Intergovernmental Oceanographic Commission
Reports of Meetings of Experts and Equivalent Bodies

Second Session of the IODE Steering Group for MEDI

Second Session

Honolulu, USA
2-4 April 2002

UNESCO 2002

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Abstract

The IODE Steering Group for MEDI was established during IODE-XVI to support the MEDI software system. The Marine Environmental Data Information Referral Catalogue (MEDI) is a directory system for datasets, data catalogues and data inventories developed by IODE. During its Second Session the Steering Group reviewed the current status of the MEDI metadata authoring tool (version 3.0b). The Group discussed the changes required to the current version of the software and drafted a list of recommended software changes.

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INTRODUCTION

The Session was opened on Tuesday, 4 April 2002 at 09:30 at the East-West Centre, University of Hawaii, Honolulu, USA, by Greg Reed, Chairman of the MEDI Steering Group (SG-MEDI). Mr Reed welcomed the participants to the meeting.

The Chairman outlined the objectives of the meeting and presented a background to the MEDI project. He recalled that the Marine Environmental Data Information Referral Catalogue (MEDI) is a directory system for datasets, data catalogues and data inventories developed by IODE. The software development for the current version of the MEDI metadata authoring tool was completed in December 2001 and has been available to the members of Steering Group on the IOC web site for testing and comment. Members of the Global Change Master Directory (GCMD) team have tested the software. The chairman also visited the Southampton Oceanography Centre in March 2002 to demonstrate the software and has received positive feedback from some of the Centre staff.

STATUS OF THE CURRENT VERSION OF MEDI

Mr Matthew de Plater, MEDI software developer, introduced the current version of MEDI. He chronicled the development work completed during the twelve-month period since the first Steering Group meeting.

- April 2001.First MEDI steering group meeting with demonstration of MEDI v.2.2.
- May 2001.Work list compiled from Steering Group meeting.
- May – Dec 2001.Software development and alpha testing phase.
- Dec 2001. Beta version of MEDI v.3.0 completed and evaluation version hosted on IOC website.
- Dec 2001 – Mar 2002. User testing by Steering Group members and ongoing beta testing.

The current version of MEDI is browser-driven, thus allowing users to connect to the internet, if required, to search for marine-related metadata. The software can also be used locally, either as a stand-alone system or on a local network. This version includes the MEDI server that operates as a service under Apache Tomcat 3.2.3 using HTML, JSP and servlets to render functionality. Apache Tomcat operates on Windows, UNIX and LINUX platforms. MEDI uses standard HTTP protocol, hence can be accessed via the internet or intranet. Metadata records are stored as DIF-XML files and data can be imported and exported using standard ZIP formats. The GIS functionality is delivered using SVG (Adobe SVG plug-in 3.0). All text is displayed via a translation table that allows multi-lingual functionality. The current distribution size is 9.93MB and the software can be downloaded from the IOC web site. The software has been successfully tested using Windows and Unix operating systems. Some problems have been reported when using Mac OS. The SVG viewer software is currently only supported by Internet Explorer and does not function correctly with Netscape. On-line help files, with examples, are available to assist the user. Records can be imported and exported in XML format.

The Group thanked Mr de Plater and expressed its appreciation for the support provided by the Australian Oceanographic Data Centre (AODC) in the development of the MEDI software tool. The Group also noted that AODC could no longer commit the resources required to accept the full responsibility for future software development.

SOFTWARE ISSUES TO BE RESOLVED

Detailed discussions were held on a number of issues to be resolved with the current version of the software. Each data entry and search screen was examined in full and the following issues were identified:

Search Records

General Search Parameters	Select field to Search: Use previous search field as default Choice of AND / OR When a search task has been added to the "Search Task List" box, the "Remove" button does not delete the added task. Ability to search for a dataset by ID number
Temporal Criteria	Combine Specific Bounds and Monthly Bounds Monthly bounds search is not working
Spatial Search	Need help hints on how to use SVG Do not display the SVG map when opening. Provide a button "Display Map" to open the SVG map to graphically define area. When defining a rectangular area, need to be able to draw in all directions. Investigate alternative ways of displaying results of a spatial search, e.g. different colours, shaded boxes
SVG Viewer	Investigate SVG performance. 180^0 issue – Don Collins to investigate how NODC handles the problem
General Comments	It should not be a requirement to login in order to search records. Ability to combine search criteria Ability to search on a subset (result of search) Ability to search for a dataset by ID number

Create New Records

Page 1.	Summary Wizard: change name to Authoring Assistant. Language: change to Dataset Language Remove Discipline Access Constraints. Move "Optional values" box to be under title. Don't need second box (see, e.g., Distribution) Use Constraints. Enlarge box (same as Quality)
Page 2.	Temporal coverage: stop date can be blank Date range: change range check message to a warning Remove paleo temporal coverage
Page 3.	Fix bug when moving back/forward to next page using bottom navigation Do not display the SVG map when opening. Provide a button "Display Map" to open the SVG map to graphically define area. Locations: desirable feature to have auto-determination of location name from a digitised sea area boundary file. Ability to edit multi-point coordinates Locations: Add World Ocean, Southern Ocean and Caspian Sea
Page 4.	Parameter, Source, Sensor, Project. Change "Add" button to "Suggest new" with instructions on how to suggest new keywords. Generate email to MEDI coordinator with new valid name. MEDI coordinator then contacts GCMD. Originator is informed if approved or rejected. (This should be the procedure for all valids) All "Add" functions not working Do not display "EARTH SCIENCE" in the list of selected parameters.
Page 5.	Rename screen to "Holding Organisation and Personnel". Create new contact. Enter all contact details on a single screen.

	Personnel roles. Select from defined list – Investigator, Data centre contact, DIF author, Technical contact. Each Organisation record requires a Data Centre Contact. URL – change to Data Centre URL.
Page 6.	Change text "Data presentation format" to "Data presentation form". Need an ADD button to add to list of suggested keywords.
Page 7.	Distribution. Increase size of "Fees" box. "Media" and "Format" lists need ADD button to add to list of suggested keywords Related URL. "URL Content Type" is controlled list, select from list of valids. Include "Suggest" button. If "URL content type" is used then "URL" field is required.
Page 8.	Multimedia. If "File" is used then "URL" is required. Format: need ADD button to add to list of suggested keywords. New name for "Multimedia"? "Sample Image". Data Resolution. Move "Temporal Resolution" to first on list.
Page 9.	Investigate methods for locating Parent Record ID. Refer to KOSI system (http://kosi.nfrdi.re.kr). In Korean only. Remove IDN Node (not required in MEDI).
General	Replace all "?" buttons with "i" icon. Create new record from template. If no template is selected system crashes. Automatically move cursor for fixed character fields (e.g. date field). All fields require a help feature. Security. Only owner can edit/delete records.

Delete Records
Need a cautionary note before deleting
Need ability to delete records from the search results screen.
Help screen required.

Export Records
Need ability to Export records from the "Search Results" Screen.
Help screen required.
Two options to export records: MEDI DIF and GCMD DIF (remove geo-shapes and validate against GCMD DTD)
FGDC compatibility. Use XSL style sheet for conversion

Import Records
Help screen required.

Main Menu
Move "Recover unsaved records" from Search Menu to Main Menu.

Administration
Add "Modify User" feature
Enlarge Address field box

General
Printable version of a DIF record is desirable.
Field "Originating Centre" missing – to be added
Redesign web interface. All mandatory fields should appear on a single page.

Review of Valid Lists

Parameter Valids. It was agreed to retain the complete set of GCMD Parameter valids but to change order of Topics so OCEANS is listed first.

Source, Sensor, Project, Data Centre valids. It was agreed that these valid lists would be reduced to include only Ocean related keywords. GCMD will provide subset lists for existing datasets using the OCEANS topic. Recommended MEDI Source Valids are listed in Annex V. Recommended MEDI Sensor Valids are listed in Annex VI. Recommended MEDI Project Valids are listed in Annex VI. Recommended MEDI Data Centre Valids are listed in Annex VIII.

Location valids. It was agreed to add the following location names to the valid list: Caspian Sea, World Ocean, Southern Ocean

CONVERTING DATASETS FOR MEDI

This item was introduced by Evgeny Vyazilov and outlined the methods used at RIHMI-WDC to convert dataset descriptions to MEDI format. The full abstract of the presentation is included in Annex IV.

GCMD PRESENTATION

Ms Monica Holland introduced this item and listed the GCMD contribution to MEDI during the intersessional period. This included:

- A subset list of all the ocean-related data centers held in the GCMD so that MEDI users will have a list of Data centers potential choices within the field "Data Provider“Database tables for “Data_Center” (“Data_Center” valids table, “Data_Center_ URL”, and “Data_Center” personnel valids)XSL modules for the tab layout
- The process of how FGDC records can be converted to DIF (and how DIF can be converted to FGDC)A list of all of the Data Centers that were used within the GOSIC portals.
- Responded to MEDI steering group's request to add Location keywords and Ocean Keywords to GCMD keyword list.

Currently the GCMD has a total of 253 Ocean keywords in the list of "GCMD Parameter Valids". The following Ocean keywords and location valids have been suggested by MEDI since the 1st session of the IODE Steering Group for MEDI: Plate Tectonics, Geochemistry, Genetics, Aquaculture, Nearshore dynamics or shelf dynamics, Remote Sensing or geosensing, and Seismology.

GCMD has incorporated several of the keyword suggestions from MEDI steering group members. GCMD Keywords added during 2001-2002 to the Earth Science > Oceans parameter valids, other ocean-related keywords, and Location valids are:

Bathymetry/Seafloor Topography > Abyssal Hills/Plains
Bathymetry/Seafloor Topography > Continental Margins > Continental Rises/Slopes
Bathymetry/Seafloor Topography > Continental Margins > Continental Shelves
Bathymetry/Seafloor Topography > Fracture Zones
Bathymetry/Seafloor Topography > Seamounts > Guyots
Bathymetry/Seafloor Topography > Ocean Plateaus/Ridge
Bathymetry/Seafloor Topography > Rift Valleys
Bathymetry/Seafloor Topography > Seamounts
Bathymetry/Seafloor Topography > Submarine Canyons
Bathymetry/Seafloor Topography > Trenches

Biosphere > Aquatic Habitat
Biosphere > Demersal Habitat
Marine Biology > Fish
Marine Biology > Genetics
Marine Biology > Marine Birds
Marine Biology > Marine Habitat
Marine Biology > Marine Invertebrates
Marine Biology > Marine Mammals
Marine Biology > Marine Microbiota
Marine Biology > Marine Plants
Marine Biology > Marine Reptiles
Marine Geophysics > Marine Tectonics > Island Arcs
Marine Geophysics > Marine Magnetics > Magnetic Anomalies
Marine Geophysics > Marine Tectonics > Mid-Ocean Ridges
Marine Geophysics > Continental Drift
Marine Geophysics > Marine Tectonics > Seafloor Spreading
Marine Geophysics > Marine Tectonics > Subduction
Marine Volcanism > Benthic Heat Flow
Marine Volcanism > Hydrothermal Vents
Marine Sediments > Hydrogenous Sediments > Evaporites
Marine Sediments > Biogenic Sediments > Carbonate Sediments
Marine Sediments > Geotechnical Properties
Marine Sediments >Sedimentary Textures > Sediment Grain Size
Marine Sediments > Biogenic Sediments > Siliceous Sediments
Marine Sediments > Sediment Chemistry
Marine Sediments >Sedimentary Textures
Marine Sediments > Sedimentary Structures
Marine Sediments >Geotechnical Properties
Ocean Chemistry > Marine Geochemistry
Sea Surface Topography > Sea Surface Height
Sea Ice > Snow Melt
Sea Ice > Snow Depth

Location Valids added during 2001-2002 are:

Barents Sea
Irish Sea
Norwegian Sea
Ross Sea
Sea Of Japan/East Sea
South China and Eastern Archipelagic Seas
Weddell Sea

The GCMD keyword valids are updated with new information or modifications periodically. A current list of all the GCMD keywords are maintained online: http://gcmd.nasa.gov/Resources/valids/index.html

The MEDI software was evaluated by GCMD and comments were received from 5 GCMD staff members. These comments have been assembled and are listed in Annex III. The MEDI export function was reviewed and the following differences were noted:

- Order of fields was different than the GCMD DTD (this can be corrected by an XSL style sheet)
- Syntax for the field Discipline was incorrect
- Date syntax incorrect, should be changed from yyyy-m-dd to yyyy-mm-dd
- Removed duplicate polypoint values and included as a keyword field

The latest version of the GCMD DTD is at http://gcmd.nasa.gov/Aboutus/xml/dif/dif.dtd.

Ms Holland also reviewed other metadata authoring tools, namely, GCMD Builder Tools, SMMS (Biological Research Division (BRD) Metadata Tool) and MATT Metadata Authoring Tool (Southern African Data Community).

