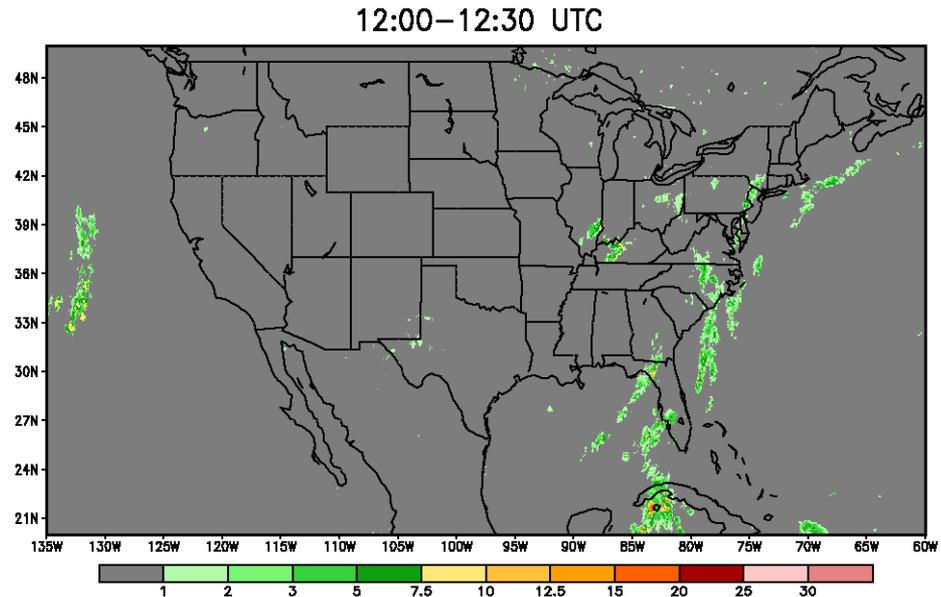




Developing Integrated Satellite and Gauge-Radar-Satellite-Model Fused Precipitation Estimates for Real-time Weather, Hydrometeorology and Hazards Monitoring



- CMORPH technique is capable of constructing high-quality precipitation estimates through integrating information from satellite PMW and IR observations aboard multiple platforms
- Applications the CMORPH products in real-time applications are compromised in resolution and latency restricted by the availability of satellite PMW data
- In this project, we will develop a regional CMORPH with refined spatial resolution (2km), reduced latency (15-min) and improved accuracy through infusion precipitation estimates derived from GOES-R sensors
- We will further construct a gauge-radar-satellite-model fused analysis of hourly precipitation to cover the CONUS and its adjacent regions seamlessly for improved monitoring of weather and climate
- Project will be carried out through close collaborations with potential users in several NOAA centers and regional offices.



Synthetic GOES-R enhanced regional CMORPH precipitation estimates for July 1, 2013, produced on a 4km resolution using satellite PMW and GOES IR data available **at a latency of 15 minutes.**

GOES-R Enhanced CMORPH and gauge-radar-satellite-model fused precipitation analyses will be provided to NHC, WPC, EMC, SR and other NOAA centers for real-time applications

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