

CIRES/GSD Research Associate

The Cooperative Institute for Research in Environmental Sciences (CIRES) in Boulder, Colorado and the NOAA Earth System Research Laboratory (ESRL) have an immediate opening for a research associate.

Background: The Forecast Applications Branch (FAB) of the Global Systems Division (GSD) of the Earth System Research Laboratory (ESRL) is engaged in cutting-edge research and development aimed at improved data assimilation, numerical modeling, and ensemble forecasting methods for the prediction of high impact weather events on fine time and spatial scales. FAB is seeking a candidate with specialized experience in statistical post-processing of ensemble forecasts and with strong background in ensemble forecasting and data assimilation, and a desire to become a member of a dynamic research team. The newly developed methods, if successful, will find their use in various applications including aviation, tropical cyclone, heavy precipitation, and severe weather forecasting.

Responsibilities: The candidate will contribute to achieving GSD's research and development objectives in a number of areas, including:

- Research and development aimed at improved methods for statistical post-processing of ensemble forecasts using advanced techniques (e.g., bias correction and downscaling using Bayesian algorithms)
- Test and evaluation of the newly developed statistical post-processing methods for various application areas such as tropical cyclone, heavy precipitation, aviation, and other severe weather forecasting
- Contribution to the assessment of analysis, forecast, and observational errors, including forecast error covariances as estimated from a set of ensemble forecasts
- Contribution to the development of advanced ensemble and data assimilation techniques, with an emphasis on building a unified ("hybrid") data assimilation / ensemble system.

Required Qualifications:

- Ph.D. degree in Meteorology, Applied Mathematics, or related fields with specialization in ensemble forecasting and data assimilation methods, with strong experience with statistical post-processing of ensemble forecasts
- Knowledge of and experience with probability and statistics
- Knowledge of and experience with numerical models
- Knowledge of and experience with programming languages, Fortran-90 preferred, and scripting
- Experience with Linux/Unix operating systems, display tools, MPI experience is a plus
- Demonstrated ability to work as part of a development team
- Good verbal and written communication skills

The position will be filled as a Research Associate in CIRES, University of Colorado at Boulder, and will be eligible for employee benefits, including 22 days of vacation per year. Screening will begin immediately and continue until filled.

To apply: Go to jobs@CU posting: 813447

Complete your EEO information; upload cover letter, resume/vita, including a three people to contact for references, and proof of degree (Document 1).

Job Code **GSD-1**

The University of Colorado at Boulder is committed to diversity and equality in education and employment

The University of Colorado at Boulder conducts background checks for all final applicants being considered for employment