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## Ocean and the Law of the Sea

### Contribution of the Intergovernmental Oceanographic Commission of UNESCO to the Report of the Secretary-General

#### Executive Summary.

The Intergovernmental Oceanographic Commission (IOC) acts as the UN system-wide focal point for ocean science and ocean services under the guidance provided by the resolutions, decisions and instructions of the IOC Assembly. The report briefly highlights the main developments in IOC in the field of ocean affairs and the law of the sea. Key activities conducted since the last Secretary-General Report are as follows: **(i) in the field of ocean research**, a new assessment under GESAMP Sources, fate and effects of micro-plastics in the marine environment was produced; in the perspective of the UNFCCC COP21, several scientific coordination and public awareness activities contributing to better understanding of ocean and climate interactions have been conducted; a new major International Indian Ocean Expedition is being planned with the support of SCOR; **(ii) in the field of observing systems and data management**, the Global Ocean Observing System coordinated by IOC continued to expand through the establishment of the Tropical Pacific Observing System and the Deep Ocean Observing Strategy (DOOS); the Ocean and Biogeographic Information System has now reached 42 million marine species records; **(iii) in the field of early warning and services**, continued progress was made in strengthening the four regional tsunami warning systems coordinated by IOC including through tsunami wave exercises, launching and/or operating tsunami information centres, and holding a conference ; **(iv) in the field of assessment and information for policy**, support has been provided to the UN Regular Process (World Ocean Assessment) and a new Transboundary Water Assessment Programme has been implemented; **(v) in the area of sustainable management and governance**, a new set of guidelines on Marine Spatial Planning (MSP) have been published and global MSP practices documented; IOC was co-leading the UN Ocean Task Support Team (TST) mandated to provide scientific and technical information on the formulation of Sustainable Development Goals (SDGs). IOC co-organized with UN-DOALOS a side event to highlight the role of IOC in capacity development and ocean sciences.; and **(vi) in the field of capacity development**; the OceanTeacher Global Academy was launched to provide technical training in all areas of IOC competence and 10 regional training centres have been established; a new Global Ocean Science Report (GOSR) is being prepared with a view to summarize information about the status of ocean research, investment in research infrastructure and human capacity, as well as potential gaps in marine sciences programmes in need of further investments.



## **DEVELOPMENTS IN THE FIELD OF OCEAN AFFAIRS AND THE LAW OF THE SEA (PART II)**

Pursuant to the resolution 69/245 entitled “Oceans and the law of the sea” adopted by the General Assembly on 29 December 2014, the information below represents the contribution of the Intergovernmental Oceanographic Commission of UNESCO to the report of the Secretary-General.

### **Ocean research**

The Group of Experts on the Scientific Aspects of Marine environmental Protection (GESAMP) WG 40 ‘Sources, fate and effects of micro-plastics in the marine environment: a global assessment’ has completed its work under the leadership of the IOC-UNESCO. It will now start a second phase with a joint co-sponsorship by the IOC, UNEP, and FAO. The new TORs were agreed by the three organizations plus GESAMP and the kick-off meeting was held in Rome 21–23 April. An immediate milestone for this group is to present a report on the impact of microplastics on fish by May 2016. The IOC is also acting as an advisory body on potential plastics projects funded by the European Union Joint Programming Initiative on Oceans (EU JPI Oceans).

Ocean acidification (OA) is a major global concern and a risk to marine biodiversity and ecosystems. It may impact human society in many ways. Addressing the needs for new research and networking, the IOC is co-leading the Global Ocean Acidification Observing Network (GOA-ON), which aims to coordinate and improve ocean observations to detect the impacts of ocean acidification. The GOA-ON roadmap was published in September 2014 and the most recent development was the establishment of a biological working group, co-chaired and coordinated by IOC-UNESCO, to improve measurements needed to detect the impact of increasing CO<sub>2</sub> levels on marine life.

Together with PICES and ICES, IOC has convened the 3rd International Symposium on the Effects of Climate Change in the World’s Ocean (Santos, Brazil, 23–27 March 2015). This Symposium is a regular scientific meeting in the topic of climate change and a flagship symposium for IOC. It attracted 284 participants from 38 countries. The three main organizers (ICES, PICES and the IOC) agreed to work together towards the 4th edition of the Symposium in 2019. The Symposium provides a timely summary of existing scientific knowledge on ocean/climate interactions, ahead of the UNFCCC COP 21 to take place in December 2015.

