



## The ChArMEx database

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The Chemistry-Aerosol Mediterranean Experiment (ChArMEx, <http://charmex.lsce.ipsl.fr/>) aims at a scientific assessment of the present and future state of the atmospheric environment in the Mediterranean Basin, and of its impacts on the regional climate, air quality, and marine biogeochemistry. The project includes long term monitoring of environmental parameters, intensive field campaigns, use of satellite data and modelling studies. Therefore ChArMEx scientists produce and need to access a wide diversity of data. In this context, the objective of the database task is to organize data management, distribution system and services such as facilitating the exchange of information and stimulating the collaboration between researchers within the ChArMEx community, and beyond.

The database relies on a strong collaboration between OMP and ICARE data centres and falls within the scope of the Mediterranean Integrated Studies at Regional And Locals Scales (MISTRALS) program data portal. All the data produced by or of interest for the ChArMEx community will be documented in the data catalogue and accessible through the database website: <http://mistrals.sedoo.fr/ChArMEx>.

The database website offers different tools:

- A registration procedure which enables any scientist to accept the data policy and apply for a user database account.
- Forms to document observations or products that will be provided to the database in compliance with metadata international standards (ISO 19115-19139; INSPIRE; Global Change Master Directory Thesaurus).
- A search tool to browse the catalogue using thematic, geographic and/or temporal criteria.
- Sorted lists of the datasets by thematic keywords, by measured parameters, by instruments or by platform type.
- A shopping-cart web interface to order in situ data files. At present datasets from the background monitoring station of Erba, Cape Corsica and from the 2012 ChArMEx pre-campaign are available.
- A user-friendly access to satellite products (SEVIRI, TRIMM, PARASOL...) stored in the ICARE data archive using OpeNDAP protocole

The website will soon propose new facilities. In particular, many in situ datasets will be homogenized and inserted in a relational database, in order to enable more accurate data selection and download of different datasets in a shared format.

In order to meet the operational needs of the airborne and ground based observational teams during the ChArMEx 2012 pre-campaign and the 2013 experiment, a day-to-day quick look and report display website has been developed too: <http://choc.sedoo.org>. It offers a convenient way to browse weather conditions and chemical composition during the campaign periods.