

ABOVE Regional Weather Briefing

Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 20 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 21 July through 2359z 21 July

The mission areas over AK will continue to be mostly free of smoke/haze through this period, with the exception of near Fort Yukon where a small fire will produce smoke and haziness. Large values of aerosol optical thickness are seen in the southern BC, southern half of AB, most of SK, and southern half of MB. Some smoke contamination could affect a small area in the northern YKT, and areas between Inuvik and Norman Wells through this period. A frontal system, making its way south-east, brings heavy precipitation from PAFA through the YKT and western NWT. Precipitation, associated with an occluded system over Nunavut, continues over central AB and SK. A low pressure system begins to affect north-western AK, while another low pressure system begins to make its way into BC by late afternoon/early evening. Clear targets over AK could be found along the Norton Sound coast and northern Bethel up to mid-afternoon, when sporadic clouds will be seen. The Yukon Delta could have some sporadic clouds through the day. Depending on the boundary of the low clouds, there could be an opportunity for clear conditions between PAFA and the Yukon Flats through this forecast, becoming mainly clear over the Yukon Flats by late afternoon. Areas between PASC and Barrow could also see some cloud free conditions by late morning/early afternoon. The vicinity of Whitehorse will be mostly clear in the morning. Over the NWT, cloud clear weather conditions could be seen between the Great Bear Lake to Yellowknife to Daring Lake early on. Similar conditions will be possible over Fort Smith, Fort Simpson, and Fort Liard. Additional targets can be possible along the northern half of SK, while conditions over AB are cloudy through the day.

Day-2 Outlook

Valid 1500z 22 July through 2359z 22 July

The largest values of aerosol optical thickness continue to affect central BC, expanding to most of AB and SK. Smaller values of aerosol optical thickness are forecasted to contaminate most of northern AK (from the Seward Peninsula to PAFA), the northern YKT, and areas between Fort Simpson and Fort Liard. The low pressure system moving through the Beaufort Sea continues to deteriorate conditions over most of northern AK and the northern coast of YKT. Clouds and

precipitation, associated with a frontal system and a low pressure system, will affect areas from Whitehorse to the southern half of the NWT, along most of BC, and the northern most points of AB and SK. Flights over interior AK, the PAFA vicinity, and the Yukon Delta could be possible through most of the day, with conditions deteriorating along north Bethel in the afternoon. Opportunities to flight over the Yukon Flats might be early on. The northern coast of AK, between PASC and Barrow, show mostly clear skies through the day, with the low cloud boundary closely to the south of this region. Another opportunity for clear sky conditions is over central YKT and northern NWT. The entire BC and most of SK regions will be under cloudy conditions. AB could see sporadic clouds in the morning, with conditions beginning to deteriorate in the afternoon.

Day-3 Outlook***Valid 1500z 23 July through 2359z 23 July***

Large values of aerosol optical thickness will be found over south-central BC, central AB, northern half of SK, and near Fort Smith through this period. Smaller quantities of aerosol optical thickness continue to affect the northern portion of the YKT, northern half of NWT, Great Slave Lake and points south, and most of central AK from the Yukon Delta/Seward Peninsula to the Yukon Flats. A frontal system, combined with a low pressure system moving over BC, provides heavy rain and cloudy conditions from BC to central AB and SK to western NWT to the Hudson Bay. A second low pressure system begins to make its way through north-western AK, deteriorating conditions from the Yukon Delta through the Yukon Flats. The northern half of AK will be under cloudy conditions and precipitation through the day. The only opportunity for clear cloud conditions over AK is in the vicinity of Anchorage during the morning hours. The southern half of YKT could be a target for some flights, with sporadic clouds developing in the afternoon. Areas between Yellowknife and the Great Bear Lake will be cloud free. The areas between Fort Liard and Fort Simpson could be a possibility for flying with the low cloud boundary near by. Mission regions over SK below 55N will be mainly clear, while areas north of 55N will see mostly middle clouds. The southern AB region could also have some sporadic clearing through this period.

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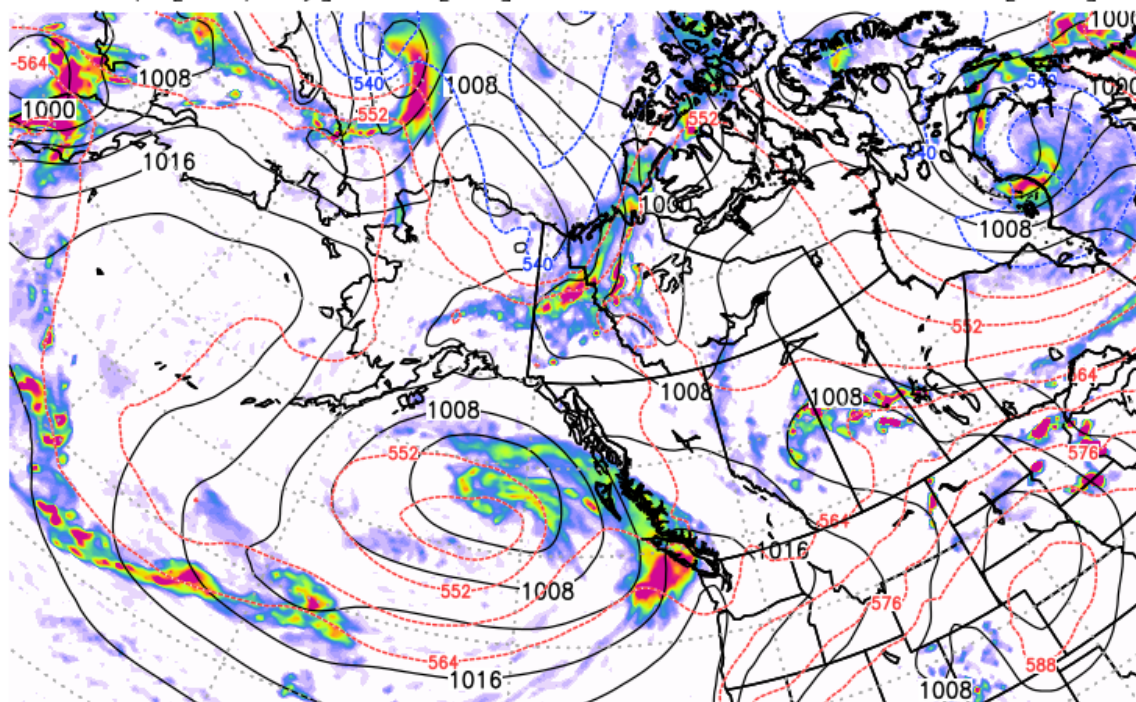
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NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-20