Ms Lola Olsen provided information on the status of GCMD's MD8 software and the MD8 Server Local Database Agent (LDA). MD8 is a Java application and is intended to be platform independent. The software requires Java 1.3, Jakarta Tomcat 4.0 (to run the servlets) and Jython 2.0 (the Java implementation of the Python programming language). The Local Database Agent (LDA) requires a database that supports triggers. The database creation scripts are tailored for Oracle 8 or 8i and some customisation may be required for other databases. These scripts also scan the GCMD catalogue and extract DIFs dependent upon specific predefined search controls such as Data Center, IDN_Node, Locations, Parameters, Project, Sensors (Instruments), and Sources (Platforms).

RECOMMENDED CHANGES TO MEDI SOFTWARE

The Group commended the work done by the MEDI software developer, Mr de Plater, and listed the changes required to current version based on the software issues identified above. Details of recommended changes to the software are listed in Annex IX.

PROMOTION OF MEDI IN THE MARINE COMMUNITY

The Group discussed ways of promoting MEDI in the marine community and to encourage its use. It was agreed that an enhanced web presence would raise the profile of MEDI. IOC will create a new web site for MEDI to provide a background to the project and describe details of the MEDI authoring software. Presentation of papers at conferences and meeting was seen as another opportunity of promoting MEDI.

CLOSURE

The Steering Group Chairman thanked everybody for contributing to the second session of the MEDI Steering Group. The Second Session of the IODE Steering Group for MEDI was closed on Thursday 4 April at 14:00. In accordance with the IODE work plan and budget it was planned to have the next Session in 2003 with the date and place to be decided later.

ANNEX I

AGENDA

Introduction

Status of the current version of MEDI

Issues to be resolved with the software

converting datasets for MEDI

Presentation from GCMD

Recommended changes to the MEDI software

Promotion of MEDI in the marine community

Closure

ANNEX II

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ANNEX III

GCMD EVALUATION OF MEDI SOFTWARE

MEDI Tool Evaluation: Page 1. Title, Summary. Discipline, Language, Access Constraints, Use Constraints, and Quality				
Problems/Understanding/Ease of Use: What problems did you have reviewing the features? Is it clear what each field requires? Which field(s) needs additional explanation for the user? What field(s) were not easy to use?	Discipline: User 1: This field needs a pick list. It is not clear what the user's choice are. When I clicked "Add I was expecting a pick list. User 2: field seems vague; no controlled keywords User 3: This field should be explained more, the user of the field should be provided, and a list of choices should be provided for the user. May be able to keep as a default value Discipline: EARTH SCIENCE Subdiscipline: OCEANS	Summary: What does "wizard" mean?	Access Constraints: The box below access constraints should be placed under the option, so that the user doesn't try to enter a value in the box.	Use Constraints: only allows 1 line of text
Unique Features: What stands out as unique within this tool for this page?	Access Constraints: Liked the Optional values provided			
Additional comments	When you transition from Page 1 to Page 2 it is not clear if you have to click “Finish” to save your work before proceeding to Page2. However after testing, I was able to see that by clicking Page 2 my work on Page 1 was saved.	What do the red asterisks mean next to some fields? I assume that these indicate required fields, but the novice user wouldn't know that. There's no explanation as to what they are.		
MEDI Tool Evaluation: Page 2. Temporal Coverage and Paleo Temporal Coverage				

Problems/Understanding/Ease of Use:	Entered 1697 as the start year. I received a warning that the start year must be > 1900 and < 2050. What do you do with a dataset that is not Paleoclimate, but starts before 1900? The other problem is that some NCEP projected climate data sets go beyond 2050. I also tried entering a start date without an end date. I got a warning telling me end month must be a number. We commonly enter start dates without an end date.	There is a dialog box that says "no temporal records" and another box that says "remove". What does that mean, does it mean that if I put in a date I have to remove the "no temporal records" line from the box?	Noticed that if you click on a valid without entering a date, it takes a long time to get the error message to loop to end.
Unique Features			
Additional comments			
MEDI Tool Evaluation: Page 3. Spatial Coverage, Rectangular Boundaries, Altitude, Depth, Locations			
Problems/Understanding/Ease of Use:	Could only get the “Box” polygon to work. I clicked the other symbols and nothing happened.	I was going along quite nicely until the specification of lat. and lon. values. For some unknown reason, I could not go on to the next page of "fill-in-the form". It kept re-entering my input values.	The geospatial fields on page 3 were especially confusing for the geospatial coordinates, what is "polygon type"? A Help key should be provided for the field. Also, not sure what to do with the buttons on the right side of the map.
Unique Features	3 of the 5 testers, mentioned that the map is a really nice feature		

Additional comments	When I clicked Page 4. My Windows '98 OS Crashed. I got a list of cryptic errors and then the tool crashed. Started Over and skipped to page 4 to avoid the same error. I was not able to retrieve the file I was working on. At the start you should give a notice to the user for retrieving unsaved documents.	Noticed that when you try to go on to the next page (page 4) before the map has loaded, the browser will crash. It may be useful to add a loading symbol so that the user is aware that something is happening, or that they must wait to continue to another section.		
MEDI Tool Evaluation: Page 4. Parameters, Source, Sensors, Project, General Keywords				
Problems/Understanding/Ease of Use:	I am not sure why the "Add" button is there. I think it is there so you can suggest a new keyword.	Does not allow the user to enter multiple parameters	The add new button did not work for the Source field	Are there sensors that are within the MEDI list of valids that aren't part of the sensor valids within GCMD?
Unique Features	I liked the Parameter function here. It is real fast and easy to use I liked the pick lists for source and sensor valids. Very nice!			
Additional comments				
MEDI Tool Evaluation: Page 5. Holding Organization: Organisations, Create New Organization Record				
Problems/Understanding/Ease of Use:	Hard to determine how to add new person, eventually realized that you must use an existing organization	It is not intuitive for the user to add a new contact within create a new organization.		
Unique Features				
Additional comments				
MEDI Tool Evaluation: Page 6. Citation Details				

Problems/Understanding/Ease of Use:

Unique Features:

Additional comments

MEDI Tool Evaluation: Page 7. Distribution and Related URL			
Problems/Understanding/Ease of Use:	Distribution: Not sure if you had to click on > to save	Related URL: Needs valids list	Related URL field should have a help field for the user. Also this field should have a valid list, not a free text option
Unique Features			
Additional comments	Not sure if you would be able to save the record at this point, or if had to go through all the pages before the record would be submitted.		
MEDI Tool Evaluation: Page 8. Multimedia and Data Resolution			
Problems/Understanding/Ease of Use:	The Multimedia field should have an explanation of how the field should be used.		
Unique Features			
Additional comments			
MEDI Tool Evaluation: Page 9. Metadata Housekeeping			
Problems/Understanding/Ease of Use:	There is no help button near parent record. Some people might not know what this means.		
Unique Features	Like the drop down boxes. The "Today" Buttons are great!		
Additional comments			
MEDI Tool Evaluation: Page 10			

Problems/Understanding/Ease of Use: None

Unique Features:

Additional comments

Additional Questions		
Standards Compliance	Is the Tool compliant with GCMD?	Valids list should be included within the tool.
Usability	Is online documentation available? If so how useful does it appear to be?	Some fields are missing guidelines or help menus to assist the user.
	Are other forms of documentation available for the user?	This feature should be incorporated into the new version of MEDI.
General Tool features	Can the metadata be developed in stages over time?	The tool will allow you to update the metadata over time, with templates, however, further explanation for saving documents is needed.
	Are there means within the tool for pre-filling, re-using, the same information?	Yes
User Interface	Does the user interface seem intuitive?	Some parts of the MEDI tool are not intuitive, please refer to table above for additional comments.
	User interface consistent with other windows functions (save, print, cut/paste?	The option to save the document as the user creates the metadata record should be noted.
	Are there multiple user interfaces (Basic, Advanced, etc)?	No, currently there is only one interface provided with this version of the MEDI tool.

Additional Comments	Finish Editing Record - There is only a Submit Button. It is not clear on whom the entry is being submitted to. How do I send a copy of the entry to myself? What is the entry ID for the record that I have created? How do I retrieve my file at a later time?	Search: Not clear on how to search using the add feature	May need to explain why the user needs to download SVG.	May want to provide on the starting pages, how to recover any unsaved documents. It was not clear for the user to look under the search feature.
	After creating my record, I am not sure if I was able to save my record correctly. I looked under all the files in "Export Records" from the main menu. My entry is not there. It may have been there, but I have no idea what the file name is since it was not provided for me during the creation process.	Noticed overall there weren't very many instructions to guide the user.	I would have thought that Import a record meant that I could just take that sample DIF and bring it on in - but evidently not. It doesn't appear that the Import is active.	
	The use of fancy tools such as SVG seems unnecessary and burdensome on the user. The "create record" system is very slow possibly due to the high cost of the graphics involved.	The record is not displayed after each additional page has completed. It may be useful for the user to see the record while it is being created	Did not understand how to Search the directory, so I chose to see all the entries - the 200 + IODE ones. I had no success with refining my query. In their list, they use Parameters and General Keywords and an uncapped "author".	
	I didn't like not knowing how many total questions I would have to complete. I didn't like the "unknown". In our version, you see the entire spectrum of what needs to be done.	I tried to update a record that I started working on, however the date did not change after I updated the record.	Tried to use a "blank" form to write my own record. I saw a template in there for other users. I'm not sure what that might mean to someone. I'm not sure how the other templates were created.	

ANNEX IV

THE PROBLEMS OF CONVERTING DATA SETS DESCRIPTION FOR MEDI

The completeness of the metadata base on the centres, kinds of observation is the important characteristic of any system, therefore it is necessary to describe not only oceanographical data, but also all data concerning natural environment of coastal zones (meteorological, geological, hydrological, etc.). With systems such as GCMD, EDMED, and MEDI it can take some hours to enter one dataset description and the metadata author does not want to spend time for repeated input of these descriptions into MEDI. It is necessary to use already created descriptions of this system.

Therefore one of tasks of development of the MEDI metadata base is the association of the information from various systems by converting from one structure of metadata base. For example, it may use metadata bases of such systems as EDMED (UK), INFOCLIMA (WMO), Blue Pages (Australia), etc., in which already there are thousands of descriptions of oceanographical datasets. Such approach would allow considerably speeding up of the work of creating the MEDI metadata base.

It is possible to divide systems of storing metadata bases on structure of their storage into two parts:
Classical databases as the relational tables;
Documentary systems representing metadata in the putting or outputting forms systems as "Key word: *Value*".

Depending on the storage structure, it is possible to propose some variants of conversion. For metadata as the relational tables the following schemes of converting can be applied.

1) DB → SQL → DB (Triple) → SQL → XML XSLT → XML MEDI

2) DB → SQL → XML XSLT → XML MEDI

3) DB → SQL → XML MEDI

In the first variant with DBMS from the several tables are combined in a triple under the structure: first field is the name of the table, second field is the name of the field in the table, third field is a value of the attribute. In this triple the names of the tables actually represent the group elements XML, and names of fields - names of elements or attributes XML. The SQL software is required which will transform this metadata into the correct XML file. XML is a perfect means of information exchange, understanding as the computer, and user. This variant is used in RIHMI-WDC to represent metadata and data on the screen of the user from a database.

In the second and third variants it is possible also to use SQL, to submit data from a database as XML files. The received XML files can be converted by the Extensible Stylesheet Language for Transformations (XSLT), which is a subset of language XML.

If metadata are submitted in the form "Key word: *values* ", this information is possible easily to transfer in XML file by replacement of key words on appropriate XML tags using editors (NotePad, WordPad, etc.). Such work is carried out in RIHMI-WDC for more than 300 data sets description, before stored as *.html, *.doc files, etc.

After reception XML files for their completion the editor XMLPad or anyone another is possible to use which allow easily to change values of elements and attributes, to add new elements and attributes, and also to change their names. If the change both additions of values

of elements and attributes are required only, it is possible to import the data in MEDI and to take advantage of editing tools of this system.

Future of development of meta-databases is the integration of the dataset descriptions with connection of the additional information - formats, documentation on data sets, maps of data coverage, detailing catalogues of datasets, etc., as it is made in Carbon Dioxide Information Analysis Center (CDIAC), National Snow and Ice Data Center, Distribution Active Archive Center (NSIDC DAAC). Use of a subset of language XML (Xlink, XPass, XPointer) allows it to make more effectively, than indication a URL address.

