# What is OceanSITES

Time series observations at critical or representative locations are one essential element of a global ocean observing system to complement a range of other approaches. OceanSITES is an international network of time series observing sites. OceanSITES was formed to support the development of a global array with sufficient key and characteristic sites to provide multidisciplinary time series sampling of the global ocean.

OceanSITES exists in order to

- promote and coordinate the continuation and extension of multi-disciplinary ocean time series sites around the globe, within the global ocean observing system
- plan and oversee a global array of time series sites such as to address the needs of research, climate change detection and impacts, operational applications, and policy makers
- share expertise, platforms, ship-time, sensors
- promote consistent data management, documentation, and distribution
- support the development of a user base and ensure the network is responsive to user needs.

Each OceanSITE

- provides sustained in-situ observations at a fixed open-ocean geographic location (typical record length of at least 5 years)
- aims to sample frequently enough to resolve tidal and diurnal frequency variability (where historically occupied by ship sampling, a co-located mooring is expected to be an objective)
- uses or is moving toward real time telemetry where technically feasible
- makes existing real time data publically available in near real-time and delayed mode data publically available within 12 months
- enables access to data via one of two GDACS (Global Data Assembly Centers) in an agreed upon netCDF format along with supporting metadata.

Moorings are the platform currently most often used to support sampling at an OceanSITE. In addition to single sites, OceanSITES includes fixed transport sections across choke points, major boundary current systems, or ocean basins. It can also include coastal time series where they are relevant to open-ocean

processes and changes, and when they are not part of a national coastal network. A goal of OceanSITES is to increase collection of deep ocean observations and of multi-disciplinary observations throughout the water column. Since 1999, OceanSITES has worked to capitalize on the potential of the mooring and ship-based time series. The growing network now consists of about 304 sites, including 129 surface and 199 subsurface moorings.

OceanSITES sits as a program of JCOMM-OPS[1] and is an element of the Global Ocean Observing System (GOOS). OceanSITES is organized around a steering committee (comprising all site operators or their representatives) and a data management team. The data management team has been effective at developing a common shared data format and has the National Data Buoy Center (NDBC) in the U.S. and Coriolis at IFREMER in France as GDACs that provide, store, and mirror the OceanSITES data.

Further information on OceanSITES is available on the project website (http://www.oceansites.org), including its mission, the benefits of participating in OceanSITES, a guide on how to join OceanSITES, its organization and governance, and quick manuals on how to obtain OceanSITES data and how to submit OceanSITES data.

[1] JCOMM-OPS is the operational ocean observing oversight group of the Joint Commission on Oceanography and Marine Meteorology of the International Oceanographic Commission and the World Meteorological Organization.