ABOVE Regional Weather Briefing
Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 29 June 2017

Note: Saskatchewan (SK), Alberta (AB), Manitoba (MB), Northwest Territory (NWT), Yukon Territory (YKT), British Columbia (BC)

PAFA = Fairbanks Airport, Alasksa
PASC = Deadhorse Airport, Prudhoe Bay Alaska

Day-1 Forecast
Valid 1500z 30 June through 2359z 30 June

Two surface low pressure systems, one taking up most of the Gulf of Alaska, and one over MB should have little impact on the regions where the optical missions are flying. An upper level low pressure system over the northern NWT will impact the weather surrounding Yellowknife on Friday. During the day Friday, a long but relatively narrow line of showers and thunderstorms will develop and move to the NNE. This line will be roughly from the Seward Peninsula...to PAFA...over much of the southwest NWT...and into the northern half of AB and west-central SK.

Likely clear areas include nearly all of BC and into the southern half of AB. Up north, clear scenes expected on Friday north of 65N up to the Arctic Ocean coast between 125W-150W (including Inuvik and PASC). Some scattered low clouds below FL010 are typically present on occasion at these latitudes. Another mainly clear patch may be present along the segment between Lakes Athabasca and Slave Lakes.

We also note clearing to the south behind the narrow rain/t-storm band outlined above. This clearing segment is forecast by the model to be in the region: 61-63N/135-150W.

Some smoke haze possible near the western showers of Athabasca and Slave Lakes. Thin smoke haze possible west of PASC. A fire over central Washington state may advect smoke up towards the BC border. Small BC fire near 53N/124W.

Day-2 Forecast
Valid 1500z 01 July through 2359z 01 July

On Saturday, a broad trough of low pressure dominates western Canada and eastern Alaska, while high pressure ridges down over the Prairie Provinces. For western Canada and eastern Alaska, this will mean that Saturday starts off fairly clear with increasing clouds throughout the day driven by the heating of the day and terrain circulations. By later in the afternoon, much of this entire region will see broken to overcast layers of cloud cover with scattered precipitation elements.

Saturday early (15z) will see large expanses of clear to mainly clear regions. The old narrow line of showers and thunderstorms from Friday may still leave a trail of clouds/showers behind along

65N over eastern Alaska and YKT...as well as down over Gr. Slave and Athabasca Lakes. From 18-21Z clouds will increase with the heating of the day but may still be under the 50% threshold in most places. It should remain mainly clear over Inuvik and west to PASC through the day. The weather continues to favor southern BC/AB for clear skies on Saturday.

Light smoke haze surrounding Slave Lake...and also the southeast tip of BC. Yukon clear.

The key takeaway for Saturday...the earlier in the day, the better (note the difference in weather map between hour 63 and hour 69).

Day-3 Outlook
Valid 1500z 02 July through 2359z 02 July

Sunday is shaping up to be a similar weather pattern as Saturday. A broad trough of low pressure remains in place from Alaska into northern AB. Scattered diurnally driven showers and thunderstorms will be found here, and again more frequent later in the daytime. The focus of the precipitation will be southeast Alaska... into the southern YKT...and into the southern NWT.

A Gulf of Alaska low will come ashore the northern two-thirds of BC on Sunday with clouds and rain.

Best targets for clear skies (again earlier in the day) appear to be similar to those on Saturday. Southern BC/AB/SK look mainly clear throughout Sunday.

Gary Partyka
Global Modeling and Assimilation Office - GSFC

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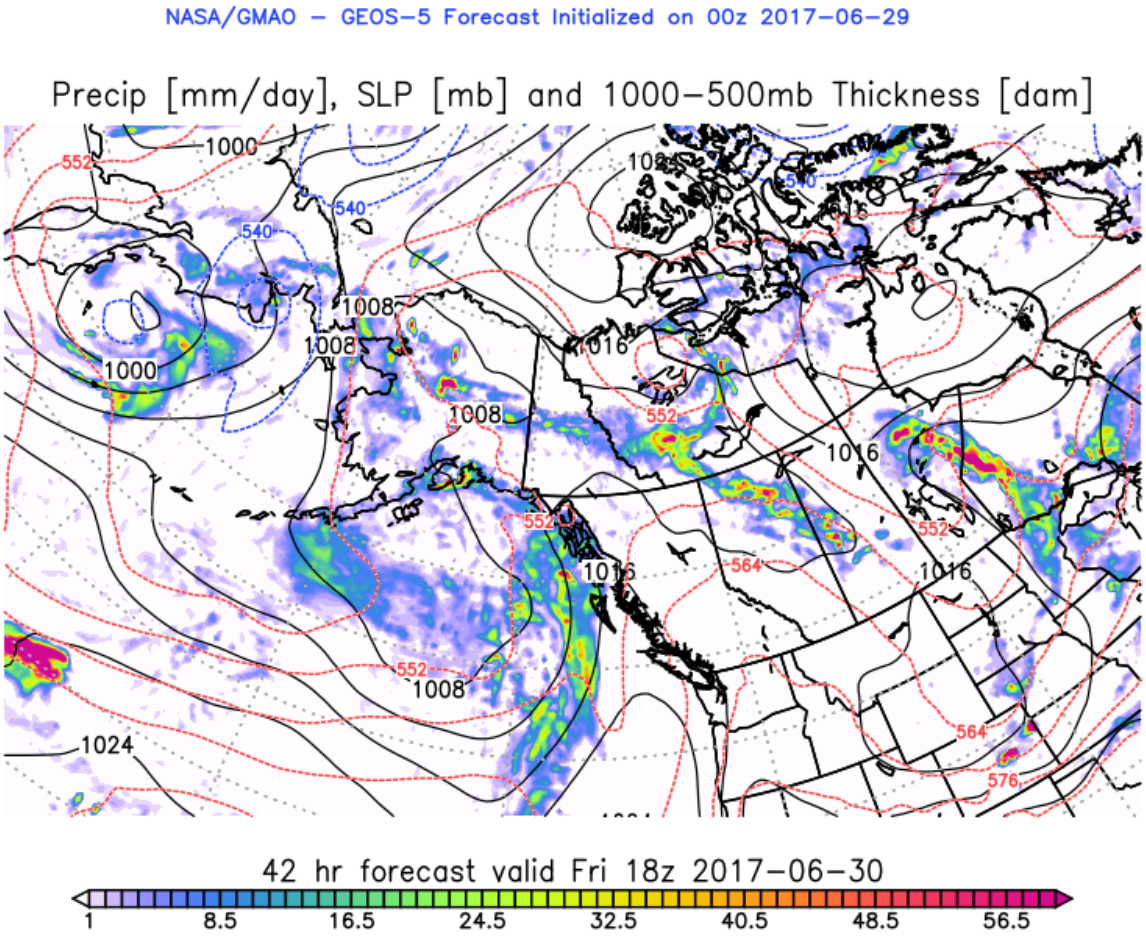

