

ODIP: Establishing and operating an Ocean Data Interoperability Platform

EU – US – Australia cooperation

Proposal : 312492

Call: FP7-INFRASTRUCTURES-2012-1-INFSO

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

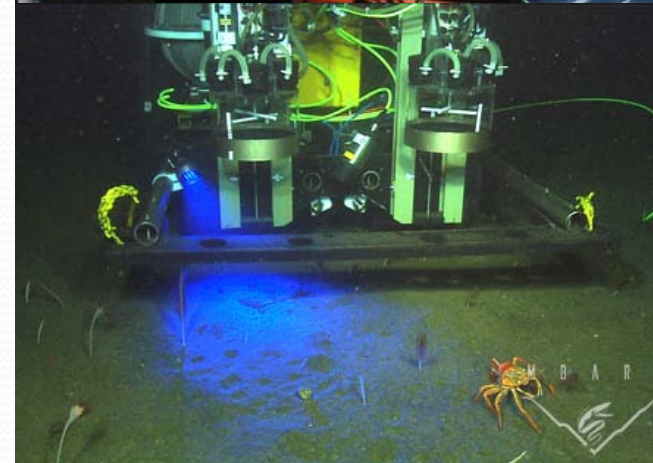
Helen Glaves – NERC (BGS)
ODIP Coordinator



Concept

- 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

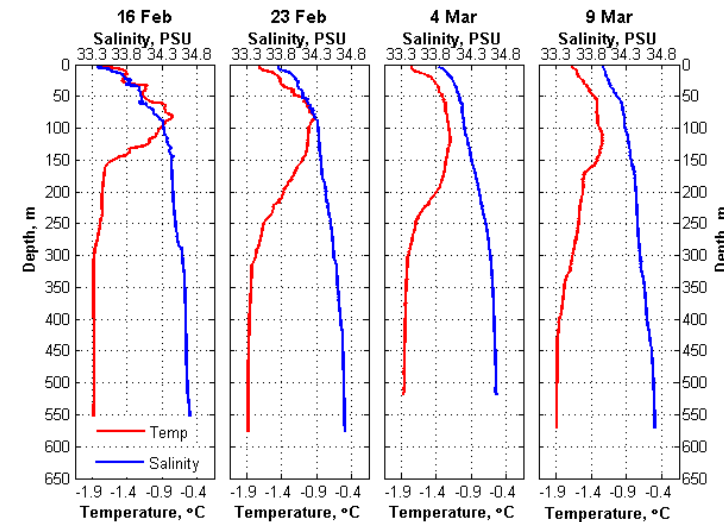
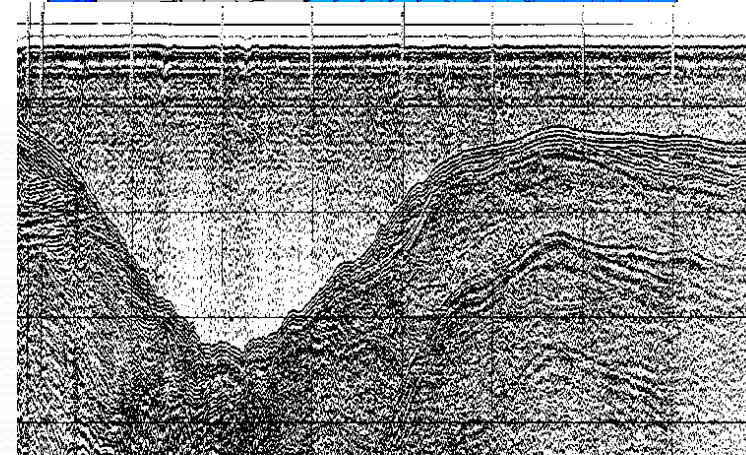
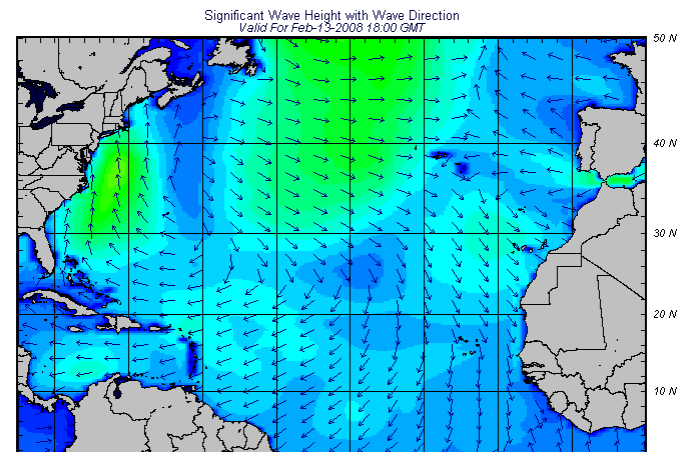
Capture once – re- use many times



