

ABOVE Regional Weather Briefing
Based on the GMAO GEOS meteorology and aerosol forecast fields
Model Initialized 00z 27 June 2017

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

Day-1 Forecast

Valid 1500z 28 June through 2359z 28 June

A low pressure system will be draped from west to east across the central parts of all 3 Prairie Provinces. For the central portions of AB/SK/MB, expect multi-layer broken to overcast skies and widespread precipitation. High pressure centers will be found over the Beaufort Sea and Nunavut with a weak upper level low pressure trough located between these two highs over the northwest corner of the NWT with overcast skies in the vicinity of Inuvik.

Skies will be generally clear to partly cloudy west of 120W over the mission regions...except for the aforementioned northwest part of the NWT. Eastern Alaska between the 140-150W including the Deadhorse-Fairbanks transect will be in the mainly clear sky zone. Another clear sky region on Wednesday expected to be 60-65N and 102-115W over the eastern NWT. Light aerosol haze, mainly from forest fires, expected to remain tied closely to the cloudy and/or precipitating regions outlined above (including some over Inuvik, the large lakes, northern AB, and down into central SK). A fire appears to be underway on the Alaska/Canada border at 67.5N. with some smoke blown westward into far northeast Alaska.

Day-2 Forecast

Valid 1500z 29 June through 2359z 29 June

On Thursday the Prairie Province low pressure system moves southeast towards the SK/MB border. A Gulf of Alaska low will spread a warm-frontal band of clouds and showers into northwest BC, and finally a weak upper level low will spark off some showers and thunderstorms on a line between the east shores of Bear Lake down to the west shores of Slave Lake and possibly further south towards northwest AB.

Multi-layer clouds and precipitation will be found over the southern two-thirds of SK and MB.

Good clear sky opportunities are likely to be found over all of the YKT all the way east to the Mackenzie River, and pretty much all of eastern Alaska, especially the Deadhorse-Fairbanks route. Other mainly clear scenes possible for southern BC and again for northeast NWT. We are also noting that all these mentioned clear/mainly clear areas will have the best chances earlier in the day compared to later in the afternoon. The GEOS model does indicate some light haze from smoke over the far northeast corner of Alaska and fire between Slave Lake and the border of AB near 115W.

Day-3 Outlook**Valid 1500z 30 June through 2359z 30 June**

On Friday, the model is developing a relatively narrow but long band of afternoon clouds, showers, and thunderstorms in a line including:

The Seward Peninsula... to Bettles...through the center of the YKT... to Fort Liard... and down into Interior AB. This line will develop/move from south to north throughout the afternoon.

Low pressure will be found over central and southern MB, as well, with widespread precipitation over MB.

Clearest areas include northeast Alaska, northern YKT, and most of BC. The Inuvik station may also have locally clear conditions.

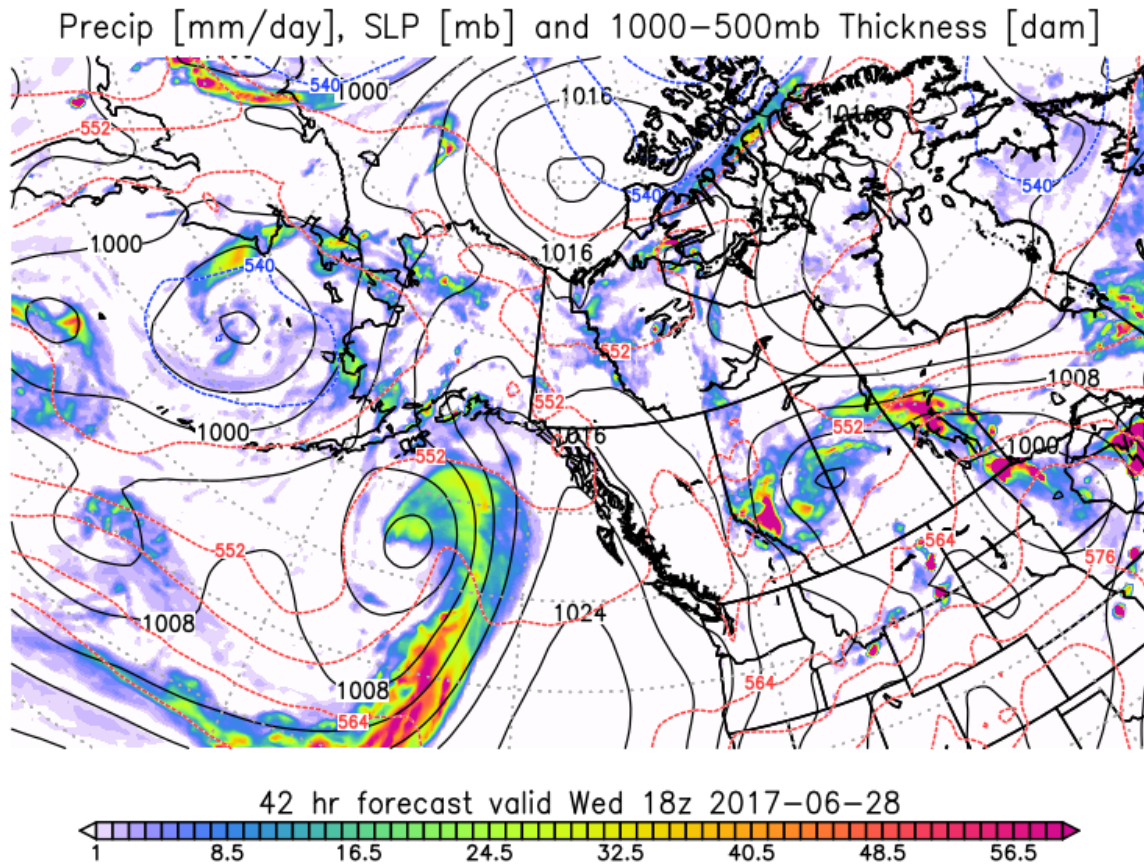
There could be some smoke haze near Yellowknife.

