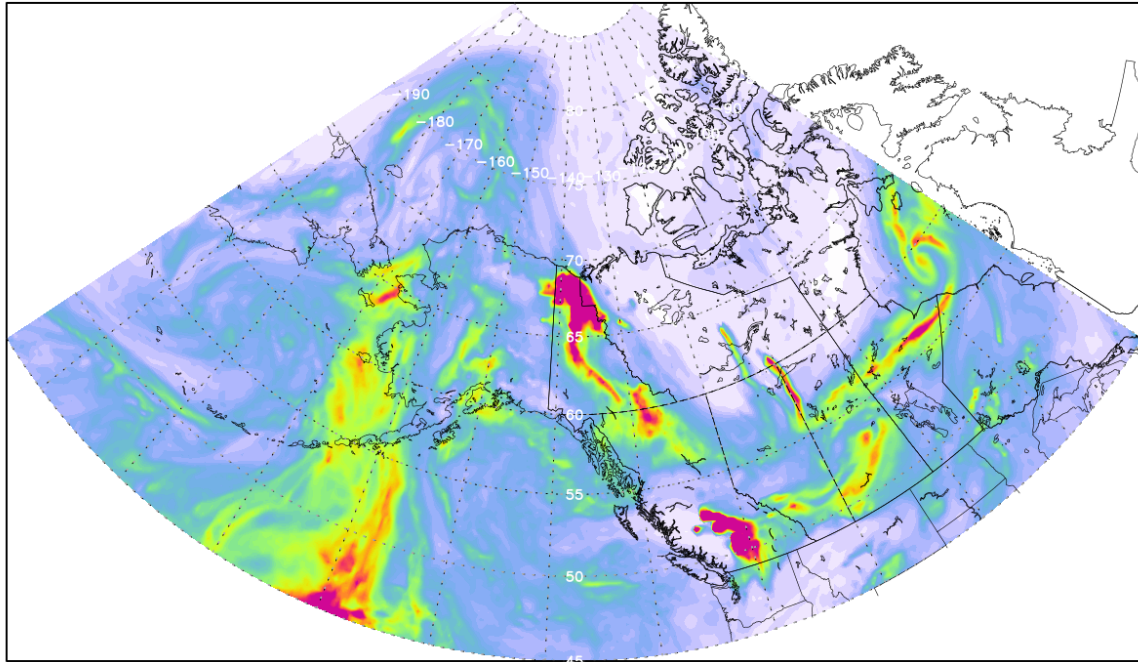
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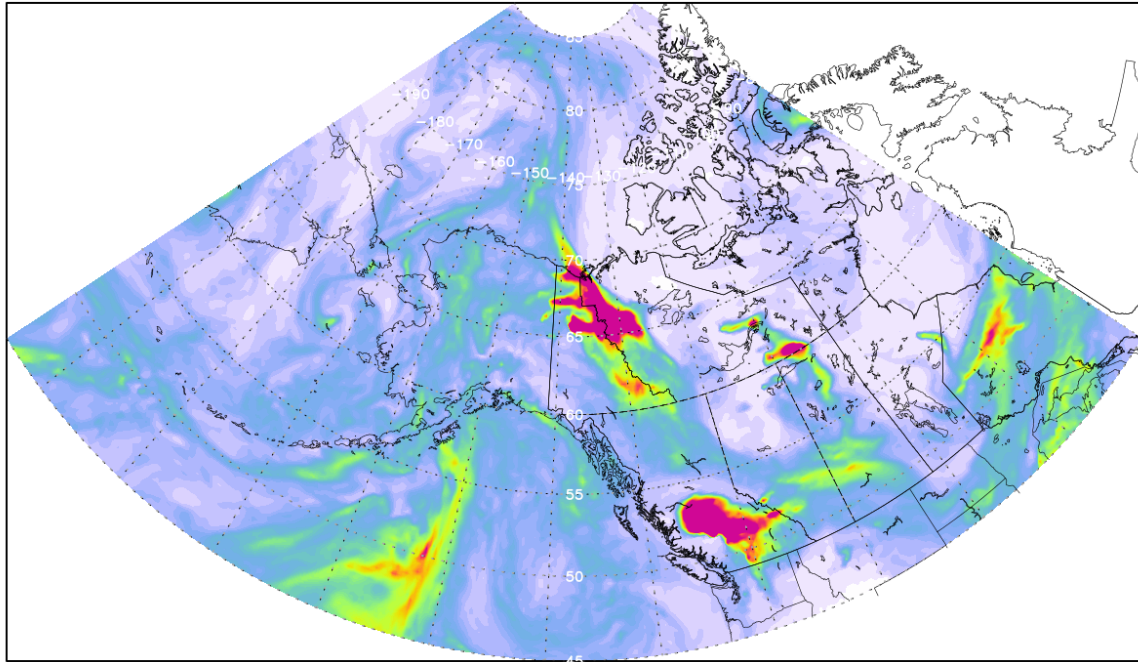
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GEOS Aerosol Optical Depth  
Initial time 16 JUL. 00z  
Valid time 17 JUL. 21z



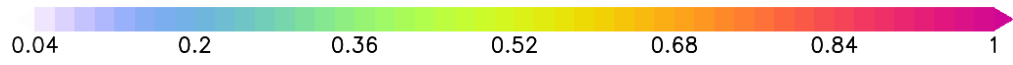
