

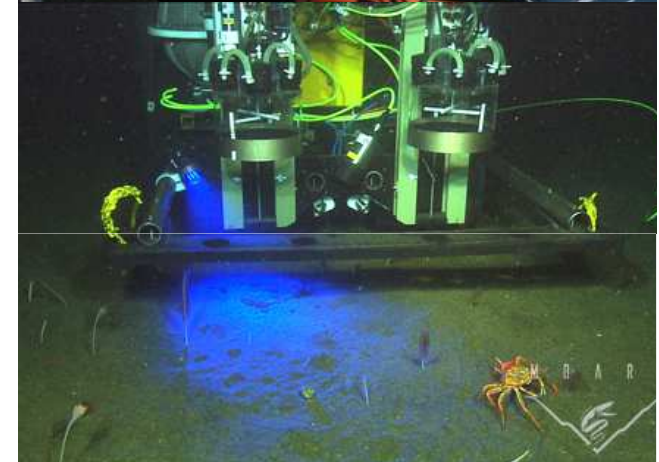


Furthering the development of an international collaboration
in marine data management

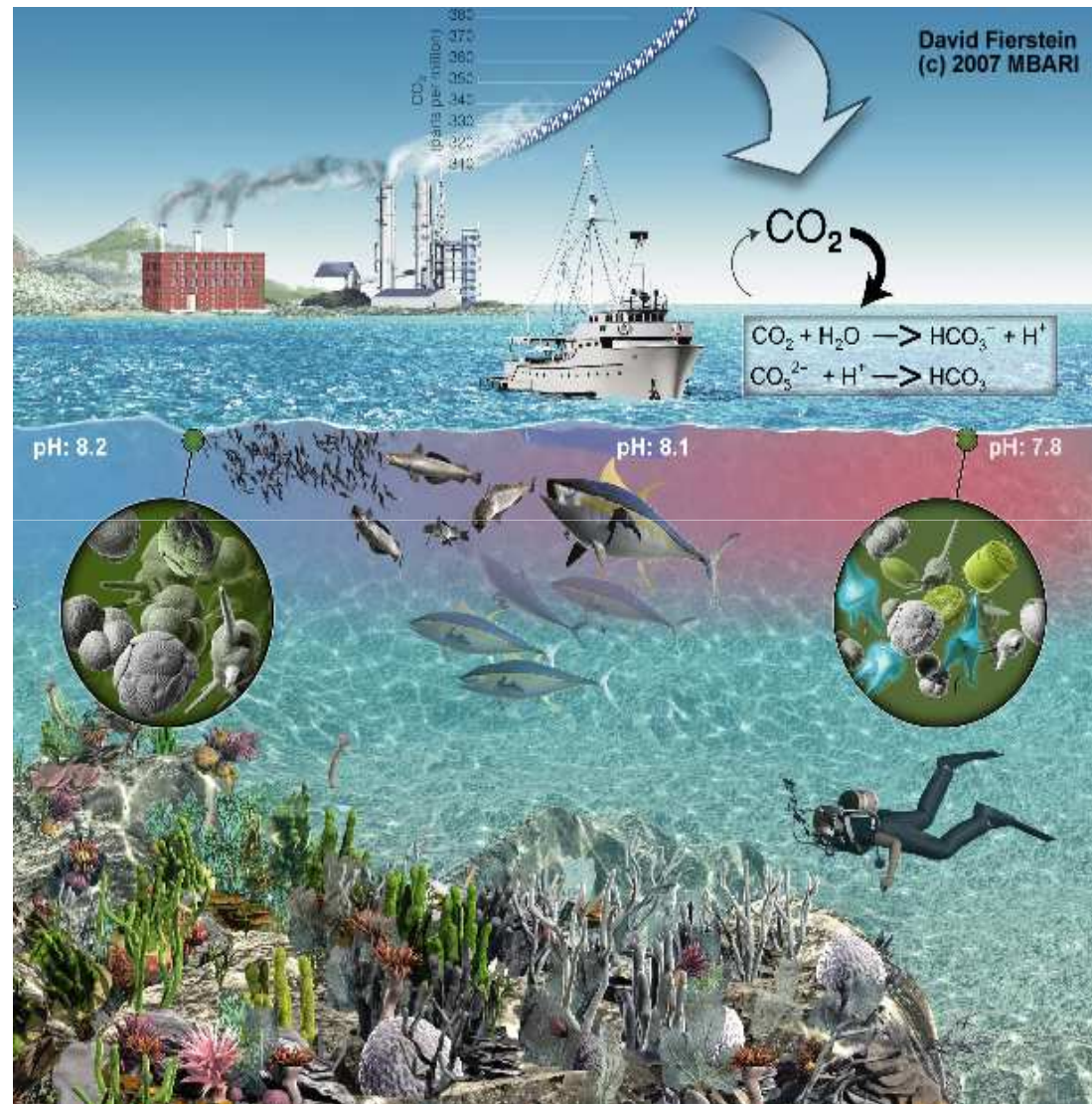
Helen Glaves, Steve Miller, Roger Proctor & Dick Schaap

