

The ARABESQUE Data Set

The two Arabian Sea biogeochemical cruises (ARABESQUE) ran from August until November 1994. The project studied processes in the Gulf of Oman, the Arabian Sea and the Northwest Indian Ocean during the monsoon and intermonsoon seasons.

The ARABESQUE field work collected over 60 individual data sets during the two research cruise legs.

ARABESQUE data management services were provided by the British Oceanographic Data Centre. The data management operation collected over 90% of the data sets identified and built them into an integrated database that forms the core of this electronic publication. The contents of the CD-ROM may be considered as a series of objects. Each object has a data or information content together with a mechanism for delivering these to the user.

The ARABESQUE Database

This is by far the most important object on the CD-ROM. It is a relational database that includes all of the data collected during the project with the exception of the surface underway and UOR measurements. The database includes over 100 Mbytes of data and is presented on the CD-ROM in three variants of Microsoft JET format together with an ASCII 'kit form' database designed to be compatible with any database management system. A Windows95 application program, the Database Explorer, has been developed that allows water bottle data to be retrieved through a powerful and flexible search engine. The database may also be queried using Microsoft Access version 2.0 or later. A set of Microsoft Access forms has been included to provide an interface to all data types held in the database. The ASCII 'kit-form' database comprises one file per database table. All fields, including internal keys, are supplied to allow the database to be recreated with ease under any database system. Alternatively, conventional data processing applications may be written against these files. The database is supported by extensive documentation in the Acrobat soft manual. This includes full descriptions of the data collection protocols, a description of the database structure and contents and instructions on the use of the Database Explorer software.

ARABESQUE Underway Data

The underway data set consists of continuous measurements of sea surface hydrography, chemistry and biology and of navigation, bathymetry and meteorology which were made on both cruises at a sampling interval of 1 minute. The underway data set is also supported by extensive documentation in the Acrobat soft manual. This includes full descriptions of the data collection protocols, a description of the underway file structure and contents and instructions on the use of the Underway Explorer software.

ARABESQUE UOR Data

The UOR data set comprises nearly 50 ASCII files, each of which represents a single deployment of the Undulating Oceanographic Recorder. Measurements were made of navigation, hydrography and chlorophyll fluorescence at 4 second intervals. This is also

documented in the Acrobat soft manual which gives descriptions of the data collection protocols and a description of the UOR file structure.