Postdoctoral offer in Physical Oceanography
Laboratoire d’Océanographie Physique et Spatiale (LOPS)
IFREMER, Brest.

Investigate seasonal to interannual variability of Irminger Sea abyssal waters with Deep Argo floats.

Applications for an 18-month postdoctoral position are invited from candidates with a recent PhD in physical oceanography or similar. The successful candidate will be based in IFREMER, Brest (France), and will join the “Ocean and Climate” team of the Laboratory of Physical and Spatial Oceanography (LOPS).

Project summary
The sampling of the deep ocean (>2000 m) is primarily relying on intermittent shipborne surveys along sparse trans-basin hydrographic sections that cannot capture the full spectrum of oceanic variability. To overcome this issue and reduce the associated uncertainties on heat and freshwater ocean budgets, IFREMER and LOPS contribute to an international effort for the vertical extension of the Argo network towards the abyss – the Deep Argo network – by maintaining a regional pilot array in the subpolar North Atlantic. This region is key in the climate system since it is here that surface climate signals can enter the deep ocean interior, through the formation and vertical sinking of the North Atlantic Deep Water (NADW).

As part of the European project H2020 Euro-Argo RISE, the proposed work will combine newly available Deep-Argo profiles (Figure) and other observational datasets to obtain a better quantification and understanding of NADW intra-seasonal to decadal variability in the Irminger Sea. In parallel, the quality of Deep Argo data will be evaluated through an inter comparison of three different deep sensors mounted on a single three-headed float (Figure). On top of informing on the variability of the abyssal North Atlantic and its causes, these activities will provide a significant valorization of the Deep Argo dataset as well as crucial recommendation to the international community on technological choices for the global extension of the network.

Contract duration
18 months (open until filled)

Requirements
- PhD in physical oceanography or related discipline (meteorology, applied mathematics)
- Experience in analysis of observed data sets and/or model outputs.
- Good programming skills (Matlab, Python, or equivalent).
- Skills in writing peer-reviewed scientific papers (English)

Interested candidates should send the following documents to damien.desbruyeres@ifremer.fr and virginie.thierry@ifremer.fr: Curriculum Vitae (including publication record), a statement of previous research and motivations for the present project, and contacts of at least two referees. Candidates must be within 6 years after PhD defense and must not have been employed as a postdoctoral fellow by Ifremer before.

Starting date before 31st December 2019