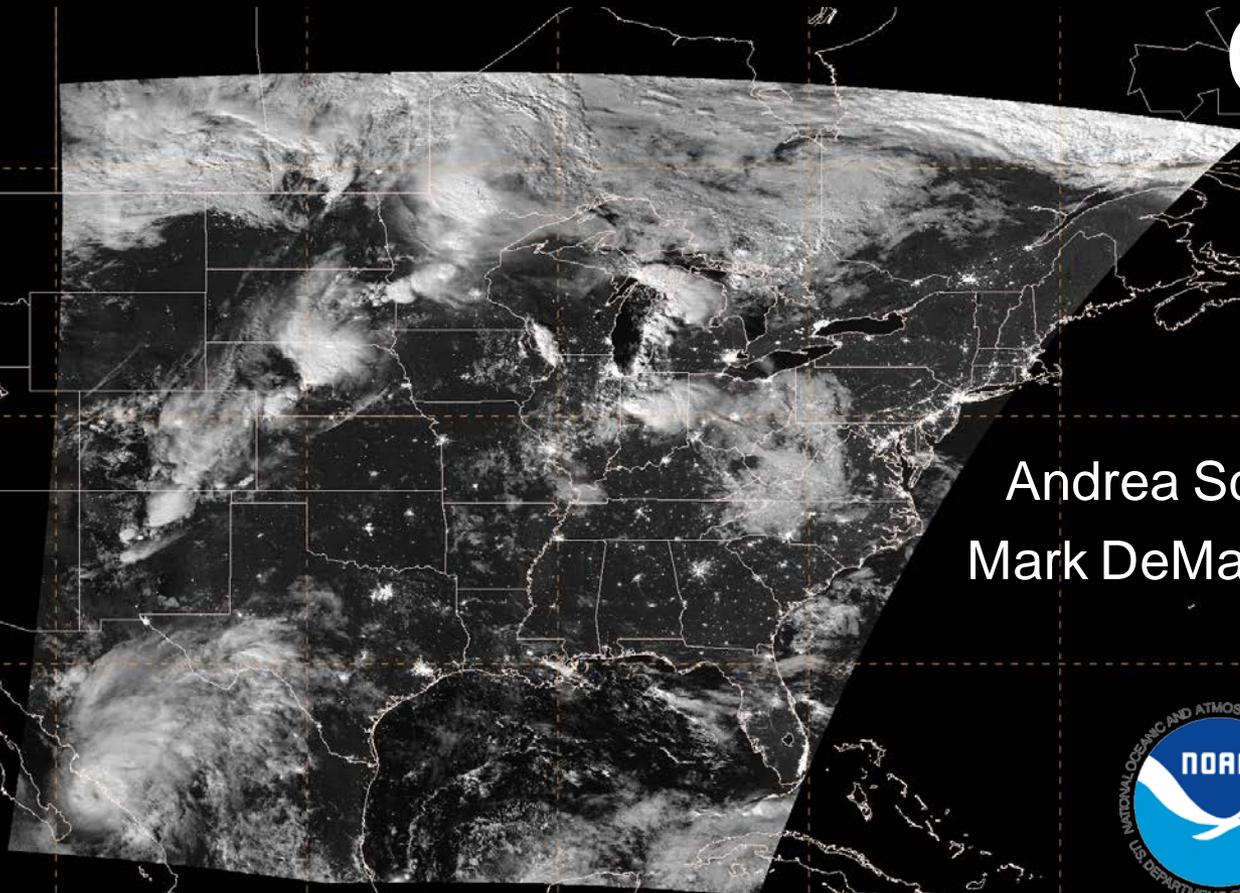
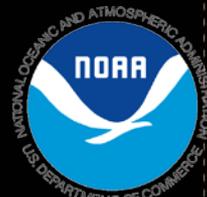


Current State of Proving Ground User Readiness at the National Hurricane Center



Andrea Schumacher, CSU/CIRA
Mark DeMaria, NOAA/NCEP/NHC



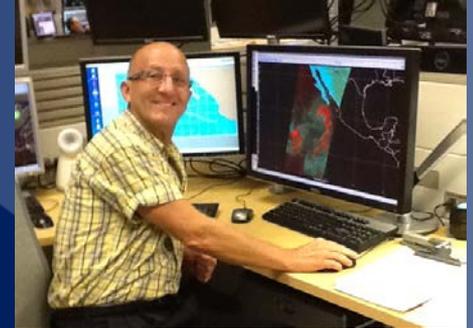
Satellite Liaison Backgrounds

- Mark DeMaria
 - Served in place of a liaison since May 2010 while NESDIS/STAR RAMMB Chief
 - Coordinating as NHC TSB Chief since Feb 2014
- Andrea Schumacher
 - Located at CSU/CIRA in Fort Collins, CO
 - In position since January 2014
- NWS forecasters we work with
 - Jack Beven, Michael Brennan + others (NHC/HSU)
 - Hugh Cobb + others (NHC/TAFB)