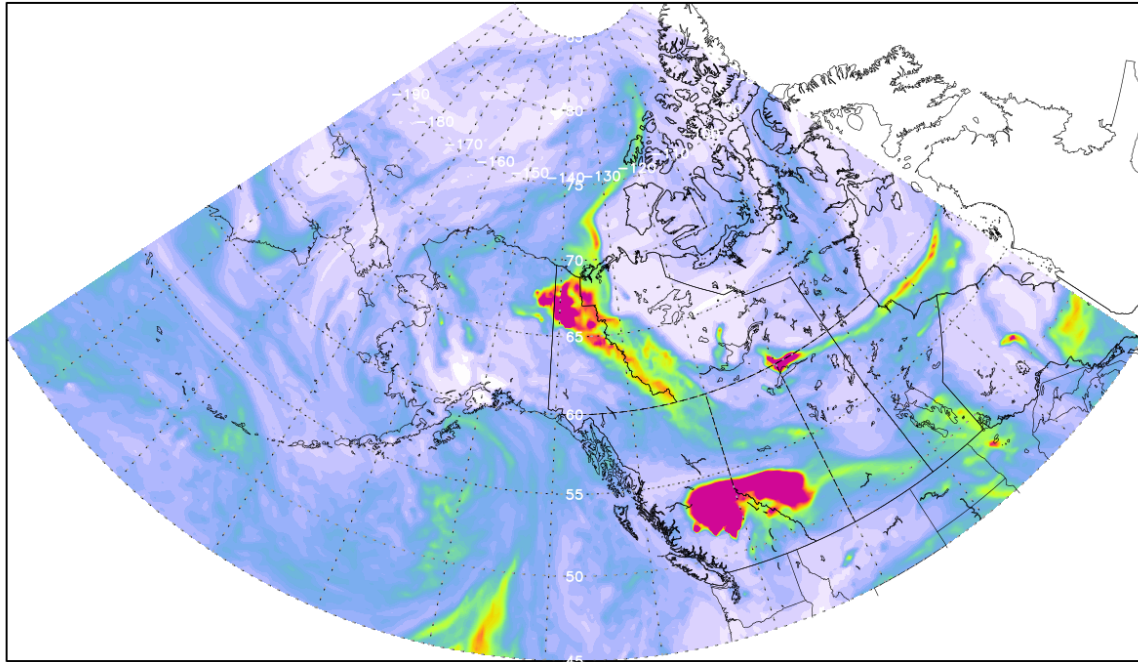
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GEOS Aerosol Optical Depth  
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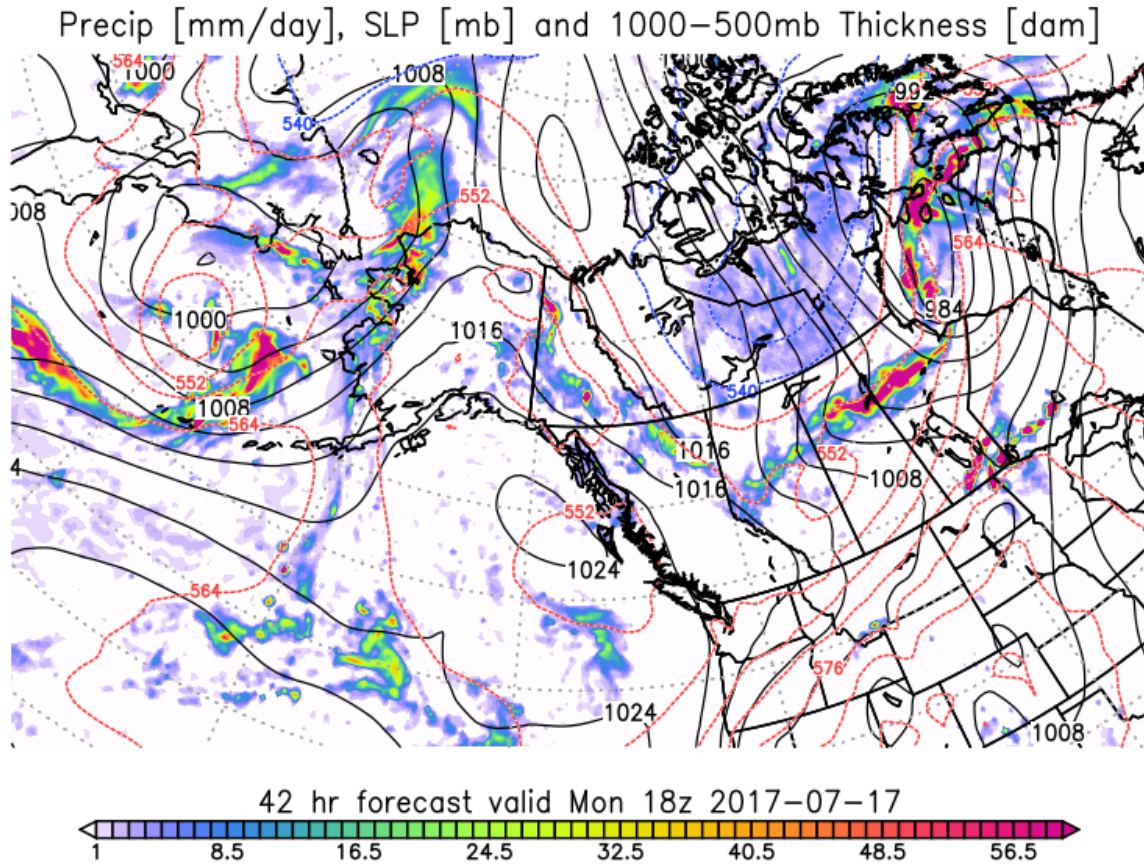
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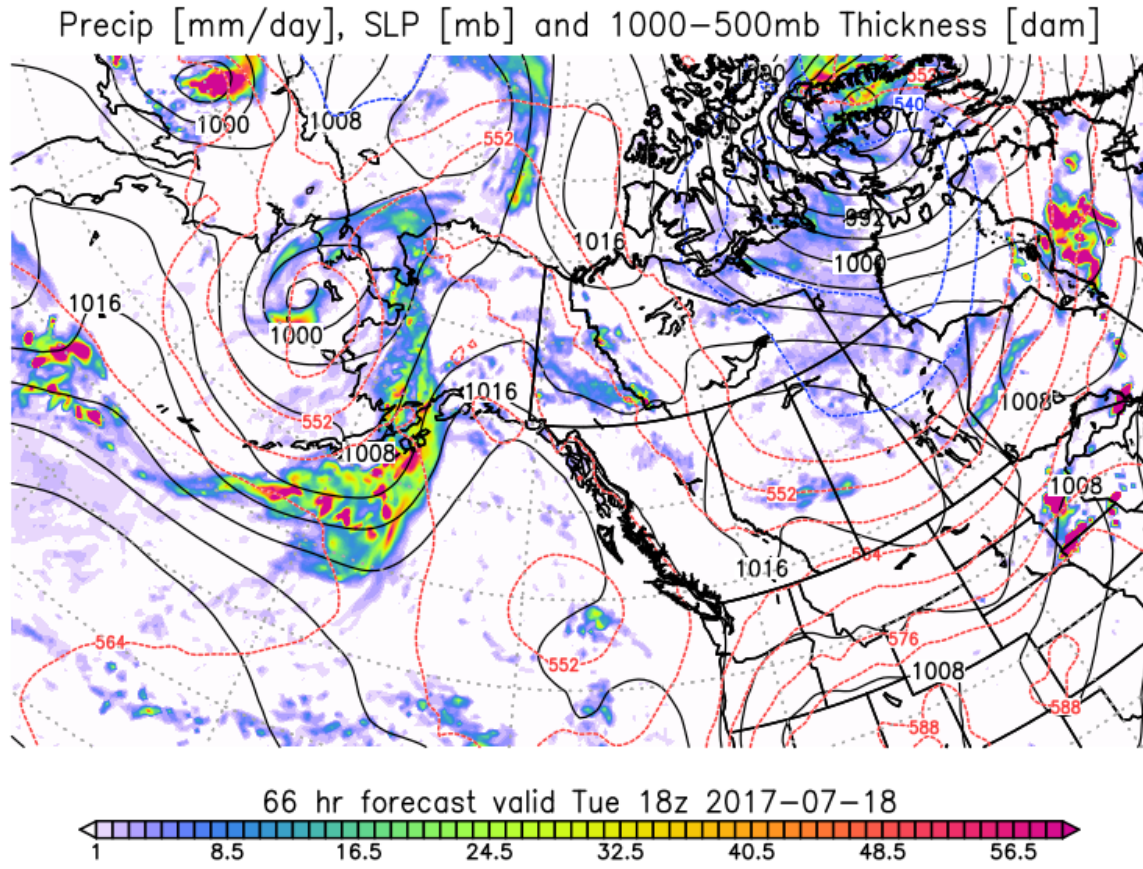
