



# The NASA Short-term Prediction Research and Transition (SPoRT) Center

GOES-R Proving Ground Update

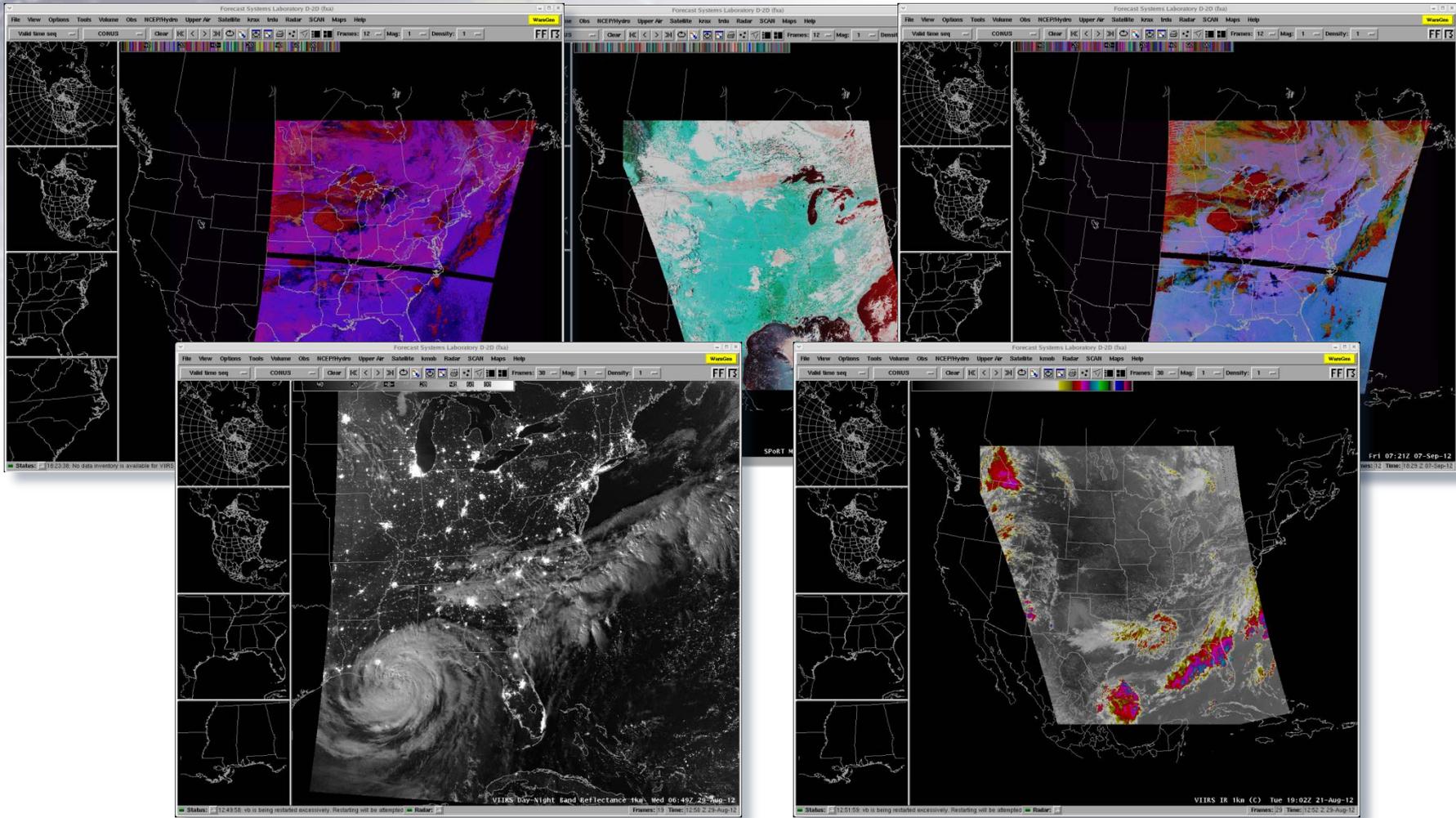
10 September, 2012

Contributions from:

Gary Jedlovec, Kevin Fuell, Geoffrey Stano, Matt Smith, Anita LeRoy (UAH)

