

A satellite view of Earth's surface, showing a portion of the Western Hemisphere. The image is faded and serves as a background for the title text. It shows the outlines of North and South America, the Atlantic Ocean, and parts of Europe and Africa.

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

GOES-R Proving Ground Update

4 March 2013

Contributions from:

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## **General Outline SPoRT Status Report:**

### **Total Lightning**

- **Network ingest status, HWT 2013**

### **RGB Imagery**

- **Snow-Cloud RGB Comparison, VSP prep to NHC for Dtmicro & Convective RGB in Tropical PG**

### **AWG Support**

- **QPE (NESDIS) & Layer PW (CIRA)**

### **Other:**

- **publications, collaborations w/ users**

### **AWIPS II**

- **EPDT TIM status/update**

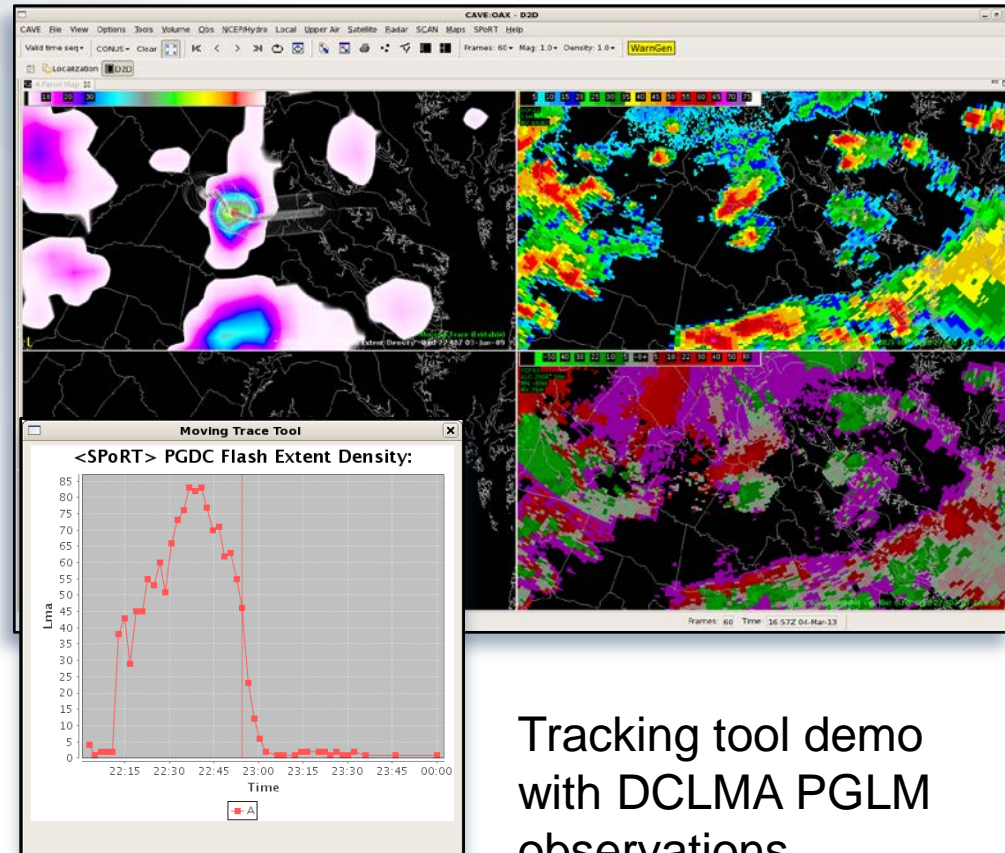
### **JPSS**

- **Users, Quick Guides, etc.**



# Total Lightning Activities

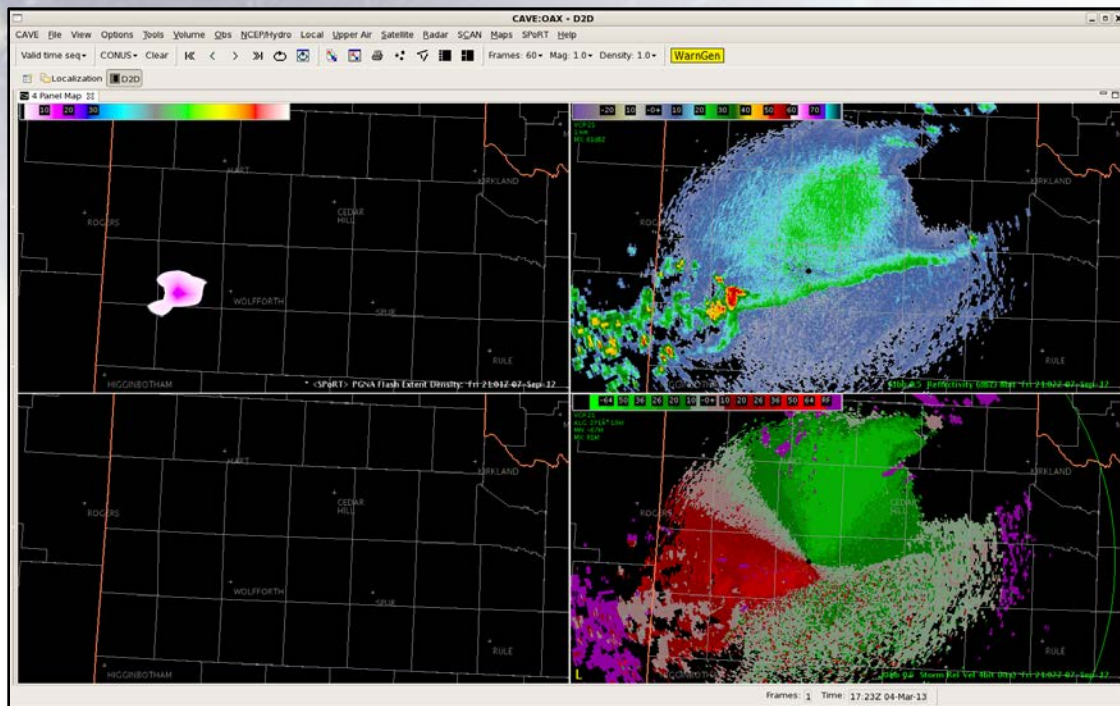
- SPoRT's LMA visualization plug-in received ATAN for AWIPS II
  - Coordinating with approved WFOs on data roll-out
  - Allows WFOs on AWIPS II to begin using total lightning
- Submitted proposal to the Operational Proving Ground
  - Collaboration between SPoRT and MDL
  - Evaluate the total lightning tracking tool
  - Small piece of MDL's larger meteogram tool