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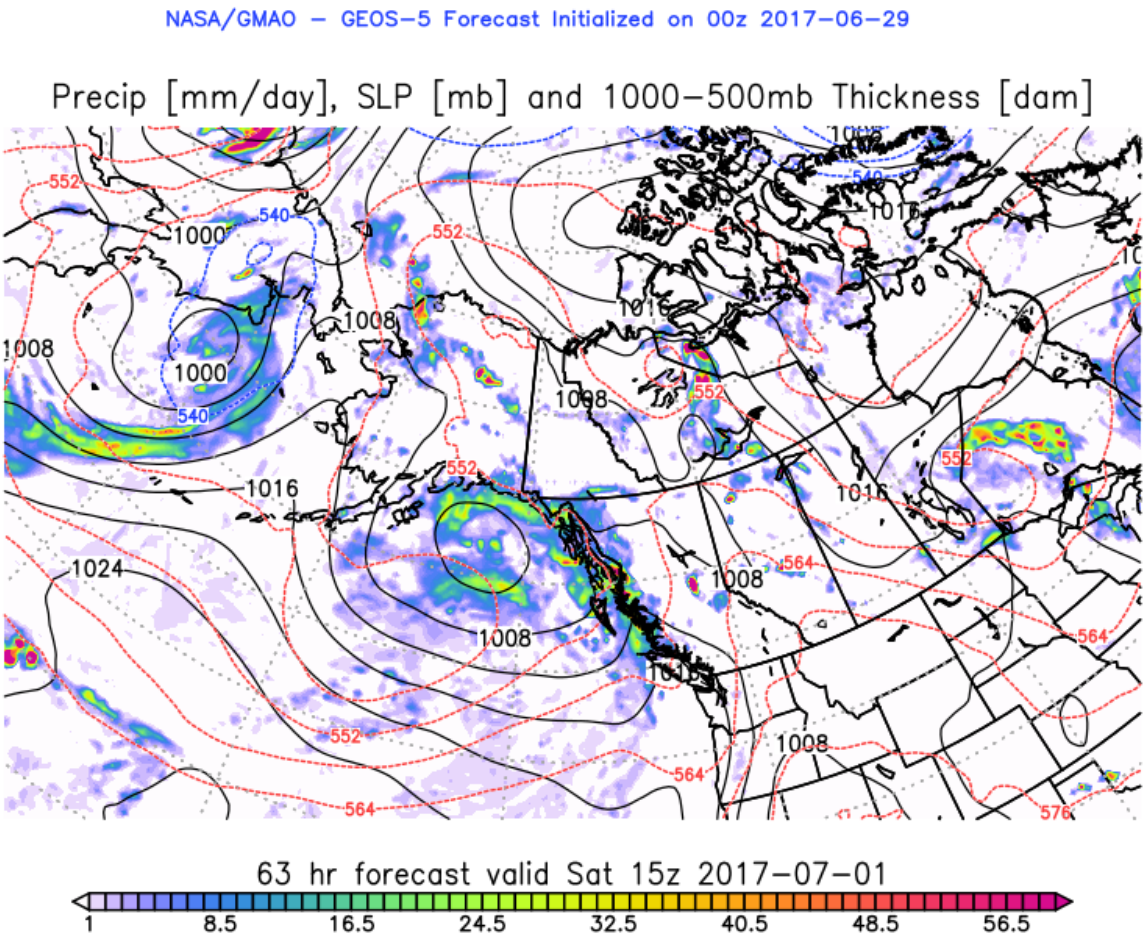

