ILICO – A French research infrastructure for Coastal Ocean and Seashore Observations

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ILICO, a French Research Infrastructure for Coastal Ocean and Nearshore Observations is a notable example of national and pan-institutional efforts to expand knowledge of the complex processes at work within the critical coastal zone in line with the European Ocean Observing System perspective.

At the interface between land and sea, ILICO is necessarily multiscale and pluri-disciplinary. It federates complementary distributed observation services (networks) monitoring coastline dynamics, sea level evolution, physical and biogeochemical water properties, coastal water dynamics, phytoplankton and benthos composition and coral reef health in order to address a wide range of scientific questions.

Each network is accredited and receives funding from the French Ministry for Higher Education, Research and Innovation and national public research institutions. In addition to the sustained and long-term nature of its time-series data, ILICO's observation sites have unique geographical coverage spanning both metropolitan coastlines and those of overseas national territories.

Significantly, although its scope is not strictly limited to coastal *marine* systems, ILICO is the French-node of the Joint European Research Infrastructure for Coastal Marine systems (JERICO-RI) led by France. Here we present ILICO's latest advances to (1) federate networks to maximize the return on investment for the community across sites and disciplines (2) foster scientific interactions and integration of its overseas and metropolitan observation practices through the development of multiple-network instrumented sites (3) develop an open data policy, aggregating multisource data to ensure optimal access and re-use by the scientific community, for operational ocean observing and forecasting, and by public authorities and citizens.