



United Nations  
Educational, Scientific and  
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IOC Sub-Commission for the  
Western Pacific  
(WESTPAC)

# IOC/WESTPAC E-Bulletin

1

No. 3 | May 2009

## Pilot Project on Monsoon Onset Monitoring and its Social & Ecosystem Impacts (MOMSEI)

Phuket, Thailand, 5-6 March 2009

### Contents

<i>IOC/ WESTPAC News</i>	1
<i>JHOD observation along 144°E in Pacific</i>	3
<i>SeaWiFS chlorophyll a variation along 144°E</i>	5
<i>Building Capacity</i>	6
<i>In WESTPAC</i>	7

The pilot project on Monsoon Onset Monitoring and its Social & Ecosystem Impacts (MOMSEI) has been developed for the South East Asia-Global Ocean Observing System (SEAGOOS) at one expert meeting in Phuket, Thailand, 5-6 March 2009.

The Asia Monsoon has been playing a significant role in the agriculture and the livelihood of people in the Asian region by providing the necessary rainfall. However, in some years when it deviates from its normal pattern, it causes floods and droughts. In this sense, accurate forecasting of the timing of the onset is therefore very important.



To this end, this pilot project, through enhancing the monsoon onset monitoring capability in the Andaman Sea in synergy with the on-going efforts of Indian Ocean Observing System (IndOOS), aims to improve the understanding and forecasting of Asia Monsoon and its multi-scale variability. In addition, this pilot project can demonstrate the value of ocean observations for the ecosystem conservation by analyzing the possible link between the Monsoon onset and coral reef bleaching in the Andaman Sea. It is said that coral reef bleaching in the

Andaman Sea has a strong seasonality and tendency to occur during the pre-monsoon onset period when the sea surface temperature (SST) reaches its annual maximum. For details on the activities, please kindly contact Weidong Yu ([wduy@fio.org.cn](mailto:wduy@fio.org.cn)), First Institute of Oceanography, State Oceanic Administration (FIO/SOA), China or Somkiat Khokiattiwong ([skhokiattiwong@gmail.com](mailto:skhokiattiwong@gmail.com)), Phuket Marine Biological Center (PMBC), Thailand.



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## IOC/WESTPAC Training Workshop on the Monitoring Technique and Emergency Response of Marine Oil Spills

The IOC/WESTPAC Training Workshop on the Monitoring Technique and Emergency Response of Marine Oil Spills successfully took place in Qingdao, 20-23 April 2009, with generous host of the First Institute of Oceanography of SOA, China, and co-sponsored by the Korea Ocean Research and Development Institute and China-Korea Joint Ocean Research Center. The four-day IOC/WESTPAC Training Workshop consisted of three-day training and one-day joint workshop on Oil Spills in Yellow Sea.

As several distinguished guests mentioned their satisfaction this training workshop received wide recognition. Total 34 trainees from 12 countries were selected and 7 well-known lecturers were invited. The first three-days of the training, 16 technical lectures delivered from 7 lecturers and one day of joint workshop with 14 presentations on the Marine Oil Spills in the Yellow Sea provided a comprehensive knowledge portal covering the topics on source identification, monitoring and forecasting techniques, emergency response and environmental risk and impact assessment. For details on the activities, please kindly contact Xiaomei Wang (xmwang@fio.org.cn).



# The Oceanographic Observations along 144°E Line over the Western Pacific Ocean Made for 26 Years by Hydrographic and Oceanographic Department, Japan Coast Guard

By Tomonori Hattori, Japan Coast Guard

Hydrographic and Oceanographic Department, Japan Coast Guard (JHOD) has carried oceanographic observations along 144°E line over the western Pacific Ocean since 1984. We observed ocean every winter in the Northern Hemisphere, on the 144°E line from near 30°N to around the equator using a survey vessel, which belong to JHOD. In 2009, JHOD carried out the observations from February through March using the survey vessel "Takuyo".



Fig. 1 Survey vessel HL02 Takuyo

Seawater temperature and salinity were measured from surface through deep layer with CTD (Conductivity, Temperature and Depth profiler) and XCTD (eXpendable Conductivity, Temperature and Depth profiler), and sea current was measured with ADCP (Acoustic Doppler Current Profiler). Moreover, five Argo floats were deployed in cooperation with Argo project.

