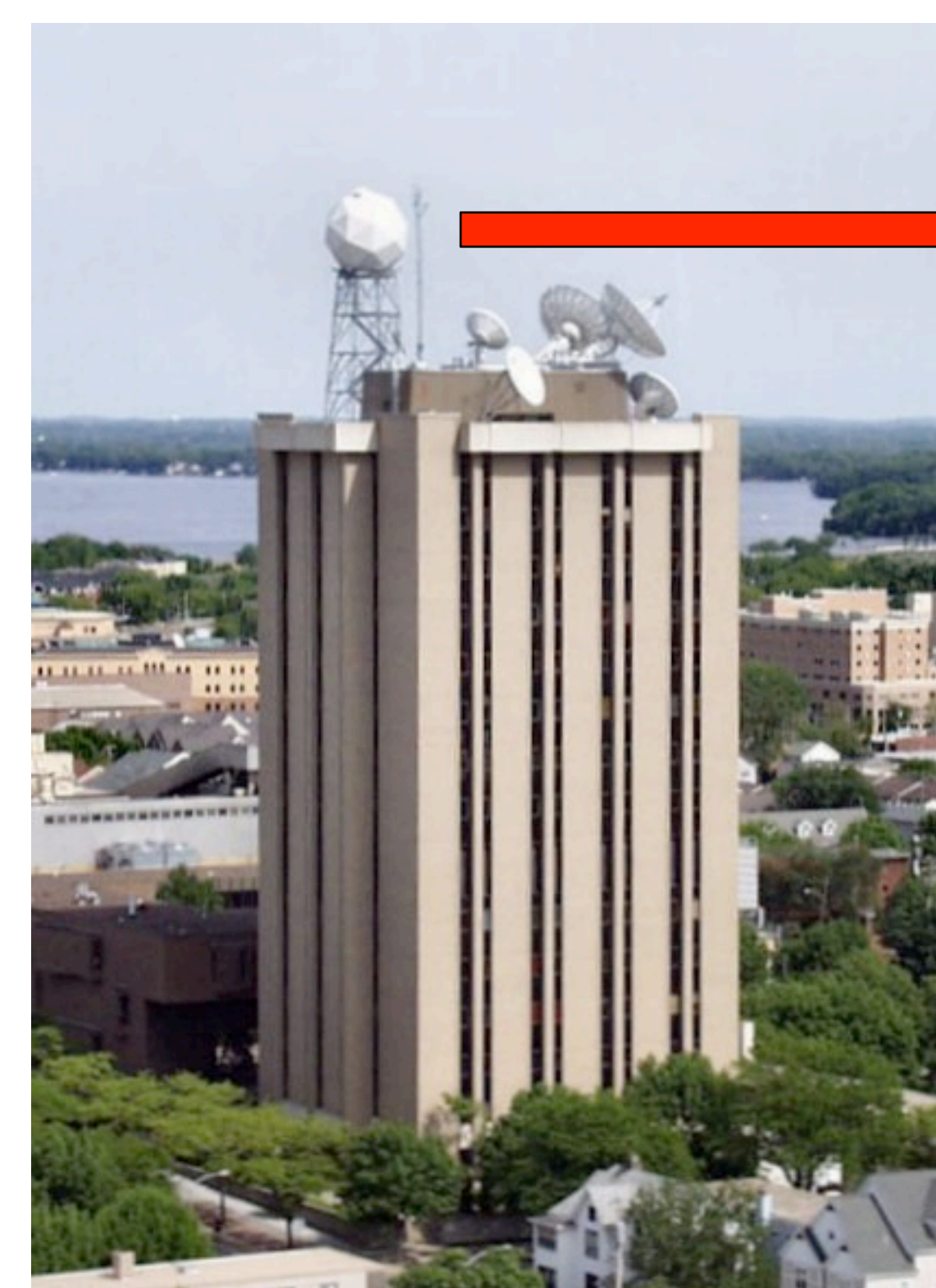


MODIS Products in AWIPS: Using Research Satellites in Operations

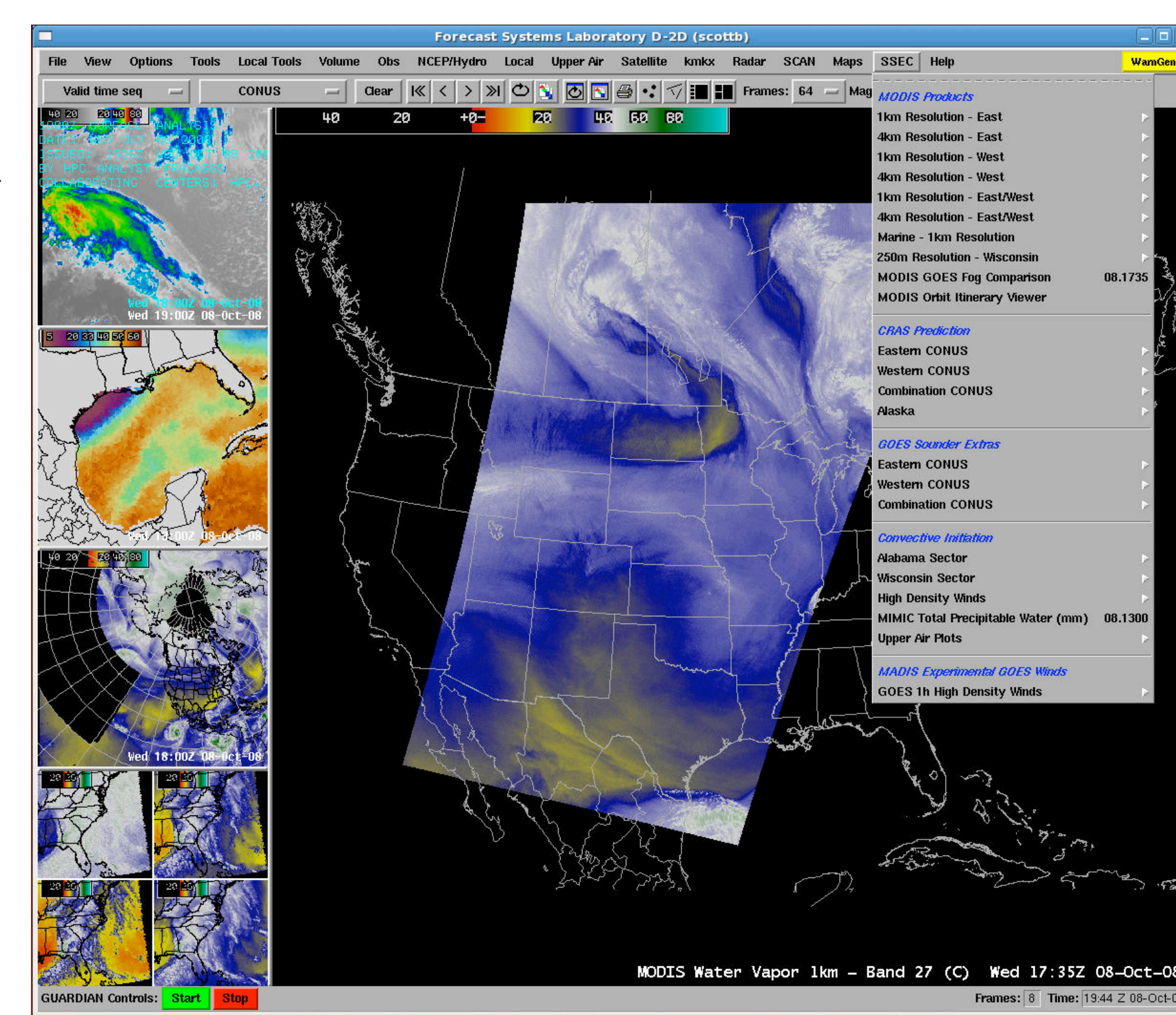
Scott Bachmeier, Jordan Gerth, Kathy Strabala