To enhance the awareness about OA among policymakers, IOC contributed to a side event during the UNFCCC COP-20 in Lima, December 2014, and is preparing a number of side events associated with the COP-21. Regarding communication with the general public and permanent delegations at UNESCO, the program of the World Oceans Day included a session on ocean acidification.

IOC support to the World Climate Research Programme (WCRP) continued in 2014–2015 at a reduced level. IOC participated in the review of the membership of the WCRP Joint Scientific Committee and suggested measures ensuring improved geographical and gender balance on the Committee at the same time keeping the oceanography as a core discipline represented on the Joint Scientific Committee.

The IOC–Scientific Committee on Oceanic Research (SCOR) International Ocean Carbon Coordination Project (IOCCP) will launch the Surface Ocean CO<sub>2</sub> Atlas (SOCAT) v3 in September 2015. Assembling this dataset has been a major undertaking by sea-going marine carbon scientists from across the world for the last four years. Due to the limited financial resources available, the IOC is providing limited funding support to IOCCP, however the IOC is cooperating with IOCCP in a number of activities such as the International Group for Marine Ecological Time Series (IGMETS), the Global Ocean Acidification Observing Network (GOA-ON), and the Global Ocean Observing System (GOOS).

IOC is providing leadership and contributing to the international debate on the importance of the ocean dimension in the new climate change regime that could emerge from the UNFCCC COP-21 process (Paris, November–December 2015). In June 2014, IOC facilitated the launch of an Ocean

Climate Platform, which brings together representatives from the research community and civil society with the aim of placing the ocean at the heart of international climate change debate, as well as raising public awareness on these issues. On 8 June 2015, with the support of France, Sweden, Monaco, Flanders (Belgium) and the Ocean-Climate Platform, IOC organized a World Ocean Day (WOD), which was recognized as an official COP-21 event, entirely dedicated to the ocean-climate issues. The programme of the Day included 4 scientific workshops, three roundtables, a UNESCO Open Campus for youth, and a concluding high-level political segment in presence of HSH Prince Albert II Monaco, H.E. President Remengesau of Palau, H.E. Prime Minister Stuart of Barbados, H.E. Vice-President Faure of Seychelles, as well several ministers and ambassadors. The WOD provided an opportunity for a dialogue amongst stakeholders on the inclusion of ocean dimensions in the COP-21 process; on the contribution of ocean science to the climate system knowledge, on the human and social aspects of climate induced changes in the ocean, as well as potential solutions; and possible actions and strategies to mitigate climate change.

IOC is also contributing to the international scientific conference: “Our Common Future Under Climate Change” (7–10 July 2015), which is organized by France and hosted by UNESCO. Two sessions focusing, respectively, on ocean observation and marine ecosystems will be convened by IOC.

Scientific research remains a major driver of ocean observations and a factor of sustainability of ocean time-series. Shipboard biogeochemical time-series programmes provide the oceanographic community with the multi-year, high-quality data needed for characterizing ocean biogeochemistry and ecosystem. Their renewed importance is related to the fact that they represent one of the most valuable tools to characterize and quantify ocean fluxes and their associated links to ecosystem functioning in a changing ocean. Under the auspices of the IOC, the International Group for Marine Ecological Time Series – IGMETS compiled data from more than 400 time series sites worldwide. The analysis of these data sets, to be published in November 2015, will help to distinguish between natural and human-induced change in marine ecosystems. The assessment of available data will help to understand marine ecosystem responses to a changing climate.

The 2nd International Ocean Research Conference (IORC) ‘One Planet, One Ocean’, organized by the IOC, the Oceanographic Society and hosted by the Fundacio Navegacio Oceanica, was held in Barcelona (Spain) on 17–21 November 2014. The five-day Conference provided an opportunity for the scientific community to come together to discuss international collaboration in marine science and technology for the coming decade. 590 scientists from 69 countries attended the scientific sessions. 450 abstracts were submitted. The gender ratio was 43% of women vs 57% of men respectively.

