The Spanish Institute of Oceanography. Its Integrated Ocean Observing System

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TIDE GAUGE NETWORK:
Working since 1943, It is the oldest Spanish tide gauge network. It has 12 stations and is completely linked to international programs as Permanent Service for Mean Sea Level (PSMSL) or Global Sea Level Observing System (GLOSS).

DEEP MONITORING SECTIONS:
Canarian deep hydrographic section and the 3 ones on the North of Spain are sampling each 6 month since 2003. Its information contributes to the knowledge of the oceanographic climatic variability and global change monitoring.

Deep Monitoring Sections:

IEO RESEARCH VESSELS CONTINUOUS MONITORING:
Nowadays the IEO maintains continuously working 5 thermosalinometers, 4 meteorological stations, 4 continuous data recording manage systems on board their research vessels. This information daily sent to the IEO data center as part of the normal activity of the ships.

COASTAL MONITORING SECTIONS:
Since 1990, 181 repeated stations conform the longest multi-disciplinary oceanographic dataset in Spain. They try to characterize the ocean variability at different scales, seasonal, interseasonal and decadal, including the plankton behavior and the ecosystem responses.

OCEAN-METEOROLOGICAL BUOY:
This was deployed on 2007, at the position 43º50'N 3º47'W, located 22 miles North of Cape Mayor in Santander. Water depth at the buoy is 2850m. The obtained information is of great importance for the scientific, meteorological, environmental, fishery, maritime and tourist activities which have a real-time marine information source.

IEO CONTRIBUTION TO ARGO INTERNATIONAL PROGRAM:
It supports the main Spanish contribution to the ARGO international program with 47 deployed profilers since 2003.

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