Cooperative Institute for Meteorological Satellite Studies (CIMSS) • Space Science and Engineering Center (SSEC) • University of Wisconsin - Madison



UW-Madison MODIS Direct Broadcast ground station

Unidata LDM feed

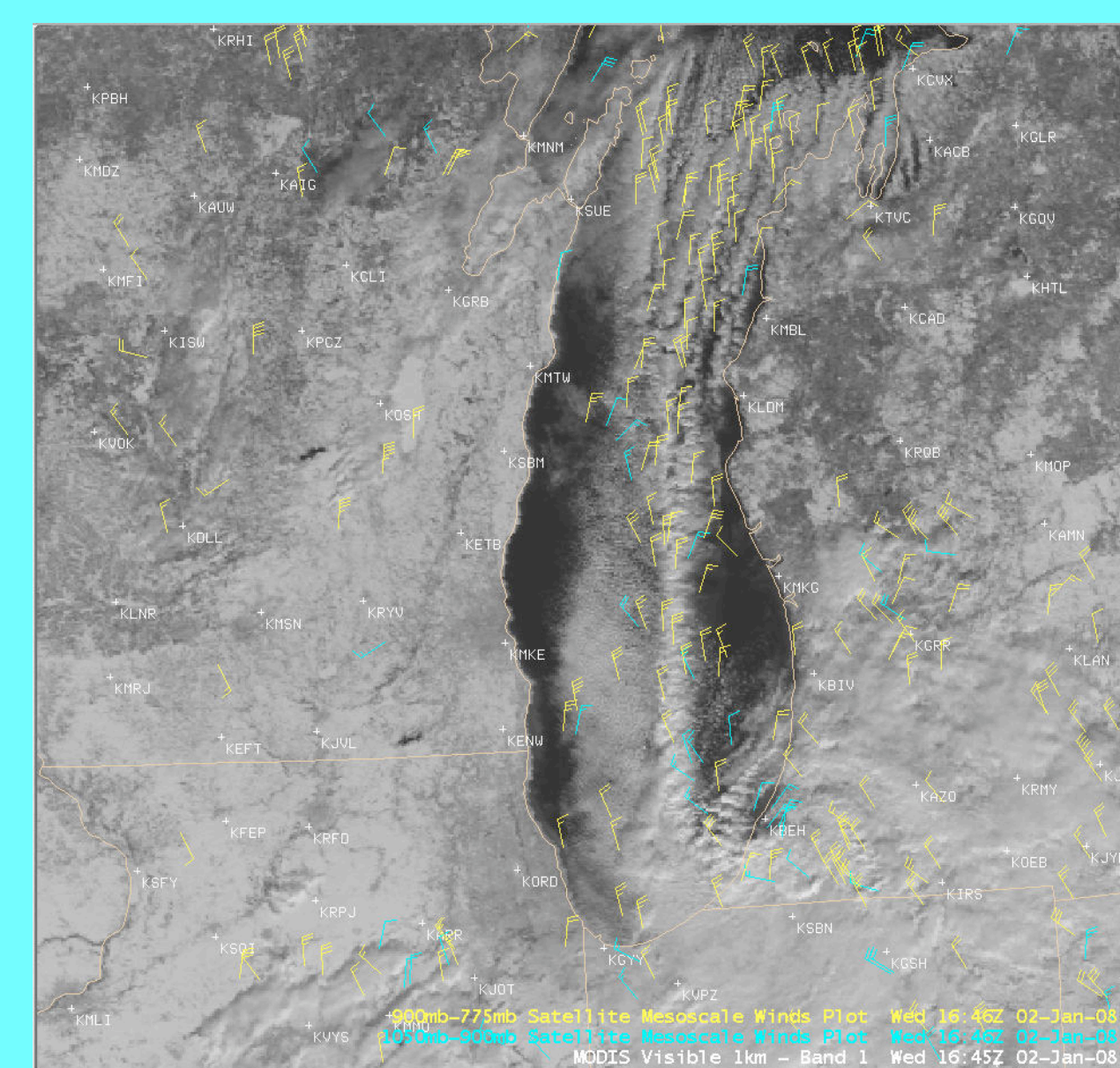


MODIS imagery (and other CIMSS satellite products) in AWIPS

CIMSS has been making MODIS imagery and products available in AWIPS (via LDM subscription) since July 2006.

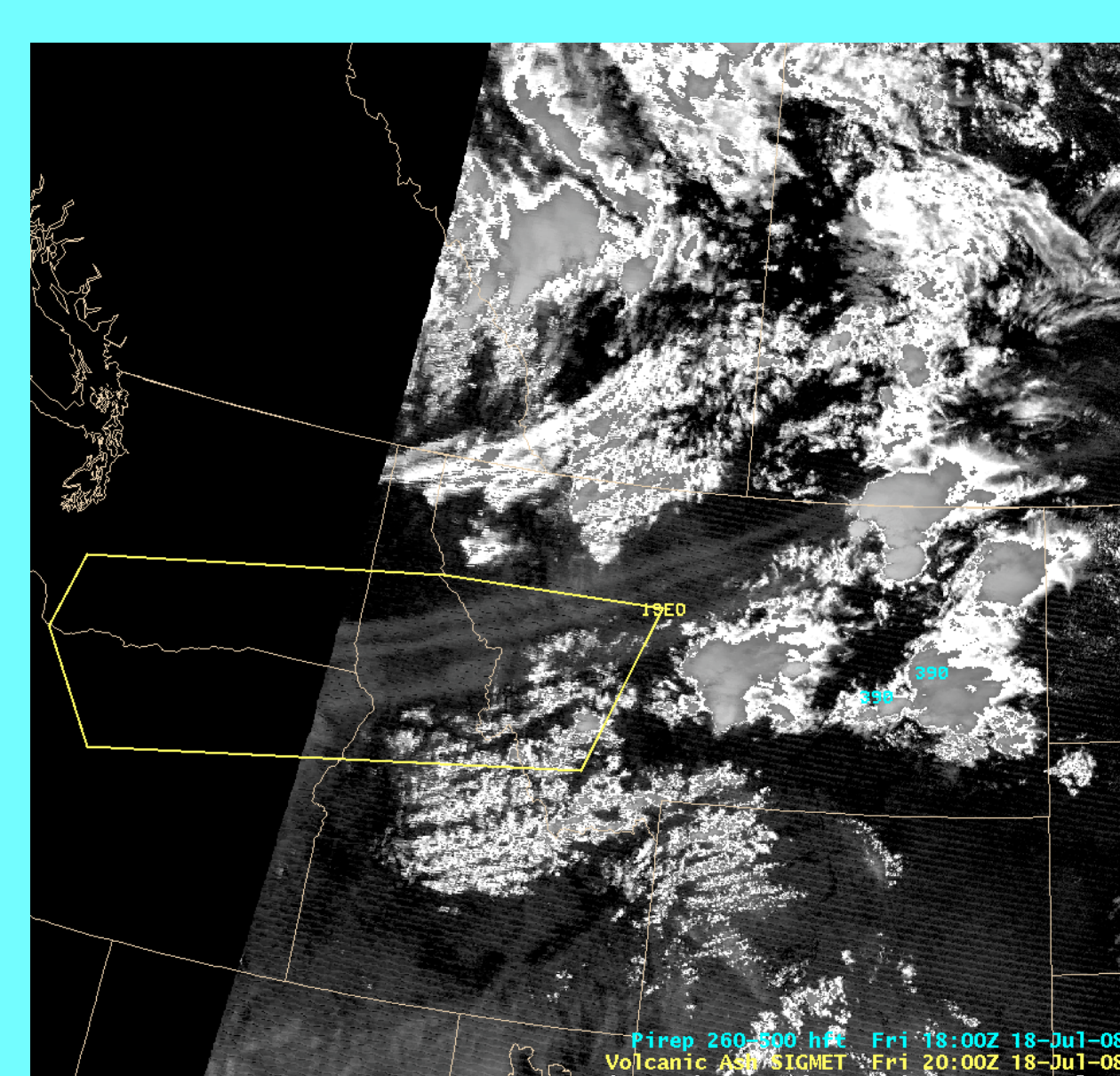
- 10 MODIS channels and products at 1-km spatial resolution
- 3 MODIS products at 4-km spatial resolution
- 4 images per day over any given region (2 daytime, 2 night-time)

