



SYSTEM OF INDUSTRY METOCEAN DATA FOR THE OFFSHORE AND RESEARCH COMMUNITIES

Access to offshore industry metocean data

A very substantial volume of metocean in situ data is collected by or under contract to major oil & gas companies. 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 for forecasting storms and heavy weather conditions, that might require timely evacuation or other safety-measures to be taken during the operation of offshore installations.

The data collection is done all over the world and over many years a large volume of data sets has been acquired, often at substantial cost and in remote areas. These are managed by the metocean departments of the oil & gas companies and stored in various formats and exchanged on a limited scale between companies.

The System of Industry Metocean data for the Offshore and Research Communities, SIMORC, is an initiative of the Metocean Committee of the International Association of Oil & Gas Producers (OGP). It brings together a wide variety of metocean data and makes them available to the scientific community and industry through a dedicated internet data service. The SIMORC concept and service were initially developed from June 2005 till end - 2007 with co-funding by the European Commission via the SIMORC project, executed by MARIS, BODC, IODE and OGP, assisted by a Taskgroup from the OGP Metocean Committee. From 2008 onwards SIMORC is operated by MARIS and BODC in an arrangement with OGP.

SIMORC's service consists of an index metadatabase and a database of actual data sets. Both are accessible via the internet at <http://www.simorc.org>. The index metadatabase is in the public domain and features a discovery service to locate interesting data sets easily. The database contains copies of metocean data sets gathered by oil & gas companies. However, these have undergone extensive quality control and conversion to unified formats (SeaDataNet ODV ASCII and NetCDF), resulting in consistent and high quality, harmonised data sets. Data sets remain the property of the oil & gas companies.

Access to the data is regulated by a User Licence Agreement, which gives favourable conditions for access and use of data sets for research and educational purposes. Industry users also need to register. Their data requests are always forwarded to the data owners for consent. Data owners have privileged and thus unrestricted access to their own data sets, that are included in SIMORC. That way SIMORC is not only a central clearing house for the industry metocean data sets, but also can function as company database system (or extranet) for OGP members to store and serve their own datasets.

The SIMORC service had its public launch in March 2007. At present it covers more than 2900 data sets from Shell, Total and BP, covering more than 2000 years of observations of winds, waves, currents and sealevels. The SIMORC system is operational to serve users in identifying and getting access to data sets and to extend its coverage regularly with additional data sets from oil & gas companies.



#	Data set name	Variables	Platform type	Instrument	Water depth (m)	Show
	ADCP_MODIFIED	Administration and dimensions > Administration and dimensions Physical oceanography > Currents	subsurface mooring	current profilers	695	Show
	LOLRPHSABIN	Administration and dimensions > Administration and dimensions Physical oceanography > Currents	subsurface mooring	current profilers	1895	Show
	LOLRPHASABIN	Administration and dimensions > Administration and dimensions Physical oceanography > Currents	subsurface mooring	current profilers	1898	Show
					1896	Show
					1895	Show
					1894	Show
					1895	Show
					1898	Show
					1896	Show

Benefits for users and Participants:

- SIMORC facilitates systematic indexing of industry metocean datasets and results of field studies, providing easy overview of available datasets to all types of users.
- SIMORC facilitates systematic archival, providing efficient and harmonised access to available datasets. SIMORC also promotes long-term stewardship of industry metocean datasets.
- SIMORC provides privileged access for staff of data owners to their own datasets.
- SIMORC facilitates validating the quality of existing datasets and harmonising their documentation and formats; improving the opportunities for further use of datasets in integrated studies and analyses.
- SIMORC facilitates and encourages exchange of datasets between industry parties; saving costs and adding value to earlier investments in data acquisition.
- SIMORC encourages relationships between industry and developing countries by providing datasets that can be used by local and regional communities for analysing their local systems and for educational purposes.