SIMORC

System of Industry Metocean data for the Offshore and Research Communities

Why?

Metocean *in situ* data are an important category of oceanographic data, comprising parameters like sea level, waves, currents, sea temperature, conductivity, air temperature, air pressure, and wind. A major share of metocean *in situ* observations for the oceans and seas is collected by research institutions and governmental organizations, operating monitoring stations and performing field surveys. In addition a very substantial volume of metocean *in situ* data is collected by private industry, in particular by or under contract to major oil & gas companies. Within Europe major offshore oil & gas fields can be found in the North Sea, Mediterranean Sea, Caspian Sea, Norwegian Sea, and on the North Western Atlantic shelf. Beyond Europe major offshore activity areas are located in e.g. the Gulf of Mexico, offshore Brazil, China Sea, Australasia, Middle East and offshore West-Africa.

Observed metocean data, analyses and climate studies provide the oil & gas industry with essential information and knowledge for the design and engineering of offshore installations, such as production platforms and pipelines, and for assessing workability conditions. In addition the information is used for supporting the planning of, for example diving operations and the installation of pipelines, and the forecasting of storms and heavy weather conditions, which might require timely evacuation or other safety measures to be taken during the operation of offshore installations.

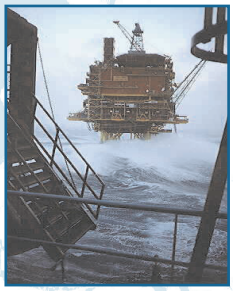
Over many years the oil & gas companies have acquired together a large volume of metocean data sets worldwide. Often these data sets are acquired at substantial cost and in remote areas. However there is not a common awareness of available data sets and no systematic indexing and archival of these data sets within the industry.

Furthermore there is only limited reporting and access to these data sets & results of field studies for other parties, in particular the scientific community. Opening up these data sets for further use will provide favourable conditions for creating highly valuable extra knowledge of both local and regional ocean & marine systems. This will provide benefits to the industry, the scientific community and regional environmental & coastal managers.

How?

From June 2005 onwards the SIMORC project is underway to develop and to launch the SIMORC internet service with the following aims:

- to manage and to operate a central index and database of metocean data sets, col lected by the oil & gas industry at various sites on the globe in the past and continuing at present
- to facilitate harmonisation in quality and for mats, storing and retrieving of these industry metocean datasets for use by industry part ners and scientific users.



The SIMORC service will consist of an index metadatabase and a database of actual Metocean data sets, that together will be accessible through the Internet. The index metadatabase will be public domain and feature a geographic-alphanumeric user interface to locate interesting data sets easily. The Metadata index will provide sufficient information to allow the user to assess the relevance of the data sets and possible related study reports to its particular interest.

The Database stores and contains Metocean data sets that have undergone quality control and conversion to unified formats, resulting in consistent and high quality, harmonised data sets. These datasets will be stored in a secure way and access to data will be regulated by a dedicated SIMORC User Licence Agreement.

This contains rules for access and use of data sets by scientific users, and by third parties. Data sets in the SIMORC database are and remain the property of the oil & gas companies. The user interface will contain an ordering facility, to which registered users of research and academic institutes can log-in and by which they can submit requests for downloading and using selected data sets for research and educational purposes.

Who?

The SIMORC project is funded by the European Commission and is executed by the following partners:

Mariene Informatie Service
"MARIS" BV (MARIS) - coordinator
www.maris.nl

International Association of Oil & Gas Producers (OGP)
www.ogp.org.uk

British Oceanographic Data Centre (BODC)
www.bodc.ac.uk

Intergovernmental Oceanographic Commission of UNESCO (IOC-IODE)
ioc.unesco.org

MARIS is coordinator and responsible for developing and operating the SIMORC internet service and (meta)databases.

The International Association of Oil & Gas Producers (OGP) coordinates participation by major oil & gas companies, bringing in their considerable data sets. Therefore OGP has set up a Limited Interest Project (LIP), which so far has been signed by the following companies: Shell, Total, BP, Hydro, Statoil, and Chevron.

BODC will quality control all metocean data sets and unify their formats.

IOC-IODE is responsible for promotion and dissemination of SIMORC on a global scale to the academic world and for including SIMORC and datasets in its educational programs for developing countries.

Contacts:

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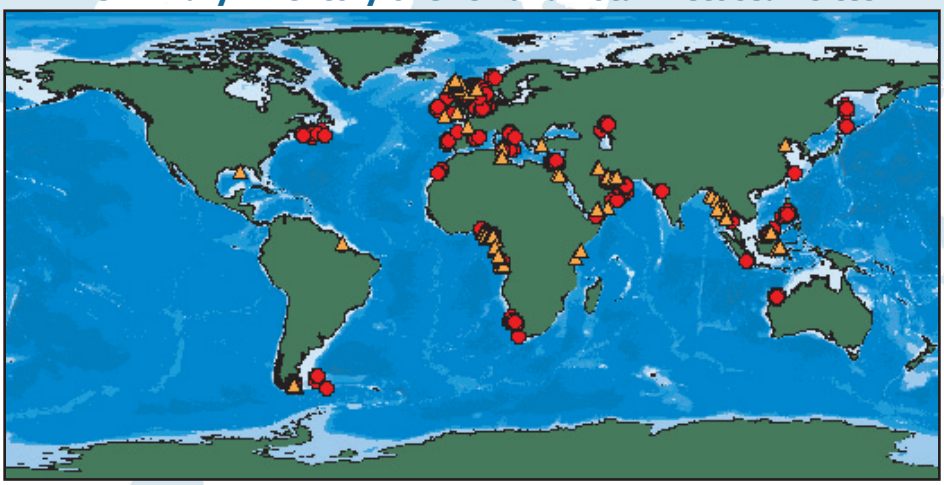
Preliminary inventory of Shell and Total metocean sites



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www.simorc.org