

NESDIS Snowfall Rate Product Captures January 2016 Blizzard

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- A historical nor'easter, Jonas, hit the Mid-Atlantic region on January 22-24, 2016 and produced record snowfall in many local areas
- The NESDIS Snowfall Rate (SFR) product captured the evolution of Jonas with five satellites including S-NPP (ATMS), POES and Metop (AMSU and MHS) satellites. A SFR animation for Jonas is at

http://www.star.nesdis.noaa.gov/corp/scsb/mspps_backup/Prese/ntation/Blizzard_of_2016.gif

- The SFR product and a SFR-based radar-satellite merged product, mSFR, were used by NWS Sterling Office (LWX) for the forecast of Jonas. Feedback from LWX indicated that the products were 'Very Useful', and their impact was 'Very Large' on the LWX forecast process

- NASA SPoRT post about SFR tracking Jonas: <https://nasasport.wordpress.com/2016/01/25/life-of-winter-storm-jonas-as-seen-by-the-nesdis-snowfall-rate-product/>

- Near real-time SFR (including S-NPP ATMS SFR) webpages:

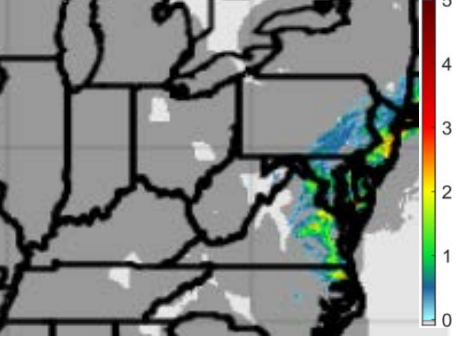
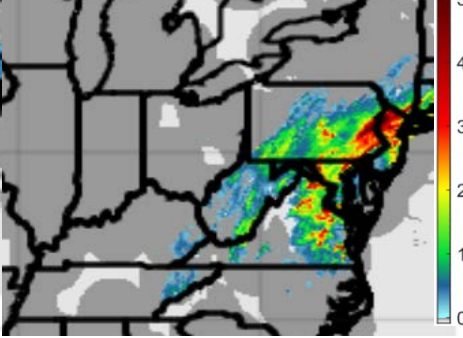
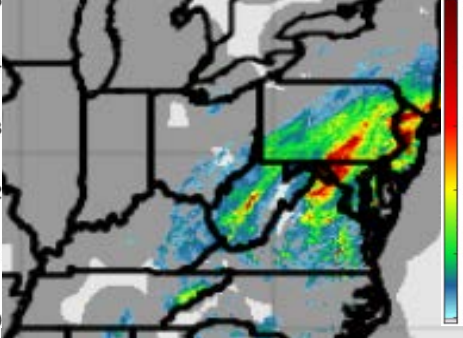
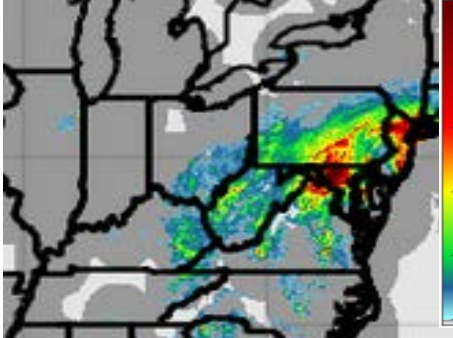
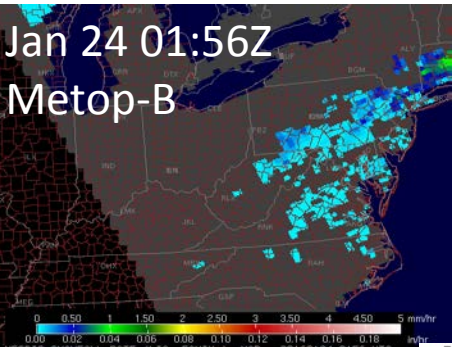
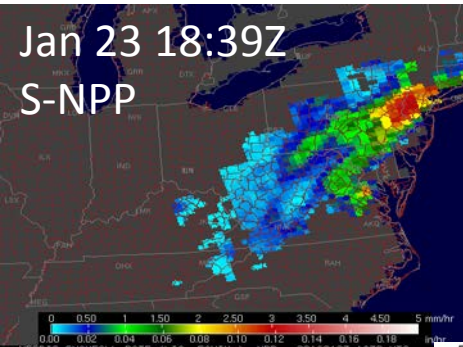
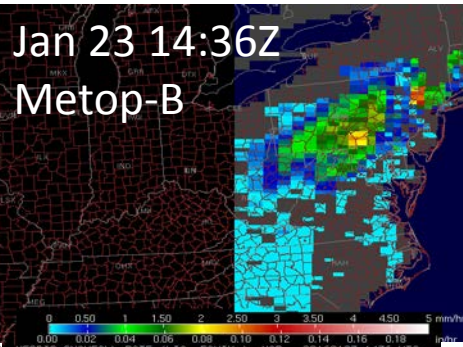
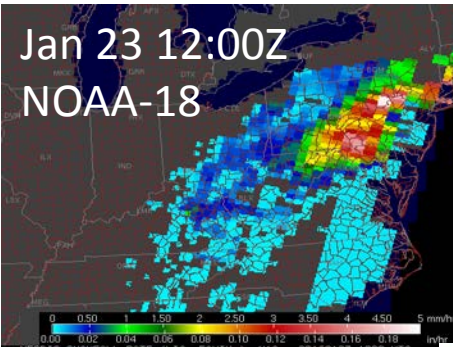
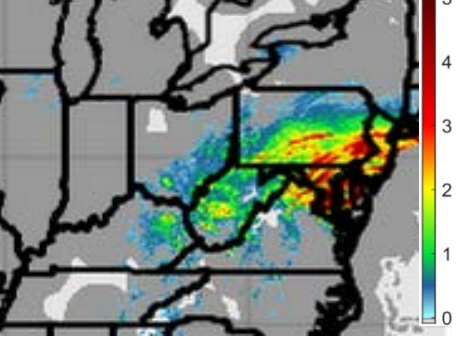
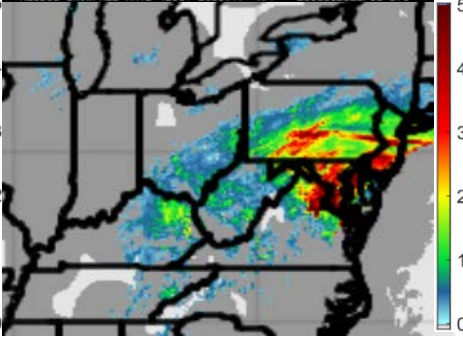
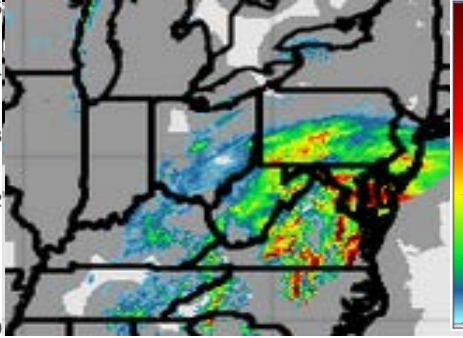
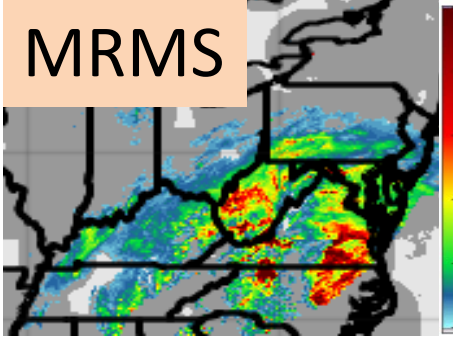
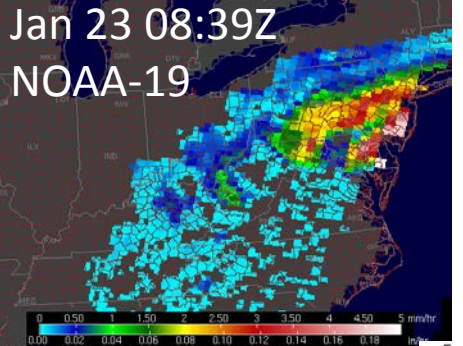
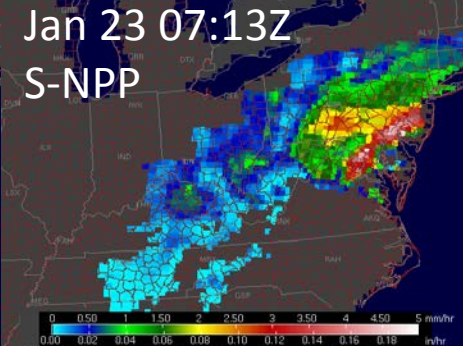
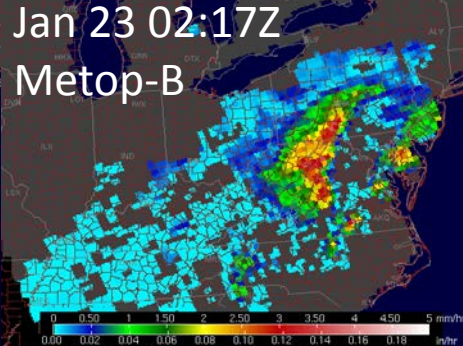
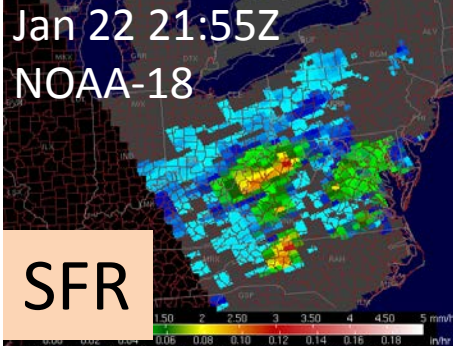
<http://cics.umd.edu/sfr/> and http://www.star.nesdis.noaa.gov/corp/scsb/mspps_backup/sfr_realtime.html

- The next slide compares SFR with NSSL MRMS radar precipitation product



Statistics

	Correl. Coeff.	Bias (mm/hr)	RMS (mm/hr)
ATMS	0.60	-0.14	0.79
MHS	0.54	-0.53	0.88



ATMS SFR Performance (Compare with radar precipitation)

