

## **ODIP: ESTABLISHING AND OPERATING AN OCEAN DATA INTEROPERABILITY PLATFORM — EU-USA-AUSTRALIA COOPERATION**

## THE CONCEPT

- A wide range of multidisciplinary oceanographic and marine data available
- Collected by thousands of organizations 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

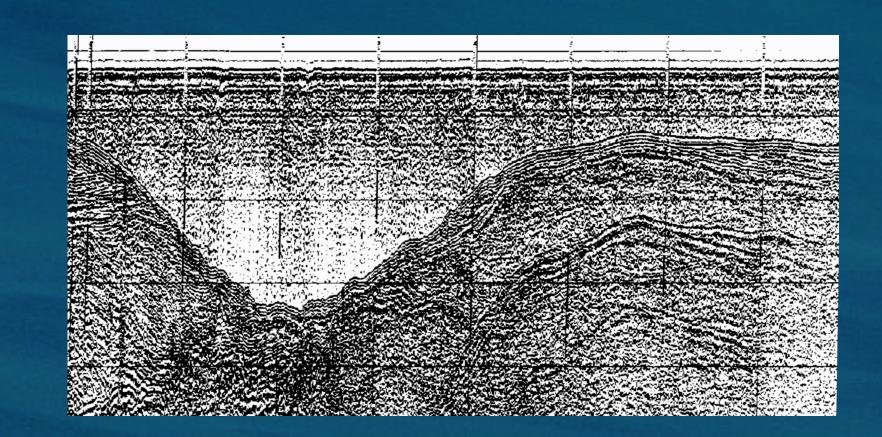


### THE NEEDS

- research

## **BARRIERS TO RE-USE MARINE DATA**

- Use of different
- Formats
- Standards
- Best practice
- Co-ordinate systems
- National and organizational data access policies







# Ocean Data Interoperability Platform

**ODIP** is a FP7 INFRASTRUCTURES project promoting international co-operation between Europe, the USA and Australia for the development of a common framework for marine data management



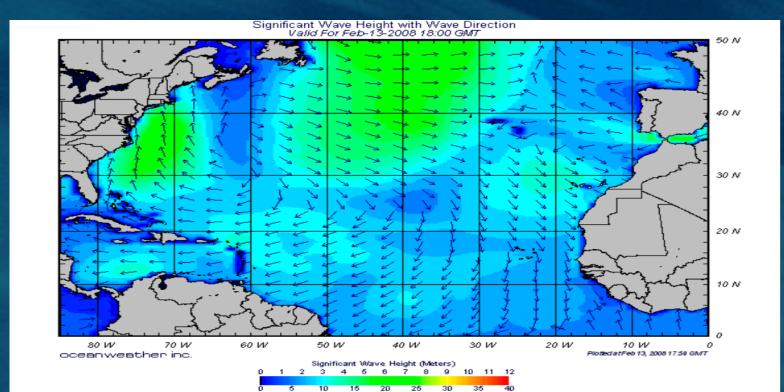


Paradigm shift from traditional discipline based marine

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 Common approach to marine data and management Interoperability between existing information systems

## **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 us UNESCO's Inter-governmental Oceanographic Commission (IOC)



• To establish an EU/USA/Australia/IOC-IODE co-ordination platform to *facilitate interoperability* between the 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

• To develop a common approach to marine data management that can be extended to other regions and organizations beyond the original project consortium





## **ODIP** OBJECTIVES

## **OVERALL STRATEGY**

To facilitate organized dialogue between key organizations in Europe, the 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 the ODIP portal and the 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

Definition of an exploitation plan and strategy to ensure long-term sustainability of ODIP

## **ODIP** PARTNERS

 Europe: 10 EU funded partners from 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: University of Tasmania (IMOS)

• International: UNESCO, IOC-IODE (Intergovernmental Oceanographic Commission)

**Other Contributors:** Europe (Alfred Wegener Institute for Polar Research (AWI) & MARUM, Australia (Australian National Data Service (ANDS), Geoscience Australia (GA) & CSIRO

## **C**OLLABORATION WITH OTHER PROJECTS AND INITIATIVES

• **iCORDI**-International Collaboration on Research Data Infrastructure COOPEUS-Connecting research Infrastructures

• **RDA**-Research Data Alliance



Dissemination and promotion of ODIP activities to encourage wider participation and adoption