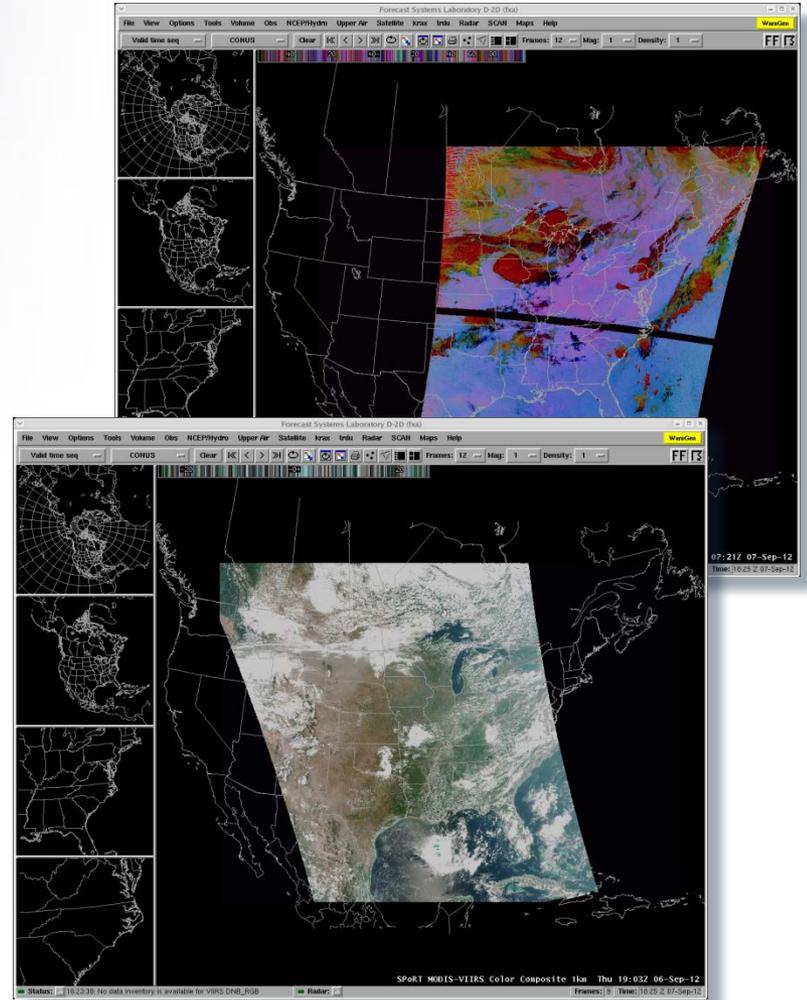


# VIIRS Product Suite Available

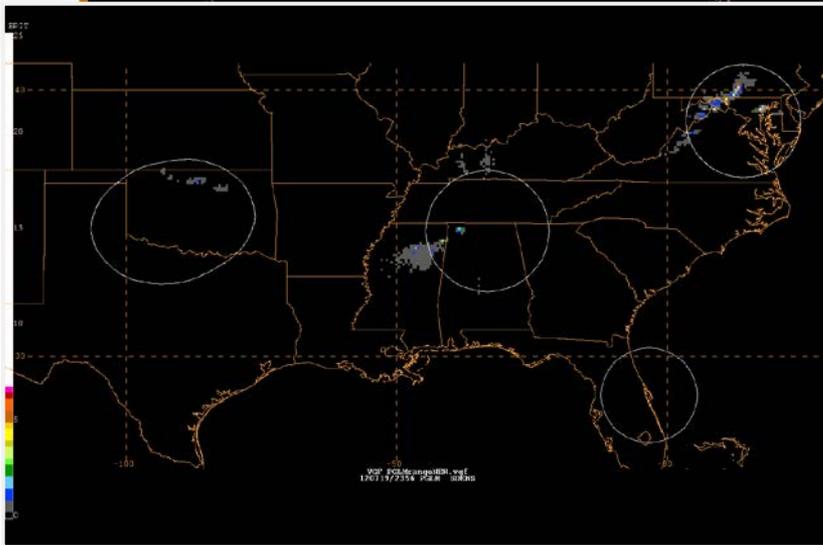
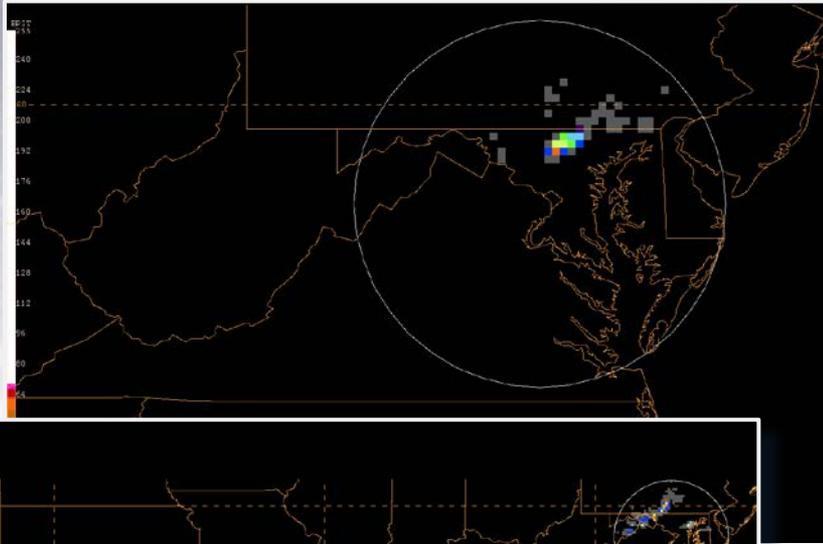


