

Material was prepared by A. Conaty

Based on the GMAO GEOS meteorology and aerosol forecast fields  
Model Initialized 00z 08 September 2017

*Note: SG (Southern Greenland), NWG (Northwest Greenland), BB (Baffin Bay), NS (Nares Strait), EI (Ellesmere Island)*

### **Day-1 Outlook**

**Valid 0900z 09 September through 1800z 09 September**

With a low pressure system retreating to the east and another approaching from the west, SG starts the period fairly cloud free. However the frontal system approaching from the west begins overspreading clouds from BB and over the western section of Greenland. Multi-layer clouds will cover the western half of SG by 18z. Although some of these clouds will be optically thin, there will be areas of precipitation from about 64N to 76N along the western shores of Greenland by 18z. The eastern two thirds of SG look favorable for flights except the far southeastern shorelines which will be cloudy early.

No aerosol issues.

### **Day-2 Outlook**

**Valid 0900z 10 September through 1800z 10 September**

A low pressure system in the northern BB area and it's associated frontal system will spread clouds and precipitation over much of SG providing very few ideal flight opportunities. Only the far eastern fringes of Greenland will be free of clouds and rain.

No aerosol issues.

### **Day-3 Outlook**

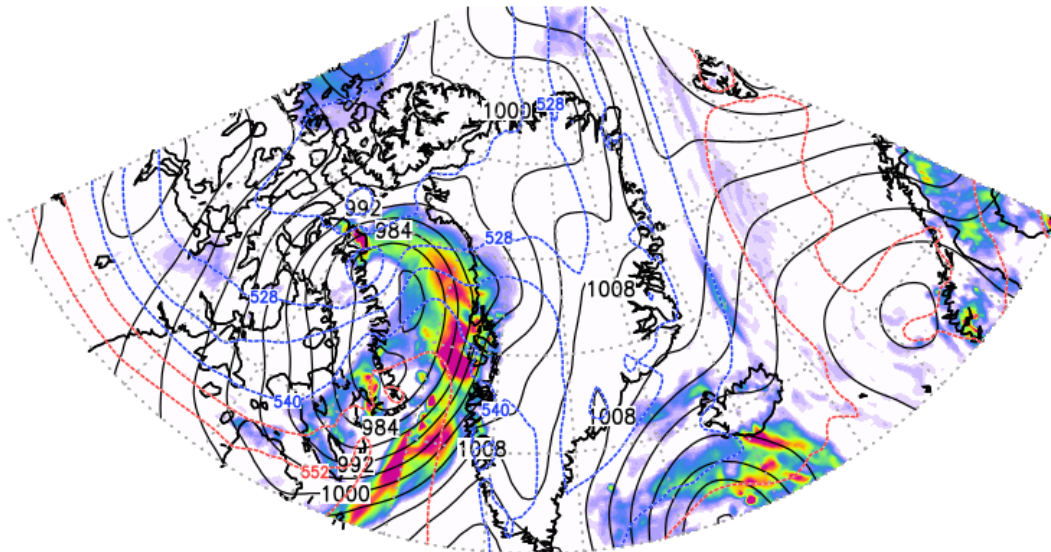
**Valid 0900z 11 September through 1800z 11 September**

On Monday, clouds and rain cover much of SG but there is a chance for the most southern flight paths from say 65N and down to the southern tip of Greenland, especially in the second half of the flying day.

No aerosol issues.

NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-09-08

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

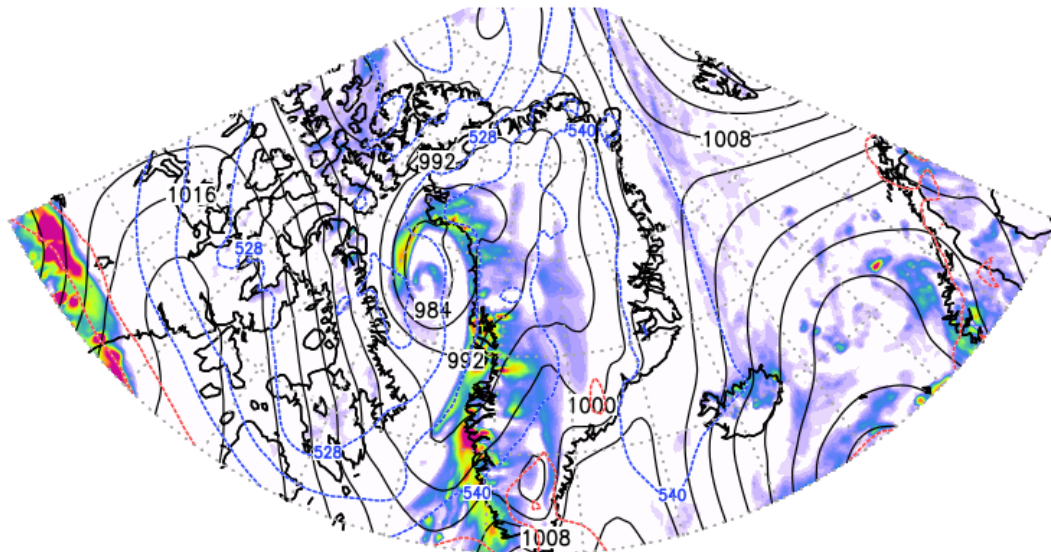


42 hr forecast valid Sat 18z 2017-09-09



NASA/GMAO - GEOS-5 Forecast Initialized on 00z 2017-09-08

