



Information required from all cruise participants when submitting data

The UK SOLAS Data Centre undertakes the safeguarding and distribution of UK SOLAS data, during the lifetime of the programme and into the future. Our data management procedures help to ensure that the UK SOLAS data set meets the highest standard.

When data analysis has been completed, please send a copy of each data set to Gwen Moncoiffé or Jenny Andrew, the UK SOLAS Data Management team at BODC by email (gmon@bodc.ac.uk, jedr@bodc.ac.uk), or on CD-ROM or DVD by post to:

ATTN Drs Gwen Moncoiffé or Jenny Andrew
British Oceanographic Data Centre
Joseph Proudman Building
6 Brownlow Street
Liverpool L3 5DA

Submission should take place within six months of the end of fieldwork unless other time-scales have been agreed with the UK SOLAS data management team.

File formats

BODC will accept most data, text and image/video file formats providing they contain, or are accompanied by, sufficient information to enable their use by BODC. Please ask if you are unsure whether we can deal with your file format.

- For small numerical data sets or metadata tables and sampling logs, spreadsheet files are most commonly used. If possible all stations, or all related data, should be in a tabulated layout on one sheet. Avoid submitting multiple identical Excel sheets, which are time consuming to reformat. Only use multiple sheets if a different table layout is required (e.g. different type of analysis or different sampler).
- For large numerical data sets, such as those from continuous vertical or surface measurements, ASCII (including CSV) or NetCDF formats are preferred. In these cases one file per station is acceptable. Unless there is clear indication to the contrary, we will assume that the format is identical for the entire data series.
- For video and still camera images, we will archive the data in their original digital format or, if scanned, in a format which offers suitable resolution.

Data standards

All scientists who will submit data to BODC should adhere to the following standards:

- Use clear column headings and units for each parameter.
- Ensure that parameters are correctly and accurately defined and labelled. If used, acronyms and non-standard nomenclature should be clearly explained.
- All measured parameters should be included. Indicate which parameters are directly measured and which are derived. For derived measurements, include the formulae used to obtain the value and any published references applicable.
- Provide quality assessment, and quality control comments and information, if appropriate. Indicate data points that you consider suspect: once data is



transferred to our standard format we can assign quality control flags to inform end users of this. Similarly, let us know if there were problems with the whole data set: we will include such comments in the documentation which accompanies the data set.

- Document methods and protocols, with details of instruments used. Information on instruments and methods should be as detailed as for a refereed publication. Include full specification for non-UKORS equipment: make, model, setup, manufacturer's and field calibration information, detection limits, accuracy and precision, type and pore size of filter used if applicable, instrument location and height/depth, sampling and sub-sampling procedures and frequencies, analytical methods, post-cruise data- and sample-processing.
- Where reference is made to a publication, provide the **full** reference, including all authors, year of publication, title, journal, issue and page numbers.
- Provide the name and institution of the scientist who should be considered the principal "owner" of the data. If this information is not provided, default ownership will be set to the project PI. Although we can only link one person's name to the data in our database, if more than one person need be acknowledged each time the data are used then please provide the full list of authors: we will include this information in the data series documentation.

Metadata

From all scientists who will submit data to BODC, the following information **is required** to be included in all data and metadata files or in the accompanying documentation:

- Sampling mechanism (e.g.: CTD rosette, air sampler, net, non-toxic sample, bucket on a rope, camera on buoy, vessel mounted camera, CLASP on buoy, vessel mounted CLASP, etc...).
- Cast/station/sample/image unique identifiers.
- Date and time of sampling event, specifying clearly whether time is GMT/UTC or local time. If local time is used then time zone must be specified. The time is **essential** to fix the position of the sample against the primary navigation data. If sampling was not instantaneous then start and end time should be provided.
- Depth or height of sample or sampling instrument.

Table 1 summarises information required according to the type of sample/measurement collected.

Cruise report

Participants should provide as much information as possible in the cruise report about sampling strategies and methods, indicating

- whether the work was integrated with other cruise participants.
- the number of stations sampled and the number of samples collected.
- what the samples will be, or were, used for, including measurements and processing completed on board, and post-cruise processing steps.
- composition of the final data set, with details on measured and derived parameters and products.

References to published work should be provided in full.

**Table 1**

Information required about different sample types (in addition to those listed above)

Data type	Information required	✓
Water bottles from CTD rosette	<ul style="list-style-type: none"> • CTD cast reference (as used by UKORS) • Depth of sample • NISKIN bottle reference • Methodology including type of filter used (if applicable) 	
Other hydrocast sampling (e.g. GOFLO)	<ul style="list-style-type: none"> • Hydrocast identifier • Type of water sampler and bottle (including volume) • Water sampling station identifier • Date and accurate time of deployment • Depth of sample 	
Incubations/laboratory experiments	<ul style="list-style-type: none"> • Source of water samples with cast and station identifier • Tracer used • Incubation/experiment identifier • Incubation start time and duration • Light level (% light illuminating sample) if applicable • Simulated depth • Other experimental conditions (e.g. inhibitors, temperature) 	
Air samples	<ul style="list-style-type: none"> • Type of sampler • Sample identifier • Sampling date and time in GMT • Date and time sampling ended, or sampling duration, if not instantaneous • Height of sampling with reference (e.g. sea level, ship's main deck) • Information about filter used 	
Stand Alone Pumps	<ul style="list-style-type: none"> • Pump system type, make, model and settings • Deployment/sample identifier • Start and end time of deployment • Depth of sample • Volume of water pumped • Filter used 	
Other samples/instruments	<ul style="list-style-type: none"> • Make, model and description of instrument • Calibration procedures (pre-, during or post-cruise) • Definition and units of data logged • Any processing applied to the data before sending to BODC • Any further calibration required (please discuss with BODC as we may be able to assist) 	

End of Document.

Last updated by JA, 19 July 2007.

Gwen Moncoiffé
 UK SOLAS Data Management Project
 Coordinator
 gmon@bodc.ac.uk
 Tel: 0151 795 4880

Jenny Andrew
 UK SOLAS Data Manager

jedr@bodc.ac.uk
 Tel: 0151 795 4883

Fax: 0151 795 4912

URL: <http://www.bodc.ac.uk/projects/uk/uksolas/>