

ZP11/Jim Smoot/Weekly Notes

5/6/14

PROPOSAL TO OCEAN SALINITY SCIENCE TEAM SOLICITATION SELECTED FOR FUNDING

(mail to: jason.b.roberts@nasa.gov/256-961-7477): A proposal entitled “Upper ocean salinity structure variability and its relationship to Aquarius observations” with Dr. Brent Roberts serving as Co-Investigator in response to the NASA Research Opportunities in Space and Earth Science - 2013 Ocean Salinity Science Team Solicitation has been selected for funding. The proposed research will examine how differing environmental conditions establish vertical stratification of ocean salinity in the upper few meters of the ocean. Such stratification prohibits the ability to accurately quantify the uncertainty of salinity retrievals from the Aquarius satellite. This project will use high-resolution ocean mixed-layer modeling together with nonlinear statistical methods to provide improved verification of Aquarius measurements. Work will be conducted with the Principal Investigator and Co-Investigators from the Woods Hole Oceanographic Institution over the next three years.

KEYNOTE SPEAKER AT GLOBAL URBAN WORKSHOP IN ATHENS, GREECE

(mail to: dale.quattrochi@nasa.gov/256-961-7887): Dr. Dale Quattrochi was a keynote speaker at an international workshop on “Global Urban Observation and Monitoring from Space” held in Athens, Greece on March 31-April 1, 2014 that was sponsored by the National Observatory of Athens, Institute for Astronomy, Astrophysics, Space Applications, and Remote Sensing. He made a presentation on his NASA-funded research on “Linking Excessive Heat with Daily Heat-Related Mortality over the Conterminous United States”. The project’s emphasis is on providing assessments of the magnitude, frequency and geographic distribution of Extreme Heat Events (EHEs) to facilitate public health studies. The project compares three indicators of heat stress; 1) Daily Maximum Air Temperature; 2) Heat Index; and 3) a new indicator called Net Daily Heat Stress (NDHS) in relation to their impacts on human health. The NDHS proves to be a better predictor of EHEs and potential impacts on heat stress than the other two indices. The Centers for Disease Control and Prevention (CDC) is incorporating the NDHS into its WONDER database where public health officials can query the database for use in national public health decision making.

PRESENTATION AT NASA NATIONAL CLIMATE ASSESSMENT INDICATORS TEAM MEETING AT NASA HEADQUARTERS

(mail to: dale.quattrochi@nasa.gov/256-961-7887): Dr. Dale Quattrochi presented an update of the work that he is Principal Investigator on regarding the “Development of National Future Heat Scenarios to Enable the Assessment of Climate Impacts on Public Health” as part of NASA’s involvement in the National Climate Assessment (NCA). This presentation was made at a project team meeting that shared results achieved to date from projects funded by NASA as related to the NCA. The meeting was held at NASA Headquarters on April 8-9, 2014.

12 PROPOSALS SUBMITTED TO NASA ROSES CALL

(email to doug.rickman@nasa.gov/256/961-7889): In response to the ROSES A.44 Public Health call the Applied Science team has submitted 12 proposals. The number of partner agencies and the range of topics is a measure of value others put in our expertise. The team is also working on proposals to National Science Foundation (NSF) on another ROSES Applied Science call.

INVITED LECTURE AT UNIVERSITY OF SOUTH FLORIDA (email

to: jluvall@nasa.gov/256 961-7886): Dr. Luvall presented an invited lecture titled “The Power of the Pixel – NASA’s Advancements in Science & Applications for the Global Public Health Community” at the University of South Florida’s School of Public Health, Global Health lecture series. The School is interested in developing a Remote Sensing/Geographic Information Systems (GIS) lab for Public Health, similar to what MSFC helped organize at University of Alabama, Birmingham. Dr. Luvall also judged student poster sessions on GIS applications in public health.

JOURNAL ARTICLE ACCEPTED FOR PUBLICATION (email to

andrew.molthan@nasa.gov / 256-961-7474): Dr. Andrew Molthan and Mr. Jason Burks are lead and coauthor, respectively, on a journal article accepted for publication titled “Satellite-Based Identification of Tornado Damage Tracks from the April 27, 2011 Severe Weather Outbreak”, which will appear in an upcoming release of the National Weather Association’s Journal of Operational Meteorology. The article surveys tornado damage scars observed from the NASA MODIS, ASTER, and Landat-7 imagers in the weeks and months following the severe weather outbreak of April 27, 2011.