ANNEX V

RECOMMENDED MEDI SOURCE VALIDS

Short Name > Long Name

ADEOS > Advanced Earth Observing Satellite
ADEOS II > Advanced Earth Observing Satellite-II
AEM-2 > Applications Explorer Mission-2
AEM-3 > Applications Explorer Mission-3
AIRCRAFT
AJISAI > Experimental Geodetic Satellite (Japanese EGS)
AQUA > Earth Observing System> AQUA (EOS PM-1)
ARGOS > ARGOS Data Collection and Position Location System
ASOS > Automated Surface Observing System
ATLAS > Atmospheric Laboratory for Applications and Science
ATLAS MOORINGS > Autonomous Temperature Line Acquisition System
AWOS > Automated Weather Observing System
BALLOONS
BUOYS
C-MAN > Coastal Marine Network
CMDL > NOAA Climate Monitoring Diagnostics Laboratory Stations
COASTAL STATIONS
COSMOS 49
DEM > Digital Elevation Model
DMSP > Defense Meteorological Satellite Program
DMSP 5D-2/F10 > Defense Meteorological Satellite Program-F10
DMSP 5D-2/F11 > Defense Meteorological Satellite Program-F11
DMSP 5D-2/F12 > Defense Meteorological Satellite Program-F12
DMSP 5D-2/F13 > Defense Meteorological Satellite Program-F13
DMSP 5D-2/F14 > Defense Meteorological Satellite Program-F14
DMSP 5D-2/F15 > Defense Meteorological Satellite Program-F15
DMSP 5D-2/F8 > Defense Meteorological Satellite Program-F8
DRILLING PLATFORMS
EOS AM-1 > Earth Observing System> AM-1
EOS PM-1 > Earth Observing System> PM-1
ERBS > Earth Radiation Budget Satellite
ERS-1 > European Remote Sensing Satellite-1
ERS-2 > European Remote Sensing Satellite-2
ETALON 1
ETALON 2
FIELD SURVEYS
FIXED OBSERVATION STATIONS
GCM > General Circulation Model
GEOS 3 > Geodetic Earth Orbiting Satellite 3
GEOSAT > Geodetic Satellite
GEOSTATIONARY SATELLITES>
GMS > Japan Geostationary Meteorological Satellite
GMS-1 > Geostationary Meteorological Satellite-1
GMS-2 > Geostationary Meteorological Satellite-2
GMS-3 > Geostationary Meteorological Satellite-3
GMS-4 > Geostationary Meteorological Satellite-4
GMS-5 > Geostationary Meteorological Satellite-5
GOES > NOAA Geostationary Operational Environmental Satellites
GOES-10 > Geostationary Operational Environmental Satellite 10
GOES-11 > Geostationary Operational Environmental Satellite 11
GOES-2 > Geostationary Operational Environmental Satellite 2
GOES-5 > Geostationary Operational Environmental Satellite 5
GOES-6 > Geostationary Operational Environmental Satellite 6
GOES-7 > Geostationary Operational Environmental Satellite 7
GOES-8 > Geostationary Operational Environmental Satellite 8
GOES-9 > Geostationary Operational Environmental Satellite 9
GPS > Global Positioning System Satellites
GRAVITY STATIONS
GROUND STATIONS
GROUND-BASED OBSERVATIONS

HAGGLUND > NZAP Hagglund Oversnow Vehicle
HELICOPTER
INSAT > Indian National Satellite
INSAT 1A > Indian National Satellite 1A
INSAT 1B > Indian National Satellite 1B
IRIS > Incorporated Research Institutions for Seismology Network
IRS-P3 > Indian ISRO IRS-P3 Spacecraft
JERS-1 > Japanese Earth Resources Satellite-1
LAGEOS > Laser Geodetic Satellite
LAGEOS 2 > Laser Geodetic Satellite 2
LANDSAT
LANDSAT-1
LANDSAT-2
LANDSAT-3
LANDSAT-4
LANDSAT-5
MAGSAT
MAPS
METEOR-3
METEOSAT
METEOSAT-1
METEOSAT-2
METEOSAT-3
METEOSAT-4 > Meteosat Operational Programme 1 (MOP-1)
METEOSAT-5 > Meteosat Operational Programme 2 (MOP-2)
METEOSAT-6 > Meteosat Operational Programme 3 (MOP-3)
METEOSAT-7
MODELS
MOORINGS
MOS-1 > Japanese Marine Observation Satellite 1
MOS-1B > Japanese Marine Observation Satellite-1B
NIMBUS
NIMBUS-3
NIMBUS-4
NIMBUS-5
NIMBUS-6
NIMBUS-7
NOAA POES > NOAA Polar Orbiting Environmental Satellites
NOAA-10 > National Oceanic & Atmospheric Administration-10
NOAA-11 > National Oceanic & Atmospheric Administration-11
NOAA-12 > National Oceanic & Atmospheric Administration-12
NOAA-13 > National Oceanic & Atmospheric Administration-13
NOAA-14 > National Oceanic & Atmospheric Administration-14
NOAA-15 > National Oceanic & Atmospheric Administration-15
NOAA-2 > National Oceanic & Atmospheric Administration-2
NOAA-3 > National Oceanic & Atmospheric Administration-3
NOAA-4 > National Oceanic & Atmospheric Administration-4
NOAA-5 > National Oceanic & Atmospheric Administration-5
NOAA-6 > National Oceanic & Atmospheric Administration-6
NOAA-7 > National Oceanic & Atmospheric Administration-7
NOAA-8 > National Oceanic & Atmospheric Administration-8
NOAA-9 > National Oceanic & Atmospheric Administration-9
NWS > National Weather Service
OBSERVATORIES
OCEAN PLATFORMS
OCEAN WEATHER STATIONS
OGO 2 > Orbiting Geophysical Observatory 2
OGO 4 > Orbiting Geophysical Observatory 4
OGO 6 > Orbiting Geophysical Observatory 6
ORBVIEW-2 > Orbital Sciences Corporation OrbView-2 Satellite
OSTA-1 > Office of Space & Terrestrial Applications-1
OV-105 > Endeavour Space Shuttle
PALACE FLOAT > Profiling Autonomous Lagrangian Circulation Explorer
PAM > Portable Automated Mesonet
PASSCAL > Program for Array Seismic Studies of the Continental Lithosphere
PIBAL > Pilot Balloons
PROFS > Program for Regional Observing and Forecast Systems Mesonet
PROTEUS > Profile Telemetry of Upper Ocean Currents

QUIKSCAT > Quick Recovery Scatterometer
RADARSAT-1
RADIO TRANSMITTERS
RADIOSONDES
RESURS-O1
SAGE > Stratospheric Aerosol and Gas Experiment
SATELLITES
SEASAT > Ocean Dynamics Satellite
SEASOAR
SEISMOLOGICAL STATIONS>
SHIPS
SMM > Solar Maximum Mission
SMS > Synchronous Meteorological Satellites
SPACE SHUTTLES
SPOT 1 > Systeme Probatoire Pour l'Observation de la Terre-1
SPOT 2 > Systeme Probatoire Pour l'Observation de la Terre-2
SPOT 3 > Systeme Probatoire Pour l'Observation de la Terre-3
SPOT 4 > Systeme Probatoire Pour l'Observation de la Terre-4
STARLETTE
STELLA
STS-2 > Space Transport System STS-2
SUBMARINE
TERRA > Earth Observing System> TERRA (AM-1)
TIROS > Television Infrared Observation Satellite
TIROS 7 > Television Infrared Operational
TIROS-N > Television Infrared Observation Satellite-N
TOPEX/POSEIDON > Ocean Topography Experiment
TRITON > TRIangle Trans-Ocean Buoy Network
TRMM > Tropical Rainfall Measuring Mission
VANGUARD
WEATHER STATIONS
WTSS > Water Temperature and Salinity System
ZODIACS

ANNEX VI

RECOMMENDED MEDI SENSOR VALIDS

Short Name > Long Name

1DP > 1D Particles Probe
2DC > 2D Cloud Probe
AA > Atomic Absorption Spectrometer
AAS > Atomic Absorption Spectrophotometry
ACCELEROMETERS
ACOUSTIC RADAR
ACOUSTIC SOUNDERS
ACRIM > Active Cavity Radiometer Irradiance Monitor
ACRIM II > Active Cavity Radiometer Irradiance Monitor II
ACTINOMETER > Radiation Thermocouple Actinometer
ADCP > Acoustic Doppler Current Profiler
ADRAD > Texas Aggie Doppler Radar
AERI > Atmospheric Emitted Radiance Interferometer
AEROVANES
AERS > Atmospheric/Emitted Radiation Sensor
AIRGUN ARRAYS
ALT (TOPEX) > TOPEX Radar Altimeter
ALTIMETERS
AMI > Active Microwave Instrument
AMMR > Airborne Multichannel Microwave Radiometer
AMSR > Advanced Microwave Scanning Radiometer
AMSR-E > Advanced Microwave Scanning Radiometer-EOS
ANEMOMETERS
ANEROID BAROMETERS
ANEROID PRESSURE SENSOR
AOLFL > Airborne Oceanographic Lidar Fluorosensor
ARMAR > Airborne Rain Mapping Radar
ARP > Acoustic Recording Package
ASTER > Advanced Spaceborne Thermal Emission and Reflection Radiometer
ATM > Airborne Topographic Mapper
ATSR > Along Track Scanning Radiometer and Microwave Sounder
ATSR-2 > Along-Track Scanning Radiometer 2
AUTOANALYZER
AVAPS > Airborne Vertical Atmosphere Profiling Systems
AVHRR > Advanced Very High Resolution Radiometer
AVNIR > Advanced Visible and Near-Infrared Radiometer
AWS > Automated Weather System
BALANCE
BAROMETERS
BATHYPHOTOMETER
BATHYTHERMOGRAPHS
BEDLOAD SENSORS
BIONESS
BLIP > Boundary Layer Instrument Package
BONGO NETS
BOPS > Bio Optical Profiling System
BOTTOM PRESSURE GAUGES
BRTS > Background Radiometric Temperature Sensors
CAMERAS
CAPAC > Cloud and Aerosol Particle Characterization
CASI > Compact Airborne Spectrographic Imager
CEILOMETERS>
CHN ANALYZERS > Carbon, Hydrogen, Nitrogen Analyzer
CLASS > C-LORAN Atmospheric Sounding System
CLOCKS
CLOUD LIQUID WATER PROBE
CLS > Cloud Lidar System
CO2 ANALYZERS
COLORIMETERS
CONDUCTIVITY METERS

CORING DEVICES
COULOMETERS
CPI > Cloud Particle Imager
CPR > Continuous Plankton Recorder
CRWVA > Combined Recording Wind Vane Anemograph
CTD > Conductivity, Temperature, Depth
CUFES > Continuous Underway Fish Egg Sampling System
CURRENT METERS>
CZCS > Coastal Zone Color Scanner
DADS > DC-8 DATA ACQUISITION AND DISTRIBUTION SYSTEM
DC8 DROPSONDES
DEWPOINT HYDROMETERS
DIGITIZER
DISDROMETERS
DORIS > Doppler Orbitography and Radiopositioning Integrated by Satellite
DREDGING DEVICES
DRIFTING BUOYS
DROGUES
DROPSONDES
DROPWINDSONDES
DRY BULB THERMOMETERS
ECHO SOUNDERS
EDOP > ER2-Doppler Radar
EGC > Electron Gas Chromatograph
ELECTROMAGNETIC DIRECTION METER
ELECTRON MICROPROBES
EPSONDE
EQUILIBRATORS
ERB > Earth Radiation Budget
ERBE > Earth Radiation Budget Experiment
ERS WIND SCATTEROMETER
ESMR > Electronic Scanning Microwave Radiometer
FILTERABLE DEPOSIT JAR SAMPLER
FLAME-IONIZATION DETECTOR
FLASKS
FLUORESCENCE MICROSCOPY
FLUORESCENCE SPECTROSCOPY
FLUOROMETERS
FSSP > Forword Scattering Spectrometer Probe
GAMMA RADIATION DETECTOR
GAMMA RAY SPECTROMETERS
GAS CHROMATOGRAPHS
GEK > Geomagnetic Electrokinetographs
GEOPHONES
GLI > Global Imager
GLORIA > Geological Long-Range Inclined ASDIC
GOES I-M IMAGER
GOES I-M SOUNDER
GPS > Global Positioning System
GPS RECEIVERS
GRAB SAMPLERS
GRAVIMETERS
GUST PROBES
HIRS > High Resolution Infrared Radiation Sounder
HIRS/2 > High Resolution Infrared Radiation Sounder/2
HPLC > High-Performance Liquid Chromatograph
HRR > High Resolution Radiometer
HRV > High Resolution Visible Imaging System
HUMIDITY SENSORS
HVPS > High Volume Particle Sampler
HYDROMETERS
HYDROPHONES
HYGROMETERS
HYGROTHERMOGRAPHS
ICE AUGERS
ICE STRESS SENSORS
ICPAES > Inductively Coupled Plasma Atomic Emission Spectrometer
ICPMS > Inductively Coupled Plasma Mass Spectrometer

