Strengthening Long-Term ecological observations in marine and transitional eLTER sites through the ITINERIS project

C. Bergami, S. Accoroni, M. Bastianini, A. Bergamasco, F. Bernardi Aubry, E. Camatti, A. Campanelli, T. Ciuffardi, G. Denti, E. Di Russo, S. Finotto, F. Grilli, I. Guarneri, C. Lombardi, A. Lugliè, F. Massa, M. Mistri, C. Munari, F. Neri, A. Oggioni, B.M. Padedda, A. Palummo, P. Penna, A. Petrocelli, P. Povero, A. Pugnetti, S. Pulina, F. Riminucci, F. Rubino, A. Sabino, C.T. Satta, M. Sigovini, S. Toller, C. Totti

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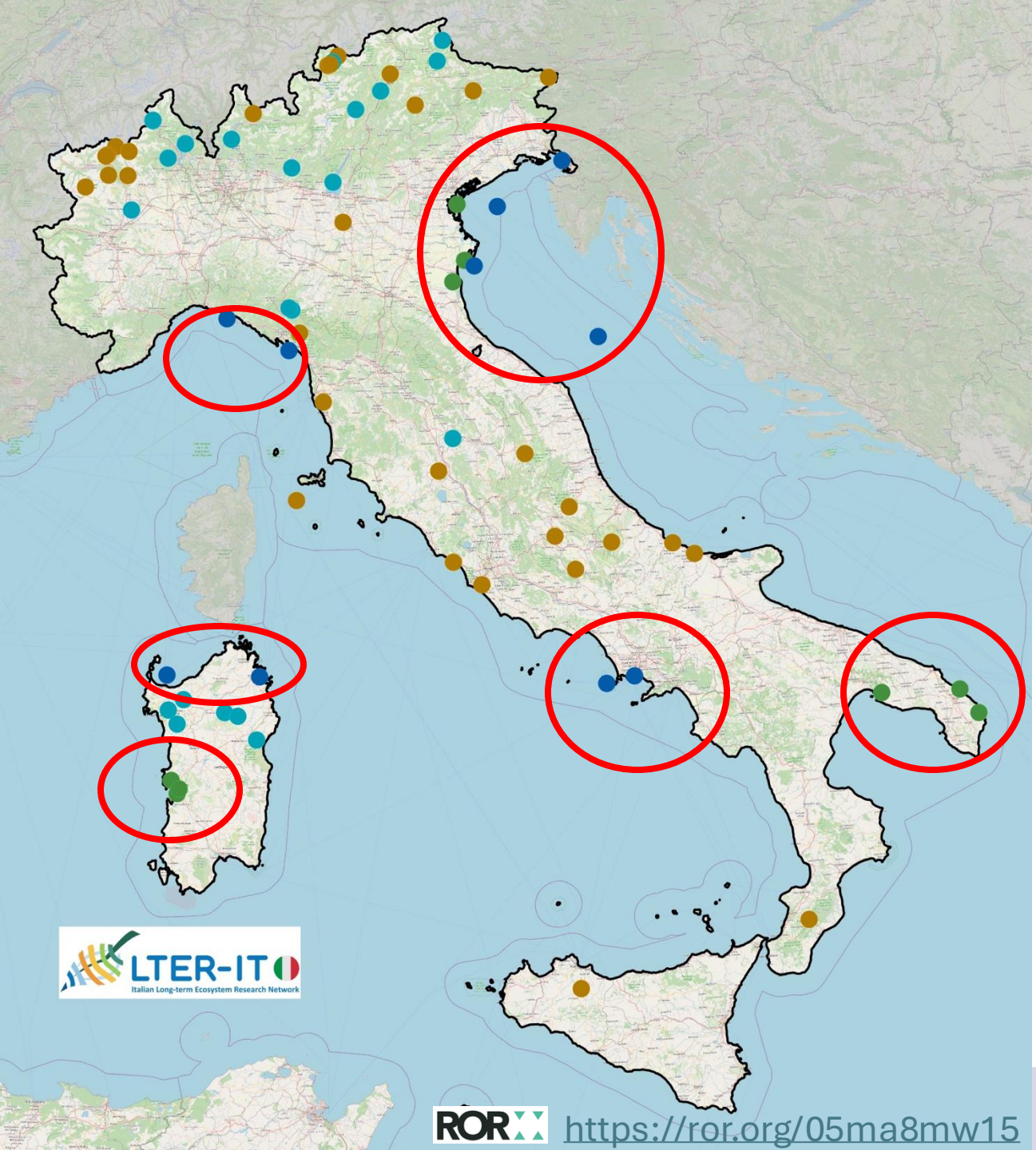


