

2 PhD + 1 PostDoc positions on coupled Greenland ice sheet and climate modeling with CESM-CISM

Job description

The research team will investigate past, present and future interactions between the Greenland ice sheet (GrIS) and the climate system with the Community Earth System Model (CESM, <http://www2.cesm.ucar.edu/>) coupled to the Community Ice Sheet Model version 2 (CISM2, <http://oceans11.lanl.gov/cism/index.html>). CESM is a global climate model capable of realistic simulation of GrIS surface mass balance, including explicit calculations of melt and refreezing. The offered projects will participate in the International Model Intercomparison Project 6 (ISMIP6).

The topics for these positions are: 1) Future GrIS evolution up to A.D. 2300: surface mass balance processes and coupling with the atmosphere; 2) The future multi-century coupled GrIS and climate evolution; and 3) GrIS and climate coupling during the last interglacial (127,000 years BP).

Qualifications

PhD applicants should have a strong background in meteorology, oceanography, Earth Sciences or Physics at MSc level, experience with FORTRAN90 and geophysical models and Unix-Linux environments. Experience with CESM, CISM or similar climate and/or ice sheet models is a plus. Good English oral and writing skills are required.

Postdoc applicants should have a PhD on Earth Sciences, meteorology, oceanography or glaciology and experience in climate and/or ice sheet modeling. Excellent skills in FORTRAN90 programming, Linux/Unix shell scripting, and handling/visualization of large model output are necessary, as well as in oral and written English.

We offer

Full-time positions during four (PhD) and three (Post-Doc) years. Funding is provided from the ERC-awarded (<https://erc.europa.eu>) project “CoupledIceClim”.

<http://www.tudelft.nl/en/current/latest-news/article/detail/erc-starting-grant-voor-onderzoek-naar-smeltend-groenlands-ijs/>

The research team will work at the Department of Geoscience and Remote Sensing, Delft University of Technology, The Netherlands (www.grs.citg.delft.nl). The team will collaborate with the Ice and Climate group of IMAU (Utrecht University, The Netherlands), and scientists from the National Center for Atmospheric Research (NCAR) and Los Alamos National Lab (LANL), in the US.

Application

Please send a letter of motivation, curriculum vitae and (email) addresses of two referees to Miren Vizcaino at M.Vizcaino@tudelft.nl with Subject: “ERC-CoupledIceClim positions”, at the latest by May 31st 2016. Starting date is between June 1st and October 1st 2016.