19 AVR, 1988

How to Prepare a MEDI Entry
HOW TO PREPARE A MEDI ENTRY

WHY DO IT?

MEDI\(^1\) is a directory system for data sets, data catalogues and data inventories and run within the framework of the IOC's International Oceanographic Data Exchange (IODE) system. The entries are deliberately kept simple so that they can be collected and disseminated as rapidly as possible.

By taking the time to prepare a MEDI entry for your organization, you will make your own work better known and you will help the increasing numbers of scientists and ocean users who are seeking data. In order to speed up data entry and get the directory information to users soonerest, we prefer that you follow the instructions given below. If you have a document that already contains all or almost all the information requested, you may use this as an alternative method of submitting Information. Your dataset may be just the one the users are looking for; make sure they find it; write your MEDI entry today.... right now!

WRITING YOUR ENTRY

Each MEDI entry starts with a section describing the data holding organization. This is followed by one or more sections, each giving a description of a single data set, data catalogue or data inventory held by the organization.

DESCRIPTING AN ORGANIZATION

A MEDI entry section describing an organization should contain three components - the organization name, the organization address and a plain text description. Give the address for user enquiries. In the address give mailing, telephone, fax, telex, cable, electronic mail and communications network addresses, if any. In your description, mention any special conditions and procedures for the supply of data.

EXAMPLE

National Oceanographic Data Center

User Services Branch
NOAA/NESSIS E/OC21
Washington, DC 20235
USA
Tel: +1 (202) 673-5549 Telemail: NODC.WDCA SPAN: NODC::SERVICES

NODC is an NODC within the IODE system and operates WDC-A Oceanography and RNODCs for IGOSS and MARPOLMON-P. Archived NODC datasets are available from NODC as magnetic tape copies of specified data subsets. For the major global files, data are also available as formatted printouts, data summaries, analyses, and plots. These files are sorted by cruise number (cruise file) and by a

\(^{1}\) Marine Environmental Data Information Referral System
geographic grid system (geofile). Datasets in originator formats are provided only as direct copies of whole data tapes. Subsets cannot be retrieved. The data files, as well as products, inventories, and cost information, are described in more detail in the NODC Users Guide (available from the above address). Data are on 1600 bpl tapes unless noted as being 6250 bpl tapes.

**DESCRIBING A DATA HOLDING**

A MEDI entry section describing a data holding is divided into three components: a title for the holding, identifiers and a plain text description. Start with the heading title and separate each component with a blank line. Note that you use the same format both to describe actual data sets and to describe catalogues and inventories (meta-data). Include separate sections for each major data type that you have, even if you manage your data as an integrated database.

Try to include the following identifiers: Data type, Geographic area, Time Period, Number of Observations and Media. If possible choose the data type from the list in Annex I, based on the ROSCOP form. Choose the Geographic Area from the list in Annex II based on IHB Sea areas. For both data type and geographic area you may enter more than one descriptor if necessary. If none of the list entries apply, substitute your own descriptor. For the media when applicable give both the type e.g. magnetic tape and the volume e.g. number of tapes, disk file size.

In the description, include relevant information such as type of instrument used, processing and quality control applied, project that data was collected for, etc.

**EXAMPLES**

*Oceanographic Station Data (SD2) File.*

Classical oceanographic bottle stations and vertical profiles (STD/CTD). Global. 1900-present. 693,259 stations. Cruise file 19 tapes (6250); geofile 42 tapes (6250).

Oceanographic data at discrete depth levels mainly from Nansen or other bottle casts (<5% CTD/STD data). Principal parameters are T, S; however, O2, PO4, P, SiO2, NO2, NO3, and pH may be recorded, as well as water color and water transparency. Values of sound velocity, sigma-T, and dynamic depth anomaly are computed.

*ROSCOP File.*

Data Inventory. Global. 1970-present. 20000 cruises. 20000 data sheets. 13 reports.

This gives you complete flexibility to include any other type of information that is important for your organization or your data holding. Follow the few simple guidelines and the pattern of the examples given above and you’ll write informative MEDI entries that will guide potential users straight to your data (and ward off those users for whom your data is not relevant).

SENDING YOUR MEDI ENTRY

The quickest way of submitting your MEDI entry is to send it as a Telemail message to IOC.SECRETARIAT (Omnet) with the subject given as "MEDI INPUT".