Gary Partyka

Global Modeling and Assimilation Office - GSFC

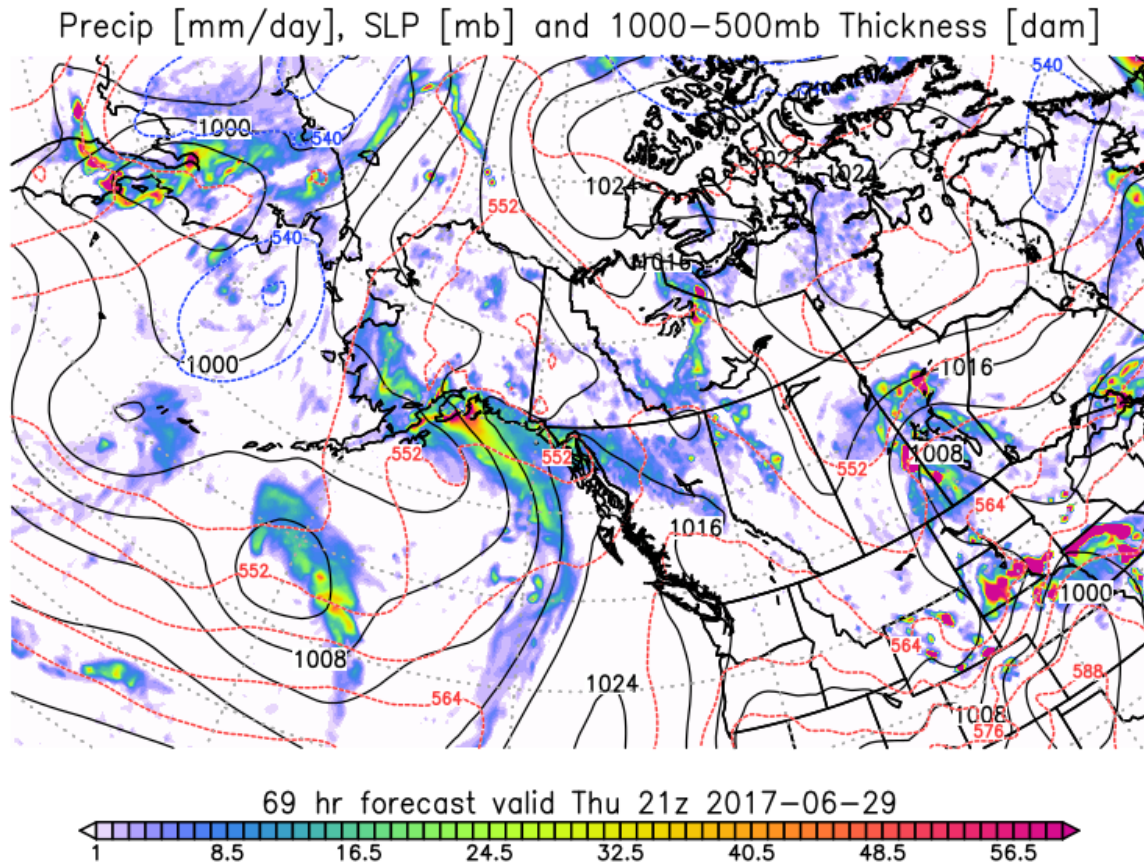
fp.8prec.sfc.042.above_lg.png

NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-06-27



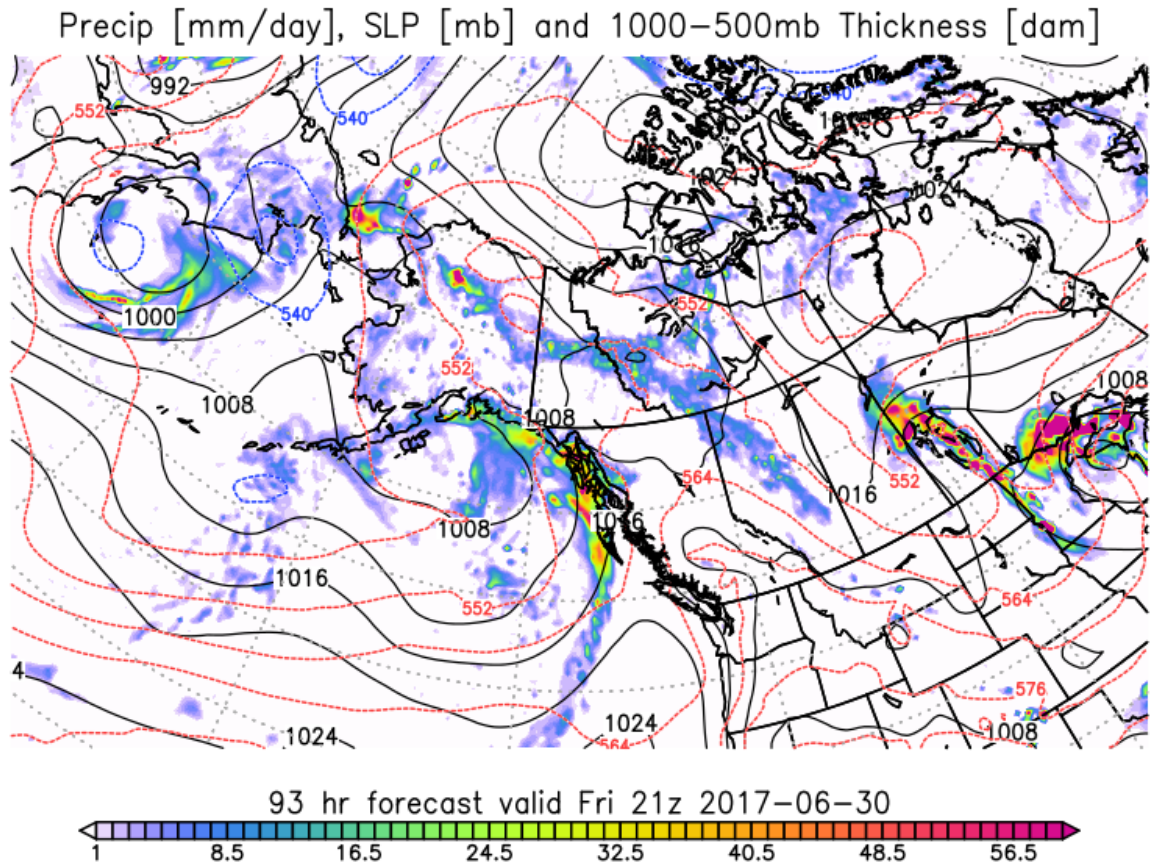