IES > Inverted Echo Sounders
IMAGING RADAR SYSTEMS > Imaging Radar Systems, Real and Synthetic Aperture
IMAGING RADIOMETERS
INCLINOMETERS
INFRARED RADIOMETERS
INS > Inertial Navigation System
INTERFEROMETERS
ISS > Integrated Sounding System
JPL LASER HYGROMETERS
KEMMERER SAMPLER
LASE > Lidar Atmospheric Sensing Experiment
LASERS > Light Amplification by Stimulated Emission of Radiation
LIDAR > Light Detection and Ranging
LIMS > Limb Infrared Monitor of the Stratosphere
LIP > Lightning Instrument Package
LIQUID CHROMATOGRAPHS
LIS > Lightning Imaging Sensor
LONG STREAMERS
LORAN > Long Range Navigation
LRA > Laser Retroreflector Array
LRGM > Lacoste-Romberg Gravity Meter
MAGNETOMETERS
MAMS > Multispectral Mapping Atmospheric Sensor
MAPS > Measurement of Air Pollution from Satellite
MASS SPECTROMETERS
MBT > Mechanical Bathythermographs
MEIS > Multispectral Electro-optical Imaging Sensor
MESSR > Multispectral Electronic Self-Scanning Radiometer
MICROSCOPES
MICROWAVE RADIOMETER
MIR > Millimeter Imaging Radiometer
MISR > Multi-Angle Imaging SpectroRadiometer
MMS > Meteorological Measurement System
MOCNESS > MOCNESS Plankton Net
MODIS > Moderate-Resolution Imaging Spectroradiometer
MOS > Modular Optoelectronic Scanner
MSR > Microwave Scanning Radiometer
MSS > Multispectral Scanner
MSU > Microwave Sounding Unit
MSU-SK > Multichannel Middle Resolution Conical Scanner
MULTICHANNEL FILTER RADIOMETERS
MWA > Multiple Water Analyzer
NANSEN BOTTLES > Nansen Water Sampling Bottles
NAST-I > NPOESS Aircraft Sounder Testbed-Interferometer
NAST-M > NPOESS Aircraft Sounder Testbed-Microwave Radiometer
NAST-MTS > NPOESS Aircraft Microwave Temperature Sounder
NAVREC > ER-2 NAV RECORDER
NDIR GAS ANALYZER > Nondispersive Infrared Gas Analyzer
NEPHELOMETERS
NEXRAD > NEXt Generation RADar
NISKIN BOTTLES
NOAA PROFILER
NORPAC ZOOPLANKTON NET
NSCAT > NASA Scatterometer
OCE > Ocean Color Experiment
OCTS > Ocean Color and Temperature Scanner
OFFI > Optical Free Fall Instrument
OLS > Operational Linescan System
OMEGASONDE
OXYGEN ANALYZERS
OXYGEN METERS
PAR SENSORS > Phytosynthetically Active Radiation Sensors
PARTICLE DETECTORS
PARTICLE SPECTROMETERS
PETROGRAPHIC MICROSCOPES
PH METERS
PHOTOMETERS
PHOTOSYNTHETRON

PLANKTON NETS
PMS > Particle Measuring System
PR > TRMM Precipitation Radar
PRARE > Precise Range and Range-Rate Equipment
PRESSURE GAUGES
PRESSURE SENSORS
PRESSURE TRANSDUCERS
PROBES
PROFILERS
PRT > Precision Radiation Thermometers
PSR > Polarimetric Scanning Radiometer
PSYCHROMETERS
PYRANOGRAPHS
PYRANOMETERS
PYRGEOMETERS
RA > ERS Radar Altimeter
RA-2 > Radar Altimeter-2
RADAR > Radio Detection and Ranging
RADAR ALTIMETERS
RADAR ECHO SOUNDERS
RADIOMETERS
RADIOSONDES
RAIN GAUGES
RASS > Radio Acoustic Sounding System
RAWINSONDES
ROCK CORERS
ROCKETSONDES
ROWS > Radar Ocean Wave Spectrometer
RT > Reversing Thermometer
SALINOMETERS
SAR > Synthetic Aperture Radar
SASS > SEASAT-A Scatterometer System
SBT > Select-Level Bathythermographs
SBUV/2 > Solar Backscatter Ultraviolet/2
SCATTEROMETERS
SCINTILLATION COUNTERS
SCOR WP-2 ZOOPLANTKON NET
SEAWIFS > Sea-Viewing Wide Field-of-View Sensor
SEAWINDS > SeaWinds
SECCHI DISKS
SEDIMENT CORERS
SEDIMENT METERS
SEDIMENT TRAPS
SEISMIC REFLECTION PROFILERS
SEISMOGRAPHS
SEISMOMETERS
SFM > Spectrofluorometer
SIDE-SCAN SONAR
SIMS > Secondary Ion Mass Spectrometers
SIRS > Satellite Infrared Spectrometer
SLAR > Side-Looking Airborne Radar
SLR > Satellite Laser Ranging
SLS > Submillimeter Limb Sounder
SMMR > Scanning Multichannel Microwave Radiometer
SNOW MEASURING ROD
SOLAR SIMULATORS
SOLARIMETERS
SOMMA > Single Operator Multiparameter Metabolic Analyzer
SONAR > Sound Navigation and Ranging
SONOBUOYS
SOSUS > Sound Surveillance System
SOUNDERS
SPECIFIC ION METERS
SPECTROGRAPHS
SPECTROMETERS
SPECTROPHOTOMETERS
SPECTRORADIOMETERS
SPOL > NCAR S-band Polarimetric Doppler Radar

SR > Scanning Radiometer
SSALT > POSEIDON Solid State Radar Altimeter
SSM/I > Special Sensor Microwave/Imager
SSU > Stratospheric Sounding Unit
STD > Salinity, Temperature, Depth
STEEL MEASURING TAPE
STREAM GAUGES
SUN PHOTOMETERS
SUSIM > Solar Ultraviolet Spectral Irradiance Monitor
SWIR > Short Wavelength Infrared Radiometer
SWMS > Surface Water Monitoring System
TELESCOPES
TEMPERATURE LOGGERS
TEMPERATURE PROBES
TEMPERATURE PROFILERS
TEMPERATURE SENSORS
THEODOLITE
THERMISTORS
THERMOMETERS
THERMOSALINOGRAPHS
THIR > Temperature-Humidity Infrared Radiometer
TIDE GAUGES
TM > Thematic Mapper
TMI > TRMM Microwave Imager
TMR > TOPEX Microwave Radiometer
TOC > Total Organic Carbon Analyzer
TOMS > Total Ozone Mapping Spectrometer
TOVS > TIROS Operational Vertical Sounder
TRANSMISSOMETERS
TRANSPARENCY METER
TRANSPONDERS
TRAWL
TUBBS TOWS
TUCKER TRAWLS
TURBIDITY METERS
UPWARD LOOKING SONAR
USIM > Underwater Spectral Irradiance Meter
VAS > VISSR Atmospheric Sounder
VIRR > Visible and Infrared Radiometer
VISSR > Visible and Infrared Spin Scan Radiometer
VISUAL OBSERVATIONS
VLBI > Very Long Baseline Interferometry
VNIR > Visible and Near Infrared Radiometer
VOLTAGE METERS
VOPC > Video Optical plankton Counter
VPR > Video Plankton Recorder
VTIR > Visible and Thermal Infrared Radiometer
VTPR > Vertical Temperature Profile Radiometer
WATER BOTTLES
WATER LEVEL GAUGES
WATERGUNS
WAVE HEIGHT GAUGES
WBS > Wide Band Spectrometer
WELL LOGGING TOOLS
WET BULB THERMOMETERS
WET/DRY PRECIPITATION SAMPLERS
WIND PROFILERS
WIND VANES
WINDII > Wind Imaging Interferometer
WL/CR > WATER LEVEL/CLIMATE RECORDERS
XBT > Expendable Bathythermographs
XCP > Expendable Current Profiler
XPOL > NOAA/ETL X-band Polarimetric Doppler Radar
XRD > X-ray Diffractometer
XRF > X-Ray Fluorescence Spectrometer
XRPD > X-Ray Powder Diffractometer
XSV > Expendable Sound Velocity Profilers

ANNEX VII

RECOMMENDED MEDI PROJECT VALIDS

Short Name > Long Name

ACCE > Atlantic Climate and Circulation Experiment
ACDCA > Antarctic Inspections Cruise
ACE > Advanced Composition Explorer (ACE) Project
ACOUSTIC MONITORING, PMEL/NOAA
AFEAS > Alternative Fluorocarbons Environmental Acceptability Study
AIDJEX > Artic Ice Dynamics Joint Experiment
AIMS/LMP > AIMS Long-term Monitoring Program
AJAX
ALACE > Airborne Laser Assessment of Coastal Erosion
ALPEX > Alpine Experiment
AMASSED > Amazon Shelf Sediment Study
ANT-VI/3 > Structure of the Continental Margin in the Weddell Sea and Adjacent Areas
ANT-VIII/5 > Structure of the Continental Margin in the Weddell Sea and Adjacent Areas
ANT-X/2 > Structure of the Continental Margin in the Weddell Sea and Adjacent Areas
ANT-XII/2 > Structure of the Continental Margin in the Weddell Sea and Adjacent Areas
ANTPAC97 >" Geodynamics & Paleoceanography> Plate Boundaries N of Antarctic Peninsula"
APIS > Antarctic Pack Ice Seals Project
ARCSS/LAII/FLUX
ARCSS/OAII/AOS > ARCSS/OAII/Arctic Ocean Section
ARCSS/OAII/SHEBA > ARCSS/OAII/Surface Heat Budget of the Arctic Ocean
ARCSS/SCICEX > ARCSS/Scientific Ice Expeditions
ARCTIC CLIMATOLOGY PROJECT
ARCTIC'91 > Structure of the Oceanic Lithosphere of the Arctic Ocean
ARGAU > Argentine and French Austral Atlantic Ocean Project
ARK-V/3B > Structure of the East Greenland Continental Margin
ARK-VII/3B > Structure of the East Greenland Continental Margin
ARK-X/2 > Structure of the East Greenland Continental Margin
ARSLOE > Atlantic Remote Sensing Land/Ocean Experiment
AVHRR PATHFINDER > AVHRR Land Dataset Program
BBSR > Bermuda Biological Station for Research
BD CARTO > French Cartographic Database
BIOENERGETICA GAVIOTA COCINERA
BIOLOGIA HUMANA Y MEDICINA
BIOMASS > Biological Investigations of Marine Antarctic Systems and Stocks
BIOQUIMICA APLICADA
BIOQUIMICA_APLICADA > Biochemical and Nutritional Studies on Antarctic
BLAST > Bromine Latitudinal Air/Sea Transect
BOFS > Biogeochemical Ocean Flux Study
BOMEX > Barbados Oceanographic and Meteorological Experiment
CALCOFI > California Cooperative Oceanic Fisheries Investigations
CAMEX-3 > Convection and Moisture Experiment 3
CAMP > California Monitoring Program
CAV2000 > Campania Antartica De Verano Del IAA 2000
CBR > Columbia Basin Research
CCAMLR > Commission for the Conservation of Antarctic Marine Living Resources
CCAP > Coastal Change Analysis Project
CCCCS > Central California Coastal Circulation Study
CEAREX > Coordinated Eastern Arctic Experiment
CEPEX > Central Equatorial Pacific Experiment
CGC > NOAA Climate and Global Change Program
CHAMP > Coral Health and Monitoring Program
CHARTERBOAT SURVEY>
CIBAC
CILAT

CISNET > Coastal Intensive Site Network
CLIMAP > Climate - Long Range Investigation, Mapping and Prediction
CLIVAR > Climate Variability
CMO > Coastal Mixing and Optics Program
COADS > Comprehensive Ocean Atmosphere Data Set
CODE > Coastal Ocean Dynamics Experiment
COLD > Coupled Ocean-Ice Linkages & Dynamics
CONFLUENCIA_WEDDELL-SCOTIA
COP > Coastal Ocean Program
CORAL REEF ALLIANCE
CORE > Coastal Ocean Response Experiment
COROAS > Oceanic Circulation in the Western Region of the South Atlantic
CREDDP > Columbia River Estuary Data Development Program
CRYSYS > Variability and Change in the Cryospheric System in Canada
DENALI > Denali National Park and Preserve
DHARMA >" Diversity> Heterotrophy> Autotrophy & Relationship with Antarctic Microorganisms"
DINOCEANTAR > Dinamica_Oceanica_Antartica
DMSP > Defense Meteorological Satellite Program
DNAG > Decade of North American Geology
DODS > Distributed Oceanographic Data System
DOMES > Deep Ocean Mining Environmental Study
DUACS > Developing Use of Altimetry for Climate Studies
EASTROPAC > Eastern Tropical Pacific
ECOLOGIA_DEL_PLANCTON
EGMEX > Eastern Gulf of Mexico
EMPACT > Environmental Monitoring for Public Access and Community Tracking
EOLE
EOS > Earth Observing System
EOSAP > Earth Observing System Amazon Project
EOSDIS > Earth Observing System Data Information System
EPA GCRP > EPA Global Change Research Program
EPIC > Eastern Pacific Investigation of Climate
EPOCS > Equatorial Pacific Ocean Climate Studies
ERBE > Earth Radiation Budget Experiment
ERICA > Experiment Rapidly Intensifying Cyclones Atlantic
ERM > Exact Repeat Mission
EUBEX > Eurasian Basin Experiment
F DRAKE > First Dynamic Response and Kinematic Experiment in the Drake Passage
FASTEX > Fronts and Atlantic Storm Track Experiment
FIRE > First ISCCP Regional Experiment
FLEX
FLORENCE > FLux Oceaniques Restitues par bilan d'ENergie a la surfaCE
FOCAL > Programme Francais Ocean et Climat dans l'Atlantique Equatorial
FOCI > Fisheries Oceanography Cooperative Investigation
FRAQS > Front Range Air Quality Study
FRENTES_OCEANICOS
GALE > Genesis of Atlantic Lows Experiment
GALVESTON BAY BAIT SURVEY>
GANOVEX VI > Aeromagnetic Investigations in North Victoria Land
GARP/FGGE > Global Atmospheric Research Program/First Garp Global Experiment (GARP/FGGE)
GATE > GARP Atlantic Tropical Experiment
GCCHP > Global Change Climate History Project
GCIP > GEWEX Continental-Scale International Project
GCOS > Global Climate Observing System
GCPS > Global Climate Perspectives System
GCTE >" Global Change and Terrestrial Ecosystems> IGBP"
GEIA > Global Emissions Inventory Activity
GEOSECS > Geochemical Ocean Section Study
GEWEX > Global Energy and Water Cycle Experiment
GHCN > Global Historical Climatology Network
GLOBEC > Global Ocean Ecosystem Dynamics, IGBP
GLOBEC-SO > Global Ocean Ecosystem Dynamics, Southern Ocean
GLOSS > Global Sea Level Observing System
GOALS > Global Ocean Atmosphere Land System
GOFC > Global Observation of Forest Cover

