

IMAGERY AND PROXY IMAGERY USAGE AT HPC, OPC, TAFB, AND SAB

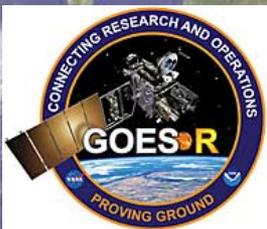
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05/01/12

NOAA Satellite Sciences Week

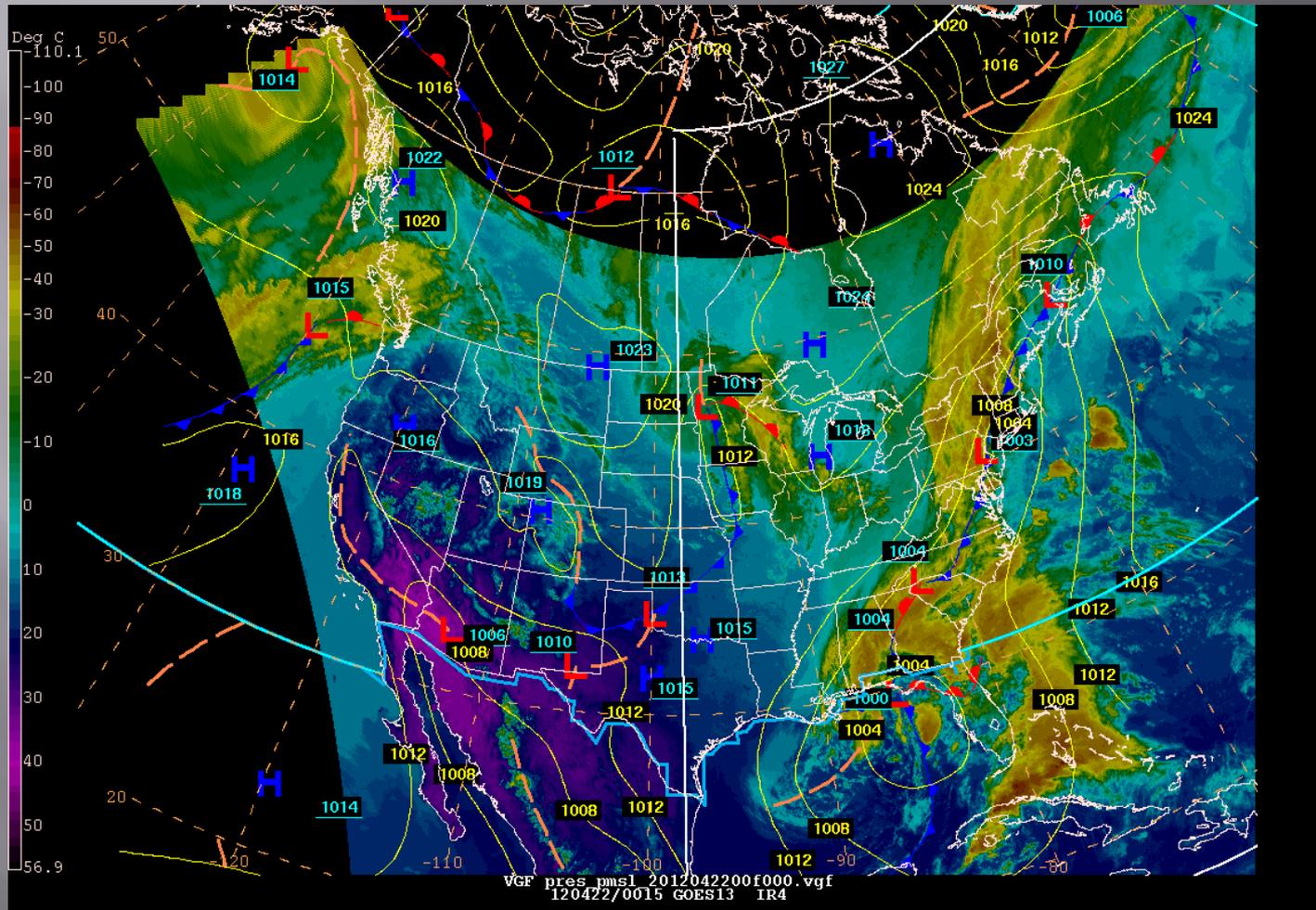


Current Operational Use of GOES East and West Imagery

- ▣ Identify Forcing Mechanisms
 - Jet Streaks
 - Shortwaves
- ▣ Identify Moisture Plumes
 - Atmospheric Rivers
 - Low-level Jet Analysis
- ▣ Satellite Trends
 - Cloud-top cooling
 - Tracking mesoscale features (i.e. MCS evolution)
 - NWP overlays (i.e. 500 mb ABSV and Heights)

