

The GeoFISH

Profession : trace metal clean surface sampler



Micronutrient trace metals



DT-INSU CNRS (FR)



Underwater, between stations

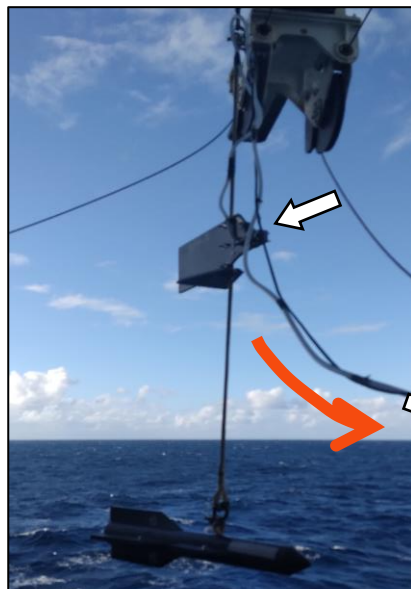


3 000 €

Professional overview

1. The **Geofish** is pulled by the side of the ship at speeds of **6-12 knots**, taking in water through a hose.

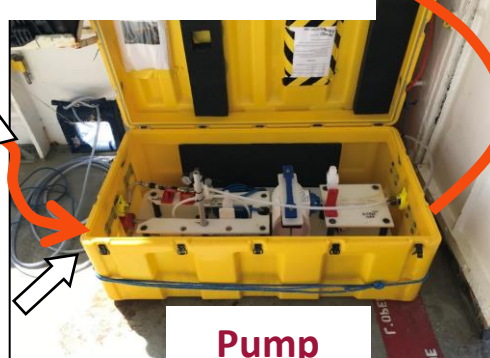
2. The **water flow** is maintained by a pump and transported to the « **bubble** » (laboratory)



Seawater intake



Seawater outlet



Pump

3. The bubble is a **clean environment** for the filtration of the sea water.



Particulate trace metals
(0.45µm filter paper)



Dissolved trace metals
(0.2 µm filtered seawater)

4. The trace metal analysis is done **on land**.

Education

- 2020 : Creation of this GeoFISH

Skills highlights

- The GeoFish is made from material with the **least metal possible**
- All parts have been **bleached** to get rid of trace metals
- Possibility of **continuous sampling** (Underway System)

Interests & curiosities

River input analyses

Paleo-oceanography (e.g. Water mass analysis)

Analytical Chemistry

Geo-chemistry