Tracking tool demo  
with DCLMA PGLM  
observations



# Collaborations Texas Tech University



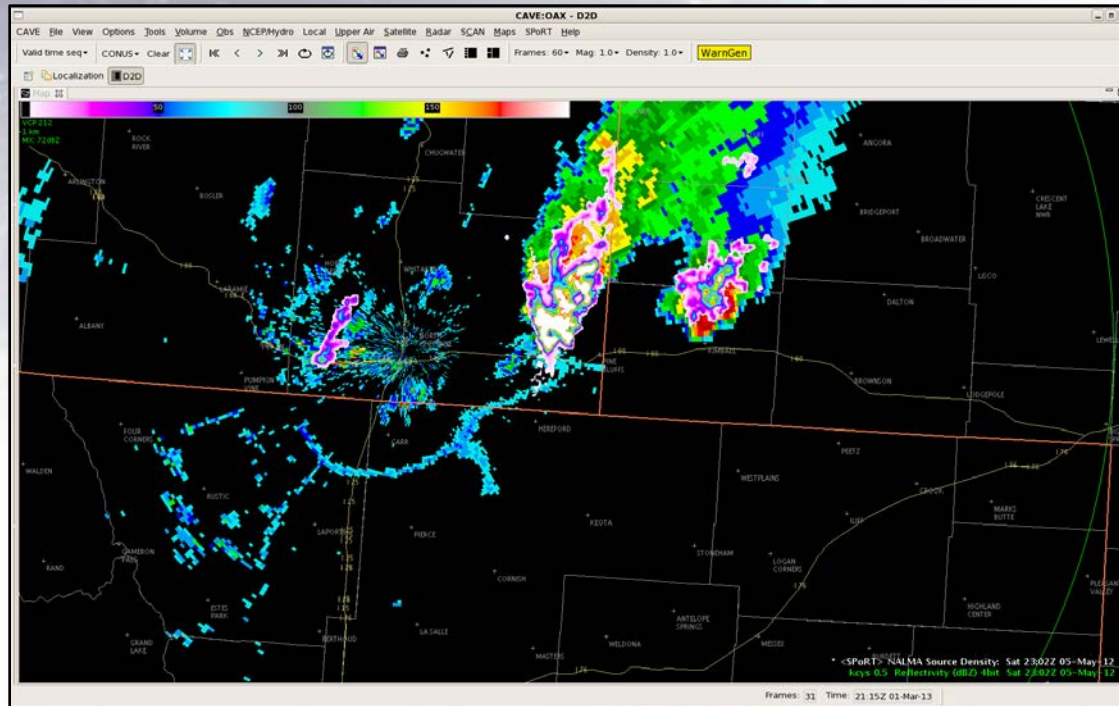
- Collaboration with Texas Tech to obtain West Texas LMA data
- Activity intended to support GOES-R PG efforts
  - PGLM Mosaic to national centers
  - Ingest with HWT this year using SPoRT plug-in

AWIPS II demo of West Texas LMA data





# Collaborations with CIRA / CSU



First AWIPS II demo of Colorado LMA data

- Work continues on Colorado LMA actions
- LDM feed active
- Colorado LMA products being produced
- Preparing ingest instructions for CIRA's partner WFOs
  - Boulder
  - Cheyenne
- Initial effort will focus on fire weather activities



# RGB Imagery

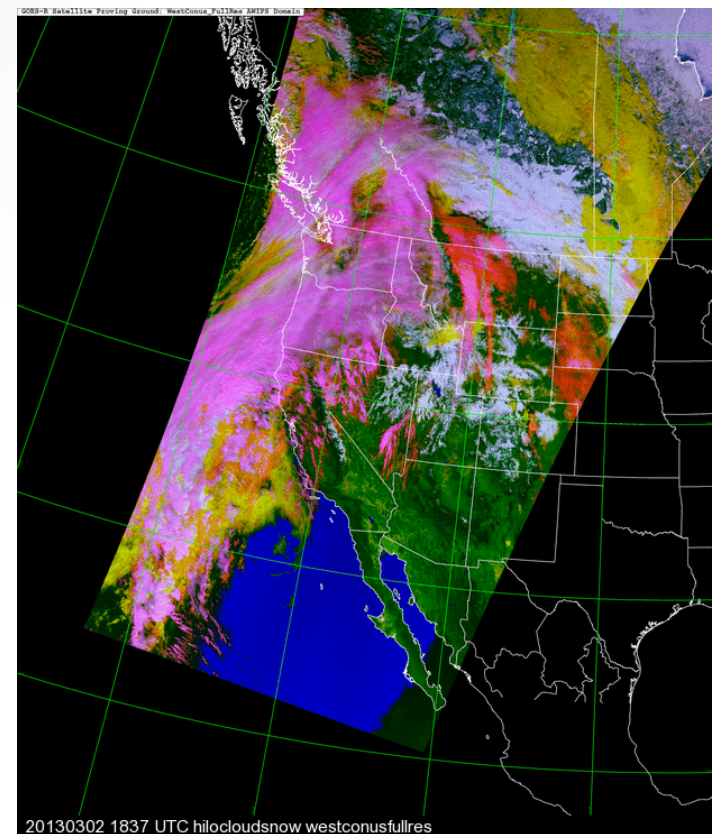
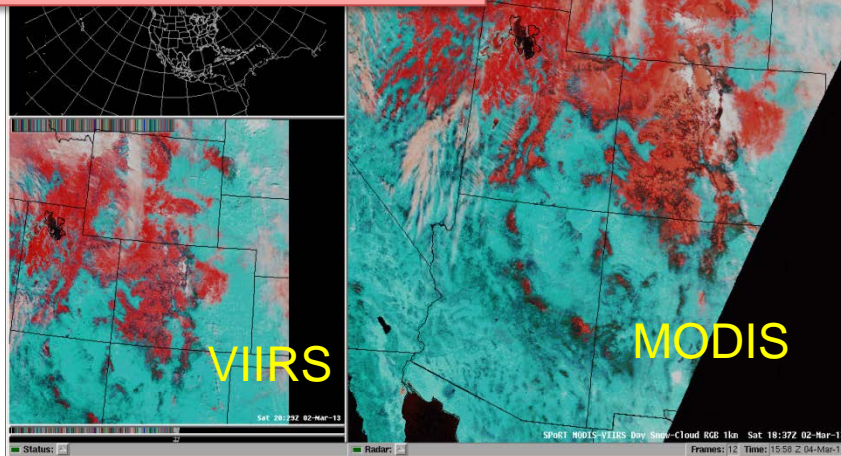
## Snow-Cloud Comparison