IOC, SCOR, and IOGOOS formed an Interim Planning Committee for the Second International Indian Ocean Expedition (IIOE-2). The Committee met by teleconference and in person and will propose structures for governance, science coordination, data and information management, capacity development, operational coordination, outreach and communications, resources and sponsorship, and transitioning science for societal benefit. The launch of the IIOE-2 is planned on the 4th of December 2015 in Goa, India.

The IOC-PICES-GEOHAB-ICES Symposium on Harmful Algal Blooms and Climate Change took place in the Göteborg, Sweden from May19-22 and discussed new scientific evidence on the the frequency and severity of Harmful Algal Blooms (HABs) and climate change trends. The Symposium developed a number of “proactive” research strategies that build rigorous, testable hypotheses to guide scientists, managers and the public on what environmental and HAB changes are projected.

## **Observing system / data management**

The Global Ocean Observing System (GOOS) is co-sponsored by the IOC, the World Meteorological Organization (WMO), the United Nations Environment Program (UNEP), and the

International Council for Science (ICSU). The Third Meeting of the GOOS Steering Committee (24–26 July 2014, Barcelona, Spain) reviewed the GOOS work plan. It adopted a draft GOOS Strategic Mapping to link three major GOOS themes (climate, ocean services, and ocean health) to scientific applications, phenomena to sustainably observe, the Essential Ocean Variables (EOVs), and the observing networks that capture these EOVs. The Strategic Mapping captures the work of GOOS in identifying requirements, evaluating the observing system against performance targets, and in promoting standards and best practices in observation and data management and sharing. The Steering Committee agreed to principles for the affiliation of GOOS Projects, which help to focus funding agencies of Member States and the scientific ocean observing community on the development of particular areas of the observing system. It approved two GOOS projects. The first is the Tropical Pacific Observing System in 2020 (TPOS 2020, [tpos2020.org](http://tpos2020.org)) project, which will evaluate, and, where necessary, change, all elements that contribute to the Tropical Pacific Observing System based on a modern understanding of tropical Pacific science. The project aims for enhanced effectiveness for all stakeholders, informed by the development and requirements of the operational prediction models that are primary users of TPOS data. TPOS 2020 embraces the integration of diverse sampling technologies, with a deliberate focus on robustness and sustainability, and will deliver a legacy of improved governance, coordination and supporting arrangements. The TPOS 2020 project is being supported by a distributed project office with nodes in the US and in China. The second new GOOS project is a Deep Ocean Observing Strategy (DOOS), which motivates physical, biogeochemical, and biological sustained observations of the deep ocean, linking it to societal issues and scientific challenges.

Collectively the voluntary collaboration of in situ and satellite observing networks operated by individual Member States and contributing to GOOS and the Global Climate Observing System (GCOS) has grown stronger since mid-2014. Monitoring statistics of the status of the in situ networks maintained through Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) shows a relatively stable status reflecting continued Member State investment, with full core coverage by Argo floats, the surface drifter network coordinated by the JCOMM Data Buoy Cooperation Panel (DBCP) edging back to full coverage after a period of problems with short drifter lifetimes, completion of repeat hydrographic stations and continued maintenance of tide gauge stations. The coverage of the Tropical Pacific Ocean by moored instruments, reporting at less than 50% in 2013 and early 2014, has been restored to a sustained 80% capacity.

The GOOS programme through IOC is a beneficiary of and partner in a new European Commission Horizon 2020 funded project, AtlantOS, focused on optimizing and enhancing the Integrated Atlantic Ocean Observing System. The overarching goal of AtlantOS, which will operate from April 2015 through March 2019, is the integration of the so far loosely-coordinated set of existing ocean observing activities into a sustainable, efficient, and fit-for-purpose Integrated Atlantic Ocean Observing System (IAOOS) contributing to GOOS. The project formally engages with partners in Europe, the USA, Canada, Brazil, and South Africa.

The Ocean Biogeographic Information System (OBIS) works at the data and science interface. This integrated high-quality and comprehensive database aids scientists in improving our understanding of the ocean's living organisms and complex ecosystems. Data from the OBIS nodes are harvested every three months, quality controlled and integrated into a single central database and published online. During the reporting period, the OBIS nodes were harvested five times. Not less than 6.34 million records from 603 databases were added, bringing the holdings to a grand total of 42 million marine species observations from 1,733 datasets. Four new OBIS nodes were established in 2014: South-East Asia (SEAOBIS), Persian Gulf and Gulf of Oman (PEGO-OBIS), Caribbean Sea (Caribbean OBIS) and OBIS Senegal.