Time series of annual observations on the same line is quite useful for analyzing mechanism of long-term variations in the ocean and atmosphere, for example, the global warming. A part of these JHOD observation data is open to the public and everyone can get them at Japan Oceanographic Data Center (JODC, <http://www.jodc.go.jp/index.html>) web site.

An example of the observed data is shown as Figure 2, which shows that from early 1980's sea surface layer (surface to 300m depth) temperature ascends at a ratio of 0.049 degree C per year. This suggests that the observation data is useful for research in ocean warming in recent decades. On the other hand, it is not sufficient yet for illuminating the global warming which has more than centennial time scale, because the term of our observation is only a quarter century.

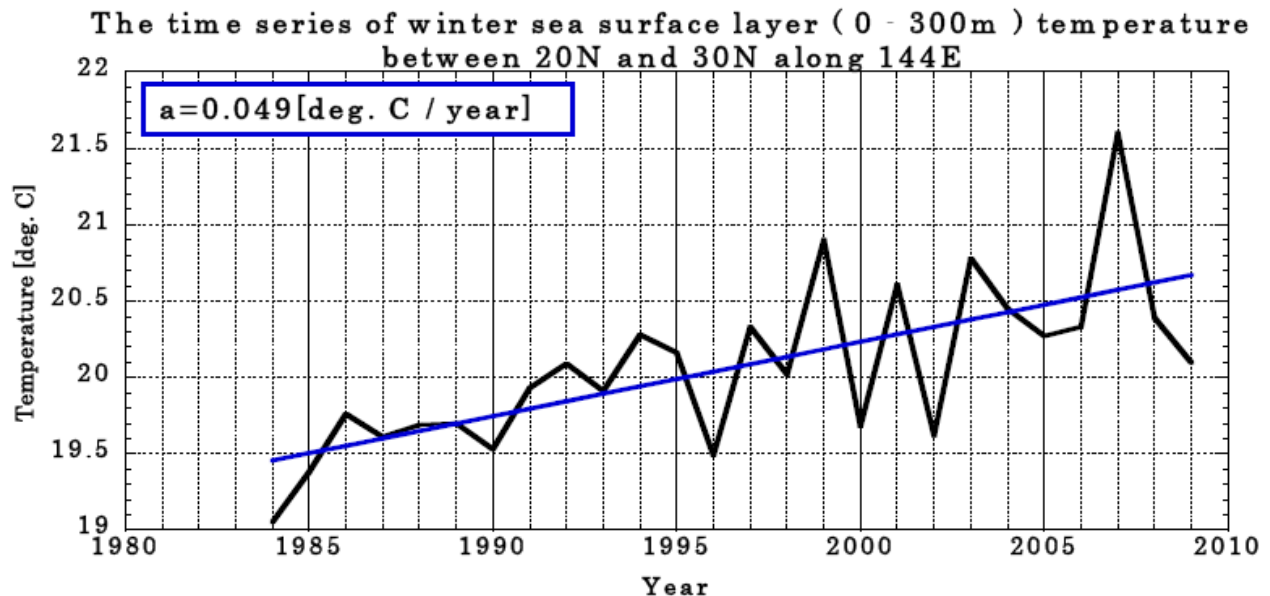


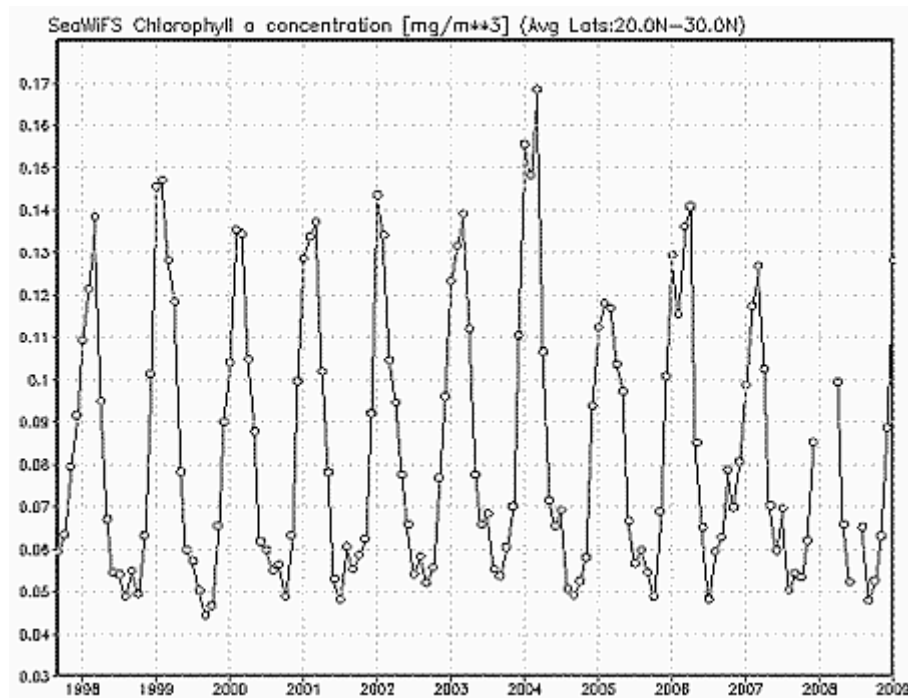
Fig. 2 The time series of winter sea surface layer (0 – 300m) temperature between 20°N and 30°N along 144°E for 26 years (1984 – 2009) with a regression gradient of 0.049 [deg. C / year].

It is very important to continue observations and maintenance of observed data. Hence, we plan to carry out oceanographic observations along 144°E line over the western Pacific Ocean positively in the future. For details, please kindly contact Tomonori Hattori (hattori-e9nci@kaiho.mlit.go.jp).

## SeaWiFS Satellite Observation of the 144°E Line in the Pacific Ocean

### Interannual chlorophyll a variation

By Dr. Chun Knee Tan, United Nations University-Institute for Sustainability and Peace, Tokyo, Japan



