

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of Unesco)

19 AVR. 1988

How to Prepare a MEDI Entry

HOW TO PREPARE A MEDI ENTRY

WHY DO 17?

MEDI¹ 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 soonest, 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.

DESCRIBING 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/NESDIS 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 ilst 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 crulses. 20000 data sheets. 13 reports.

ROSCOP forms from 30 countries, providing information on data collected in Oceanographic cruises. Semi-annual catalogues of ROSCOP-2 Forms published. Issues 1-5, 1978-1980.

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 MEDIENTRY

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 a 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

101. 100 (1) 40 00 40 00

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 Skagerrak North Sea Greenland Sea Norweglan Sea Barentsz Sea White Sea Kara Sea Laptev (or Nordenskjold) Sea East Siberian Sea Chuckchi Sea Beaufort Sea The Northwestern Passages **Baffin Bay Davis Strait** Labrador Sea **Hudson Bay Hudson Stratt** 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

Gulf of St. Lawrence

NE Atlantic (Limit 40 W) NW Atlantic (Limit 40 W) 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 Tyrrhenlan Sea Ionlan 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 Agaba **Red Sea** Gulf of Aden Arablan Sea Gulf of Oman **Gulf of Iran (Persian Gulf)** Laccadive Sea Bay of Bengal Andaman or Burma Sea

Mozambique Channel

Indian Ocean

Malacca and Singapore Straits Sea of Okhotsk Malacca Strait **Bering Sea** Singapore Strait Philippine Sea Gulf of Thailand (Siam) North Pacific Ocean East Indian Archipelago (Indonesia) NE Pacific (Limit 180 deg.) Sulu Sea NW Pacific (Limit 180 deg.) Celebes Sea Gulf of Alaska Molukka Sea Coastal Waters of SE Alaska and British **Gulf of Tomini** Columbia Halmahera Sea Gulf of California Ceram Sea South Pacific Ocean Banda Sea SE Pacific (Limit 140 W) Arafura Sea SW Pacific (Limit 140 W) Timor Sea Great Australian Bight Flores Sea **Bass Strait Gulf of Boni** Tasman Sea Bali Sea **Coral Sea** Makassar Strait Solomon Sea Java Sea Bismarck Sea Savu Sea Southern Ocean South China Sea (Nan Hai) Atlantic Sector of Southern Ocean Eastern China Sea (Tung Hai) Indian Ocean Sector of Southern Yellow Sea (Hwang Hai) Japan Sea Pacific Sector of Southern Ocean Inland Sea (Seto Naikai)

Land Areas

ANNEX II

Data types

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

METEOROLOGY

Upper air observations Incident radiation Air-sea interface studies Ice observations

Occasional standard measurements Systematic standard measurements Meteorological measurements

HYDROGRAPHY

SURFACE

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

PHYSICAL

Sub-surface physical underway Mechanical bathythermograph expendable Sound velocity stations

Classical oceanographic stations

Vertical profiles (STD/CTD)

Sound velocity sta Acoustic stations Transparency Optics

Diffusion (Dynamic)
Physical measurements

NEAR SEA FLOOR (< 10 m)

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

CHEMICAL

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

POLLUTION

measurements

Chemical measurements

Suspended solids
Heavy metals
Petroleum residues
Chlorinated hydrocarbons
Other dissolved substances
Thermal pollution
Pollution measurements
Waste water: B0D
Waste Water: Nitrates
Waste water: Microbiology
Waste water: Other
Discoloured water
Bottom deposits
Contaminated organisms

GEOLOGY 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

Littoral zone studies

Physical analysis of sediments
Chemical analysis of sediments
Paleothermy
Paleomagnetism and rock magnetism
Paleontology
Geothermy
Geochronology
Mineral and fossi! resources

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

Phytobenthos 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

Biologic sounds
Bioluminescence
Vitamin concentrations
Aminoacid concentration
Hydrocarbon concentrations
Lipid concentrations

ATP-ADP-AMP concentrations DNA-FINA 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