Transitional waters – Adriatic

- ✓ Lagoon of Venice *
- ✓ Po delta lagoons (2 sites) *
- ✓ Lagoons of Salento (2 sites)
- ✓ Mar Piccolo of Taranto *

Transitional waters – Tyrrhenian

- ✓ Lagoons of Sardinia (3 sites) *

Marine coastal sites – Adriatic

- ✓ Northern Adriatic sea (4 sites) * * *

Marine coastal sites – Tyrrhenian

- ✓ Gulf of Naples (2 sites)
- ✓ Marine ecosystems of Sardinia (2 sites)
- ✓ Ligurian Sea (2 sites) * *

- **Marine sites**
- **Transitional water sites**
- Fresh water sites
- Terrestrial sites

* **9 sites** implemented in the ITINERIS project

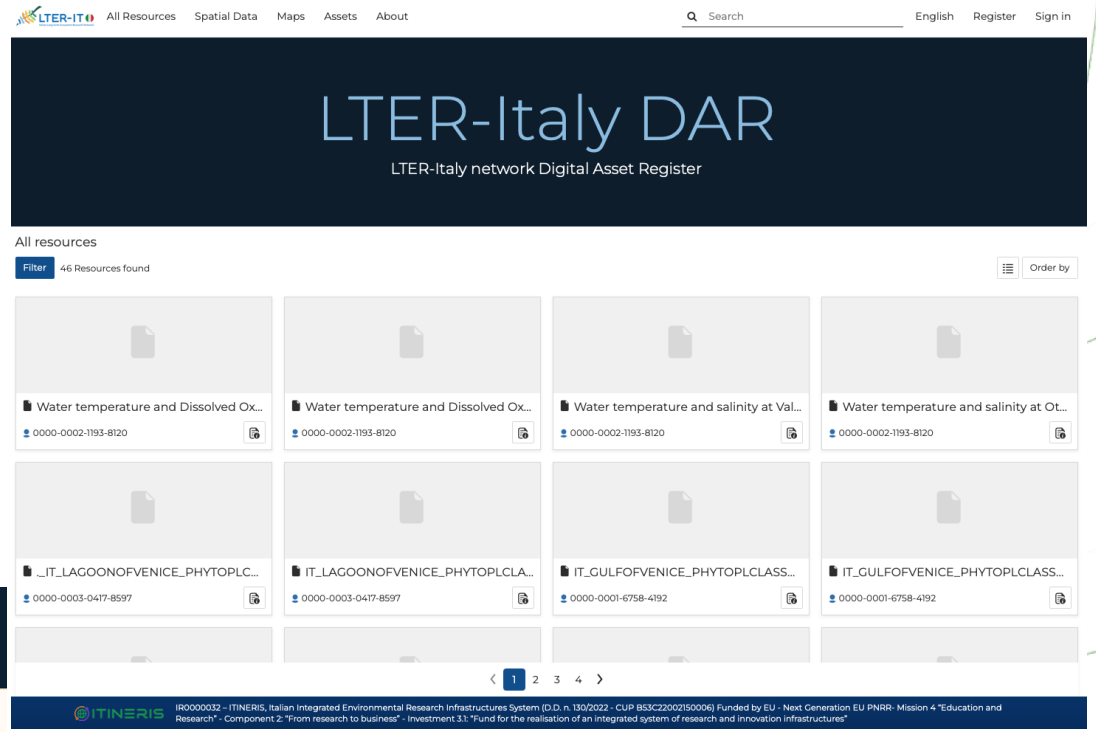
https://ror.org/05ma8mw15

Key improvements in the monitoring of biological Essential Variables

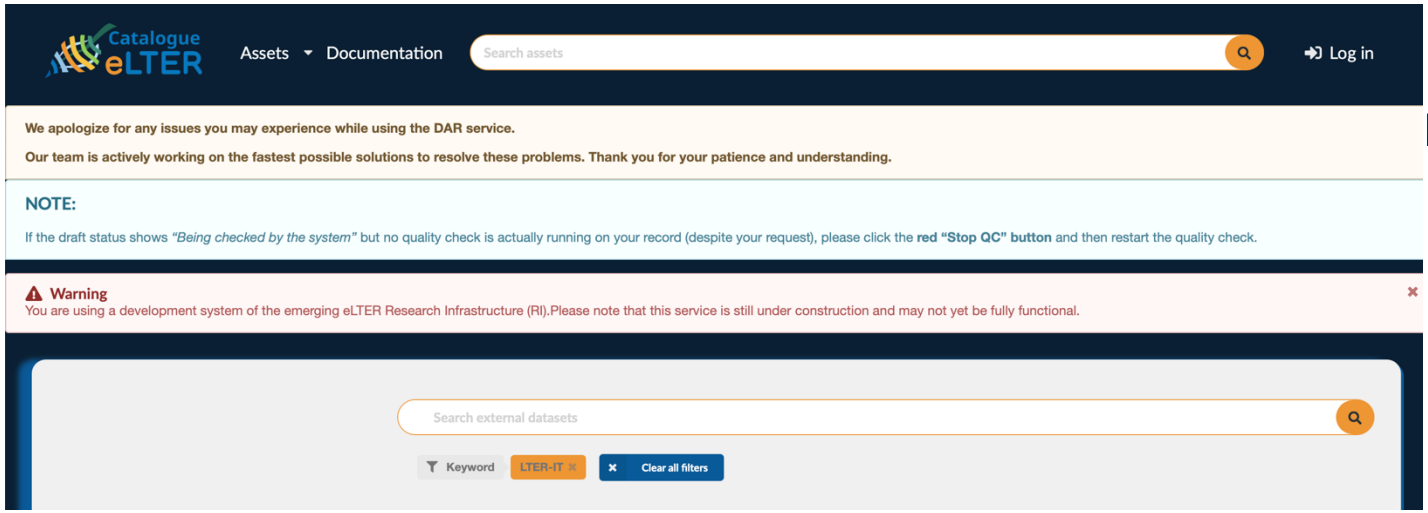
- New taxonomic groups: **innovative technologies** for the mapping and **real-time observation** of key groups (fish and gelatinous microzooplankton) using imaging systems integrated with **Automatic Identification Systems** (AIS)
- sensor based observation: automation of biological data acquisition, enabling high-resolution monitoring of **phytoplankton and zooplankton** (e.g. cytometers, UVP6, ZooScan) and supporting broad taxonomic identification
- coordinated observations across the eLTER network: deployment of shared instrumentation across multiple marine and transitional sites to improve data comparability and foster synergies (also at the european level)
- comprehensive ecosystem assessments: integration and enhancement of sensors for physical-chemical parameters strengthened the connection between oceanographic and biological/ecological data

The LTER-Italy Digital Asset Registry (DAR)

- catalogue of datasets from **marine and transitional sites of LTER-Italy** (expandable to other ecosystems)
- authentication through **ORCID**
- possibility of **DOI assignment** through CNR-Datacite service agreement
- 46 datasets (until now)
- 20 EVs (until now)
- harvesting of datasets on **eLTER-RI DAR**



https://dataregistry.lteritalia.it/



https://dar.elter-ri.eu

THANKS!

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