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-16



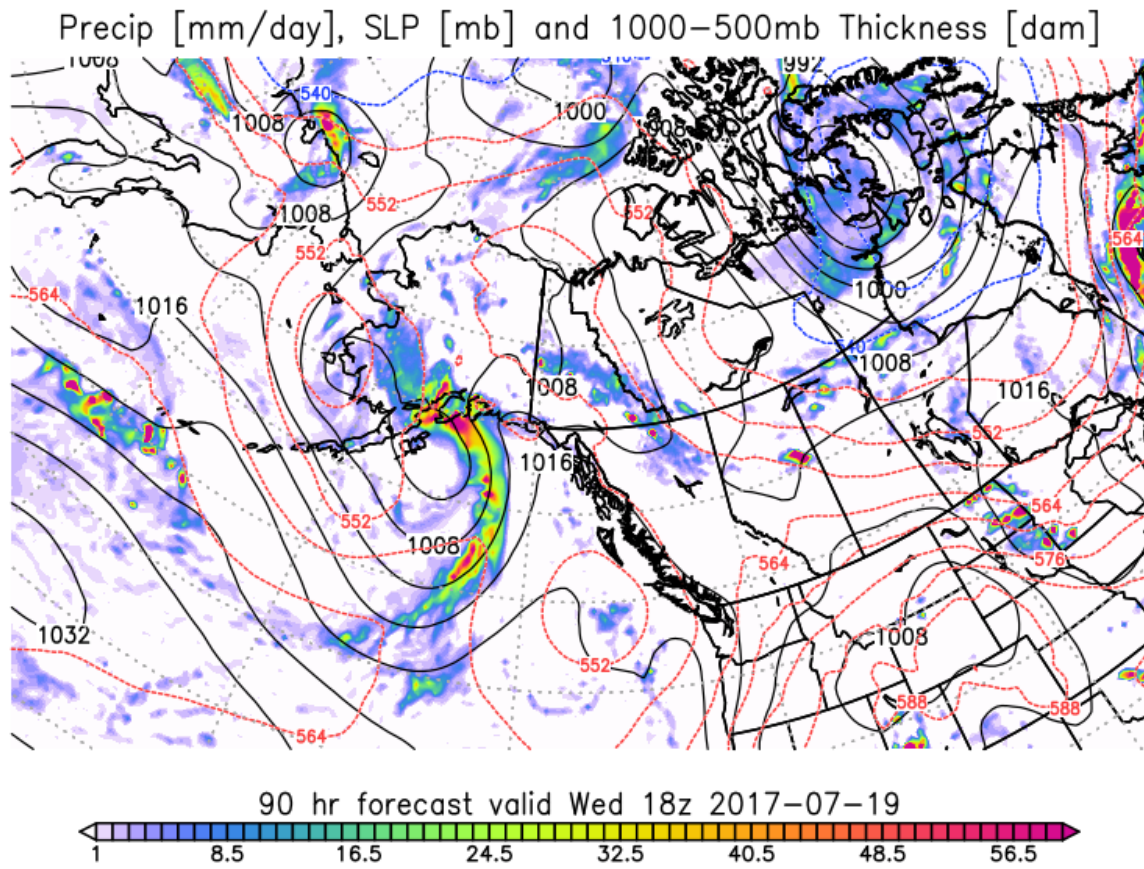
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-16



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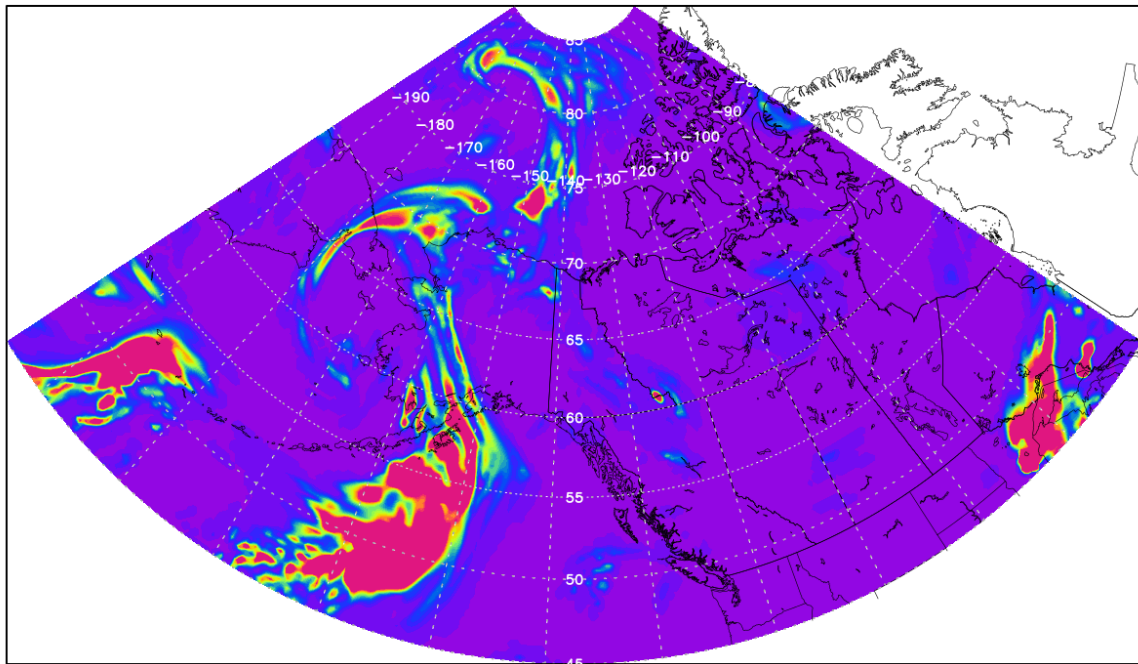
NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-16





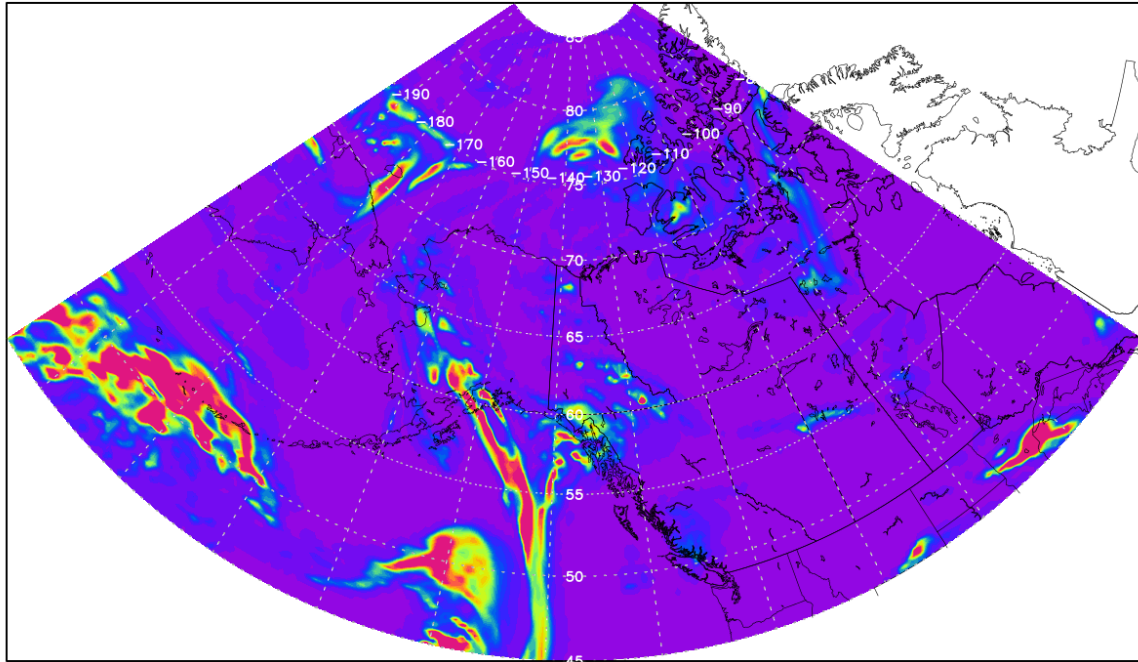
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GEOS High Cloud Optical Depth  
Initial time 16 JUL. 00z  
Valid time 18 JUL. 18z



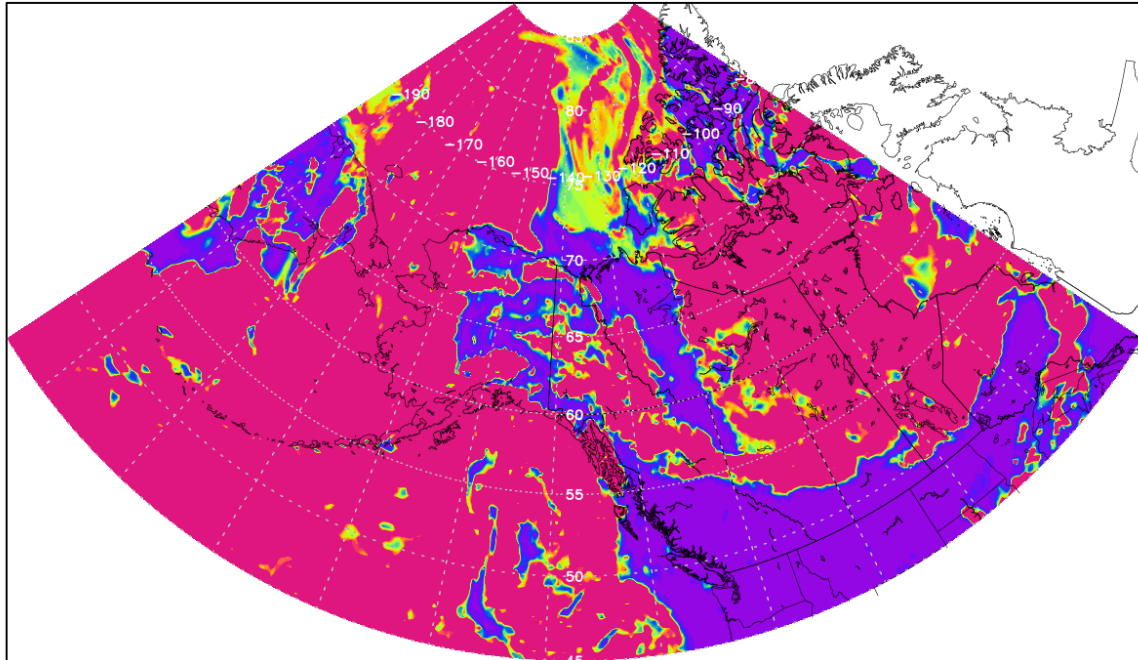
