GEOVIDE

AN INTERNATIONAL STUDY OF WATER AND HEAT FLUXES IN THE NORTH ATLANTIC OCEAN AND LABRADOR SEA

Trace elements and their isotopes (TEIs) play a crucial role in oceans and can be used as tracers for past and modern ocean processes.

Studying how TEIs cycle has direct implications for a great deal of scientific research including into the carbon cycle, climate change, ocean ecosystems and environmental contamination.

This is the background to the international collaborative project GEOVIDE. This cruise plans to undertake oceanographic research in the North Atlantic and Labrador Sea to improve our understanding of water and heat fluxes across the OVIDE section. It seeks in particular to add to the existing information available about deep-water mass export and circulation, and to provide new information on chemical element fluxes. GEOVIDE also aims to quantify the processes which influence the cycling of TEIs in the region.

This project in the North Atlantic is the French contribution to the GEOTRACES International Study of the Marine Biogeochemical Cycles of TEIs. GEOVIDE belongs to the second part of LabexMER: A Changing Ocean. It is also linked to Equipex's Novel Argo Ocean Observing System (NAOS).

This project aims to be robust, visible and international. It is supported by the Universe, Planet, Space, Environment (UPEE) cluster in the context of Toulouse's integrated university UNITI, which held the French Initiative of Excellence label (IdEx) until 2018.

Partners

Research centers

Laboratoire des sciences de l'Environnement MARin (CNRS-LEMAR) IUEM, Brest [Project Developer]
CNRS-LEGOS Laboratoire d'Etudes en Géophysique et Océanographie Spatiales
GEOMAR : Helmholtz Centre for Marine Research, Forschungsbereich 2 : Marine Biogeochemie, FE Chemische Ozeanographie
Ifremer-LPO Laboratoire de Physique des Océans, Brest
IIM-CSIC Instituto de investigaciones Marinas del CSIC, Vigo, Spain
LSCE, CEA, Gif-sur-Yvette
MIT Massachusetts Institute of Technology, USA
University Autonom Barcelona Universitat Autonoma de Barcelone, Spain
University Oxford University of Oxford, UK
VUB Vrije Universiteit Brussel

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- Agence Nationale de la Recherche

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