



Postdoctoral Fellowship

Los Alamos National Laboratory

Impacts of Climate Change on the Hydrologic Cycle in the Southwest United States.

Summary: A postdoctoral position is available within the Theoretical Division to develop and apply a regional climate model of the Southwest United States (SWUS). The work will focus on the use of a high-resolution atmospheric model to characterize the regional aspect of anthropogenic climate change. Foci will include the characterization of the regional hydrologic cycle, the sensitivity of the regional hydrologic cycle to increasing greenhouse gases and the sensitivity of surface vegetation to changes in the regional hydrologic cycle. The work will include participation in a project-wide impacts analysis of regional climate change on vegetation survival and mortality throughout the SWUS. The successful applicant will work within an interdisciplinary team of staff members, postdocs and graduate students focused on improved simulation of regional climate change. The postdoc will work closely with members of LANL's Climate Modeling group, members of LANL's Earth and Environmental Sciences Division, the University of New Mexico and the National Center for Atmospheric Research. This project is primarily a modeling, simulation and analysis project with extensive use of observational data and experimental results for model development and validation.

Required skills include experience developing and/or using numerical models of atmospheric dynamics, demonstrated ability to publish peer-reviewed papers, effective written and oral communication skills, willingness to work in a team environment, and a Ph.D. pending or received within the last five years. **Desired skills** include a background in mesoscale atmospheric dynamics, exposure to mesoscale atmosphere models, such as the Weather Research and Forecasting (WRF) model, and working knowledge of FORTRAN, C or C++.

Candidates may also be considered for prestigious Director's, Oppenheimer, Feynman or Reines Fellowships.

For more information please contact Nate McDowell (mcdowell@lanl.gov, <http://climateresearch.lanl.gov/>) and Todd Ringler (ringler@lanl.gov, <http://public.lanl.gov/ringler/ringler.html>). To be considered for the position, please send a resume and a short statement of your future research goals to Dr.'s McDowell and Ringler.