SPoRT RGB ( 3/2/13, MODIS 1837Z  
and VIIRS 2029Z)

CIRA MODIS RGB via RAMSDIS  
Archive (3/2/13, 1837Z)

Collaboration Call w/ CIRA  
and western WFOs

- Comparison eval of RGB
- SPoRT creating file for CYS
- SPoRT testing CIRA file  
ingest for ABQ and TFX





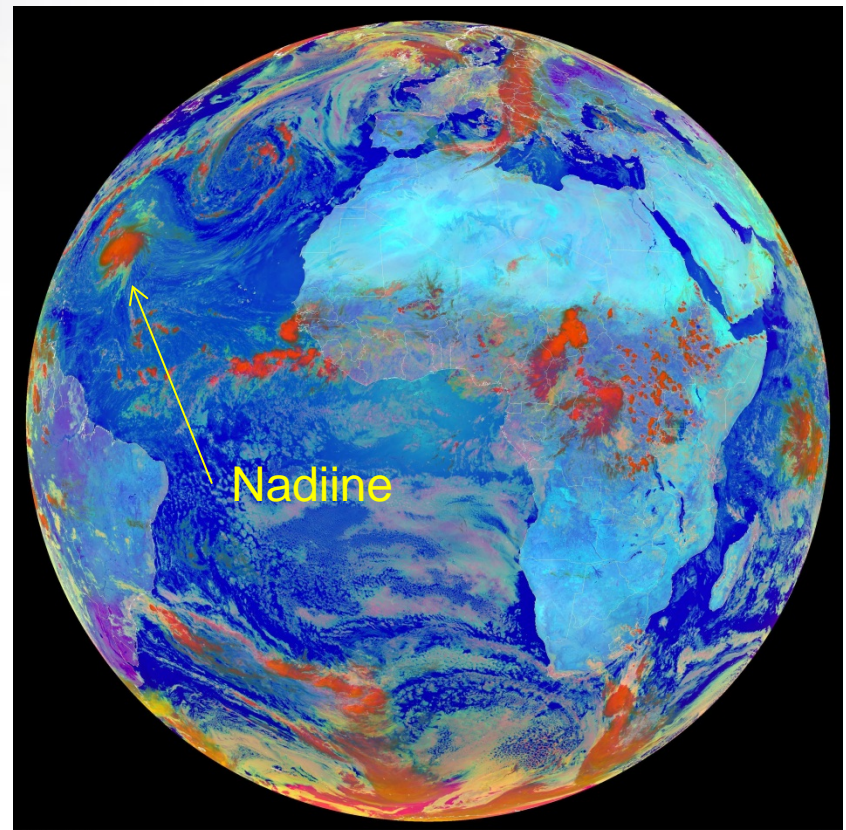
# RGB Imagery

## Day-time Micro and Convective Storms in Tropical PG

### Preparing for Visiting Scientist Program project to NHC

- Objective: Introduce RGB imagery for storm analysis applications
- EUMETSAT rep to attend visit (Jochen Kerkmann)
  - They have imagery from 2012 season.
  - Fuell/Folmer have NAWIPS archive.
- 2012 potential cases
  - Hurricane Leslie (8/30-9/11)
  - Hurricane Michael (9/3-9/11)
  - Hurricane Nadine (9/10-10/3)
  - Tropical Storm Oscar (10/3-10/5)
  - Tropical Storm Tony (10/22-10/25)