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



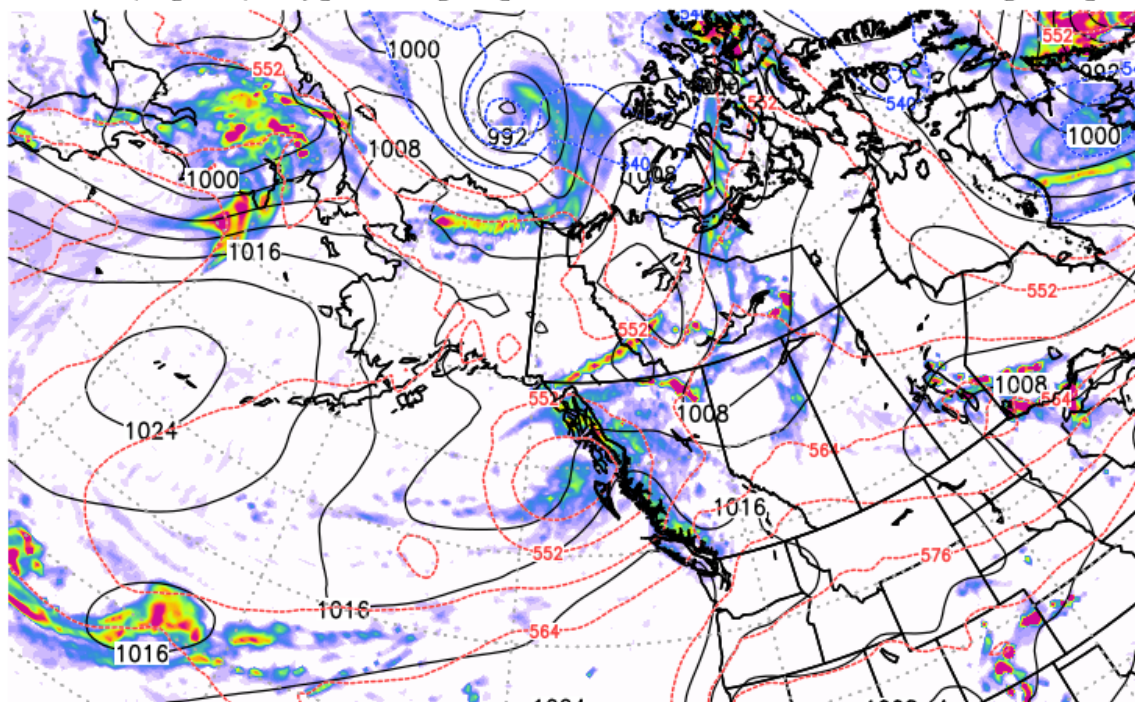
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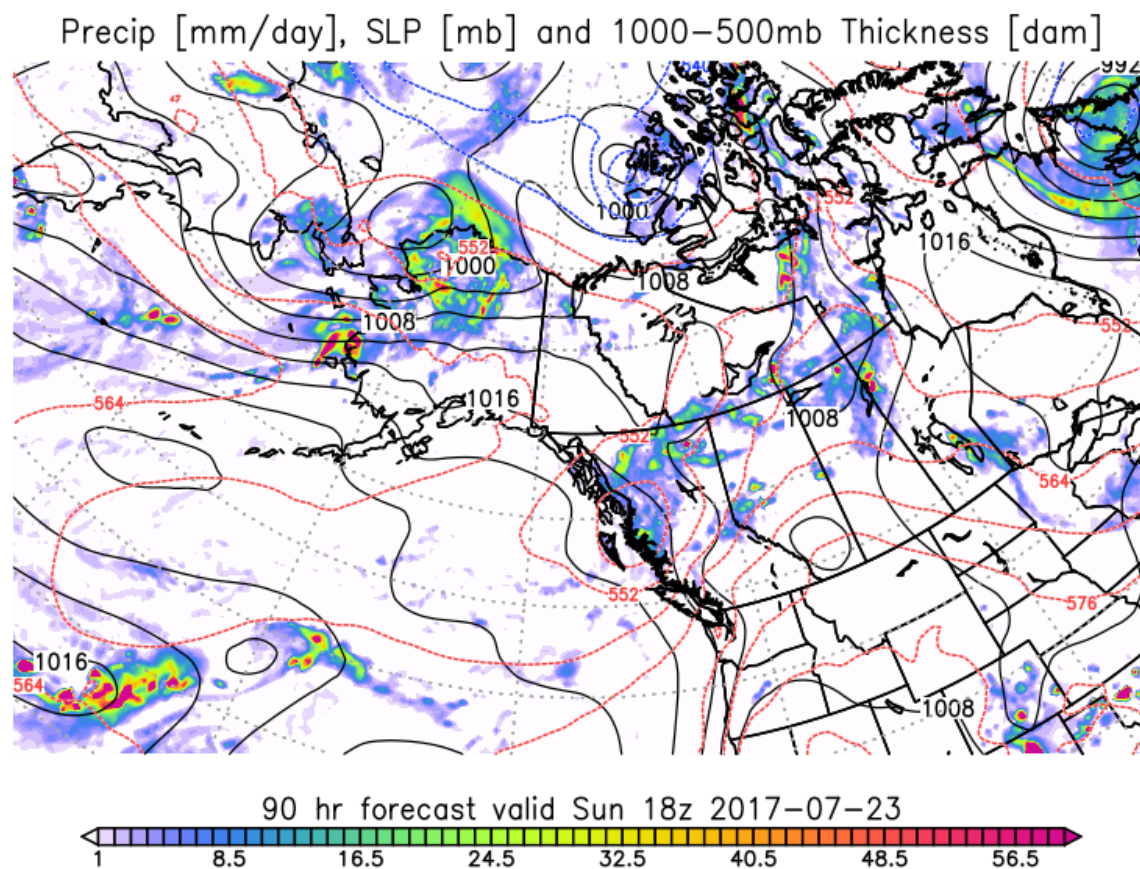