Monthly SeaWiFS chlorophyll a along the 144°E 20-30°N from September 1997- January 2009

The NASA Giovanni has provided a user friendly interface to analyze the ocean color data from the SeaWiFS satellite ([giovanni.gsfc.nasa.gov](http://giovanni.gsfc.nasa.gov)). Scientists now can acquire the long term trend results of the oceanographic conditions within a few minutes using the Giovanni interface.

Figure above shows the monthly averaged SeaWiFS chlorophyll a along the 144°E 20-30°N from September 1997- January 2009 that has been continuously sampled by Japan Coast Guard (JHOD) since 1984. The seasonal trend shows surface chlorophyll a peak

during the northern hemisphere winter season.

The chlorophyll a peak do not fluctuate much during 1998 – 2003, however, it increased significantly in 2004, and shift into decreasing trend until 2008. In early 2009, the chlorophyll a increased and almost reaching the 1998-2003 level. It will be interesting to investigate the factor causing large fluctuation during the 2004-2008 periods.

Data courtesy:  
NASA Giovanni ([giovanni.gsfc.nasa.gov](http://giovanni.gsfc.nasa.gov))

# Building Capacity

IOC/WESTPAC E-Bulletin

## Funding Opportunity

### KWEF Research Grant Program

The Kurita Water and Environment Foundation (KWEF) is a nonprofit organization established on March 12, 1997.

The KWEF supports scientists in ASEAN countries, China and Korea who are conducting research in their own countries on the conservation and restoration of water resources, which are defined as oceans, surface water, and soil and underground water as well as the areas of land adjacent to them.

