



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

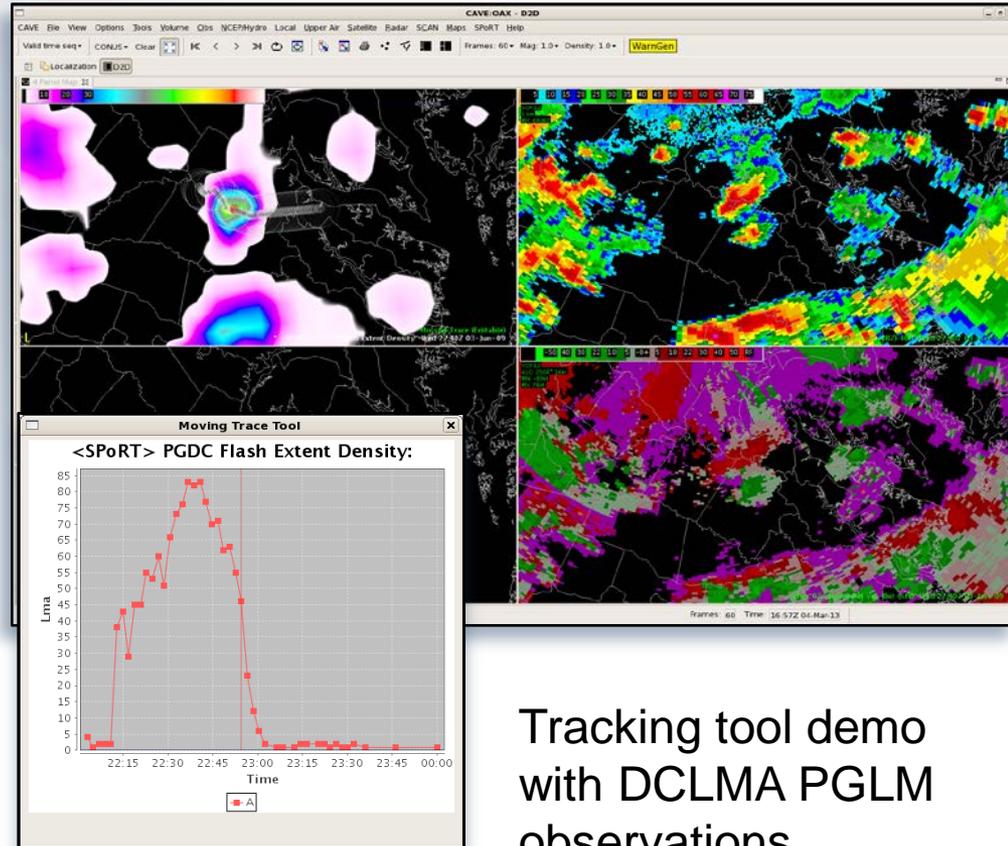
JPSS

- Users, Quick Guides, etc.