66 hr forecast valid Sat 18z 2017-07-22

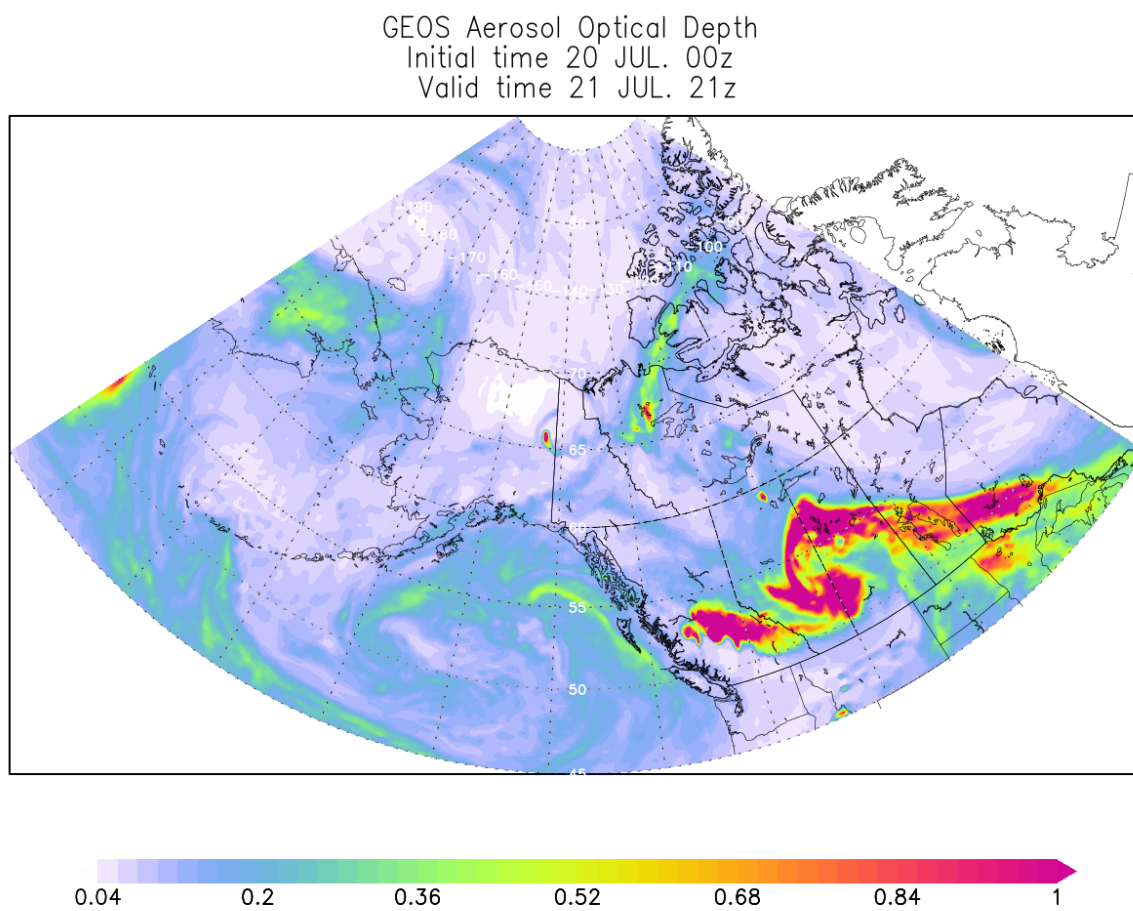


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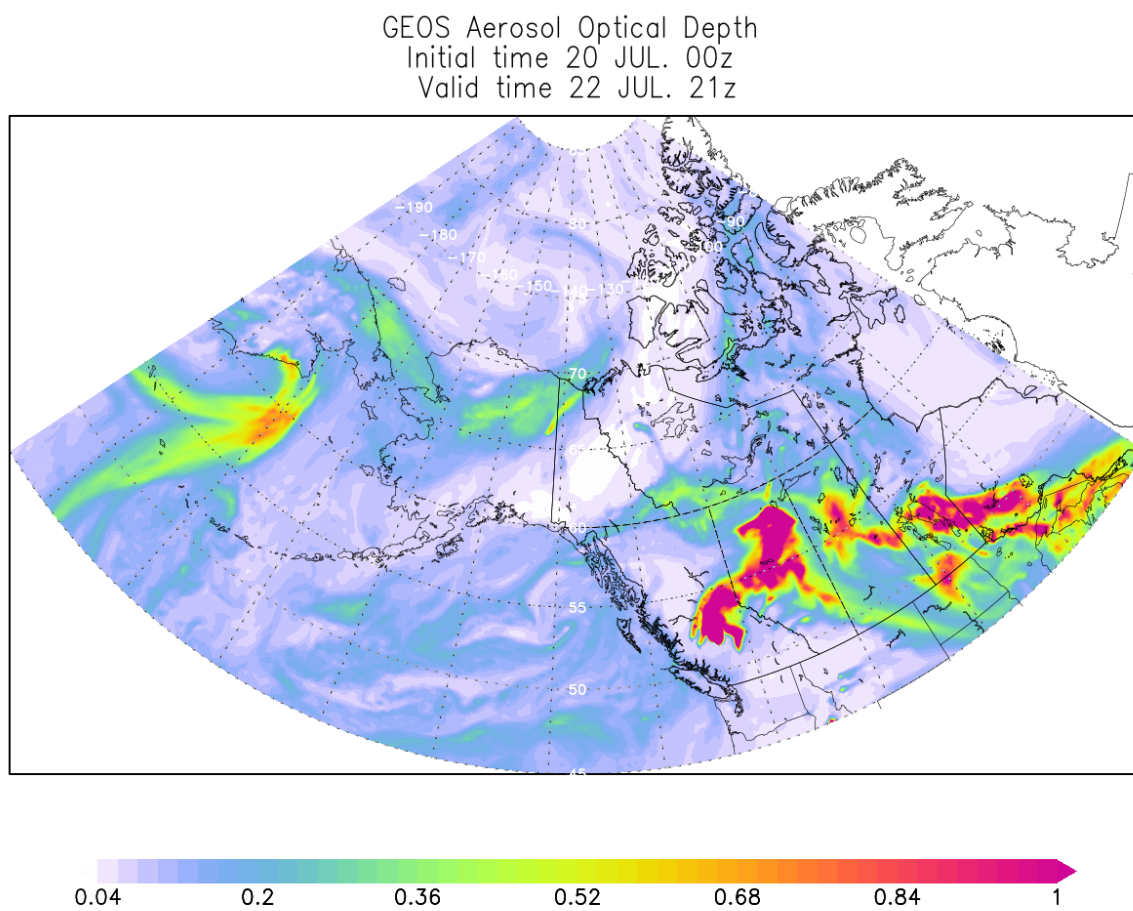
NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-07-20