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

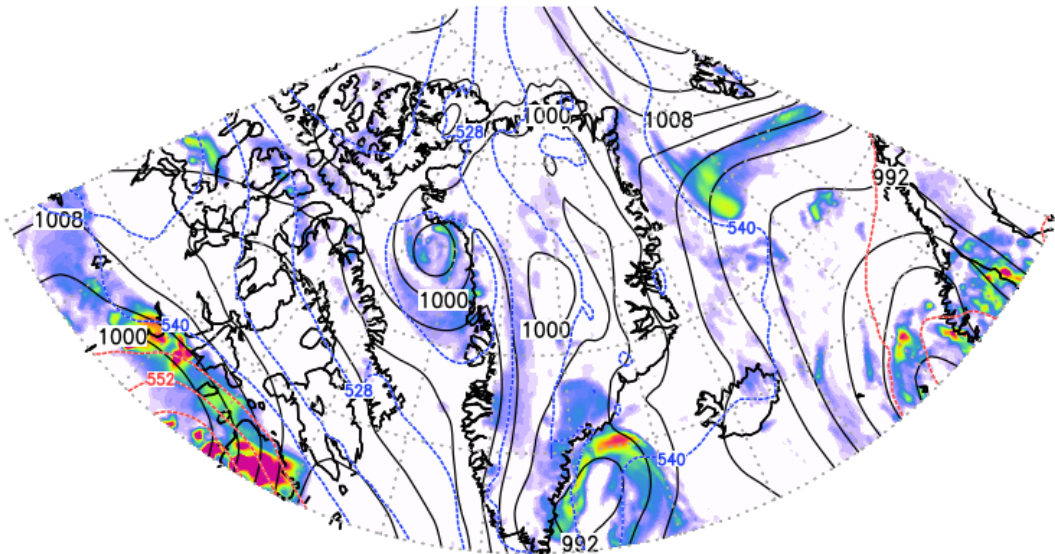


60 hr forecast valid Sun 12z 2017-09-10



NASA/GMAO – GEOS-5 Forecast Initialized on 00z 2017-09-08

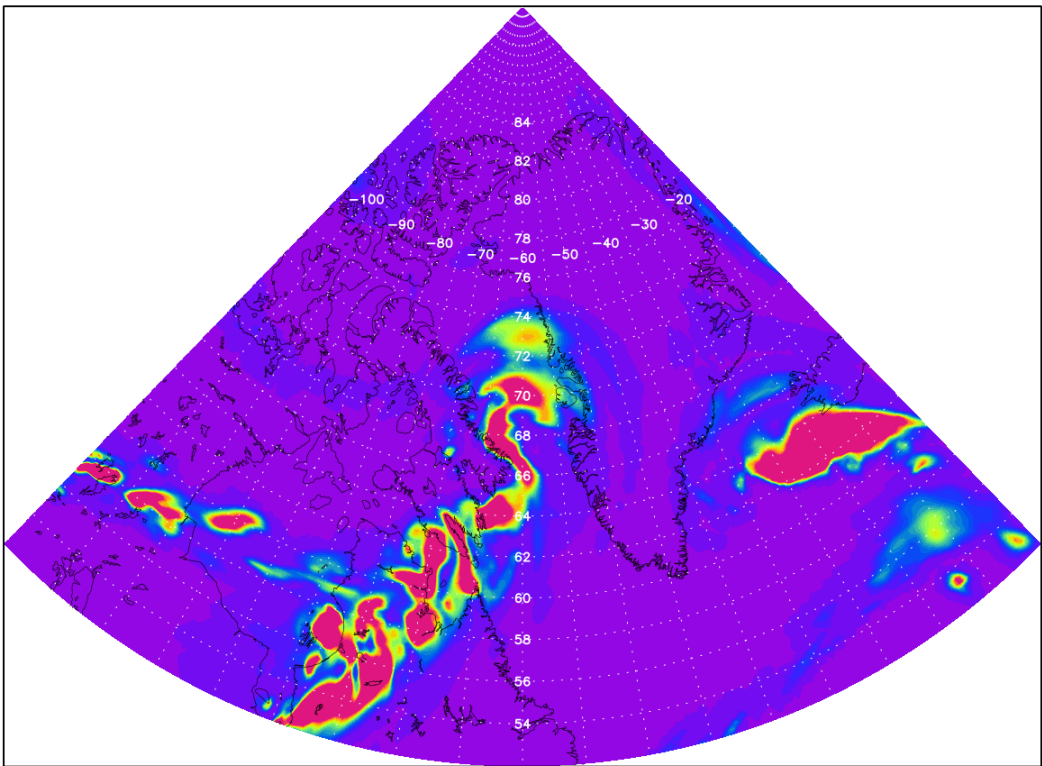
Precip [mm/day], SLP [mb] and 1000–500mb Thickness [dam]