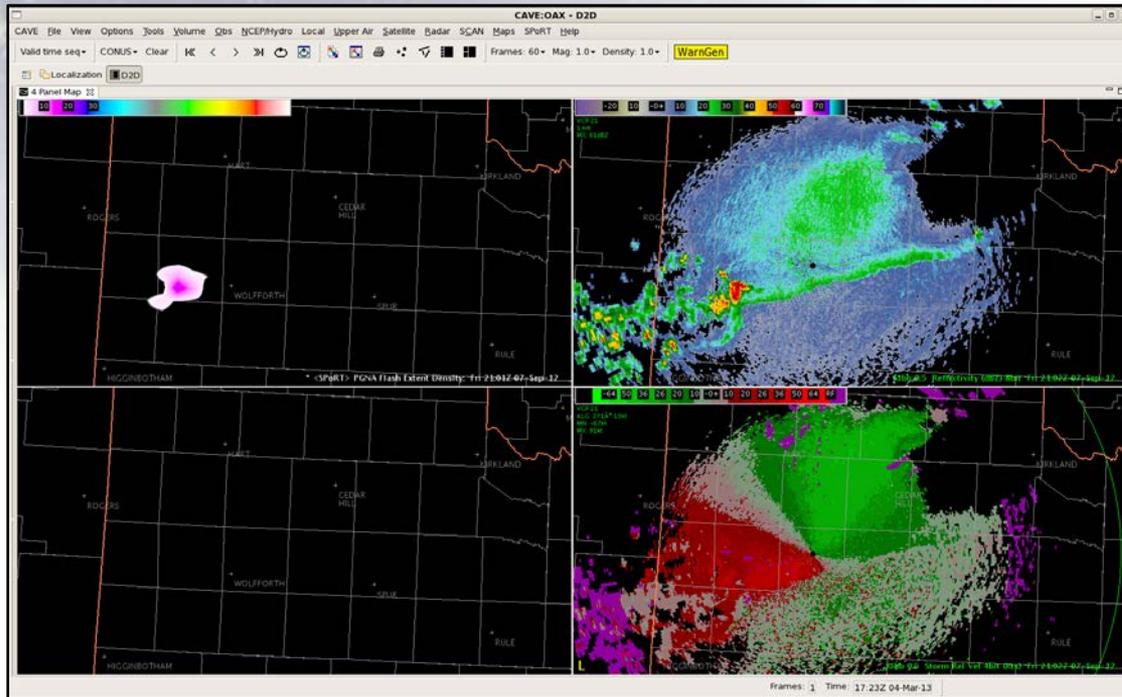
Total Lightning Activities

- 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



Collaborations Texas Tech University

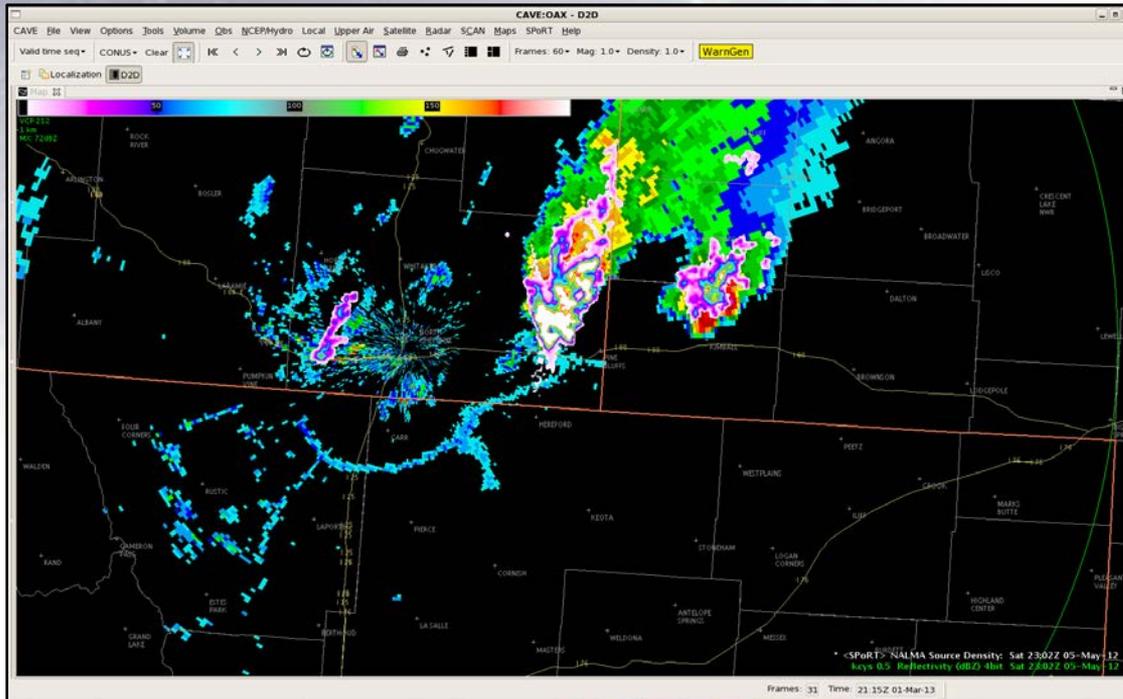
- Collaboration with Texas Tech to obtain West Texas LMA data
- Activity intended to support GOES-R PG efforts
 - PGLM Mosaic to national centers
 - Ingest with HWT this year using SPoRT plug-in