# VIIRS Channels

- SPoRT coordinating VIIRS transition with partners
- All partners using the hybrid have access
- Albuquerque, Huntsville, Morristown, and Raleigh first to investigate RGBs



# Lightning and National Centers

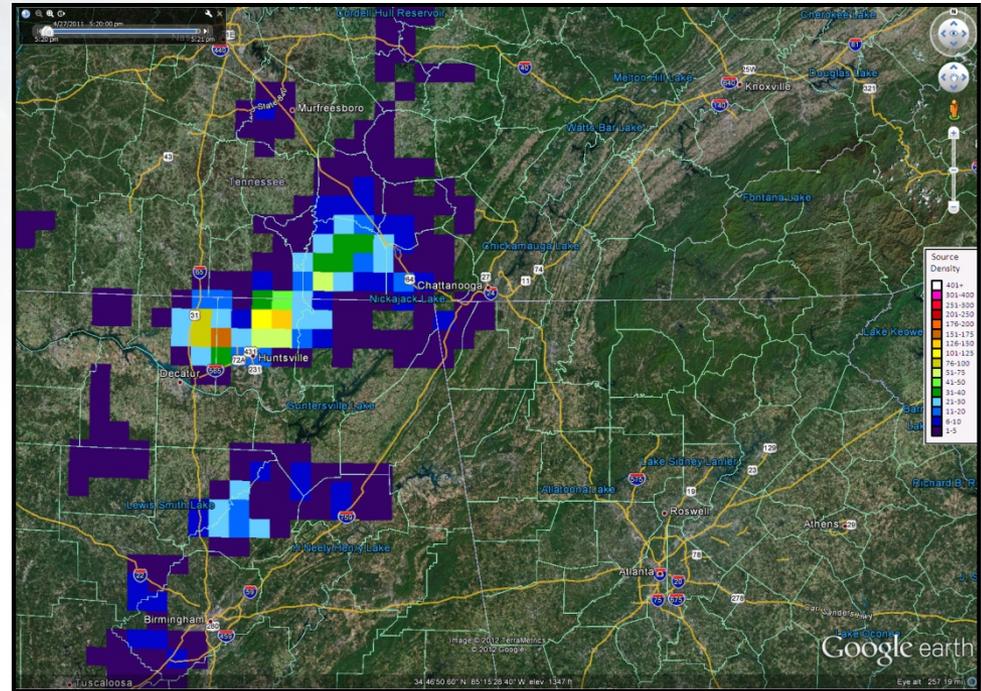


- Follow-up activities from visiting scientist trips
- Preparing Pseudo-GLM for ops introduction
- Great coordination with Aviation Weather Center and Storm Prediction Center GOES-R Champions