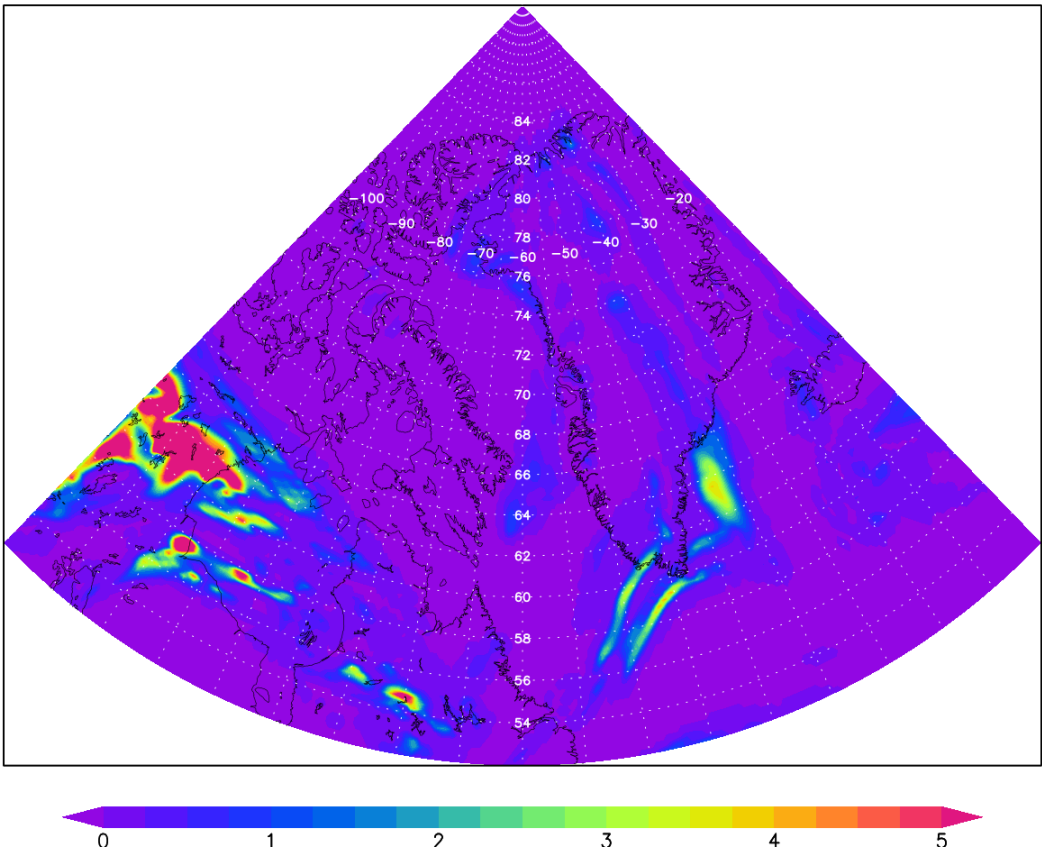
84 hr forecast valid Mon 12z 2017-09-11



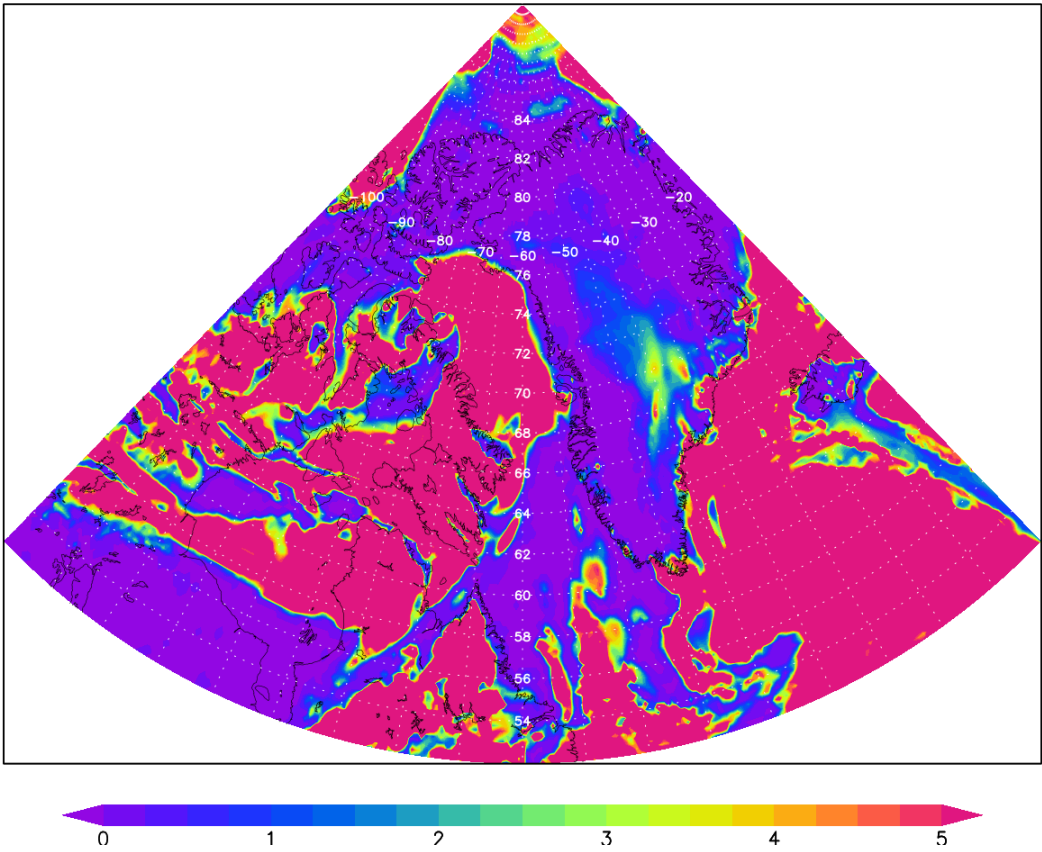
GEOS High Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 09 SEP. 12z



