THE IODE ANNIVERSARY BIBLIOGRAPHY: 50 YEARS OF ACTIVITIES

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Abstract

The IODE Anniversary Bibliography was initiated by the Steering Committee of the IODE Anniversary International Conference which requested the Group of Experts on Marine Information Management (GE-MIM) to produce a bibliography of the output from IODE projects both closed and current. The bibliography documents and demonstrates the dynamic and substantial progress achieved by the IODE. This paper describes the work involved in presenting the bibliography and gives an overview of the technical side of work undertaken in September 2010 – March 2011.

Keywords: bibliographies, research programmes, oceanographic data, oceanographic information, IODE

Introduction

The 50th Anniversary of the IOC/IODE Programme is being celebrated during 2011. To mark this important milestone, IODE organized an Anniversary International Conference to demonstrate its' vision of new challenges faced by the data and information management communities and its' contribution to capacity building and society's needs for data and information products.

To document and demonstrate the dynamic and substantial progress achieved by the IODE, the Anniversary Steering Committee requested the Group of Experts on Marine Information Management (GE-MIM) to produce a bibliography of the output from IODE projects both closed and current.

Whilst this sounds a simple request which can be supported by bibliographic databases – one of the calls that GE-MIM has made over the years to the IODE Community, is to communicate, document and cite the work resulting from IODE Projects. But, it is only in the last few years in the burgeoning digital environment that the IODE Community is understanding the need for constant recording and depositing in repositories of their IODE project outcomes, to provide one measure of IODE success.

Work organization

The Bibliography Working Group included five members (Ms. Maria Kalenchits, Estonian Marine Institute, Estonia (3 month secondment to the IODE Project Office), Ms. Pauline Simpson, Central Caribbean Marine Institute, Cayman Islands, Mr. Marc Goovaerts, Hasselt University Belgium, Ms. Linda Pikula, NOAA, USA and Mr. Peter Pissirssens, Project Office for IODE, Belgium.

Technically, the work consisted of several phases.

During the first phase (September – November 2010), the relevant documents were identified through a series of search sessions applied to each digital resource and the metadata was imported (in some cases entered manually) into RefWorks reference database (http://www.refworks.com). References were associated with project names via linking to appropriate keywords (one reference can be linked to several projects). Duplicate references were identified and eliminated.

During the second phase (December-January 2010), IODE Community members were invited to check the collection, (which was exported into CiteULike software, a free on-line service for managing references, for this purpose), and report to the Bibliography Group any missing records.

During the third phase (January-February 2011), APA 6th (no casing applied) output format was modified and used to generate the bibliography. Enriching of metadata and considerable editing was done throughout the process.

Finally, the bibliography was transferred into a DSpace environment (March 2011). An IODE USB with the PDF version of the IODE Anniversary Bibliography was given to the participants at the IODE Anniversary Conference and the IODEXXI Session held in Liege, Belgium in March 2011.

The IODE Anniversary Bibliography is searchable on the website http://biblio.iode.org.

General selection criteria

Of necessity we have had to rely on available digital resources such as ASFA (Aquatic Sciences and Fisheries Abstracts), Web of Science (a citation database of Thomson Reuters), OceanDocs Repository, AVANO (a marine and aquatic sciences OAI harvester), UNESDOC Database as well as project websites. It was found to be inefficient to search Scirus web tool - the identification of relevant records (often from multi-thousand result retrieval) required considerable time and effort, and most of the relevant documents in Scirus appeared to duplicate those retrieved from other digital resources.

Resources were searched for project names (full names and acronyms); in the case of full-text databases, the document was considered relevant if the keyword (project name) appeared in the full text more than once. A decision was made not to include the projects initiated by other organizations and implemented in partnership with IODE (like GEWEX, CLIVAR, SPARC, CLiC, SOLAS, etc). In the case of the OBIS project, it was decided not to

include any documents published prior to 2011, the date the project was officially moved under the IODE umbrella. In addition to project reports and official websites, the bibliography includes conference presentations, scientific articles, monographs and dissertations.

The IODE Anniversary Bibliography - pdf version

The Bibliography records were formatted using RefWorks by application of the APA6 (no casing applied) output format which was slightly modified to meet the agreed bibliography reference style.

References are grouped by project names (records with multiple affiliation appear in the pdf bibliography more than once). Each group of references is preceded by the project description. Within the group, references are presented in author alphabetical order (the same author's papers are presented in chronological order by publishing date). Many references have active links directly to the full-text documents or are accessible through a repository link. The printed version of the Bibliography can easily be produced from the pdf file which is available through the IODE 50th anniversary webpage.