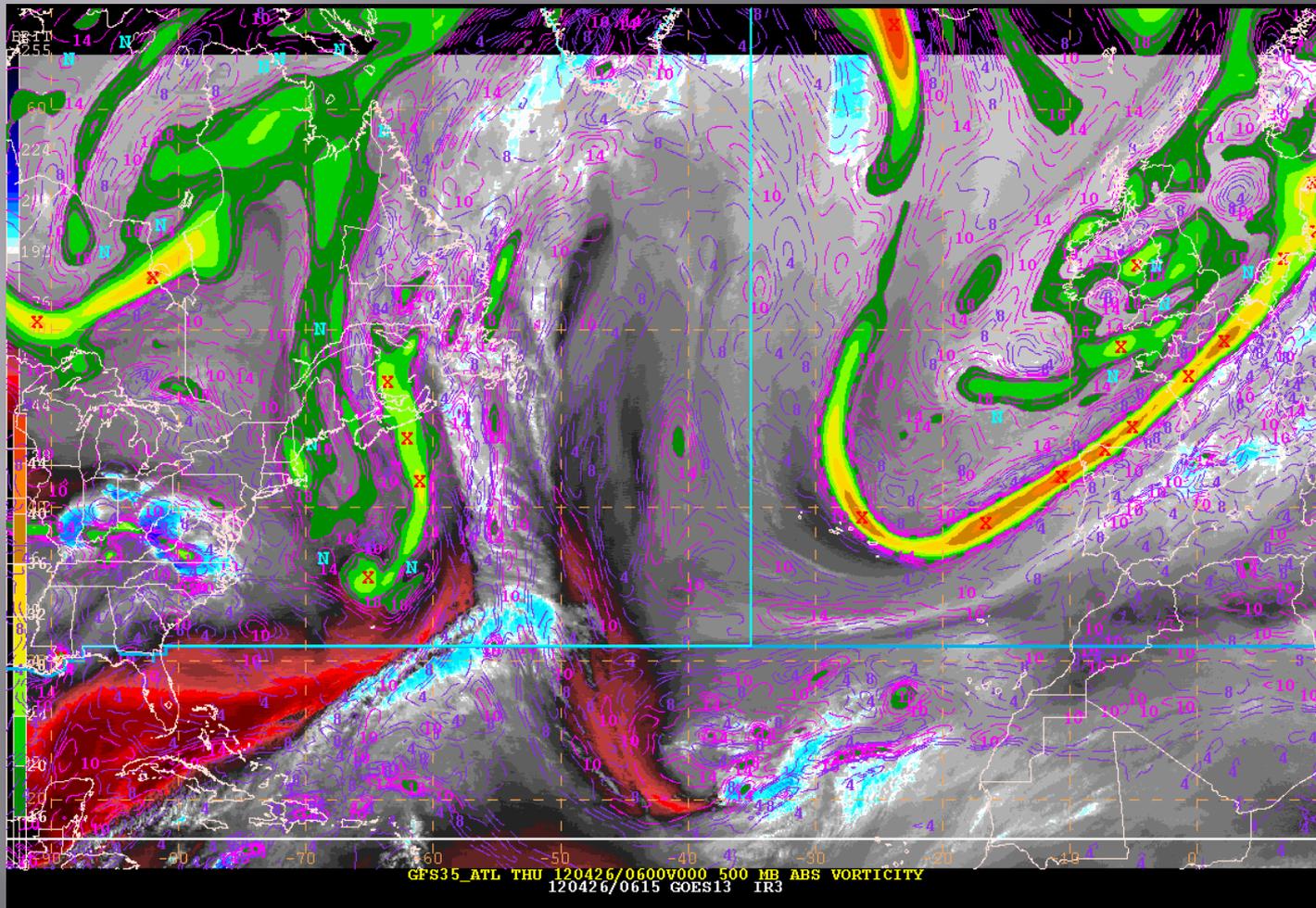
Nor'easter on 04/22/12

GOES-13 IR used by HPC



North Atlantic on 04/26/12