fp.8precis.sfc.069.above_lg.png

NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-06-27



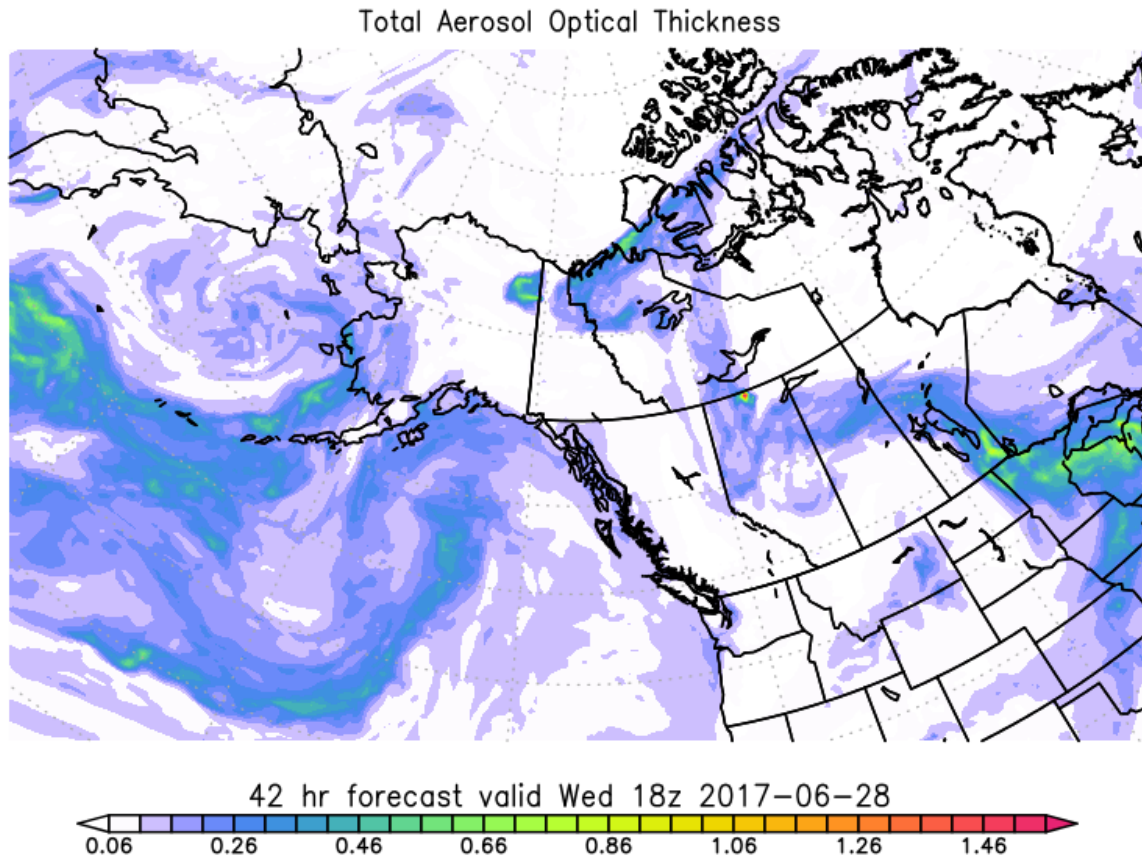
fp.8prec.sfc.093.above_lg.png

NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-06-27