GEOS High Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 10 SEP. 12z

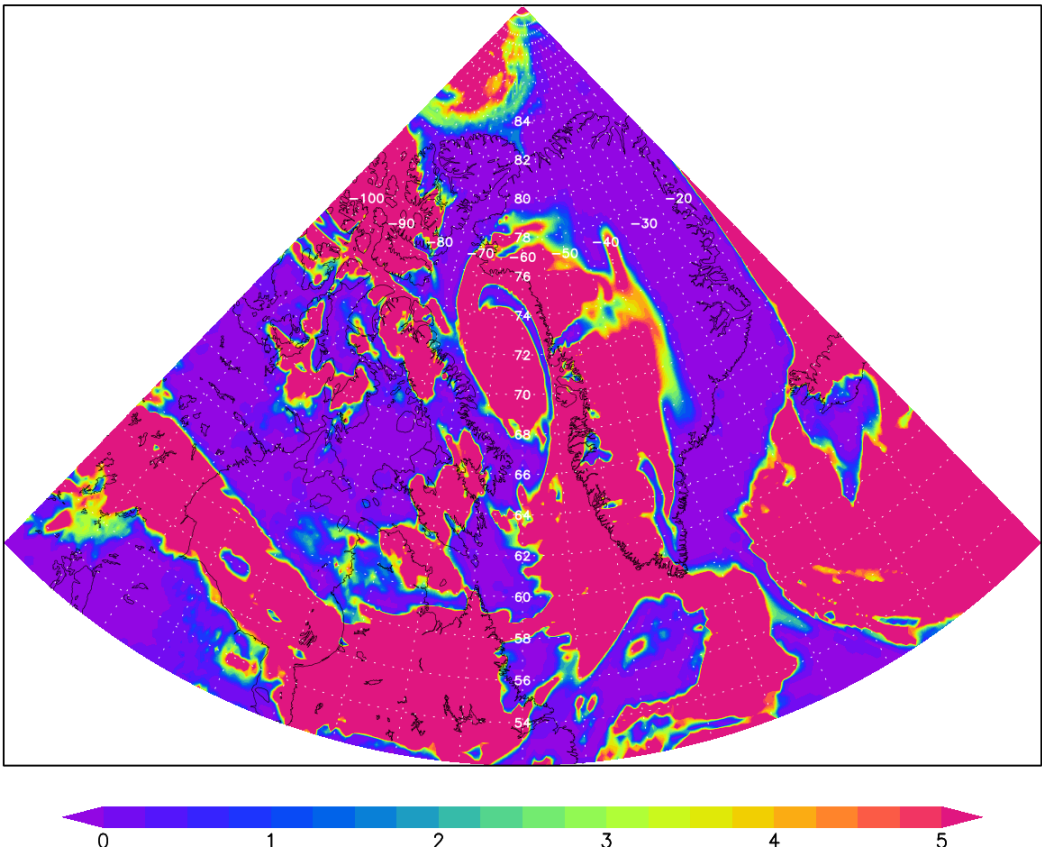


GEOS Low Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 