Visible (0.65µm)



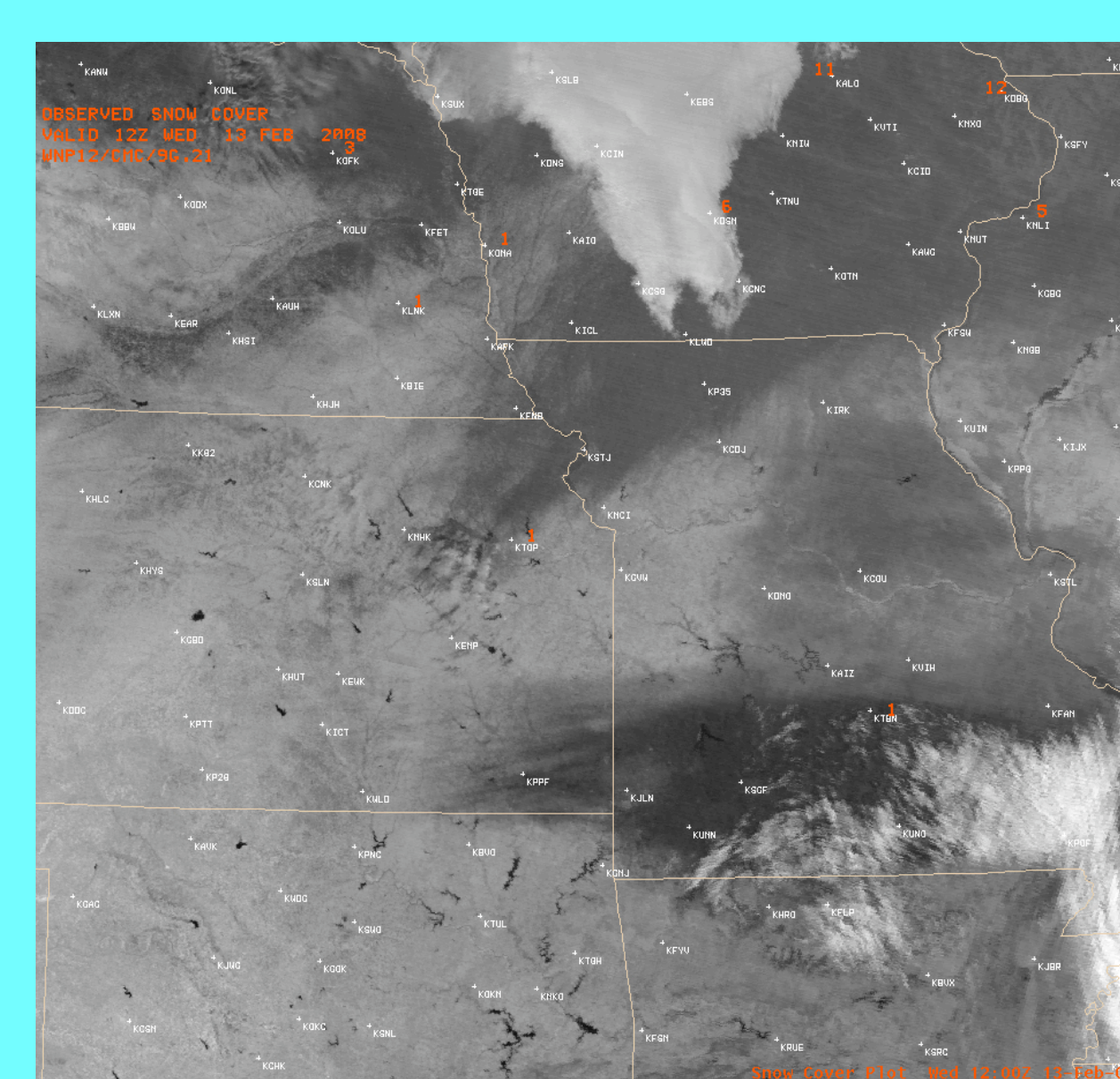
Lake-Effect Cloud Band

Cirrus (1.3µm)



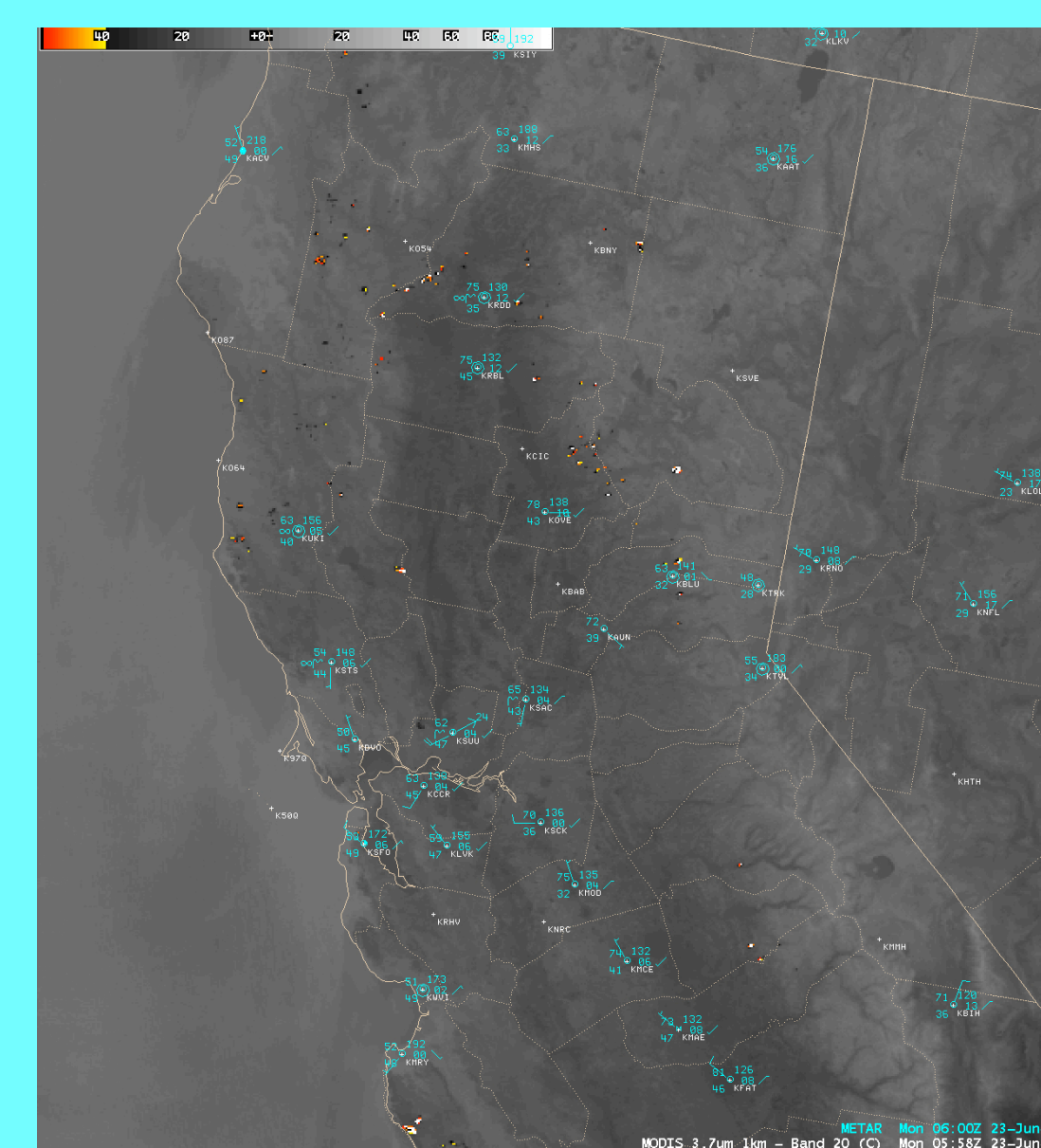
Volcanic Plumes

Snow/Ice (2.1µm)