The IODE Anniversary Bibliography - online version

The IODE Anniversary Bibliography was migrated from RefWorks into a DSpace environment. The logistics was rather straightforward:

1. The Refworks database was downloaded as a csv-file. The original idea was to download it as single file. But the collections defined in Refworks were not exported as metadata. Therefore we needed to export it collection by collection, which further on created some extra work, as will be explained.

2. The csv files have to be cleaned up and adapted to DSpace import standards. We replaced the header with the appropriate Dublin Core definition and the specific interpunction – e.g. a '|' to split up values in one field.

3. Most of the work went into the definition of the collection affiliation as defined in DSpace. This was partly manual work. If we have to do the exercise again, we would not rely on the collection structure of Refworks, but simply create an extra downloadable field.

4. Finally, the different csv-files were imported in a standard DSpace 1.7.0 repository, with an extended metadata set.

The database was set up at Hasselt University and will be hosted by IODE. The IODE Anniversary Bibliography is searchable on the website http://biblio.iode.org. References are browseable by projects, authors, titles, subjects and the issue date. The number of unique records in the initial bibliography is 2144.

The Future of the Bibliography

User's feedback

Initial feedback from the community indicated that members wanted to contribute their retrospective records to ensure the outputs were correctly recorded.

Updating

The amassing of the original bibliography was not a trivial task. We would hope that the IODE Community will contribute retrospective output metadata and full text to complete the record of IODE successes. If the community, in their work for IODE, are required to deposit their outcomes (papers, workshop reports, presentations etc) in their own institutional repository of OceanDocs, they can be harvested and any future reporting of IODE activities should become easier. Outputs from IODE Programmes are an essential metric to maintain as evidence of successful projects and funding. GE-MIM will consider at its' next meeting whether regular updates are required to be published and how this will be achieved.

Some possible actions:

IODE Community Members asked to contribute retrospective records of their programme outputs.

IOC/IODE to require all members to submit their metadata and full text output to an available repository from 2011 onwards.

GE-MIM will discuss how to monitor this requirement.

Conclusions

The IODE Anniversary Bibliography was created to celebrate 50 years of IODE Activities. The PDF version was a one- off information product, but it highlighted that IODE outputs are not being regularly recorded. If this can be achieved, the open access repository network, could provide to IOC/IODE useful evidential metrics and expose IODE project outcomes to a wide audience of policy makers, educators and scientists.

LIST OF THE IODE PROJECTS COVERED BY THE BIBLIOGRAPHY

Project Acronym	Project Full Name	No. of bib. records associated with the project (01.05.2011)
GENERAL	IODE Documents	89

ASCABOS	Supporting Program for Capacity Building in the Black Sea Region	4
ASFA	Aquatic Sciences and Fisheries Abstracts	4
Data Publishing		4
DBCP	Data Buoy Cooperation Panel	45
ETDMP	JCOMM/IODE Expert Team on Data Management Practices	30
GEBCO	General Bathymetric Chart of the Oceans	109
GE-BICH	Group of Experts on Biological and Chemical Data Management and Exchange Practices	12
GE-MIM	IODE Group of Experts on *Marine Information Management*	40
GE-TADE	Group of Experts on Technical Aspects of Data Exchange	15
GFD	Group of Experts on Format Development	2
GLOSS	Global Level of the Sea Surface; The Global Sea Level Observing System	165
GODAR	Global Oceanographic Data Archaeology and Rescue	35
GOOS	Global Ocean Observing System	457
GOSUD	Global Ocean Surface Underway Data	22
GTSPP	Global Temperature-Salinity Profile Programme	39
IPY	The International Polar Year	3
JCOMM	Joint Technical Commission for Oceanography and Marine Meteorology	92

Marine XML		18
MEDAR/MEDATLAS	Mediterranean Data Archaeology and Rescue / MEDATLAS-Mediterranean Atlas	66
MEDI	Marine Environmental Data and Information Referral System	33
MOTIIVE	Marine Overlays on Topography for Annex II Valuation and Exploitation Project	3
NODC/RNODC/WDC	National Oceanographic Data Centres/Responsible National Oceanographic Data Centres/ World Data Centres	457
OBIS	Ocean Biogeochemical Information System	2
OCEAN DATA PORTAL		18
OCEAN DATA STANDARDS		5
OCEANDOCS		13
OCEANEXPERT		9
OCEANPC		7
OCEANPORTAL		13
OCEANTEACHER (ACADEMY)		24
ODIN		158
OPEN SCIENCE DIRECTORY		2
SEADATANET		23
SIMORC	System of Industry Metocean data for the Offshore	4

	and Research Communities	
VIRTUAL LABORATORY	53	1
WOD & WOA	World Ocean Database; WOA - World Ocean Atlas	291

Bibliography references by date issued

Period of time	No. of records
2010-2011	124
2000-2009	1412
1990-1999	436
1980-1989	103
1970-1979	53
1960-1969	3
1950-1959	2