09 SEP. 12z

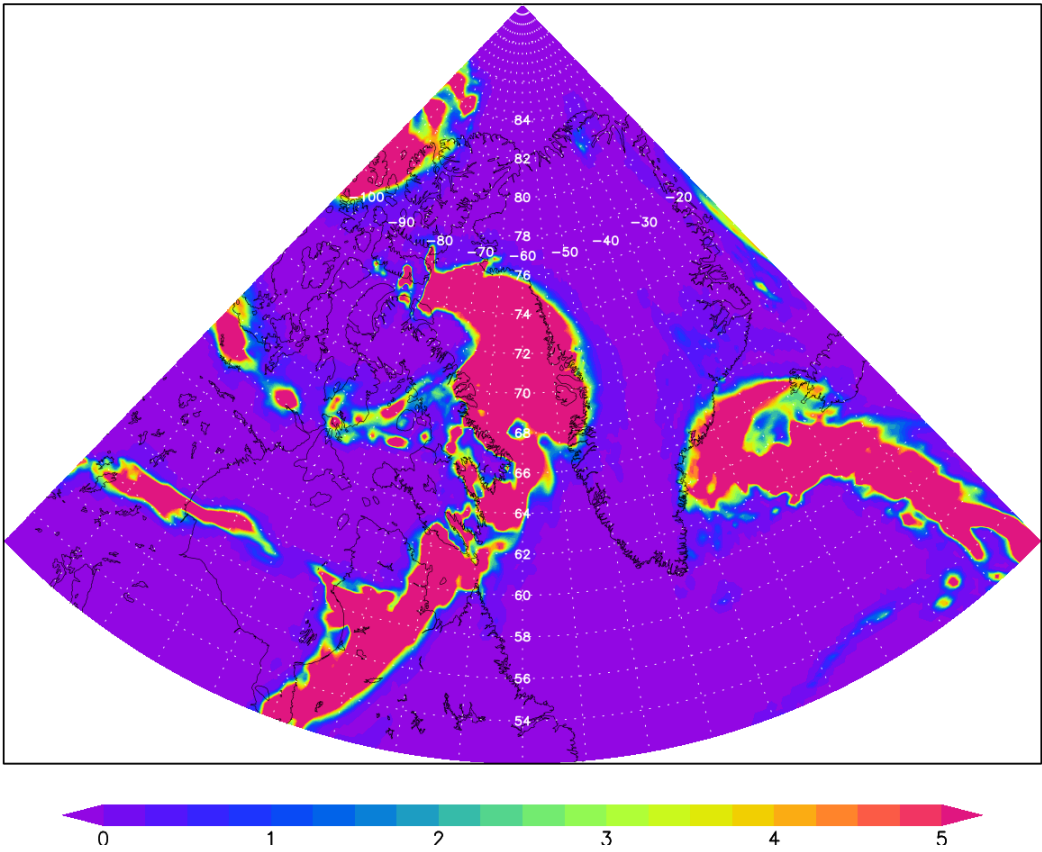




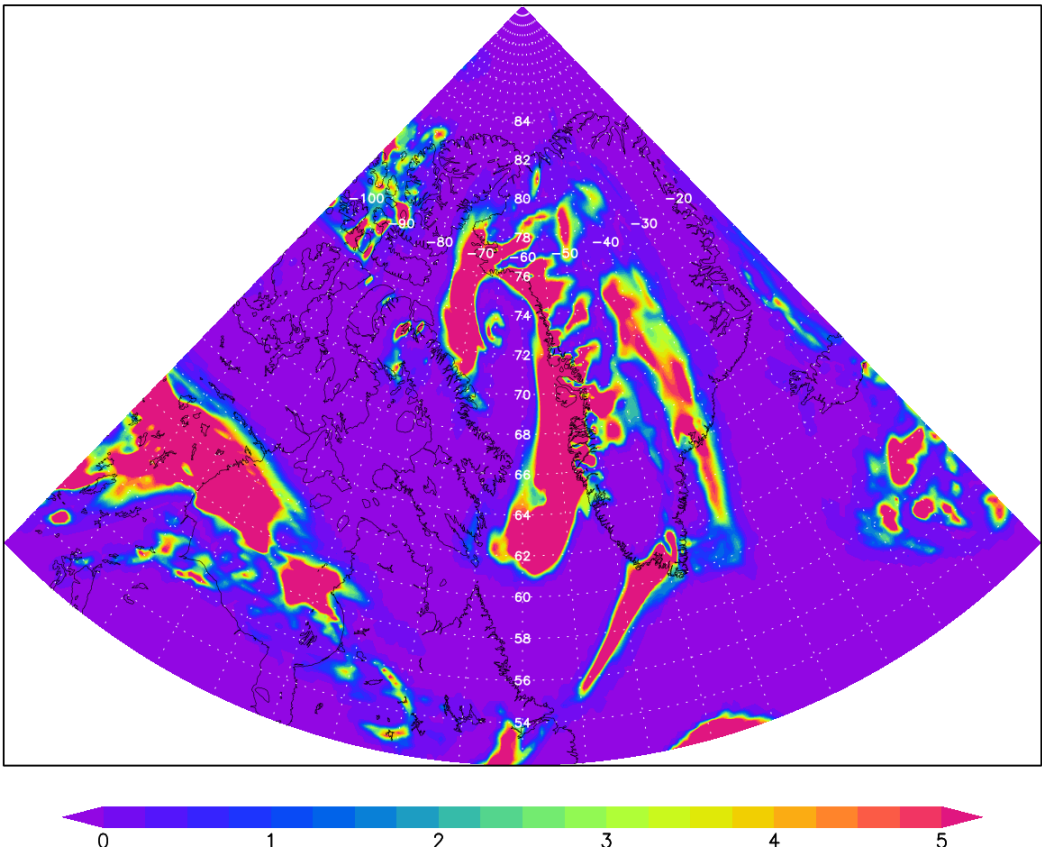
GEOS Low Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