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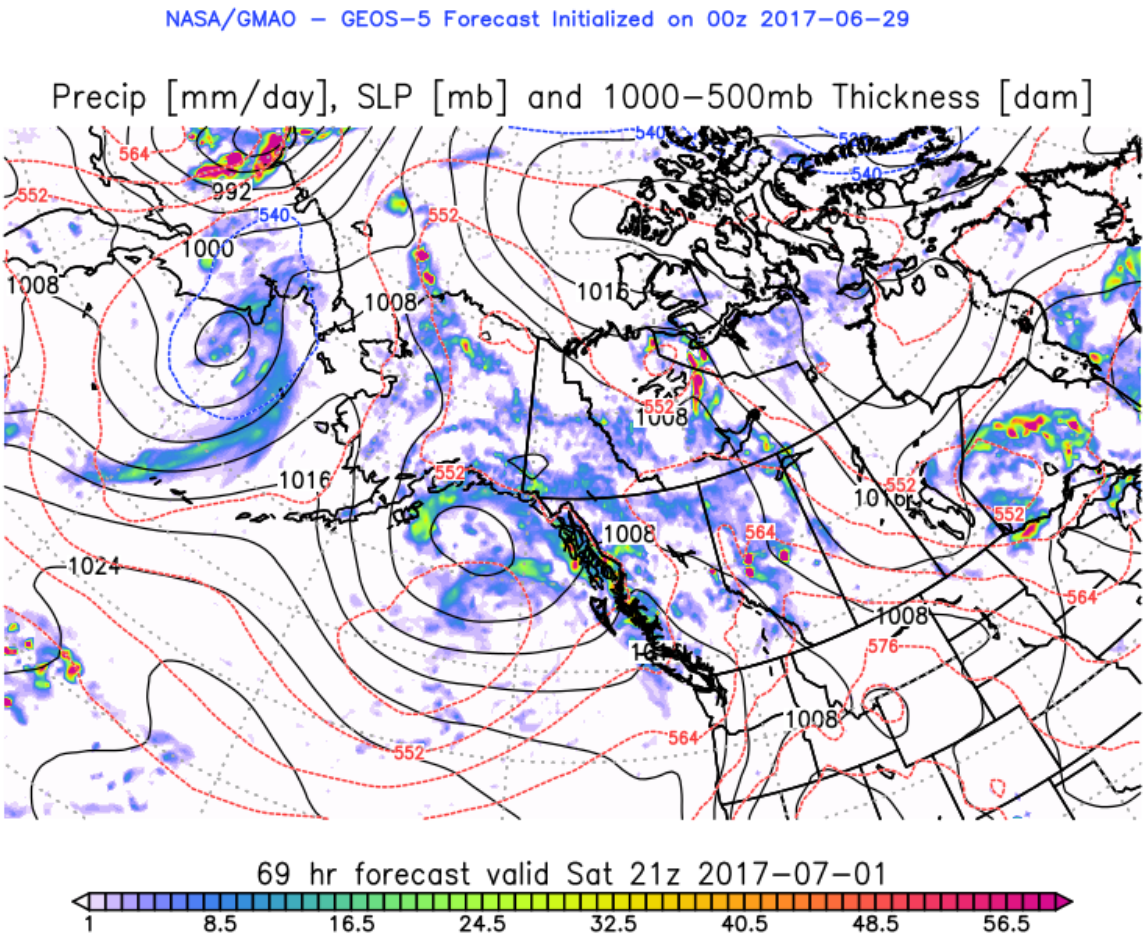

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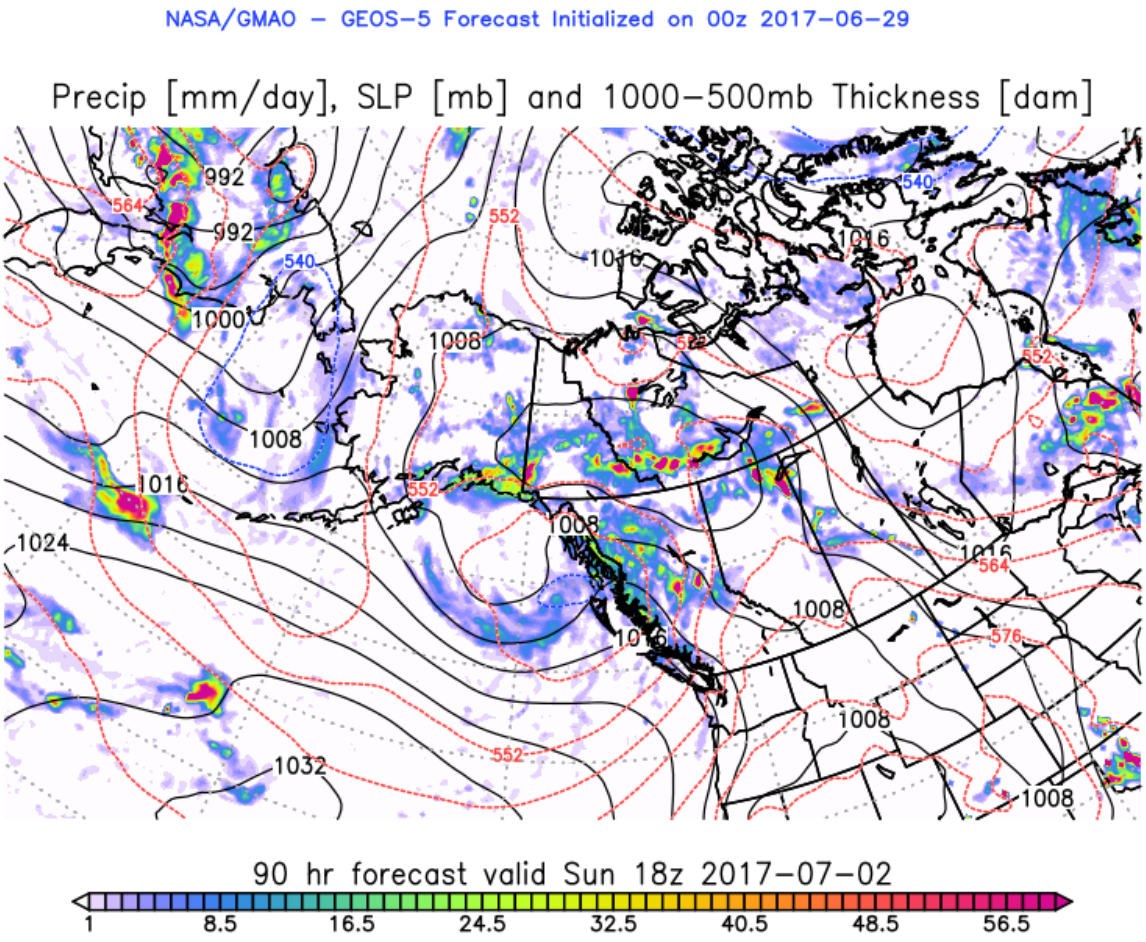

