Position in marine atmospheric boundary layer fog

The Environmental Fluid Dynamics Group within the Civil and Environmental Engineering and Earth Sciences Department (CEEES) at the University of Notre Dame is seeking a PhD student or a postdoctoral researcher in the area of computational atmospheric boundary layer turbulence and fog/cloud dynamics. As part of a project funded by the Office of Naval Research, advanced numerical techniques based on large eddy simulation (LES) will be joined with field observations of coastal marine fog formation and dissipation. The goal is to study basic transport, thermodynamic, and microphysical mechanisms with aims of improving predictive capabilities at NWP scales. Elements of model and algorithmic development, numerical experimentation, fluid mechanics, atmospheric physics, and verification/validation against observational data will each play a role. The researcher will participate in the field campaign measuring marine boundary layer turbulence and fog properties in addition to leading numerical efforts on turbulence/fog interaction.

Experience or interest in computational fluid dynamics, turbulence, numerical modeling, large eddy simulation, and/or atmospheric science is preferred. Candidates should preferably have degrees in mechanical engineering, civil and environmental engineering, physics, atmospheric science, meteorology, or related discipline.

The duration of the position is either (a) 2 year postdoctoral position or (b) a full 4-5 year PhD student position. Applications will be accepted until the position is filled. The desired start date is during the summer of 2018. Interested candidates should send a current CV, 1 recent publication, and a list of references to Prof. David Richter at David.Richter.26@nd.edu. Questions regarding this position should be sent to this address as well. For further information on the research being done in this group, visit http://www.nd.edu/~drichte2.

The University of Notre Dame seeks to attract, develop, and retain the highest quality faculty, staff, and administration. The University is an Equal Opportunity Employer, and is committed to building a culturally diverse workplace. We strongly encourage applications from female and minority candidates and others that will enhance our community. Moreover, Notre Dame prohibits discrimination against veterans and qualified individuals with disabilities, and requires affirmative action by covered contractors to employ and advance veterans and qualified individuals with disabilities in compliance with 41 CFR 60-741.5(a) and 41 CFR 60-300.5(a).