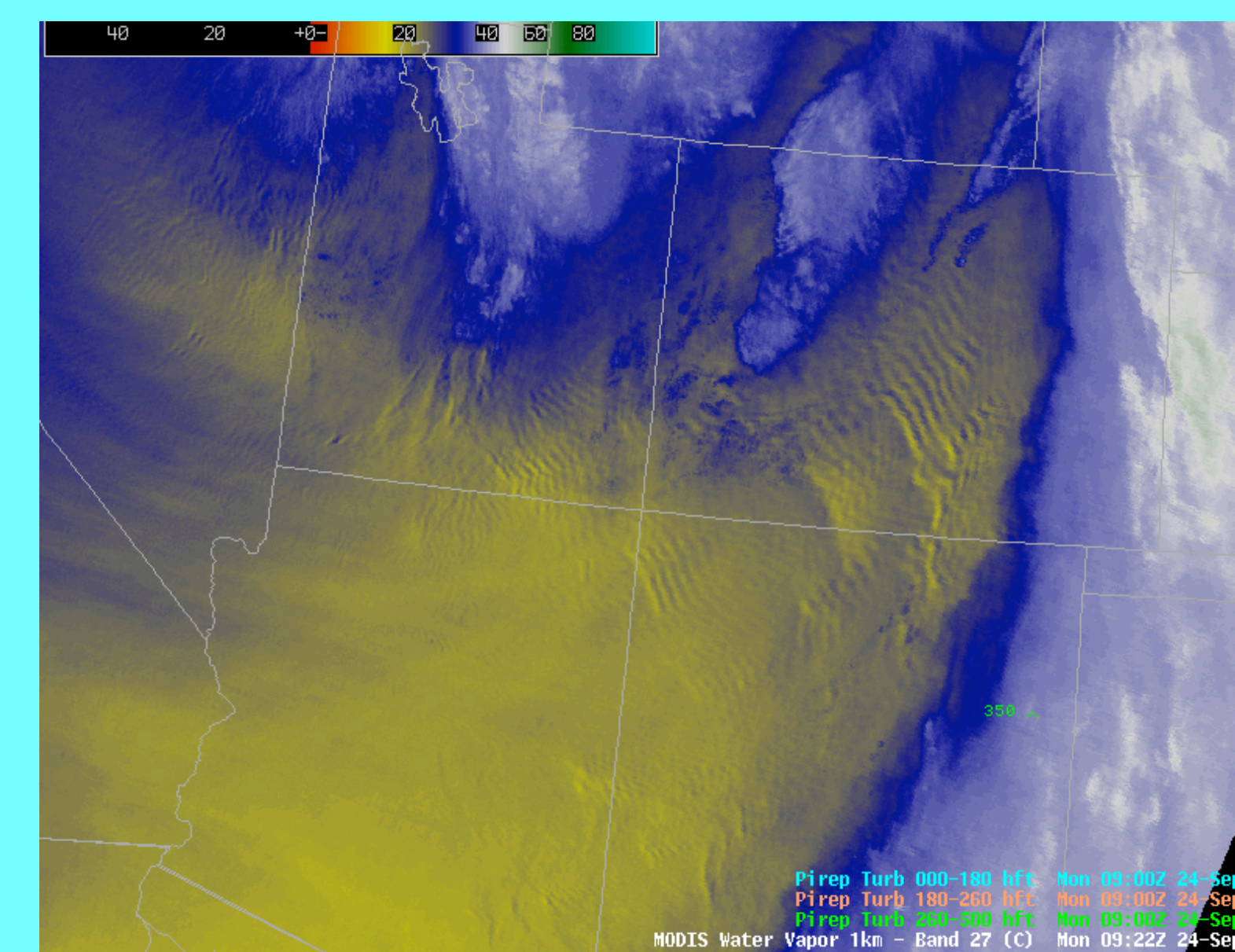
Ice Storm

Shortwave IR (3.7µm)



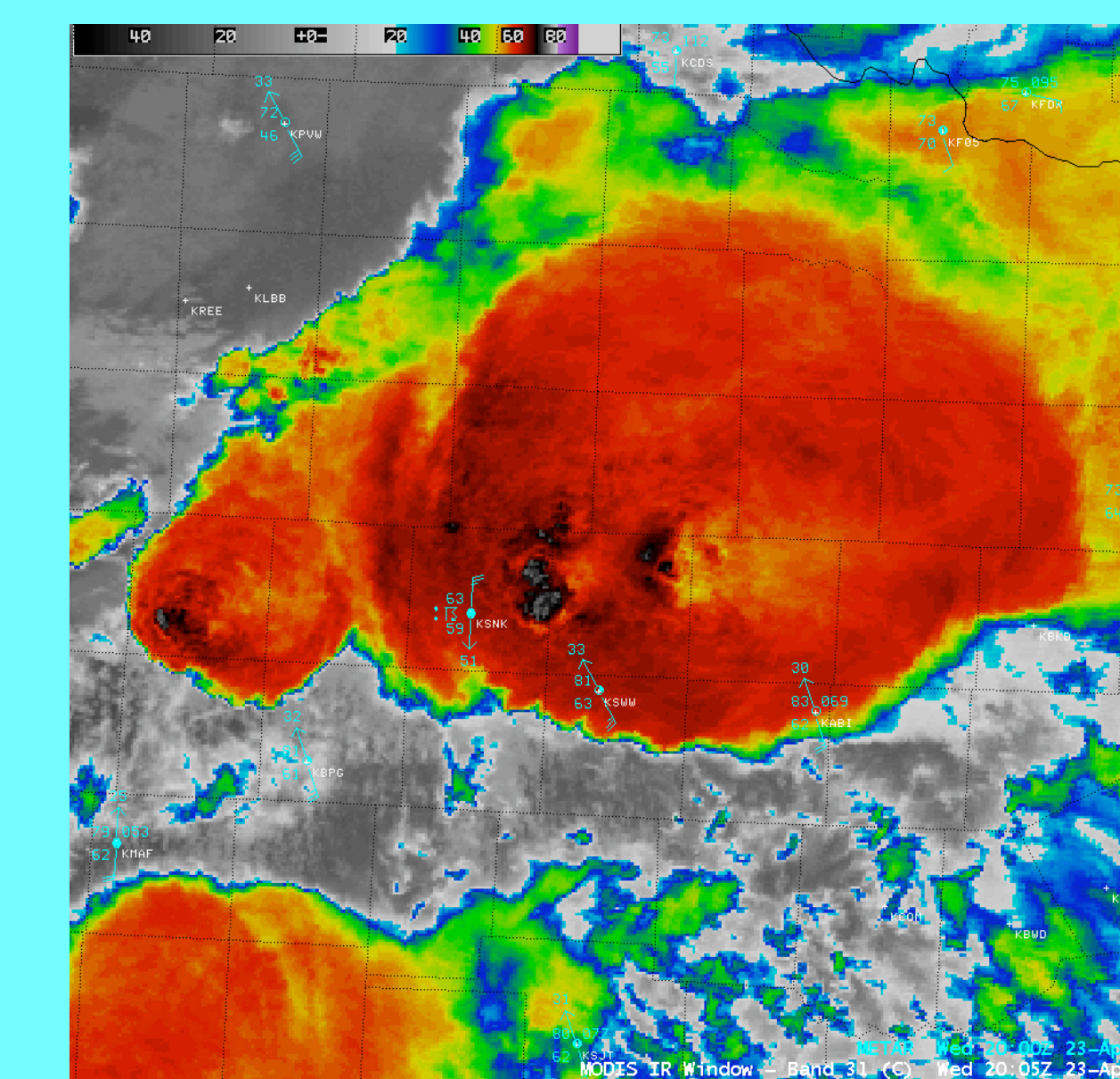
Wildfires

Water vapor (6.7µm)