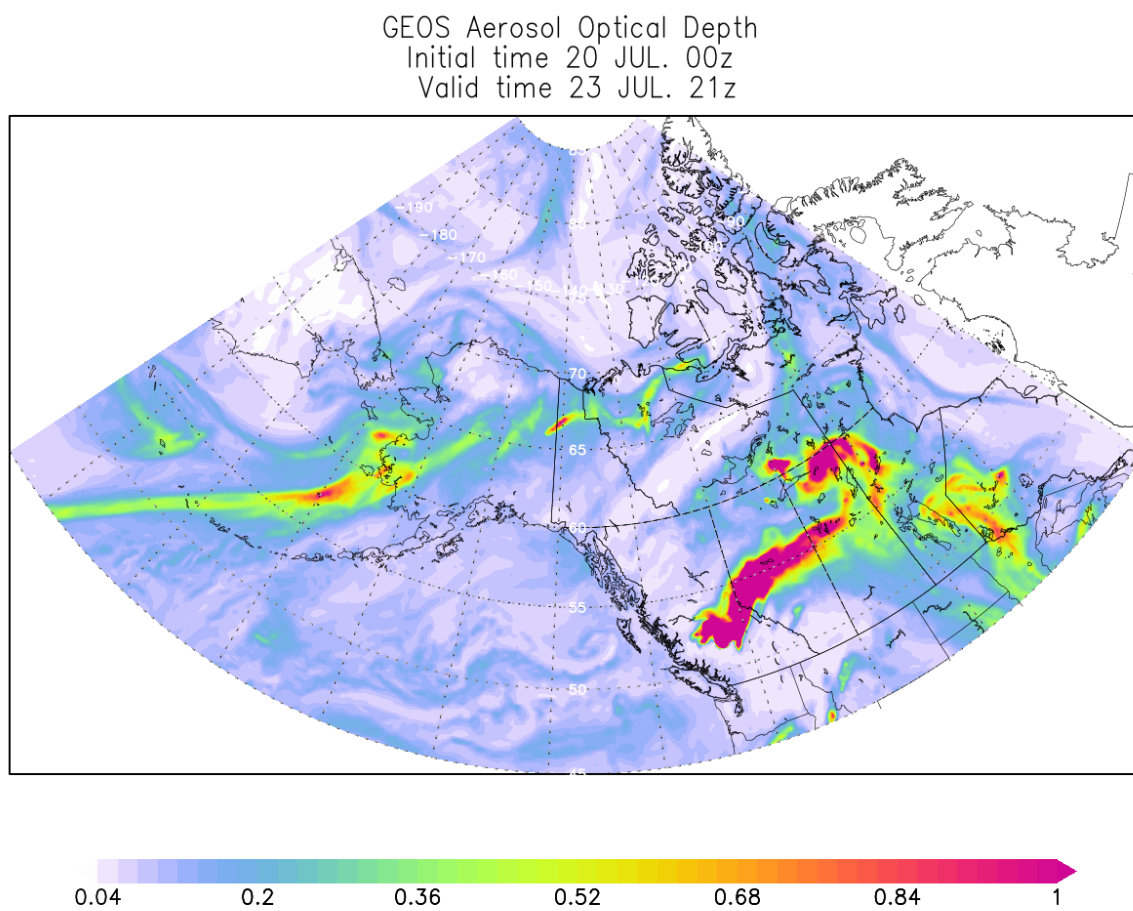
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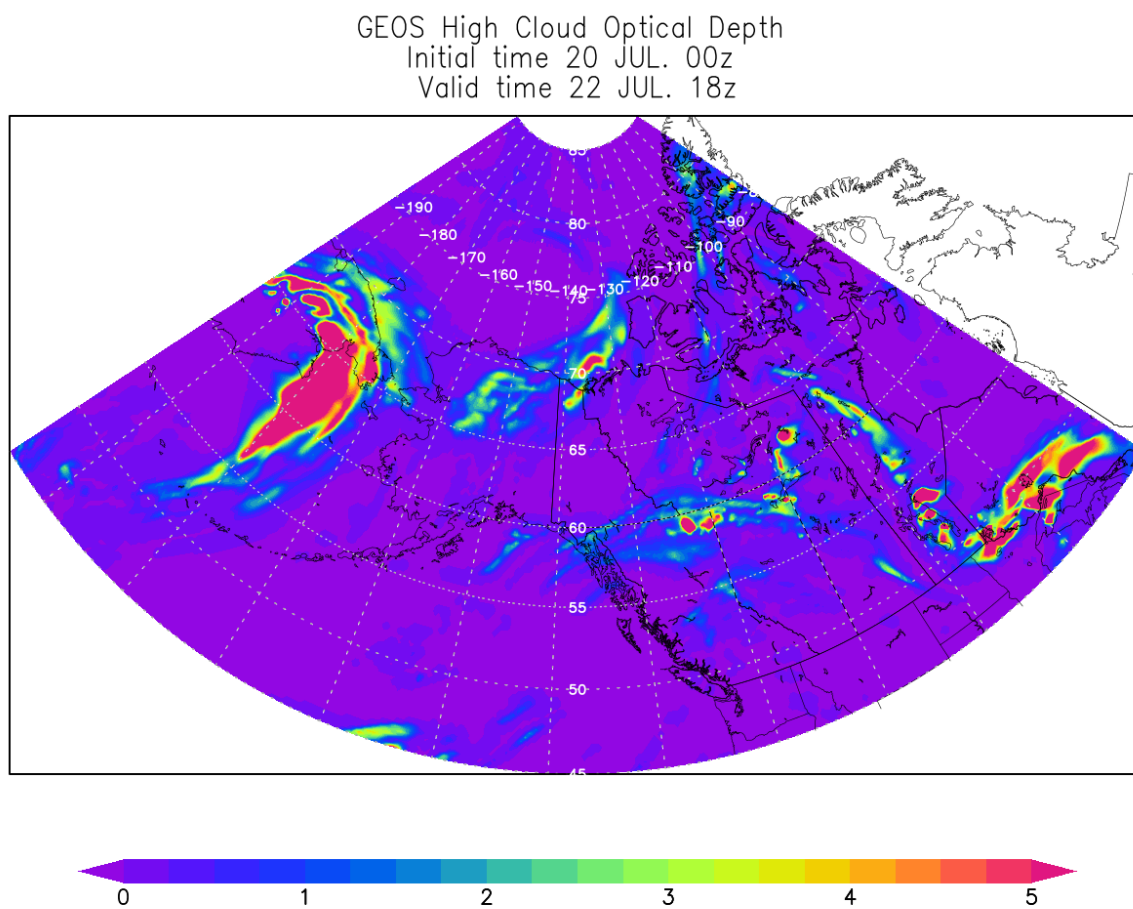