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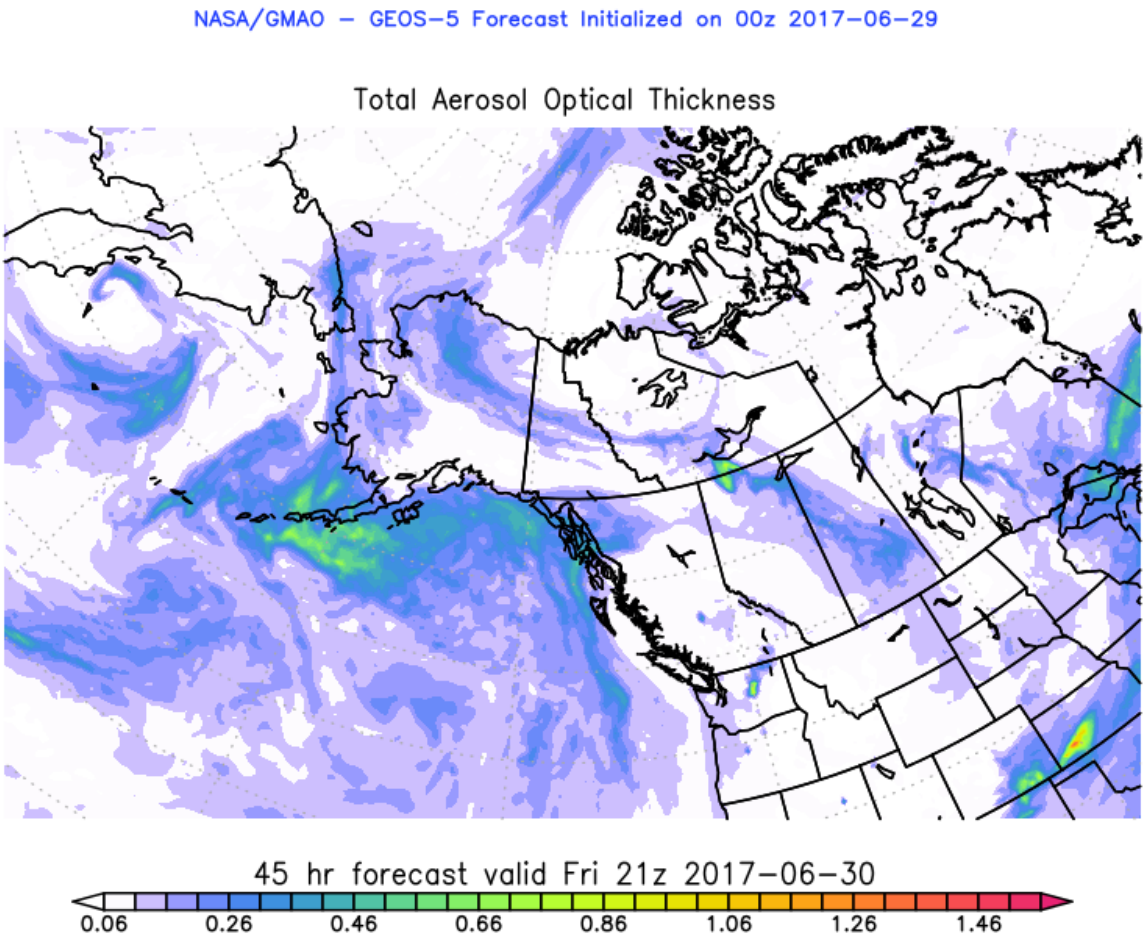

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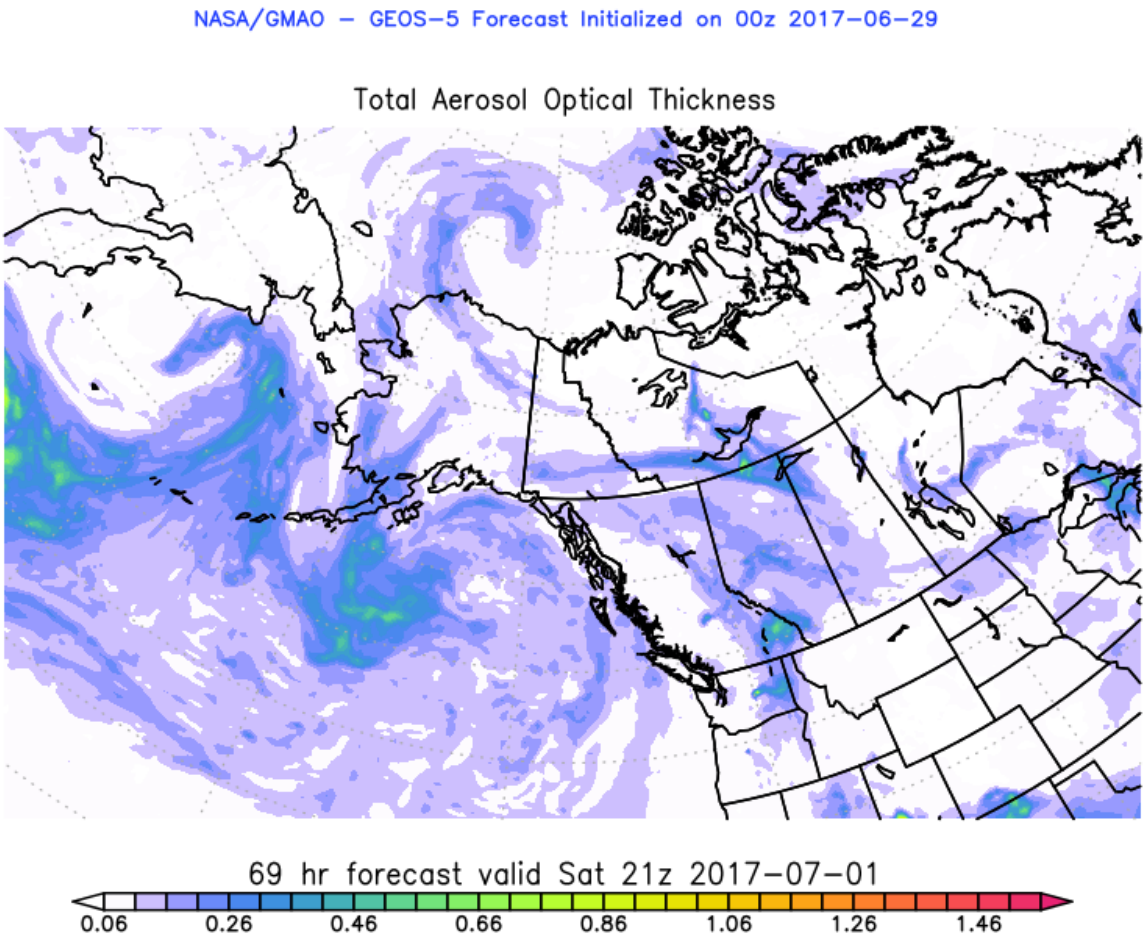