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

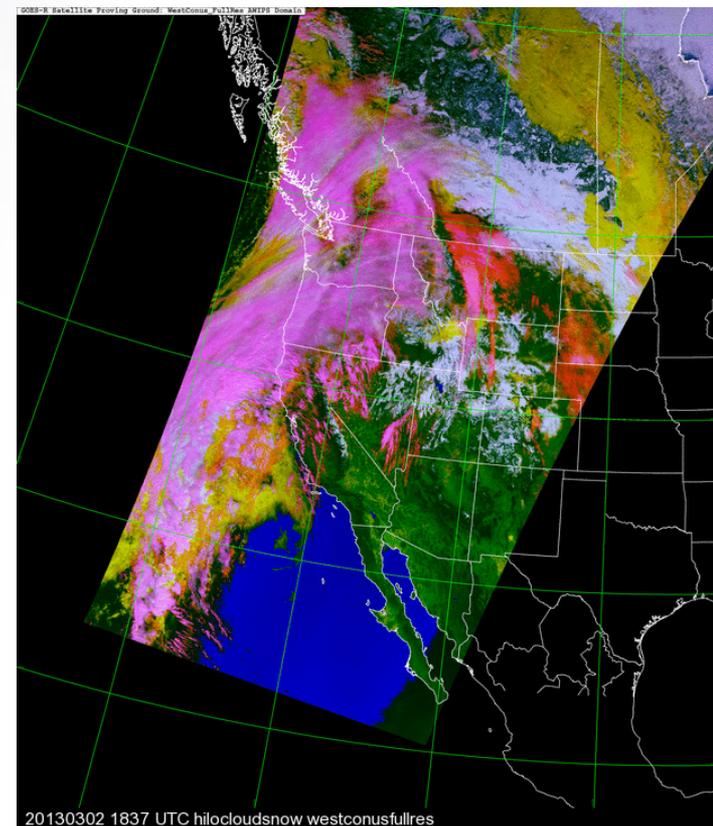
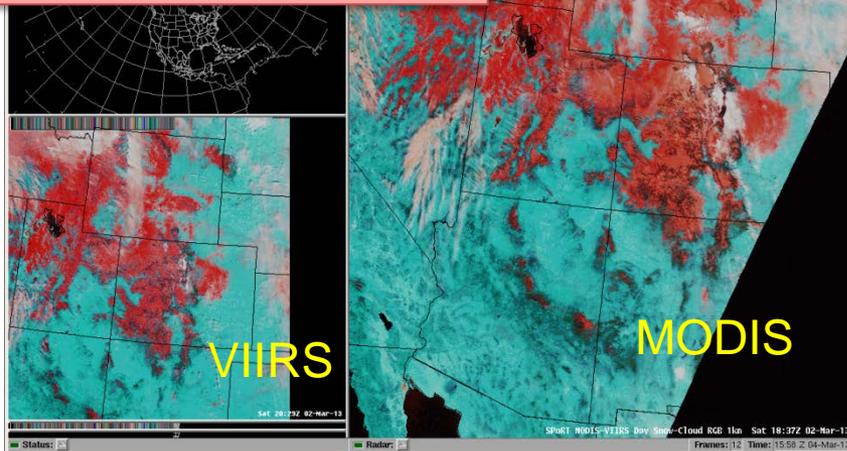
Snow-Cloud Comparison