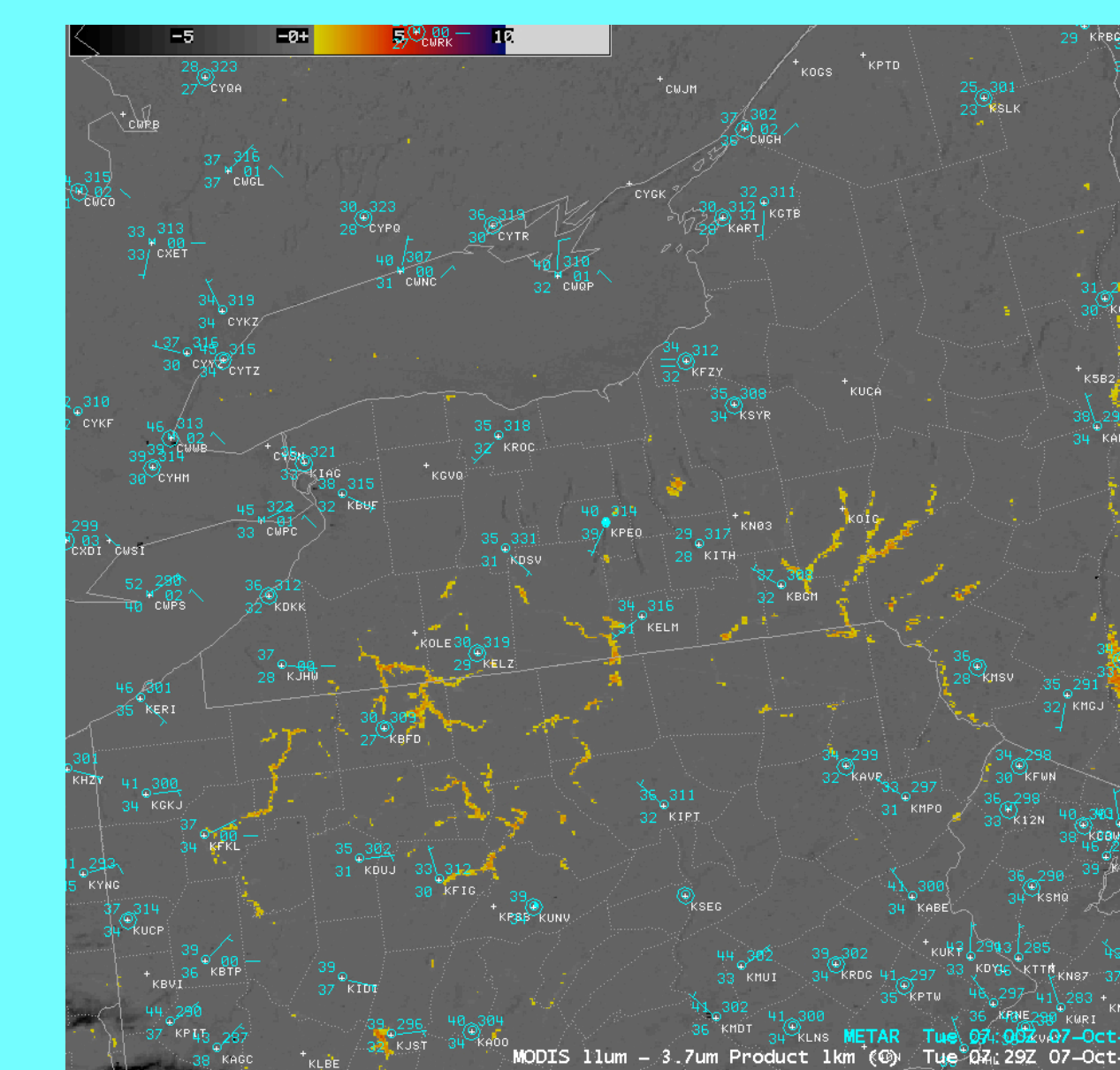
Mountain Waves

IR Window (11.0µm)