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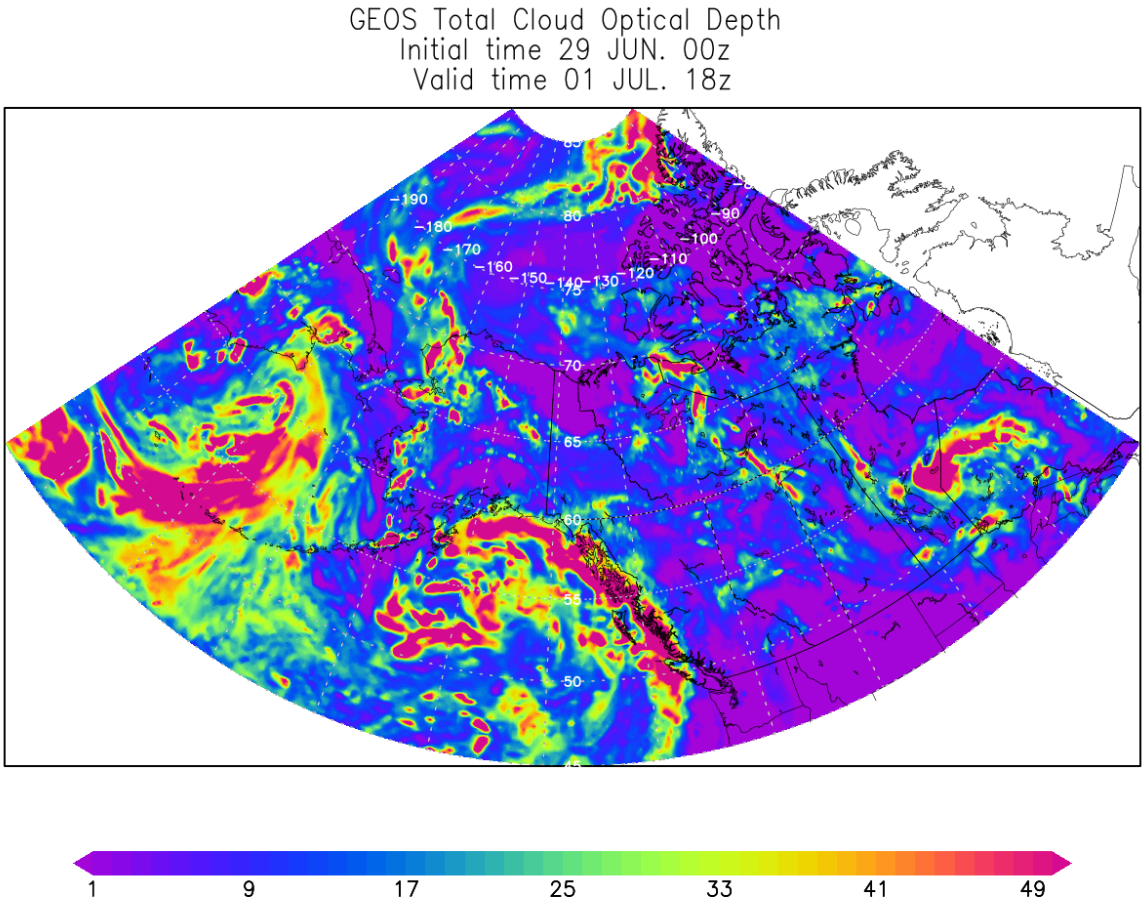

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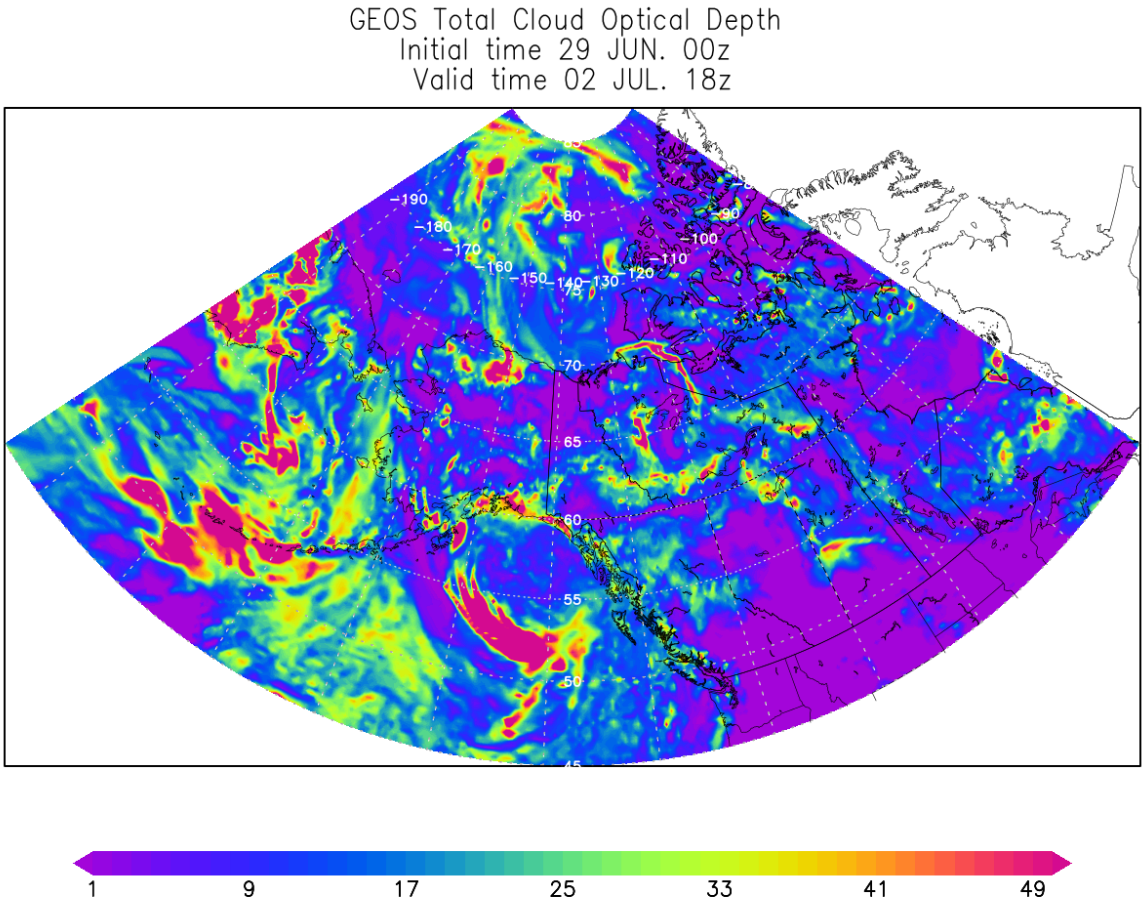

