

## **Third IGBP Congress “Connectivities in the Earth System”**

**Banff, Canada, 19-24 June 2003**

### **Session B2 – Oceanographic Data Management**

#### **Session Summary**

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The session opened by declaring its primary objective to be to help the new projects, such as SOLAS, IMBER and the SCOR/IOC GEOHAB initiative, to develop their data management plans.

The data management of the mature programmes JGOFS, WOCE, LOICZ and GLOBEC was reviewed. It became clear from this that the following actions are extremely beneficial to projects:

- Establishment of a Data & Information Management Unit at the outset.
- Development of distributed, scalable data management
- Adoption of standards to facilitate interoperability of data and information
- Utilisation of existing infrastructure but with additional resources to ensure it fulfils international rather than national specifications and standards
- Provision of services and data access that match the needs of scientists
- Provision of data through alternative media, e.g. CD-ROM, for those without internet access
- Development of a close working relationship between data managers and scientists through means such as ‘end-to-end’ project data management and the provision of data access tools

Some generic data management issues were then examined:

- The form and content of a ‘data policy’.
- The role of developing technologies, such as the development of seamlessly integrated distributed databases
- Areas where oceanographic data managers need to look for new techniques, such as socio-economic data, bio-informatics and non-spatial data, for example, mesocosm and other experiments

Strategy scenarios to bridge the gap between data at the ‘PI’ level and a complete, fully integrated and documented data set were then examined.

The session was concluded by drawing together the following recommendations:

## **Recommendations for New IGPB Oceanographic Programmes**

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1. Projects should establish a data policy at the outset to address the following issues:
  - Data sharing within the programme, between programmes and the entry of data into the public domain.
  - Data quality issues.
  - Long-term security of the data.
2. All new programmes should dedicate resource to the development of a project meta-database that will form the project data inventory. This should conform to appropriate international standards (e.g. ISO19115 for spatially referenced data) to facilitate integration and exchange of information between programmes. Previous experience has shown that this resource is most effective if located in the IPO.
3. Projects should establish a data management working group such as the JGOFS Data Management Task Team or the WOCE Data Products Committee. Past experience has shown that these groups are more effective if they comprise both data managers and scientists.
4. National science programmes should address data management in a credible manner, including giving consideration to capacity building if appropriate.

## **Recommendations for Further Work**

1. A data policy template should be developed to assist programmes with the compliance with recommendation (1) above.
2. IGBP should work together with other international agencies to promote a culture where datasets are regarded as citable entities that are recognized as important scientific outputs.

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