



# Satellite Proving Ground for Marine, Precipitation, and Satellite Analysis

SATELLITE LIAISON: MICHAEL J. FOLMER, PHD

# Summer 2014 Proving Ground Demonstration (5/15/14 – 9/30/14)

- ▶ New Products:
  - ▶ Convective Initiation
  - ▶ Hybrid Imagery
  - ▶ Nearcast
  - ▶ Fog and Low Stratus
- ▶ Continued Products:
  - ▶ Overshooting Top Detection
  - ▶ GLD-360 Lightning Density
  - ▶ GOES-14 SRSOR
  - ▶ RGB Applications
- ▶ TAFB: Demo runs through 10/31/14

# Current Feedback: GOES-14 SRSOR

- ▶ WPC: The 1 minute updates were very helpful in seeing cloud trends and the early stages of convective initiation with towering cumulus clouds. Without the 1 minute updates, I wouldn't have been able to issue a mesoscale precipitation discussion in as timely of a manner. Mixed cloud cover over the region of interest led to uncertainty in how much CIN remained, so seeing towering cumulus and storm development helped gain some lead time. Honestly, the 1 minute updates were useful, but 5 minute updates could have proven just as useful.

# Current Feedback: Overshooting Top Detection

- ▶ SAB: The overshooting top detection/cooling product gave me added confidence in the strength of new convective development over southeast Kansas, with a system that was otherwise dissipating per warming cloud tops. The new convective development in southeast Kansas was identified with multiple overshooting tops (despite the diurnal min of convection around sunrise), which ended up producing additional flash flooding across southwestern Missouri a short time later, while the remains of the MCS over central Kansas continued to dissipate.

# Path Forward

- ▶ A Winter 2014-2015 Proving Ground Plan will be developed by 9/30/14 and will run from 11/15/14 – 3/31/15.
  - ▶ Focus on Baseline products, Himawari Preparation, and applications of RGBs for explosive cyclogenesis.
  - ▶ Convective products will still be used and evaluated when warranted.
- ▶ Working with Eric Stevens (AK region) on RGB Air Mass uses in AK as a collaboration between OPC and AK region.
  - ▶ Proposed training session at the end of the 2015 OCONUS meeting.
- ▶ RGBs into AWIPS II (NCP) Visiting Scientist visit to the NCWCP from 9/16/14 – 9/18/14.
  - ▶ Scott Longmore – CIRA, Kaba Bah – CIMSS, and Kevin McGrath – SPoRT
  - ▶ Focus on using concepts developed for D2D and learning what is needed in NCP to create RGBs “on the fly”.
  - ▶ Will also start to address the color blind scaling idea for RGB enhancements
- ▶ Training for Himawari and GOES-R
  - ▶ Will be coordinating much more with COMET for the first basic training

# Path Forward

- ▶ Tropical Analysis and Forecast Branch:
  - ▶ A new approach as been started to get TAFB more involved in the MPS Proving Ground activities.
    - ▶ Coordination with Andrea Schumacher and Mark DeMaria to better distinguish between the two “seasons” of operations at TAFB.
- ▶ AWIPS II and McIDAS training
  - ▶ Working with Deb Molenaar and others on finding a way for the liaisons to be better equipped to assist with transitioning products into new platforms and displays.
- ▶ OPC Interns:
  - ▶ Kelcey Smith (USCG Academy) – Fog and Low Stratus product usage in OPC and TAFB waters.
  - ▶ Colleen Wilson (UMD) – Convection and GOES-R algorithms
- ▶ JPSS: Meeting with Mitch Goldberg to talk about having someone assist me (and maybe other liaisons) on getting more JPSS products ready for demonstrations (?)

# Satellite Liaison Blog

GOES-R & JPSS: The Future of Weather Satellites

HOME ABOUT THE BLOG

Posted by Michael Folmer on 08/27/2014 Edit This

## Hurricane Cristobal's Lightning Bursts: Day 2

Posted in: Lightning, R2O/O2R, SRSOR, Super Rapid Scan, Tropical. Leave a comment

Well, we are winding down the GOES-14 Super Rapid Scan Operations for GOES-R (SRSOR) for 2014 and we have seen three interesting tropical cyclone cases (Lowell, Marie, Cristobal), each unique in their own way. Hurricane Cristobal has more or less maintained intensity over the last two days and the lightning bursts have been very interesting to observe using the 2-min imagery overlaid on the SRSOR imagery. Today's lightning activity, similar to yesterday, featured intermittent activity in the large band to the east and southeast of the hurricane. Meanwhile, additional thunderstorms developed near a pseudo-warm front feature to the northeast of the storm. I have included the OPC West Atlantic Surface Analysis for reference:



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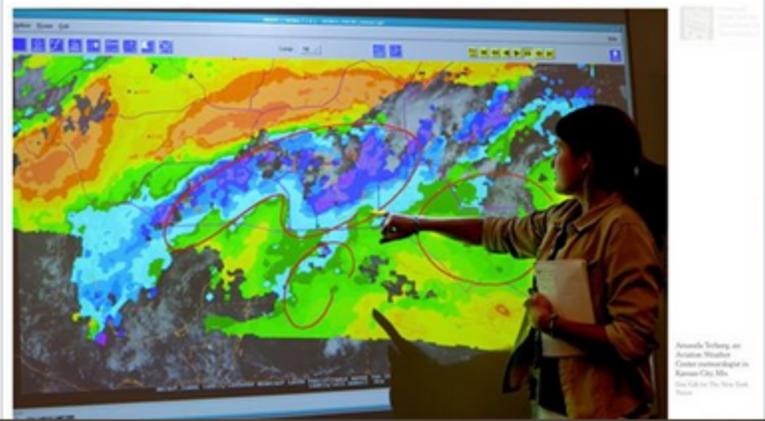
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What have you been up to?

GOES-R Proving Ground Posted by Chad Gravelle · 35 minutes ago

GOES-R Satellite Liaison, Amanda Terborg, is shown explaining the GOES-R NearCast product to Aviation Weather Center meteorologists in a recent New York Times article on turbulence.

<http://www.nytimes.com/2014/09/08/technology/airlines-take-the-bump-out-of-turbulence.html>



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