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GEOS High Cloud Optical Depth  
Initial time 16 JUL. 00z  
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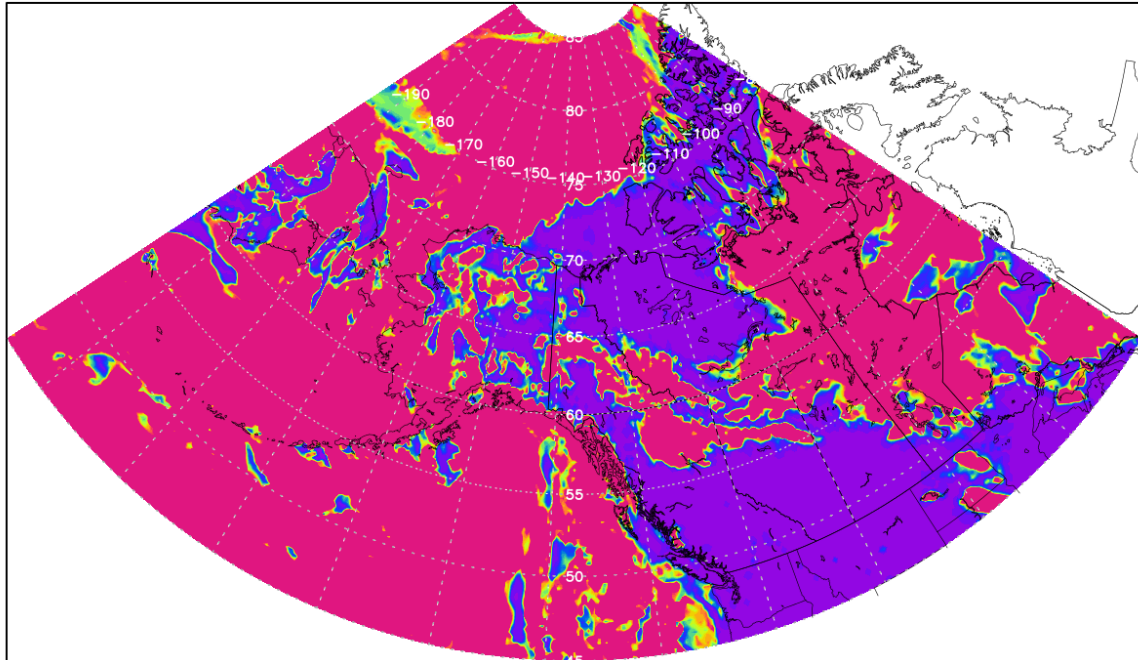
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GEOS Low Cloud Optical Depth  
