Atmosphere and Ocean Research Institute
The University of Tokyo

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Present trends in IOC/IODE

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【Co-Chair of IOC/IODE】

Intergovernmental Oceanographic Commission (IOC)

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
COMMISSION OCÉANOGRAPHIQUE INTERGOUVERNEMENTALE
COMISIÓN OCEANOGRÁFICA INTERGUBERNAMENTAL
МЕЖПРАВИТЕЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ
اللجنة الدولية الحكومية لعلوم المحيطات
政府间海洋学委员会

UNESCO

- Established in 1960 in UNESCO with Functional Autonomy
- UN body for ocean science, observation, and services

Purpose: to promote international cooperation and to coordinate programmes

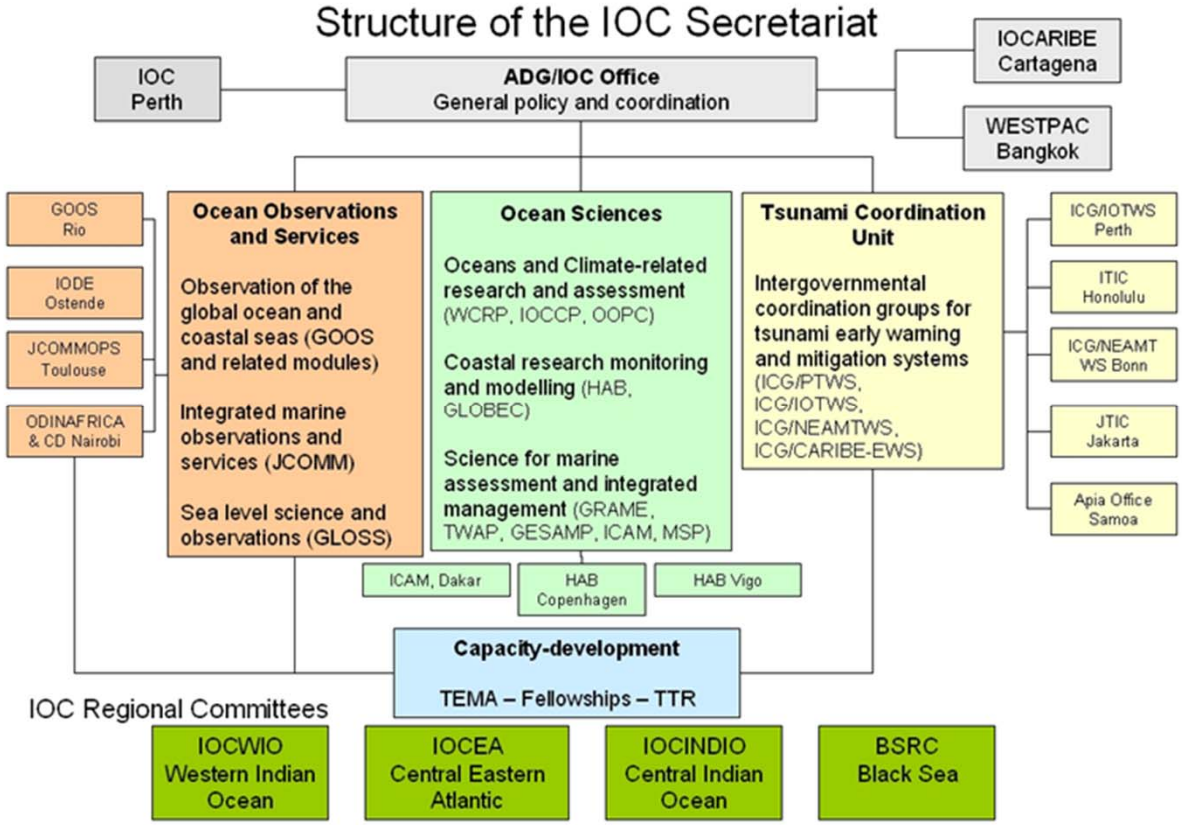
Function:

(1) international programmes and the dissemination and use of their results;
(2) standards, reference materials, guidelines and nomenclature;
(3) competent international organization;
(4) education, training and the transfer of related technology.

