Japanese Contribution to IODE

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Outline

- Background of Japan Hydrographic and Oceanographic Department (JHOD)
- History of Japan Oceanographic Data Center (JODC)
- Current situation of JODC
- New role of JODC for the oceanographic data and information management

BACKGROUND OF JHOD

Background of JHOD

Ministry of Land, Infrastructure, Transport and Tourism

- Japan Coast Guard
  - **Hydrographic and Oceanographic Department**
  - Guard and Rescue Department
  - Other Department・・・
- Japan Meteorological Agency
- Other Agency・・・

Background of JHOD

- Hydrographic Survey Vessels belonging to
  - JCG Headquarters : 5

Shoyo

Takuyo

Meiyo

Tenyo

Kaiyo

  - Regional JCG Headquarters : 7

Background of JHOD

- Administration and Planning Division
- Technology Planning and International Affairs Division
- Hydrographic Survey Division
- Environmental and Oceanographic Division
- **Oceanographic Data and Information Division**
  - Japan Oceanographic Data Center
- Chart and Navigational information Division

HISTORY OF JODC (1965-2011)

History (1965-1974)

1965: Establishment of JODC

1965: Data Center for Cooperative Study on the Kuroshio and Adjacent Seas (KDC)

1966: National Oceanographic Programme

1972: Domestic committee for Oceanographic Data and Information Exchange

Establishment of JODC

- JODC was established in 1965 in accordance with the resolution adopted by the IOC/UNESCO in 1961 as well as the reports of the Council for Marine Scientific Technology in 1963 and 1964.

History (1975-1984)

1975: DC for IGOSS/MAPMOPP

1978: DC for Kuroshio Exploitation and Utilization Research (KER)

1979: RNODC for IOC/WESTPAC

1982: IOC/WESTPAC Training Course on Data Management (-1996)

IOC Training course on data management (1982-1996)

- For the support to the activities of the IOC/WESTPAC
- Learning the basic concepts of the IODE system and its function, and acquisition, procession and compilation of oceanographic data.
- Total 51 trainees in 15years (1982-1996)

History (1985-1994)

1987: RNODC for MARPOLMON

1991: RNODC for ADCP

1991: Online Information and Data Exchange Service (JOIDES)

1994: JODC website

History (1995-2004)

1996: JODC Online Data Service System (J-DOSS)

1996: NEAR-GOOS RDMDB

1997: Establishment of Marine Information Research Center (MIRC) in JHA

1997: IOC/WESTPAC Training Course on NEAR-GOOS Data Management (-2006)

2002: GODAR/WESTPAC Workshop (-2006)

NEAR-GOOS RDMDB (1996-)

- To provide a regional framework for gathering and distributing oceanographic data in the North-East Asian region
- The oceanographic/marine meteorological data in the NEAR-GOOS region are maintained at the Regional Delayed Mode Data Base (RDMDB) operated by the JODC, which is responsible for the Regional Data Center for the WESTPAC.

NEAR-GOOS RDMDB (1996-)

7th NEAR-GOOS Coordinating Committee Vladivostok, Russia in 2002

GODAR-WESTPAC (2002-2006)

GODAR WESTPAC 2nd workshop, Tokyo in 2004.

History (2005-)