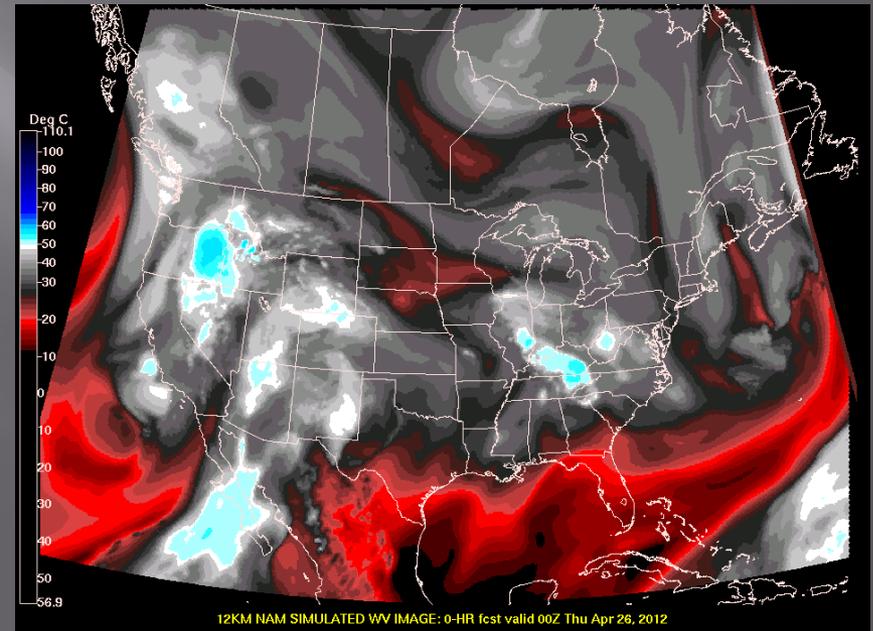
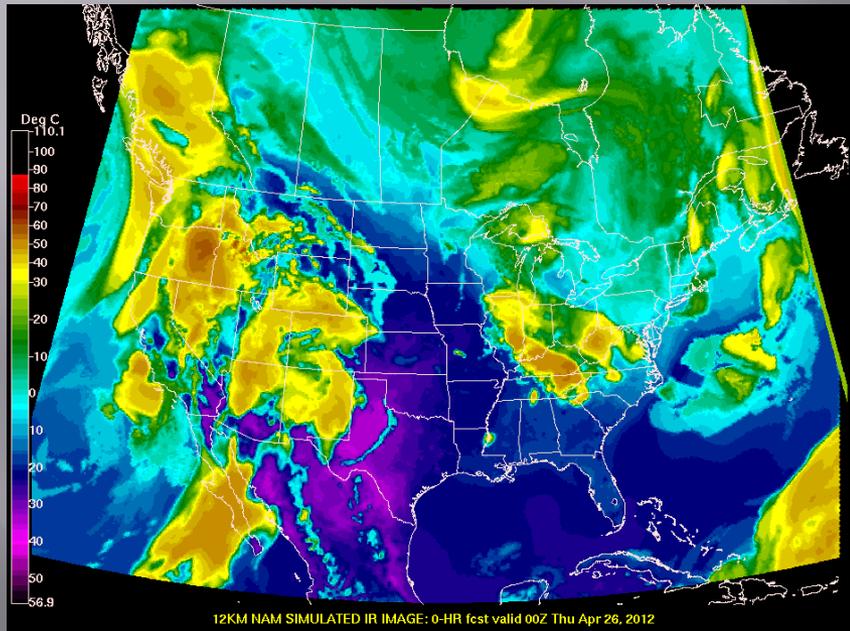
GOES-13/Meteosat-9 WV used by OPC