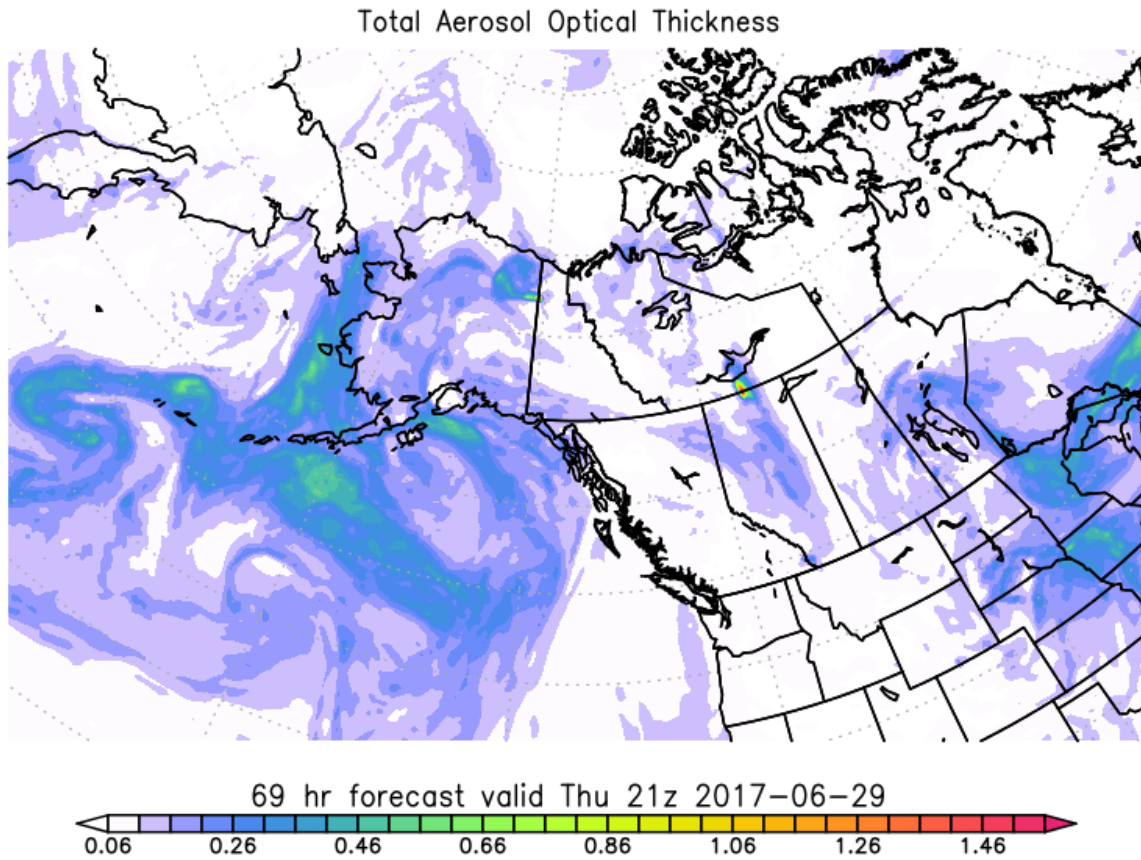
f516_fp.7totaot.042.above_lg.png

NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-06-27



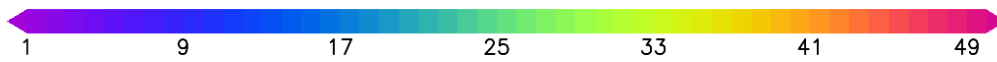
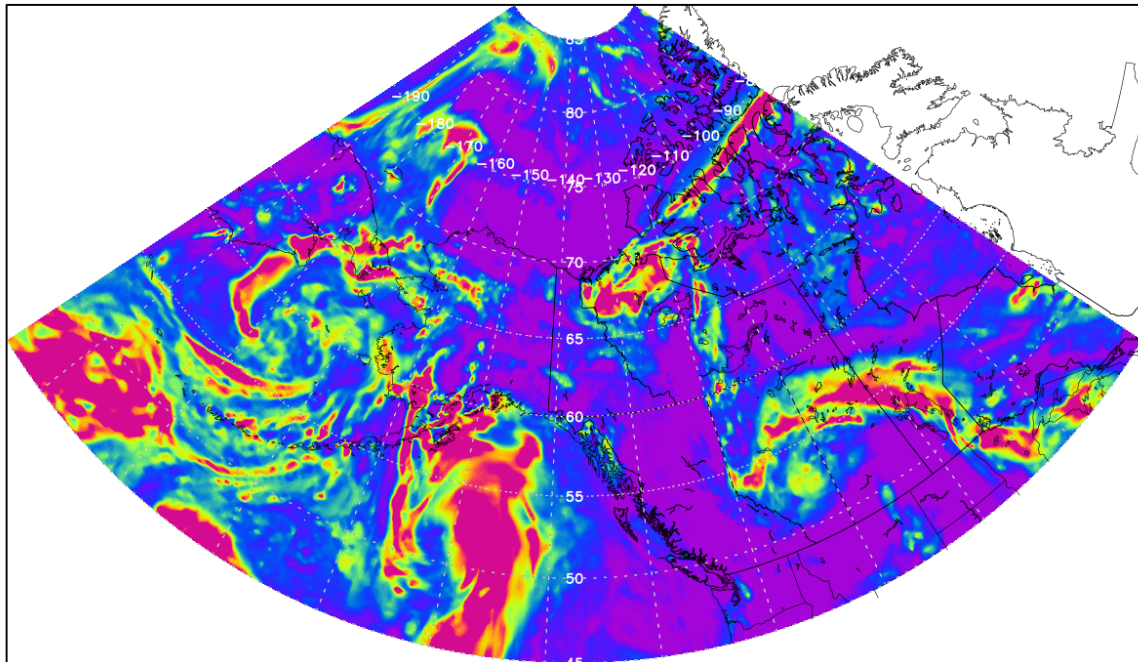