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



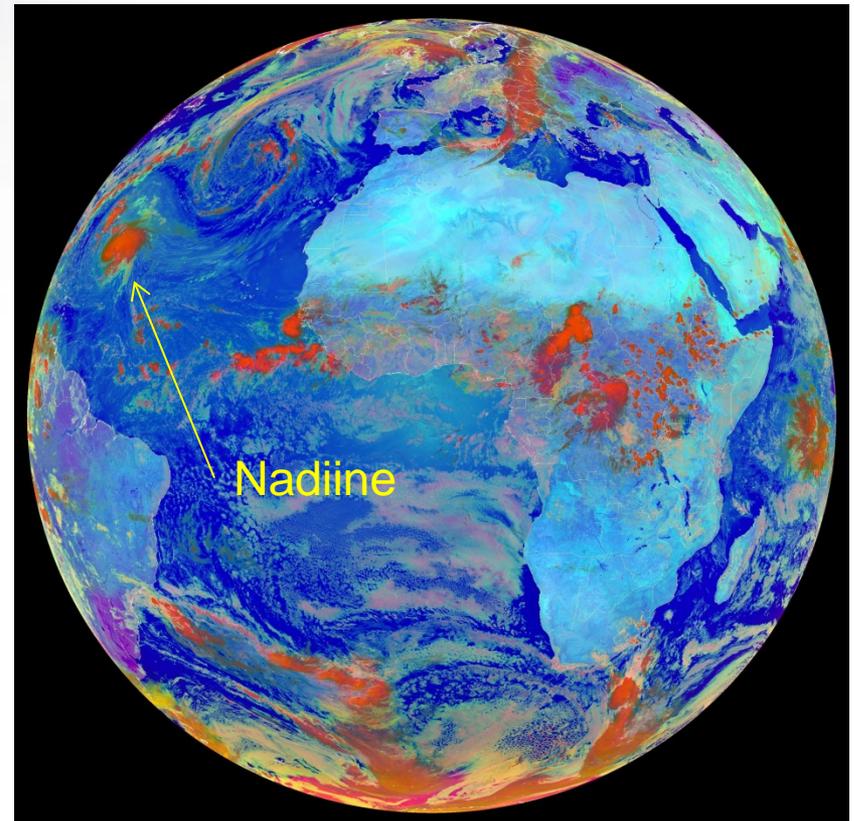
RGB Imagery

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)