HPC Use of Simulated Satellite Imagery

12 KM NAM IR

12 KM NAM WV



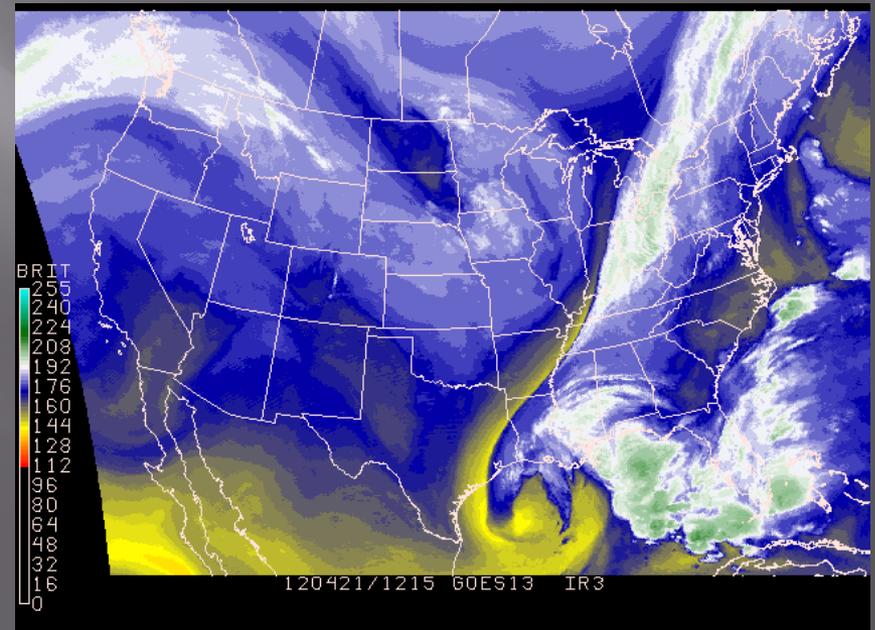
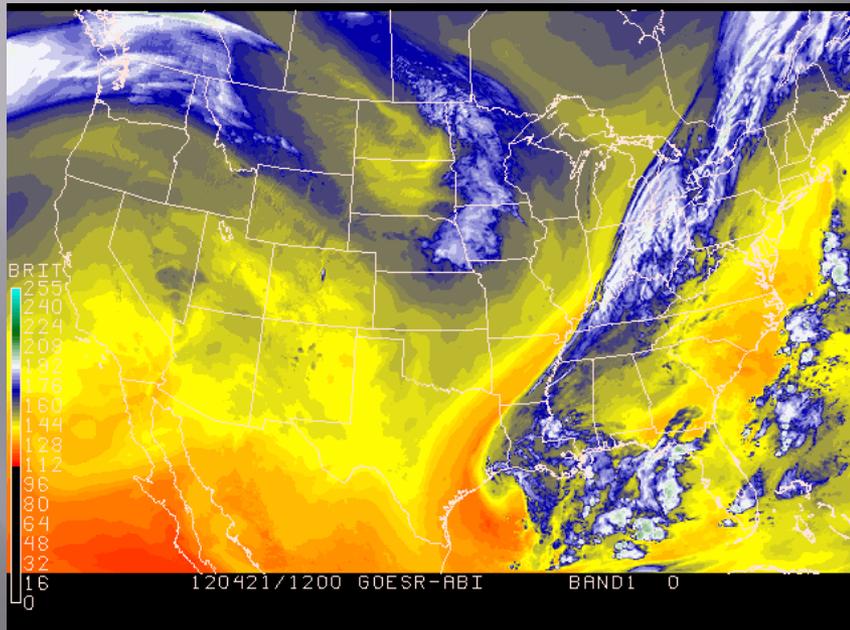
Simulated Band Usage