Areas of research supported

- Physical and chemical properties of water
- New technologies for conservation and restoration of water resources. (River, Lake, Pond, Discharge etc.)
- New technologies for water measurement and assessment

Due date: May 25, 2009

For details, please visit

<http://www.kwef.or.jp/e-index.html>

## Job Opportunity

- (i) Postdoctoral Position in Ocean Biogeochemical Modelling, Toulouse and LPO/IRD - Brest, France. The offered post-doctoral position is part of The European FP7 MEECE (Marine Ecosystem Evolution in a Changing Environment) project. Letters of application, a C.V., a short statement of research interests and the name of two referees should be sent by May 15, 2009 to [veronique.garcon@legos.obs-mip.fr](mailto:veronique.garcon@legos.obs-mip.fr), [eric.machu@ird.fr](mailto:eric.machu@ird.fr) and [Pierrick.Penven@ifremer.fr](mailto:Pierrick.Penven@ifremer.fr).  
[http://www.unescobkk.org/fileadmin/user\\_upload/westpac/documents/Employment/postdoc\\_position\\_April\\_20-MEECE.pdf](http://www.unescobkk.org/fileadmin/user_upload/westpac/documents/Employment/postdoc_position_April_20-MEECE.pdf)
- (ii) Programme Specialist, regional capacity development IODE, Oostende, Belgium. The incumbent will assist with the implementation of IODE regional capacity development programme activities with special attention to Africa. Due date: 16 May 2009.  
[http://www.iode.org/index.php?option=com\\_content&task=view&id=146&Itemid=115](http://www.iode.org/index.php?option=com_content&task=view&id=146&Itemid=115).
- (iii) Laboratory and Field Technician, Department of Oceanography at the University of Hawaii. Inquiries should be sent to: David Ho, Department of Oceanography, University of Hawaii, 1000 Pope Rd, MSB 517, Honolulu, HI 96822. [ho@hawaii.edu](mailto:ho@hawaii.edu).  
[http://www.unescobkk.org/fileadmin/user\\_upload/westpac/documents/Employment/Lab\\_Tech\\_Ad\\_2.pdf](http://www.unescobkk.org/fileadmin/user_upload/westpac/documents/Employment/Lab_Tech_Ad_2.pdf)

## Capacity Building

### PICES 2009 International Summer School on Satellite Oceanography for the Earth Environment

This summer school intends to help and motivate postgraduate students, early-career scientists, and other professionals as well as newcomers to satellite oceanography by providing basic knowledge of remote sensing for advanced applications. Courses will be composed of lectures, seminars, and hands-on training in satellite-data receiving procedures, including data calibration, image processing, and examples of application case studies.

Date: 25-28 August 2009.

Venue: Seoul National University, Korea

Application Due: May 31, 2009.

Financial support available. Applicant should submit application form and supporting documents to Dr. Kyung-Ae Park ([kapark@snu.ac.kr](mailto:kapark@snu.ac.kr))

For details, please visit

[http://www.pices.int/meetings/summer\\_schools/2009\\_summer\\_schools/2009-Seoul-ss/2009-Seoul-main-ss.aspx](http://www.pices.int/meetings/summer_schools/2009_summer_schools/2009-Seoul-ss/2009-Seoul-main-ss.aspx)

## IOC/WESTPAC Announcement

### First IOC/WESTPAC Workshop on the Coral Reef under Climate and Anthropogenic Perturbations (CorReCAP)

*The first workshop of IOC/WESTPAC CorReCAP will be for four days with oral presentations and open discussion on the first two days. The second half of this workshop will be reserved for the preparation of summary report and synthesis document to assess the actual situation of coral reefs and to identify the hot topics of research in Western Pacific Region.*

Date: 23-26 May 2009

Venue:

East China Normal University, Shanghai, China

Contact: Prof. Dr. Jing Zhang

Phone: +86-21-62233009 or +86-21-62232887

Fax: +86-21-62546441

Email: [jzhang@sklec.ecnu.edu.cn](mailto:jzhang@sklec.ecnu.edu.cn) or  
[office@sklec.ecnu.edu.cn](mailto:office@sklec.ecnu.edu.cn)

### IOC/WESTPAC Workshop on Marine Invasive Species and Management in the Western Pacific Region

*IOC/WESTPAC Coastal Marine Biodiversity and Conservation Project in collaboration with IOC/WESTPAC Harmful Algal Blooms in the Western Pacific (WESTPAC-HAB) is organizing the Workshop on Marine Invasive Species and Management in the Western Pacific Region.*

Date: 4-5 June 2009

Venue: Chulalongkorn University, Bangkok, Thailand

Contact:

Dr. Suchana Chavanich

Email: [suchana.c@chula.ac.th](mailto:suchana.c@chula.ac.th)