2008: Basic act on Ocean Policy

2010: DC for GEOTRACES

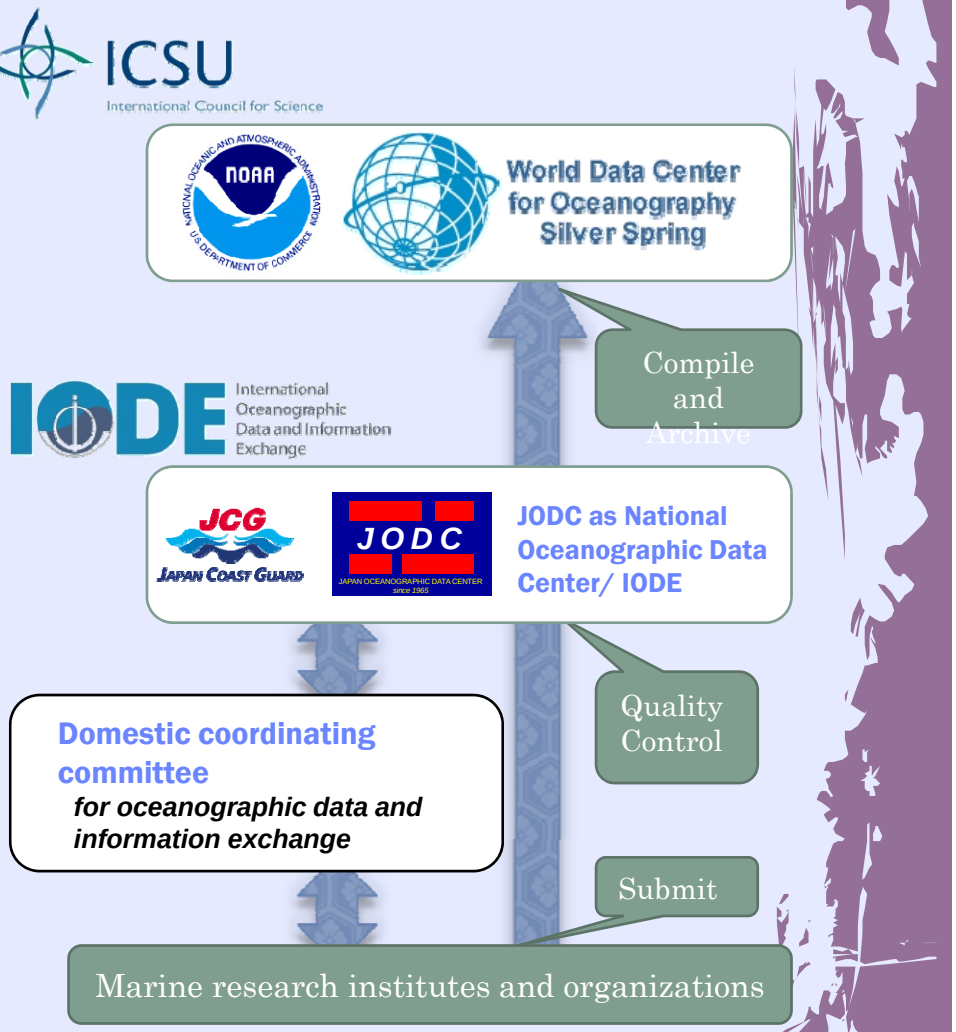
2011: International Symposium for the Integration of Marine-related Data and Information (supported by OPRF)

CURRENT SITUATION OF JODC

Current situation of JODC

- Staff (2011)
  - Management: 4
  - Technical: 13
  - Administrative: 3
  - Contractors: 2

- Budget (2011)
  - ￥61,366,000
    ($ 800,000)

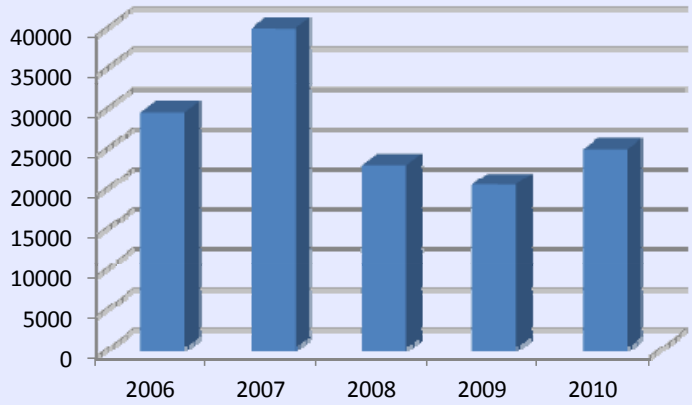


Data Flow to the WDC and IODE

Data Items in JODC

- Ocean Station Data
- Marine Organisms
- Ocean Current
- Tide (Sea Level)
- Tidal Current
- Marine Pollution
- Bathymetry and Marine Geophysics
- Oceanographic Information
  - Cruise Summary Report etc.
- Gridded Data Products
  - Temperature (1 ° Mesh)
  - Salinity (1 ° Mesh)
  - Ocean Current (1 ° Mesh)
  - Depth (500m Mesh)