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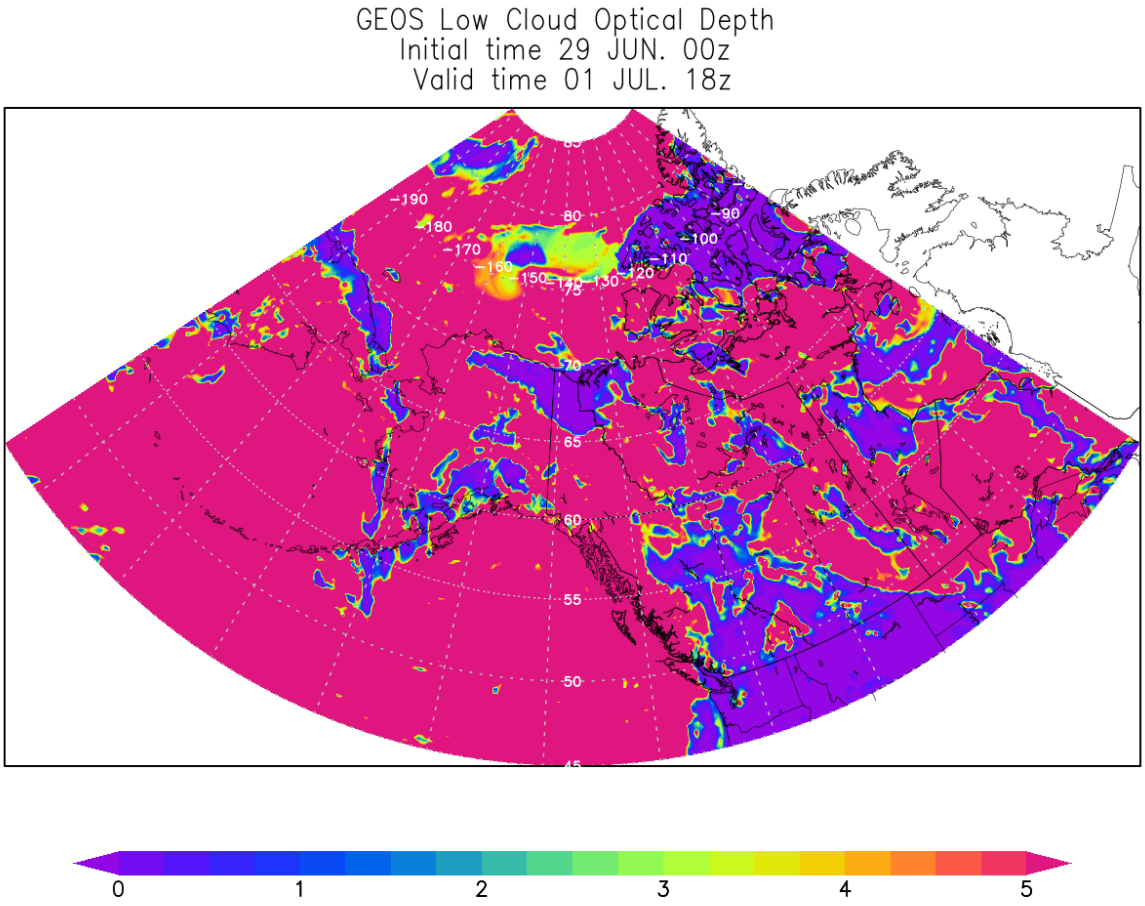

