

# Summary report of YSLME Ocean Color Workshop III (YOC-III)

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## 1. Meeting Report

### DAY-1

#### Session 1: Organization of the meeting

[1] With welcome address, Kawamura (host) opened the YOC-III meeting.

[2] JIANG reported the present status of YSLME (the YSLME Joint cruise and the YSLME second phase) and encouraged further development of the YOC activities. Concerning roles of the OC remote sensing in the regional ocean monitoring, the YOC-2007 is a good example of regional international cooperation (i.e., YSLME with IOC, NOWPAP).

[3] Kawamura explained the purpose of meeting; to learn the examination results using the shared data, to discuss on the practical Case-II algorithm for the Yellow/East China Sea, and to decide the final outputs from the YOC-2007. He also reported that the Actions from YOC-II are all taken for the YOC-III activities.

[4] The proposed agenda (ANNEX 1) was adapted. The list of participants is in ANNEX 2. Cui of FIO joined the YOC-III as an observer for future cooperation.

## **Session 2 Present status of the bio-optical data sharing**

[5] Ahn presented the newly submitted data structure and their measuring methods. Eko presented the submitted SeaWiFS match-ups. Cui introduced FIO bio-optical observations in the Yellow Sea.

## **Session 3 Discussions**

[6] As one of the outputs of YOC-2007, generation of the **YOC-2007 common dataset** was agreed by the members. In order to include all the submitted data, new columns for any wavelength measurements (e.g., 555 and 565) will be added to it. SeaWiFS satellite data V.5 (RRS) + OC4 products will be added as well. Since satellite passing time is not included in the submitted data, it will be submitted by Eko by the end of January 2008 (**Action 1**).

[7] The data manager (Ms. Yun) generates the YOC-2007 common dataset, and circulate it before she leaves the YSLME (By someday of February 2008, **Action 2**). Ryu assists the data manage for generation of the YOC-2007 common database (**Action 3**).

[8] Kim may produce the LAC SeaWiFS data using the latest version of SEADAS since 2005 for the dataset (next phase). Kawamura will contact him (**Action 4**)

## **Session 4 Results of examination/validation using the shared data**

[9] Tang presented the results of his analyses, and indicated that the algorithms of Tang et al.(2004) can be useful for the whole study area with tuning their coefficients. He selected three in-water algorithms for Chl-a, TSM and CDOM estimations (ANNEX 3).

[10] Yoo showed characteristics of the submitted optical data and confirmed their consistency/usefulness, which improves the existing Case-II algorithm. He also suggested that there are rooms of further improvements of the Case-2 algorithm using the shared data.

[11] Eko presented analyses results using the SeaWiFS match-ups and, on behalf of Sasaki, examination/development of the CDOM algorithm.

[12] Through these presentations, it is pointed out that some in situ and satellite data are needed to be carefully checked.

[13] Finally, as the primary output of YOC-2007, **new Case-II algorithm** for the OC product generation was decided by the members, which are

- 1) Use the Tang's formula selection for Chl-a, TSM and CDOM,
- 2) Use the SEAWIFS RRS for tuning the selected formula, and
- 3) Check the erroneous data for the final tuning and validation.

[14] Eko serves for the final coefficient tuning by the end of February 2008 (**Action 5**).

## **DAY-2**

### **Session 1 Summary of the presented results**

[15] Kawamura presented the summary of DAY-1's presentations and discussions. The action items, which are listed below, were reviewed and agreed with minor corrections.

### **Session 2 Future plans**

[16] The members discussed on generation of scientific papers describing the YOC-2007 results. The final decision is left for future meetings.

[17] Further improvements of the regional Case-2 algorithm were discussed, which leads the members to needs of cooperative works with experts of the OC atmospheric corrections. Possible collaborators are Son of KORDI, Ding of NSOAS, Toratani of Tokai University and Murakami of JAXA. This will be discussed in the meeting of next phase.

[18] The members agreed to continue the YOC activities in 2008. Kawamura will consult with the YSLME and draft the proposal of YOC-2008. (**Action 6**)

[19] Kawamura proposed an outreach of YOC-2007 achievement using the chance of WESTPAC symposium in May 2008. The YOC-2007 is a good model of cooperation among the regional international frameworks (i.e., YSLME, IOC/WESTPAC and NOWPAP) for the changing marine environments. The proposed half-day session (ANNEX 4) was agreed by the members. Once the YOC-2008 is approved by YSLME, its first meeting will be joined it.

