

The Cooperative Institute for Meteorological Satellite Studies (CIMSS) at the University of Wisconsin-Madison is offering a an atmospheric science Researcher Position to provide leadership, satellite meteorology expertise, and meteorological support for the GOES-R Proving Ground efforts based at the NOAA/NWS Aviation Weather Center (AWC) in Kansas City, Missouri.

Position Description

The Cooperative Institute for Meteorological Satellite Studies (CIMSS) at The University of Wisconsin-Madison is seeking an atmospheric scientist (Researcher series) to provide leadership, satellite expertise, and meteorological support for the GOES-R Proving Ground efforts based at the National Weather Service (NWS) Aviation Weather Center (AWC) in Kansas City, Missouri. The UW/CIMSS position will be embedded within the NOAA Aviation Weather Testbed (AWT) at the AWC. The AWT provides the infrastructure and facilities to develop, test, and evaluate new and emerging scientific techniques, products, and services. The AWT actively engages in the research-to-operations process by supporting applied research, verifying the quality and scientific validity of new techniques and products, and providing a common venue for both forecasters and researchers to engage in developing and testing state-of-the-art aviation weather services. This project will entail activities focused at maximizing the forecast value of geostationary satellite data and products, particularly activities centered on aviation weather impacts to the National Airspace System and improving the safety of flight. The incumbent will interact with NWS operational forecasters and NESDIS satellite analysts to prepare them for new satellite dependent products that will become available operationally after the launch of the GOES-R satellite series.

The principal duties of this position are:

- Serve as a “Satellite Research to Operations Liaison” at the AWC, leading GOES-R Proving Ground efforts on satellite based hazardous aviation weather products and demonstrating the unique value of satellite information as a research transition to operations liaison to forecasters;
- Serve as “implementation expert” for selected planned GOES-R products and their proxies;
- Test and validate proposed new satellite dependent products and decision aids for operational forecasters with an emphasis on exploring the value of advanced satellite derived products for observing or predicting aviation hazards (e.g., turbulence, icing, convection, ceiling, visibility, volcanic ash);
- Participate in routine experimental projects serving as the focal point for all satellite centered activities at the AWC;
- Lead in training operational forecasters on new and emerging satellite-based techniques and tools, particularly those for aviation developed or evaluated in the AWT;
- Bridge satellite-related activities between the FAA’s NextGen Weather Program and the NWS;
- Represent the GOES-R effort within the AWT by contributing to formal scientific publications or attending off-site conferences, symposia, and aviation weather-related outreach events;

- Develop synergy and shared accomplishments with the GOES-R Proving Ground at the Hazardous Weather Testbed (HWT) in Norman, Oklahoma and the NWS Proving Ground at the NWS Training Center (NWSTC) in Kansas City, Missouri;

The minimum qualifications for the position are:

1. A PhD degree or a Master's Degree in Meteorology, Atmospheric Science or related area and at least two years experience in operational meteorology or applied research;
2. Emphasis will be placed on applicants with considerable experience in satellite meteorology and its application to short-term hazardous weather forecasting and aviation meteorology (e.g., convection, cloud microphysics relevant to icing/ceilings/visibility, turbulence, heavy precipitation, numerical models and ensemble systems, etc.).
3. Applicants should specifically identify demonstrated expertise in Satellite Meteorology and any of the following areas: Convection; Numerical Modeling; Ensemble and Probabilistic Forecasting; Aviation Meteorology and Forecasting (e.g., observing or forecasting turbulence, icing, ceilings, visibility, convection, winds at the surface and aloft, etc.); Winter Weather; Excessive Precipitation; Knowledge of the National Airspace System or NextGen; Volcanic Ash; Dispersion Modeling.
4. Excellent oral and written communication skills are highly desired and an ability to work in a collaborative team environment is required for this position.
5. Please indicate experience with: Linux (or UNIX) operating systems, programming skills (e.g., linux scripting, Java, Python, Fortran, C/C++, etc.), and meteorological display systems (e.g., McIDAS, N-AWIPS, GEMPAK, AWIPS, AWIPS2, etc.), satellite data access, formats and display, web display capability and programming (e.g., Dreamweaver, Flash, Java, PHP) and generating briefings (e.g., Powerpoint, Camtasia, web, etc.), and providing training (e.g., teaching experience, workplace briefings, etc.).

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments, and workshops; infrequent travel is expected. The incumbent will receive training and experience in the latest radar technology and warning decision-making.

The incumbent reports to the CIMSS Principal Investigator, with oversight provided by AWC Aviation Support Branch Chief and NESDIS staff scientists. Technical oversight will be provided by CIMSS staff, NWS/AWC and NESDIS meteorologists. The incumbent works under general supervision but is expected to work independently and determine action to be taken in handling all but unusual situations. This is a non-supervisory position, although the incumbent may occasionally serve as a leader of scientific or technical experiments, groups, or teams; therefore, strong teamwork and leadership skills are necessary.

The salary for this position is competitive and will be based on experience, skills, and knowledge. Information on University benefits may be found by contacting Ms. Sally Loy at sally.loy@ssec.wisc.edu