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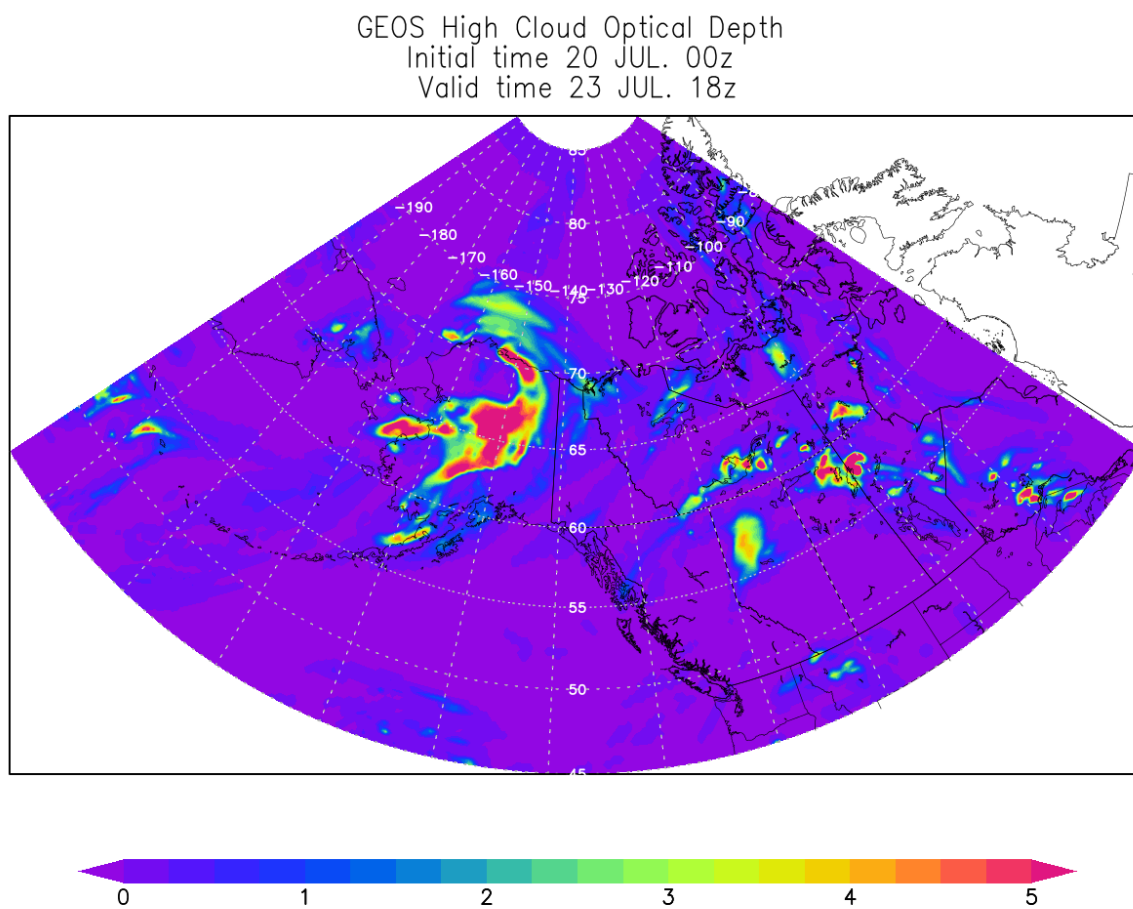
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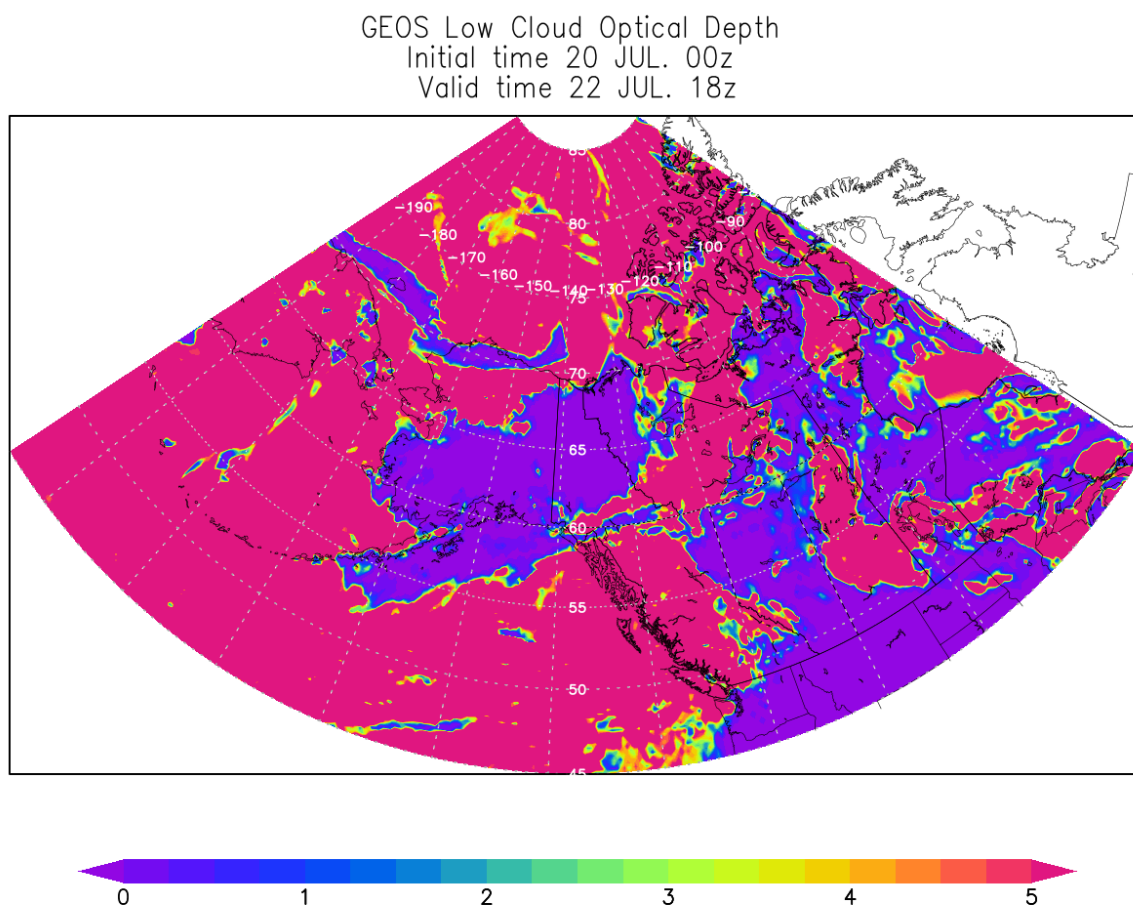