IOC

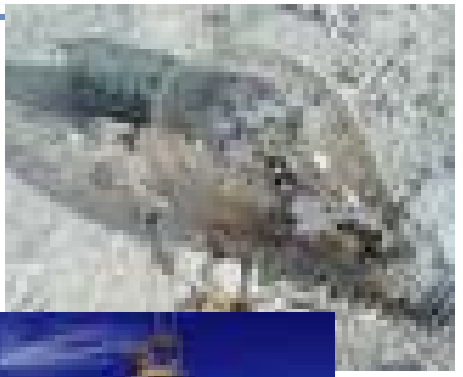
(1) The Assembly: general policy, main lines of work,
Biennial Draft Programme and Budget
(2) The Executive Council: 40 Member States
(3) Secretariat : Executive Secretary + staff
(4) Subsidiary bodies

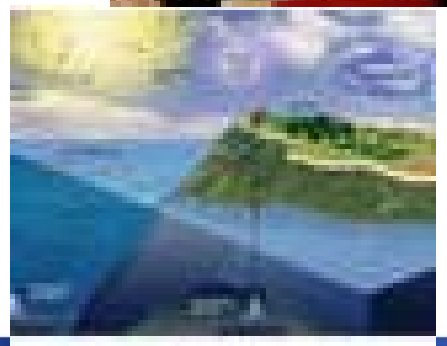
IOC Chairperson
Prof. P. Haugan (Norway)



4 High Level Objectives of IOC:

1. **Healthy ocean ecosystems**
2. **Early warning for ocean hazards**
3. **Resiliency to climate change and variability**
4. **Enhanced knowledge of emerging issues**