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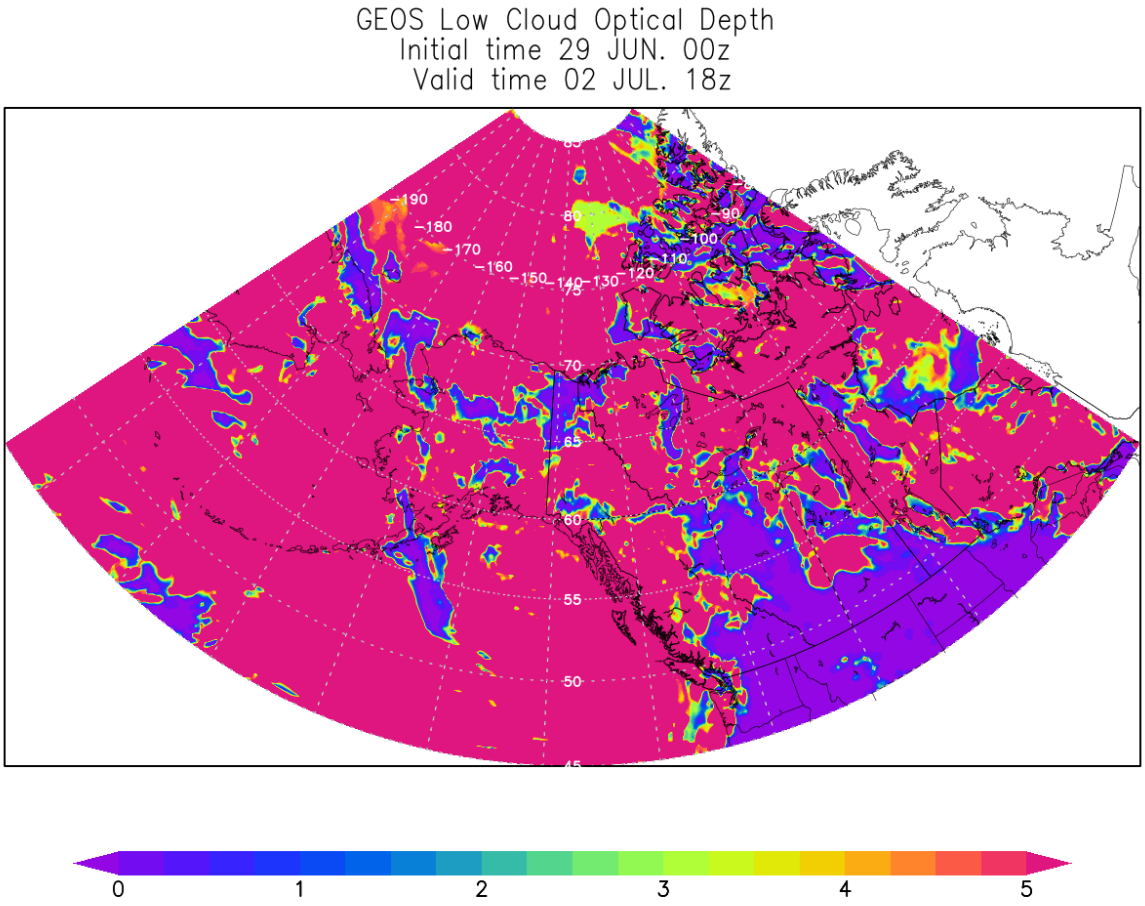

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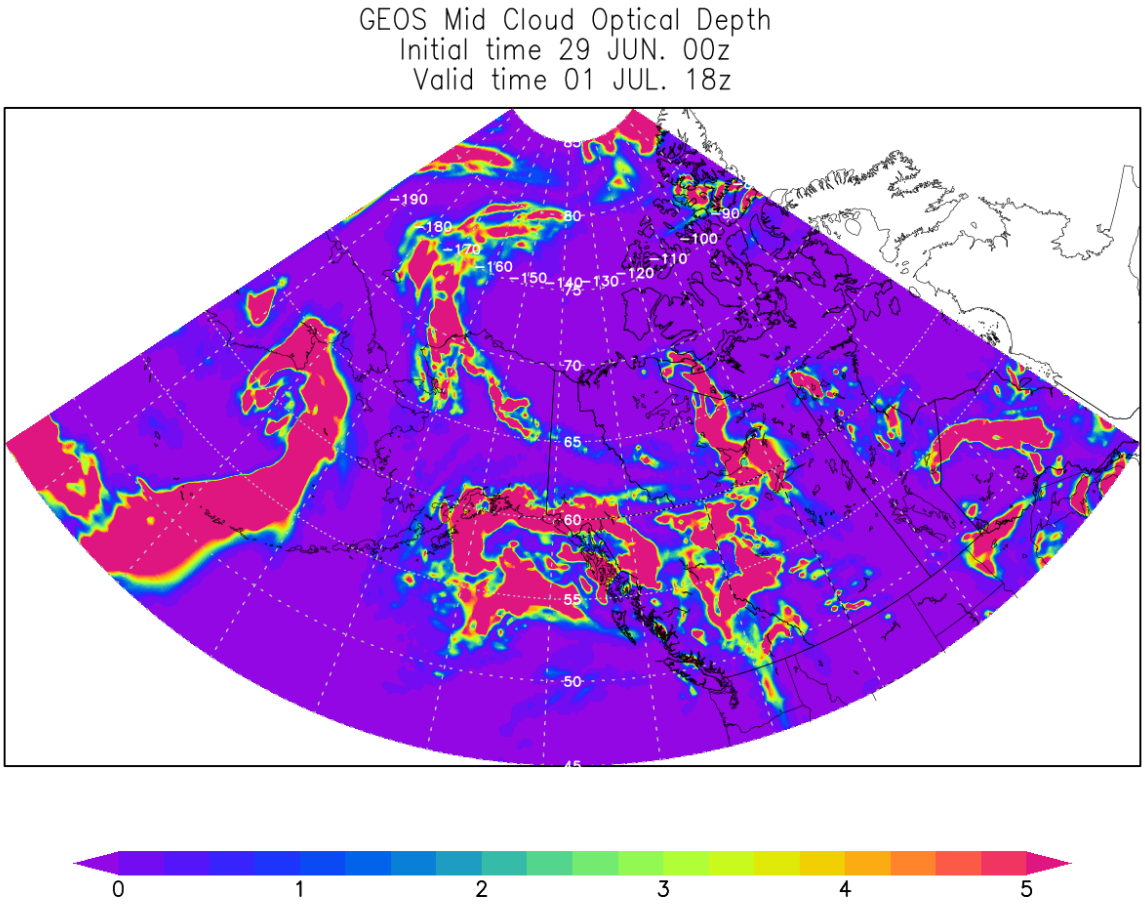