- ▣ Current Simulated Infrared Imagery from the NAM is used for the Air Quality Web Drawer at HPC.
- ▣ Use the WRF-simulated Imagery from CIRA and CIMSS for Model Diagnostics
 - Use Satellite Forecasts to Compare with NWP Output.
 - Short-range Trends (i.e. nowcasting)
- ▣ Use the WRF-simulated ABI bands for comparison to current GOES IR bands
- ▣ Use the WRF-simulated Fog Product from CIRA to assist OPC and TAFB Offshore Fog Forecasts

Potential Use of Simulated Satellite Imagery

4 KM WRF – BAND 10 (WV)

GOES-13 4KM WV

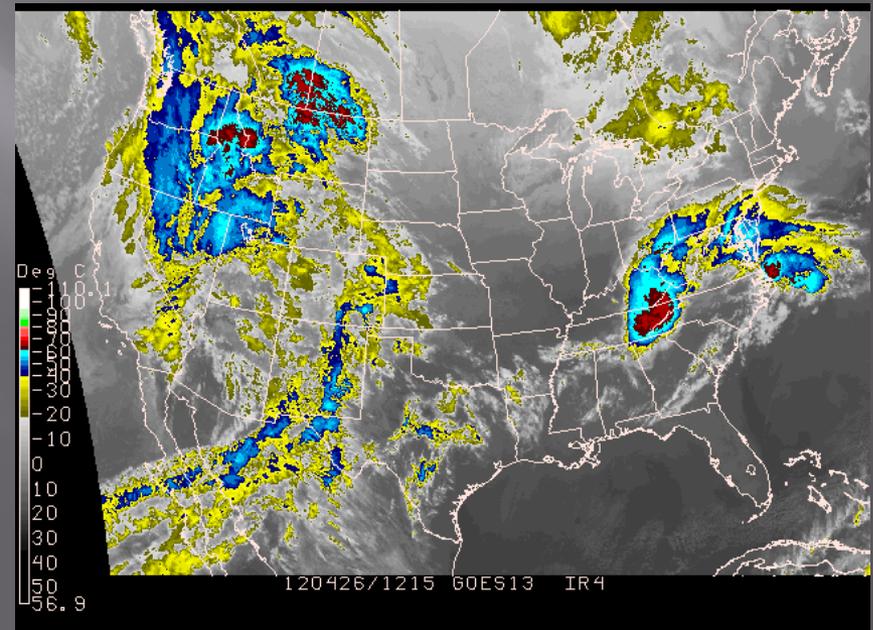
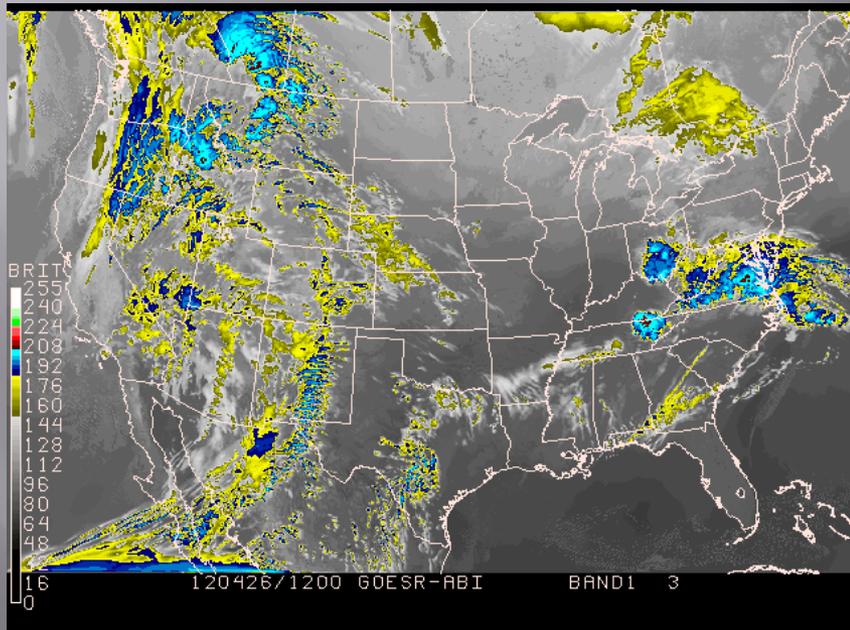


