

OceanSITES – the global network for fixed-point time series observations



OceanSITES

Contact: projectoffice@oceansites.org

X @OceanSITES_GOOS

OceanSITES in a nutshell

Mission

Collect, deliver, and promote use of high-quality data from long-term, high-frequency observations at fixed locations in the open ocean. OceanSITES collect multidisciplinary data worldwide from the full-depth water column and the overlying atmosphere

Vision

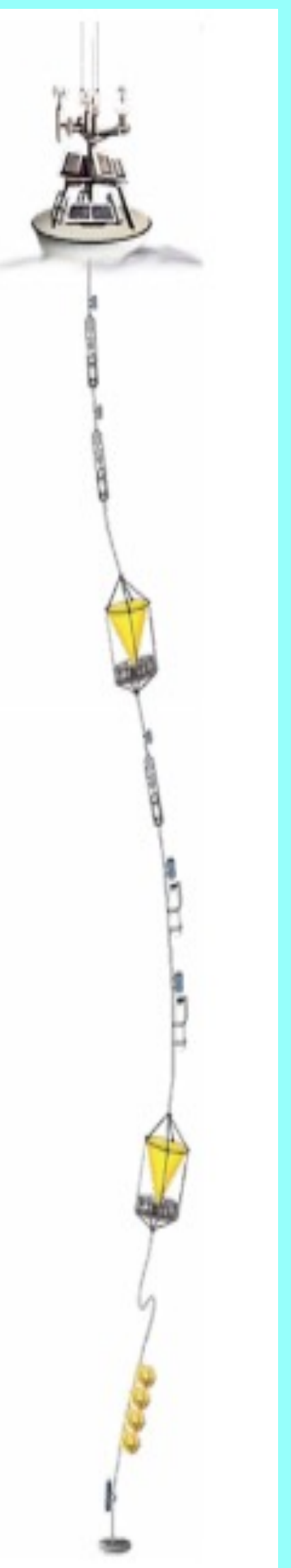
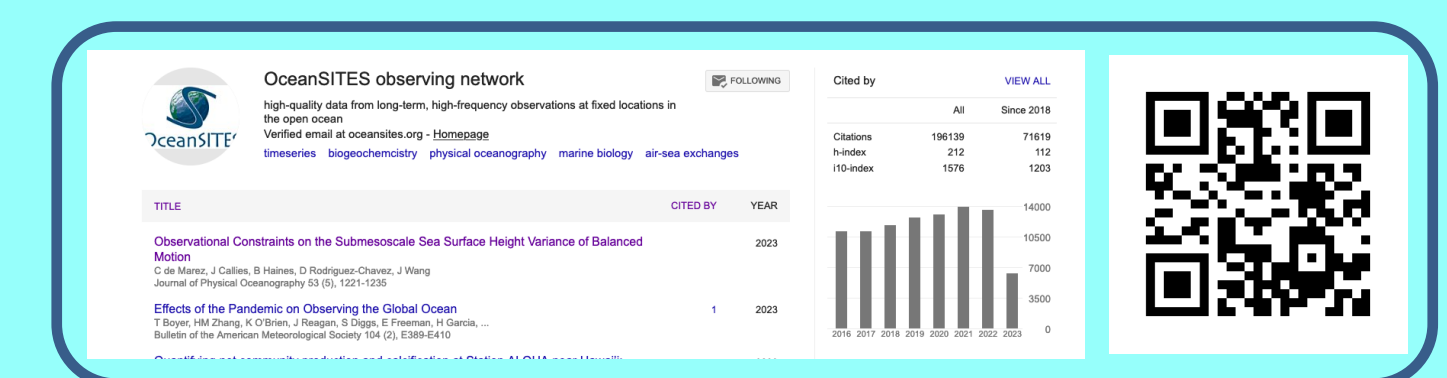
A multiplatform and multipurpose system of interoperable and FAIR & CARE ocean observation that enable users deriving information on climate change, ocean forecast, and ocean health

