Post-Doctoral Position in Tropical Ocean-Atmosphere Coupled Processes

The Department of Atmospheric Science at Colorado State University invites applicants for a postdoctoral fellow position to study Warm Pool ocean-atmosphere coupled processes under the direction of Dr. Charlotte DeMott starting in Summer 2020. The successful candidate will explore how processes in the upper ocean and lower atmosphere, and their scale interactions, regulate the exchange of energy across the air-sea interface, and how biases in the ocean may affect the atmosphere, and vice versa. Budgets of heat, moisture, and momentum using the DOE Energy Exascale Earth System Model (E3SM) are expected to form the basis of this exploration, followed by comparisons to relevant observations and reanalysis products to assess model performance. New diagnostic methods developed during this study may be applied to CMIP6 model output and potentially incorporated into the PCMDI model diagnostics package. The primary focus of this study is the Madden-Julian oscillation but the successful candidate may explore additional scales, regions, or phenomena of interest.

The position will be based in Fort Collins, Colorado, where the candidate will informally interact with
large-scale climate dynamics research groups led by several CSU faculty members. The post doc will
also formally interact with Dr. Nicholas Klingaman (University of Reading) who is a Co-PI on this project.

Job expectations:
- Lead analysis of ocean-atmosphere coupled regulation of air-sea energy exchange.
- Present findings at conferences and workshops.
- Author or co-author papers describing findings for publication in peer-reviewed journals.

Required qualifications:
- PhD in Atmospheric Science, Oceanography, or a related field.
- Experience using large atmospheric or oceanic data sets (model output or reanalyses).
- Proficiency with data processing and plotting software (e.g., NCO, CDO, NCL, Python).
- Demonstrated oral and written communication skills.

Preferred qualifications:
- Familiarity with convective processes, boundary layer meteorology, and/or surface flux algorithms.
- Experience working with multi-model comparison data sets (CMIPx, WCRP/GEWEX, etc.)

For complete position announcement and qualification requirements, and to apply electronically, visit http://jobs.colostate.edu/postings/75024.

Applications will be accepted until the position is filled, however, to ensure full consideration, applications should be submitted by 11:59pm on Friday, February 21st, 2020.

Colorado State University is an EO/EA/AA employer and conducts background checks on all final candidates.