Activity Statistics



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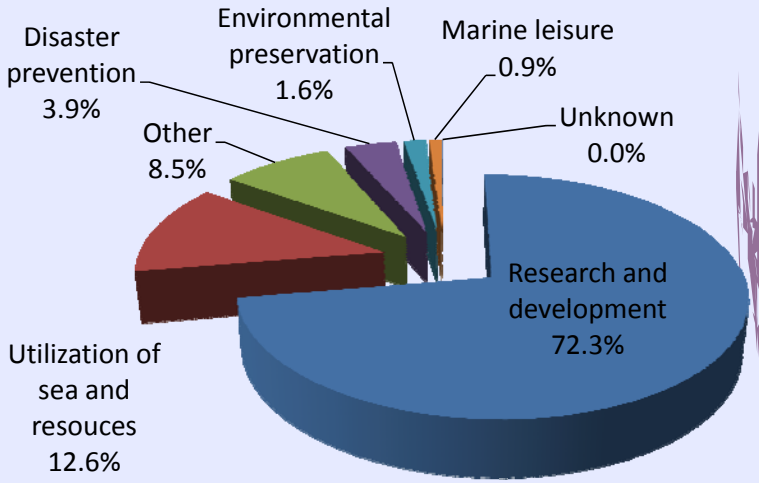
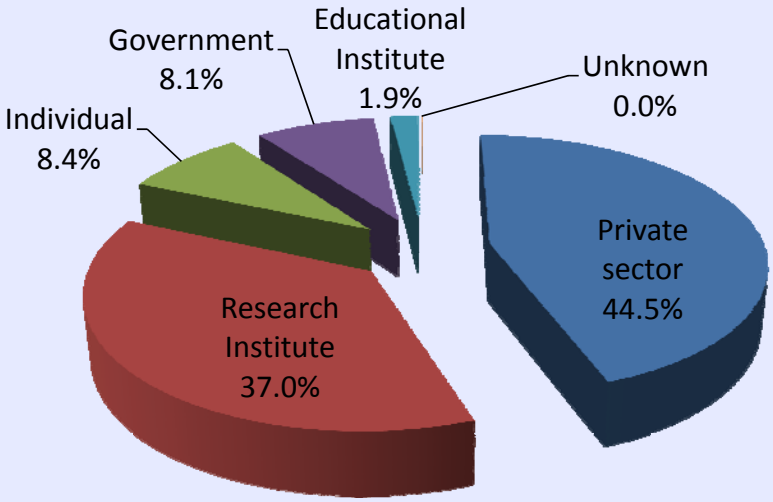
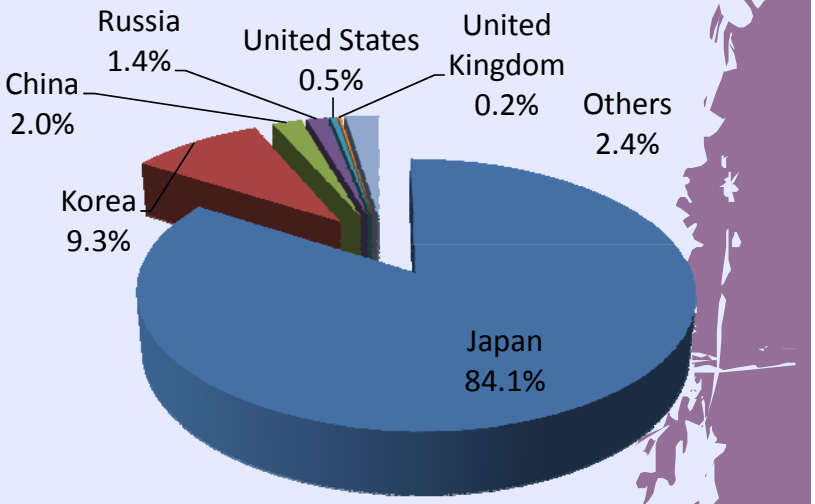


Type of purpose (2010)



Type of user (2010)