- A very wide range of multidisciplinary oceanographic and marine data
- Collected by thousands of organisations around the world
- Using a wide array of instrumentation and platforms
- Very considerable costs (e.g. in Europe in 2011 1.4 billion €)
- Often unique and therefore irreplaceable

Capture once – re- use many times



- Paradigm shift from traditional discipline based marine research
- Multidisciplinary ecosystem level approach: promoted in Europe by Marine Strategy Framework directive MSFD (2008) and the Marine Knowledge 2020 communication from the EU
- Requires large amounts of good quality data from a range of disciplines

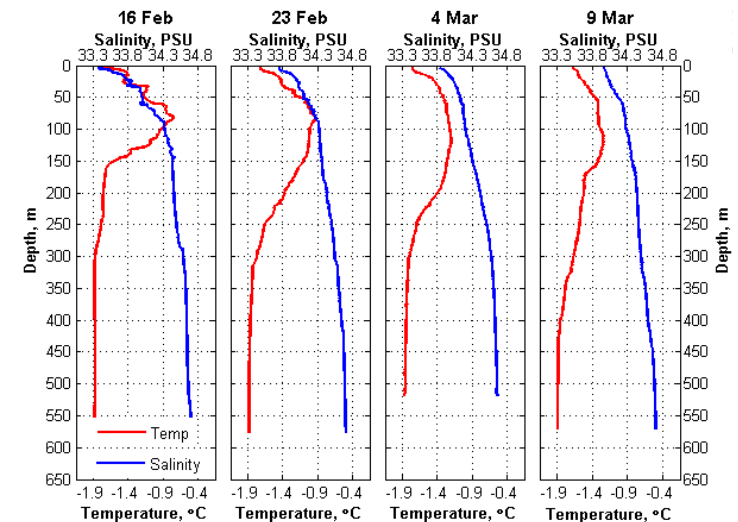
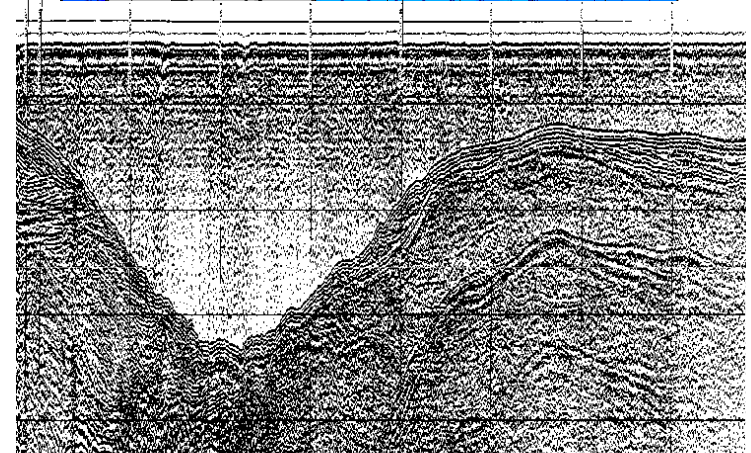
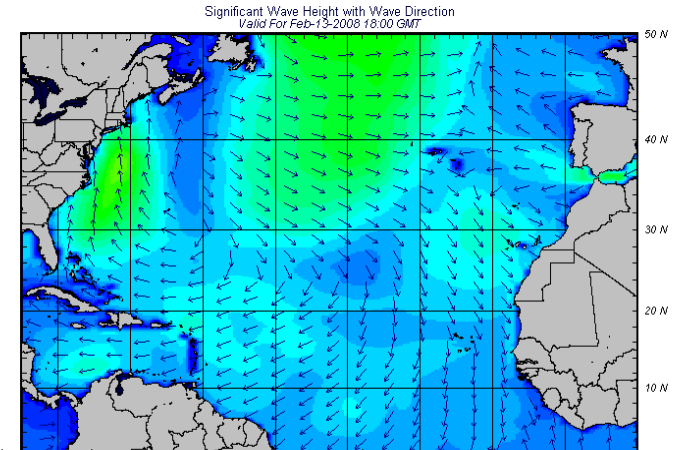




