

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 05 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 06 August through 2359z 06 August**

The low pressure system near Cambridge Bay stays in place while the associated cold front brings clouds and precipitation southward through northern BC, AB, SK and MB. Clouds and rain from another frontal system approach Alaska and YKT from north. Low clouds will be present along the north coast from PABR to PASC. What starts out as a mostly clear day in terms of low cloud optical thickness, becomes mostly cloudy during the end of the period. Seward Peninsula and Yukon Flats both start out mostly cloud free early but become cloudy by the end of the period. A low pressure system south of the Alaska peninsula is pushing a band of clouds and precipitation northward over the Alaska range overspreading the southern 1/3 of Alaska. North McKenzie River Valley including Great Bear Lake looks partly cloudy becoming clear. Great Slave Lake and Yellow Knife are cloudy early becoming partly cloudy by end of period. Areas of most troublesome aerosol optical depth continue to be southern 1/2 of BC and the air just ahead of the frontal system near Cambridge Bay and over the Hudson Bay.

Day-2 Outlook**Valid 1500z 07 August through 2359z 07 August**

The low pressure system in north central Canada is now centered near northern Hudson Bay. The clouds and rain associated with this system stretch south across the Hudson Bay through southern sections of AB, SK, and central MB. Behind the front, high pressure builds in bringing mostly clean air, and fewer clouds to the northern YKT and most of NWT including McKenzie River and vicinity of Great Bear Lake and Yellow Knife. Northern portions of AB, SKT, and northwest MB will also see fairly clean and cloud free conditions. There may be a small