Emerging needs in ocean issues:

SDG-14

IPCC chapter on ocean and cryosphere

BBNJ

G7 Summit

IODE(International Oceanographic Data and Information Exchange)

- Established in 1961 by IOC
- Exchange of oceanographic data and information between participating Member States through

  NODCs (National Oceanographic Data Centers) 66

  ADUs (Associate Data Units) 16

  WDS (World Data System) of ICSU
- ～80 oceanographic data centers in member countries

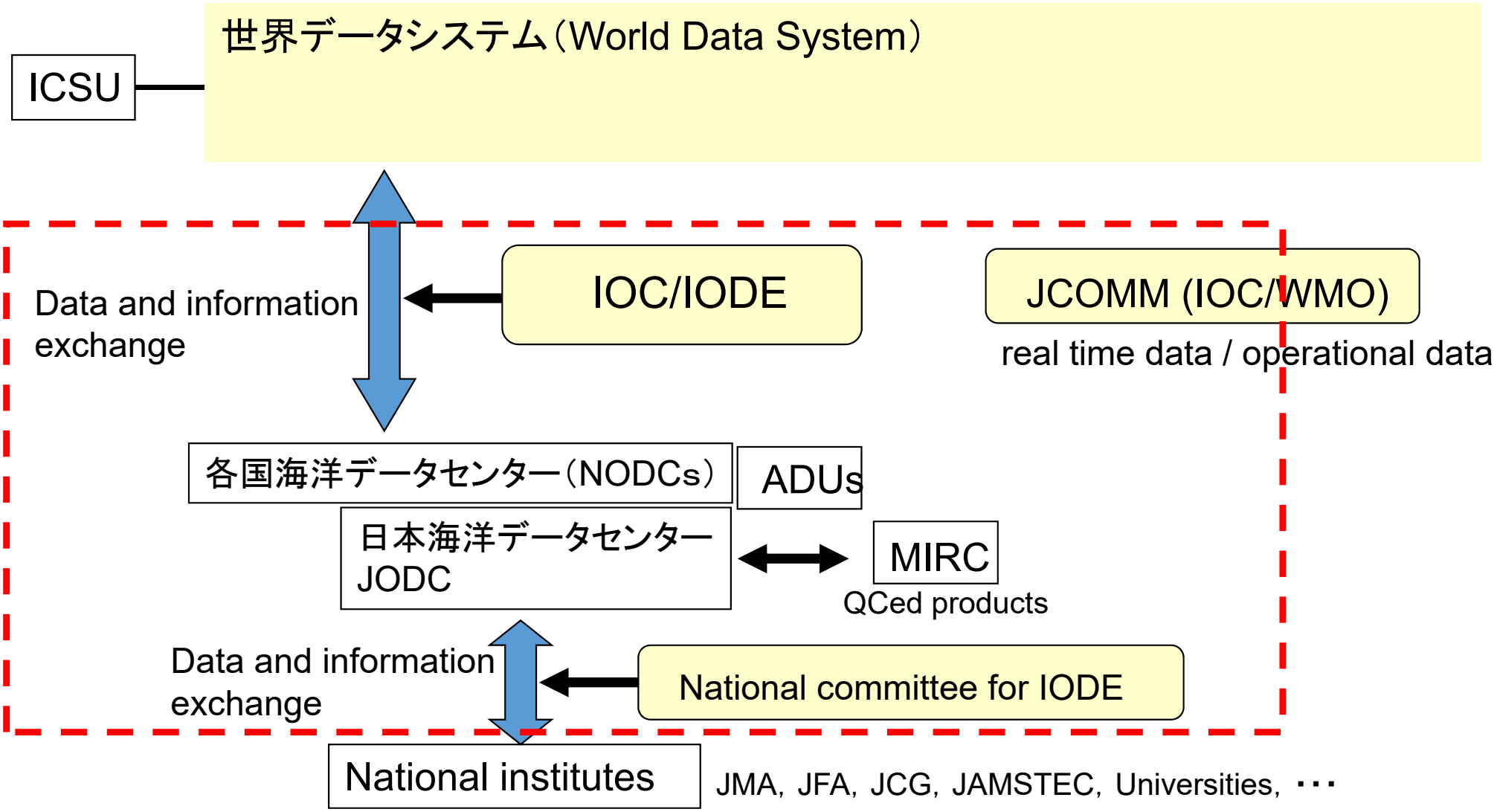
IODE Office in Oostende, Belgium since 2005)

