

Netherlands:3 PhD Positions in Atmospheric Science

The Faculty of Civil Engineering and Geosciences of Delft University of Technology (TU Delft) provides leading international research and education, with innovation and sustainability as central themes. Research and education are closely interwoven and address societal challenges. The Faculty consists of the departments of Transport and Planning, Structural Engineering, Geoscience and Engineering, Water Management, Hydraulic Engineering, and Geoscience and Remote Sensing.

The Department of Geoscience and Remote Sensing conducts a research programme in the disciplines of geodesy and remote sensing, natural geophysics, and climate and atmospheric sciences. It emphasises the interrelation between new observational techniques and applications in engineering and geosciences, including the development of ground-based, airborne, and space-borne methods and models. The department has an internationally leading role in research related to Earth-oriented space research, satellite geodesy, gravity field modelling, natural hazards, geodynamics and climate studies.

Job description

Do even the smallest clouds simply drift with the wind? This question is at the heart of the recently funded ERC Starting Grant project CloudBrake, which strives to understand the impact of momentum transport by cumulus convection on large-scale patterns of winds. CloudBrake's goal is to expose relationships between clouds and winds to estimate the amount of cumulus friction in different boundary layer flows, which is important for numerical weather prediction, climate modelling, and wind energy design. The research carried out by the three PhD candidates will combine high-resolution modelling with the analysis of existing and new measurements made from the ground, from aircraft and from space. The focus is on understanding small-scale processes, which are then used to conceptualise important mechanisms that matter for large-scale circulations, which will be tested in large-scale models.

Are you about to graduate or have you recently graduated? Do you have a keen interest in understanding small-scale physical processes within the Earth system, and can you communicate your progress and collaborate within a young team? We are looking forward to your application!

During your appointment you will perform individual research as part of a team with a broader goal, interact with researchers at climate modelling institutes, give presentations at international conferences and write publications, contribute to the planning and execution of a flight campaign and enrol in the faculty's Graduate School to develop your personal soft skills.

Requirements

Applicants should have

a Master's degree in physics, mathematics, meteorology, Earth system science, or a related field.

excellent communication skills demonstrated through a written article or thesis, a public presentation or personal blog.

- proficiency in written and spoken English.
- experience with data analysis, programming and/or numerical modelling.

Conditions of employment

The TU Delft offers an attractive, customisable compensation and benefits package, including a discount for health insurance and sport memberships, and a monthly work costs contribution. Flexible work schedules can be arranged. An International Children's Centre offers day care, before- and after-school care and an international primary school. Dual Career Services offers support to accompanying partners. Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities.

As a PhD candidate you will be enrolled in the TU Delft Graduate School. The TU Delft Graduate School provides an inspiring research environment; an excellent team of supervisors, academic staff and a mentor; and a Doctoral Education Programme aimed at developing your transferable, discipline-related and research skills. Please visit <http://graduateschool.tudelft.nl/> for more information.

Information and application

For more information about this position, please contact Dr. Louise Nuijens, phone: +31 (0)15-2785956, e-mail: louise.nuijens@tudelft.nl. To apply, please e-mail a detailed CV and a letter of application by 31 January 2017 to Recruitment-CiTG@tudelft.nl.

Your application should include (a) your CV, (b) your letter of motivation, including your possible start date and the names and contact information of at least two references (max. 2 pages), and (c) copies of your degree and your transcripts (courses and grades). Please refer to vacancy number CITG16-46 in your application. Applications will be reviewed in January and early February, and interviews will be held soon thereafter. The appointment will have a start date between Feb - June, or as soon as possible.

Tentative Submission Deadline : 31 January 2017

[Further Information](#)