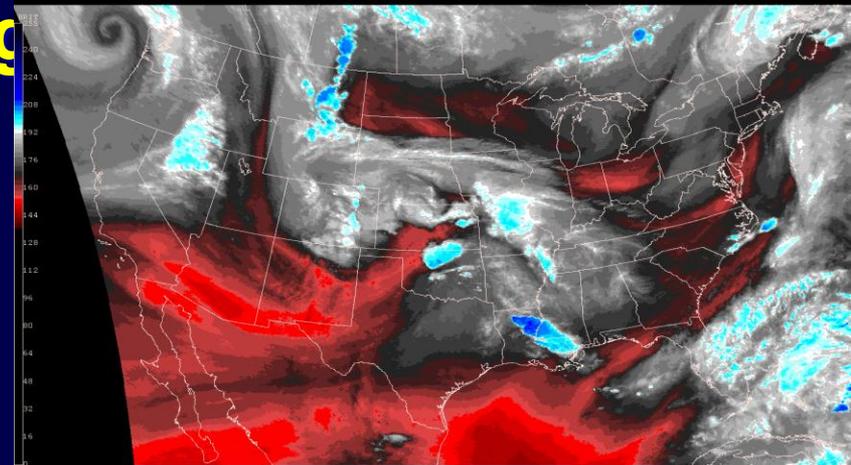


Summary of GOES-R Activities at CIMSS/ASPB and Recommendations for the Future

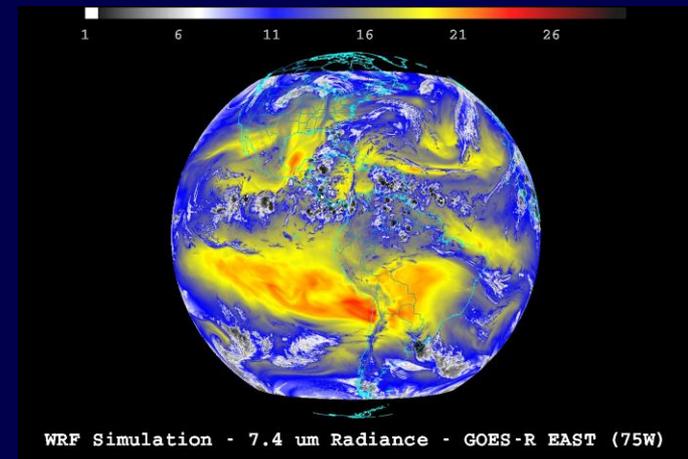
Steven Ackerman, Tom Achtor

- GOES-R Algorithm Working
- GOES-R Risk Reduction
- GOES-R Proving Ground
- High Impact Weather



GOES-R Algorithm Working Group (AWG)

- **19 Tasks with direct responsibility for**
 - 22 baseline algorithms developed by CIMSS/ASPB science teams
 - 11 option 2 algorithms developed by CIMSS/ASPB science teams
- 5 hemispheric and regional simulated data sets created leveraging supercomputer time (Proxy)
- Instrument performance and waiver requests through GRAFIIR
- Visualization and analysis through McIDAS-V



GOES-R Risk Reduction

- **12 tasks exploring ideas, testing innovative approaches and demonstrating utility of GOES-R measurements**
 - 1 EPO task
 - 2 travel grants
- **Ability to explore and innovate has enabled new approaches to be developed and tested (FAA, NASA, NextGen, DOD)**
 - Volcanic Cloud Alert System
 - Nowcasting system development
 - Convective Storm Forecast Improvement
 - Fusion / Synergy of multiple observations

GOES-R Proving Ground

- Test and validate technologies and products to enable transition to operational use
- Work in collaboration with AWG and R3 teams to evaluate baseline and option 2 products
- Provide user assessments and feedback to product developers
- Expand partnerships with GOES-R data and product users
- Emphasis on NWS and NCEP Centers



GOES-R High Impact Weather

- **Focus on combined use of hyperspectral sounder data from POES with imaging products from ABI**
- **Research conducted on scales from mesoscale storms to tropical systems to mid latitude cyclones**
- **Focus on nowcasting and short range forecast improvement**
- **Excellent example of fusion/synergy approach to using multiple sources of information in product development**

GOES-R Activities:

Recommendations for the Future

- **GOES-R research and development must be well supported now and beyond launch**
 - Science tests – post launch and ongoing calibration/validation studies are crucial
- **Build upon the early GOES GIMPAP project as a model for future development**
 - Option 2 (SO₂, turbulence, cryospheric, convection, icing, fog, etc) cutting edge GOES-R satellite based decision support needs adequate resources to continue development for innovative integration into operations prior to launch
 - Post launch research and development will continue to exploit the new measurements with improved products

GOES-R Activities:

Recommendations for the Future

- **Continue Proving Ground to support end-to-end research to operations**
- **Continue to leverage NESDIS CIs' research infrastructure and data processing capabilities to further the success of the GOES-R program**
 - **Validation will be a key post launch component**
- **Expand on education and training, from the professional level to EPO**