window of opportunity early for the western Seward Peninsula as clouds from two separate frontal systems approach from the northwest and from the southeast. The questions are 1) Can the flight take place below the middle deck of clouds? and 2) Will the approaching systems allow enough time for a meaningful flight? Locations of the largest aerosol optical thickness continue to be the southern 2/3 of BC and the air just ahead of the frontal system sweeping through southern Canada.

Day-3 Outlook**Valid 1500z 08 August through 2359z 08 August**

A high pressure system is centered over SK keeping conditions over most of AB and SKT fairly clean and cloud free. Southern portions of McKenzie River look good especially near Great Slave Lake. Great Bear Lake will start the period cloudy and be in and out of clouds and rain in the period. There may be a window for flying over Yukon Flats which is partly cloudy early, then mostly clear for the middle of the period, becoming cloudy at the end of the period. At this time, Seward Peninsula is forecast to be cloudy and rainy through the period. Locations of the largest aerosol optical thickness continue to be the southern 2/3 of BC and southwestern AB along with portions of southern NWT and northern SK in the area south and east of Lake Athabasca and Great Slave Lake.

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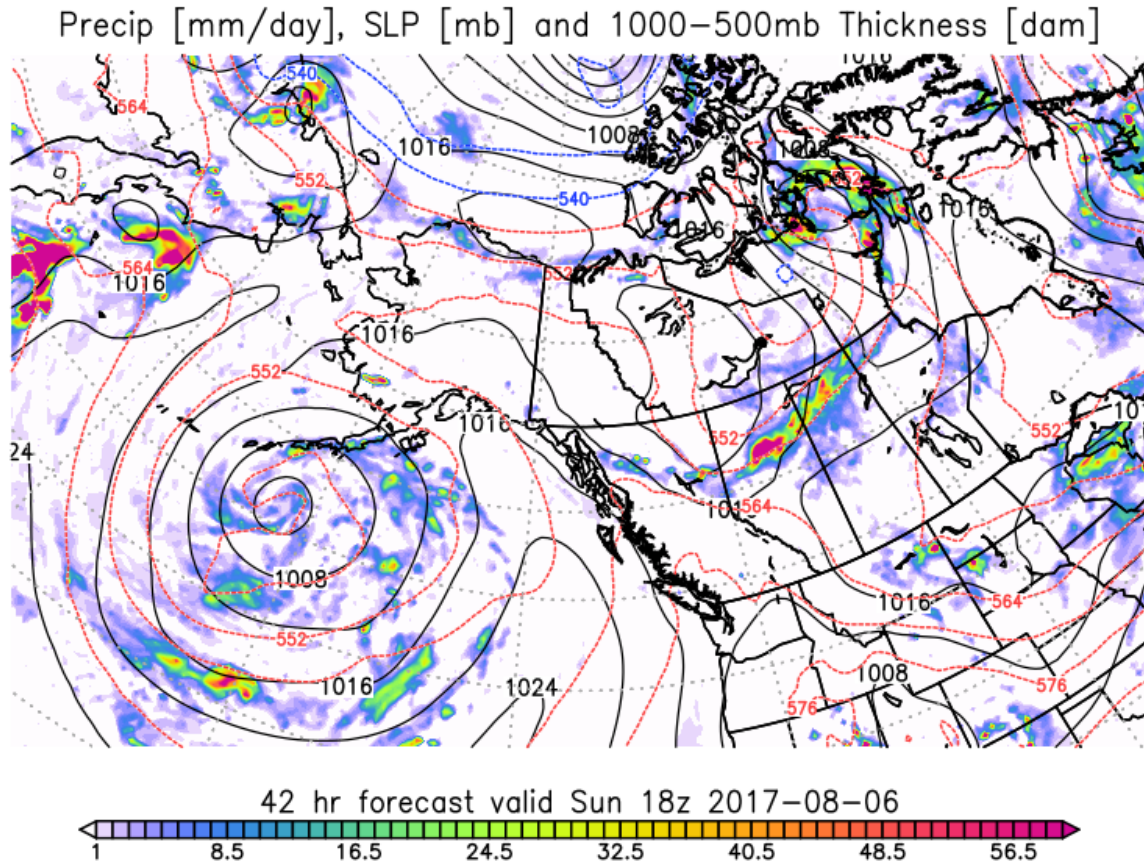
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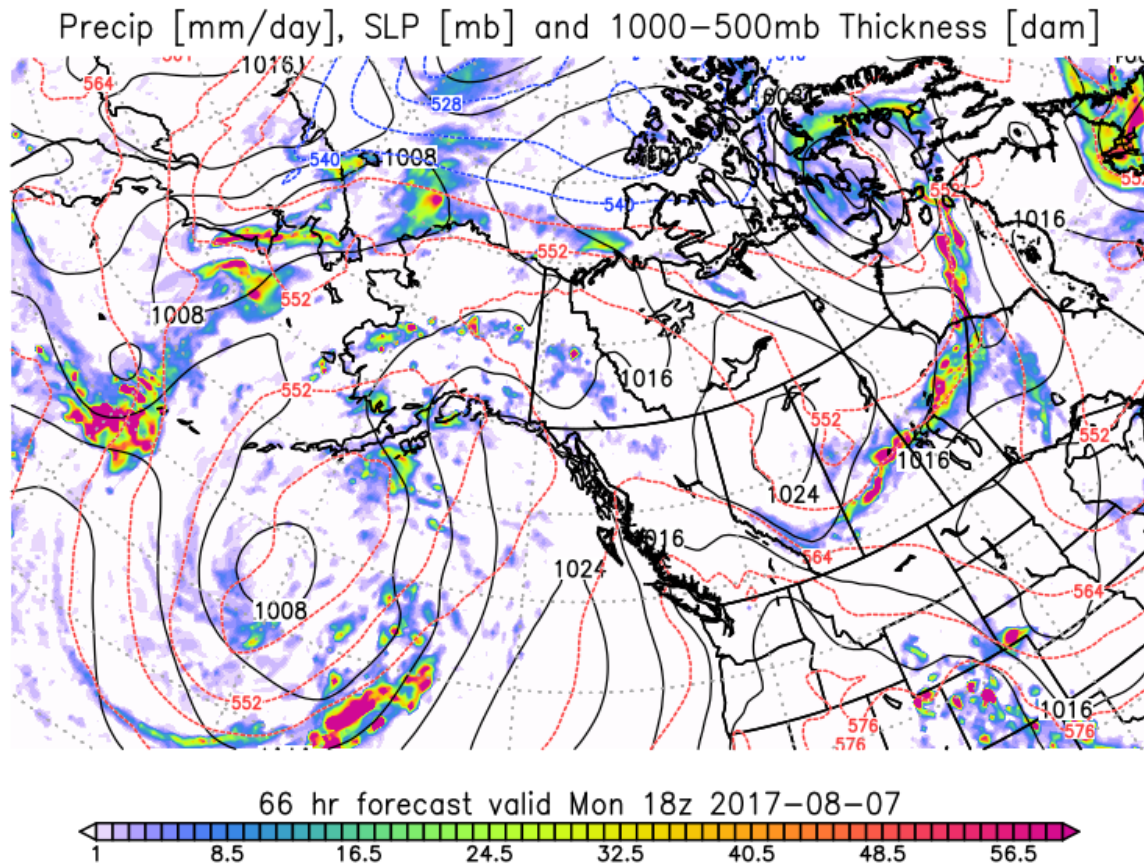
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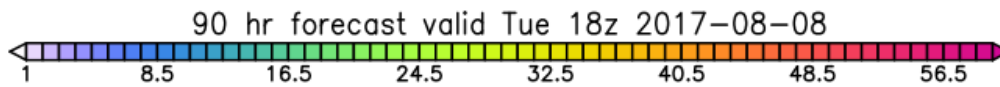
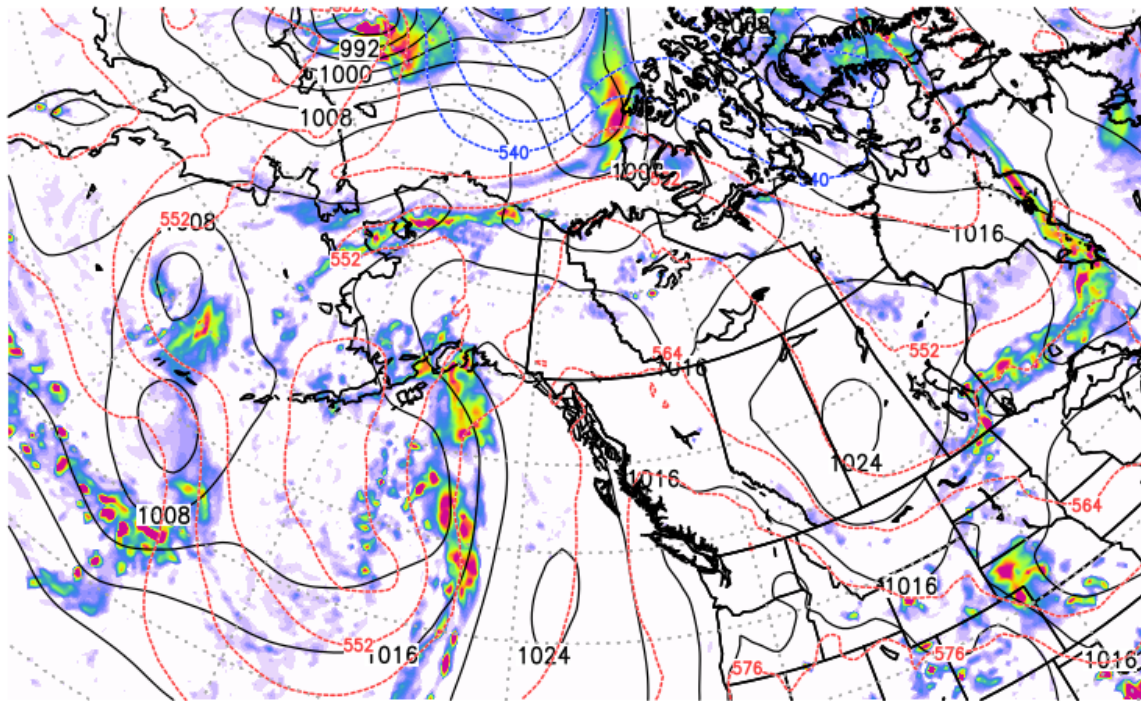
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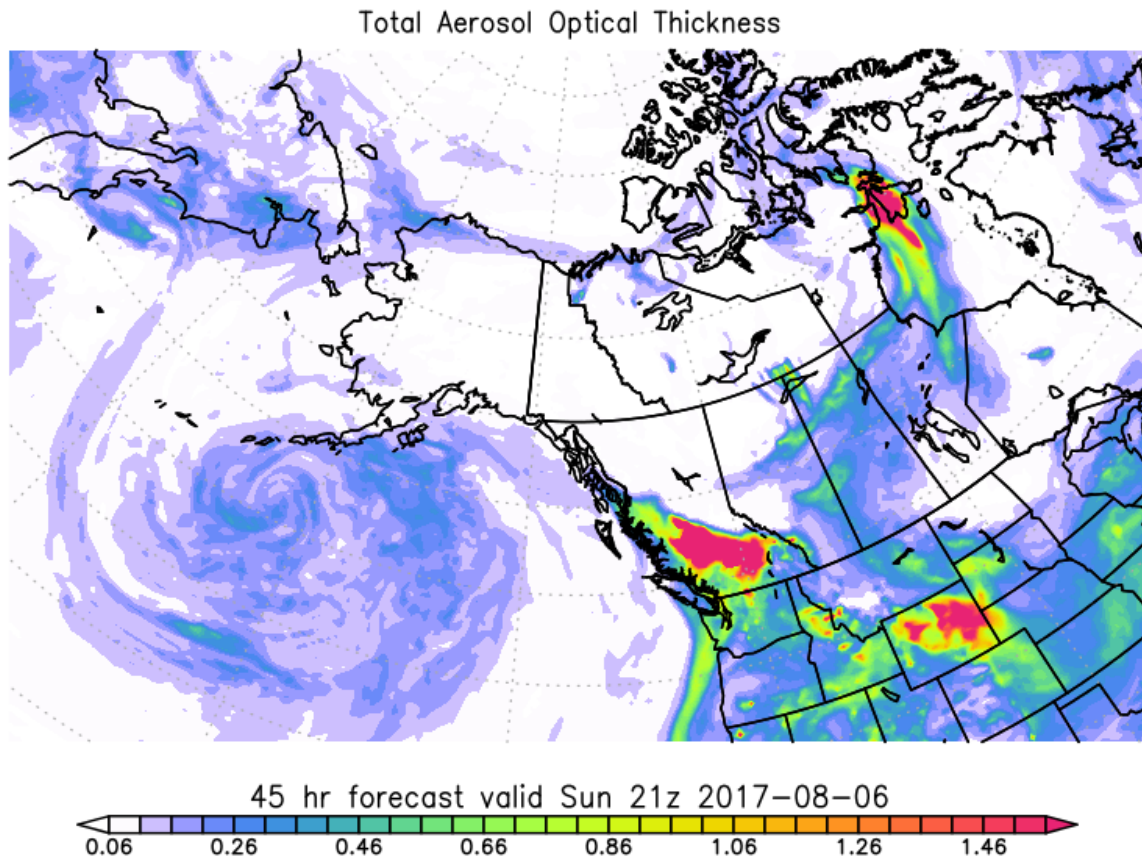
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Precip [mm/day], SLP [mb] and 1000-500mb Thickness [dam]



