

Census of Marine Life

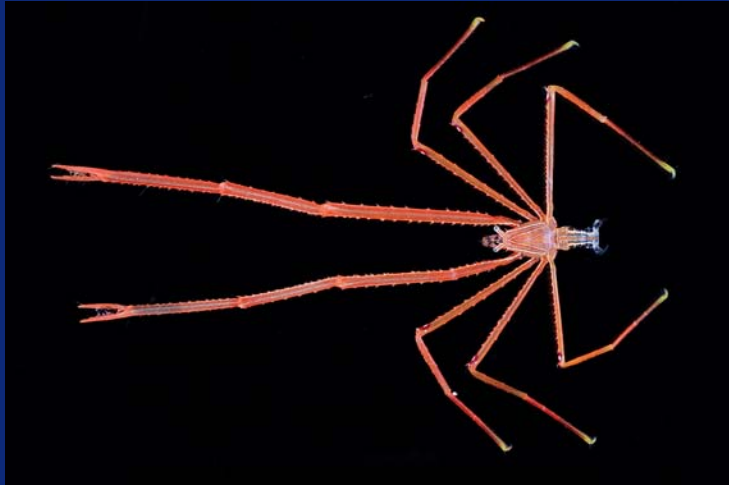
A global network of researchers engaged in an international collaborative initiative to assess and explain the **diversity, distribution, and abundance** of marine life in the oceans – *past, present, and future* – and to identify the current limits to knowledge (what is **known, unknown and unknowable**)

The First Census: 2000-2010



Exploration and Discovery

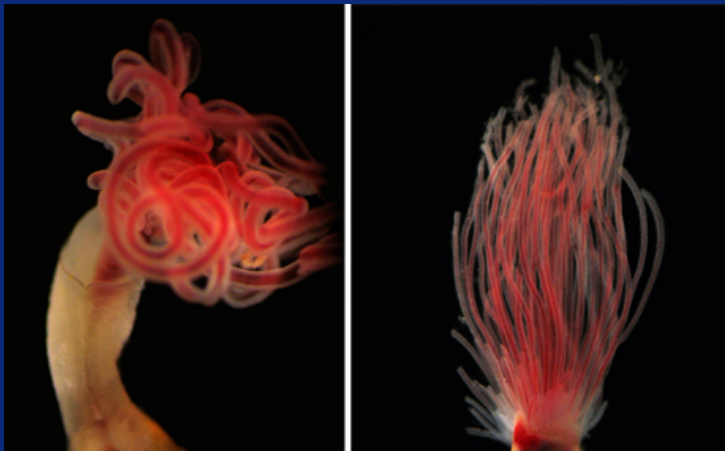
Some new & undescribed species...



A likely new species of the rare deep-sea sponge crab genus *Homolodormia*. Photo: Tin-Yam Chan, National Taiwan Ocean University, Keelung



A new species of the spider-like squat lobster of the genus *Chirostylus* which generally associated with deep-water corals. Photo: Tin-Yam Chan, National Taiwan Ocean University, Keelung



This previously undescribed species of “Medusa” worm (family siboglinidae) was found on the Gulf of Cadiz mud volcanoes

. Photo: Ana Hilario, University of Aveiro.

CoML Components

Grand Challenge Questions

Oceans Past

What did live in the oceans?

**History of
Marine Animal
Populations
(HMAP)**



Oceans Present

What does live in the oceans?

**Ocean Realm
Field Projects**



Oceans Future

What will live in the oceans?

**Future of
Marine Animal
Populations
(FMAP)**



Ocean Biogeographic Information System (OBIS)

