Maritime safety and security



USING MARINE SEISMIC TECHNIQUES TO UNDERSTAND OCEAN PHYSICS

Ocean circulation involves relatively well-known movements, such as the Gulf Stream and its gyres, as well as smaller-scale movements, which are difficult to observe and, consequently, little understood. The latter play a crucial role, however, in energy dissipation within the ocean.

Recent observations obtained using marine seismic reflection, a technique traditionally deployed for underground prospecting, have revealed an unprecedented high-resolution view of these fine-scale movements. These preliminary results demonstrate the unique potential of this technique for physical oceanography.

The object of the SIMILA project will be twofold. First, it will optimise this technique for observing fine-scale movements. Secondly, it will analyse the observations obtained to understand the mechanisms at play.

The SIMILA project is transdisciplinary, involving geosciences, a field in which the seismic techniques have been developed, and ocean physics.



Partner

Research center

Ifremer, Brest [Project Developer]

Funder

- Agence Nationale de la Recherche

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