 10 SEP. 12z



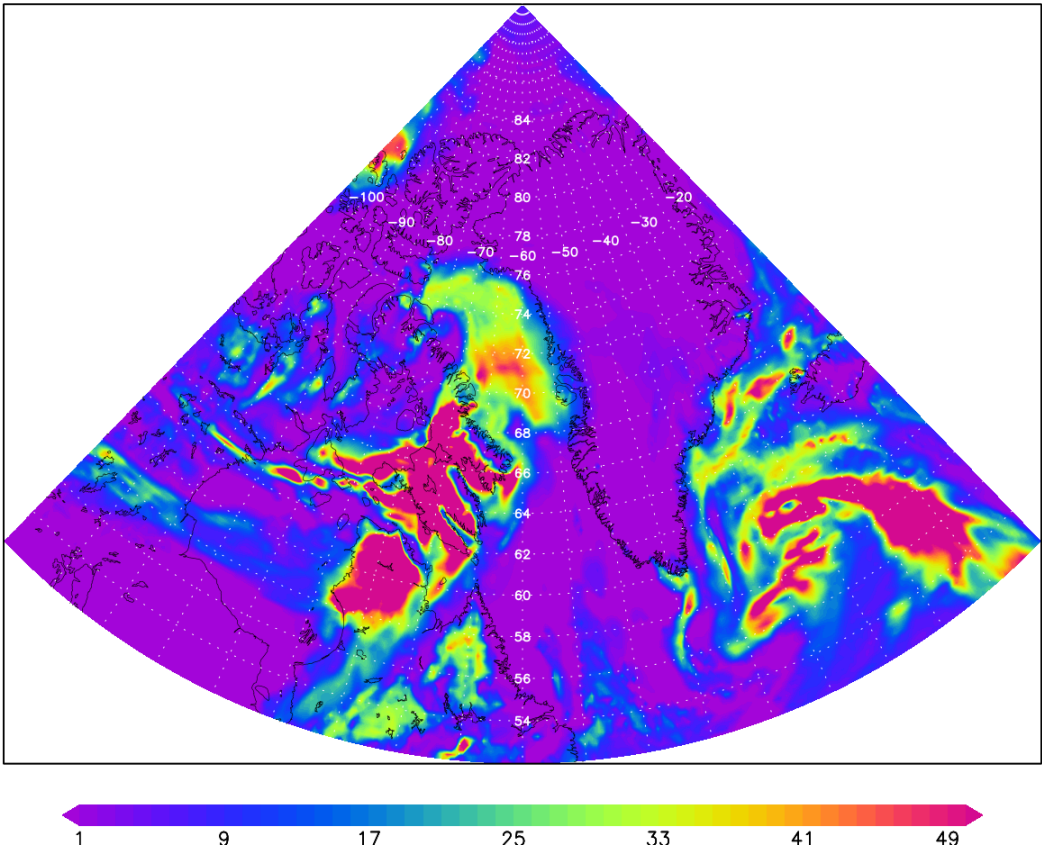
GEOS Mid Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 09 SEP. 12z



