

AWT WE13 – Looking back...

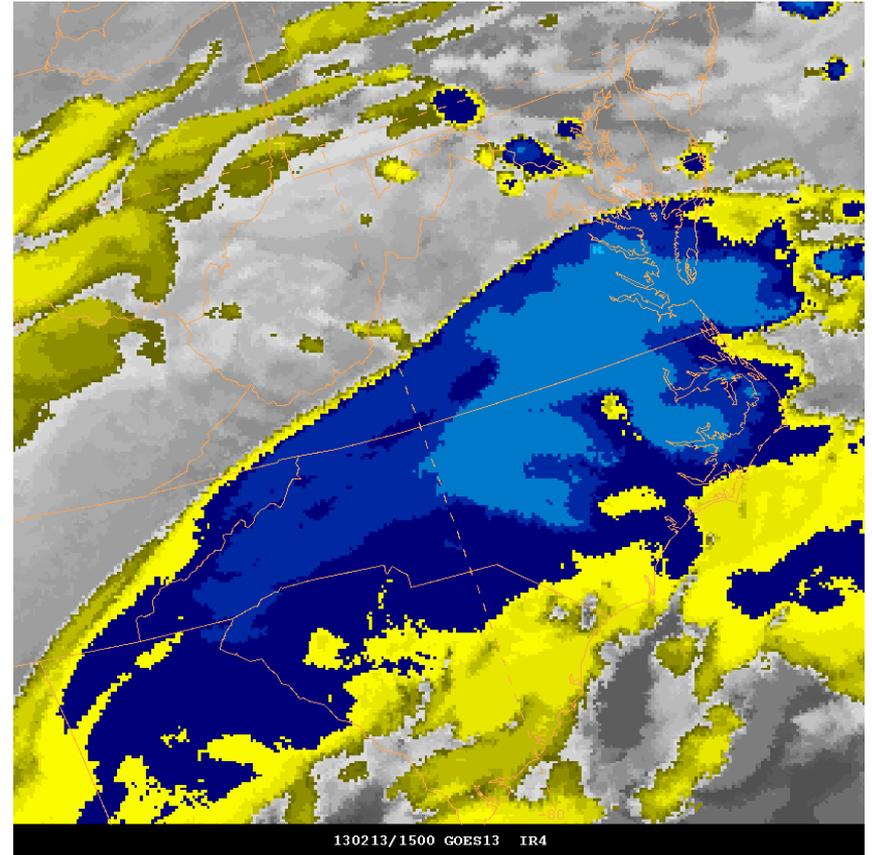
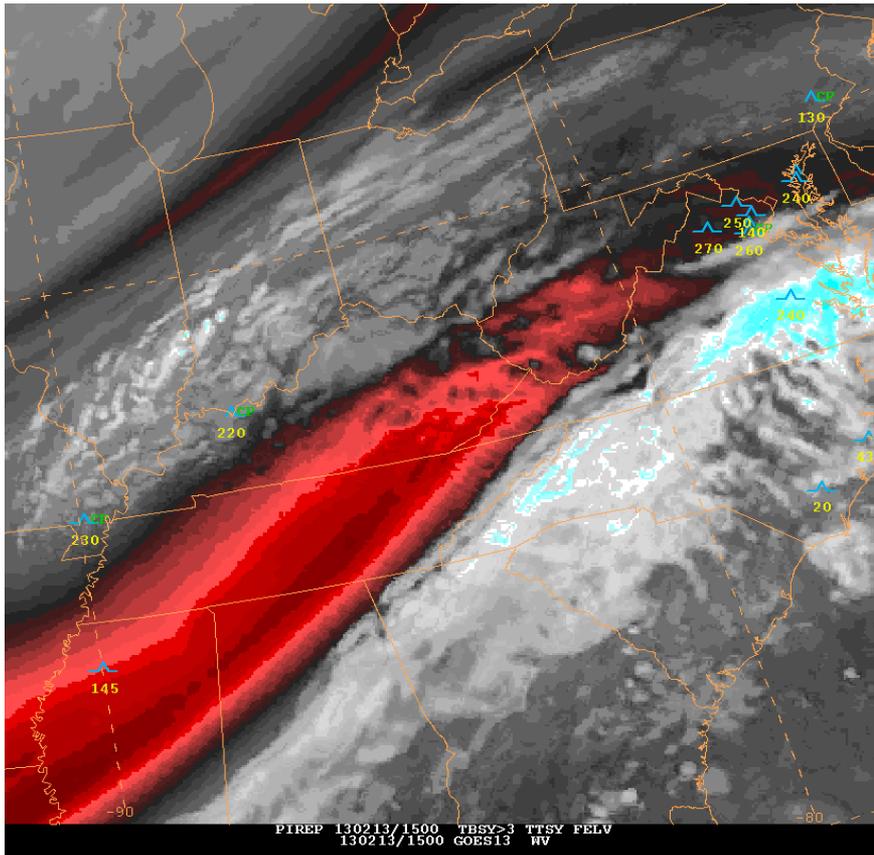
Amanda Terborg
PG All Hands update
4th March 2013