Barriers to sharing re-use of marine data

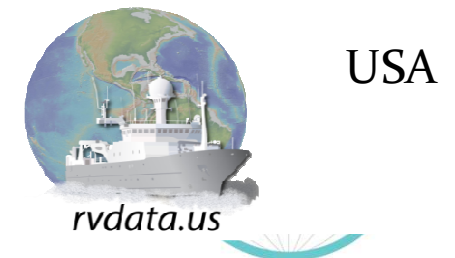
- Use of different
 - Formats
 - Standards
 - Best practice
 - Co-ordinate systems

- National and organisational data access policies



E-infrastructures

- A number of regional initiatives have made significant progress in addressing these barriers by developing marine data management infrastructures
- International organizations such as UNESCO's Intergovernmental Oceanographic Commission (IOC) and its IODE programme are promoting and supporting the development of these infrastructures.



Ocean Data Interoperability Platform

EU-US –Australia collaborative project



Call: FP7-INFRA-2012-3.2 – International co-operation with the USA on common e-infrastructure for scientific data

Start date: 1 October 2012

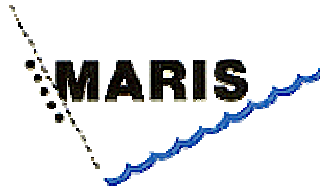
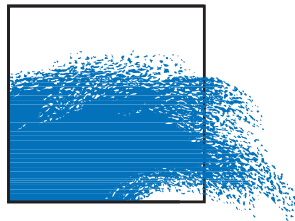
Duration: 36 months

Funded in parallel by European Commission, National Science Foundation (NSF) and Australian Government

ODIP partners

Europe: 10 EU funded partners: 6 countries

NERC-BGS/BODC, MARIS, OGS, IFREMER, HCMR, ENEA, ULG, CNR, RBINS-MUMM, TNO



USA :

- **NSF funded partners (R2R supplement)**

San Diego Supercomputer Center (SDSC),

Scripps Institution of Oceanography (SIO),

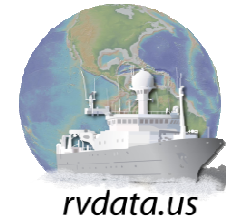
Woods Hole Oceanographic Institute (WHOI),

Lamont-Doherty Earth Observatory (LDEO),

Florida State University - Center for Ocean-Atmospheric
Prediction Studies

- **Others**

NOAA US-IOOS, NOAA US-NODC, NOAA NGDC, UNIDATA



Australia

- Integrated Marine Observing System
- Australian Ocean Data Network



International

- UNESCO IOC-IODE





Other contributors

- Europe
 - Alfred Wegener Institute for Polar Research
 - MARUM
- Australia
 - Australian National Data Service
 - Geoscience Australia
 - CSIRO



ODIP: Overall objectives

- To establish an EU/USA/Australia/IOC-IODE co-ordination platform to **facilitate the interoperability of ocean and marine data management infrastructures**
- To demonstrate this co-ordination through the development of several joint EU-USA-Australia-IOC/IODE **prototypes that would ensure persistent availability and effective sharing of data** across scientific domains, organisations and national boundaries
- Development of **a common approach to marine data management** that can be extended to other regions and organisations beyond the original project consortium



Overall strategy

ODIP platform to facilitate organised dialogue between key organisations in Europe, USA and Australia involved with the management of marine data.

Achieved by:

- Creating inventories of existing standards and policies
- Publication of these existing standards and best practice through ODIP portal and Research Data Alliance (RDA)
- Regular joint workshops to develop interoperability solutions and/or common standards
- Development of prototypes for testing and evaluating potential solutions for different disciplines
- Dissemination and promotion of ODIP activities to encourage wider participation and adoption
- Definition of an exploitation plan and strategy to ensure long-term sustainability of ODIP

1st ODIP workshop



IODE, Ostend, Belgium

February 2013





Thank you!

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