CIMSS

Potential Use of Simulated Satellite Imagery

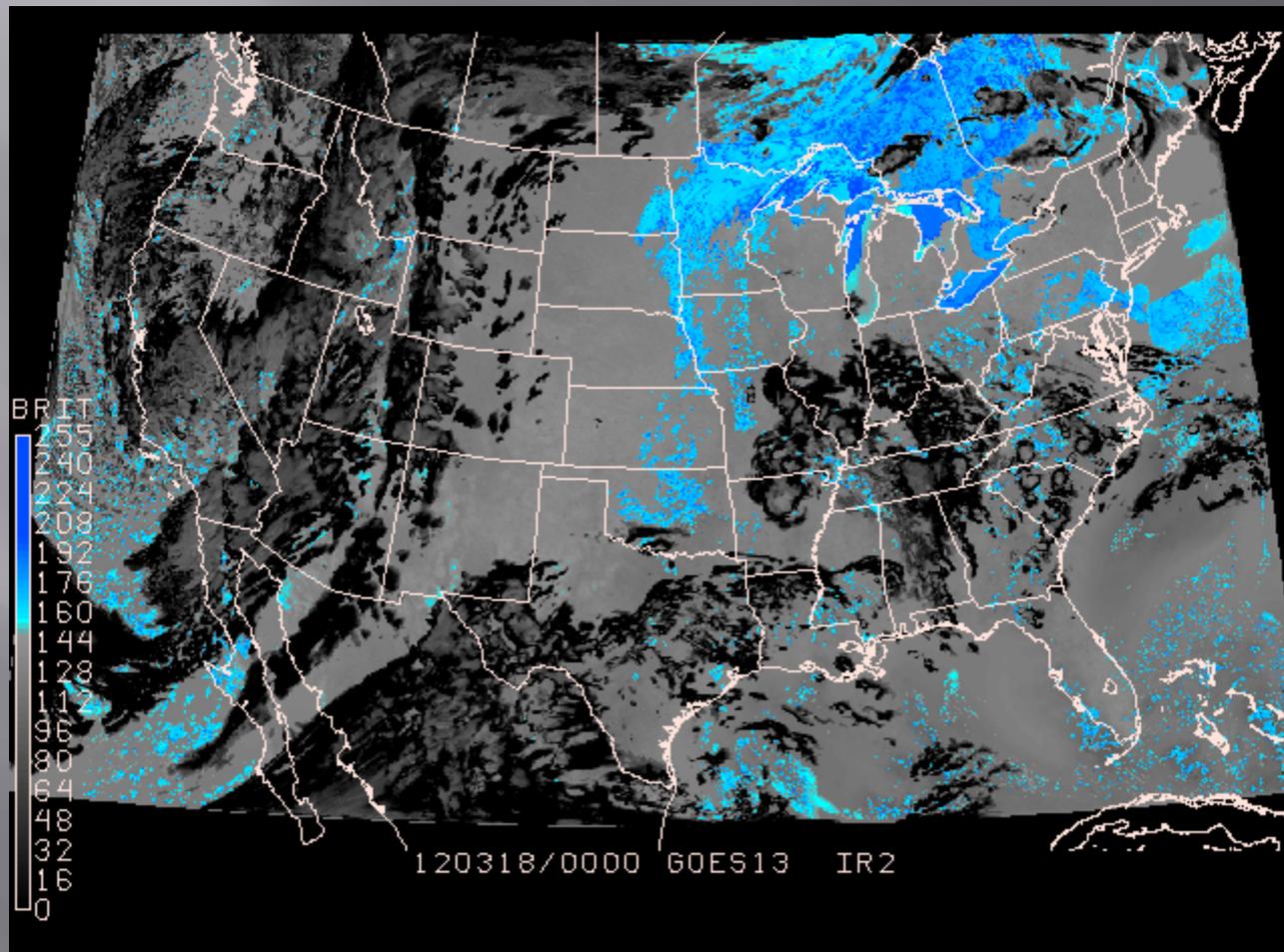
4 KM WRF – BAND 13 (IR)

