ZP11 Weekly Notes
7/29/15

PRESENTATION AND AWARD AT THE NASA PRECIPITATION MEASUREMENT MISSIONS SCIENCE TEAM MEETING (email: timothy.j.lang@nasa.gov /256-961-7861): Timothy Lang (ZP11) presented a poster at the NASA Precipitation Measurement Missions Science Team Meeting, which occurred during 13-17 July in Baltimore, Maryland. The poster was titled "AMPR and radar observations from IPHEx: Data quality control and product generation," and also featured fellow ZP personnel Brent Roberts, Paul Meyer, and Anthony Guillory as co-authors. The poster discussed the analysis of observations from the Integrated Precipitation and Hydrology Experiment (IPHEx), a NASA Global Precipitation Measurement (GPM) ground validation (GV) campaign that occurred during late spring of 2014 in North Carolina. Marshall's Advanced Microwave Precipitation Radiometer (AMPR) flew on the NASA ER-2 during this experiment, and was a featured part of the presentation. AMPR's next flight opportunity is the Olympic Mountain Experiment (OLYMPEX), another GPM GV campaign that will happen late this fall in western Washington State. Timothy Lang and the rest of the GPM Post-Launch Team (which includes many NASA and other scientists/staff), also collectively received a NASA Group Achievement Award at the PMM meeting, "for exceeding all expectations for GPM operations, data processing, algorithm performance, science impact, and public outreach within 1 year after launch."

OPEN SOURCE RADAR SOFTWARE PROJECTS DEVELOPED AT MARSHALL ADDED TO OFFICAL NASA CODE REPOSITORY (email: timothy.j.lang@nasa.gov /256-961-7861): Three new open source software projects developed by Timothy Lang (ZP11) were added to the official NASA code repository, and are now available via code.nasa.gov and github.com/nasa. The projects are: Python Interface to Dual-Pol Radar Algorithms (DualPol; https://github.com/nasa/DualPol), which facilitates precipitation retrievals (e.g., hydrometeor type, precipitation rate, precipitation mass, particle size distribution information) from polarimetric weather radar data; Single Doppler Retrieval Toolkit (SingleDop; https://github.com/nasa/SingleDop), which will retrieve two-dimensional low-level winds from either real or simulated Doppler weather radar data; and Python Polarimetric Radar Beam Blockage Calculation (PyBlock; https://github.com/nasa/PyBlock), which will calculate and suggest corrections for beam blockage by obstacles (e.g., buildings, mountains, trees) in polarimetric weather radar data.