Barriers to 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
- Development of these infrastructures is being promoted and supported by international organizations such as UNESCO's Intergovernmental Oceanographic Commission (IOC)



Australia

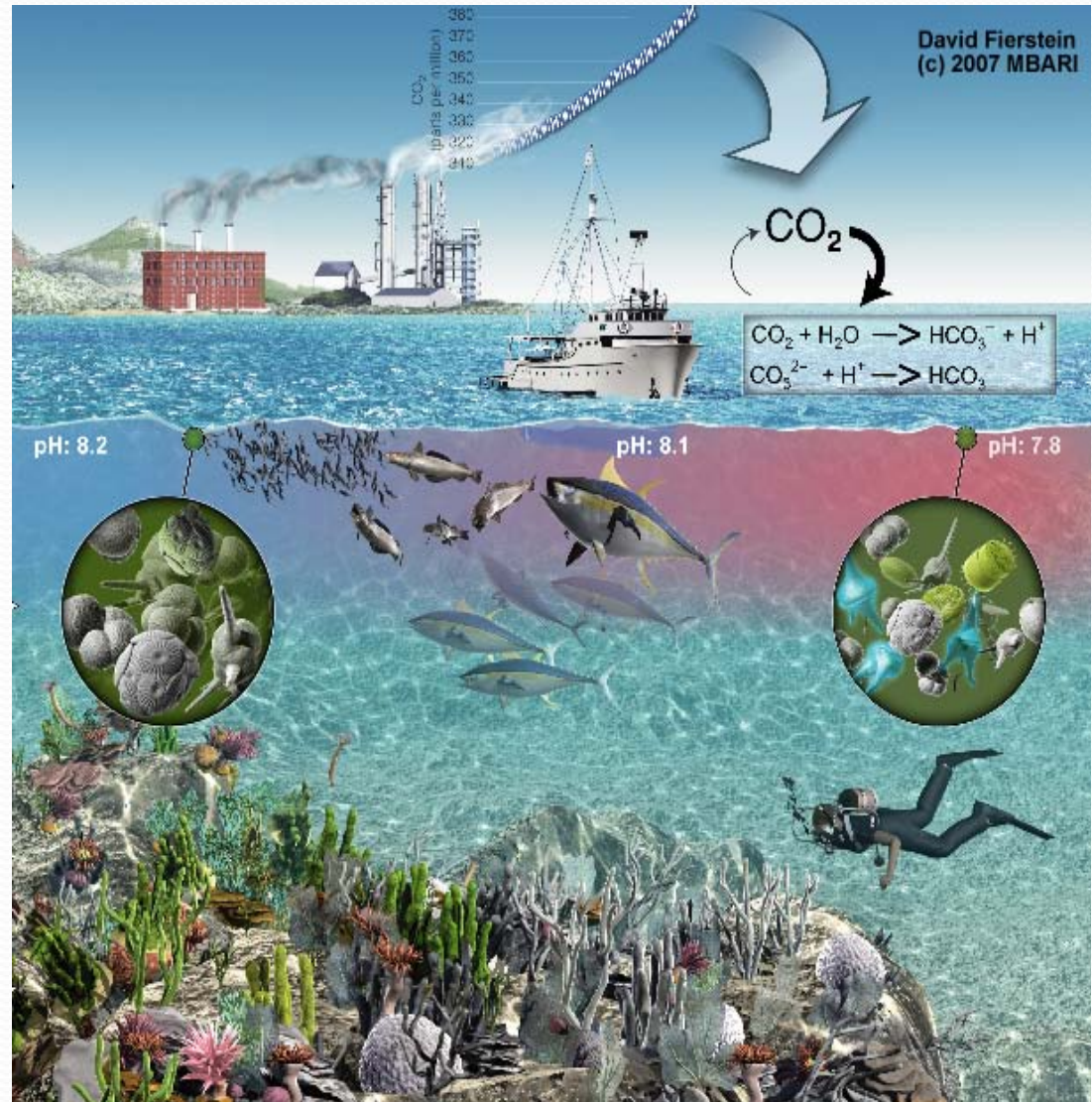


Europe



rvdata.us

- Paradigm shift from traditional discipline based marine research
- Multidisciplinary ecosystem level approach: promoted in Europe by Marine Strategy Framework directive MSFD (2008)
- Large amounts of good quality data from a range of disciplines



Concept

- Marine data: key element of research, monitoring, assessment, planning and management of marine environment
- Marine Strategy Framework Directive (2008): ecosystem based approach : requires large amounts of multidisciplinary & interoperable data

**Requires the development of a global infrastructure
for the management and exchange of ocean and
marine data**



ODIP: Overall objective

- To establish an EU/USA/Australia/IOC-IODE co-ordination platform to facilitate the development interoperability between these regional ocean and marine data management infrastructures
- To demonstrate this co-ordination through the development of several joint EU-USA-Australia prototypes that would ensure persistent availability and effective sharing of data across scientific domains, organisations and national boundaries.



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 (working group proposal)
- 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



ODIP Workplan

WP1: Project Management

WP2: ODIP Workshops

WP3: ODIP Prototypes

WP4: Formulation of possible solutions and impact assessment

WP5: Dissemination and Promotion

ODIP consortium workshops to define use cases and identify potential solutions

Developed in response to use cases defined during the ODIP workshops.

Contributions to the RDA including proposal for marine data management working group

Resulting in common standards, interoperability solutions and topics for future joint projects



ODIP Partners: 19 organisations

- **Europe**

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

- **USA**

San Diego Supercomputer Center, Scripps Institution of Oceanography, Woods Hole Oceanographic Institute (WHOI), UNIDATA, Lamont-Doherty Earth Observatory (LDEO), NOAA US-IOOS, NOAA US-NODC, NOAA NGDC, Florida State University - Center for Ocean-Atmospheric Prediction Studies