# PGLM Evaluation at WFOs

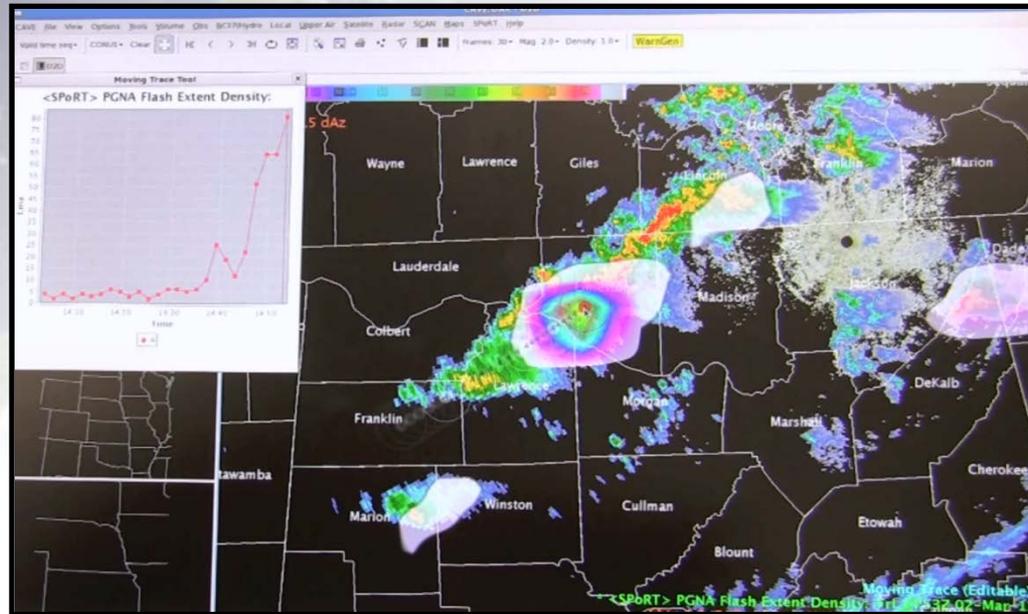
- Preparing lightning safety evaluation (spring)
- Collaboration
  - WFO Morristown, TN
  - Chattanooga EMA
- EMA will use Google Earth display
- WFO Melbourne coordinating 2<sup>nd</sup> project



PGLM centered on Chattanooga, TN



# Lightning Tool in AWIPS II

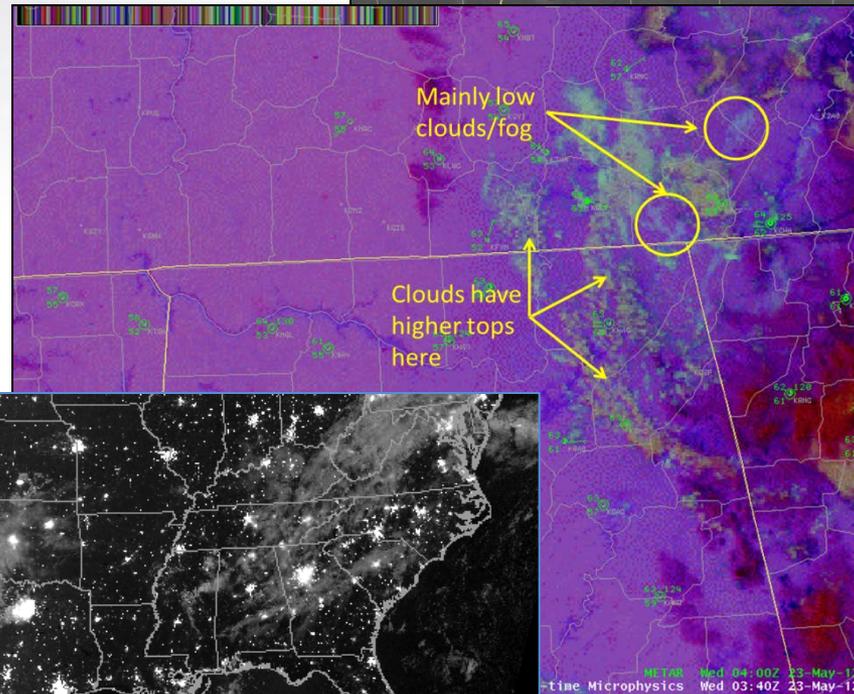
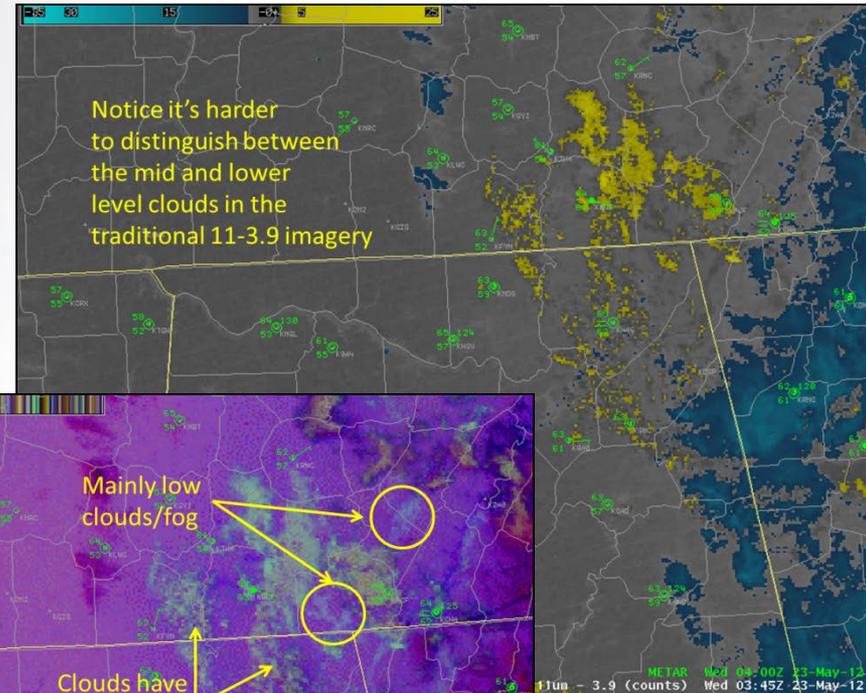


