**EUR-OCEANS DATA MANAGEMENT PLAN**

**Tools & Services for meta-analysis in Ocean Science**

Stéphane PESANT¹, Michael DIEPENBROEK², Robert HUBERT², Nicolas DITTERT² and Uwe SHINDLER²

¹CNRS, UMR 7093, LOV, Villefranche-sur-Mer, France; ²PANGAEA, MARUM, Uni. Bremen, Germany

¹pesant@obs-vlfr.fr  ²http://www.pangaea.de/

**INTRODUCTION**

Data management was traditionally considered as an end-product of research projects and its activities were limited to (Black) the Acquisition, Curation and Archival of data, and to the development of basic data Portals. Recently however, European Networks of Excellence and European Information Infrastructures have considerably broaden the responsibilities of Data Management to include: (Red) a close collaboration with the scientific community involved in meta-analysis and modeling (Modeling); and (Green) a key role in fostering interactions between Modeling and the scientific community involved in experimental and fieldwork (Observing).

We outline here how EU-FP6-EUR-OCEANS proposes to addressed these new Data Management Responsibilities.

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**Funding Data Compilation & Transformation**

4 projects funded in 2007-2008 (195K €)

- Ocean Acidification – Biogeochemical models [FP7-IP-EPOCA]
- Zooplankton vital rates – Trophic model [FP6-IP-SESAME]
- Extracellular release of DOC – All models [Review Paper]
- Carbon biomass of plankton functional types – PFT models

**Developing Data Portals**


**Developing Data Submission Templates**

Detailed Instructions and a simple Excel file including:

- Data Tables for biogeochemical and taxonomic data;
- Metadata Tables defining the dataset’s Citation, Sampling events (including sampling methods), and Parameters (including analysis methods). Also used by PF6-SESAME, and FP7-EPOCA.

**Future Tools & Database developments**

Several issues need to be addressed:

- In-depth exploration of metadata
- Resolving duplication issues
- Automated conversion of units
- Link parameters to taxonomic registers
- Archive community-based knowledge

**Organising Fora** – Meetings of Experts to address the consistency of plankton data and their transformation into biomass of Plankton Functional Types (Sept. 2008)

3-day meeting on Bacterio- & Phytoplankton
3-day meeting on Zooplankton
Participants from MarBEF, PESI, MGE, SESAME, GLOBEC

Issues to be addressed include:

- Taxonomy: Expert-to-expert validation
- Taxonomy: Manual vs. automatic identification
- Conversion: Counts and pigments to carbon biomass
- Conversion: Taxonomy and pigments to Functional Groups
- Harmonisation: Sampling and Analytical Methods

**Funding Data Rescue**

16 projects; 13 countries (195K €)

- Plankton abundance & biomass
- Plankton vital rates & fluxes
- Fish surveys and stomach contents
- Particulate & Dissolved Org. matter

**Funding Technician Training**

Participants from 12 countries (38K €)

- Automated Imaging Analysis (30 trainees)
- Manual Microscopy Analysis (12 trainees)

**Model Shopping Tool**

59 models described

- Detailed description
- Codes & parameterisation
- (Model Outputs)
- (Comparative simulations)

**Developing Data Warehouses**

Groups of parameters can be defined and all corresponding data points (as opposed to full datasets) are extracted in a single spreadsheet that includes georeferences and methodological details.

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