GOMPOP > Gulf of Mexico Physical Oceanography Program
GOOS > Global Ocean Observing System
GOSECS > Geochemical Ocean Secrions Study
GPCC > Global Precipitation Climatology Centre
GPCP > Global Precipitation Climatology Project
GTOS > Global Terrestrial Observing System
GULFCET II > Gulf of Mexico Cetacean Project II
GUSREX > Gulf Stream Recirculation Experiment
HIELOANTAR > Antarctic Glaciology
HIFT > Heard Island Feasibility Test
HOT > Hawaiian Ocean Time Series Project
IAA ENVIRONMENTAL PROGRAM
ICITA > International Cooperative Investigations of the Tropical Atlantic
IDOE > International Decade of Ocean Exploration
IDS > International DORIS Service (IDS)
IERS > International Earth Rotation Service
IGAC >" International Global Atmospheric Chemistry Project> IGBP"
IGBP > International Geosphere-Biosphere Programme
IGOSS > Integrated Global Ocean Services System
IGS > International GPS Geodynamics Service
INDIGO > Indien Gaz Ocean
INTERCAMBIO_CALORICO > Study of Food Intake, Calories and Heat Production in Humans in Antarctica
INTERKOSMOS
IPAB > International Program for Antarctic Buoys
IPCC > Intergovernmental Panel on Climate Change
IPOD > International Phase of Ocean Drilling
ISCCP > International Satellite Cloud Climatology Project
ISLSCP > International Satellite Land Surface Climatology Project
ISLSCP INITIATIVE-I > International Satellite Land Surface Climatology Project Initiative-I
ISMEX
ISOS > International Southern Ocean Studies
IVS > International VLBI Service for Geodesy and Astrometry
IXTOC
JAPACS > Japanese Pacific Climate Studies
JARE 18 > Japanese Antarctic Research Expedition 18
JARE 20 > Japanese Antarctic Research Expedition 20
JARE 21 > Japanese Antarctic Research Expedition 21
JARE 22 > Japanese Antarctic Research Expedition 22
JARE 23 > Japanese Antarctic Research Expedition 23
JARE 24 > Japanese Antarctic Research Expedition 24
JARE 25 > Japanese Antarctic Research Expedition 25
JARE 26 > Japanese Antarctic Research Expedition 26
JARE 27 > Japanese Antarctic Research Expedition 27
JARE 28 > Japanese Antarctic Research Expedition 28
JARE 41 > Japanese Antarctic Research Expedition 41
JARE > Japanese Antarctic Research Expedition
JASIN78 > Joint Air-Sea Interaction Project
JCOMM > Joint WMO/IOC Commission for Oceanography and Marine Meteorology
JGOFS > Joint Global Ocean Flux Study, IGBP
JONSDAP76 > Joint North Sea Data Acquisition Project
JONSWAP > Joint North Sea Wave Project
L-RERP > Puget Sound Long-Range Effects Program
LAKE MICHIGAN ECOL. MONITOR
LATEX > Louisiana-Texas Shelf Physical Oceanography Program
LEADEX > Arctic Leads Experiment
LEADS ARI > Office of Naval Research Arctic Leads Accelerated Research Initiative
LMER > Land Margin Ecosystem Research Project
LOICZ > Land-Ocean Interactions in the Coastal Zone, IGBP
LOIS > Land Ocean Interaction Study
LTER > Long-Term Ecological Research
MAGIA > Structure, Stratigraphy> and Sedimentology North of the Antarctic Peninsula
MARINE_MAMMALS_PROGRAM > Marine Mammals Dynamic Population in South Orkney Is. & South Shetland Is.
MARIS > Multi Aquatic Resource Information System

MARMAP > Marine Resources, Monitoring, Assessment and Prediction
MARPOLMON
MASAR > Mid Atlantic Slope Rise Experiment
MEDALPEX > Mediterranean Alpine Experiment
MEDIO_AMBIENTE
MERIT > Monitoring Earth Rotation and Intercompare Techniques
MESA > Marine Ecosystems Analysis (Puget Sound) Project
MISR > Multi-angle Imaging SpectroRadiometer
MIZEX > Marginal Ice Zone Experiment
MIZPAC > Marginal Sea Ice Zone Pacific
MOHAVE > Measurement of Haze and Visual Effects
MONEX > Monsoon Experiment
MONITOREO_DE_ECOSISTEMAS > Penguin Monitoring of Antarctic Peninsula, South Orkney Is., South Shetland Is.
MRS > Marine Remote Sensing
NANSEN > North Atlantic Norwegian Sea Exchange
NASA/ESIP > NASA Earth Science Information Partners Program
NAWQA > National Water Quality Assessment Program
NCCCS > Northern California Coastal Circulation Study
NCTS > Northern California Transport Study
NEMO > New Millennium Observatory Project
NEMP > Northeast Monitoring Program
NERR > National Estuarine Research Reserve
NEXRAD > NEXt Generation Weather RADar
NGDRS > National Geoscience Data Repository System
NICAL
NOAA/NASA PATHFINDER > NOAA/NASA Pathfinder Program
NODC/COL > Coastal Ocean Laboratory, National Oceanographic Data Center, NOAA
NORPAX > North Pacific Shuttle Experiment
NORSWAM > North Sea Wave Model
NS&T > National Status and Trends Program
NSTS > Nearshore Sediment Transport Study
NWI > National Wetlands Inventory
OAXTC > Ocean/Atmosphere Exchange of Trace Compounds
OCEAN > Ocean Color European Archive Network
OCEANOGRAFIA_COSTERA
OCRS > Ocean Color Remote Sensing
OCS > Outer Continental Shelf Program
OCSEAP > Ocean Continental Shelf Environmental Assessment Project
ODP/DSDP > Ocean Drilling Program / Deep Sea Drilling Program
ONR OCEAN OPTICS > Office of Naval Research Ocean Optics
OOFASH > Oceanographic Observations of Fisheries at the Adjacent Seas of Hokkaido
OPUS > Observations of Persistent Upwelling Structures
OTEC > Ocean Thermal Energy Conversion
PACS > Pan-American Climate Studies
PAGES > Past Global Changes, IGBP
PFSFC > Project on the Forecast of Sea and Fishing Conditions
PNRA > Programma Nazionale di Ricerche in Antartide
POLES > Polar Exchange at the Sea Surface
POLYMODE
PREOPERATIONAL SURVEY OF A DUMP > Preoperational Survey of a Dumping Site of Low-Level Radioactive Wastes
PRISM > Pleistocene> Research, Interpretation> and Synoptic Mapping Project
PROBES > Processes and Resources of the Bering Sea Shelf
PYS > Project of Yatsushiro Sea
RECURSOS_MINERALES > El Permafrost en la Peninsula Antarctica
REEF > Reef Environmental Education Foundation
REEF RELIEF > Reef Relief Organization
ROME
ROSE > Rural Oxident in a Southern Environment
SAGE I > Stratospheric Aerosol and Gas Experiment I
SAGE II > Stratospheric Aerosol and Gas Experiment II
SAHFOS > Sir Alister Hardy Foundation for Ocean Science
SBC/SMB > Santa Barbara Channel/Santa Marine Basin Study
SBCS > Santa Barbara Channel Study
SCCWRP > Southern California Coastal Water Research Project

SCICEX > Scientific Ice Expeditions
SCTS > Southern California Transport Study
SEAS > Shipboard Environmental Aquisition System
SEATAR > Studies of East Asia Tectonics and Resources
SEAWIFS > Sea-viewing Wide Field-of-view Sensor
SEQUAL > Seasonal Response of the Equatorial Atlantic
SHEBA > Surface Heat Budget of the Arctic Ocean
SICPP > Seasonal-to-Interannual Climate Prediction Program
SIESIP > Seasonal to Inter-annual Earth Science Information Partners
SIID-SMARA > Sea Ice and Iceberg Drift Project, Servicio Meteorologico de la Armada
SIMBIOS > Sensor Intercomparison Merger for Biological Interdisciplinary Oceanic Studies
SIZEX > Seasonal Ice Zone Experiment
SJVAQS > San Joaquin Valley Air Quality Study
SMILE > Shelf Mixed Layer Experiment
SOUTH.CAL.OCS BASELINE
SPACC > Small Pelagic Fish and Climate Change, GLOBEC
SPECMAP
SPREX > Spring Removal Experiment
STACS
STERNA92
STREX > Storm Transfer and Response Experiment
TBS
TCM-90 > Tropical Cyclone Motion
TEFLUN > Texas Florida Underflights Field Experiments
TEFLUN-A > Texas Florida Underflights Field Experiment A
TEFLUN-B > Texas Florida Underflights Field Experiments B
TIWE > Tropical Instability Wave Experiment
TOGA > Tropical Ocean Global Atmosphere
TOGA COARE > TOGA Coupled Ocean Atmosphere Response Experiment
TOVS PATHFINDER > TOVS Path A
TRANSPAC
TTO > Transient Tracers Oceans Experiment
TWERLE
UNEP/GRID > UNEP/Global Resources Information Database
USARP > U.S. Antarctic Research Program
UV-B JUBANY
VENTS > VENTS Program, Pacific Marine Environmental Laboratory
VIVALDI91
VOCAR > Variability of Coastal Atmospheric Refraction
WAMEX > West African Monsoon Experiment
WAVEMOD
WCMC > World Conservation Monitoring Centre's Marine and Coastal Programme
WCRP > World Climate Research Program
WEPOLEX > Weddell Polynya Expedition
WERATLAS
WOCE > World Ocean Circulation Experiment
WQRSBMP > Water Quality Research of Shizugawa Bay of Miyagi Prefecture

ANNEX VIII

RECOMMENDED MEDI DATA CENTRE VALIDS

Short Name > Long Name

AADC > Australian Antarctic Data Centre
ACZISC SECRETARIAT > Atlantic Coastal Zone Information Steering Committee Secretariat
AEDC/UK > Antarctic Environmental Data Centre
AFI > Aquarius Flight Inc.
AGI > American Geological Institute
AIMS > Australian Institute of Marine Science
ALTERRA > ALTERRA, Texel
AMRC > Antarctic Meteorological Research Center
AODC > Australian Oceanographic Data Centre
ASDC > Atmospheric Sciences Data Center, NASA Langley
ASDLS > Antarctic Seismic Data Library System
ASF > Alaska SAR Facility
ASF DAAC > Alaska SAR Facility Distributed Active Archive Center
AVISO > Archiving, Validation and Interpretation of Satellite Oceanographic Data
AWI > Alfred Wegener Institute for Polar and Marine Research
BADC > British Atmospheric Data Centre
BBSR > Bermuda Biological Station for Research
BIGELOW LABORATORY > Bigelow Laboratory of Ocean Sciences
BIO/F&O > Fisheries and Oceans Bedford Institute of Oceanography Ocean Sciences Division
BISHOP MUSEUM > Bishop Museum Department of Natural Sciences
BODC > British Oceanographic Data Centre
BOM > Bureau of Meteorology, Australia
CABI > CAB International
CAL/DWR > California Department of Water Resources
CANADAX > Canadax Industrial Group Limited
CBOS > Chesapeake Bay Observing System
CBP > Chesapeake Bay Program
CCMA > Canadian Centre for Climate Modelling and Analysis
CCRS/GC/NRCAN > Canada Centre for Remote Sensing, GC, NRCan
CDA > Centro de Datos Antarticos, Argentina
CDIAC > Carbon Dioxide Information Analysis Center, DOE
CEADO > Centro Argentino de Datos Oceanograficos
CEDARE > Centre for Environment and Development for the Arab Region and Europe
CEDO > Centro Espanol de Datos Oceanograficos
CENDOC > Centro Nacional de Datos Oceanograficos de Chile
CENPAT > Patagonian National Centre
CERB > Centro de Estudios de Recursos Bioticos
CERC > Coastal Engineering Research Center
CERC/FRF > Coastal Engineering Research Center, Field Research Facility
CFS > Canadian Forest Service
CFS/GLFC > Canadian Forest Service, Great Lakes Forestry Centre, NRCan
CH > Chadwyck-Healey Inc.
CHL > Chadwyck-Healey Limited
CHS > Chadwyck-Healey Inc. of Spain
CICESE > Centro de Investigacion Cientifica y de Educacion Superior de Ensenada
CIMSS > Cooperative Institute for Meteorological Satellite Studies
CMO/GC/NRCAN > Canada Map Office, Centre for Topographic Information, Geomatics Canada, Natural Resources Canada
CN-NADC > National Antarctic Data Center of China
CNODC > China National Oceanographic Data Center
CNR/IMGA > Consiglio Nazionale delle Ricerche/Istituto per lo studio delle Metodologie Geofisiche Ambientali
COBA > Centro Oceanografico Buenos Aires
COLA > Center for Ocean-Land-Atmosphere Studies
CORAL > Coral Reef Alliance
CRSSA/CC > Center for Remote Sensing and Spatial Analysis, Cook College
CRU > Climatic Research Unit, University of East Anglia
CSIC > Instituto de Ciencias del Mar

