



PhD in Climatology at Complutense University of Madrid

Applications by late 2016 (estimated)

Start date: Early 2017 or as soon as possible thereafter

The [STREAM](#) (Stratosphere and Tropospheric REsearch And Modeling) group of at Complutense University of Madrid (UCM) and the Geosciences Institute (IGEO) has a long standing experience in the fields of dynamics of the middle atmosphere, tropospheric climate variability and climate reconstruction of the last 500 years. The group has demonstrated involvement in a number of international activities and a dense network of collaborations.

Recent advances in climate research have demonstrated the influence of the stratosphere on the surface climate, with potential implications for future climate projections. However, the limited period of instrumental observations prevents us from quantifying its contribution to modulating the climate responses to internal (e.g., El Niño Southern Oscillation) and external (volcanic and solar) forcings.

We are seeking a PhD student to work in Madrid, Spain within the project "**PALEOSTRAT: PALEOmodelling from a STRATospheric perspective**" funded by the Spanish Government. The main goal of this project is to better characterize the role of the stratosphere in the surface climate responses to internal and external natural forcings.

The PhD student will use model output from a suite of fully-forced simulations of the Last Millennium with a state-of-the-art Climate Model, which only differ in the representation of the stratosphere. The aim of this studentship is to quantify the impact of the middle-atmosphere on the climate and gain insight into the dynamical mechanisms.

Prerequisites and highly-recommended skills

1. A M.Sc. degree or equivalent in meteorology.
2. Some experience in at least one of the following areas matching the position: physics and chemistry of the atmosphere, meteorology and atmospheric dynamics.
3. Good knowledge of mathematical fundamentals and programming skills in a high-level language (IDL, Matlab, Python, etc...).
4. Knowledge of Unix/Linux systems.
5. Fluency in English (writing and speaking).
6. Some experience in numerical climate and chemistry modeling will be of great advantage.



Conditions

- The initial appointment is for one year. Assuming satisfactory performance, it will be extended up to three additional years.
- The salary is ~14000 €/year (after taxes). Additional funds are available for short research stays abroad (up to a total of 12 months during the 3-year period) and conferences attendance.
- The Ph.D Thesis will be done in Madrid, Spain, under the supervision of Dr. Natalia Calvo and Dr. David Barriopedro.

Applications

The following documents should be sent to Dr. Natalia Calvo (nataliac@fis.ucm.es) and Dr. David Barriopedro (dbarriop@fis.ucm.es):

1. A short CV
2. A letter of motivation outlining research interests
3. The names and contact information of two potential referees who can provide recommendation letters (optional).

Candidates will be shortlisted around the last quarter of 2016. Afterwards, they will be asked to submit a formal application electronically through the Spanish government's MINECO website: <http://www.mineco.gob.es/>. This process (including the opening and closing of the call) is subject to the rules of the Spanish FPI fellowship call. Estimated start date is early 2017.

For informal enquiries concerning this position and the selection process, please also contact nataliac@fis.ucm.es and dbarriop@fis.ucm.es