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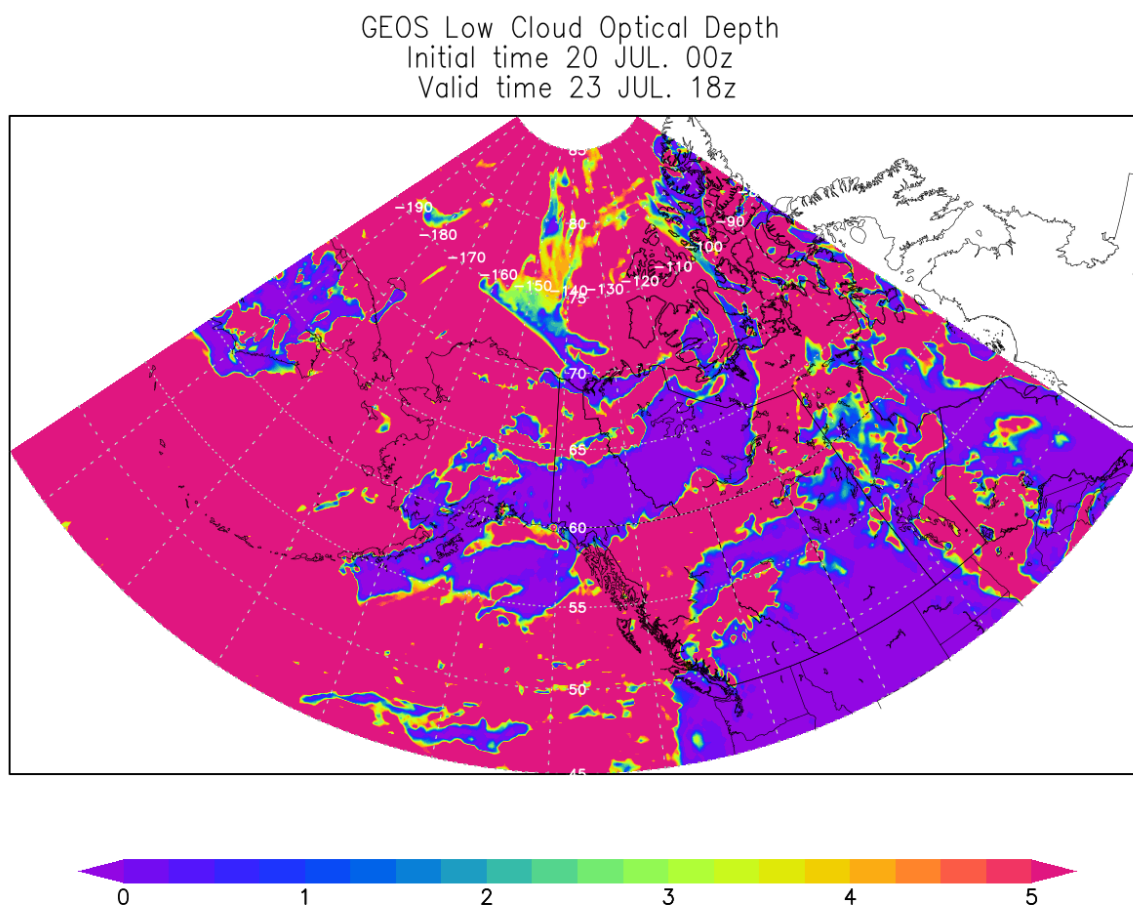
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