

## **CIWRO Research Scientist – Stormscale Convection and Radar**

The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) at the University of Oklahoma currently is seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory's (NSSL) Warning Research & Development Division on the development of new radar-based applications for investigation into tornadic thunderstorms. The incumbent will use their expertise and technical capabilities to an array of tornado-related problems, including developing new radar-based climatologies and applications for severe weather warning guidance. The position will primarily focus on the needs and goals of NOAA's VORTEX-USA Program.

The duties of the position are:

1. Apply knowledge of severe storms and radar to the development of new algorithms and models to improve tornado and severe storm detection and prediction for probabilistic severe weather warning guidance;
2. Apply knowledge of severe storms and radar to the development of new climatologies for rotating storms and tornadoes using a large, gridded radar data set and its derivatives;
3. Investigate the effect of non-WSR-88D network radars and other observations of opportunity on severe products in the Multi-Radar Multi-Sensor system;
4. Provide expertise and contribute toward investigating different tornado-related problems using a large, gridded radar data set;
5. Collaborate on scientific proposals for research related to severe storms and their attendant hazards;
6. Attend meetings and professional conferences to present research results and interact with collaborators and users;
7. Meet with collaborators and provide regular summaries of work accomplished;
8. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological, remote sensing, and computing and/or machine learning science.

The minimum qualifications for the position are:

1. Minimum PhD in Meteorology or related area;
2. Experience using radar data, including Doppler velocity and polarimetric fields, in severe storms research;
3. Experience with scientific programming on UNIX/Linux systems using a high-level language (e.g., C++, Python, Java).

Applicants should identify expertise with any of the following areas: weather radar data and principles; severe local storms and their attendant hazards; programming;

statistics; machine learning. Strong oral and written communication skills are needed for the position, including the ability to present research to various audiences and collaborate on reports and publications.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments, or workshops conducted at remote sites. Supervision will be provided by CIWRO staff. Technical oversight will be provided by CIWRO staff, NSSL scientists, and NSSL management. The incumbent will work under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees but may serve as technical team leads and supervise students.

Incumbents will have opportunities to receive training and gain expertise in the latest radar and other remote sensing technology, and, as needed by the position's technical requirements, technical skills related to programming and machine learning. Incumbents will also have opportunities for career development through resources provided by the University; more information may be found at <https://hr.ou.edu/Employees/Career-Development>.

The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at <https://hr.ou.edu/>. The position will be located in Norman, OK (<https://www.normanok.gov/about-norman>) at the National Weather Center (<https://www.ou.edu/nwc>).

To apply for the position, please forward your resume, cover letter and list of three references to:

CIWRO Careers  
University of Oklahoma CIWRO  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
ciwro-careers@ou.edu  
ATTN: VORTEX-USA Radar RS

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