GOES-13 4 KM IR



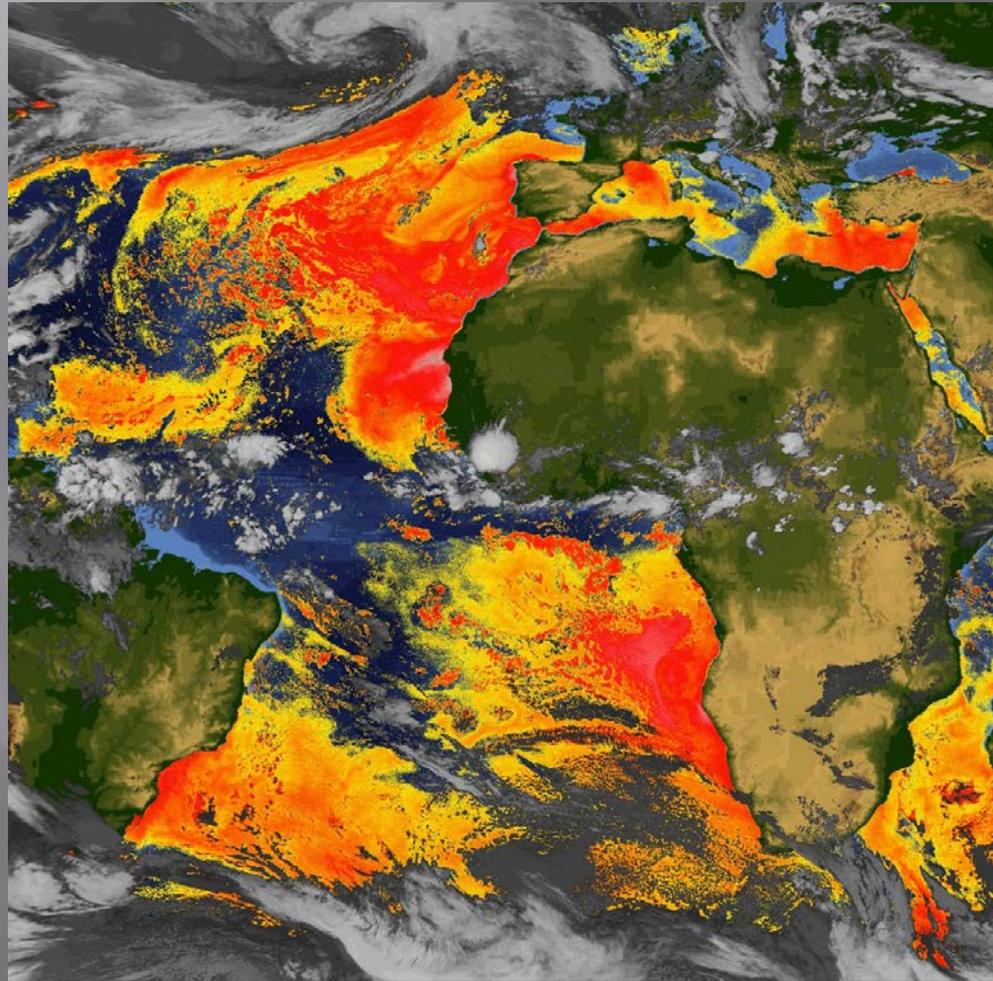
CIMSS

Difference Band Usage Simulated Fog Product



CIRA

Difference Band Usage Saharan Air Layer Product



Jason Dunion

Questions?