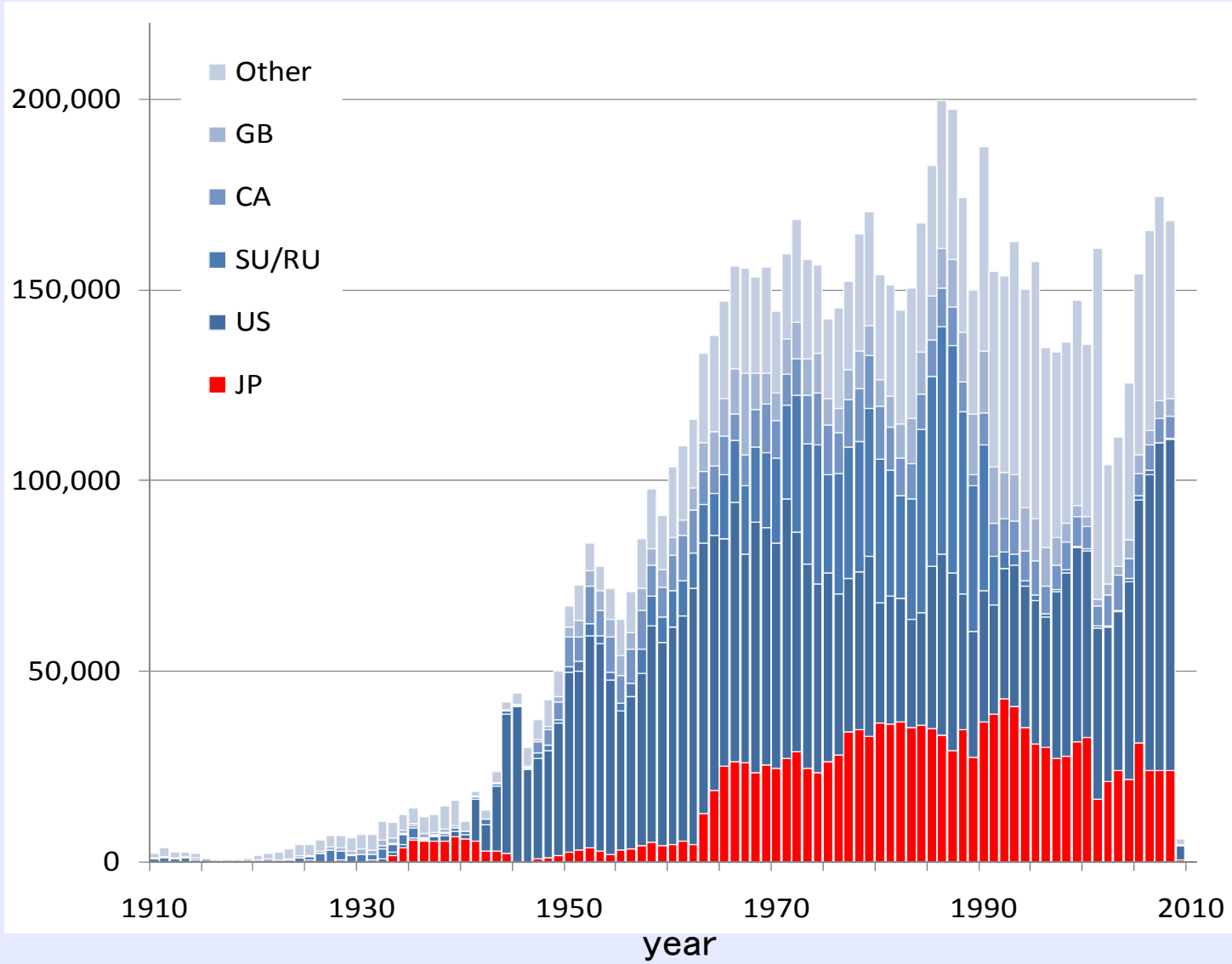
User's nationality (2010)