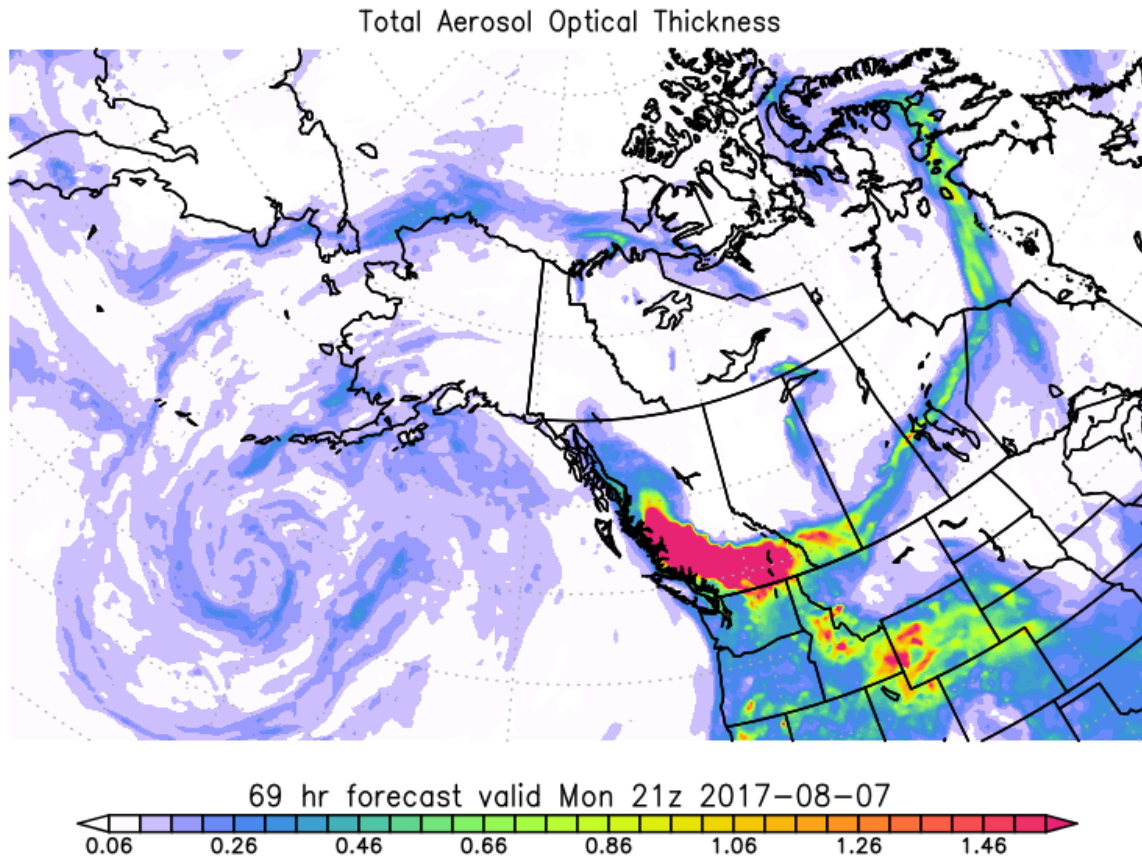
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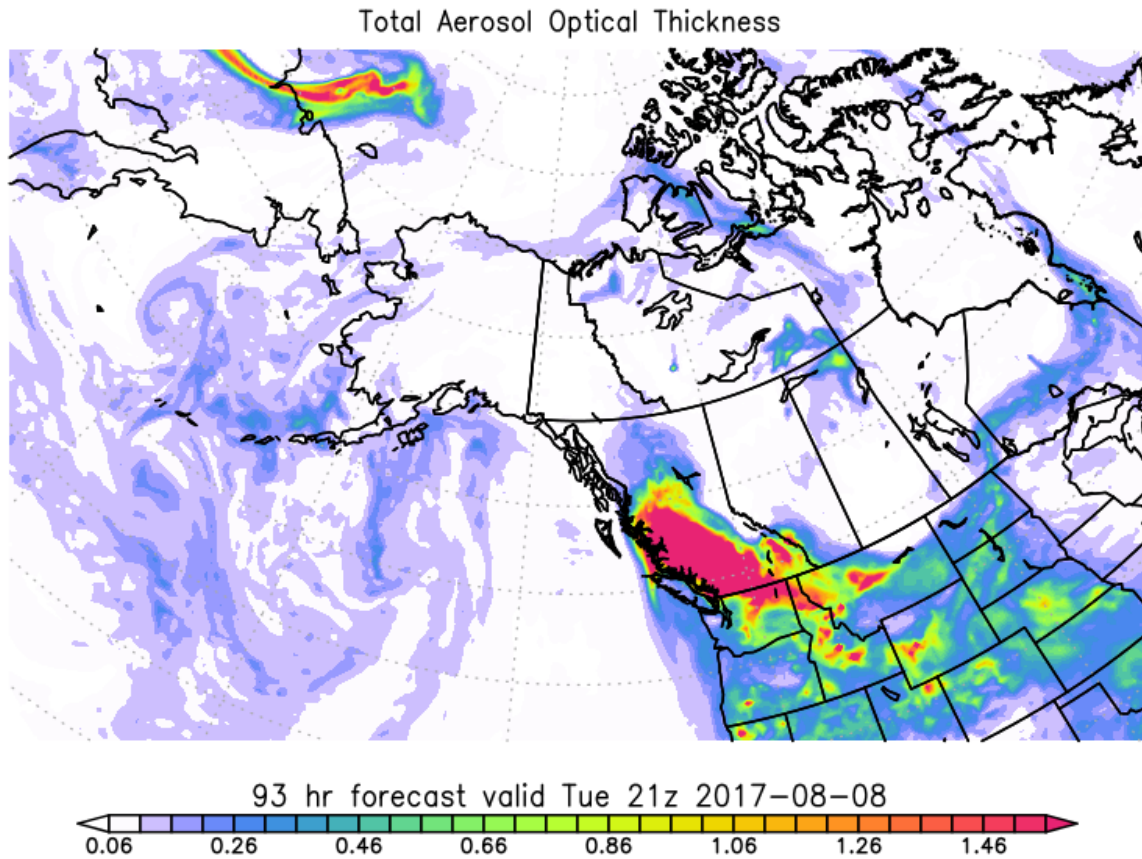
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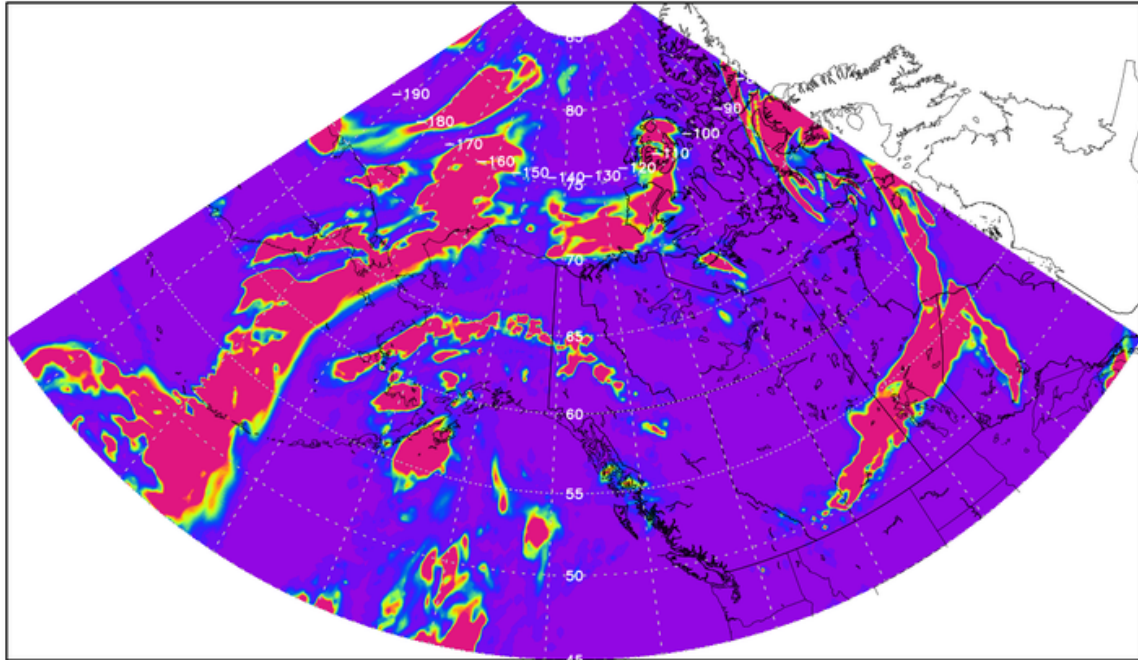
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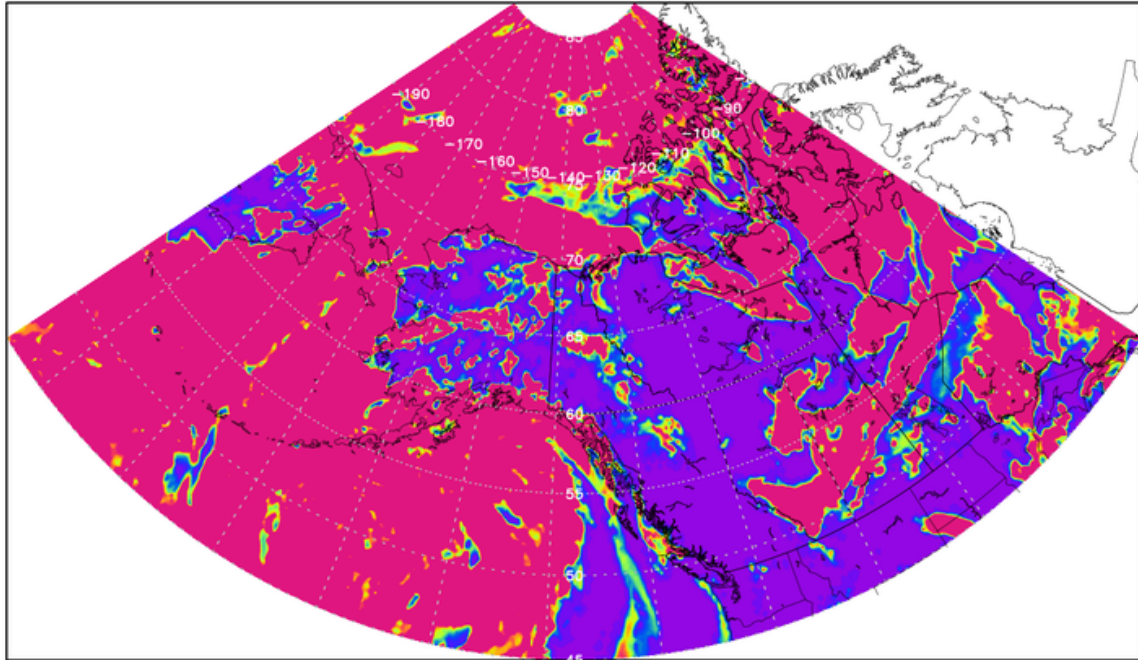
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GEOS Mid Cloud Optical Depth
Initial time 05 AUG. 00z
Valid time 07 AUG. 18z



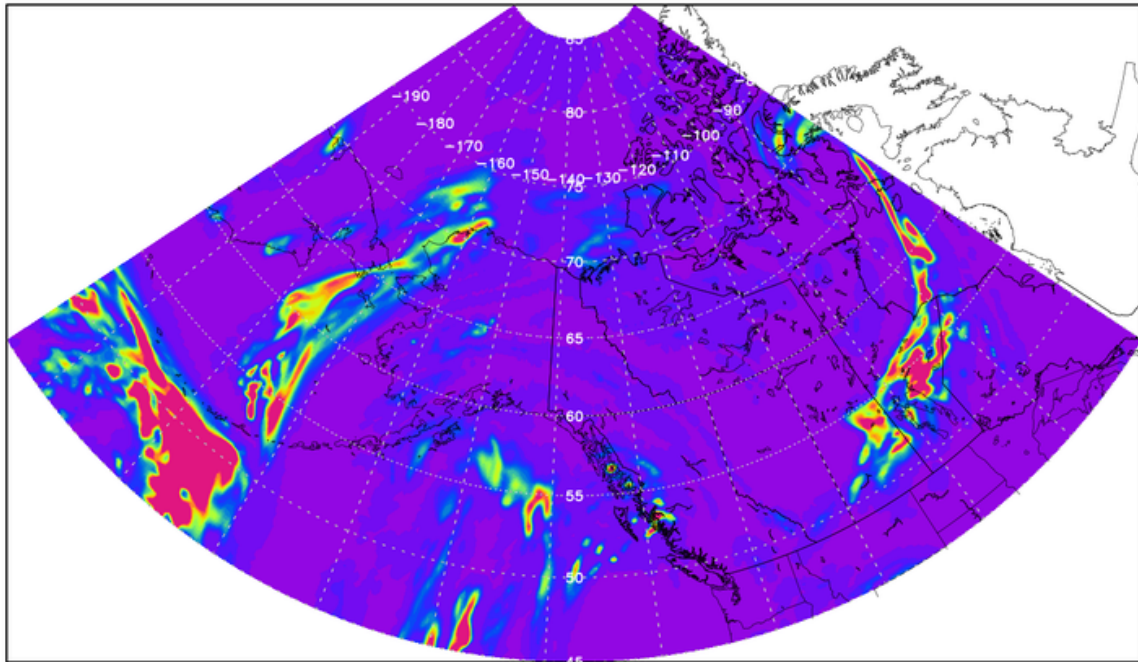
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GEOS Low Cloud Optical Depth
Initial time 05 AUG. 00z