Election of new IODE Co-Chairs (2015-2017)

As the outgoing Co-Chair (Ms Sissy Iona and Mr Ariel Troisi) had completed two terms in Office, the IODE Committee elected two new Co-Chairs: Ms Cynthia Chandler (USA) and Prof Yutaka Michida (Japan). More info See here

Present Co-Chairs elected at 23rd Session of IODE in 2015; C. Chandler (WHOI, USA) and Y.Michida (AORI,Japan)

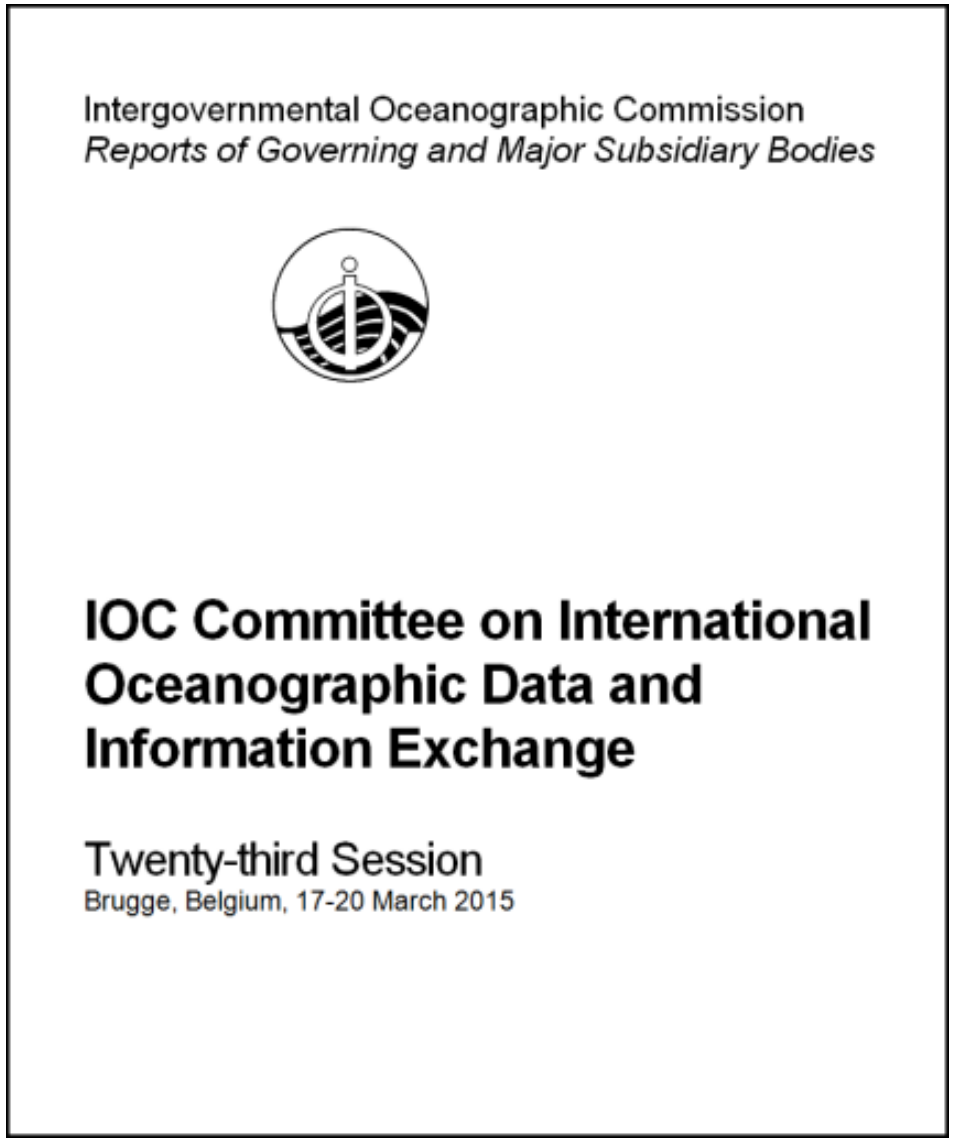
IODE: International Oceanographic Data and Information Exchange



23rd Session of IODE

- Held in Brugge, Belgium, Mar. 16-20, 2015
- 10th Anniversary of IODE project office in Oostetde
- 105 participants from 40 IOC Member States and 10 organizations
- 4 decisions and 5 recommendations adopted
- Final report available from 'iode.org'
- Elected co-chairs, Cyndy Chandler (USA) and Yutaka Michida (Japan)

Session Report of IODE-XXIII


Intergovernmental Oceanographic Commission
Reports of Governing and Major Subsidiary Bodies

IOC Committee on International Oceanographic Data and Information Exchange

Twenty-third Session
Brugge, Belgium, 17-20 March 2015

Final report available from iode.org

- http://www.iode.org/index.php?option=com_content&view=article&id=416&Itemid=100159

IODE-XXIII session outcomes -1

Adopted 4 decisions establishing inter-sessional working groups

1. propose a re-structuring of IODE
2. revise the IOC strategic plan for oceanographic data and information exchange
3. create an IOC communication and outreach strategy for data and information management
4. formally establish OceanTeacher Global Academy as an IODE project

IODE-XXIII session outcomes -2

Adopted 5 recommendations concerning:

1. ODINBlackSea
2. establishment of the OceanExpert project
3. establishment of the IODE project for an international quality controlled ocean database (IODE-IQuOD)
4. establishment of the IODE pilot project expanding OBIS with environmental data (OBIS-ENV-DATA)
5. IODE work plan and budget 2015-2017

Decision at IODE-XXIII

- propose a re-structuring of IODE
  - working group formed to reassess and explore options for the IODE structure for the next 10 years
  - Assess strengths and weaknesses of the current structure
  - Propose options for revising the current structure, projects and activities

Discussions to prepare a report on re-structuring have been led by H. Garcia (USA) and Y. Michida (JPN). Webex meetings once a month are trying to finalize the report to be submitted to IODE-XXIV in Mayaisia, Mar. 2017.

