

ZP11/Jim Smoot/Weekly Notes

6/17/14

ROSES-13 A.11 OCEAN VECTOR WINDS SCIENCE TEAM PROPOSAL SELECTED FOR FUNDING (email: timothy.j.lang@nasa.gov / 256-961-7861): A proposal, titled “Using scatterometer-measured vector winds to study high-impact weather events,” was selected for support by NASA’s Science Mission Directorate under NASA Research Announcement (NRA) NNH13ZDA001N-OVWST. The Principal Investigator (PI), Timothy Lang (ZP11), will work with co-investigators from the University of Alabama in Huntsville and the University of Illinois at Urbana-Champaign. The primary goal of the proposed research is to investigate the accuracy of wind retrievals from space-based scatterometers during high-impact weather events like squall lines and mid-latitude cyclones, and to understand how the winds organize and sustain these weather systems. This 4-year research project will establish a pathway for integrated science between NASA's precipitation and the vector wind research communities. Scatterometer platforms that will be used during this work include legacy SeaWinds data (e.g., from QuikSCAT), as well as current and future U.S. and international missions (Advanced Scatterometer (ASCAT), Oceansat-2 Scatterometer (OSCAT), and RapidScat). Satellite-borne precipitation radar (e.g., Tropical Rainfall Measuring Mission (TRMM) and Global Precipitation Measurement (GPM)) and advanced ground-based Doppler and polarimetric radar data also will be used in the analysis.

LIGHTNING MAPPER USING LIGHTNING IMAGING SENSOR (LIS)-OPTICAL TRANSIENT DETECTOR (OTD) RANKED #1 on Atmospheric Research MOST-DOWNLOADED LIST. (mail to: Daniel.J.Cecil@nasa.gov / 256-961-7549): “Gridded Lightning Climatology from TRMM-LIS and OTD: Dataset Description” by Dan Cecil (ZP11), Dennis Buechler (UAH/ZP11), and Rich Blakeslee (ZP11) is listed as the #1 most downloaded paper from the journal *Atmospheric Research* for the last 90 days. It has been ranked in the top ten since spring 2013, previously reaching #3 on the list. This paper documents the gridded lightning climatology products made available from MSFC, with examples of results from the period 1995-2010. Both the LIS and OTD instruments were developed by MSFC.