- **AUSTRALIA**

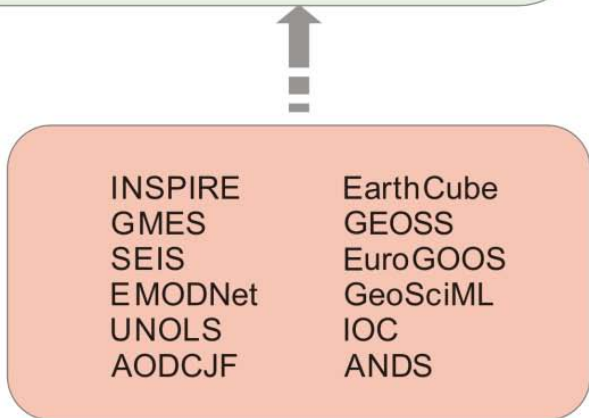
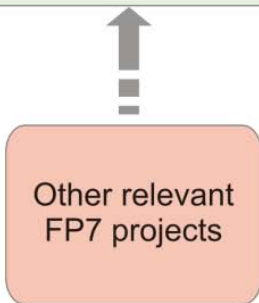
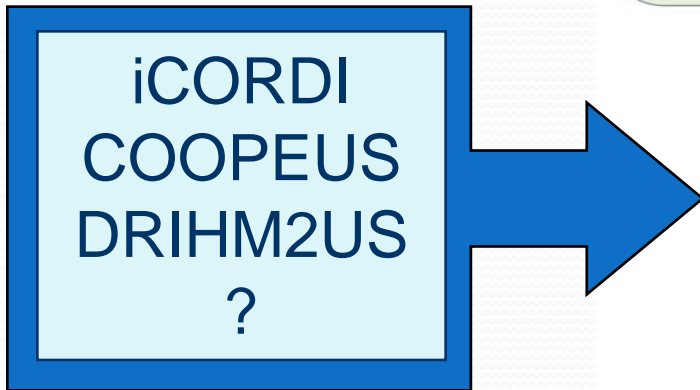
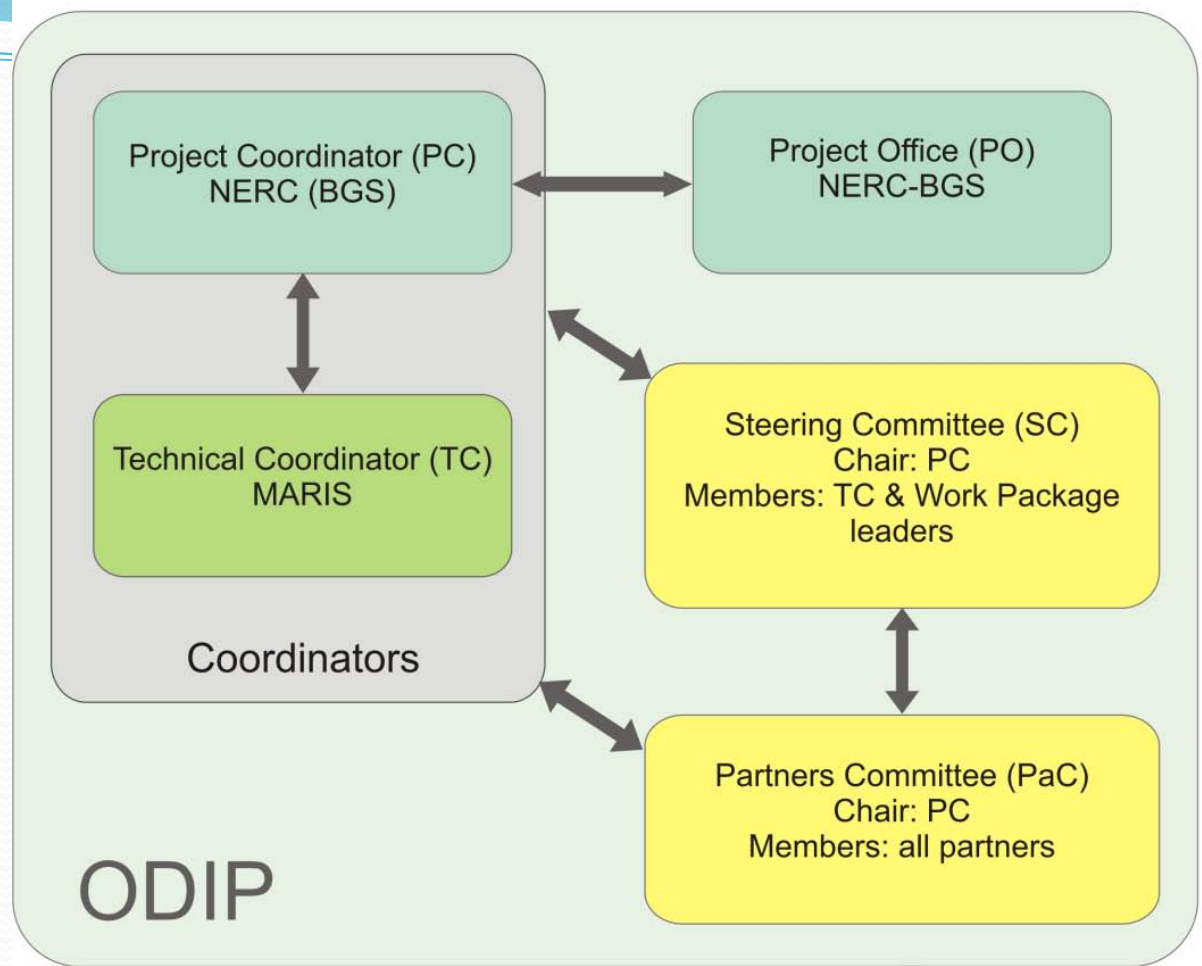
University of Tasmania (IMOS)

- **UNESCO IOC-IODE**

(Intergovernmental Oceanographic Commission)



ODIP collaboration





Project start :

1 October 2012 (36 months)

Kick-off meeting: 20

November 2012

British Library,

London , UK





Thank you!