ZP11 Weekly Notes
02/03/16

SPoRT EFFORTS HIGHLIGHTED IN FEMA BRIEFING TO WHITE HOUSE NATIONAL SCIENCE AND TECHNOLOGY COUNCIL SUBCOMMITTEE ON DISASTER REDUCTION (email to: andrew.molthan@nasa.gov/256-961-7474): Following the record flooding that occurred on the Mississippi River in December 2015 and January 2016, the National Science and Technology Council Subcommittee on Disaster Reduction (SDR) met on February 4, 2016. As part of this discussion, an agenda item led by Federal Emergency Management Agency (FEMA) addressed lessons learned and best practices from the recent Midwest flooding events. Christopher Vaughan, FEMA Geospatial Information Officer, highlighted contributions from the NASA Applied Sciences: Disasters Program and coordinated, cross-Center engagement efforts in support of disaster response. During the Mississippi River flooding event, members of the SPoRT team contributed to the Applied Sciences: Disasters Program's coordinated effort to support FEMA by helping with the tasking of NASA imaging assets such as Earth Observing-1 (EO-1) and the Advanced Spaceborne Thermal Emission Radiometer (ASTER) aboard NASA's Terra satellite. Efforts included providing true color and multispectral derived products to imagery analysts at FEMA. In addition, Dr. Andrew Molthan (ZP11) of the Short-term Prediction Research and Transition (SPoRT) team and Michael Goodman (ZP10) supported the Disasters Program by serving as coordinators among the Centers, helping to gather information throughout the agency for a streamlined delivery to FEMA. Other contributions from NASA Centers included advice and guidance on the collection of synthetic aperture radar (SAR – provided by Jet Propulsion Lab) data and near real-time flood mapping from a variety of NASA instruments (GSFC). FEMA remains interested in learning more about NASA's Disasters Program and response support, particularly regarding advanced capabilities in mapping disaster impacts from SAR and multispectral imaging across NASA, National Oceanic and Atmospheric Administration (NOAA), international, and commercial platforms.

SPoRT FEATURED ON NASA INFORMATION ARCHITECTURE & DATA MANAGEMENT (NIAM) SITE (email to: brad.zavodsky@nasa.gov/256-961-7914): The Short-term Prediction Research and Transition (SPoRT) Center completed an invited case study submission to the NASA Information Architecture & Data Management (NIAM) team at Headquarters. The NIAM is tasked with understanding data challenges for the agency and ways that individual projects have addressed those challenges. The NIAM was particularly drawn to SPoRT's unique real-time applications as a great example of the "data velocity" challenge, which refers to the transfer of data from instrumentation through processing to decision makers with limited latency. This case study was recently published on the NIAM website (https://niam.nasa.gov/projects/) and will be given further promotion to the broader data community. The inclusion of this case study helps to affirm MSFC and SPoRT as leaders in the research to applications community.

SNOWFALL RATE PRODUCT DERIVED FROM NASA SATELLITE DATA USED BY FORECASTERS DURING HISTORIC WINTER STORM (email to: brad.zavodsky@nasa.gov/256-961-7914): The Short-term Prediction Research and Transition (SPoRT) Center at MSFC has an ongoing collaboration with the National Oceanic and Atmospheric Administration (NOAA) National Environmental Satellite, Data, and Information Service (NESDIS) Center for Satellite Applications and Research (STAR) to evaluate the operational utility of a satellite-derived snowfall rate product derived from passive microwave sensors aboard NASA, NOAA, and European satellites. This product—developed at STAR and iteratively modified based on guidance provided by SPoRT and operational forecasters the NOAA National Weather Service (NWS)—captured the heavy snowfall associated with the winter storm that impacted the eastern U.S. on 22-23 January and was used by a forecaster at the Sterling, VA NWS office as part of a public forecast to confirm white out conditions on area highways. More details of this specific case can be found at https://nasasport.wordpress.com/2016/01/25/life-of-winter-storm-jonas-as-seen-by-the-nesdis-snowfall-rate-product/.

ZP11 Weekly Notes
02/03/16

TECHNICAL INTERCHANGE MEETING OF EARTH SCIENCE DATA AND INFORMATION SYSTEM (ESDIS) PROJECT AND DAAC MANAGERS HELD AT NATIONAL SPACE SCIENCE TECHNOLOGY CENTER (NSSTC) (email to: rahul.ramachandran@nasa.gov/256-961-7620): The MSFC Global Hydrology Resource Center (GHRC) Distributed Active Archive Center (DAAC) lead by Rahul Ramachandran (ZP11) hosted a Technical Interchange Meeting of ESDIS and the DAAC Managers on January 26-27, 2016. The focus of this meeting was to foster more collaboration among the twelve NASA-funded Earth science data centers (aka DAACs). Specific collaborative efforts were initiated, to work toward a more similar user experience across DAAC (e.g., JPL, GSFC, MSFC, LaRC, U. Colorado, Columbia Univ.) web sites and user tools, and to explore use of the commercial computing cloud.

ZP11 EARTH SCIENCE OFFICE WEBSITE IS A "HIT" (email to: paul.meyer@nasa.gov; 256-961-7892): An annual audit of access counts to gauge interest in the ZP11 Earth Science Office website (http://weather.msfc.nasa.gov/) revealed that the average number of "unique" IP addresses accessing the site during each month of 2015 was 495,469, or an average of approximately 16,500 unique hits per day.