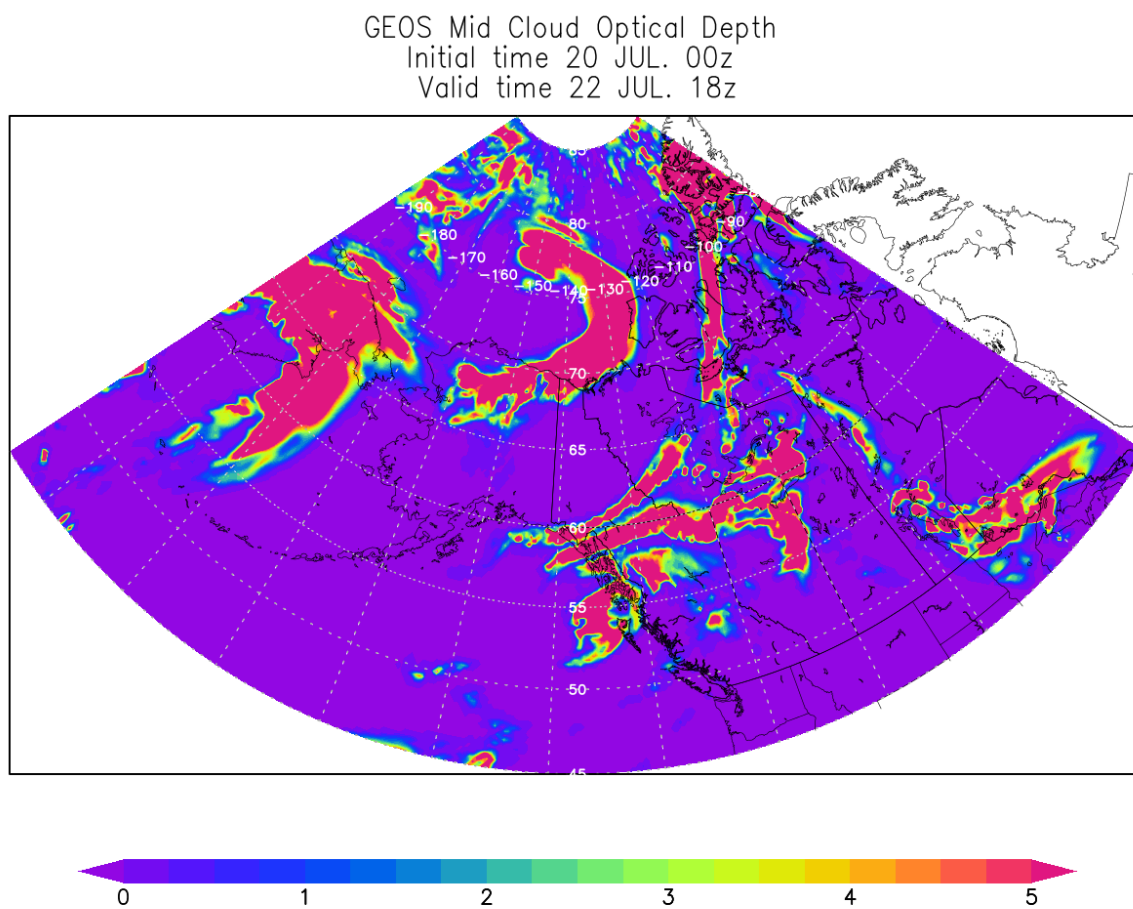
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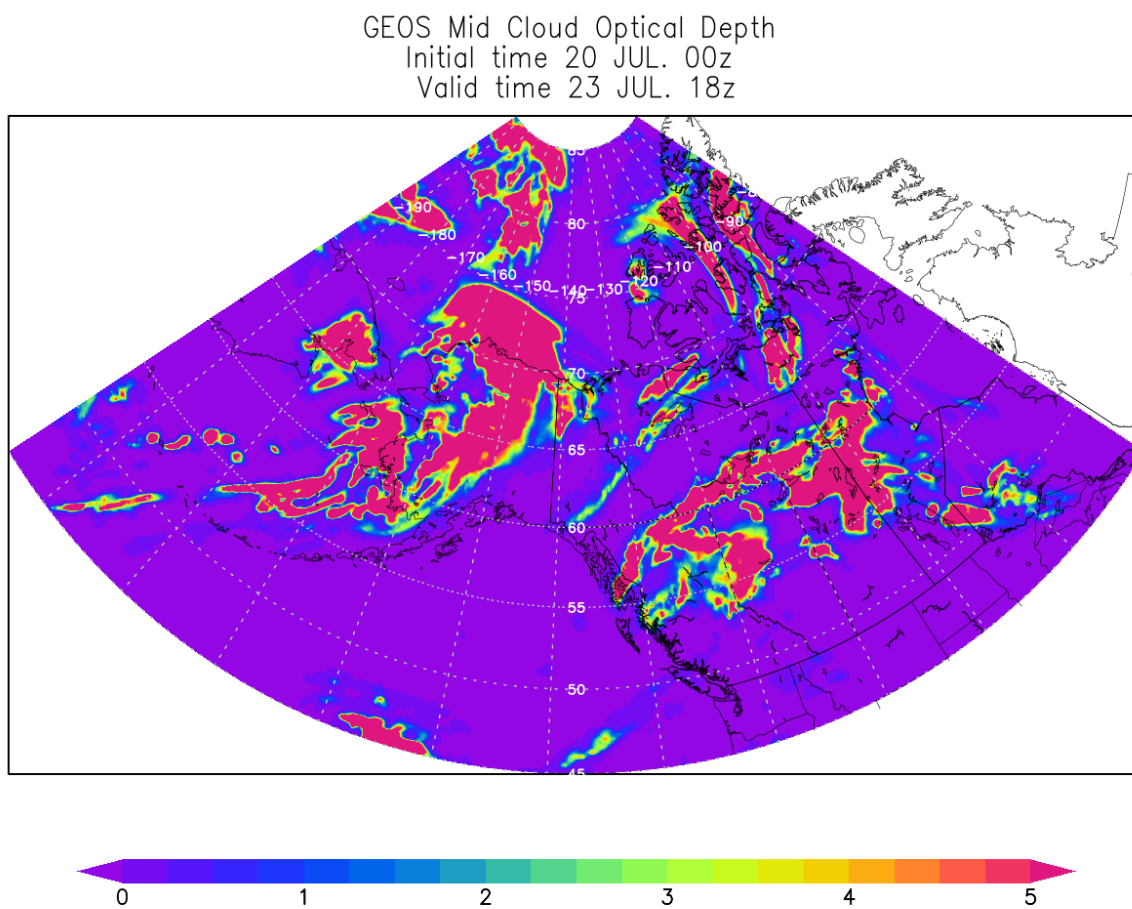
