Open science resources for the discovery and analysis of Tara Oceans data

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The Tara Oceans expedition (2009–2013) sampled contrasting ecosystems of the world oceans, collecting environmental data and plankton, from viruses to metazoans, for later analysis using modern sequencing and state-of-the-art imaging technologies. It surveyed 210 ecosystems in 20 biogeographic provinces, collecting over 35,000 samples of seawater and plankton. The interpretation of such an extensive collection of samples in their ecological context requires means to explore, assess and access raw and validated data sets. To address this challenge, the Tara Oceans Consortium offers open science resources, including the use of open access archives for nucleotides (ENA) and for environmental, biogeochemical, taxonomic and morphological data (PANGAEA), and the development of on line discovery tools and collaborative annotation tools for sequences and images. Here, we present an overview of Tara Oceans Data, and we provide detailed registries (data sets) of all campaigns (from port-to-port), stations and sampling events.

Design Type(s)  
observation design  
global survey

Measurement Type(s)  
Registry

Technology Type(s)  
Written Documentation

Factor Type(s)  
marine biome  
Bay of Biscay  
Strait of Gibraltar  
Mediterranean Sea  
Mediterranean Sea, Western Basin  
Ligurian Sea  
Tyrrhenian Sea  
Ionian Sea  
Adriatic Sea  
Mediterranean Sea, Eastern Basin  
Red Sea  
Arabian Sea  
Indian Ocean  
Mozambique Channel  
Southwest Atlantic Ocean  
South Atlantic Ocean  
Drake Passage  
South Pacific Ocean  
Equatorial Pacific Ocean  
North East Pacific Ocean  
Gulf of Mexico  
Florida Straits  
NW Atlantic Ocean  
North Atlantic Ocean  
NE Atlantic Ocean  
Norwegian Sea  
Kara Sea  
Arctic Ocean  
Beaufort Sea  
Northwest Passages  
Baffin Bay

Sample Characteristic(s)  

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