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

GOES-R Proving Ground Update

14 January, 2013

Contributions from:
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General Outline SPoRT Status Report:

RGB Imagery
• User feedback, training, future tasks

Other Activities
• QPE (NESDIS), UAH Convective Init., AWIPS II

JPSS
• Hurricane Sandy, KML, Hybrid, AWIPS I changes

Total Lightning
• New Collaborations, Preparations for Spring 2013
RGB Imagery

- Night-time Microphysics blog posts by ABQ, RAH and interest by MFR (recently installed)
- Have begun to create laminated Quick Guides for users to have in operations
- Upcoming tasks:
  - Finish Air Mass RGB case of Hurricane Philippe
  - Use 2012 TC cases to create introductory training for Daytime Microphysics and Convective Storms RGBs for use at NHC in 2013 tropical testbed period.
Other PG Transition Activities

QPE:
• 12/3/12: Had telecon with AK WFOs and MTR, EKA, MFR to discuss needs and plan evaluation activities
• Users desire accumulation products (1,3,6,24,72,168hr) and Bob K. has started to produce. Menu items being added at WFOs
• Bob K. providing expertise for initial training materials by SPoRT
• Evaluate with W. Coast ~March and AK ~late summer
• SPoRT adjusted product to differentiate non-data points with values of 0

UAHCI:
• Developers are testing algorithm with GOES-W and making improvements in preparation for Spring 2013

AWIPS II:
• SPoRT plans to participate in development of software governance policy with NWS/OST (traveling to D.C. late Jan.)
• Used VIIRS data (DNB) in support of forecasting and relief efforts associated with Hurricane Sandy
• Expanded dissemination of RGB products to National Centers (N-AWIPS and KML)
• Began dissemination of VIIRS real-time imagery to several WFOS in AWIPS. Implementing menu changes with SPoRT WFO partners (includes RGBs and hybrids)
• Created several quick-guide documents for forecaster training: VIIRS v MODIS; DNB

Right: VIIRS Dust RGB in KML format for use in Google Earth

Above: HPC blog using SPoRT-provided VIIRS/CrIS Air Mass
Below: VIIRS incorporated to Hybrid imagery sent to WFOs
New Lightning Collaborations

- Accepted for new GOES-R Visiting Scientist project
  - Effort with CIRA / CSU
  - North Colorado LMA
- Preparing to include West Texas LMA data
- Ongoing discussions with other network owners / operators
- Benefits to GOES-R and other programs
  - National Centers
  - Spring Program
  - Local forecast offices

N-AWIPS demo with current and future networks with network status.
Preparations for Spring Program

- Coordinating with Hazardous Weather Testbed
- Will demonstrate SPoRT’s AWIPS II tracking tool
  - Forecaster highlights cell of interest
  - Tool generates time series
  - Most requested tool from forecasters
- Will include a first order lightning jump algorithm
- Effort with UA Huntsville developers
- Extend current tracking tool and calculate on the fly