OceanSITES Data System

- Data Management team – monthly meetings open to all - Interest? email: projectoffice@oceansites.org
- Time series data format “OceanSITES netCDF” (CF convention, SeaVOX etc.)
- Dedicated data server (regional DACs, GDACs, archive) for free sharing of data without delay
- Your voice in/link to global data initiatives such as those behind GOOS, GCOS and associated
- Work with us on visualizing your data

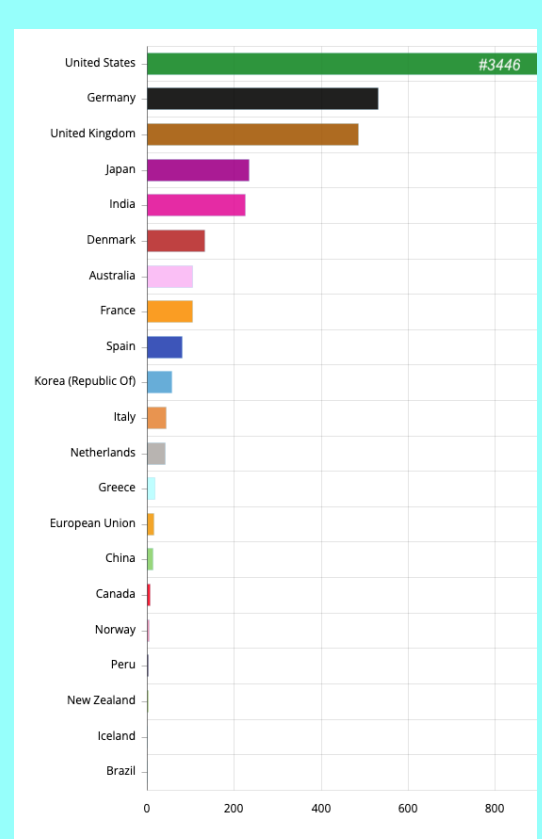
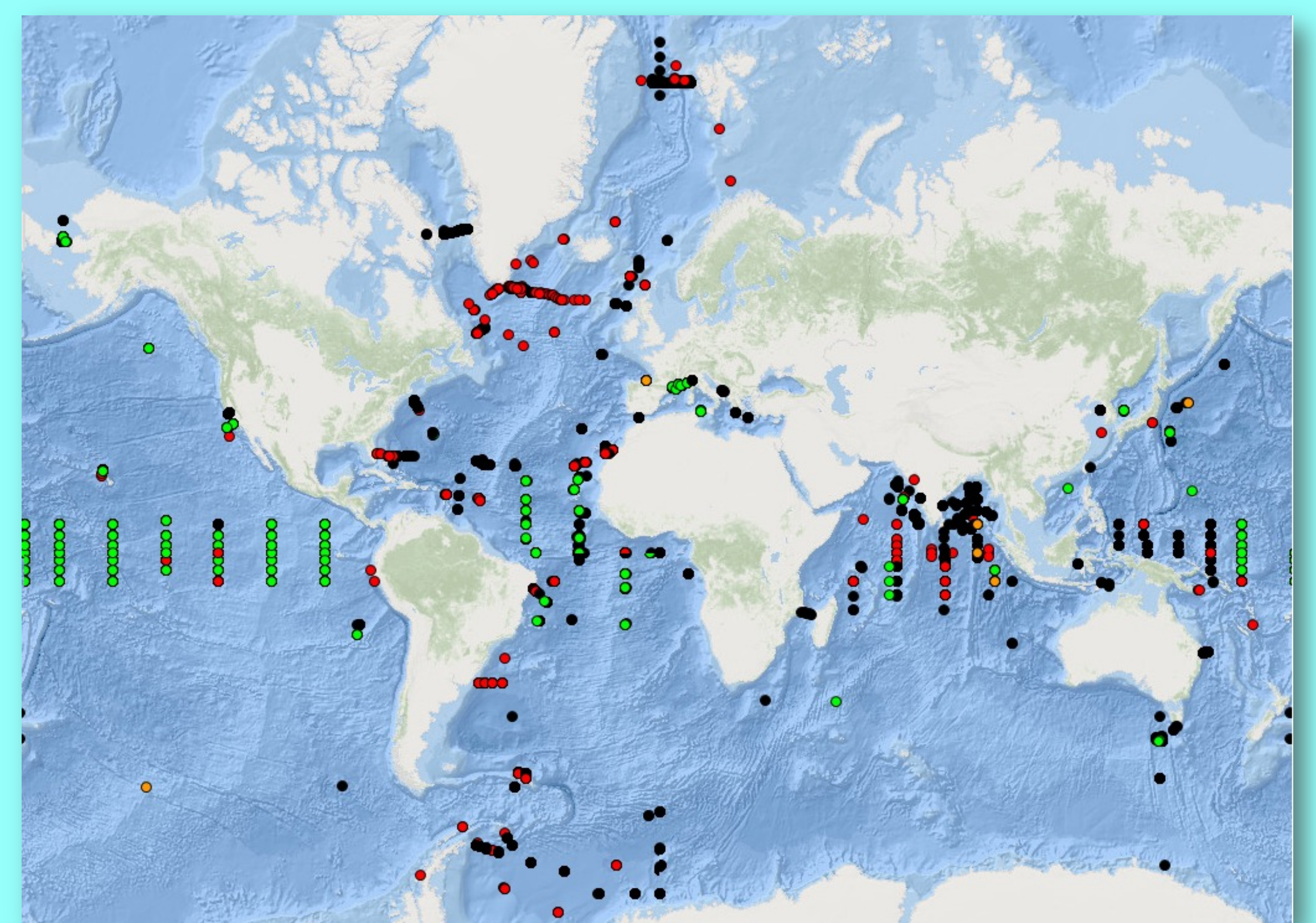
Coordination activities OceanSITES