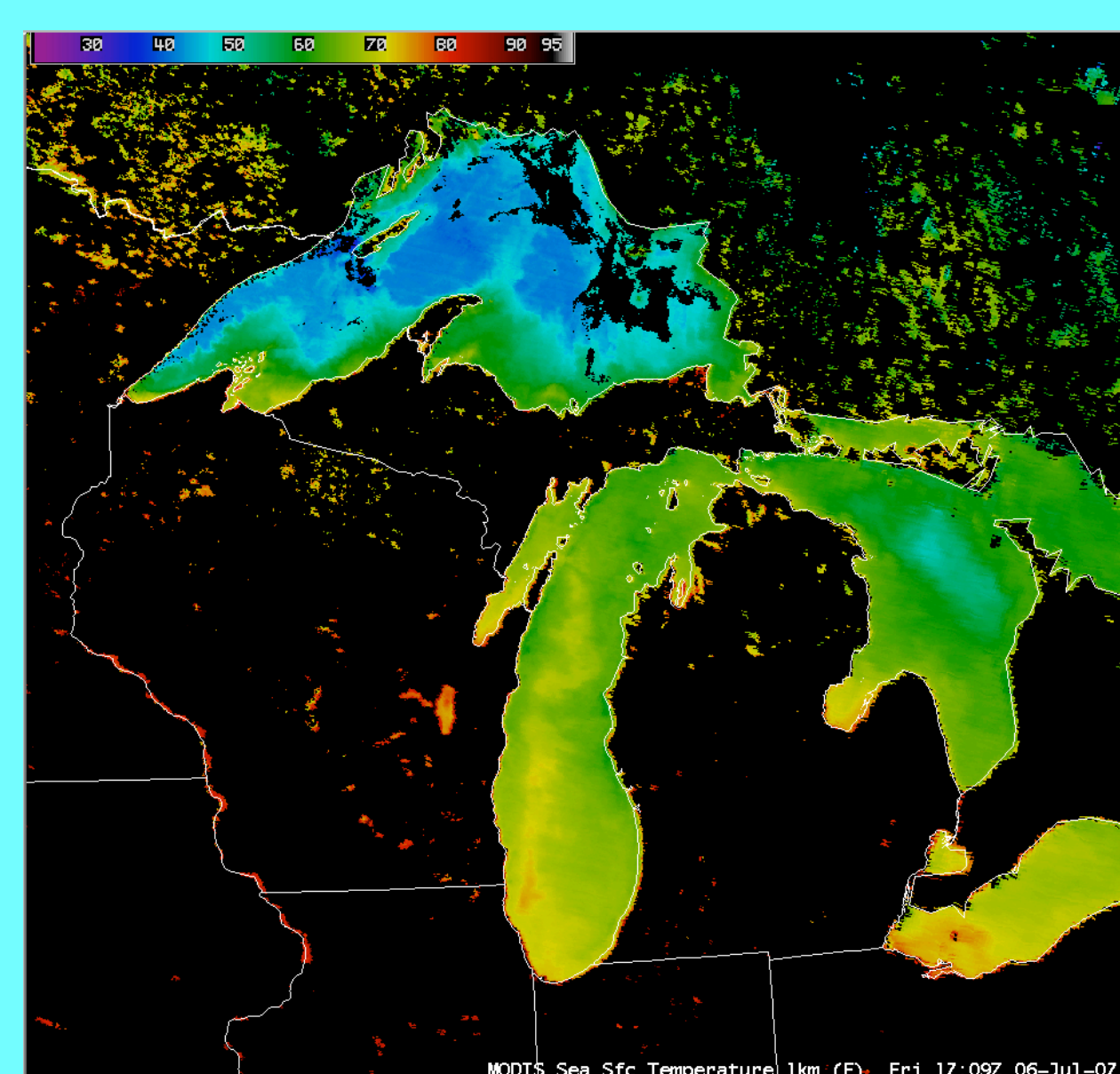
Severe Convection

Fog/stratus product



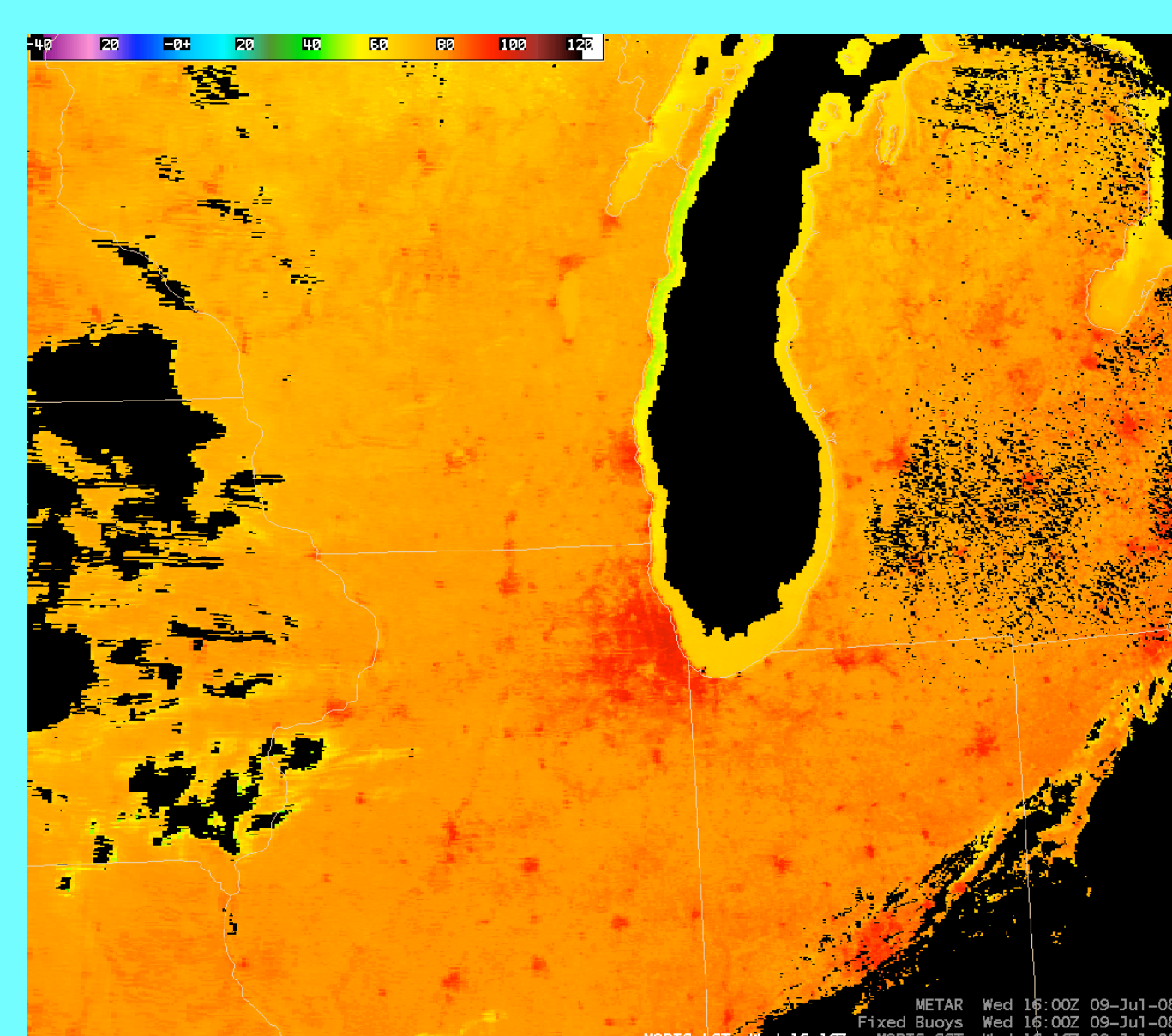
River Valley Fog

Sea Surface Temperature



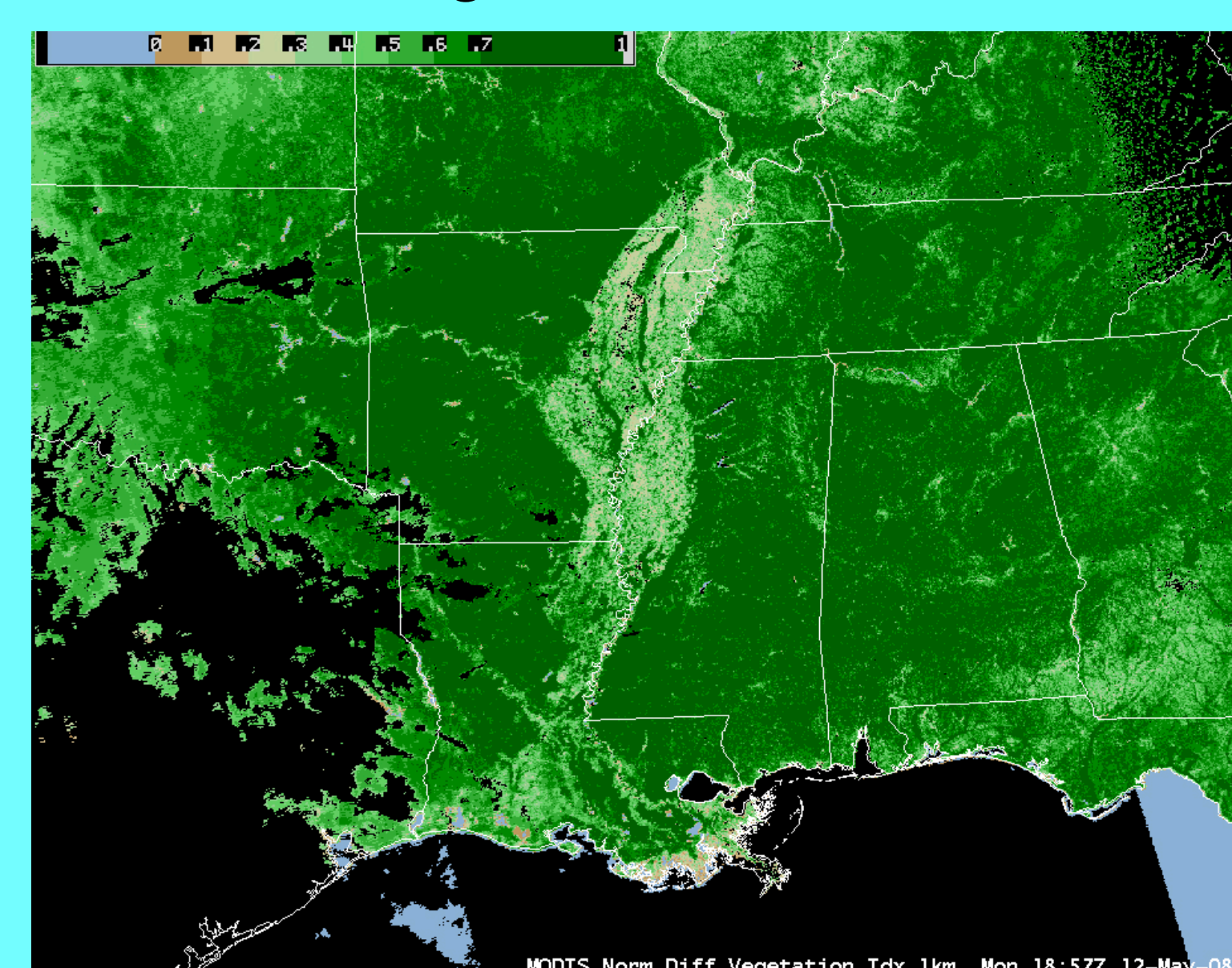
Great Lakes

Land Surface Temperature



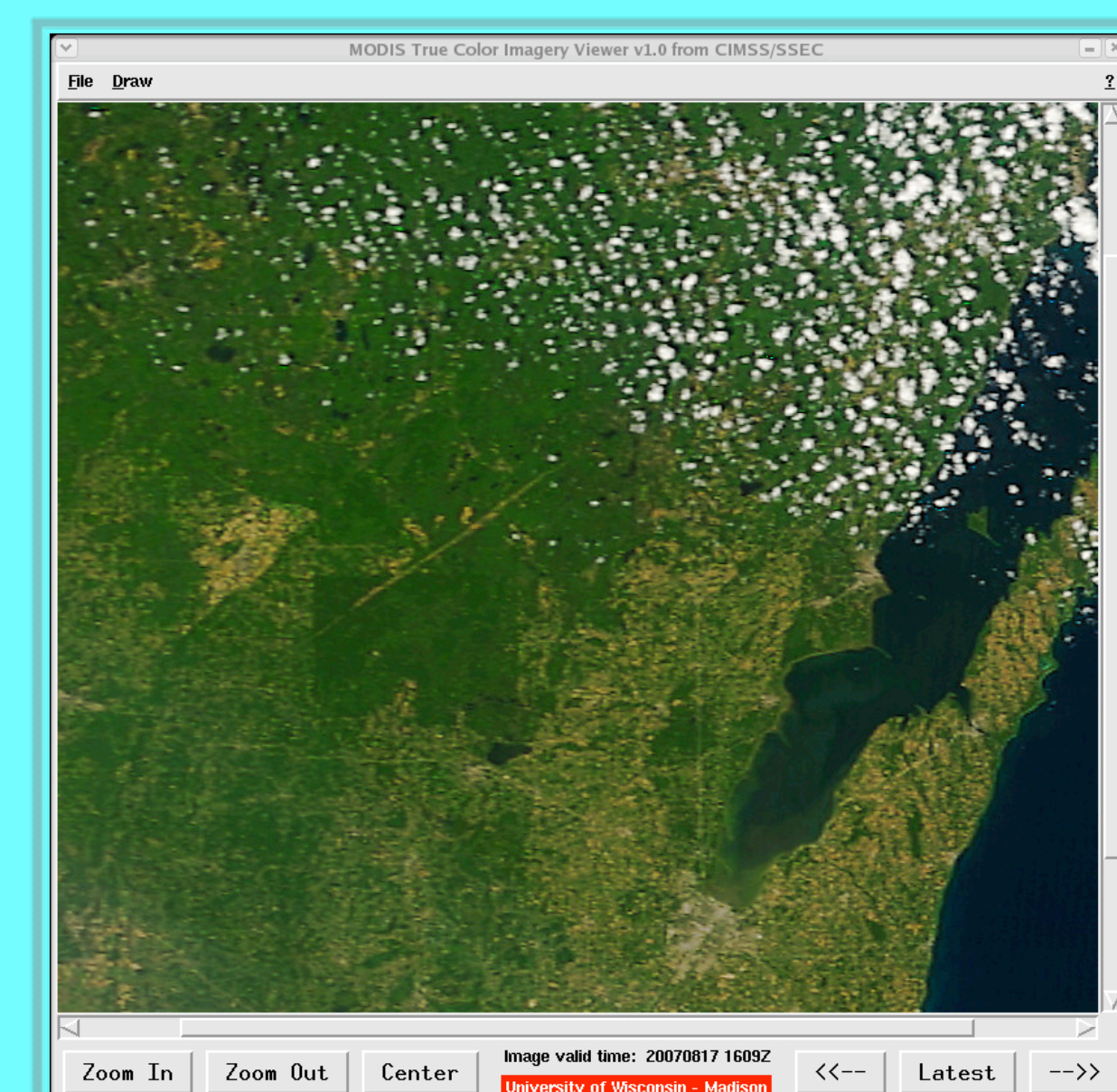
Urban Heat Islands