CSUOHIO/CESTP > Cleveland State University, Center for Environmental Science, Technology and Policy
CU - CLEMSON/BFSI > Baruch Forest Institute, Clemson University
CU - CORNELL > Cornell University
CWS > Canadian Wildlife Service
DACEOU > Department of Applied Chemistry and Engineering, Oita University
DALHOUSIE > Dalhousie University
DARDNI > Department of Agriculture and Rural Development for Northern Ireland, Belfast
DEPK > Department of Environment and Pollution, Kumamoto Prefecture
DEYP > Department of Environment Yamanashi Prefecture
DHETP > Department of Health and Environment Tokushima Prefecture
DIASHU > Department of Integrated Arts and Sciences, Hiroshima University
DIFRES > Danish Institute for Fisheries Research
DKRZ > Deutsches Klimarechenzentrum GmbH
DLR/DFD > German Remote Sensing Data Center, Deutsches Fernerkundungsdatenzentrum (DFD)
DNR > Department of Natural Resources - Queensland, Australia
DOD > Deutsches Ozeanographisches Datenzentrum
DOI/MMS/GOMR > Gulf of Mexico Outer Continental Shelf Region, Minerals Management Service, U.S. Department of the Interior
DOI/NPS/DNP > Denali National Preserve, National Park Service, U.S. Department of Interior
DOI/USGS/NEIC > National Earthquake Information Center, U.S. Geological Survey, U.S. Department of the Interior
DRA > Defense Research Agency
DVNII > Far East Research Institute for Hydrometeorology
EC > Environment Canada
EC/CCIW > Environment Canada, Canada Centre for Inland Waters
EC/CIS > Environment Canada - Canadian Ice Service
EC/MSC/CCRM > Climate Monitoring and Data Interpretation Division, Meteorological Service of Canada, Environment Canada
EDC DAAC > EROS Data Center Distributed Active Archive Center
EDIMAR > Estacion de Investigaciones Marinas Isla Margarita - FLASA
EESD/LANL > Earth & Environmental Sciences Division/Los Alamos National Laboratory
EIC/ITE > Environmental Information Centre at the Institute of Terrestrial Ecology
ELSEVIER > Elsevier Science Inc.
ELTU > Environmental Laboratory Tohoku University
EMI/UOT > Estonian Marine Institute, University of Tartu
EOC > Earth Observation Center
EPA > Environmental Protection Agency
ESA/ESRIN APP-AEU > European Space Agency/ESRIN Remote Sensing Services
ESIP/MP > Earth Science Information Partners Federation Marketplace
EURIMAGE SCRL
FAO > Food and Agriculture Organization of the United Nations
FAO/FI > Food and Agriculture Organization of the United Nations, Fisheries Department
FCIHE > Fukuoka-City Institute for Hygiene and Environment
FIMR > Finnish Institute of Marine Research
FLA/DEP/FMRI > Florida Department of Environmental Protection, Florida Marine Research Institute
FO > Fisheries and Oceans, Canada
FSE/SUT-NISHIMURA LABORATORY > Faculty of Science and Engineering, Science University of Tokyo, Nishimura Lab.
FSPFES > Fukushima Prefecture Fisheries Experiment Station
FSU > Florida State University
FSU/ARF > Antarctic Research Facility, Department of Geosciences, Florida State University
FSU/COAPS > Florida State University Center for Ocean-Atmospheric Prediction Studies
FUB > Free University of Berlin
FWIE > Fish and Wildlife Information Exchange, Virginia Tech
FWS/ALASKA > U.S. Fish and Wildlife Service, Alaska
GC/NRCAN > Geomatics Canada, NRCan
GCIP > GCIP Project Office
GDCEDC > GALE, ERICA Data Center, Drexel University

GETECH > Geophysical Exploration Technology
GFZ > Geo Research Center Potsdam
G-JGOFS-PDM > German JGOFS Project Data Management
GKSS > GKSS Forschungszentrum GmbH Geesthacht, Germany
GLCF > Global Land Cover Facility
GMU > George Mason University
GRDC > Global Runoff Data Center
GSC/NRCAN > Geological Survey of Canada, NRCan
GSFC_DAAC > Goddard Space Flight Center Distributed Active Archive Center, NASA
GSJ > Geological Survey of Japan
GSNSE/KU > Graduate School of Natural Science and Engineering, Kanazawa University
GWC > Gulf Weather Corporation
HCFES > Hokkaido Central Fisheries Experimental Station
HE > Hamilton Exploration
HNHS > Hellenic Navy Hydrographic Service
HPFES > Hyogo Prefectural Fisheries Experimental Station
HTHAEC > H.T. Harvey and Associates, Ecological Consultants
HWU > Heriott-Watt University, UK
IAA > Instituto Antarctico Argentino
IACR > Institute of Arable Crops Research-Rothamsted
ICES/MDC > Marine Data Centre, International Council for the Exploration of the Sea
ICES/SVC_HYDR > International Council for the Exploration of the Sea, Service Hydrographique
ICLARM > International Center for Living Aquatic Resources Management
ICPRB > Interstate Commission on the Potomac River Basin
IDI > Intermountain Digital Imaging
IFM > Institut fuer Meereskunde, Kiel, Germany
IFREMER/CERSAT > IFREMER Centre ERS d'Archivage et de Traitement
IFREMER/CORIOLIS > CORIOLIS Data Service, IFREMER
IFREMER/LEH > IFREMER Laboratoire Ecologie halieutique
IFREMER/SISMER > IFREMER Systemes d'Informations Scientifiq ues pour la Mer, France
IGBP/IGAC/GEIA > Global Emissions Inventory Activity, International Global Atmospheric Chemistry, IGBP
IGNE > IGN ESPACE
IGPO > International GEWEX Project Office
IISTU > Institute of Industrial Science, Tokyo University
IMDC > Irish Marine Data Centre
IMR > Institute of Marine Research, Bergen, Norway
INFOMAR > INFOMAR Inc.
INOCAR > Instituto Oceanografico de la Armada
INODC > Indian National Oceanographic Data Centre
INPE/CPTEC > Centro de Previsao de Tempo e Estudos Climaticos
INPE/DSM > INPE Divisao de Sensoriamento Remoto
IOF > Institute of Oceanography and Fisheries
IOS > Institute of Ocean Sciences, Sidney, B.C
IOW > Institut fur Ostseeforschung, Germany
IPCR > The Institute of Physical and Chemical Research
IPIC > IRIS PASSCAL Instrument Center
IPIMAR > Instituto de Investigacao das Pescas e do Mar, Portugal
IRIS > Incorporated Research Institutions for Seismology
ISIRC > International Soil Reference and Information Centre
IUCN/SSC/AFESG > African Elephant Specialist Group - Species Survival Commission - WCU
IUI > Interuniversity Institute for Marine Sciences, Israel
IUPUI/GEOL > Department of Geology, Indiana University-Purdue University at Indianapolis
JAMSTEC > Japan Marine Science and Technology Center
JHU/APL > Applied Physics Laboratory, Johns Hopkins University
JISAO > Joint Institute for the Study of the Atmosphere and Ocean, U. Washington
JMA > Japan Meteorological Agency
JODC > Japan Oceanographic Data Center
JPL/PODAAC > Physical Oceanography Distributed Active Archive Center

JRC/SAI > Space Applications Institute at Joint Research Center (JRC), Ispra (VA) /Italy
KODC > Korean Oceanographic Data Center
KOPFES > Kochi Prefectural Fisheries Experimental Station
KORDI > Korea Ocean Reasearch and Development Institute
KOSMOS > Kosmos Z & K
KPFES > Kanagawa Prefectural Fisheries Experimental Station
KUDA > Kuwait Data Archive
LANDCARE RESEARCH,
LAVAL > Laval University
LDEO > Lamont-Doherty Earth Observatory
LDEO/IRI > International Research Institute for Climate Prediction, Lamont-Doherty Earth Observatory
LMER/CRETM/UW > University of Washington, Columbia River Estuarine Turbidity Maximum Project
LMER/CRRL > Columbia River Research Laboratory, LMER
LTER/FCE > Florida Coastal Everglades, Long-Term Ecological Research Network Office
LTER/PALMER > Palmer Research Station, Long Term Ecological Research Program
LTER/PIE/MBL > Marine Biological Laboratory, Plum Island Ecosystem
MACLAREN > MacLaren Plansearch Ltd/ SNC/Lavalin Inc
MARF/EUMETSAT > Meteorological Archive Retrieval Facility/ EUMETSAT
MARLAB > Marine Laboratory Aberdeen, UK
MARTEC > Martec, Ltd
MBARI > Monterey Bay Aquarium Research Institute
MBL/LTER > Marine Biological Laboratory, Woods Hole
MDDNR > Maryland Department of Natural Resources
MEDIAS > Support Office for Regional Research on Global Environmental Change
MEDS > Marine Environmental Data Service
MERI > Marine Ecology Research Institute
MIAS > Marine Information & Advisory Service
MIC > Meteorological Information Center (JWA)
MID/YUK > Mining Inspection Division, Yukon Region, DIAND
MLML > Moss Landing Marine Laboratories
MMS/POCS > Mineral Management Service, Pacific OCS Region
MODB > Mediterranean Oceanic Data Base
MPFES > Miyagi Prefectural Fisheries Experimental Station
MPI > Max Planck Institute
MRJ INC
MRSC > Manitoba Remote Sensing Centre, Manitoba, Canada
MSC/EC > Meteorological Service of Canada, EC
MSL/NRIS > Montana State Library/Natural Resource Information System
MSU/LTER > Michigan State University, Kellogg Biological Station (KBS)
NASA/GISS > Goddard Institute for Space Studies, NASA
NASA/GSFC/LHP/HSB > Hydrological Sciences Branch, Laboratory for Hydrospheric Processes, GSFC, NASA
NASA/GSFC/LHP/OIB > Oceans and Ice Branch, Laboratory for Hydrospheric Processes, GSFC, NASA
NASA/GSFC/LTP/CDDIS > Crustal Dynamics Data Information System, Laboratory for Terrestrial Physics, NASA/GSFC
NASA/GSFC/LTP/GD > Geodynamics Branch, Laboratory for Terrestrial Physics, GSFC, NASA
NASA/GSFC/NSSDC > National Space Science Data Center, Goddard Space Flight Center, NASA
NASA/JPL/AIRSEA > Air - Sea Interaction & Climate, Jet Propulsion Laboratory, NASA
NASA/JPL/OCEANESIP > Ocean ESIP, Jet Propulsion Laboratory, NASA
NASA/MSFC/GHRC > Global Hydrology Resource Center, Marshall Space Flight Center, NASA
NASDA/EOC > National Space Development Agency of Japan/Earth Observation Center
NASDA/EORC > National Space Development Agency of Japan/Earth Observation Research Center
NATUUR > Natuur and Techniek
NAVOCEANO > U.S. Naval Oceanographic Office
NAVY/NOAA JIC > Joint Ice Center
NBDNRE > New Brunswick Department of Natural Resources and Energy
NCAR > National Center for Atmospheric Research
NCAR/ATD > Atmospheric Technology Division, NCAR