Satellite Liaison Training

- No formal training, but participation in tropical cyclone conferences, workshops, and reviews
 - M. DeMaria co-led the GOES-R Risk Reduction program until Feb 2014, organized and attended annual review meetings
 - M. DeMaria involved in most AWG reviews
 - A. Schumacher on-site for 2011 & 2012 mid-year PG reviews
 - M. DeMaria and A. Schumacher attended numerous tropical cyclone meetings and conferences since 2010
 - Interdepartmental Hurricane Conference
 - AMS Tropical Conference
 - Semi-annual NCAR-CSU tropical cyclone workshops

What We've Learned - Preparing / Training Users



- Annual pre-demonstration product reviews
 - One hour briefings on demonstration products in late July
- ~1 day training on new products by developers, May 2013
- Seminars at NHC
- Working one on one with forecasters during site visits
- Provision of on-line training material
- Coordination with satellite focal points on demonstration plan and final reports (usually Brennan and Beven)
- *One on one training during site visits was most effective for non-satellite focal point forecasters*

How User Community Should Prepare for GOES-R / JPSS

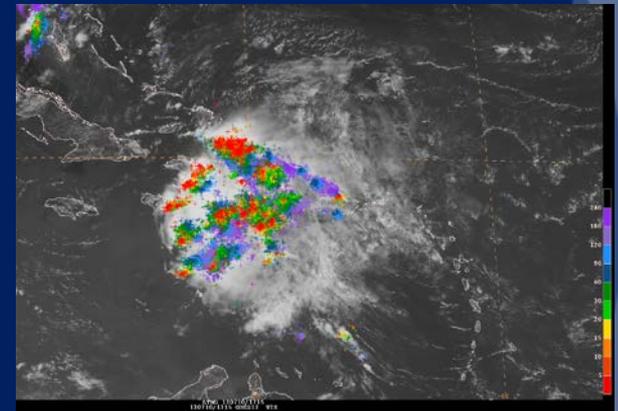
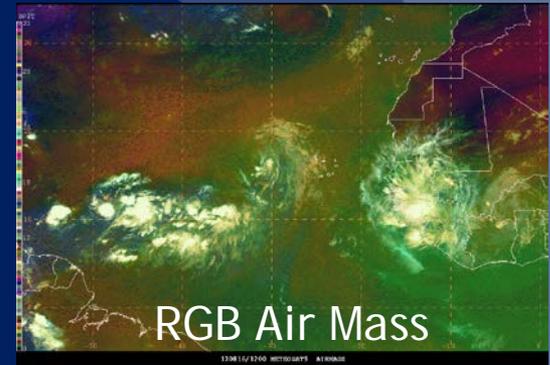
- Need multi-levels of training opportunities
- Web-based product summaries and more in depth descriptions to be used for reference
- Short live training along the lines of VISIT
 - Sometimes real time event focus
- Longer course, maybe just for satellite focal points
 - Difficult to get forecaster time at NHC
- Demonstrations of impact of GOES-R data/products on NHC forecast parameters, including quantitative evaluations/verifications where possible

What We've Learned – Working with product developers

- Ensuring the O2R-R2O loop is created/closed
 - Feedback from final reports provided to developers
 - Hurricane Intensity Estimate feedback to CIMSS on pressure-wind relationship, algorithm modified
 - Need for wider area of coverage of NPP Day-Night Band coordinated with providers following 2013 season
 - Coordination with NCO on need for local generation of RGB products in AWIPS2/NCP
 - Special case: M. DeMaria served in liaison role and developer of lightning application to intensity prediction. Experimental algorithm modified based on post-season evaluation

Greatest Successes So Far

- NHC forecasters have become familiar with RGB products and those will likely become part of routine NHC operations during the GOES-R era
- The myth that more lightning always means TC intensification has been dispelled through the demos
 - Training on an objective lightning product has led to improved understanding and qualitative utilization of lightning strike data



Biggest Challenges So Far

- NHC's Technology and Science Branch has been significantly understaffed for most of the NHC PG since 2010
 - Difficult to find time to implement and manage experimental products
 - NHC's TAFB has also been understaffed for most of the NHC PG
- Lots of competition with other demonstrations at NHC
 - JHT, HFIP, EMC parallel model evaluations, social science groups, experimental storm surge, field program coordination, etc
- Lack of on-site satellite liaison
 - Should improve in 2014 due to M. DeMaria's new position

Vision for the Position – Transitioning to SMEs?

- From NHC's perspective, this would be useful if there was very strong coordination between the SME and NHC management
 - NHC could help set SME goals
 - Liaison might also be involved in product development
 - For example, developing and evaluating AWIPS2 applications

Vision for the Position – Building the Position & Retaining Liaisons

- Building the position
 - The SL might work directly with the Centers to help implement and test algorithms in operations
- Retaining Satellite Liaisons
 - A long range plan and commitment for support would be needed
 - Opportunity for career advancement



Q & A