[20] Ishizaka and Ahn will introduce the YOC activities in the IOCCG meeting in February 2008.

[21] The YOC-III meeting was closed as scheduled at 12:00 a.m.

## **2. Action Items**

**Action 1:** Eko submits SeaWiFS passing time of the satellite match-ups will be submitted for inclusion in the YOC-2007 common dataset. *Due date: 31 January 2008*

**Action 2:** To complete the YOC-2007 common dataset, the data manager (Ms.Yun) adds new columns for any wavelength measurements (e.g., 555 and 565) and SeaWiFS satellite data V.5 (RRS) + OC4 products with passing time. She circulates the final version through the internet.

*Due date: February 2008*

**Action 3:** Ryu assists the data manager's works.

**Action 4:** Kawamura contacts Kim of NFRDI for the LAC SeaWiFS data since 2005 for improvement of the common dataset.

*Due data: Next meeting in 2008*

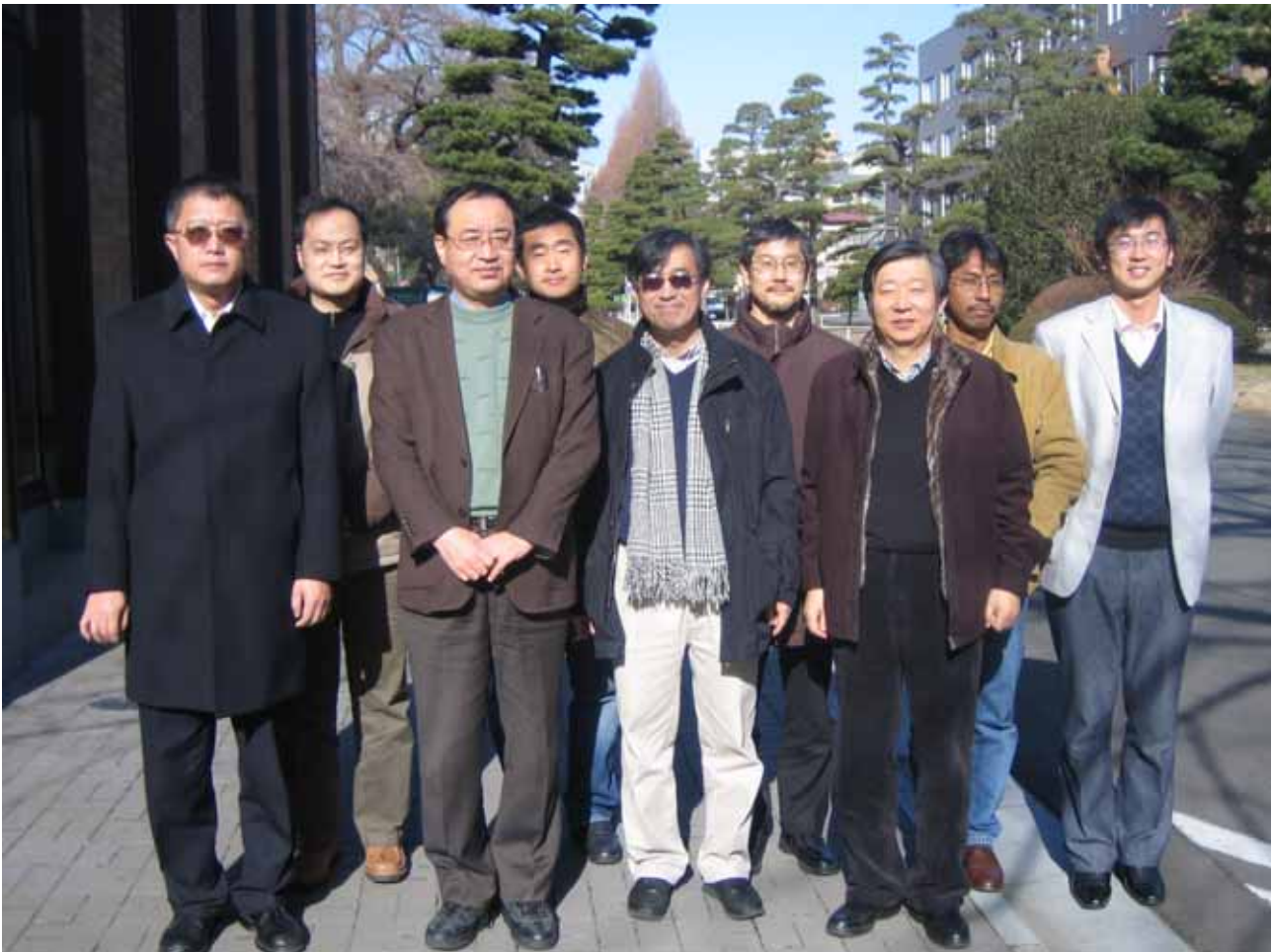
**Action 5:** Eko serves for the final coefficient tuning and report its results.