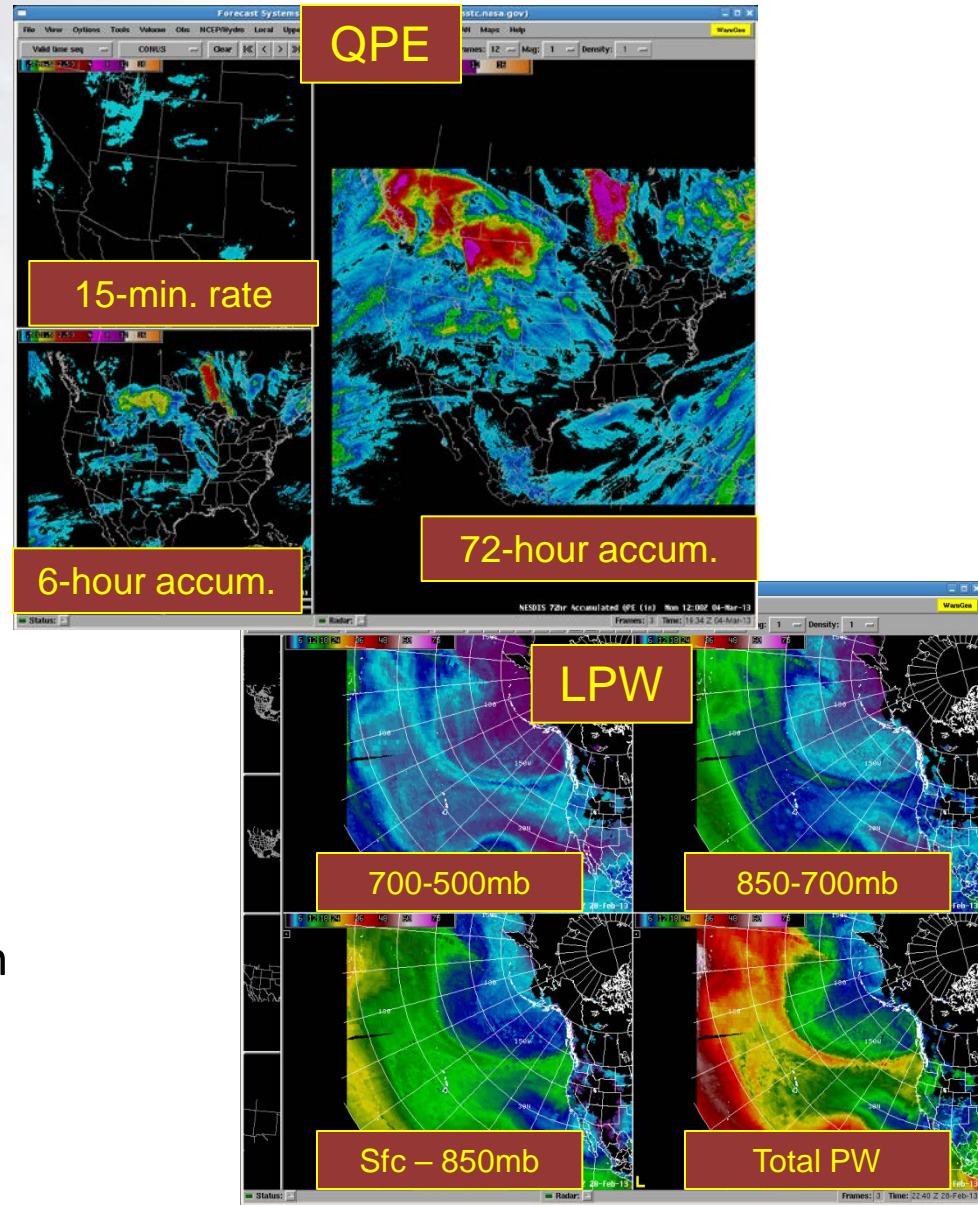
### EUMETSAT Imagery from SEVIRI



# AWG Support Activities

## Evaluation of NESDIS QPE

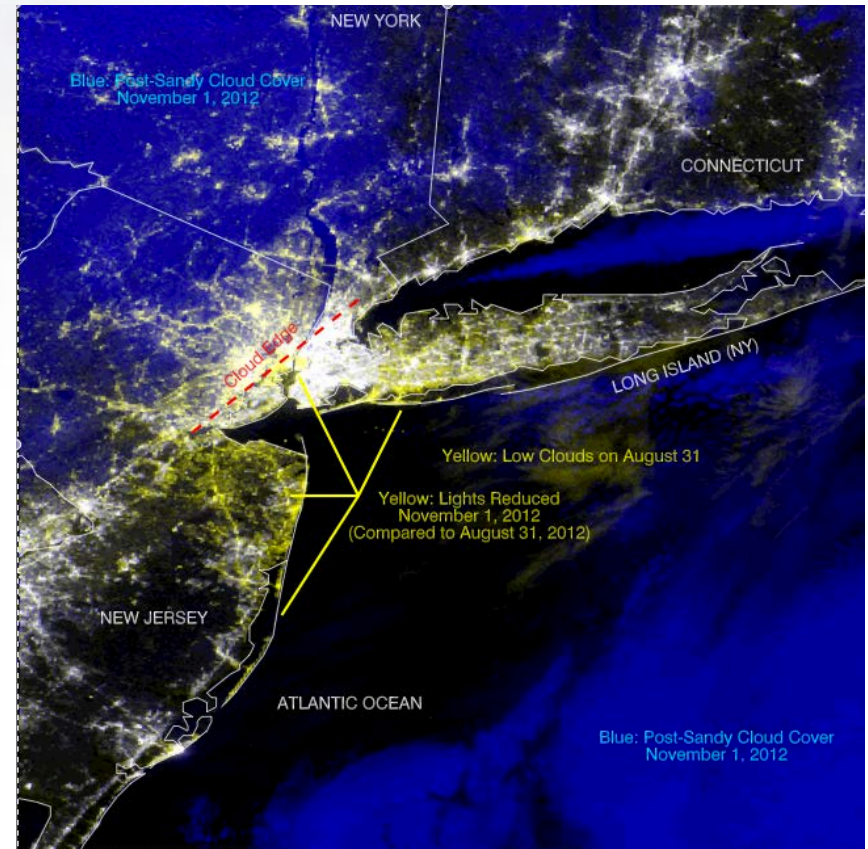
- West Coast WFOs ready to ingest (MTR, EKA, MFR)
- Evaluation to begin 3/7/13
  - Kickoff call with developers
  - Training provided / Q&A
  - Focus on data void areas over ocean (Atmos. Rivers)
  - ABQ also to look at intermountain areas
  - Users assisted with evaluation form
  - Including CIRA Layer PW





# Other PG Related Activities

- AGU EOS publication (Molthan and others):  
“Satellite Observations Monitor Outages From Superstorm Sandy”
- NWA J. of Oper. Meteor. accepted publication:  
“Multispectral Imagery for Detecting Stratospheric Air Intrusions Associated with Mid-Latitude Cyclones”
  - Comparison of MODIS Air Mass RGB to atmos. Analysis and AIRS ozone
- Technical work to support NHC and WPC in upcoming season
- Plan participation in NOAA Satellite Science Week Virtual Workshop and GOES Satellite Conference