f516_fp.7totaot.069.above_lg.png

NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-06-27



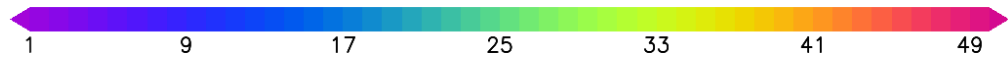
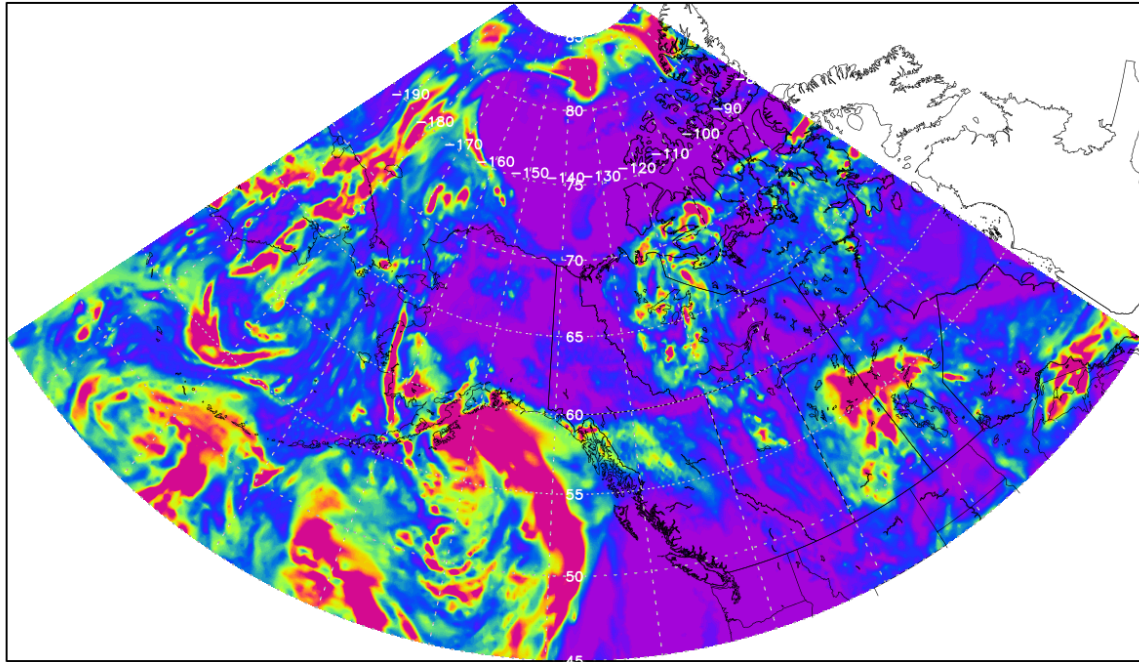
ABOVE_Total_Cloud_IT_00z27JUN_VT_18z28JUN.png

