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Development of a resident AUV for scientific observation

Jérôme Blandin

IFREMER, RDT, PLOUZANE, France (jerome.blandin@ifremer.fr)

The resident AUV (Autonomous Underwater Vehicle) project aims at developing an observation vehicle based on and returning from a cabled observation infrastructure on the seabed, so as to extend its observation radius without recourse to a ship. It is the mobile extension of a permanent fixed-point underwater observation system, designed for reducing the cost of *in situ* observational data, decreasing their environmental footprint and broadening their spatial range. The project has started in May 2023. It is currently focusing on de-risking the main critical building blocks associated to resident systems (docking maneuver, contactless data/power transmission, secured positioning) before launching the design of the vehicle itself. This project is part of the « technological innovation » activities of the IFREMER ScInObs project (science and innovation for subsea observatories).