## Partner Organizations Announcement

### PEMSEA

#### EAS Congress 2009

*The EAS Congress 2009 will be a venue for reviewing and sharing on-the-ground experiences in integrated management of coastal and marine resources. Carrying the theme, "Partnerships at Work: Local Implementation and Good Practices," it will highlight initiatives and good practices covering key aspects of coastal and marine resource management and how interregional, interagency and multisectoral partnerships are contributing toward the attainment of regional and international environmental targets.*

*The International Conference will feature six major Conference Themes as follows that cover essential aspects of sustainable coastal and ocean development:*

- Coastal and Ocean Governance
- Natural and Man-made Hazard Prevention and Management
- Habitat Protection, Restoration and Management
- Water Use and Supply Management
- Food Security and Livelihood Management
- Pollution Reduction and Waste Management

*The Provisional Programme of the Congress is available at the following URL:*

[http://pemsea.org/eascongress/section-support-files/easc2009\\_provisional\\_programme.pdf](http://pemsea.org/eascongress/section-support-files/easc2009_provisional_programme.pdf)

*The abstract deadline has been extended by 30 April. Kindly find the following URL for your information.*

[http://www.pemsea.org/eascongress/section-support-files/easc2009\\_call\\_for\\_abstracts.pdf](http://www.pemsea.org/eascongress/section-support-files/easc2009_call_for_abstracts.pdf)

Date: 23-27 November 2009

Venue: Manila, Philippines

Contact: EAS Congress Secretariat

Email: [congress@pemsea.org](mailto:congress@pemsea.org)

Phone: +63 (2) 9292992

## Youth Forum at the EAS Congress 2009

*The 2nd EAS Youth Forum (YF2) aims to: provide a venue for youth of the EAS region to learn more about pressing issues in the marine and coastal environment; strengthen the role of young participants in addressing these issues; and provide some practical skills that can be applied at the community level. The YF2 will carry the theme: **Youth of the East Asian Seas Region and Climate Change**. The YF2 can serve as a venue for promoting awareness on the potential impacts of climate change and how the youth can be engaged in addressing this pressing concern.*

<http://www.pemsea.org/eascongress/youthforum>

## Yellow Sea Large Marine Ecosystem Project (YSLME)

### Co-operative Cruises Summary Workshop

*Workshop to finalize data analysis, inter-calibration, solving data differences, and provide inputs for Chief Scientists to write the regional cruise reports.*

Date: 17-18 June 2009  
Venue: Sokcho, Korea  
Contact: Connie Chiang  
Email: [connie@yslme.org](mailto:connie@yslme.org)

### Regional Mariculture Conference

*Gathering of mariculture scientists working in the Yellow and East China Seas to exchange information, present newest findings, and increase awareness and capability of mariculturists in reducing environmental impacts of mariculture while improving productivity of disease diagnosis, prevention and control.*

Date: 16-18 June 2009  
Venue: Jeju, Korea  
Contact: Mark Walton  
Email: [mark@yslme.org](mailto:mark@yslme.org)

## Training Workshop on Project Sustainability

*Workshop for stakeholders to develop a good understanding of the rationale and steps to pursue long-term, sustainable implementation of conservation plans. The participants will learn how to implement conservation plans from the perspective of sustainable financing.*

Date: 24-25 June 2009  
Venue: Qingdao, China  
Contact: Isao Endo  
Email: [isao@yslme.org](mailto:isao@yslme.org)

### 4th Youth Programme

*Public awareness activities about importance of protecting Yellow Sea, targeting youth or other stakeholders.*

Date: 18-20 August 2009  
Venue: Qingdao, China (TBD)  
Contact: Isao Endo  
Email: [isao@yslme.org](mailto:isao@yslme.org)

### Jellyfish International Monitoring Network

*Workshop to establish international network to monitor jellyfish in the Yellow Sea. Participants will consist of research scientists and government agencies from China, ROK and France who are willing to establish a regional network to address this new and emerging transboundary issue in the Yellow Sea.*

Date: 2-4 September 2009  
Venue: Korea  
Contact: Connie Chiang  
Email: [connie@yslme.org](mailto:connie@yslme.org)