IODE Re-Structuring Theme 1: Evolving IODE

[A] Problem

IODE should effectively meet emerging needs, including those in the SDG-14 and in 'Tsukuba Communique' released by the G7 S&T Ministers' meeting in Tsukuba, by improving its structure and ways of management in more strategic viewpoint. The number of projects in the IODE framework, for example, exceeds 30 as pf 2016, which may have caused less monitoring their progress, less communications between the Secretariat and projects, and in some cases duplicated activities to be avoided.

[B] Recommendation

IODE Strategic plan will have three layers; i) IODE Purpose, ii) IODE Strategies, and iii) IODE Engagement The IODE Purpose should meet IOC's high level objective(s), and IODE Strategies should be defined to achieve IODE Purpose. The IODE Engagement needs to be designed to accomplish the IODE Strategies and Purpose.

IOC Oceanographic Data Exchange Policy

Preamble

The **timely, free and unrestricted** international exchange of oceanographic data is essential for the efficient acquisition, integration and use of ocean observations gathered by the countries of the world for a wide variety of purposes including the prediction of weather and climate, the operational forecasting of the marine environment, the preservation of life, the mitigation of human-induced changes in the marine and coastal environment, as well as for the advancement of scientific understanding that makes this possible.

Recognising the vital importance of these purposes to all humankind and the role of IOC and its programmes in this regard, the Member States of the Intergovernmental Oceanographic Commission **agree** that the following clauses shall frame the IOC policy for the international exchange of oceanographic data and its associated metadata.

IOC Oceanographic Data Exchange Policy

Clause 1 （Data under the auspices of IOC）
Member States shall provide timely, free and unrestricted access to all data, associated metadata and products generated under the auspices of IOC programmes.

Clause 2 （Data from non-IOC programmes）
Member States are encouraged to provide timely, free and unrestricted access to relevant data and associated metadata from non-IOC programmes that are essential for application to the preservation of life, beneficial public use and protection of the ocean environment, the forecasting of weather, the operational forecasting of the marine environment, the monitoring and modelling of climate and sustainable development in the marine environment.

Clause 3 （Non-commercial use）
Member States are encouraged to provide timely, free and unrestricted access to oceanographic data and associated metadata, as referred to in Clauses 1 and 2 above, for non-commercial use by the research and education communities, provided that any products or results of such use shall be published in the open literature without delay or restriction.

IOC Oceanographic Data Exchange Policy

Clause 4 （Rights of data originators）
With the objective of encouraging the participation of governmental and non-governmental marine data gathering bodies in international oceanographic data exchange and maximizing the contribution of oceanographic data from all sources, this Policy acknowledges the right of Member States and data originators to determine the terms of such exchange, in a manner consistent with international conventions, where applicable.

Clause 5 （Use of IODE system）
Member States shall, to the best practicable degree, use data centres linked to IODE's NODC and WDC network as long-term repositories for oceanographic data and associated metadata. IOC programmes will co-operate with data contributors to ensure that data can be accepted into the appropriate systems and can meet quality requirements.

Clause 6 （Capacity development）
Member States shall enhance the capacity in developing countries to obtain and manage oceanographic data and information and assist them to benefit fully from the exchange of oceanographic data, associated metadata and products. This shall be achieved through the non-discriminatory transfer of technology and knowledge using appropriate means, including IOC's Training Education and Mutual Assistance (TEMA) programme and through other relevant IOC programmes.

Suggestions to IQuOD

- Interlinked relationship with other ongoing activities closely related to IQuOD, in particular, GODAR, WOD and GTSPP be well established.

- Progress reports to IODE Committee in a regular basis are highly appreciated, so that IODE community and IQuOD can mutually exchange their views and closely communicate for better accomplishment.

Definitions

‘Free and unrestricted’ means non-discriminatory and without charge. “Without charge”, in the context of this resolution means at no more than the cost of reproduction and delivery, without charge for the data and products themselves.

‘Data’ consists of oceanographic observation data, derived data and gridded fields.

‘Metadata’ is 'data about data' describing the content, quality, condition, and other characteristics of data.

‘Non-commercial’ means not conducted for profit, cost-recovery or re-sale.

‘Timely’ in this context means the distribution of data and/or products, sufficiently rapidly to be of value for a given application

‘Product’ means a value-added enhancement of data applied to a particular application.