### **Early warning and services**

Since the 27th session of the Assembly, the tsunami programme has continued to progress despite the UNESCO's strained financial situation. IOC managed to keep the Intergovernmental Coordination Group (ICG) process for the four regional tsunami warning systems going over the past year. The 11th session of ICG of the North East Atlantic and Mediterranean Tsunami Warning

and Mitigation System (ICG/NEAMTWS), the 10th session of the ICG for Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS), the 26th session of the ICG for the Pacific Tsunami Warning and Mitigation System ICG (ICG/PTWS), and the 10th session of the ICG for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS) as well as the Eighth Meeting of the Working Group on Tsunami and other Hazards related to Sea-Level Warning and Mitigation Systems (TOWS-WG) were all held as planned.

The first phase of Oman National Multi Hazard Early Warning System project (NMHEWS) will be coming to an end in 2015. Under a 2009 agreement with Oman's Ministry of Transport and Communication, IOC has been providing technical support for the NMHEWS development. The NMHEWS has now started its operational phase and the NMHEWS centre was officially inaugurated on 23 March 2015 back-to-back with an IOC organized scientific conference to conclude the project and the 10th Session of the ICG/IOTWS.

Four tsunami wave exercises have been carried out over the past year. The exercises are designed to assess the effectiveness of communication flows among the stakeholders involved, country readiness, and the efficiency of emergency procedures. The exercises also create considerable awareness in the public. The Tsunami Wave exercises (i) IOWAVE14 for the Indian Ocean took place on 9–10 September 2014; (ii) NEAMWave14 for the North East Atlantic, Mediterranean and connected seas took place on 28–30 October 2014; (iii) PACWave15 for the Pacific Tsunami Warning System took place on 2–6 February 2015; and (iv) CARIBEWave15 for the Caribbean took place on 25 March 2015.

For the tsunami programme there are many anniversaries in 2015. The three “youngest” regional tsunami warning systems in the Caribbean, Indian Ocean and the NE Atlantic, Mediterranean and connected seas all celebrate their 10-year anniversary. And the Pacific Tsunami Warning System celebrated its 50-year anniversary with large conference titled "Making the Pacific Ready for the Tsunami Threat" on 20–21 April 2015.

New tsunami warning products were introduced in the Pacific on 1st October 2014. The new products issued by the Pacific Tsunami Warning Center have been developed in order to provide greater detail of estimated level of impact. While the old products were provided solely in text form, the new products contain both graphical and text information.

Progress has continued on the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) funded project on Tsunami Hazard Assessment in the Indian Ocean and for collecting eyewitness accounts and other information about the 1945 tsunami in the NW Indian Ocean (Makran area).

The IOC Indian Ocean Tsunami Information Centre (IOTIC) was officially launched in Indonesia, Jakarta on 24 November 2014, at the 10-year conference to commemorate the 26 December 2004 Indian Ocean Tsunami organized by the BMKG Indonesia and IOC. To ensure the sustainability of IOTIC, Indonesia, through BMKG, has offered to host the IOTIC for the first five years (2016–2021) with the support of office space, staffs, and some funds for programme and activity.

The core financial resources of the Caribbean Tsunami Information Centre (CTIC) for its operational expenses are covered until the end of 2015 thanks to the approval of Emergency Funds for CTIC by the UNESCO Director-General although operational expense finances beyond 2015 are not secured.

## **Assessment and Information for policy**

IOC continued to follow closely the preparation of the World Ocean Assessment (WOA) report under the UN Regular Process. WOA will provide a sound scientific basis for decisions at the global level on the world's ocean and seas and a framework for national and regional assessments and management decisions. Although the UN General Assembly (UNGA) requested the completion of the first WOA by the end of 2014, some delays have been encountered. The Bureau

of the UNGA Ad Hoc Working Group that governs the WOA process decided to postpone the review of the text to the period January–March 2015. IOC contributed to this review process by providing technical comments to the chapters related to its expertise. An IOC Circular Letter was also sent to IOC Member States in order to inform them on the review process and invite them to participate. As an observer, IOC continued to provide technical information and resources to the WOA Group of Experts. IOC also contributed financial resources to assist the UN Division for Ocean Affairs and the Law of the Sea (DOALOS) with the editorial process of the report.