Overview

- Morning verification and end of the day summaries
- FA (icing, turb, C&V), National Aviation Meteorologist, and Global Graphics
 - 3 hour (FA) and 12 hour (GGN) snapshots using usual tools as well as new datasets.
- Presentations by NTSB, Lockheed Martin, NCAR
- Roundtable discussion on R to O efforts at the AWC... GOES-R training materials praised!
- Week 1 weather briefing with HPC
- Having a Winter Experiment shut down by snow...

Synthetic Imagery

WRF simulated water vapor (left) and NAM Nest simulated IR (right)

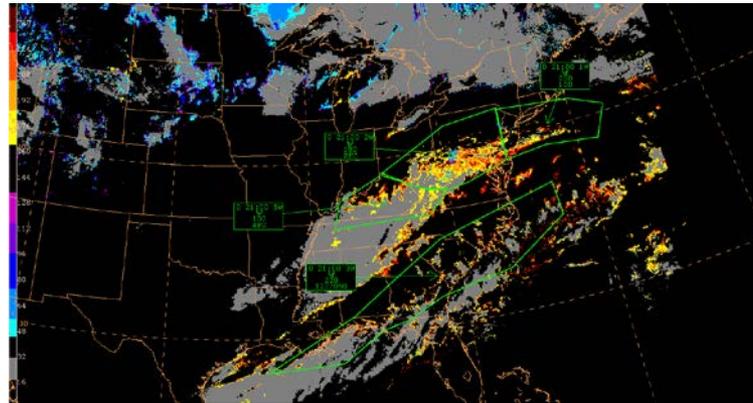
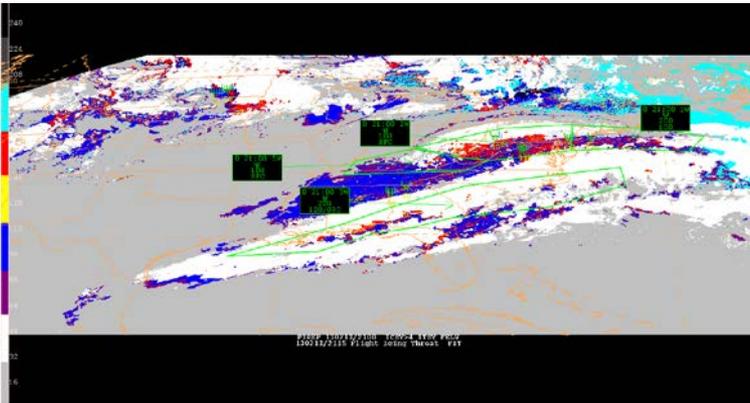


Synthetic Imagery: feedback

- Consistently heard positive feedback and forecasters were very impressed with the imagery!
- 'It [WV] was very helpful in determining the building ridge and shear zone' and other features often associated with turbulence
- 'Very, very impressed with how well [the WRF] ran'
- 'This [imagery] is awesome!'
- Notable utility in icing forecasts, particularly with the icing enhancement
- The synthetic fog difference was used both for C&V forecasting and also to identify liquid clouds with below zero tops for potential areas of icing