If you are unable to use this medium, submit the MEDI entry on an IBM-PC compatible floppy disk (3 1/2" or 5 1/4", low or high density). A simple DOS text file is best but most common word processor file formats can also be accepted.

Alternatively simply send the MEDI entry on paper.

Floppy disk and paper MEDI entries should be addressed to

MEDI Co-ordinating Centre
Intergovernmental Oceanographic Commission
UNESCO
7 Place de Fontenoy
75700 Paris
France. Tel: +33 (1) 45 68 40 08

This same centre will give you details on how you can get information from MEDI.

Thank you very much for your willingness to assist the effective use of oceanographic data by submitting a MEDI entry.
ANNEX I

Geographic Area Names

These names are based on those in I.H.B. Special Publication No 23 (Third Edition, 1953) - 'Limits of Oceans and Seas', which contains a precise definition of each area. Modifications to the I.H.B. system include the addition of sub-divisions for the major oceans and of entries for the Southern Ocean (Southern limit - the Antarctic Continent. Its northern limit is dependent on the oceanographic conditions e.g. Antarctic Convergence, and is typically 50 S) and the use of the name 'global' to describe data holdings covering a worldwide range. Except for the name 'global' the same names are also used in the ROSCOP form and in the GF3 data formatting system.

OCEAN/SEA AREA NAMES

Global
Baltic Sea
   Gulf of Bothnia
   Gulf of Finland
   Gulf of Riga
Kattegat, Sound and Belts
Skagerak
North Sea
Greenland Sea
Norwegian Sea
Barents Sea
White Sea
Kara Sea
Laptev (or Nordenskjold) Sea

East Siberian Sea
Chukchi Sea
Bering Sea
The Northwestern Passages
   Baffin Bay
Davis Strait
   Labrador Sea
Hudson Bay
   Hudson Strait
Arctic Ocean
   Lincoln Sea
Inner Seas off the West Coast of Scotland
Irish Sea and St. George's Channel
Bristol Channel
English Channel
Bay of Biscay
North Atlantic Ocean
   NE Atlantic (Limit 40 W)
   NW Atlantic (Limit 40 W)
Gulf of St. Lawrence

Bay of Fundy
Gulf of Mexico
Caribbean Sea
Mediterranean Sea
   Western Basin
   Eastern Basin
   Strait of Gibraltar
   Alboran Sea
   Balearic Sea (or Iberian Sea)
   Ligurian Sea
   Tyrhenian Sea
   Ionian Sea
   Adriatic Sea
   Aegean Sea (The Archipelago)
   Sea of Marmara
   Black Sea
   Sea of Azov
South Atlantic Ocean
   SE Atlantic (Limit 20 W)
   SW Atlantic (Limit 20 W)
Rio de La Plata
Gulf of Guinea
Gulf of Suez
Gulf of Aqaba
Red Sea
Gulf of Aden
Arabian Sea
Gulf of Oman
Gulf of Iran (Persian Gulf)
Laccadive Sea
Bay of Bengal
Andaman or Burma Sea
Indian Ocean
   Mozambique Channel
Malacca and Singapore Straits
  Malacca Strait
  Singapore Strait
  Gulf of Thailand (Siam)
East Indian Archipelago (Indonesia)
  Sulu Sea
  Celebes Sea
  Molukka Sea
  Gulf of Tomini
  Halmahera Sea
  Ceram Sea
  Banda Sea
  Arafura Sea
  Timor Sea
  Flores Sea
  Gulf of Boni
  Ball Sea
  Makassar Strait
  Java Sea
  Savu Sea
South China Sea (Nan Hai)
Eastern China Sea (Tung Hai)
Yellow Sea (Hwang Hai)
Japan Sea
Inland Sea (Seto Naikal)

Sea of Okhotsk
Bering Sea
Philippine Sea
North Pacific Ocean
  NE Pacific (Limit 180 deg.)
  NW Pacific (Limit 180 deg.)
Gulf of Alaska
Coastal Waters of SE Alaska and British Columbia
Gulf of California
South Pacific Ocean
  SE Pacific (Limit 140 W)
  SW Pacific (Limit 140 W)
Great Australian Bight
  Bass Strait
Tasman Sea
Coral Sea
Solomon Sea
Bismarck Sea
Southern Ocean
  Atlantic Sector of Southern Ocean
  Indian Ocean Sector of Southern Ocean
  Pacific Sector of Southern Ocean
Land Areas
ANNEX II

Datatypes

These names are adapted from those used for the ROSCOP form. The data types 'Data catalogue' and 'Data Inventory' have been added.

