

Postdoctoral or researcher position in aerosol-climate interactions at University of California – Los Angeles (UCLA)

Prof. Jasper Kok and the Aerosol-Climate Interactions group at UCLA's department of Atmospheric and Oceanic Sciences seek applicants for a postdoctoral scholar or researcher. The successful applicant will lead one or more projects to quantify the radiative forcing of desert dust through interactions with clouds and/or radiation. This work is critical to improving predictions of climate change because dust has increased by ~40-70% since pre-industrial times, which might have produced a substantial radiative forcing of the climate system through interactions with radiation and clouds. This dust radiative forcing has not been accounted for in the recent Sixth Assessment Report or current climate models, which fail to reproduce the historical increase in dust.

Anticipated duties include:

- Modifying and using a climate model, such as the Community Earth System Model, to simulate the radiative forcing of dust through interactions with clouds and radiation
- Compiling in situ and satellite observations of dust and cloud properties to constrain model simulations
- Using an offline radiative transfer model to calculate radiative effects of desert dust through interactions with radiation
- Analyzing climate model output and performing comparisons against observations of aerosols and clouds
- Co-supervising graduate and undergraduate students
- Communicating findings in written and oral form

Desired qualifications include:

- A Ph.D. in atmospheric science, physics, engineering, or a related field by the start of the appointment
- Expertise in interactions between aerosols and radiation and ideally also aerosols and clouds
- Experience with using the Community Earth System Model or another global climate model
- Experience analyzing climate model data
- Experience using an offline radiative transfer model (optional)
- Strong mentoring skills and/or a desire to develop this skill set
- Strong quantitative skills
- Strong programming skills (ideally in python, Matlab, or Fortran)
- Strong oral and written communication skills

The salary will be competitive and commensurate with relevant experience. We particularly encourage applications from women, minorities, and other groups that are historically underrepresented in the geosciences. U.S. citizenship or residency is not required. Flexible work agreements may be made to allow for partial (but not full) off-site work at a remote location.

The Aerosol-Climate Interactions group is deliberate about providing a supportive environment for students, postdocs, and researchers of all backgrounds and engages actively with UCLA's Center for Diverse Leadership in Science. For more information about Prof. Jasper Kok's research and UCLA's Aerosol-Climate Interactions group, please visit <http://jasperkok.com>.

Interested applicants should send a CV with a cover letter, names of three references, graduate transcripts if within two years of receiving your PhD, and a summary of recent work and interests (up to one page). All applications should be submitted electronically as a single PDF document to Prof. Jasper Kok (jfkok@ucla.edu). This appointment is for one year and may be renewed pending satisfactory performance and funding availability. The start date is flexible but would preferably be between June and December of 2022. Review of applications will begin immediately and will continue until the position is filled. Only short-listed candidates will be contacted by e-mail after the selection process.

The University of California 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. For the complete University of California nondiscrimination and affirmative action policy please follow this link: <http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct>.