Land-Ocean Interaction Study
Rivers, Atmosphere and Coasts Study

RACS (C) Marine I and RACS (A) Data Sets

Users' Guide

RACS (C) marine data set and documentation compiled by
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LOIS (RACS) was a NERC multidisciplinary research project encompassing terrestrial, fluvial, atmospheric and marine systems. Fieldwork was undertaken between 1992 and 1997 in the eastern UK between Great Yarmouth and Berwick upon Tweed.

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Introduction

The RACS Component of LOIS was probably one of the most ambitious cross-disciplinary research projects ever undertaken. It included the several sub-components:

BIOTA — A study of the salt marshes of the Humber and the Wash. This was also known as RACS (C) Terrestrial.

RACS (A) — An atmospheric chemistry study looking at changes in air masses as they passed from the Wash into East Anglia.

RACS (R) — A study of the rivers that drain into the North Sea.

RACS (C) — A study of the estuarine systems, the coast and coastal waters between Great Yarmouth and Berwick upon Tweed. Strictly speaking this should be called RACS (C) Marine, but most workers in the project simply referred to it as RACS (C).

This CD-ROM contains the complete RACS (A) data set together with the shipborne data collected in the coastal North Sea, Humber Estuary and Tweed Estuary, which form a significant portion of RACS (C) Marine data set. A number of RACS (C) 'Special Topic' stand-alone data sets are also included.

It does not include any of the moored instrument data from the Holderness Experiment, the mouth of the Wash, the Humber Estuary or the Tweed Estuary. Nor does it include any data from the LISP study of the Humber inter-tidal mud flats. It is hoped to publish these in the future as a second RACS(C) product.

Although it includes only part of the marine data, the data set presented on this CD-ROM is nevertheless both large and structurally complex. This document is designed to provide as much help as possible to those wishing to navigate through and make use of the data set. It is a 'soft document' implemented using Adobe's *Acrobat* active documentation system and is therefore more like a Web site than a conventional printed document. Instead of an index containing page numbers, there are 'hot links' which will take you to the appropriate point in the document with a single click of the left mouse button. These may be identified in two ways. First, when the *Acrobat* hand cursor is on a hot link, it turns into a pointing finger. This can be a little difficult to see, so to make it easier, any text that lies within a hot link has been highlighted with colour, usually red.

The manual is implemented as a series of document files arranged in hierarchical layers. Whilst *Acrobat* includes mechanisms for getting back from a file to the file that called it these are either not obvious (using the document

list in the File menu) or long winded (backspacing through views). To circumvent this, additional help has been provided in the form of 'Parent' and 'Home' buttons at the top of each document. Clicking the 'Parent' button opens the file that called the current file. In other words, it moves you one layer up through the hierarchy. Clicking the 'Home' button opens this file, bringing you straight back to the beginning.

The *Acrobat* reader you are now using is a powerful piece of software. In addition to the 'hot link' document navigation it has many other features. For those who prefer to read away from their computer screen, documents may be printed either whole or in part. Text and graphics may be copied to other applications and therefore may be regarded as data that may be accessed directly from this document. Please take some time to explore this document. We are confident that you will find it time well spent.

Contents

Credits and Acknowledgements	Who did what to bring this electronic publication to you, including acknowledgement of copyright and trademarks.
Roll of Honour	Scientific acknowledgements.
The LOIS Project	A description of the LOIS Project.
RACS Fieldwork Summary	A synopsis of the fieldwork activities that produced the data set presented here.
CD-ROM Overview	A descriptive electronic brochure providing a summary of the CD-ROM contents.
The BODC Explorer Software	A suite of *Windows* application programs that provide a user-friendly interface to the CD-ROM data.
The RACS (C) Marine Database	RACS (C) Marine water column and benthic data from the Challenger, Sea Vigil and Tweed campaigns except for underway data.
The RACS (C) Underway Data Set	Continuously measured sea surface data, meteorology, navigation and bathymetry from the RRS Challenger cruises.
RACS Special Topics Data Sets	Data from the Humber Observatory, Holderness Beach Profile Surveys and a Digital Elevation Model of the East coast from the Wash to the Humber.
The RACS (A) Data Set	Meteorological and atmospheric chemistry data from the Imperial College Jetstream aircraft, two MV Guardian cruises and the UEA Weybourne Observatory.