Vacature 72182

Vacaturenummer: 72182

Ordernummer:

Faculteit / Dienst: Faculteit Geowetenschappen

Omschrijving faculteit / dienst: The Faculty of Geosciences offers education and research concerning the geosphere, biosphere, atmosphere and anthroposphere. With a population of 2200 students (BSc and MSc) and 425 staff, the faculty is a strong and challenging organisation. The faculty is organised in four departments: Innovation and Environmental Sciences, Earth Sciences, Physical geography, and Human Geography and Urban and Regional Planning.

Further information concerning the faculty is available at the website http://www.geo.uu.nl/ while general information about Utrecht University can be found at www.uu.nl.

The Faculty of Geosciences is looking to appoint a:

Functie titel: PhD researcher "Improving near real-time flood forecasting using multi-sensor soil moisture assessment"

Omvang: 1,0 fte

Salaris: starts with € 2,042.- gross per month in the first year and increases to € 2,612.- gross per month in the fourth year of employment

Functie-inhoud: This four-year PhD position is offered within the Department of Physical Geography in Utrecht, Netherlands, in collaboration with the EC Joint Research Centre, Ispra in Italy, Technical University of Vienna in Austria, and the Study of the Biosphere from Space (CESBIO), Toulouse in France. Major flooding events have scourged various areas in Europe in the last decennia causing significant economic and emotional damage. Climate change models predict increasing weather extremes and hence, an increase in the magnitude and frequency of flooding. The European Commission is developing and testing a European Flood Forecasting System (EFAS). The EFAS approach is quasi operational but lacks reliable input data on the soil moisture status which is an important variable triggering surface runoff.

The candidate is expected to investigate the possibilities of using satellite information derived from ERS/MetOp and SMOS to quantitatively map soil moisture status and to link this information to the LISFLOOD model used for EFAS. Error propagation and data assimilation methods will be applied for improving and evaluating the modelling results. The study must yield insight into what satellite-derived soil moisture products and/or combinations of datasets are best used for improving flood forecasts. Information concerning the research activities of our group can be found at http://www.geog.uu.nl/dejong, concerning the modelling approaches on http://p http://pcraster.geo.uu.nl/ and http://floods.jrc.ec.europa.eu/, and concerning the hydrological research at http://education.geo.uu.nl/mschydrology/.

The place of work will be Utrecht University although the candidate is expected to work for several weeks or months at the partner institutes. The candidate is expected to closely communicate with the partners, other PhD candidates and the principal investigator and to publish in international peer-reviewed journals. The PhD candidate is also expected to write a (paper) PhD thesis within the project duration of four years.

Functie-eisen: Highly motivated candidates with an MSc degree in hydrology, physical geography, civil engineering, geology, applied mathematics or a related field are encouraged to apply. The candidate should have a proven record in geographic hydrology, spatio-temporal modelling, earth observation, programming and/or data assimilation. The candidate should be proficient in English and have excellent scientific writing and presenting skills. The candidate is an enthusiastic team player and has good organisational and communicational skills.

Arbeidsvoorwaarden: The PhD candidate is offered a one-year fulltime position with -at good performance- the prospect of an extension with a maximum of three years (in total 4 years fulltime). The salary starts with € 2,042.- gross per month in the first year and increases to € 2,612.- gross per month in the fourth year of employment at fulltime appointment.

The extent of this fulltime position is 38 hours per week (1,0 fte). The salary is supplemented with a holiday bonus of 8% and an end-of-year bonus of 8.3% per year. In addition we offer a pension scheme and flexible employment conditions. Conditions are based on the Collective Labour Agreement of the Dutch Universities.

More information about employment conditions can be found on the website.

Contactpersoon: Additional information about the vacancy can be obtained from Prof Dr S.M. de Jong, e-mail: s.dejong s.dejong@geo.uu.nl

Datum aanmelding: 14-07-2010

Datum start:

Datum eind:

Soll. richten aan: Applications, including a statement of research interests, a curriculum vitae, a list of publications, and contact information of three referees should be submitted before **October 1st, 2010** to:

Faculty of Geosciences, Personnel Department
P.O. Box 80.115
3508 TC Utrecht
The Netherlands

or (preferably) by e-mail to: PenO@geo.uu.nl.

Please mention vacancy number **72182** in all communications,
and mention where you saw this advertisement first.

100 woorden tekst:

In welk medium:

Plaatsingsdata:
ublad:
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Taal: Engels

Personeelsoort: WP