Web-based provider of global geo-referenced information on marine species

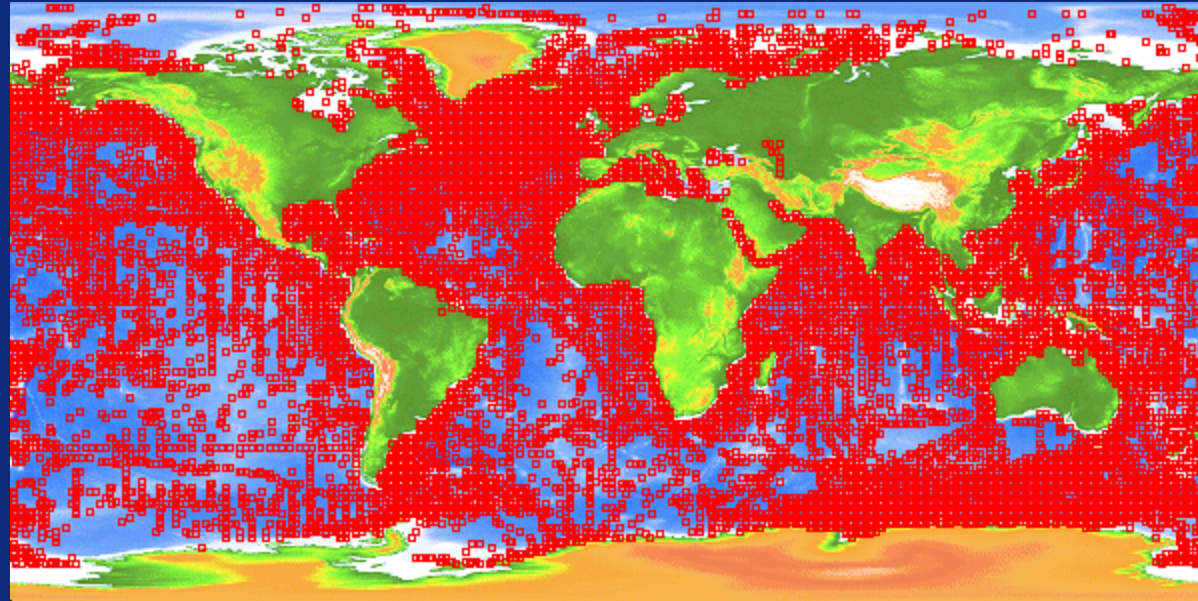
A national, regional and international infrastructure for information and biogeographic data on marine species and their distribution and abundance

OBIS provides, on an 'open access' basis through the World Wide Web:

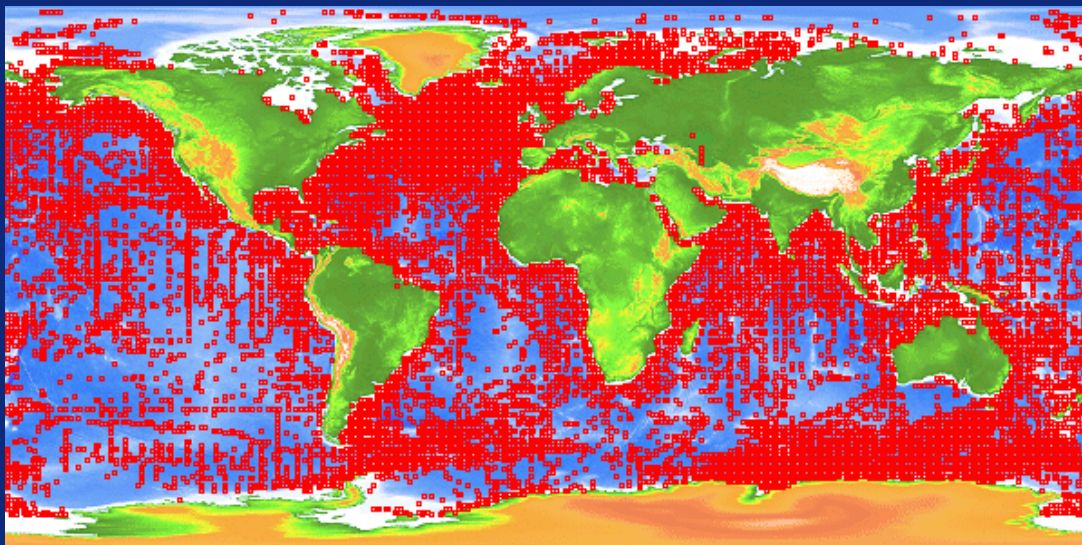
- taxonomically and geographically resolved data on marine life and the ocean environment;
- interoperability with similar databases;
- software tools for data exploration and analysis.

