

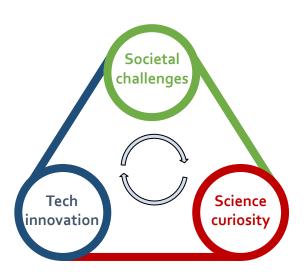








Network of seabed & water column observatories



- Facilitate the coordination and promote partnership among multi-national and large-scale observatory projects, and initiatives;
- Integrate knowledge and expertise in order to understand deep ocean's complexity and anthropogenic impacts;
- Encourage technology innovation and transfer, enhancing cooperation with industries and business;
- Engage public and boost ocean literacy through citizen science initiatives, increasing the awareness on the importance of deep ocean in Earth processes like Climate Change;
- Develop capacity building and training for research communities;
- Strengthen coherent and continuous cooperation between research infrastructures by contributing to GOOS and its deepocean component DOOS.



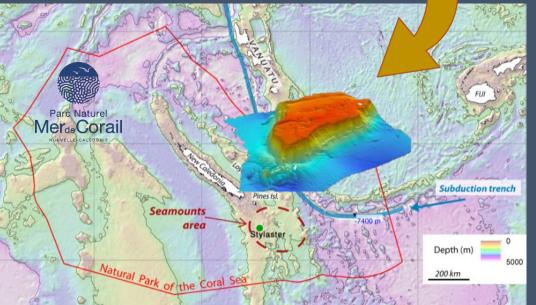
Updates & recent developments

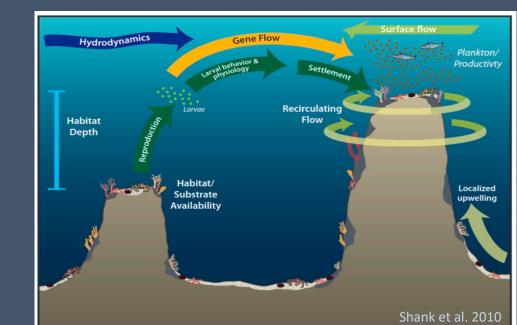
science and innovation for subsea observatories





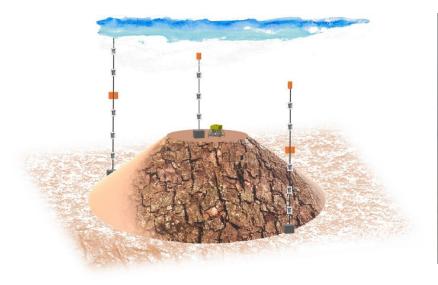
The project designs & deploys innovative multidisciplinary observation systems at two sites in the Indian (Mayotte) and South Pacific Ocean (New Caledonia).

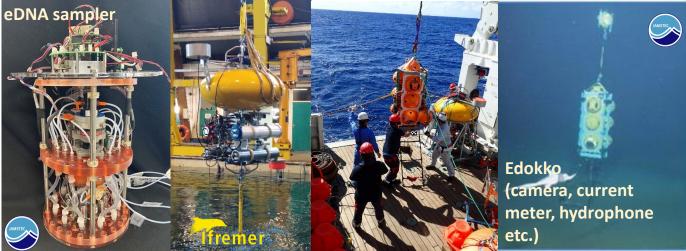






Deployment during cruise KASEAOPE-1 (May 2023)





Partners

- Mostly academics (research institutes & organisations) & coordination with relevant projects/research cruises
- Governments (Ministries), e.g. project on the national collaboration roadmaps (Fr/Jp)
- Workshops & visits to co-design & co-deliver with local communities
- Industrial partners (from commercial to cooperation, e.g. testing equipment)



Ongoing developments

Reduce:

- operating costs
- carbon footprint

Extend:

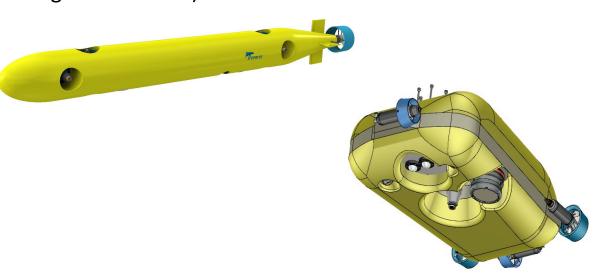
- Spatial coverage around fixed point
- Time series (repeated mission)

Resident AUV

- Repeated missions around a fixed-point seabed observation structure providing power and communication channel
- No human intervention for 12 months (ultimate target 24 months)

Moored profiler

Moored profiling system that profiles the water column along a fixed wire with one single set of sensors







With OCG networks

Programme-wise

- (enforcing) links with EMSO-ERIC (EMSO France) *OceanSite*
- Cabled network (MAMOR https://www.marmor-project.org/) SMARTCable
- AUV project *OceanGliders & OASIS*
- Research ship sharing IRSO

Institute-wise

- Euro-Argo ERIC, Argo-France
- Froos-Eoos-Goos
- OceanOPS

And beyond...