GEOS Total Cloud Optical Depth
Initial time 27 JUN. 00z
Valid time 28 JUN. 18z



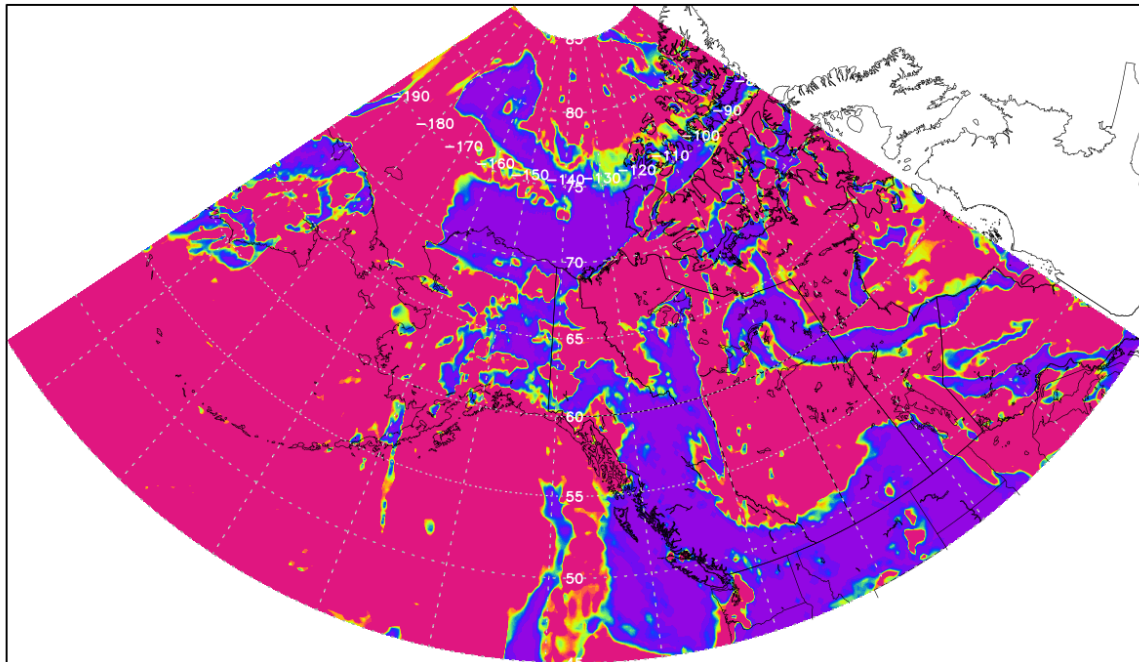
ABOVE_Total_Cloud_IT_00z27JUN_VT_18z29JUN.png

GEOS Total Cloud Optical Depth
Initial time 27 JUN. 00z
Valid time 29 JUN. 18z



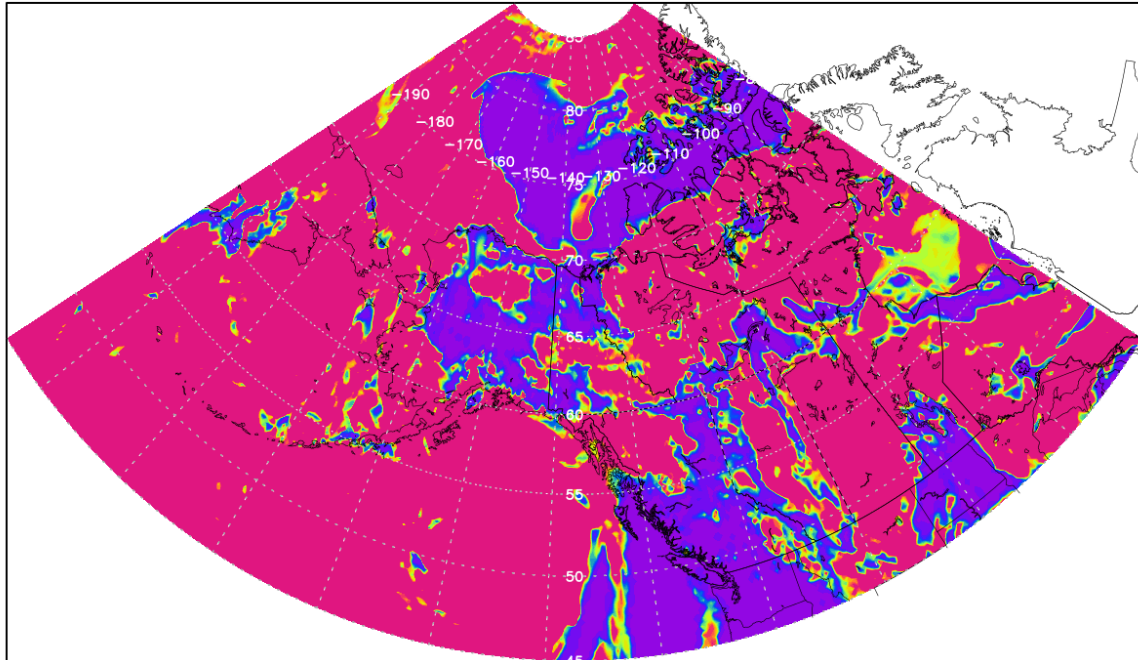
ABOVE_Low_Cloud_Optical_Depth_IT_00z27JUN_VT_18z28JUN.png

