

Climate Statistics Postdoctoral Scholar - 86241

Organization: CE-Climate & Ecosystems

The Climate & Ecosystems Division (<https://eesa.lbl.gov/our-people/division/climate-ecosystem-sciences>) at Lawrence Berkeley National Laboratory (Berkeley Lab) invites applications for a Climate Statistics Postdoctoral Scholar to join a project aimed at understanding observed changes in extreme weather: the Calibrated and Systematic Characterization, Attribution, and Detection of Extremes (CASCADE) project. Research within CASCADE advances our understanding of climate extremes and enhances our ability to attribute and project changes in extremes. You will use of world-class High-Performance Computing resources at the National Energy Research Scientific Computing center (NERSC), and it will potentially involve the use and evaluation of a new, cutting edge climate model: the Energy Exascale Earth-system Model (E3SM).

What You Will Do:

- Work closely with a team that is developing novel statistical methodology for characterizing extreme weather events and their corresponding climatology.
- Evaluate precipitation statistics, from an event-focused perspective, in observations and climate model output.
- Use advanced Earth System Models to test hypotheses about how natural variability and external forcing interact to modulate extreme weather systems.
- Author technical reports and peer-reviewed journal articles.
- Work collaboratively in a large multidisciplinary research team.
- Successfully contribute to an active intellectual environment.
- Focus on developing and/or utilizing advanced extreme value analysis and methods for a variety of weather processes and phenomena, including precipitation, temperature, and storm systems (e.g., atmospheric rivers, extratropical cyclones, tropical cyclones, and fronts).
- Characterizing correlated and multivariate extremes (both over space and for multiple variables) is of particular interest.
- Understand how natural variability and external forcings (e.g. greenhouse gasses) interact to modulate weather systems associated with extreme events.
- Contribute to the development of methods for application to observational and model-based datasets.
- Work closely with a vibrant, multidisciplinary team that includes experts in atmospheric science, statistics, and computer science.

What Is Required:

- Recent Ph.D. in statistics, applied mathematics, computer science, or a closely related field.
- Demonstrated ability to perform comprehensive statistical analyses making use of different subsets of simulations, evaluation datasets, and advanced analysis techniques.
- Demonstrated proficiency with R and other programming languages.
- Demonstrated excellent oral and written communications skills for presentation of research.
- Ability to work effectively in a large and integrated team.
- Experience in extreme value analysis, weather/climate phenomena, and development of statistical methodology.

The posting shall remain open until the position is filled.

Notes:

- This is a full time, 2 year, postdoctoral appointment with the possibility of renewal based upon satisfactory job performance, continuing availability of funds and ongoing operational needs. You must have less than 3 years paid postdoctoral experience. Salary for Postdoctoral positions depends on years of experience post-degree.
- Full-time, M-F, exempt (monthly paid) from overtime pay.
- This position is represented by a union for collective bargaining purposes.
- Salary will be predetermined based on postdoctoral step rates.

- This position may be subject to a background check. Any convictions will be evaluated to determine if they directly relate to the responsibilities and requirements of the position. Having a conviction history will not automatically disqualify an applicant from being considered for employment.
- Work will be primarily performed at: Lawrence Berkeley National Lab, 1 Cyclotron Road, Berkeley, CA.

How To Apply

Apply directly online at <http://50.73.55.13/counter.php?id=154963> and follow the on-line instructions to complete the application process.

Berkeley Lab (LBNL, <http://www.lbl.gov/>) addresses the world's most urgent scientific challenges by advancing sustainable energy, protecting human health, creating new materials, and revealing the origin and fate of the universe. Founded in 1931, Berkeley Lab's scientific expertise has been recognized with 13 Nobel prizes. The University of California manages Berkeley Lab for the U.S. Department of Energy's Office of Science.

Equal Employment Opportunity: Berkeley Lab is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or protected veteran status. Berkeley Lab is in compliance with the Pay Transparency Nondiscrimination Provision under 41 CFR 60-1.4 (<https://www.dol.gov/ofccp/PayTransparencyNondiscrimination.html>). Click here (<https://www.dol.gov/ofccp/PayTransparencyNondiscrimination.html>) to view the poster: "Equal Employment Opportunity is the Law".