Graduate Research Assistant Position Opening on Satellite Remote Sensing of Precipitation

The Hydrometeorology and Remote Sensing Lab (http://hydro.ou.edu) at The University of Oklahoma (OU)/National Weather Center (http://nwc.ou.edu) is seeking an enthusiastic graduate student to work on satellite remote sensing of precipitation. The HyDROS group is actively involved in NASA’s next space mission called the Global Precipitation Measurement (http://pmm.nasa.gov/GPM), to be launched in early 2014. Previous studies from the group have demonstrated the potential of using rainfall estimates from NOAA/NSSL’s National Mosaic and Quantitative Precipitation Estimation (NMQ/Q2) system (http://nmq.ou.edu) to identify and quantify specific errors with space-based measurements.

The NASA-funded project will utilize data from the NMQ/Q2 system to improve the monitoring of precipitation from space at a global scale. Specifically, the work will consist in performing detailed rainfall comparison analyses between ground-based radars and several space sensors for improved understanding and quantification of precipitation processes from space. Then, the project will take advantage of the newly upgraded dual-polarimetric radar observations from NEXRAD as well as GPM’s dual-frequency radar measurements from space. The combination of these unique measurements will provide new insights for hydrometeor types, particle size distributions, and cloud microphysical processes. The selected student will join an enthusiastic team of about 30 people including several other students working on various hydrometeorology topics.

Candidates for this position should have knowledge and/or experiences with radar/satellite remote sensing, hydrology, atmospheric science/meteorology and statistics. They should have good oral and written communication skills and excellent teamwork capability. Experience with large datasets is recommended. Familiarity with programming languages (Fortran/C/Matlab/Python/R-statics/Web, etc.) and Unix/Linux system is desirable. The work will be co-supervised by Prof. Yang Hong (OU; yanghong@ou.edu) and Dr. Jonathan J. Gourley (NSSL; jj.gourley@noaa.gov). You are welcome to contact us for more details. Applications will be accepted beginning now until the position is filled.