- Collaboration with Southern Region ROC
- Test algorithms before full WFO transition
- Test tool ahead of 2013 Spring Program



# Night-time Microphysics RGB Evaluation

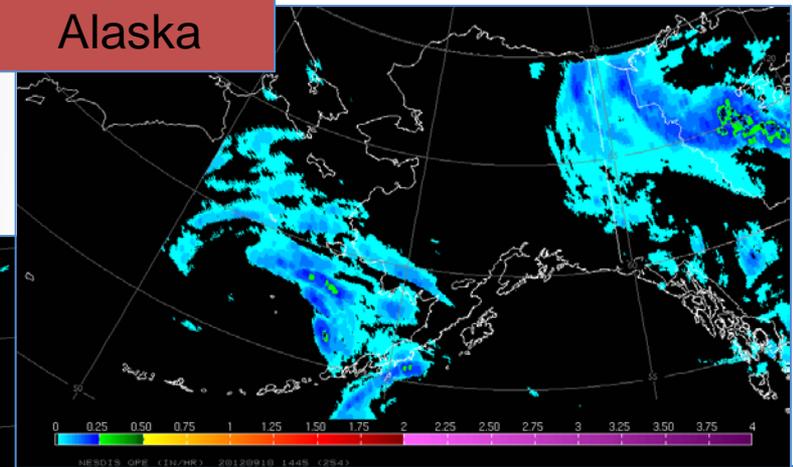
- To occur Fall 2012 (Sept/Oct)
- Focus: Fog vs. Low Clouds
- RGBs from MODIS and VIIRS
- Include VIIRS Day-Night-Band to evaluate
- Compare to 11-3.9 $\mu$ m difference imagery
- WFOs: HUN, BMX, OHX, MRX, RAH
- Products available via web and user's DSS



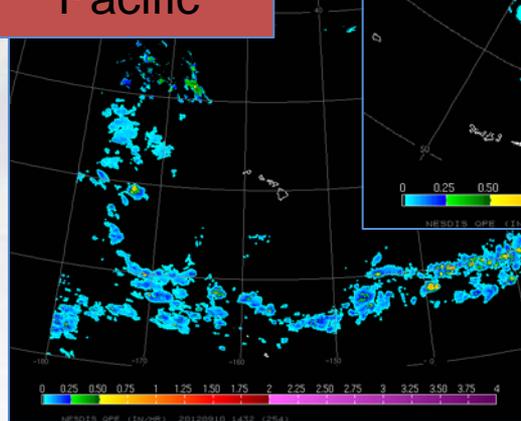
# NESDIS QPE Product Transition

- Collaborating with Bob Kuligowski
- Have started planning training materials
- Data and install instructions successfully implemented at Alaska RFC
- Alaska WFOs working to setup in AWIPS I
- Pacific Region working with local WFO to implement.
- OCONUS Evaluation of product being planned for Fall/Winter 2012/13
- Evaluation may include W. Coast WFOs for focus on atmospheric rivers.
- Future: Provide to National Centers via AREA files