OBIS: www.iobis.org

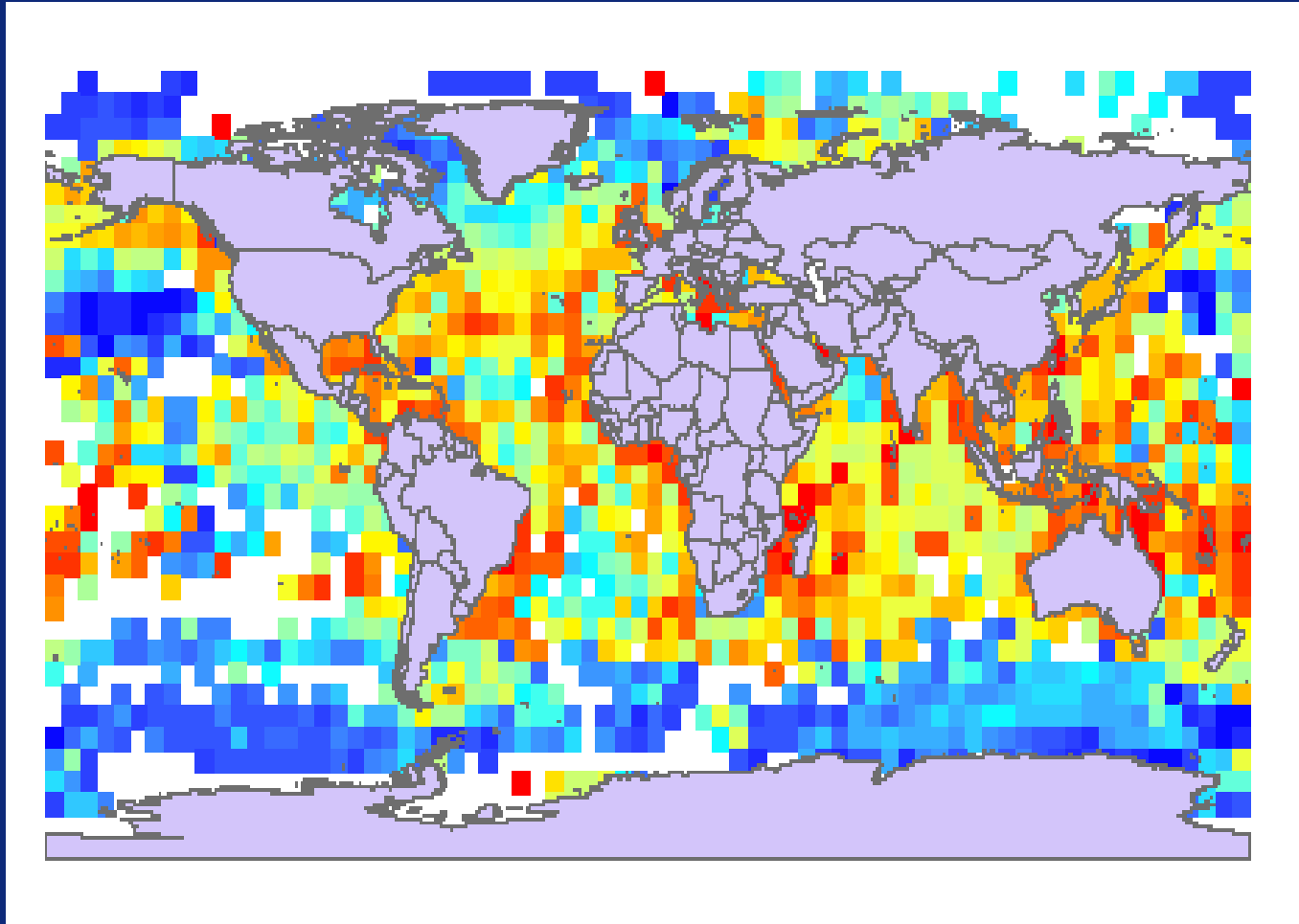
**Currently in OBIS
(July 2010):
27.7 million records
of 114,000 species
from 817 databases**



**2009: 21.9 million records
2008: 16.7 million records
2007: 13.6 million records
2006: 10 million records
2005: 5 million records**