GEOS Low Cloud Optical Depth
Initial time 27 JUN. 00z
Valid time 28 JUN. 18z



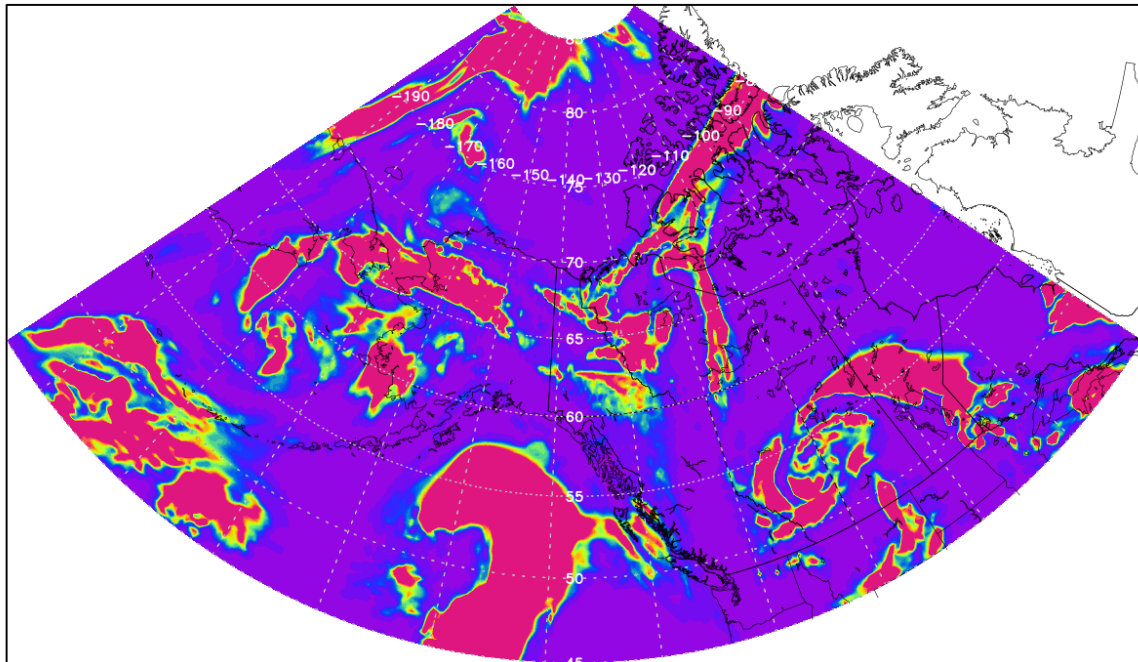
ABOVE_Low_Cloud_Optical_Depth_IT_00z27JUN_VT_18z29JUN.png