IOC is leading the implementation of the marine components of the Transboundary Water Assessment Programme (TWAP) funded by GEF. The project started in March 2013 with the establishment of an Open Ocean and Large Marine working groups. A second meeting of the two working groups took place at IOC in April 2014. The project will provide a number of core ecological, socio-economic and governance indicators for the marine environment (64 Large Marine Ecosystems and Open Ocean areas) using globally available datasets. In order to implement this project, IOC has created a partnership with a number of scientific institutions that are providing technical inputs and indicator-based products. These assessment products will be available in mid-2015 in the form of printed report and through the One-Shared-Ocean portal, which will be launched at that time. From the IOC perspective, TWAP is the first integrated and global marine assessment that the Commission is leading, and the results produced have the potential to inform a number of ocean governance mechanisms; these include the GEF, other UN agencies with an ocean mandate, other global assessment processes such as WOA and Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES), regional seas organizations, and LME commissions as well as Member States.

## **Sustainable management and governance**

A new set of international guidelines on Evaluating Marine Spatial Plans (IOC Manual and Guide, 70) was published in October 2014 as the outcome of a two-year project funded by the Moore Foundation. A content-rich website on the evaluation of marine spatial plans has also been developed through an effective partnership among IOC and OpenChannels with grant funds from the Moore Foundation. The MSP concept advocated by IOC is based on a process that brings together multiple users of the ocean—including energy, industry, government, conservation and recreation sectors—to make science-based coordinated decisions about how to use marine resources sustainably. Through the planning and mapping process of a marine ecosystem, planners can consider the cumulative effect of human activities on the ocean. The intended result of MSP is a more coordinated and sustainable approach to how the ocean is used—ensuring that while marine resources and services are utilized within clear environmental limits allowing marine ecosystems to remain healthy and biodiversity to be conserved.

In January 2015, IOC obtained a new Grant from the Moore Foundation to conduct a project on global assessment and dissemination of MSP. The project will document the international practices of ocean planning or marine spatial planning (MSP) advances through: (1) documentation of ocean planning practice world-wide, (2) a summary of "lessons learned" from over 40-50 global initiatives and an online update of the UNESCO Guide to MSP (2009) including a remodeling of the UNESCO website and a joint publication on the OpenChannels website.

In the follow-up to Rio+20 UN Conference on Sustainable Development, IOC is co-leading the UN Ocean Task Support Team (TST) mandated to provide scientific and technical information upon request to the Member States negotiating the formulation of Sustainable Development Goals. Under SDG 14, several proposed targets relate to the mandate of IOC, and particularly target 14.a that calls to *"...increase scientific knowledge, develop research capacities and transfer marine technology taking into account the IOC Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular SIDS and LDCs."* On 21 April 2015, together with the UN-DOALOS, IOC organized a side event entitled "Building ocean knowledge, technology and capacity towards achieving sustainable development of the ocean and

seas” to highlight the role of IOC in capacity development and ocean sciences. A new IOC brochure on IOC’s contribution to Transfer of Marine Technology was launched at the 16th meeting of the Informal Consultative Process on Ocean Affairs and the Law of the Sea (UNICPOLOS).

Regional Sub-Commissions continued to play their role as catalysts for regional programme delivery and the Sub-Commission for the Western Pacific (WESTPAC) celebrated its 25th Anniversary by organizing a wide range of commemorative events at regional and national level, including joint cruises, workshops, a symposium, trainings, and publications.

## **Capacity Development**

Considering paragraph 160 of the Outcome Document of the Rio+20 Conference entitled “The Future We Want” and following a voluntary Commitment on “Building Global Capacity for Marine Sciences, Observation and Transfer of Marine Technology” taken by at the Rio+20 conference, the Intergovernmental Oceanographic Commission of UNESCO (IOC/UNESCO) has conducted a global and regional assessment of capacity development needs in the field of marine scientific research and ocean observation especially in developing nations and SIDS. This has led to the formulation of a global strategy in capacity development to implement these needs, through partnership with countries, donors, UN Agencies, global financial institutions and the private sector. In this context, a Joint Experts Group was organised by the IOC, the UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) and the UN-Division for Ocean Affairs and the Law of the Sea/ Office of Legal Affairs (DOALOS/OLA) on “the Significance of Marine Science and Technology for SIDS and the importance of Capacity Building and Marine Technologies Transfer to SIDS to support Sustainable Development” from 14 to 19 May 2013 in New York. The Strategy was presented to the Executive Council of the IOC during its meeting of July 2014. An Action Plan has then been developed and the consolidated Strategy and Action Plan will be presented to the 28th session of IOC Assembly in 2015 for its consideration.

