





Postdoctoral Research position in Paleoclimate Modelling

LabexMER and the LOPS research lab are inviting application for a post-doctoral position in Paleoclimate Modelling.

Scientific context:

The context of the proposed position is a collaborative project (Past Oceanic Currents and Sedimentary Deposits, funded by the LabexMER) between geodynamicians (Daniel Aslanian), sedimentologists (Marina Rabineau) and physical oceanographers (Camille Lique, Olivier Arzel, Thierry Huck) at Ifremer and the European Institute for Marine Studies (IUEM) in Brest, France, in collaboration with Yannick Donnadieu (LSCE, Paris and CEREGE, Aix) and David Ferreira (Reading, UK).

The successful postdoctoral researcher will have to take in charge the setup of a coupled ocean-atmosphere-sea-ice model for paleoclimate modelling of the Ypresian (~55Myr ago). The bulk of the work consists in (i) combining the realistic bathymetry, coastlines, forcings, and initial conditions for this period into the numerical model configuration, (ii) run the model and test the solutions sensitivity mostly in terms of reconstructed large-scale ocean circulation, (iii) interpret and validate the results. Further investigations will focus on the ocean circulation sensitivity to specific oceanic gateways closure. The expected coupled model is the MIT-GCM, but alternatives could be considered depending on the postdoc experience (there is significant expertise with NEMO ocean and ice components at LOPS).

Expected profile

Candidates should hold a PhD in physical oceanography, paleoceanography, atmospheric science, climate or paleoclimate science, and have strong skills in numerical modelling and model output analysis. Knowledge in applied mathematics, experience in programming with Fortran, data analysis and statistics with MatLab, Python, or Ferret are expected. Experience in paleoclimate or paleoceanography research would be an asset. Motivation, autonomy, rigor, critical mind, capacity to work in a multidisciplinary team, ability to communicate in English are all required.

Type of contrat

- Contract period: 18 months initially, plus one additional year subject to success with ongoing funding applications.
- Start from: November 1st, 2017 or earlier depending on funding.
- Location: Laboratoire d'Océanographie Physique et Spatiale (LOPS, UMR 6523 CNRS IFREMER IRD UBO), IUEM, Brest, France. http://www.umr-lops.fr/

How to apply?

Applicants should submit a cover letter, CV, and contact information for two references by email to Thierry Huck (email: Thierry.Huck@univ-brest.fr + cc at : contact-labexmer@univ-brest.fr).

Additional information or questions can be addressed similarly to Daniel Aslanian, Camille Lique, or Marina Rabineau.

Deadline for application is: September 30th, 2017

Keywords

Paleoceanography, paleoclimatology, numerical modelling