GENERAL

Data catalogue
Data Inventory

NEAR SEA FLOOR (< 10 m)

Continuous temperature recording
Continuous salinity recording
Discrete temperature measurements
Discrete salinity measurements

METEOROLOGY

Upper air observations
Incident radiation
Air-sea Interface studies
Ice observations
Occasional standard measurements
Systematic standard measurements
Meteorological measurements

CHEMICAL

Oxygen
Phosphates
Total - P
Nitrates
Nitrites
Silicates
Alkalinity
pH
Chlorinity
Trace elements
Radioactivity
Isotopes
Dissolved gases
Chemical measurements

HYDROGRAPHY

SURFACE

Continuous temperature recording
Continuous salinity recording
Discrete temperature measurements
Discrete salinity measurements

POLLUTION

Classical oceanographic stations
Vertical profiles (STD/CTD)
Sub-surface physical measurements underway
Mechanical bathythermograph
Bathythermograph-expendable
Sound velocity stations
Acoustic stations
Transparency
Optics
Diffusion (Dynamic)
Physical measurements

Suspended solids
Heavy metals
Petroleum residues
Chlorinated hydrocarbons
Other dissolved substances
Thermal pollution
Pollution measurements
Waste water: BOD
Waste Water: Nitrates
Waste water: Microbiology
Waste water: Other
Discoloured water
Bottom deposits
Contaminated organisms
GEOLGY GEOPHYSICS

MEASUREMENTS MADE AT A SPECIFIC LOCATION

- Dredge
- Grab
- Core-rock
- Core-soft bottom
- Sampling by divers
- Sampling by submersible
- Drilling
- Bottom photography
- Sea floor temperature (< 1 m from bottom)
- Acoustical properties of the sea floor
- Engineering properties of the sea floor
- Magnetic properties of the sea floor
- Gravimetric properties of the sea floor
- Radioactivity measurements
- Geology/Geophysics measurements

MEASUREMENTS UNDERWAY

- Motion picture of sea floor
- Bathymetry-wide beam
- Bathymetry-narrow beam
- Side scan sonar
- Seismic refraction
- Gravimetry
- Magnetism
- Underway geophysical measurements

TYPES OF STUDIES

- Physical analysis of sediments
- Chemical analysis of sediments
- Paleothermy
- Paleomagnetism and rock magnetism
- Paleontology
- Geothermy
- Geochronology
- Mineral and fossil resources
- Littoral zone studies

DYNAMICS

- Current meters
- Currents measured from ship drift
- GEK
- Drifters
- Swallow floats
- Drift cards
- Bottom drifters
- Tidal observations
- Sea and swell
- Dynamical measurements

BIOLOGY

- Primary productivity
- Phytoplankton pigments
- Seston
- Particulate organic carbon
- Particulate organic nitrogen
- Dissolved organic matter
- Bacterial and pelagic micro-organisms
- Phytoplankton
- Zooplankton
- Neuston
- Nekton
- Invertebrate nekton
- Pelagic eggs and larvae
- Pelagic fish
- Amphiblans
- Benthic bacteria and micro-organisms
- Phyto- and zoobenthos
- Commercial demersal fish
- Commercial benthic molluscs
- Commercial benthic crustacean
- Attached plants and algae
- Intertidal organisms
- Borers and foulers
- Birds
- Mammals and reptiles
- Deep scattering layers
- Acoustical reflections on marine organisms
- Biological sounds
- Bioluminescence
- Vitamin concentrations
- Aminoacid concentration
- Hydrocarbon concentrations
- Lipid concentrations
- ATP-ADP-AMP concentrations
- DNA/RNA concentrations
- Taggings
- Biological measurements
BIOLOGY (continued)

TYPES OF STUDIES

Identification
Spatial and temporal distribution
Monitoring and surveillance
Biomass determination
Description of communities
Food chains energy transfers
Population and environments
Population structures
Taxonomy, systematics, classification
Physiology
Behavior
Pathology, parasitology
Toxicology
Gear research
Exploratory fishing
Commercial fishing
Aquaculture