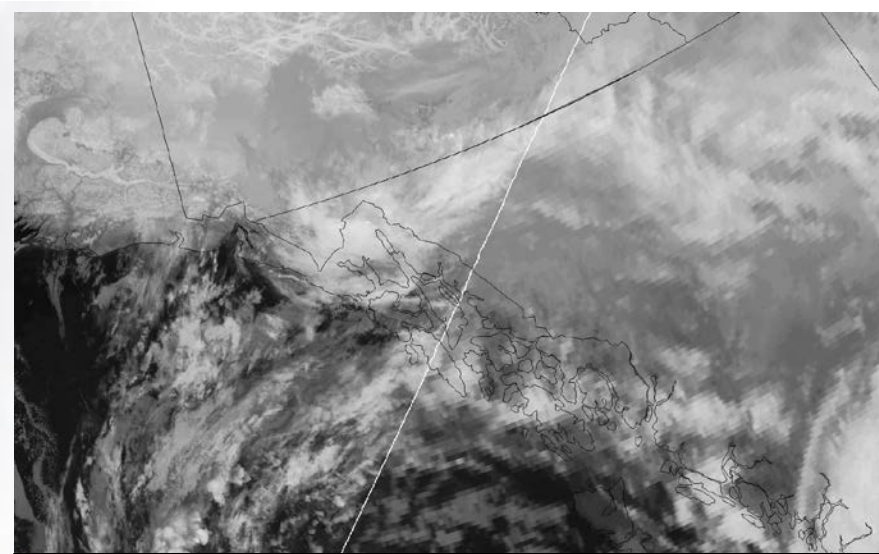
# AWIPS II

- Governance Policy
  - SPoRT visited SEC to fine-tune checklist of requirements
  - For GOES-R PG partners and other non-NOAA institutions
  - SEC will present soon via Virtual Lab and ??
  - SPoRT LMA plug-ins going through governance process (ATAN)
- Experimental Products Development Team (EPDT)
  - Next week (March 12-14) in Huntsville @ SPoRT
  - Focus: Writing EDEX and CAVE plug-ins
  - Hands-on training and lab activities
  - 15 trainees
  - More meetings to come
- Deployment to enter second tier after upcoming test



# JPSS PG

- Sending VIIRS data
  - Single channel swaths
  - RGB swaths
  - POES/GOES Hybrid
- AWIPS
  - Requires menu updates
  - Complete: TFX, ABQ, MTR, EKA, MFL, MLB, RAH
  - Upcoming: LIX, AFC, AJC, MOB, CRP
- AWIPS II
  - Will provide VIIRS data as desired
    - HUN, HGX, BOU, Reg'l HQs
- Training
  - Quick guides avbl. online
  - <http://weather.msfc.nasa.gov/sport/training/>



VIIRS LWIR Swath over Juneau Regional Hybrid

The screenshot displays the SPoRT (Short-term Prediction Research and Transition Center) website. The header features the SPoRT logo and the NASA logo. Below the header, there is a navigation bar with links to Real-Time Data, Core Projects, GOES-R PG, JPSS PG, Transitions, Library, and Organization. The main content area is titled "Product Training Modules" and lists several training modules, each with a thumbnail image, a title, a download link, and a brief description. The modules include: VIIRS DNB (Download PDF, 7 MB), VIIRS DNB (Download PDF, 8 MB), RGB Air Mass (Download PDF, 6 MB), RGB Dust (Download PDF, 7 MB), RGB Nighttime Microphysics (Download PDF, 1 MB), and WRF Model Lightning Forecast Algorithms (LFA) (Download PDF, 1.2 MB). The website also includes a footer with the SPoRT logo and the NASA logo.