GEOS Low Cloud Optical Depth
Initial time 27 JUN. 00z
Valid time 29 JUN. 18z



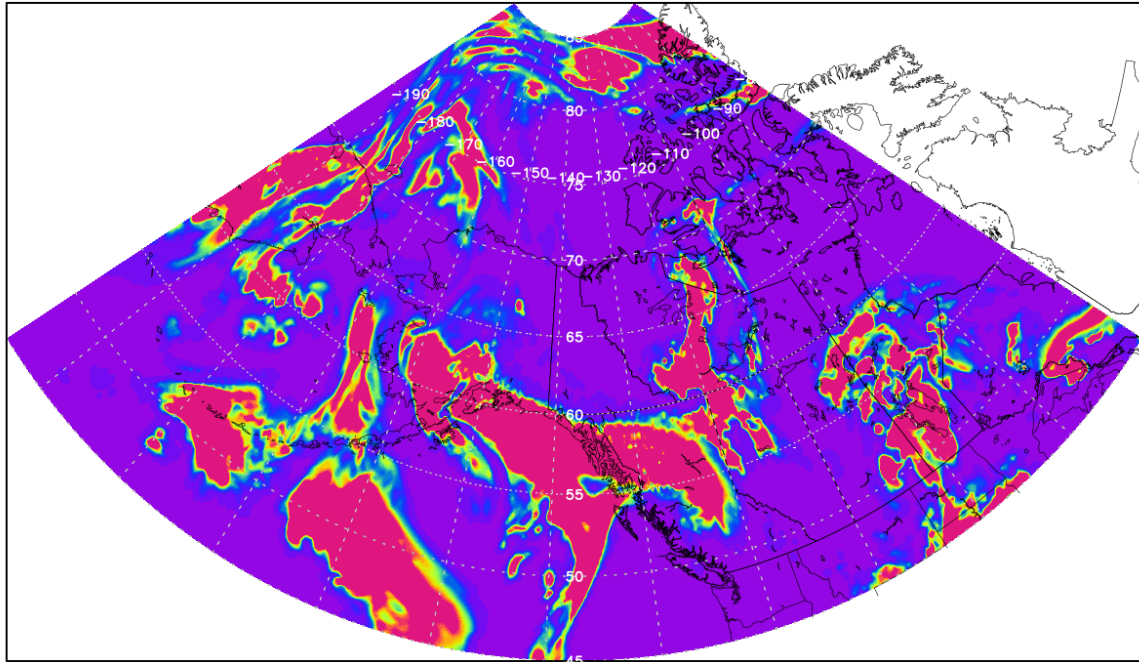
ABOVE_Mid_Cloud_Optical_Depth_IT_00z27JUN_VT_18z28JUN.png

GEOS Mid Cloud Optical Depth
Initial time 27 JUN. 00z
Valid time 28 JUN. 18z



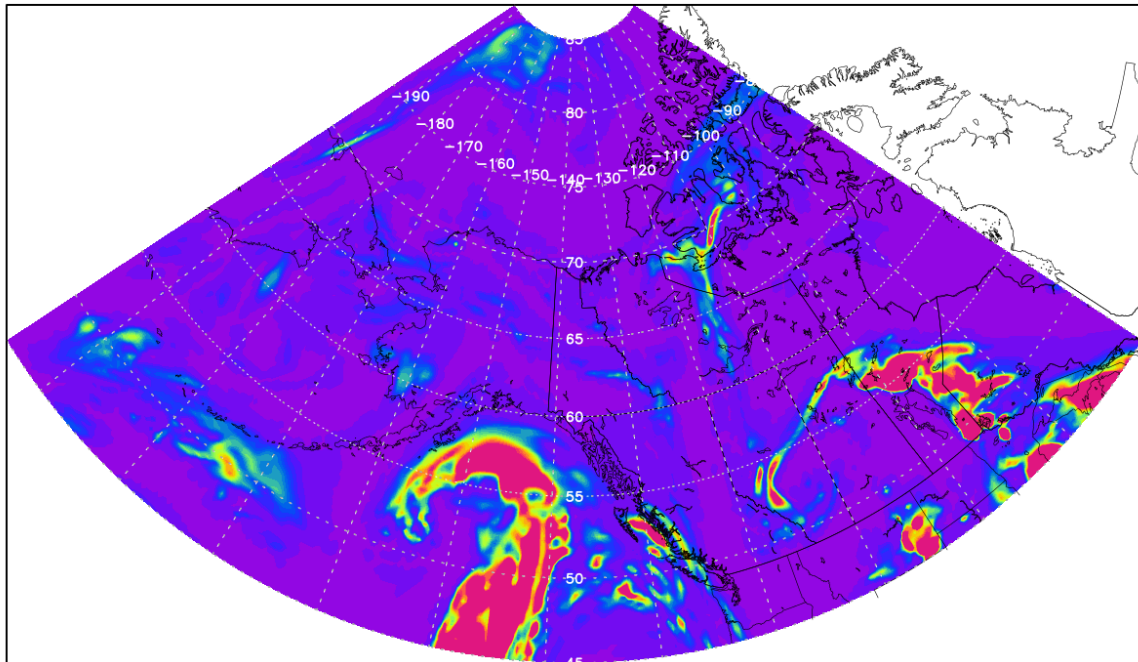
ABOVE_Mid_Cloud_Optical_Depth_IT_00z27JUN_VT_18z29JUN.png

GEOS Mid Cloud Optical Depth
Initial time 27 JUN. 00z
Valid time 29 JUN. 18z



ABOVE_High_Cloud_Optical_Depth_IT_00z27JUN_VT_18z28JUN.png

GEOS High Cloud Optical Depth
Initial time 27 JUN. 00z
Valid time 28 JUN. 18z



ABOVE_High_Cloud_Optical_Depth_IT_00z27JUN_VT_18z29JUN.png

GEOS High Cloud Optical Depth
Initial time 27 JUN. 00z
Valid time 29 JUN. 18z