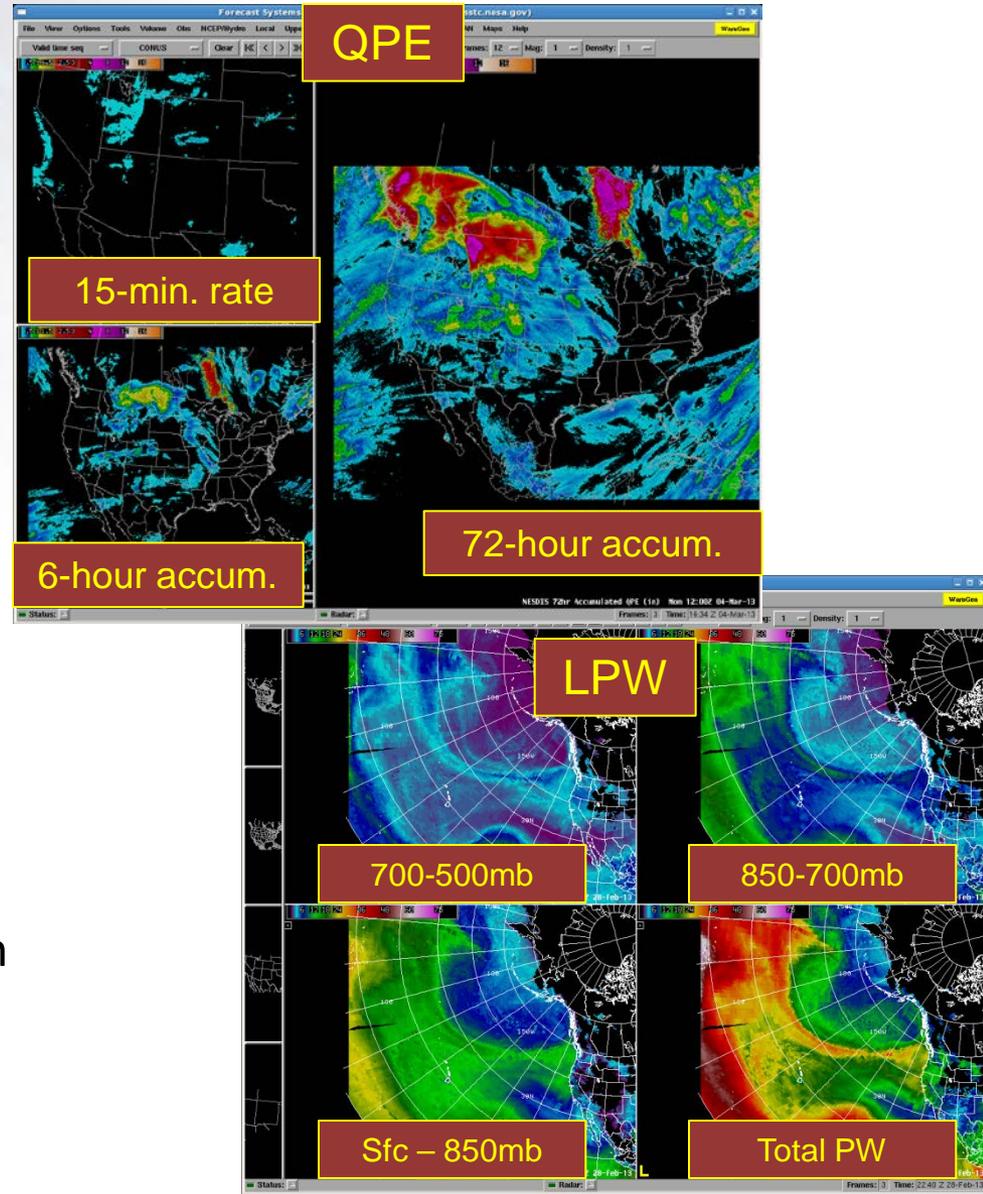
EUMETSAT Imagery from SEVIRI



AWG Support Activities

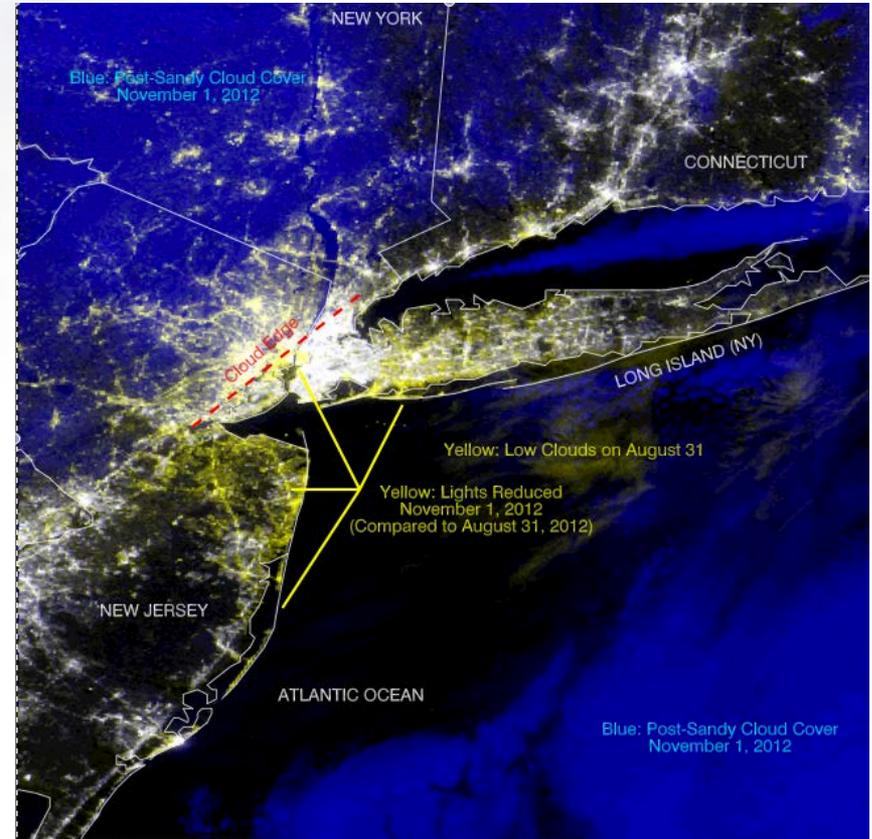
Evaluation of NESDIS QPE

- 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



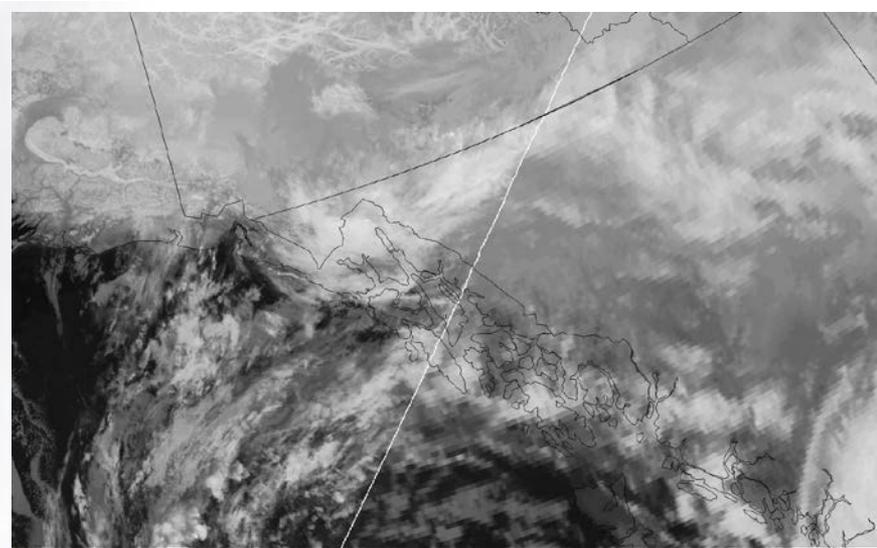
AWIPS II

- 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 shows the SPoRT Training Program Overview page. The page features the SPoRT logo and the NASA logo. The main heading is "Short-term Prediction Research and Transition Center". Below