Max-Planck-Institut für Meteorologie

The Max Planck Institute for Meteorology (MPI-M) is a multidisciplinary centre for climate research located in Hamburg, Germany. It has an internationally recognized reputation in climate modeling. The MPI-M is located in the heart of one of Europe's most livable and vibrant cities. It provides a highly international and interdisciplinary environment for conducting scientific research as well as access to state-of-the-art scientific and computational facilities.

Within the European Horizon 2020 Work Programme funded collaborative projects *"Blue-Action: Arctic Impact on Weather and Climate"* (http://www.blue-action.eu/index.php?id=3904) and *AtlantOS,* the department for The Ocean in the Earth System (Director's research group) is looking for a

Postdoctoral Scientist/Research Scientist (m/f, W037)

The overarching goal of the *Blue-Action* project is to improve our current ability to describe, model and predict Arctic climate change and its impacts on Northern Hemisphere climate, weather and their extremes. Within the Blue-Action research consortium, the advertised position focuses on investigating key lower latitude oceanic and atmospheric drivers of the past, current and future Arctic climate changes and on developing ways to enhance interannual-to decadal predictions in the Arctic and over the Northern Hemisphere. This will be done using observational/reanalyzes data sets, grand ensembles of coupled model simulations, coordinated pacemaker experiments, and suites of initialized climate predictions. The performance skill of current and next generation (partly done within CMIP6 DCPP, Blue-Action, and other relevant projects) of seasonal-to-decadal predictions will be assessed with a strong emphasis on attribution – i.e., assessing the representation of mechanisms responsible for the two-way connections between the Atlantic region and the Arctic. The impact of identified mechanisms will be further assessed through coordinated multi-model retrospective seasonal-to-multiannual hindcast experiments for selected case studies.

The projects Blue Action and AtlantOS have received funding from the European Union's Horizon 2020 research and innovation programme grant agreement No. 727852 and 633211.

Responsibilities

- Develop original research, analysis and experimental strategy to address research questions relevant for the Blue-Action project objectives as described above
- Conduct and analyze coordinated sensitivity and hindcast climate simulations with the Max Planck Earth System Model aiming at improving our understanding of Arctic-Mid-latitude-Tropics bidirectional linkages at seasonal-to-decadal time scale and their potential predictability, with a focus on North Atlantic/Eurasian climate extreme events.
- Contribute to work package and task(s) coordination, in particular those lead by MPI-M, as well as to the writing and assembling of task reports.
- Disseminate the results through publications in high-impact peer-reviewed journals and presentations at project annual meetings, national and international conferences.
- Attend training, coordination, and dissemination activities that are organized by Blue-Action.

Qualifications / experience

- A PhD in Meteorology, Oceanography, Physics, or a related area is required for this position.
- Good knowledge of climate dynamics and predictability, in particular of atmospheric and/or ocean/sea-ice dynamics, atmosphere/ocean interactions and teleconnections.
- Experience in performing and evaluating coupled atmosphere-ocean system simulations is desired.

- Expertise in evaluating the skill of (seasonal) decadal climate predictions and initialization is an advantage.
- Programming skills in Fortran and statistical post-processing (e.g. cdo, R) and visualization software (e.g. MATLAB, FERRET, NCL, IDL, GRADS), as well as experience in handling large climate data sets.
- Good knowledge of advance statistical techniques for climate analyses. Experience in extreme events statistics.
- Ability to coordinate cross-institutional research work and reporting tasks is desired.
- Ability to work both independently and within a team.
- Excellent written and verbal communication skills in English.

Selection criteria
The selection criteria will value the qualifications, the experience and the ability of the candidates to fulfill the responsibilities of the opening as outlined above.

Employment conditions
- The position is offered for 36 months, starting date between April and June 2017.
- Payment will be in accordance with German public service positions (TVöD E14), including extensive social security plans. The conditions of employment, including upgrades and duration, follow the rules of the Max Planck Society for the Advancement of Sciences and those of the German civil service.

Selection process
A selection panel will be established. The selection will follow the rules of the Code of Conduct for Researcher Recruitment (http://ec.europa.eu/euraxess/index.cfm/rights/codeOfConduct).
The Max Planck Institute for Meteorology seeks to increase the number of female scientist and encourages them to apply. Handicapped persons with comparable qualifications receive preferential status.

How to submit your application for this post
Please submit:
- A cover letter
- A detailed curriculum vitae
- The names, addresses, and telephone numbers of two references

by uploading the documents in our online Webtool:

https://s-lotus.gwdg.de/mpg/mhmt/perso/mpim_W037.nsf/application

Deadline for applying
This vacancy has been opened on 16 February 2017. The vacancy will be keep open until filled. A first cut-off date for the collection of the applications is foreseen on **31 March 2017**. If the position is not filled, this vacancy announcement will be re-published indicating a second cut-off date.

Further information on this position
For further information, please contact Dr. Daniela Matei (daniela.matei(at)mpimet.mpg.de) and Dr. Johann Jungclaus (johann.jungclaus(at)mpimet.mpg.de). Do not forward your application to these email addresses; the application needs to be submitted through the online Webtool (see link above).

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