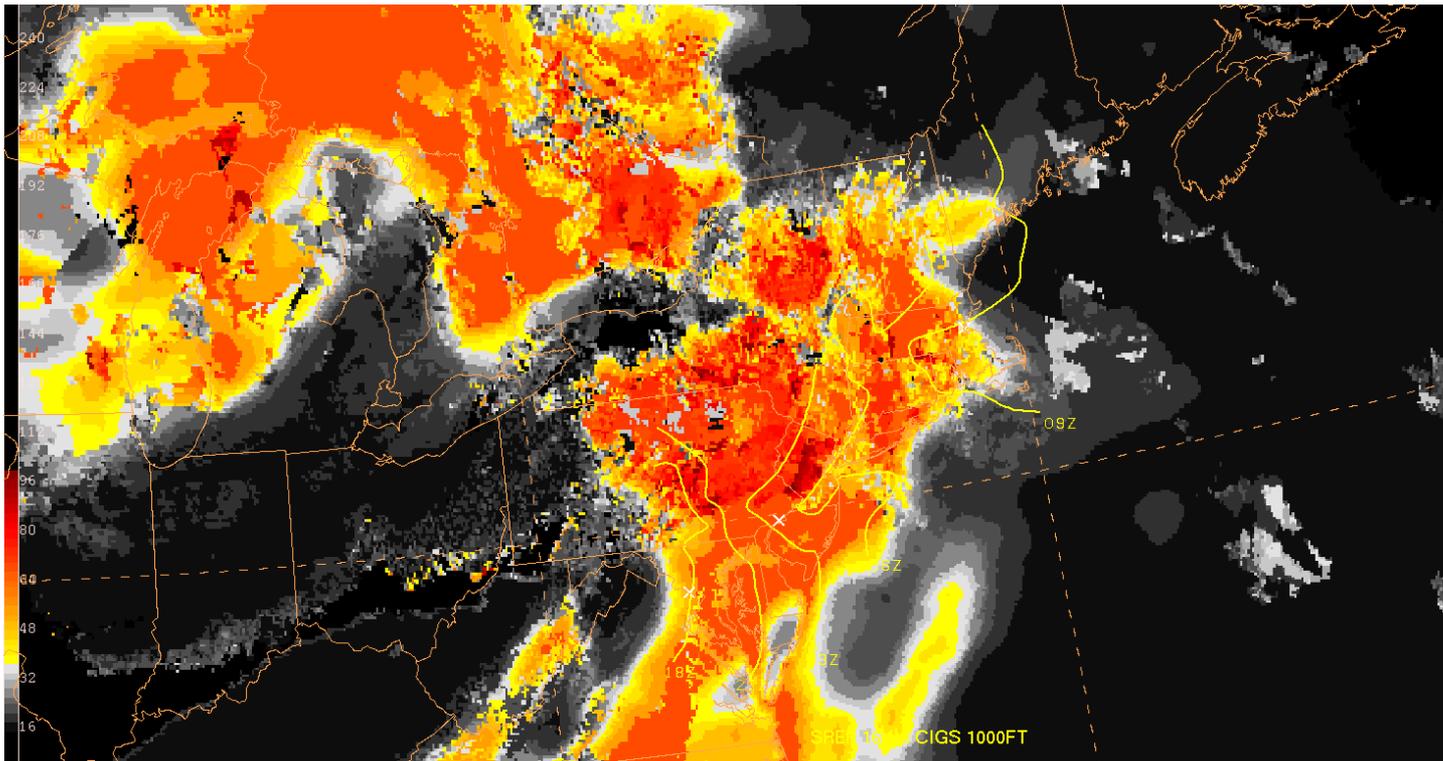
Icing

Flight Icing Threat (top left), SLD (top right), icing bases (bottom left), and tops (top right)



Icing: feedback

- AWC forecasters have limited time during which they must forecast for multiple hazards (icing, turb, C&V, LLWS, etc.), and so while the detail of the FIT was appreciated, it is not necessarily needed.
- 'Provided further situational awareness and helped further identify areas of focus for icing'
- 'It has potential' and 'is a good diagnostic tool'
- The SLD was 'a pretty cool analysis tool' and was 'useful in identifying current areas of focus'
- Icing tops and bases 'were useful in identifying the thickness of current icing layers'



- The FLS had particular use at the NAM desk, where concerns are focused more on the next few hours (instead of the next day)
- 'An excellent diagnostic tool, doing a very good job in identifying current areas of concern'
- Used to identify both areas of concern as well as dissipation rate
- 'Did a very good job in the West' and 'did a good job over the Appalachians'

Fog and
Low
Stratus:
feedback

What's next?

- Final report: will provide a summary of the two week experiment and feedback/comments
 - Current due date is the end of June... I think I can do better 😊
- R to O
 - FLS is already available in ops
 - Synthetic Imagery... next on the list to be pushed. Currently working with Michael on training materials
 - FIT... a good start with lots of potential though may wait on its transition another year for further demonstration and development

THANK YOU

A huge thanks to all those who helped make this experiment such a big success. Your hard work was very, very much appreciated!