this, there is a navigation menu with options: Real-Time Data, Core Projects, GOES-R PG, JPSS PG, Transitions, Library, and Organization. The page is titled "Product Training Modules" and contains a list of training modules, each with a thumbnail image, a title, a download link, and a brief description. The modules include: VIIRS (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 Algorithm (LFA) (Download PDF, 1.2 MB).

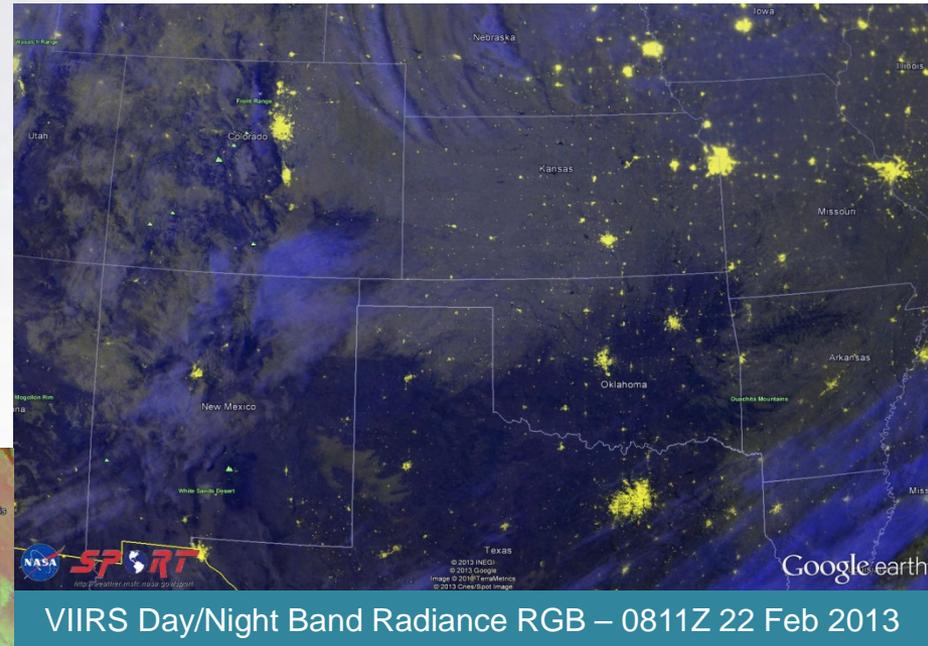
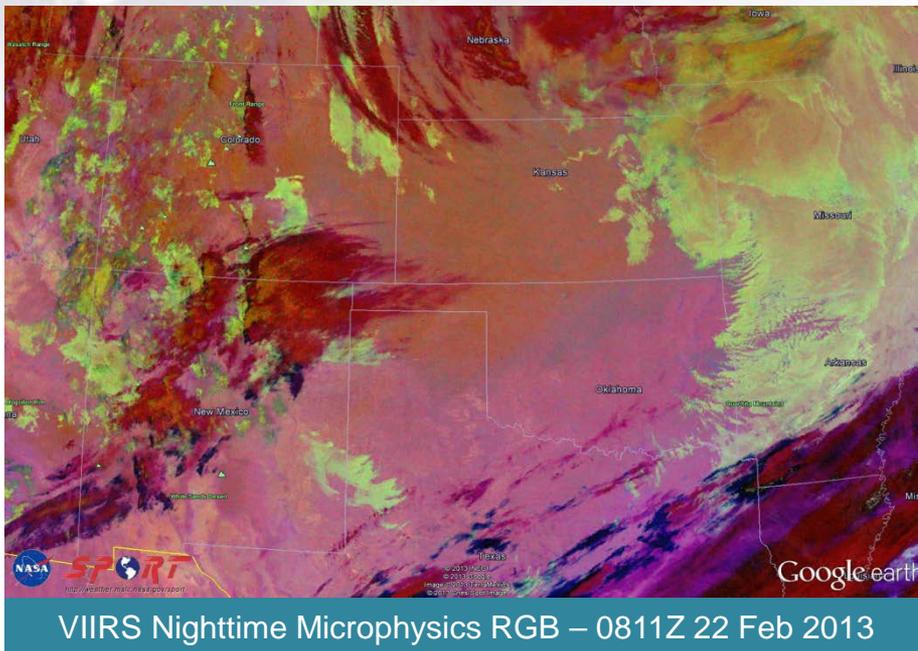