- Established 1999 – OceanSITES enables the alignment of nations observation with global initiatives
- Make nations climate observations a contributions to the WMO Integrated Observation System (WIGOS) and the GCOS Implementation plan
- Share expertise, software, information, Best Practices, Training
- Communicate Eulerian observational efforts in the quarterly newsletter
- Broadcast publications as a contribution to global efforts (OceanSITES h-index: 212)
- Engage in global initiatives such as UN Decade programs/projects OASIS, GOOS Observing together, GOOS Observing Co-Design, DOOS
- Assembling time series data products for easy use by data users (e.g. modelling centres)

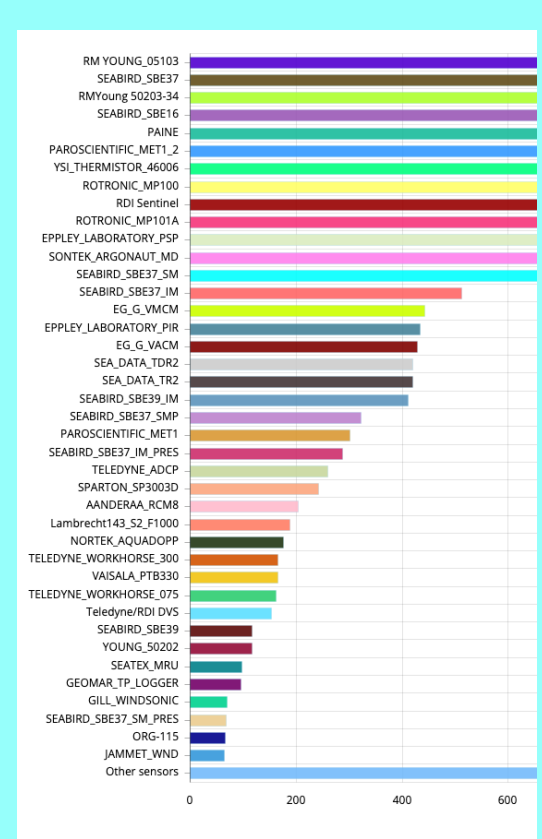


Major OceanSITES science themes:

