

Advertisement for NYSM-NOAA Winter Weather Project Post-Doc Position  
13 September 2021

**NEW POSTDOCTORAL SCIENTIST POSITION**

The New York State Mesonet (NYSM; <http://www.nysmesonet.org>), located at the State University of New York at Albany (UAlbany), is seeking a Postdoctoral scientist with an interest in winter weather observations, statistics and operations. This position is a new, full-time, two-year term position. The selected candidate will lead development and evaluation of a suite of new and innovative winter weather products for immediate use in National Weather Service operations.

Applicants are asked to submit electronically: (i) a curriculum vitae, (ii) a publication list, (iii) the names of three individuals who can provide a letter of reference, and (iv) a statement of professional interests to New York State Mesonet Program Manager Dr. Jerry Brotzge ([jbrotzge@albany.edu](mailto:jbrotzge@albany.edu)). The position will remain open until filled. Preference will be given to applications that are received before 1 October 2021.

**JOB SUMMARY:** The New York State Mesonet is a national leader in the collection of winter weather observations with regular measurements of snow depth, snow water equivalent, and precipitation, and derived estimates of freezing rain, snow accumulation, snow to liquid ratio, and precipitation type. The post-doctoral scientist will work closely with NYSM staff and National Weather Service personnel to evaluate and improve existing winter weather observations and analysis techniques and develop new products and visualization from these measurements, with the goal of improving situational awareness and monitoring capabilities. The scientist is expected to apply artificial intelligence, machine learning, and/or other statistical methods to develop value-added products and analyses from these core measurements and in combination with external observations and model output, and to develop new ways for communicating and visualizing these data to users. The post-doctoral position is a unique opportunity to create new winter weather products for ready integration into operations.

**REQUIREMENTS INCLUDE:**

*Education and Experience*

- A Ph.D. Degree in Atmospheric Science, Meteorology, Environmental Science, or related field from a college or university accredited by the U.S. Department of Education or an international recognized accrediting organization (equivalent combination of education/related experience accepted) within the last three years.
- Demonstrated record of research and publication and/or product development

*Knowledge, Skills and Abilities*

- Strong programming skills (Python, JavaScript, R, C, C++, PHP, Java)
- Strong visualization software skills (Matplotlib, D3, GIS, GrADS, IDV, NSL, Matlab, etc.)
- Experience with applied statistics, artificial intelligence (AI) and/or machine learning (ML).

*Recommended*

- Strong interest in winter weather.
- Strong interest in developing products for the operational community.