Valid time 07 AUG. 18z



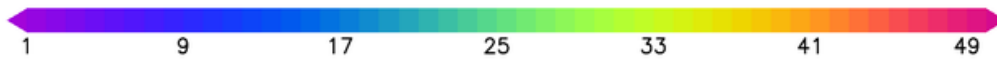
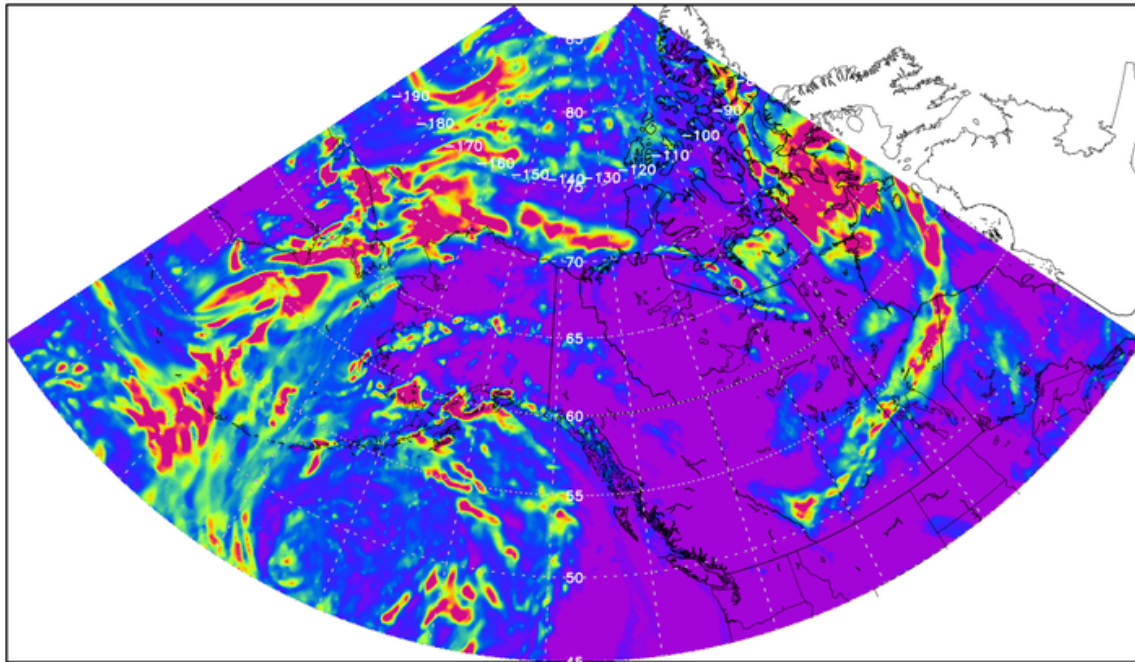
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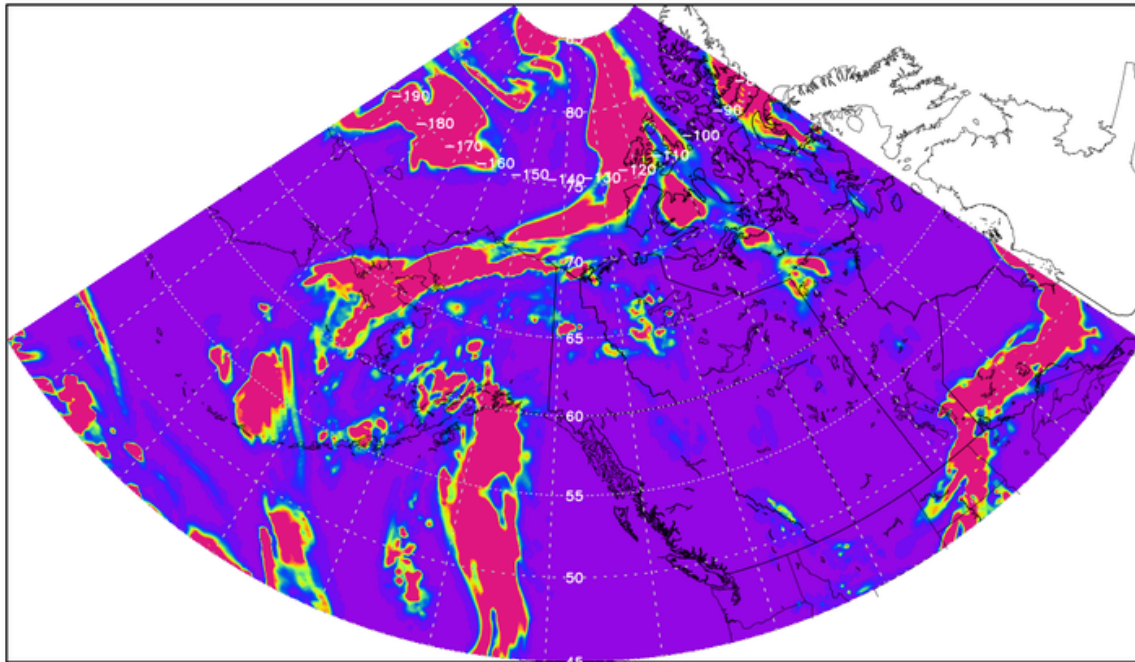
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GEOS Total Cloud Optical Depth
Initial time 05 AUG. 00z
Valid time 07 AUG. 18z



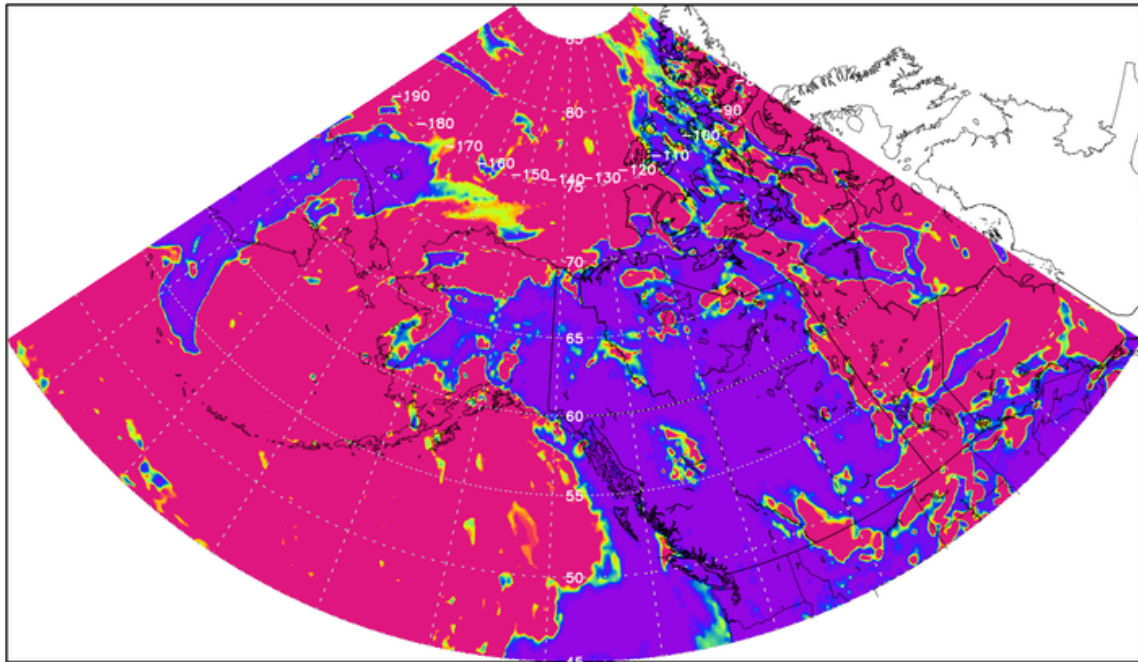
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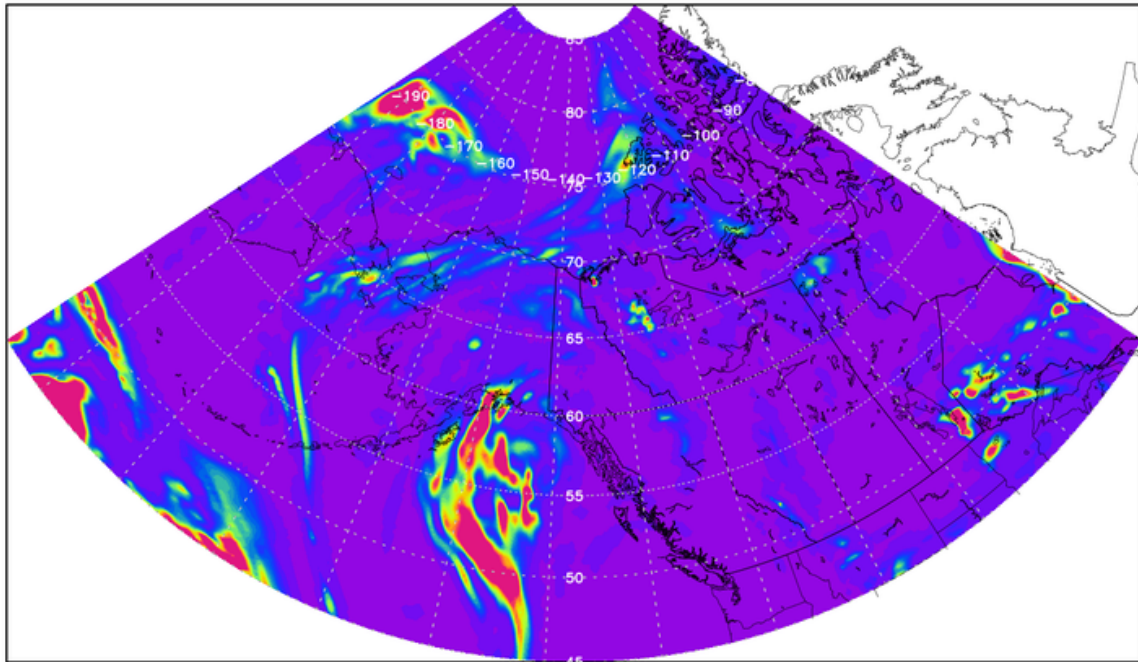
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ABOVE_Total_Cloud_IT_00z05AUG_VT_18z08AUG.png

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