**Due date: 29 February 2008**

**Action 6:** Kawamura consults with the YSLME and draft the proposal of YOC-2008.

**Due date: March 2008**

**3. Group photo of the YOC-III meeting participants in front of the SAKURA Hall of Tohoku University meeting building at 11:00 on 22 January 2007.**



## ANNEX 1

## Agenda

### YSLME workshop “Regional Ocean Color Algorithm for the Yellow Sea (YOC) – III”

Date: 21 and 22 January 2008

Venue: Sakura Hall, the Katahira Campus of Tohoku University, Sendai Japan

Hotel: Sumire House

Preparatory meeting (16:00-20:00) on 20 January, 2007

Kawamura, Ishizaka, Ahn, Yoo, Ryu, Tang, Cui, Jian

*The members are picked up at the Sendai airport*

YOC-III meeting on 21-22 January 2008

*The meeting room is close to the Sumire hotel. Five minutes walking distance.*

*DAY-1 (21 January 2008)*

#### I. Morning Session (9:30 - 1230, Break at 11:00)

##### 1. Organization of the Meeting

###### 1.1 Opening and remarks

Welcome address (KAWAMURA)

From YSLME (JIANG)

Local logistics (KAWAMURA)

###### 1.2 Purpose of workshop (KAWAMURA)

###### 1.3 Adoption of the Agenda

##### 2. Present status of the bio-optical data shearing

Ahn, Ryu, Eko, (Kim)

*Presentations on the newly added data Each 15-minutes.*

Cui “FIO bio-optical measurements and plan to contribute to the YSLME”

##### 3. Discussions

*Discussions are invited for future of our data shearing.*

#### LUNCH (1230 – 14:00)

#### II. Afternoon Session (1400 - 1730, Break at 1530)

##### 4. Results of examination/validation using the sheared data

*Presentations and associated discussions are the main part of YOC-III*

China (TANG), Korea (AHN, RYU, YOO),

Japan (ISHIZAKA, EKO)

Reception party (19:00- )