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Valid time 18 JUL. 18z



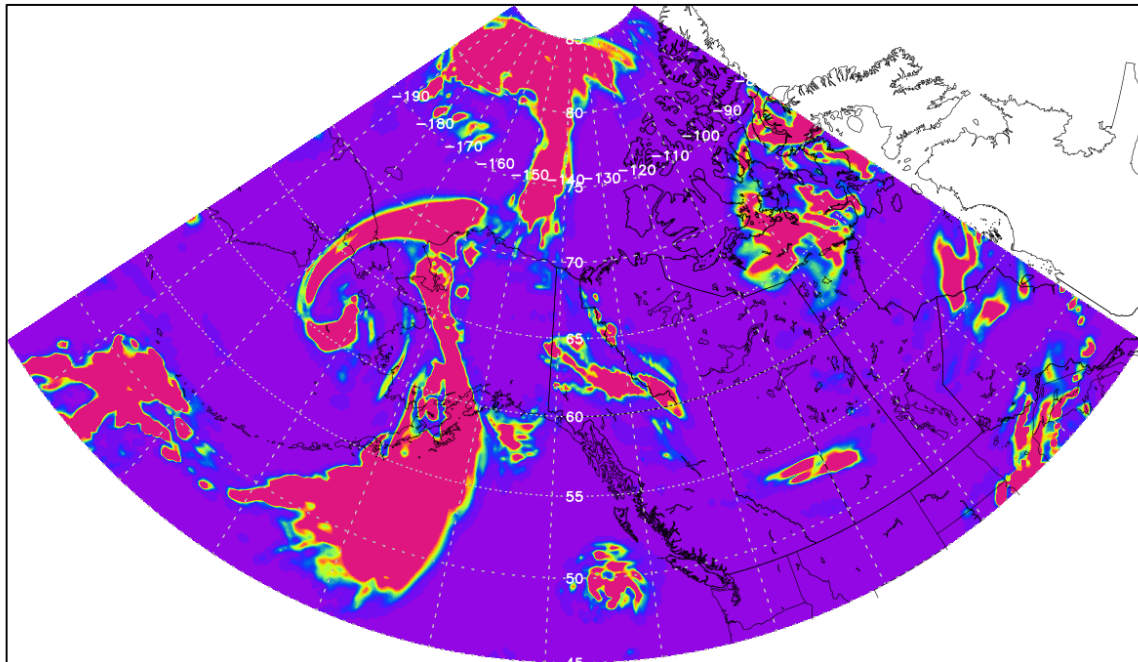
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GEOS Low Cloud Optical Depth  
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Valid time 19 JUL. 18z



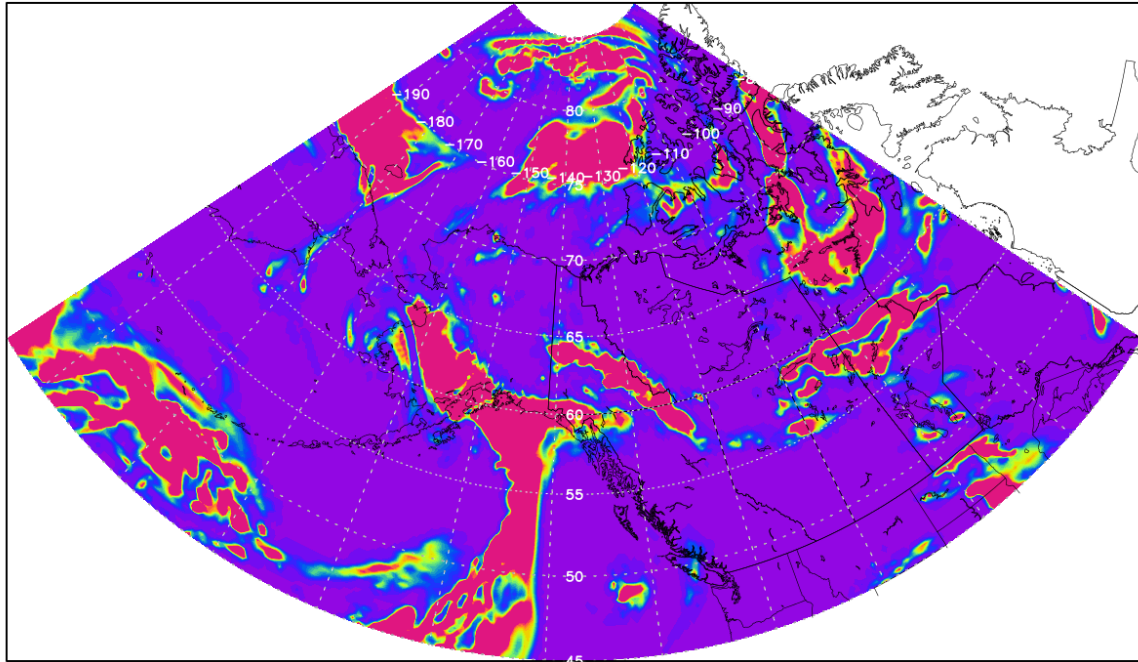
