ZP11 Weekly Notes
4/15/15

SPORT/MSFC DISASTER RESPONSE TEAM PROVIDES IMAGERY FOR ILLINOIS TORNADOES (email to: andrew.molthan@nasa.gov/256-961-7474, jason.e.burks@nasa.gov/256-961-7661). On April 9, 2015, severe thunderstorms produced several reports of damaging wind, hail, and a few tornadoes — including one particularly strong (EF-4) long-track tornado across north-central Illinois. As part of an ongoing NASA Applied Sciences: Disasters funded project, the MSFC/Short Term Prediction Research and Transition (SPoRT) Disaster Response Team provided Landsat 8 panchromatic and true-color imagery of the EF-4 tornado track within the NOAA/National Weather Service (NWS) Damage Assessment Toolkit, as the Landsat 8 imager captured a cloud-free scene of the damage path on the morning of April 10. Images produced by the team were distributed by a web mapping service originally developed under an MSFC technology development proposal awarded to SPoRT/Jason Burks (ZP11). In addition, the imagery was distributed via social media (Twitter and the "Wide World of SPoRT" blog), where they quickly went "viral" and were re-tweeted by several major weather entities including Accuweather and The Weather Channel, totaling 179 retweets and nearly 65,000 views, and 872 visits to the SPoRT blog. In addition, The Weather Channel requested and was provided the full-resolution imagery, which they used in their own tweet with credit given to NASA MSFC/SPoRT and the U.S. Geological Survey, which drove additional re-tweets and page views. Colleagues at the NWS forecast office in Chicago, IL used the Landsat 8 imagery to complement the ground survey of the tornado that was performed on Friday, and members of the office reported that they were "very excited and impressed" by the capability of having NASA imagery within their survey toolkit.

SPORT TEAM MEMBER RECEIVES AWARD AT UAH RESEARCH HORIZONS DAY (email to: andrew.molthan@nasa.gov/256-961-7474): University of Alabama Huntsville (UAH) graduate student and MSFC/ Short Term Prediction Research and Transition (SPoRT) team member Tony Cole was recognized with a second place overall best poster award at the First Annual UAH Research Horizons Day, where he presented disaster-related use of the Suomi National Polar-Orbiting Partnership's Day-Night Band sensor. Research activity and the presentation focused on the use of Suomi data for identifying power outages and recovery in Chile following a major earthquake that occurred on 1 April 2014. Tony continues to explore and develop disaster-related applications of Suomi data as part of his M.S. Thesis work in the UAH Earth System Science department.

PARTICIPATION IN GOES-R/S FIELD CAMPAIGN PLANNING MEETING (email to: rich.blakeslee@nasa.gov/256-961-7962): The lightning team participated in a Geosynchronous Operational Environmental Satellite-R/S (GOES-R/S) airborne field campaign planning meeting held on April 8-9 at College Park, Maryland. The purpose of the GOES-R/S airborne field campaign is to provide validation support for the new Geostationary Lightning Mapper (GLM) and the Advanced Baseline Imager (ABI) instruments that will be launched on GOES-R in early 2016 and GOES-S in late 2017. The objective of the planning meeting was to identify the key instrument compliment that would be integrated on NASA's high altitude ER-2 aircraft in support of the validation field campaigns, as well as to set potential dates for the conduct of the missions. NASA and her partners at the National Space Science and Technology Center

(NSSTC) are developing an airborne GLM simulator called the Fly's Eye GLM Simulator (FEGS) that will serve as the primary airborne validation sensor for GLM.

INTERNATIONAL SPACE STATION (ISS) LIGHTNING IMAGING SENSOR (LIS) PRESENTED BUDGET IN PPBE 2017 (email to: rich.blakeslee@nasa.gov/256-961-7962): The International Space Station (ISS) Lightning Imaging Sensor (LIS) team supported the NASA Planning, Programming, Budgeting, and Execution (PPBE) review on April 13 for the ISS LIS project. In April 2013, a space-qualified flight spare LIS was selected to fly on the ISS to take advantage of unique capabilities provide by the space station including its high inclination orbit and the potential of providing real time lightning data to operational users, as well as serve as a scientific follow-on to the highly successful Tropical Rainfall Measuring Mission (TRMM) LIS. The science mission for ISS LIS is funded by the NASA Headquarter's Science Mission Directorate (SMD).