NCAR/DSS > Data Support Section, NCAR
NCAR/SCD/MSS > Scientific Computing Division, Mass Storage System, NCAR
NCMR > National Centre For Marine Research
NERC/DU > National Environment Research Council, Dundee University
NERSC > Nansen Environmental and Remote Sensing Centre
NFLD/DFAQ > Newfoundland and Labrador Department of Fisheries and Aquaculture
NFLDDME > Newfoundland and Labrador Department of Mines and Energy
NIBH > National Institute of Bioscience and Human Technology
NIES > National Institute for Environmental Studies
NIMA > National Imagery and Mapping Agency (NIMA)
NIOZ > Netherlands Institute for Sea Research
NIPR > National Institute of Polar Research
NMDC/IMR > Institute of Marine Research, Norwegian Marine Data Centre
NOAA/CBO > NOAA Chesapeake Bay Office
NOAA/CSC > NOAA Coastal Services Center
NOAA/NCCOS/CCMA > Center for Coastal Monitoring and Assessment, NOAA
NOAA/NESDIS/NCDC > National Climatic Data Center, NOAA
NOAA/NESDIS/NGDC > National Geophysical Data Center, NOAA
NOAA/NESDIS/NODC > National Oceanographic Data Center, NOAA
NOAA/NESDIS/NODC/COL > Coastal Ocean Laboratory, National Oceanographic Data Center, NOAA
NOAA/NESDIS/NODC/LISD > Library Services Information Division, NOAA
NOAA/NESDIS/ORA/LSA > Laboratory for Satellite Altimetry, NOAA
NOAA/NESDIS/OSDPD > Office of Satellite Data Processing and Distribution, NOAA
NOAA/NGDC/WDC-MGG > World Data Center for Marine Geology & Geophysics, National Geophysical Data Center, NOAA
NOAA/NMFS/AFSC/NMML > National Marine Mammal Laboratory, Alaska Fisheries Science Center, NOAA/NMFS
NOAA/NMFS/FSED > Fisheries Statistics and Economics Division, NMFS
NOAA/NMFS/NEFSC > Northeast Fisheries Science Center, National Marine Fisheries Service, NOAA
NOAA/NMFS/OREI > Office of Research and Environmental Information, NOAA
NOAA/NMFS/OST > Office of Science & Technology, NOAA
NOAA/NMFS/SEFSC > Southeast Fisheries Science Center, National Marine Fisheries Service, NOAA
NOAA/NMFS/SWFSC > Southwest Fisheries Science Center, National Marine Fisheries Service, NOAA
NOAA/NMFS/SWFSC/PFEL > Pacific Fisheries Environmental Laboratory, Southwest Fisheries Science Center, NOAA/NMFS
NOAA/NOS/COP > Coastal Ocean Program, National Ocean Service, NOAA
NOAA/NOS/NCCOS > National Centers for Coastal Ocean Science
NOAA/NOS/NGS > National Geodetic Survey, NOAA
NOAA/NOS/OCRM/NERR > National Estuarine Research Reserve, NOAA
NOAA/NOS/OCS/CSDL > Coast Survey Development Laboratory, NOAA
NOAA/NOS/OCS/HSD > Hydrographic Surveys Division, NOAA
NOAA/NOS/OCS/MCD > Marine Chart Division, NOAA
NOAA/NOS/OCS/OPSD > Oceanographics Products and Services Division, NOAA
NOAA/NOS/ORCA/CMBAD > Coastal Monitoring and Bioeffects Assessment Division, NOAA
NOAA/NOS/ORCA/HAZMAT > Hazardous Materials Response and Assessment Division, NOAA
NOAA/NOS/ORCA/SEA > Strategic Environmental Assessment Division, NOAA
NOAA/NOS/SPO > National Ocean Service Special Projects Office, NOAA
NOAA/NWS/BOSTON > Boston Massachusetts Forecast Office, NOAA
NOAA/NWS/NCEP > National Centers for Environmental Prediction, NOAA
NOAA/NWS/NCEP/CPC > Climate Prediction Center, NOAA
NOAA/NWS/NCEP/CPC/WRCC > Western Regional Climate Center, NOAA
NOAA/NWS/NDBC > National Data Buoy Center
NOAA/NWS/PTWC > Pacific Tsunami Warning Center, NOAA
NOAA/NWS/TALLAHASSEE > Tallahassee Forecast Office, NOAA
NOAA/OAR/AOML > Atlantic Oceanographic and Meteorological Laboratory, NOAA
NOAA/OAR/ARO > NOAA Arctic Research Office
NOAA/OAR/CMDL > Climate Monitoring Diagnostics Laboratory, NOAA
NOAA/OAR/CMDL/HATS > Halocarbons and other Trace Species Group, NOAA
NOAA/OAR/ERL/ARL > Air Resources Laboratory, NOAA
NOAA/OAR/ERL/CDC > Climate Diagnostics Center, NOAA
NOAA/OAR/ERL/ETL > Environmental Technology Laboratory, NOAA
NOAA/OAR/ERL/GLERL > Great Lakes Environmental Research Laboratory, NOAA

NOAA/OAR/ERL/NSSL > National Severe Storms Laboratory, NOAA
NOAA/OAR/ERL/WPL > Wave Propagation Laboratory, NOAA
NOAA/OAR/PMEL > Pacific Marine Environmental Laboratory, NOAA
NOAA/OAR/PMEL/TAO > Tropical Atmosphere Ocean Project, Pacific Marine Env. Lab., NOAA
NOAA/OAR/SEAS > Shipboard Environmental (Data) Aquisition System,NOAA
NOAA-SAA > NOAA/NESDIS Satellite Active Archive
NOD > Norsk Oseanografisk Datasenter
NODC/BULGARIA > National Oceanographic Data Center, Bulgaria
NODC/PAKISTAN > Pakistan National Oceanographic Data Centre
NPS > Naval Postgraduate School
NRIFS > National Research Institute of Fisheries Science
NRSC > National Remote Sensing Centre Ltd, UK
NS/SRC > Nova Scotia Sport and Recreation Commission
NSAF/FAS/AD > Nova Scotia Department Agriculture and Fisheries, Fisheries and Aquaculture Services, Aquaculture Division
NSAF/IDBSB/MSD > Nova Scotia Department of Agriculture and Fisheries, Industry Development and Business Services Branch, Marketing Services Division
NSIDC > National Snow and Ice Data Center
NSIDC_AGDC > NSIDC Antarctic Glaciological Data Center
NSIDC_ARCSS > Arctic System Science Data Coordination Center
NSIDC_DAAC > NSIDC Distributed Active Archive Center
NSIDC_NOAA > National Oceanic and Atmospheric Administration
NTIS > National Technical Information Service
NZAI/ANZ > Antarctica New Zealand, New Zealand Antarctic Institute
OCEANOR > Oceanographic Company of Norway AS
ODP > Ocean Drilling Program
OGS > Osservatorio Geofisisco Sperimentale - Geofisica della Litosfera
ONE MADAGASCAR > Office National pour L'Environnement, Madagascar
ORNL_DAAC > Oak Ridge National Laboratory Distributed Active Archive Center
ORSTOM > L'Institut Francais de Recherche Scientifique pour le Developpement en Cooperation
OS > Ordnance Survey, UK National Mapping Agency
OSU - OREGON > Oregon State University
OSU/CPSU > Cooperative Park Studies Unit, Oregon State University
OSU/LTER > Oregon State University, H.J. Andrews LTER Site
PACINST > Pacific Institute for Studies in Development, Environment, and Security
PES > Planet Earth Science
PINRO > Polar Research Institute of Marine Fisheries and Oceanography
PML > Plymouth Marine Laboratory, UK
PNRA > Italian Program for Antarctic Research
POL > Proudman Oceanographic Laboratory
POLES > Polar Exchange at the Sea Surface
PPCO > Phillips Petroleum Company
PSMSL > Permanent Service for Mean Sea Level
PSU/EMS > Earth and Mineral Sciences, Pennsylvania State University
PWRI > Public Works Research Institute, Ministry of Construction
QUB > Queen's University, Belfast
RAN/HYDRO > Royal Australian Navy, Hydrographic Office
RAS/ICMMG/NTL > Novosibirsk Tsunami Laboratory, Institute of Computational Mathematics and Mathematical Geophysics, Russian Academy of Sciences
REEF > Reef Environmental Education Foundation
REEF RELIEF > Reef Relief Organization
RHS > Regional Hydrometeorological Service
RIAMKU > Research for Applied Mechanics Kyushu University
RITI > Reading Information Technology, Inc.
RNODC > Russian National Oceanographic Data Centre RIHMI-WDC
RSDAS > Remote Sensing Data Analysis Service, Plymouth Marine Laboratory, UK
RSFDCE > Russian State Fund of Data on Condition of Environment
RSI > RADARSAT International
RSL/SUT > Remote Sensing Laboratory, Science University of Tokyo
RU > Rutgers University
RU - RICE > Rice University
RUG > University of Groningen
RWS-RIKZ > Rijksinstituut voor Kust en Zee (Institute for Marine and Coastal Management)
SAHFOS > Sir Alister Hardy Foundation for Ocean Science

SAMS > Scottish Association for Marine Science
SCCWRP > Southern California Coastal Water Research Project
SEDAC > Socioeconomic Data and Applications Center
SEYCHELLES FISHING AUTHORITY,
SFU > Simon Fraser University
SHIRSHOV > Shirshov Institute of Oceanology
SIO/C4 > SIO Center for Clouds Chemistry and Climate
SIO/CCS > Scripps Institution of Oceanography, Center for Coastal Studies
SIO/GRD > Geosciences Research Division,Scripps Institution of Oceanography
SIO/JEDAC > Scripps Institution of Oceanography, Joint Environmental Data Analysis Center
SIO/MLRG > Scripps Institution of Oceanography, Marine Life Research Group
SIO/PORD > Scripps Institution of Oceanography, Physical Oceanography Research Division
SIO/SSF > Scripps Institution of Oceanography, Satellite Facility
SMHI > Swedish Meteorological and Hydrological Institute
SMRL > Seaconsult Marine Research Ltd.
SNSMR/NSGC > Service Nova Scotia and Municipal Relations, Registry and Information Management Services, Nova Scotia Geomatics Centre
SOC > Southampton Oceanography Centre
SOUTHAMPTON/SOBS > University of Southampton, School of Biological Sciences, UK
SPOT IMAGE,
SSEOP > Space Shuttle Earth Obs. Phot. Database, NASA
TAMU/GERG > Texas A&M University, Geochemical & Environmental Research Group
TAMU/OCEAN > Texas A&M University, Department of Oceanography
TCIPO > TOGA COARE International Project Office
TNAU > Tamil Nadu Agricultural University
TNCMT > Toba National College of Maritime Technology
TSS > Tromso Satellite Station
UAF/GDC > Univ. of Alaska Fairbanks, GeoData Center, Geophysical Institute
UAF/IMS > Institute of Marine Science, University of Alaska Fairbanks
UAS/IBSS > Ukrainian Academy of Science, Institute of Biology of the Southern Seas
UAS/MHI > Ukrainian Academy of Sciences/Marine Hydrophysical Institute (MHI)
UBC > University of British Columbia
UC/CCAR > Colorado Center for Astrodynamics Research, University of Colorado
UCAR/JOSS > University Corporation for Atmospheric Research Joint Office for Science Support
UCAR/NOAA/JOSS/CODIAC > UCAR JOSS Cooperative Distributed Interactive Atmospheric Catalog System
UCI > University of California, Irvine
UCONN > University of Connecticut
UCSB > University of California, Santa Barbara
UCSB/ICESS > Institute for Computational Earth System Science, University of California Santa Barbara
UCSB/OPL > University of California, Santa Barbara, Ocean Physics Laboratory
UCSD/SIO/IGPP > Institution of Geophysics and Planetary Physics, Scripps Institution of Oceanography, University of California, San Diego
UCT_OCEAN > University of Cape Town Department of Oceanography
UDEC > Universidad de Concepcion, Chile
UDEL/GEOG > University of Delaware, Department of Geography
UH > University of Hawaii
UH/METO > Meteorology Department, University of Hawaii
UH/SAC > Shipboard Acoustic Doppler Current Profiler Center, University of Hawaii
UH/SLC > Sea Level Center, University of Hawaii
UH/SOEST > School of Ocean and Earth Science and Technology, University of Hawaii
UHAM/CMCR > University of Hamburg Centre for Marine and Climate Research
UHH/KMEC > Kalakaua Marine Education Center, University of Hawaii at Hilo
UHI > University of Highlands and Islands, UK
UI > University of Illinois
UIB > University of Bergen
UKEA/NCEMS > UK Environment Agency, National Centre for Environmental Monitoring and Suveillance
UMASS/GEOL > University of Mass., Dept. of Geosciences
UMD/MDSG > University of Maryland, Maryland Sea Grant