The OceanTeacher Global Academy (OTGA) project, funded by the Government of Flanders (Belgium), was launched through the first session of the IODE Steering Group for the OceanTeacher Global Academy (13–16 January 2015) and OTGA Train-the-Trainers Course (19–23 January 2015), both held in Ostend, Belgium. Building upon the experience with the OceanTeacher Global Academy, which developed a web-based training system to support classroom and blended training, the OTGA will develop a network of IODE/OTGA regional training centres (RTCs) in Latin America (and Caribbean), Africa, Indian Ocean and Western Pacific regions. OTGA will allow reducing student travel, providing training in local languages and focusing more on local issues. The OTGA network of RTCs will also be available to other IOC programmes, as needed.

Following the signing of Memorandum of Agreement (MoA) between the Ministry of Earth Sciences, Government of India and the IOC, on 4 July 2013, for the establishment of the International Training Centre for Operational Oceanography (ITCOcean) in Hyderabad, India, the Centre conducted 11 training programmes aiming at capacity development in the areas of operational oceanography. Total of 297 trainees, mainly from the Indian Ocean rim countries and Africa, were trained in the areas of remote sensing and potential fishing zones, ocean state forecasting, processing of ocean colour data and their applications, ocean climate and modelling, Standard Operating Procedure for tsunami warning and emergency response, Ensemble Kalman Filters for ocean data assimilation, ocean information services for cyclone forecasters, advanced statistical concepts in atmospheric and oceanic sciences, etc. The newly established state-of-art 48 seat e-class room at ITCOcean would allow the participation of trainees in the training programme from distant locations.

The IOC Executive Council at its 47<sup>th</sup> session (Paris, 1–4 July 2014) launched the new Global Ocean Science Report (GOSR). The GOSR will assist local and national governments, academic and research institutions, as well as international organizations and donors, in making informed decisions, e.g. on future research investment. It will summarize information about the status of

ocean research, investment in research infrastructure and human capacity, as well as potential gaps in marine sciences programmes in need of further investments. It is envisaged to provide an overview on nations' (i) investments, (ii) resources, and (iii) scientific productivity in Ocean Science. It will provide a tool for mapping and evaluating the human and institutional capacity of Member States in terms of marine research, observations and data/information management, as well as a global overview of the main fields of research interest, technological developments, capacity building needs and overall trends. A questionnaire was developed and sent to all IOC Member States with a view to collect and analyse national data on the topics of the report. The GOSR should be ready in 2017.

WESTPAC employs adaptive and self-driven approaches to capacity development in the region with guiding principles to focus on regional and national needs, to foster North-South and South-South cooperation, and to link trainings to the attainment of research goals addressing critical challenges to sustainable development in the region.

The Second Sino-Africa Forum on Marine Science and Technology was co-organized by the IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA) and the State Oceanic Administration of China (SOA). It was hosted by the IOCAFRICA on 9–10 April 2015 in Nairobi, Kenya. Other Initiatives implemented by IOCAFRICA include collaboration between the ocean and climate communities with the focus on improving climate prediction through incorporation of ocean data. IOCAFRICA, in cooperation with JCOMM, GOOS, and IODE's OceanTeacher, with the support of the Government of Flanders (Belgium), organized the African Summer School on Application of Ocean and Coastal Data and Modelling products from April–September 2014.

The Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), in close cooperation with the Colombian Ocean Commission (CCO), participated in an exhibition promoting IOC's activities in the Caribbean Region under the framework of the International Event "Sail Cartagena de Indias 2014" (15–19 May, Cartagena, Colombia). IOCARIBE SIDS actively participated in the UN SIDS Conference (September 2014, Samoa) and in the Yeosu International Ocean Forum and Roundtable 2014 (Yeosu, Korea, 21–24 October 2014).

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