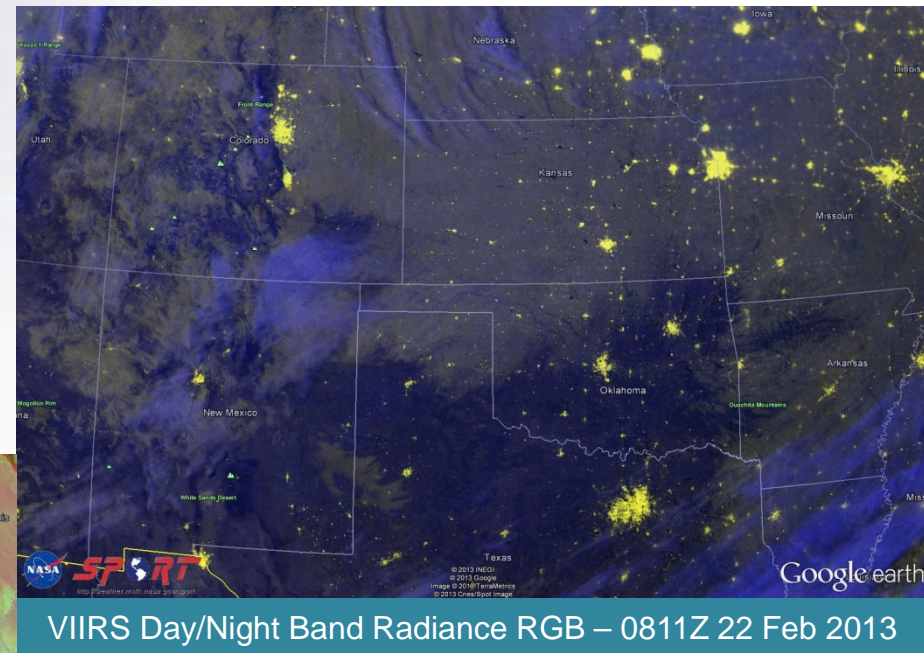
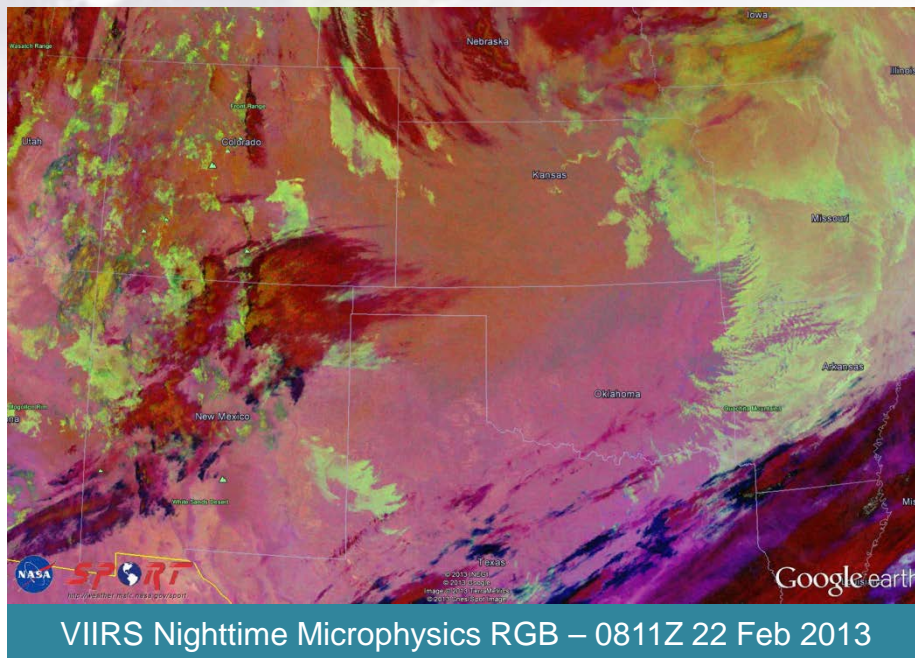


# JPSS PG

## SPoRT Blog Entry (Kris White/HUN)

<http://nasasport.wordpress.com/2013/02/24/nighttime-snow-melt-captured-in-viirs-daynight-band-imagery/>

Nighttime snow melt captured in VIIRS Day/Night Band imagery





The end