UMD/METO > University of Maryland Meteorology Dept.
UME/SMS > University of Maine, School of Marine Sciences
UMIAMI > University of Miami
UMIAMI/RSMAS > Rosenstiel School of Marine and Atmospheric Science, University of Miami
UMN/CPSU > Cooperative Park Studies Unit, University of Minnesota
UMONT/GNP > Glacier National Park, University of Montana
UNEP/EAD/GRID-GENEVA > UNEP - Environment Assessment Division - Global Information Database - Geneva
UNEP/EAD/GRID-SIOUX FALLS > UNEP - Environment Assessment Division - Global Information Database - Sioux Falls
UNEP/EAP-AP (GRID-BANGKOK) > UNEP -Environmental Assessment Programme for Asia and the Pacific
UNEP/GRID-ARENDAL > United Nations Environment Programme Global Resource Information Database
UNEP/GRID-GENEVA > United Nations Environment Programme Global Resource Information Database
UNEP/GRID-INPE > United Nations Environment Programme Global Resource Information Database - INPE
UNEP/GRID-PAC > UNEP - Global Resource Information Database - Programme Activity Centre
UNEP/GRID-WARSAW > UNEP - Global Resource Information Database - Warsaw - Environmental Info Centre
UNH/CSRC > Complex Systems Research Center, Univ. of New Hampshire
UNIHH > University of Hamburg, Germany
UNISYS > UNISYS Corporation Weather Services
UOC > Ukraine Oceanologic Center
UOL > University of Liverpool, UK
UOS > University of Strathclyde, UK
URI > University of Rhode Island
US_WOCE > United States WOCE (World Ocean Circulation Experiment) Office
USAF/AFRL > US Air Force Research Laboratory
USAFETAC/OL-A > USAF Environmental Technical Applications Center, Operating Location-A
USC/BARUCH/LTER > U. of South Carolina, Baruch Inst. for Marine Biology and Coastal Research
USC/BARUCH/NERR > National Estuarine Research Reserve, Baruch Marine Field Laboratory, University of South Carolina
USDA/ARS/NAL > National Agricultural Library, USDA
USDA/ARS/NAL/AGIS > Agricultural Genome Information System, National Agricultural Library, USDA
USDA/ARS/NRI > Natural Resources Institute, USDA-ARS
USDA/ARS/SEWRL > Southeast Watershed Research Laboratory, USDA-ARS
USDA/ARS/TFRL > Tree Fruit Research Laboratory, USDA-ARS
USDA/CSREES/MSSTATE > MS State University, USDA-CSREES
USDA/CSREES/PURDUE > Purdue University, USDA-CSREES
USDA/ERS > Economic Research Service, USDA
USDA/FS/NERS > Northeastern Research Station, Forest Service, USDA
USDA/FS/RMRS > Rocky Mountain Research Station, Forest Service,USDA
USDA/NASS > National Agricultural Statistics Service, USDA
USDA/NRCS/NCGC > National Cartography and Geospatial Center,USDA-NRCS
USDA/NRCS/NWCC > National Water & Climate Center, USDA
USF/DMS > University of South Florida, Department of Marine Sciences
USFWS > U.S. Fish and Wildlife Service
USFWS/NWI > U.S. Fish and Wildlife Service, National Wetlands Inventory
USGS > U.S. Geological Survey
USGS/BRD > USGS Biological Resources Division
USGS/BRD/CERC > Columbia Environmental Research Center, Biological Resources Division, U.S. Geological Survey
USGS/BRD/ERO > USGS Biological Resources Division, Eastern Regional Office
USGS/BRD/FCSC > USGS Biological Resources Division, Florida Caribbean Science Center
USGS/BRD/FRESC > U.S. Geological Survey, Biological Resources Division, Forest Rangeland Ecosystem Science Center
USGS/BRD/GLSC > Great Lakes Science Center, USGS/BRD
USGS/BRD/LSC > USGS Biological Resources Division, Leetown Science Center
USGS/BRD/MSC > USGS Biological Resources Division, Midwest Science Center

USGS/BRD/NPWRC > Northern Prairie Wildlife Research Center, Biological Resources Division, U.S. Geological Survey
USGS/BRD/NWHC > National Wildlife Health Center, USGS/BRD
USGS/BRD/NWRC > National Wetlands Research Center, USGS/BRD
USGS/BRD/PWRC > Patuxent Wildlife Research Center, USGS/BRD
USGS/BRD/RDL > U.S. Geological Survey, Biological Resources Division, Research and Development Laboratory
USGS/BRD/WRO > USGS Biological Resources Div., Western Regional Office
USGS/EDC/ALASKA > EROS Data Center, Anchorage, AK
USGS/EROS > Earth Resources Observation Systems Data Center, U.S. Geological Survey
USGS/ESIC/ANCHORAGE > Earth Science Information Center, Anchorage, Alaska
USGS/ESIC/D.C. > Earth Science Information Center, Washington, D.C.
USGS/ESIC/DENVER > Earth Science Information Center, Denver, Colorado
USGS/ESIC/LAKEWOOD > Earth Science Information Center, Lakewood/Denver, Colorado
USGS/ESIC/LOS ANGELES > Earth Science Information Center, Los Angeles, California
USGS/ESIC/MENLO PARK > Earth Science Information Center, Menlo Park, California
USGS/ESIC/RESTON > Earth Science Information Center, Reston, Virginia
USGS/ESIC/ROLLA > Earth Science Information Center, Rolla, Missouri
USGS/ESIC/SALT LAKE CITY > Earth Science Information Center, Salt Lake City, Utah
USGS/ESIC/SAN FRANCISCO > Earth Science Information Center, San Francisco, California
USGS/ESIC/SPOKANE > Earth Science Information Center, Spokane, Washington
USGS/ESIC/STENNIS > Earth Science Information Center, NASA Stennis Space Center, Mississippi
USGS/GD/CRC > Central Region Center, Geology Division, U.S. Geological Survey
USGS/GD/DENVER > USGS, Geology Division, Denver
USGS/GD/GCRP > USGS/Geology Division/Global Change Research Program
USGS/GD/MENLO PARK > USGS, Geology Division, Menlo Park, CA
USGS/GLIS/RESTON > USGS/Global Land Information System, Reston, VA
USGS/NAWQA > National Water Quality Assessment Program, U.S.Geological Survey
USGS/NMD > USGS National Mapping Division
USGS/NMD/RESTON > National Mapping Division, Reston, VA
USGS/OFR > USGS Open File Reports Section
USGS/WHFC > Woods Hole Field Center, U.S. Geological Survey
USGS/WRD > Water Resources Division, U.S. Geological Survey
USGS/WRMGS > USGS Western Region Marine and Coastal Surveys
USP/IO > Institituto Oceanografico - Universidade de Sao Paulo
USSR/HYDRO > USSR Hydrographic Service, Research Oceanographic Centre
UT/AUSTIN/BEG > University of Texas - Austin/Bureau of Economic Geology
UT/AUSTIN/CSR > University of Texas - Austin/Center for Space Research
UTIG > Institute for Geophysics, University of Texas at Austin
UTORONTO > University of Toronto
UTROMSO > University of Tromso
UVA/IBED/PGSS > Physical Geography and Soil Science, Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam
UVA/LTER > University of Virginia, Department of Environmental Science
UW/S > University of Wales - Swansea
UWA > University of Washington
UWA/APL > University of Washington, Applied Physics Laboratory
UWA/SAFS/CBR > Columbia Basin Research/School of Aquatics and Fisheries Sciences, University of Washington
UWI/LTER > University of Wisconsin-Madison, Department of Limnology
UWI/MADISON/IES/CCR > U. Wisconsin Institute for Environmental Studies, Center for Climatic Research
VIMS > Virginia Institute of Marine Science
VNIIGMI/WDC > All Union Research Institute of Hydrometeorological Information
VNIRO > All-Union Research Institute for Marine Fishing and Oceanography
VT/ANR > Vermont Agency of Natural Resources
VT/DEC > Vermont Department of Environmental Conservation
WCMC > World Conservation Monitoring Centre
WDC/GLACIOLOGY, BOULDER > World Data Center for Glaciology, Boulder
WDC/SEISMOLOGY, DENVER > World Data Center for Seismology, Denver
WDC-A/PALEOCLIMATOLOGY > World Data Center-A for Paleoclimatology

WDC-B/RIHMI > World Data Center-B Research Institute of Hydrometeorological Information
WDC-B1/OCEANOGRAPHY > World Data Center-B1 for Oceanography
WFF/OSB > Wallops Flight Facility Observational Science Branch, NASA
WHOI > Woods Hole Oceanographic Institution
WHP_SAC > WOCE Hydrographic Programme Special Analysis Centre
WLDELFT > Delft Hydraulics
WMO > World Meteorological Organization
WPRCEPH > Wakayama Prefectural Research Center of Environment and Public Health
WRI > World Resources Institute
YNCMT > Yuge National College of Maritime Technology
YNU > Yokohama National University
YSFRI > Yellow Sea Fisheries Research Institute

ANNEX IX

RECOMMENDED MODIFICATIONS TO MEDI 3.0b

Feature	Description	Priority
MEDI Format	Remove DISCIPLINE field	1
	Remove PALEO TEMPORAL COVERAGE field	1
	Remove IDN NODE field	1
	Add ORIGINATING CENTRE field	1
Search function	*General Search Parameters*: fix Remove function	1
	Choice of boolean AND / OR for search	3
	Select field to search: use previous selection as default	3
	Add the ability to search by dataset ID	2
	Temporal search: fix monthly bounds search	1
	Ability to search on multiple criteria (eg General+Spatial+Temporal)	1
	Ability to combine Specific Bounds and Monthly Bounds search	2
	Spatial search: do not display SVG map as default. Provide a button to "Display Map"	1
	Ability to define a rectangle in all directions	3
	Investigate alternative ways of displaying results of a spatial search, e.g. different colours, shaded boxes.	3
	Investigate SVG ways to improve performance	2
	Resolve 180^{o} longitude problem	1
	Ability search on a subset (the result of a search)	2
	Ability to combine search criteria (e.g. Spatial+Temporal)	1
	It should not be a requirement to logon to search MEDI	1
	On Search Results screen label the ID field	
Create records	*Summary Wizard*: change name to *Authoring Assistant*	1
	Summary Wizard: error on 'Submit'	
	Language: Change to *Dataset Language*	1
	Access Constraints: move "optional values" box and delete second box (e.g. see Distribution)	1
	SVG crashes browser on Page 3 when changing pages.	1
	Spatial Coverage: default screen does not show SVG map. Add button "Display Map" to open SVG map	1
	Locations: auto-determination of location names	3
	Ability to edit multi-point coordinates	1
	Parameter, Source, Sensor, Data Centre, Project valids: Change ADD button to SUGGEST with instructions on how suggest new valids. Generate email to MEDI coordinator with new valid suggestions. MEDI coordinator informs GCMD and originator is informed if approved or rejected.	1 2
	Do not display "EARTH SCIENCE" in list of selected Parameters	1
	Rename *Holding Organisation* to *Holding Organisation and Personnel*	1
	To enter personnel, select from drop down list of personnel roles	1
	When selecting a new data centre contact, allow a new contact to be added	1
	When creating a new data centre, must select from list of valids. If not found then use "Suggest New" feature.	
	Each organisation requires a Data Centre Contact	1
	URL: Change name to *Data Centre URL*	1
	Data Presentation Format: change to *Data Presentation Form*	1
	Need ADD button to add a new keyword to *Data Presentation Form*. This is not a controlled list	1
	Increase size of "Fees" box"	1
	Media and *Format* lists need ADD button to add to list of suggested keywords	1
	URL Content Type is a controlled list. Select from list of valids.	1

	Include a Suggest button with instructions on how suggest new valids.	
	If *URL Content Type* is used then *URL* field is required	1
	New name for "Multimedia": "Sample Image"	1
	If *Sample Image* is used then *URL* is required	1
	Format: Need ADD button to add to list of suggested keywords	1
	Data Resolution: Move *Temporal Resolution* to top of list	1
	Investigate methods for locating *Parent ID* (refer to KOSI system)	3
	Temporal Coverage. Stop Date should be optional	1
	Temporal Coverage. Display warning message if date vale falls outside range 1800-2050	1
	Replace all *?* buttons with *I* icon	1
	Create new record from template. If no new template is selected system crashes	1
	Automatically move cursor for fixed character fields (e.g. date)	2
	Security. Only an owner can edit/delete records	1
Delete Records	Need cautionary note before deleting	1
	Create recycle bin function for deleted records to allow recovery	2
	Ability to delete records from the search results	2
Export records	Ability to export records from the search results	2
	Two options for export: MEDI DIF and GCMD DIF	1
	FGDC compatibility. Use style sheet for conversion	3
Main screen	Move *Recover Unsaved Records* from Search menu to Main menu	1
Administration	Add *Modify User* feature	1
	Enlarge Address field	1
General	Ability to produce a printable version of a DIF record	2
	Redesign web interface. All mandatory fields to appear on first page	1
	Help screens required for all fields	1
Valid Lists	Parameter valids. Change order so OCEANS topic is listed first	1
	Replace Source, Sensor, Project and Data Centre valids with GCMD subset	1
	Location valids. Add Caspian Sea, World Ocean, Southern Ocean	1
	Multilingual Valid Lists	3

Priority 1. High Priority: To be completed before release of V3.0

Priority 2. Medium Priority: To be included in next release.

Priority 3. Low Priority: Investigate possibility of inclusion in future releases