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IODE National Report on Oceanographic Data Management and Exchange for Chile
IODE NATIONAL REPORT ON OCEANOGRAPHIC DATA MANAGEMENT AND EXCHANGE FOR CHILE

1. Name of Data Centre:
   
   Centro Nacional de Datos Hidrográficos y Oceanográficos de Chile (CENDHOC)

2. National IODE Coordinator:
   
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3. Data Center Address:
   
   Same as above

4. Data Center URL:
   
   http://www.shoa.cl/cendoc/index.htm

5. IODE Data Center Designation Date:
   
   CENDHOC was designated a NODC in 1968

6. Description of national data flow:

How does data flow operate in your country (if possible illustrate by means of one or more diagrams)? This should cover:

Chile’s national Data flow involves many institutions (governmental, academic and private) that collect their own data, each having responsibility for contributing to international programs of their competence (see flow diagram below). CENDHOC takes advantages of the relation that SHOA maintains with all these bodies, and interacts directly with Universities and Governmental Institutions to make arrangements for marine data & information exchange.
1. **Metadata management:**
   - At the discovery level
     
     *CENDHOC maintains a local MEDI system, where national data cruises are described and summarized.*
   
   - At the Cruise level
     
     *None*
   
   - For monitoring/operational systems (e.g. EDIOS, regional GOOS systems, etc)
     
     *None*

2. **Data tracking:**

   As a continuous program, CENDHOC maintains a level of data recovery within the national institutions by periodically receiving some oceanographic data sets. The data delivery is performed through the initiative of the Institutions themselves (regular updates) or through the application of DS 711 by SHOA. The DS 711 mentioned before, assures that any institution, either national or foreign, that had requested authorization and performed oceanographic research within the Chilean EEZ must turn in all the final data collected to SHOA in a period not longer than 6 months. Every year, more than a sixty requests regarding DS 711 are handled by the Department of Oceanography, once the data are received, they are passed to CENDHOC for further processing.
7. **What is the structure of marine data management in your country:**

1. **How many organisations are involved?**
   - **Governmental Institutions** such as the Navy (SHOA and DIRECTEMAR) and other technical Institutes (IFOP, SERNAPESCA, INACH, etc)
   - **Academic Institutions** such as Universities and specialized Centers (e.g. COPAS)
   - **Privates** consulting offices.

2. **Who does what?**
   - **Governmental institutions** such as the Chilean Navy act as regulating offices as well as long-term monitoring, collector and data dissemination (oceanographic and hydrographic data). Other technical institutions such as IFOP and SERNAPESCA do similar tasks in the fishery and aquaculture environments.
   - **Research institutions** such as Universities and other Academic centers mainly act as data providers to CENDHOC, though they may have a data processing facility. The Center for Oceanographic Research in the Eastern South Pacific (COPAS) located at the “Universidad de Concepción”, Chile is an exception in the sense that it also performs data processing management as CENDHOC.
   - **Private** mainly act as data collector.

3. **What data goes where?**
   
   Most of the physical data (CTD, SST and SL time series, currents and wave data) obtained by marine and research-related institutions are received and collected at CENDHOC according to bilateral data-exchange arrangements or through the accomplishment of DS711 mentioned above.
   
   Some similar data are also kept by academic institutions on their own data banks

4. **Are there data for which there is no home?**

   There are some data (physical, biological, etc) collected by commercial (consulting) agencies and Universities that are not routed to public users.

5. **What gets passed on to other organisations?**

   On a regular basis CENDHOC forward physical data into World Data Center-A and RNODC for Southern Oceans
6. What regional links and data centres are there?

- **CENDHOC** - the Chilean NODC depending on and located at SHOA.
- **COPAS** - The Center for Oceanographic Research in the Eastern South Pacific (COPAS) located at the Universidad de Concepción

8. What are the strengths and problems of the present arrangements nationally, regionally and internationally?:

**Strengths**

The centralizing task that CENDHOC performs as a national NODC by collecting, applying quality control procedures, archiving and disseminating both data and products constitute a well recognized feature on data exchange matters at the national, regional and international level.

**Problems**

At the national level, there is still a lack of full participation in data exchange matters by marine scientists and marine related institutions, though CENDHOC has provided them with seminars on IODE matters as well as oceanographic data as requested.

9. What improvements could be made nationally, regionally and internationally?:

Certainly a better participation of the marine related institutions in Chile in data management activities could improve the coordination on this matter. CENDHOC will continue with its initiatives to provide national users with training (workshops) and awareness on data formats and exchange procedures.

Regionally and internationally to increase the efforts and activities of the ODINCARSA project.

10. What future national activities are planned?:

Recently, the Director of SHOA tasked CENDHOC with the responsibility of taking care of all the management of the Hydrographic data collected by SHOA in their EEZ, in order to make them available to public user. A web page is being implemented to provide with information, data and products on this matter.

Also a national ARGO web page (spanish) will be implemented to show the participation of Chile in this operational international program. (During May, 2005 two Chilean Argo Buoys will be launched by SHOA in its EEZ)

11. What national, regional or international projects is your NODC involved in (both IODE and non-IODE). Examples: Argo, GTSP, EDMED, EDIOS, Sea-Search, GODAR, ...

**National:** CONA
**Regional:** ODINCARSA, CPPS
**International:** ARGO, GOOS, MEDI, IASMLIC, GLOSS, ETDMP