Normalized Difference Vegetation Index



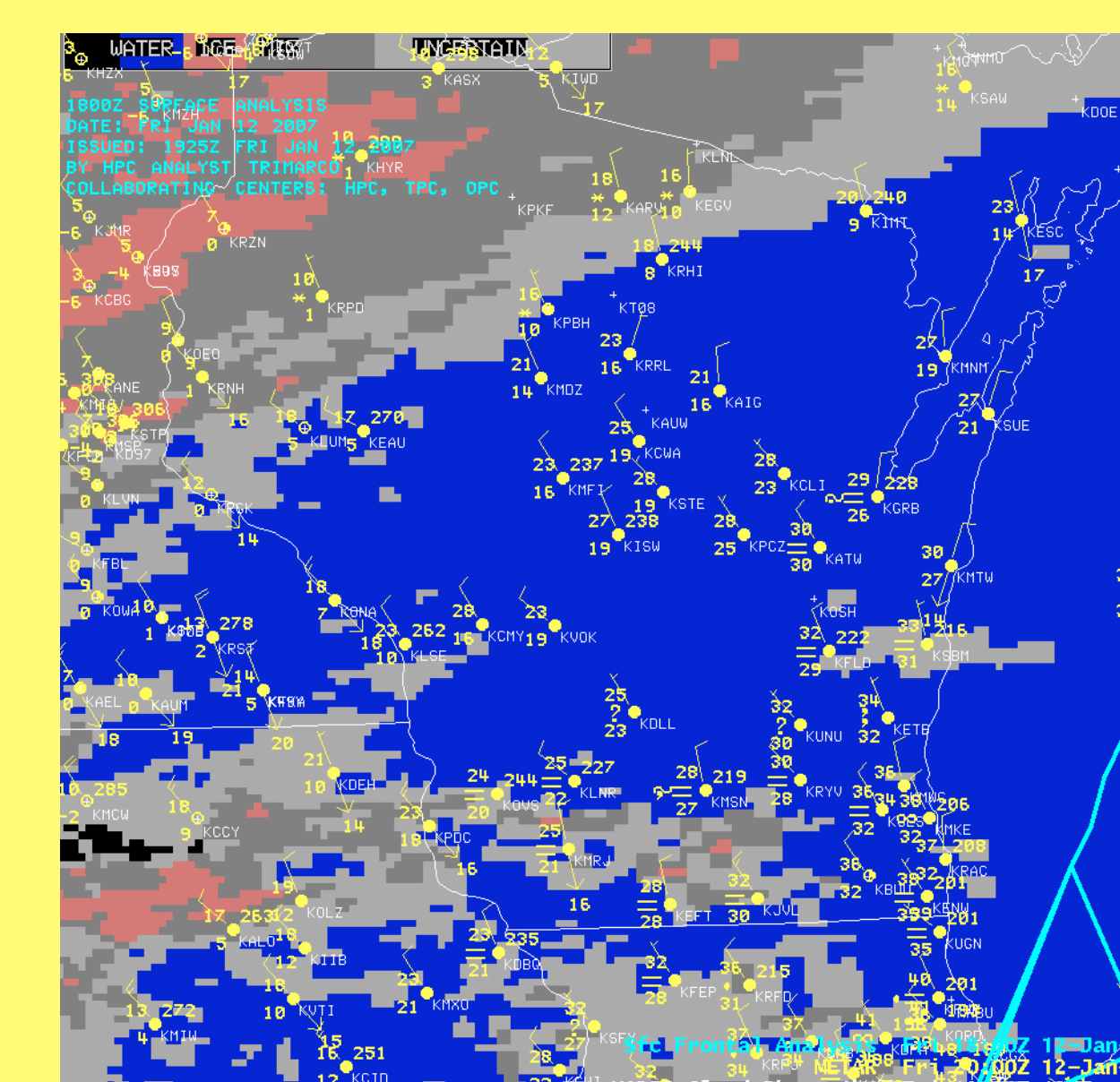
Mississippi Alluvial Valley

250-m True Color Image



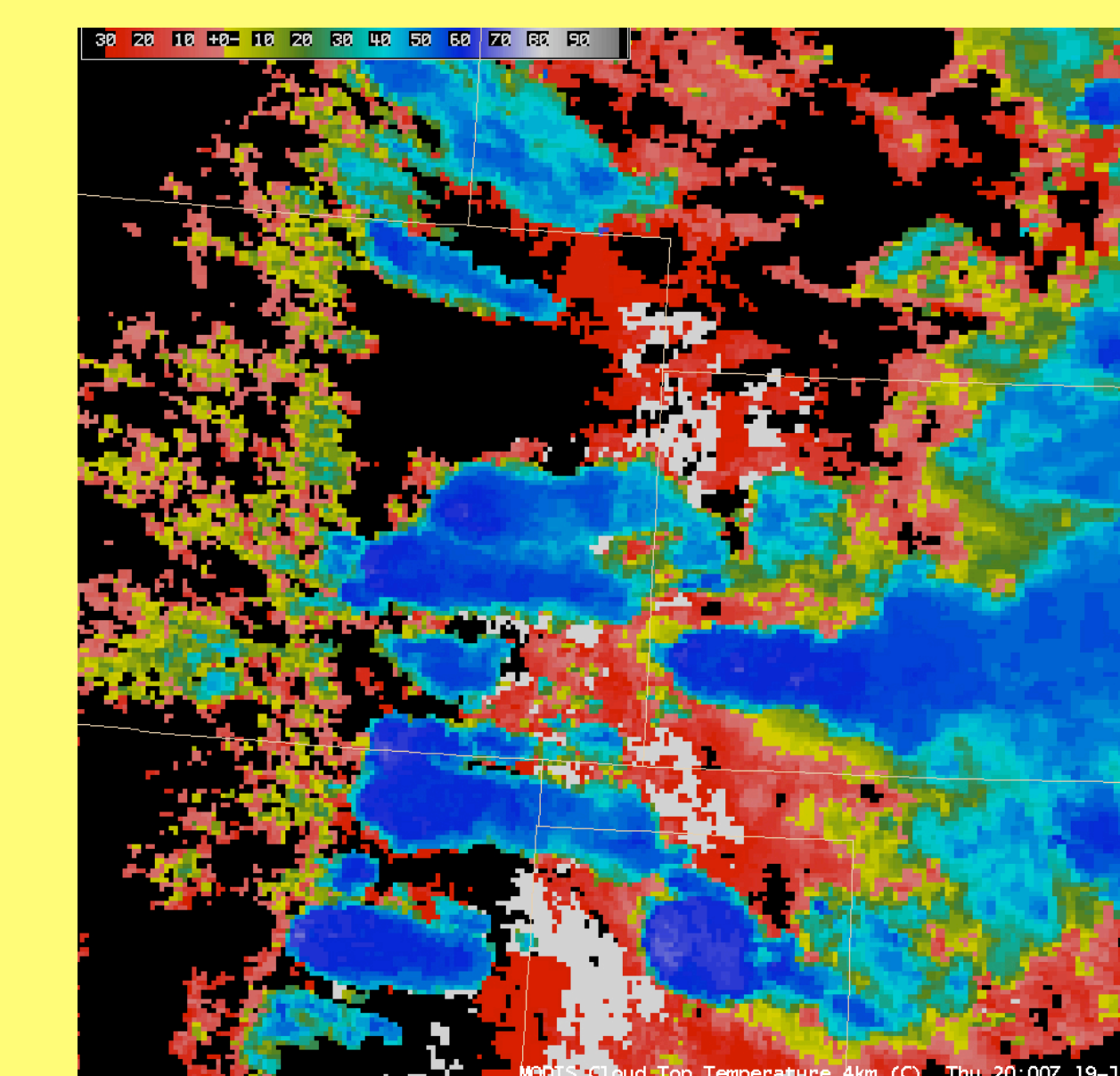
Tornado Damage Path

Cloud Phase



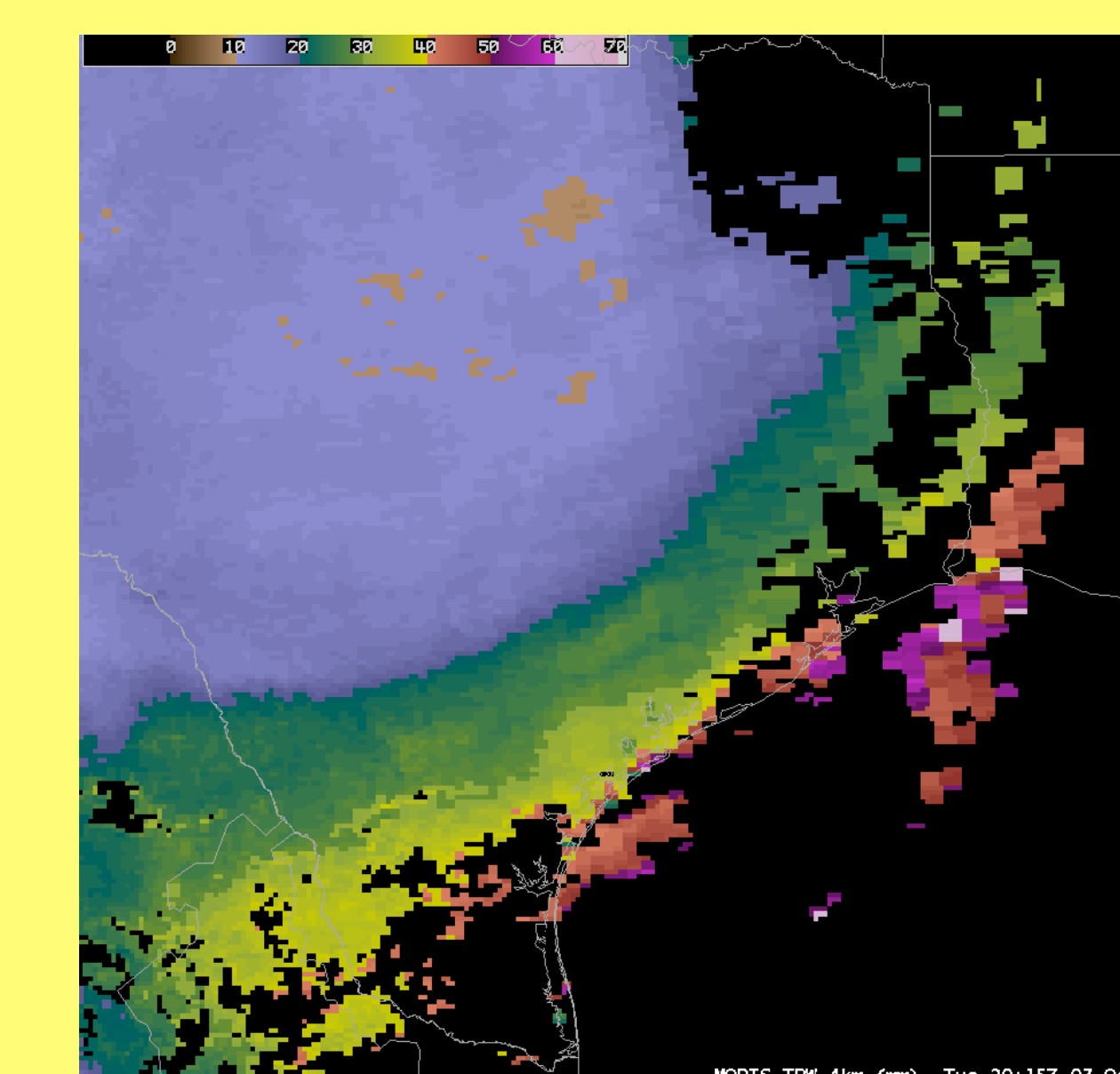
Precipitation Type Forecasts

Cloud Top Temperature



Severe Convection

Total Precipitable Water



Gulf of Mexico Return Flow

Having access to MODIS products in AWIPS is an important step in preparing operational meteorologists for the types of satellite imagery that will be available from the Advanced Baseline Imager (ABI) on the GOES-R satellite.