- Transport moored arrays
- Air/sea flux reference sites
- Global Ocean Watch
- Best Practices
- Deep Ocean Observations
- Open ocean/costal interaction
- OceanSITES statistics from times when OceanOPS was operational
- In total: 5552 platforms registered



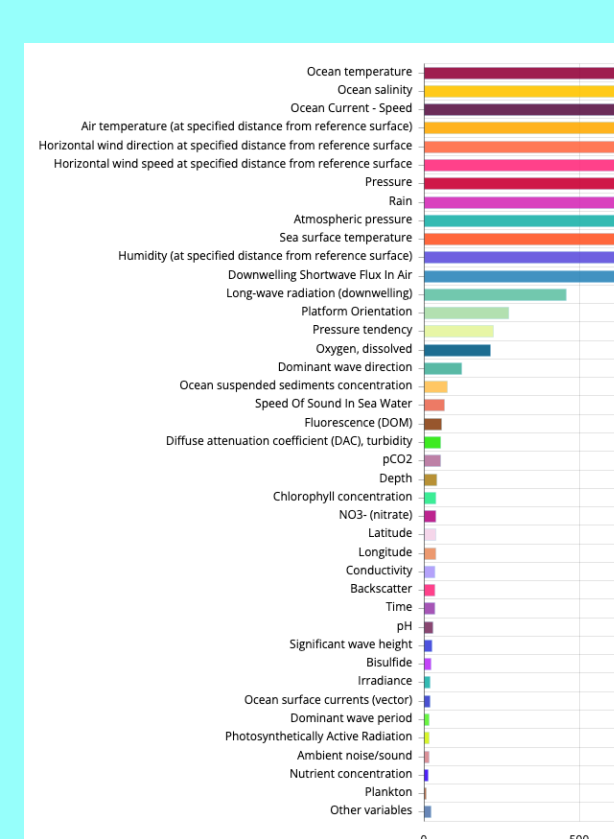
Networks involved



Parameters recorded



Countries participating



Sensors used

Current work and future plans

- Rehaul website oceansites.org to better serve community and external user needs, incl.
 - Data products catalogue
 - Software (e.g. data conversion and QC, mooring design software,)
 - Sticking time series -together webtool (NOAA)
- Evaluate accreditation of OceanSITES being an official WMO “Global Reference network”
- Which site will be the first to say: “all EOVs recorded” ? We will have one newsletter dedicated to your site only!
- Catalogues of distributed data sets (e.g ERRDAP)
- Detail contributing countries requirements for Eulerian climate time series and derive generalization & recommendations

EOV/ECV list

EOVs/ECVs Derived from Observed Variables:

Physics	Biogeochemistry	Biology and Ecosystems
Surface & subsurface temperature	Particulate matter	Phytoplankton
Surface & subsurface salinity	Oxygen	Zooplankton
Surface & subsurface currents	Nutrients	Fish abundance
Ocean surface heat flux	Inorganic carbon	
Ocean surface stress	Particulate Matter	
Sea surface height	Stable carbon Isotopes	
Cross-disciplinary		
Ocean color	Ocean sound	Marine debris

References

Cronin, M. F., R. A. Weller, R. S. Lampitt, and U. Send (2011). Ocean reference stations. In: Earth Observation, InTech, Rijeka, Croatia, ISBN: 978-953-307-973-8. 5, 487-494.,
 Send, U., Weller, R., Wallace, D., Chavez, F., Lampitt, R., Dickey, T., Honda, M., Nittis, K., Lukas, R., McPhaden, M. and Feely, R. (2010). "OceanSITES" in Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 2), Venice, Italy, 21-25 September 2009, Hall, J., Harrison, D.E. & Stammer, D., Eds., ESA Publication WPP-306, doi:10.5270/OceanObs09.cwp.79.