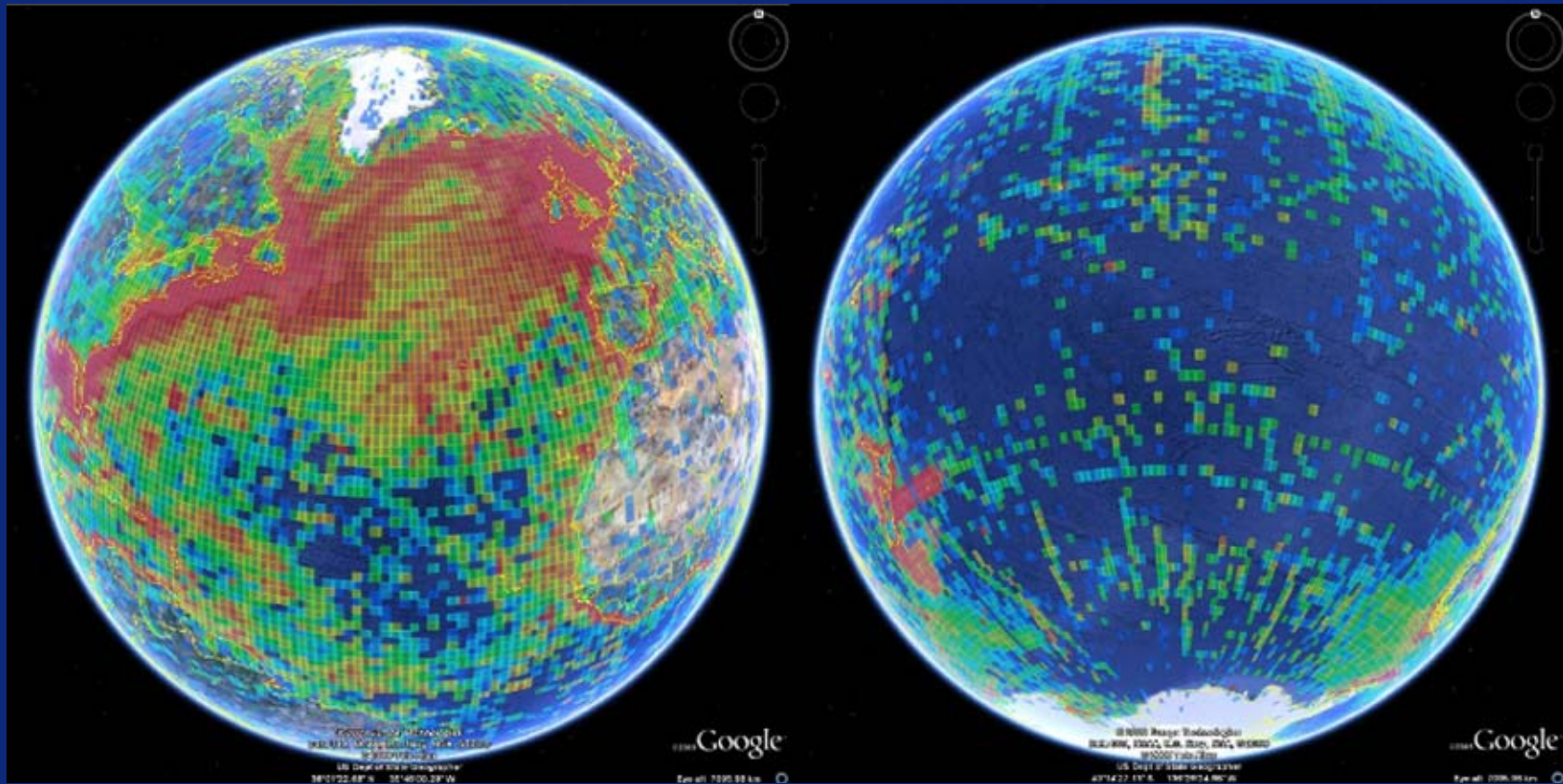
OBIS



OBIS can show us biodiversity hotspots.

Image: E. Vanden Berghe, Rutgers University

OBIS

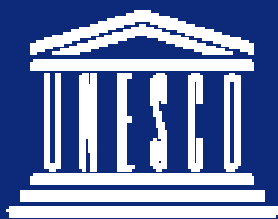


And OBIS can show us gaps in knowledge.

Image: Google, based on OBIS datasets

OBIS

On June 24, 2009 the Intergovernmental Oceanographic Commission accepted OBIS as a program under the International Oceanographic Data Exchange (IODE).

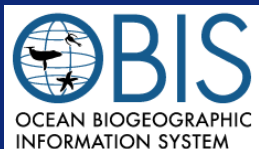


IOC



Although the Secretariat of OBIS will remain at Rutgers University, this new status within IOC will help to ensure the global use and maintenance of OBIS into the future.

OBIS Applications



OBIS has the potential to produce maps like these for the EEZ of all countries.