Japanese Contribution

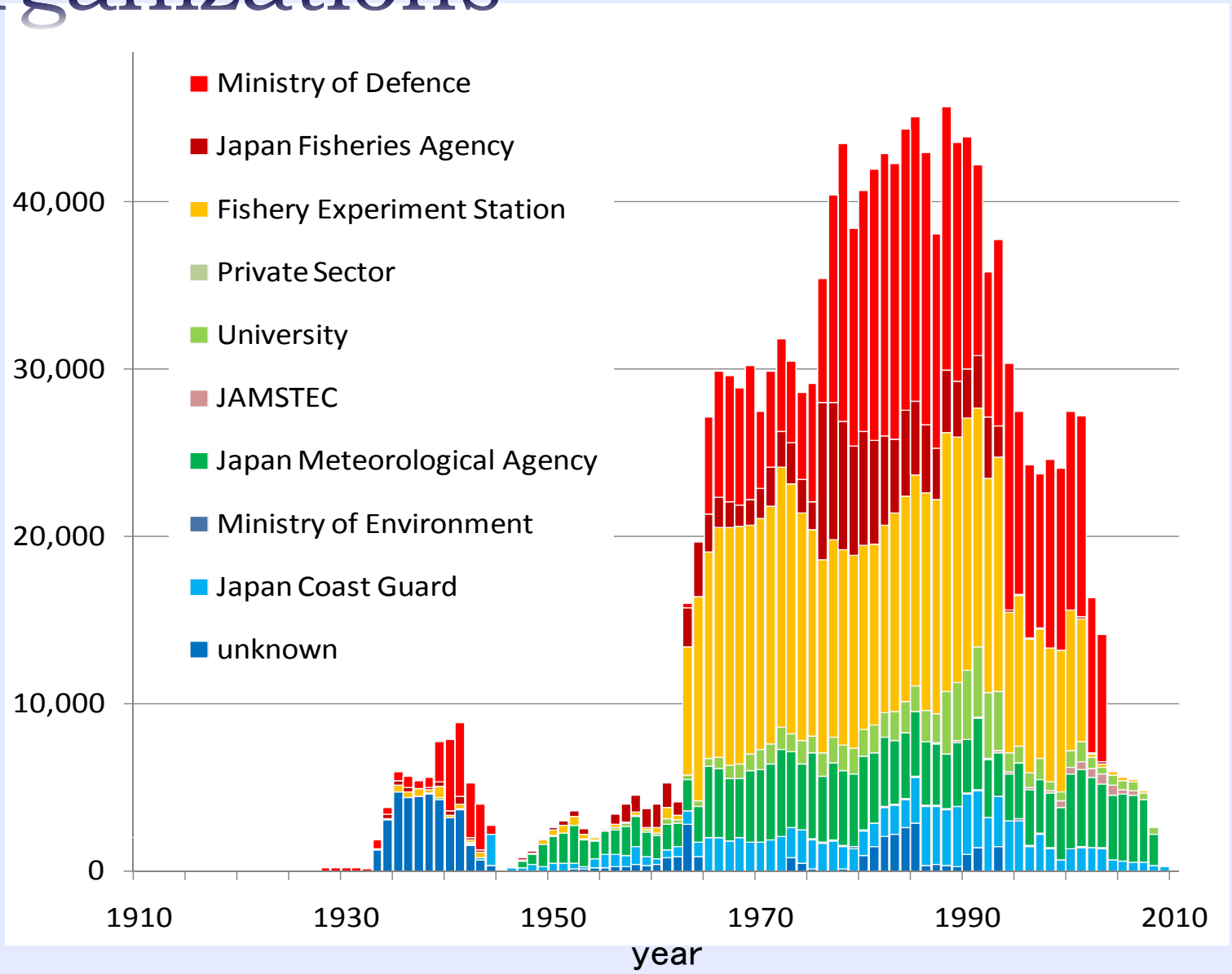
Country Name [ISO code]		United States [US]	Japan [JP]	Russia (Soviet Union) [RU, SU]	Canada [CA]	United Kingdom [GB]	Other	**Total**	**% of total Japan**
OSD	Ocean station Data Low resolution CTDs and XCTDs	374,130	541,722	577,877	119,815	130,297	797,457	**2,541,298**	**21.3%**
CTD	High resolution CTDs and XCTDs	172,396	37,197	22,680	131,810	28,006	249,756	**641,845**	**5.8%**
MBT	Mechanical and Digital Bathythermographs	1,169,369	296,218	449,359	184,844	118,639	208,320	**2,426,749**	**12.2%**
XBT	Expendable Bathythermographs	851,184	291,530	14,094	77,728	213,130	656,824	**2,104,490**	**13.9%**
MRB	Moored Buoys	357,128	137,181	0	0	0	72,235	**566,544**	**24.2%**
DRB	Drifting Buoys	22,735	40,453	0	0	0	58,640	**121,828**	**33.2%**
PFL	Profiling Floats	306,252	68,710	306	20,325	19,226	133,166	**547,985**	**12.5%**
Total		**3,253,194**	**1,413,011**	**1,064,316**	**534,522**	**509,298**	**2,176,398**	**8,950,739**	
% of total		**36.3%**	**15.8%**	**11.9%**	**6.0%**	**5.7%**	**24.3%**		

Comparison of the contribution to the WOD09

Japanese Contribution



Breakdown of domestic organizations



NEW ROLE OF JODC

New Role of JODC

- Basic Plan on Ocean Policy
  (approved in Cabinet meeting 18 March, 2008)
- 2.6.(3) **Integration of marine-related information**
  - It is troublesome to search necessary information on specific marine zones or of specific types.
  - **Establish a system to comprehensively manage and provide the** pieces of **information** now scattered in respective agencies.
  - In the process, **utilize the efforts made so far by agencies such as the Japan Oceanographic Data Center**

(abridged)

Summary

- Since its establishment JODC has been fulfilling the role of the synthetic marine data bank of Japan under the framework of IODE.
- Japan is one of the main oceanographic data suppliers in the world.
- JODC is expected to contribute to the comprehensive marine-related data and information infrastructure in Japan.

Thank you for your attention.