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GEOS Mid Cloud Optical Depth  
Initial time 16 JUL. 00z  
Valid time 18 JUL. 18z



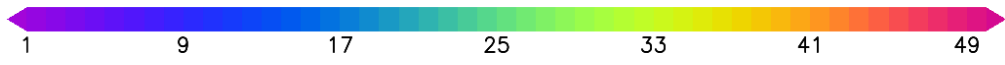
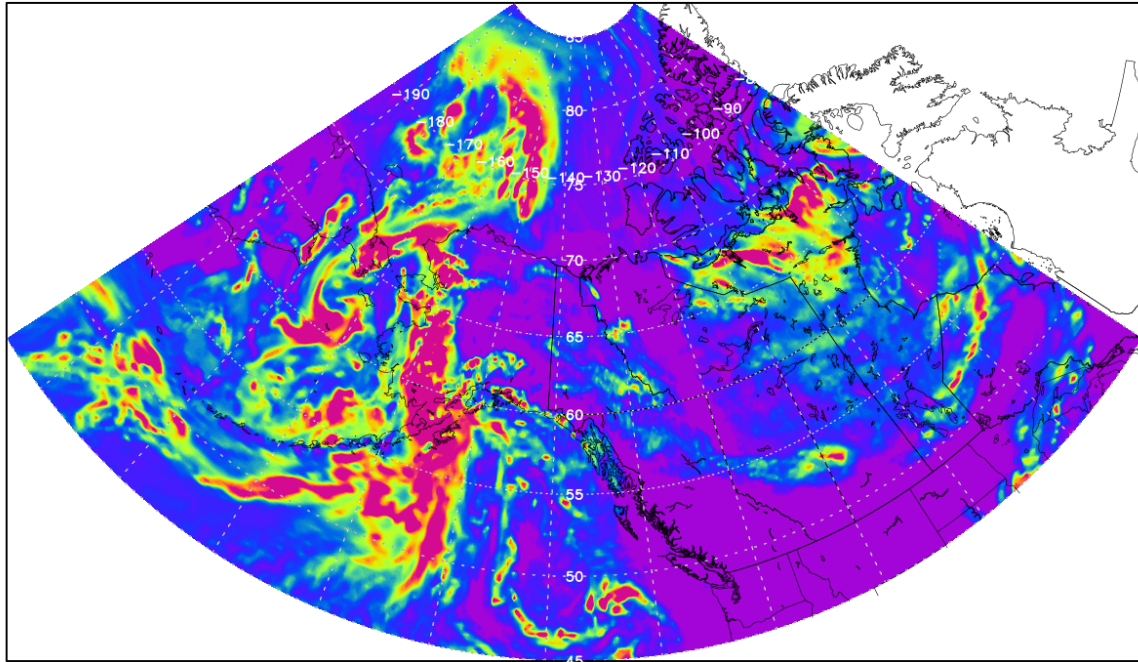
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GEOS Mid Cloud Optical Depth  
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ABOVE\_Total\_Cloud\_IT\_00z16JUL\_VT\_18z18JUL.png

GEOS Total Cloud Optical Depth  
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Valid time 18 JUL. 18z



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