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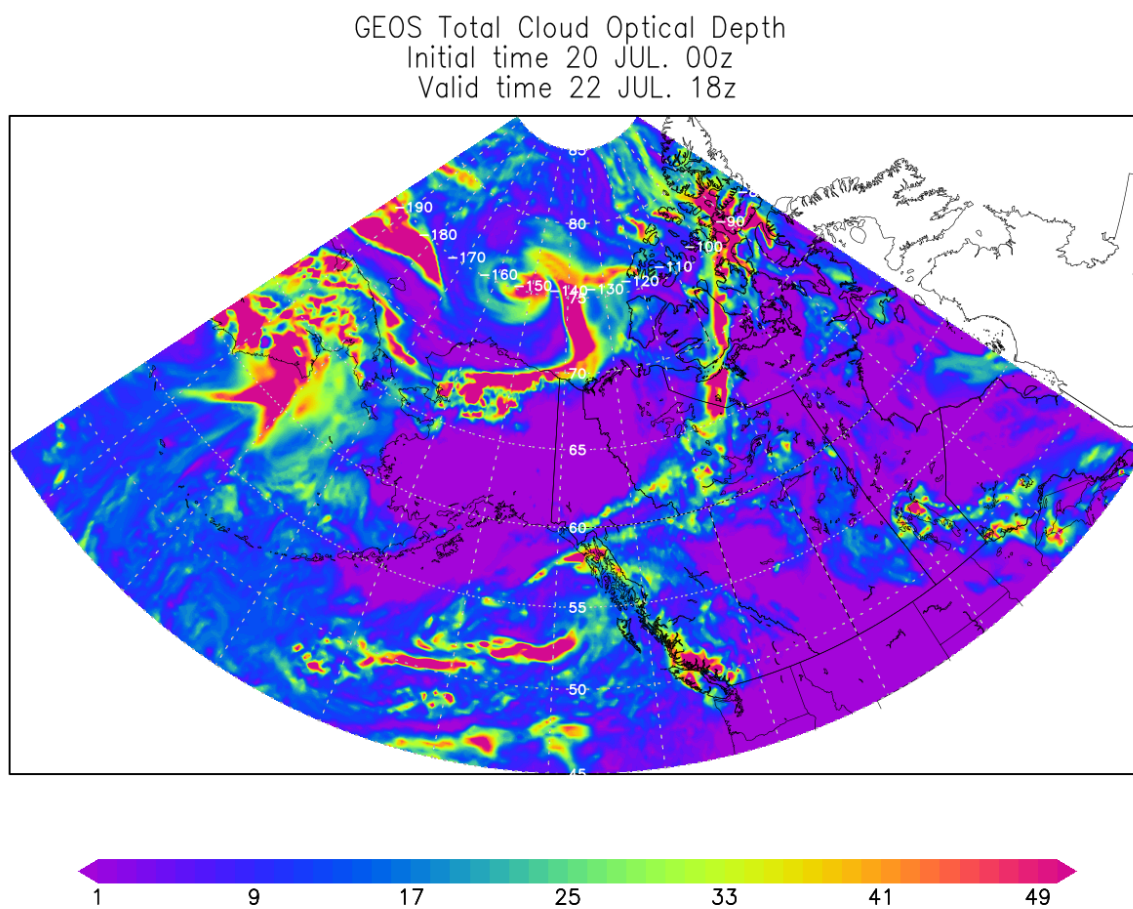
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