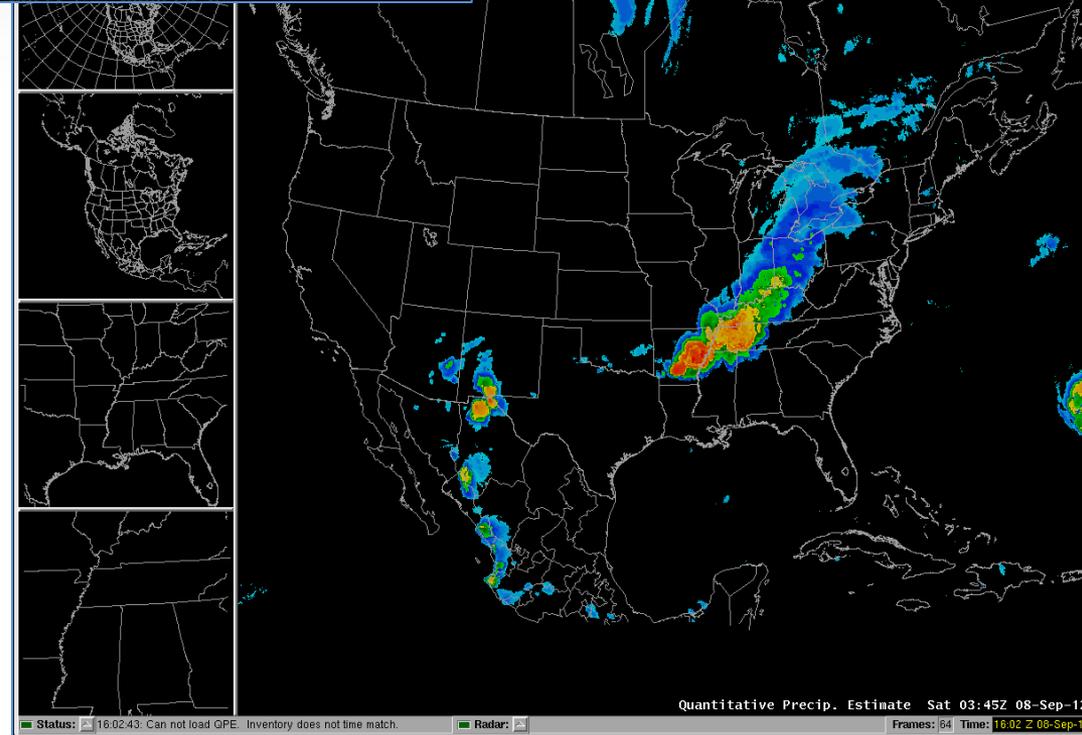
Alaska



Pacific



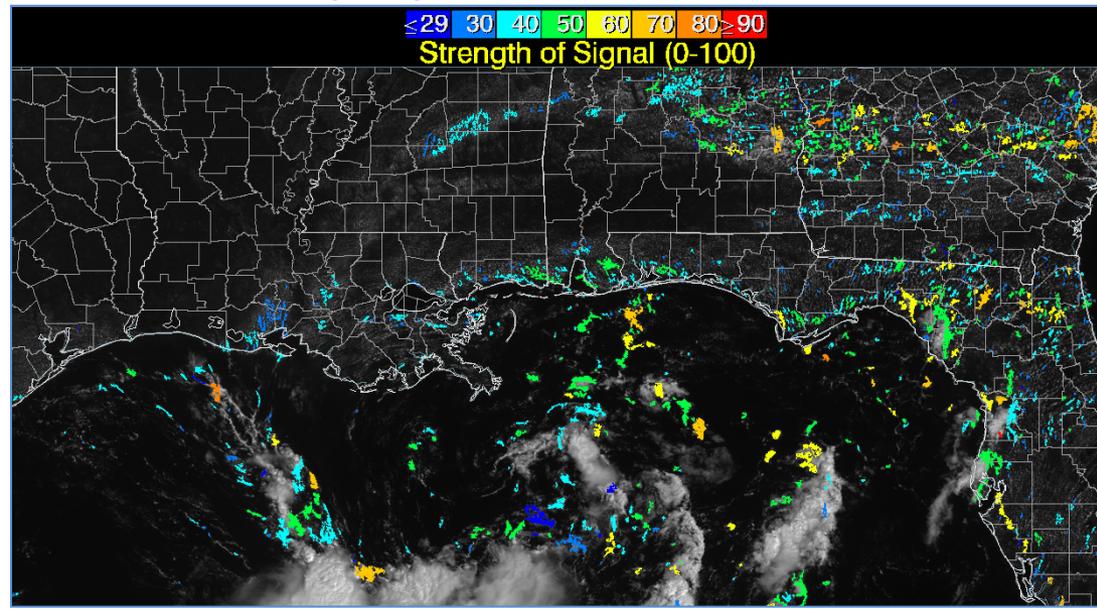
CONUS



# UAH CI V2.2

- New Strength of Signal display
  - Evaluated at HWT 2012, AWC 2012 Summer Experiment, and during 2012 summer convection by partner NWS-WFOs (MFL, MLB, HUN, ABQ) in operational setting
    - WFOs submitted 31 evaluations from 12 different users and corresponded via email and NWS Chat
  - Evaluations led to improvements in training, a small “bug” fix, and upgrades to NAWIPS display.

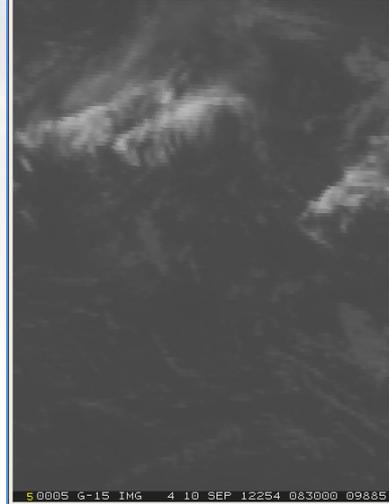
Image from  
[www.nsstc.uah.edu/SATCAST](http://www.nsstc.uah.edu/SATCAST)



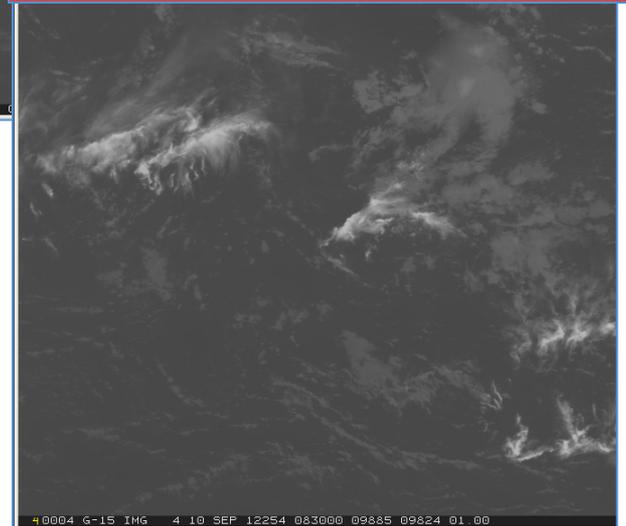
# OCONUS Activities

- QPE Transition to AK/Pac.
  - See previous slide
- Hybrid Sample Data Sets
  - Providing small data set for testing in Alaska and Pacific Regions
  - Mostly single channel imagery
  - To include MODIS and VIIRS
- RGB Imagery (MODIS/VIIRS)
  - Currently developing product suite
  - Domains: Alaska, Hawaii, W. Atlantic
  - National Centers interested in RGBs over W. Atlantic
  - Using UAF/GINA, SSEC and NASA/LANCE to acquire data.
  - Future: VIIRS/MODIS via Hawaii DB

Hybrid IR image w/ GOES



Hybrid IR image at next frame w/ MODIS inserted



# SPoRT WFO Visits

- Southern Region Headquarters
  - Partnership with Regional Operations Center (ROC)
- WFO Corpus Christi, Texas
- WFO Miami, Florida
- WFO Morristown, Tennessee
- WFO Nashville, Tennessee (upcoming)
  
- VSP trip to NHC on RGB application/training