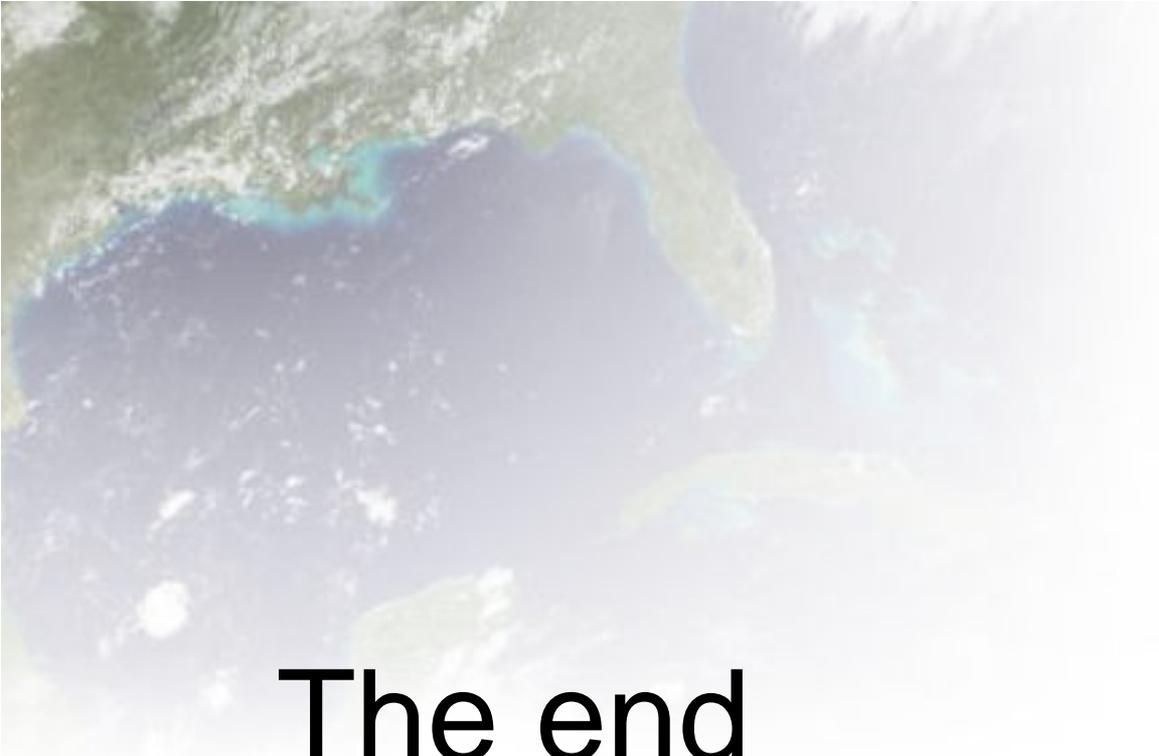
JPSS PG

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