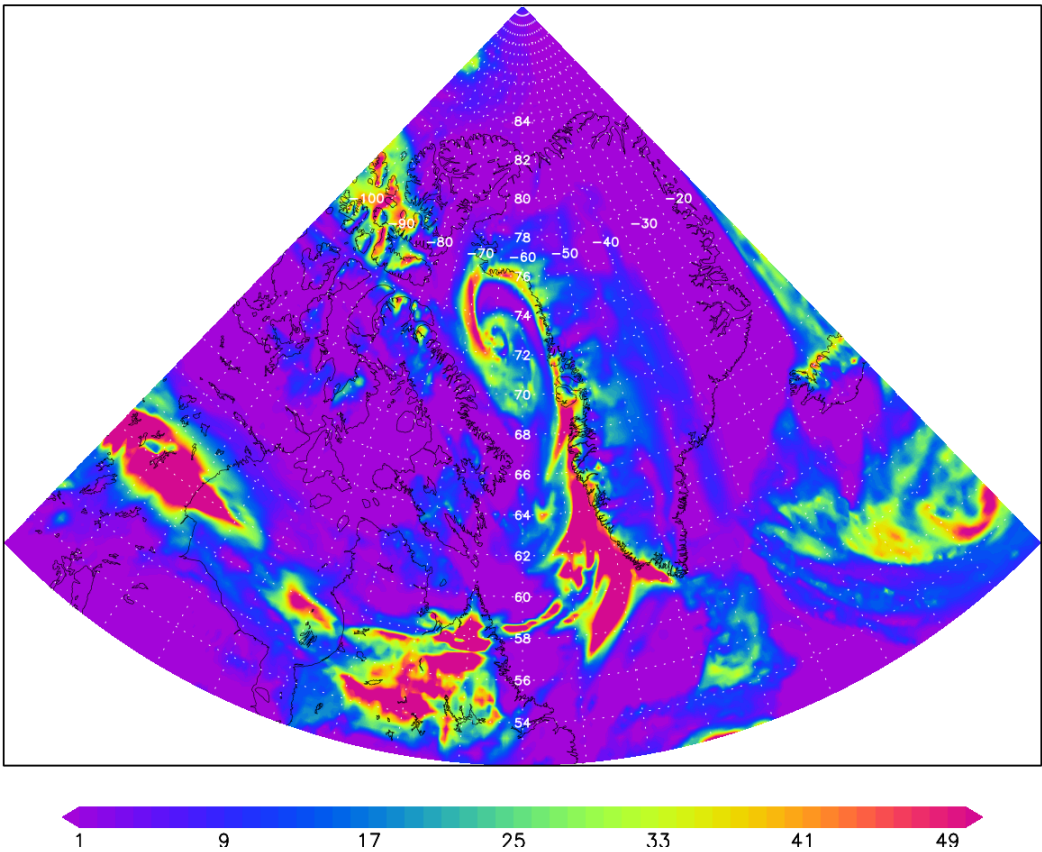
GEOS Mid Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 10 SEP. 12z



GEOS Total Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 09 SEP. 12z



GEOS Total Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 10 SEP. 12z



GEOS Total Cloud Optical Depth  
Initial time 08 SEP. 00z / Valid time 11 SEP. 12z