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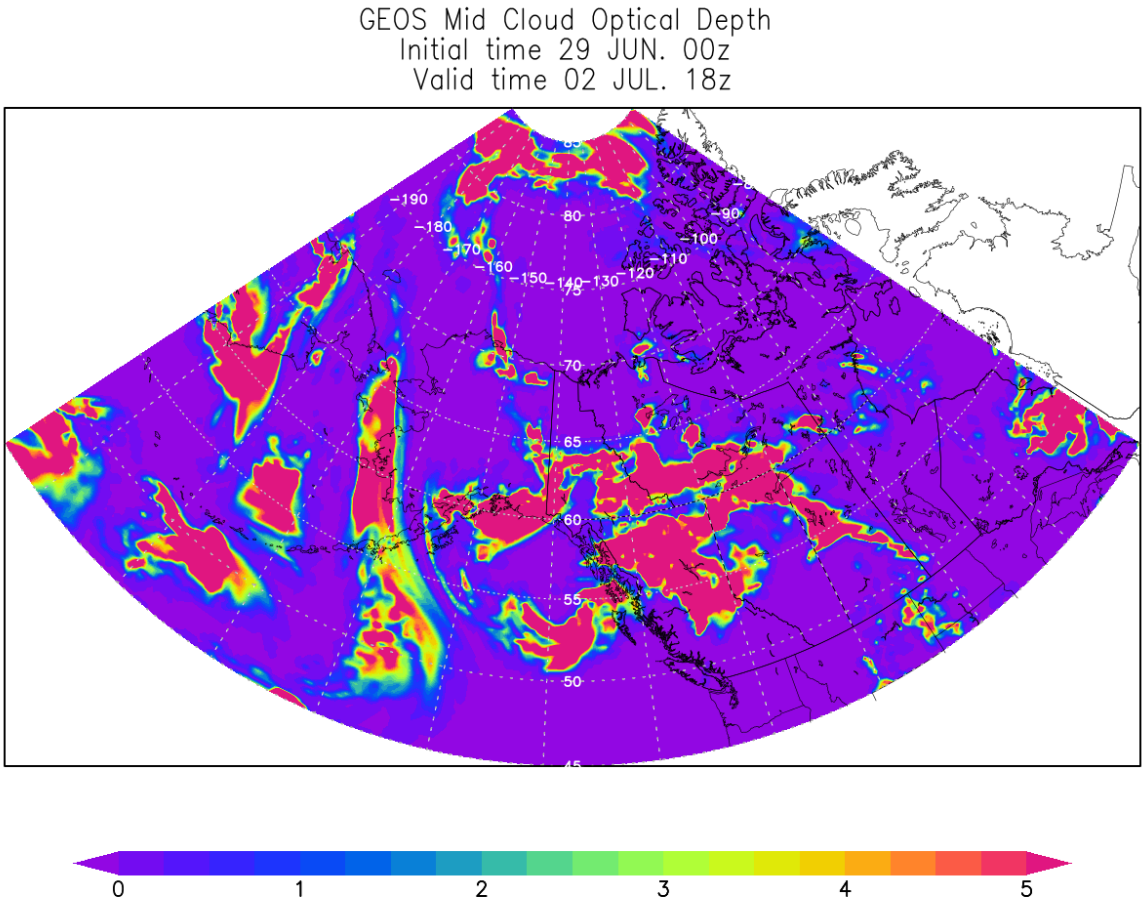

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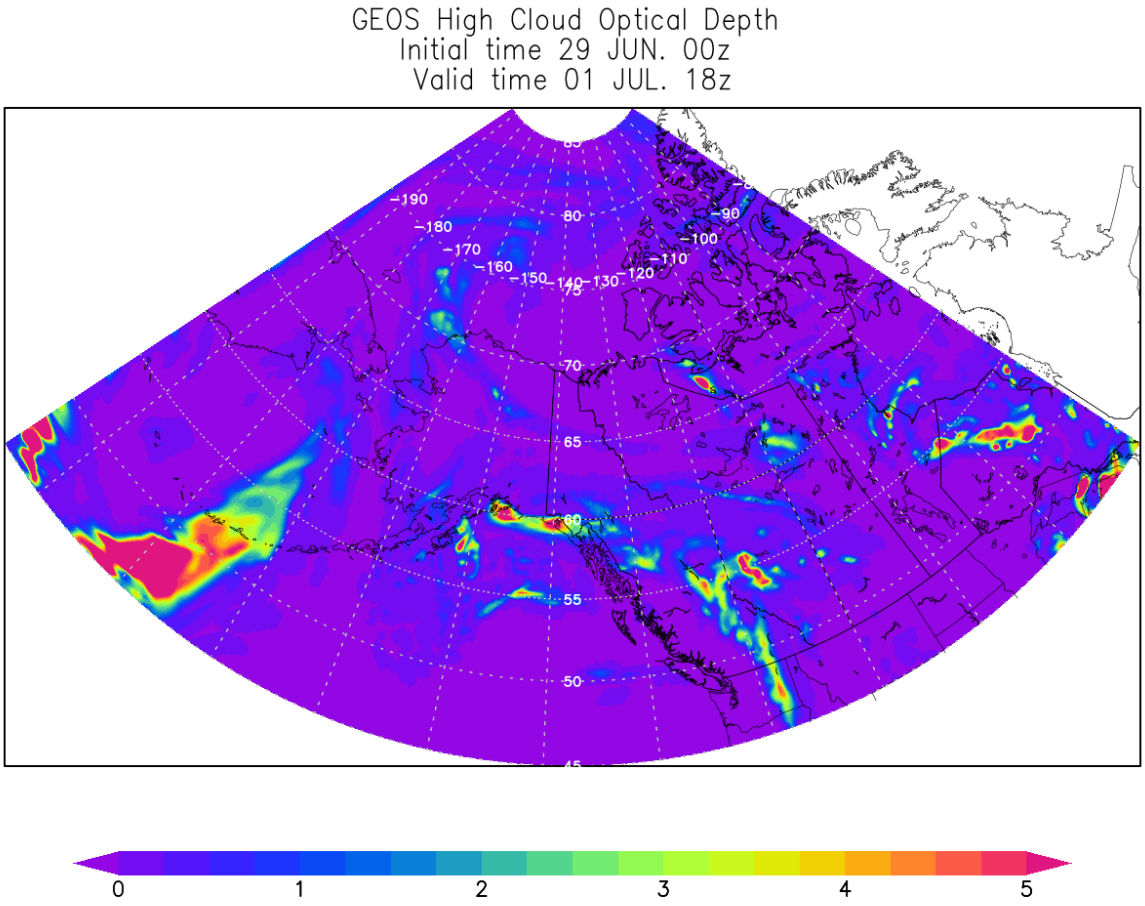

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