*All the participants and local staffs are invited*

*DAY-2 (22 January 2008)*

#### I. Morning Session (9:30 – 12:00, Break at 11:00)

##### 1. Summary of the presented results

##### 2. Future plans

##### 3. Closing

## ANNEX 2:

### Participant of YSLME workshop “Regional Ocean Color Algorithm for the Yellow Sea – III”

#### Regional OC Experts

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#### YSLME

##### **Mr. JIANG Yihang**

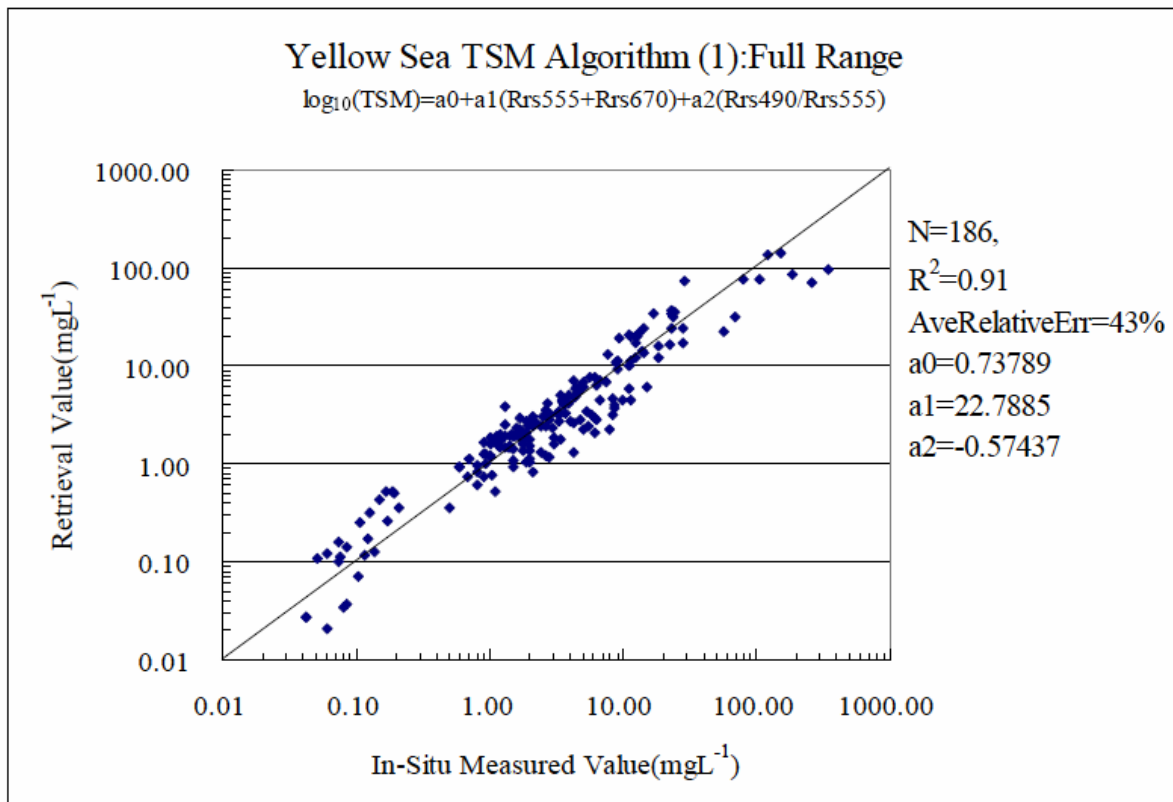
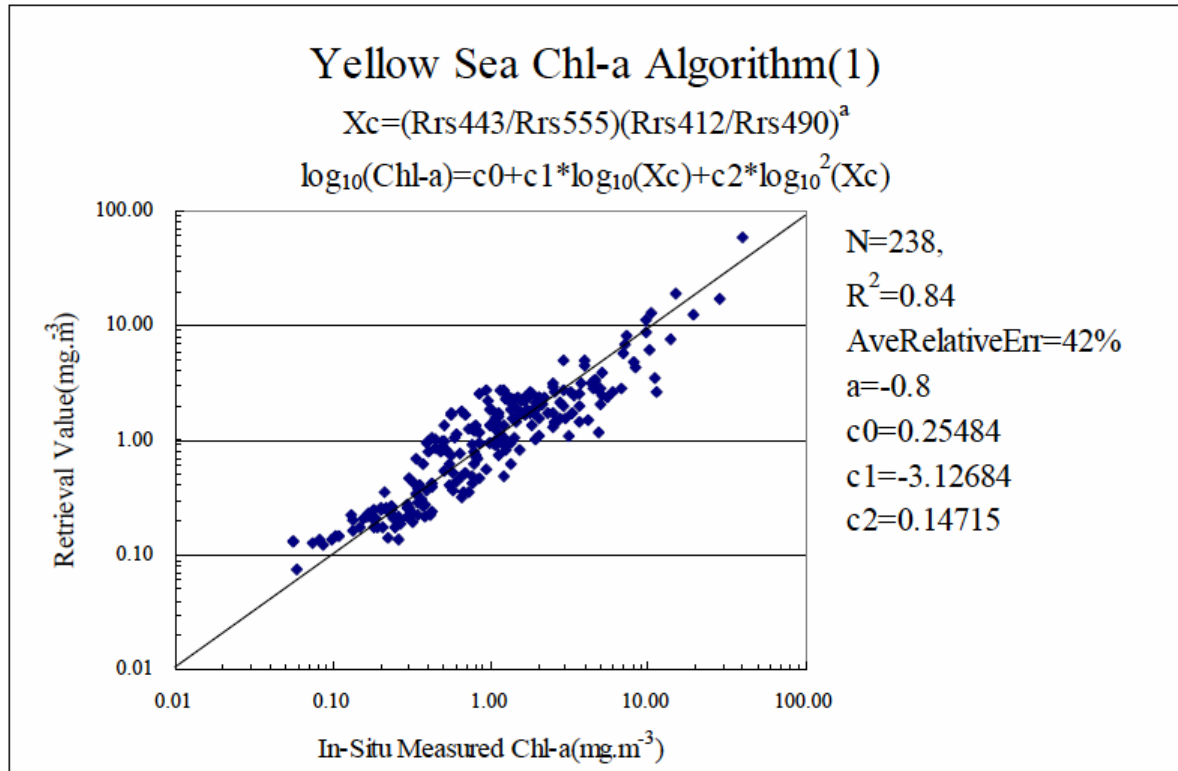
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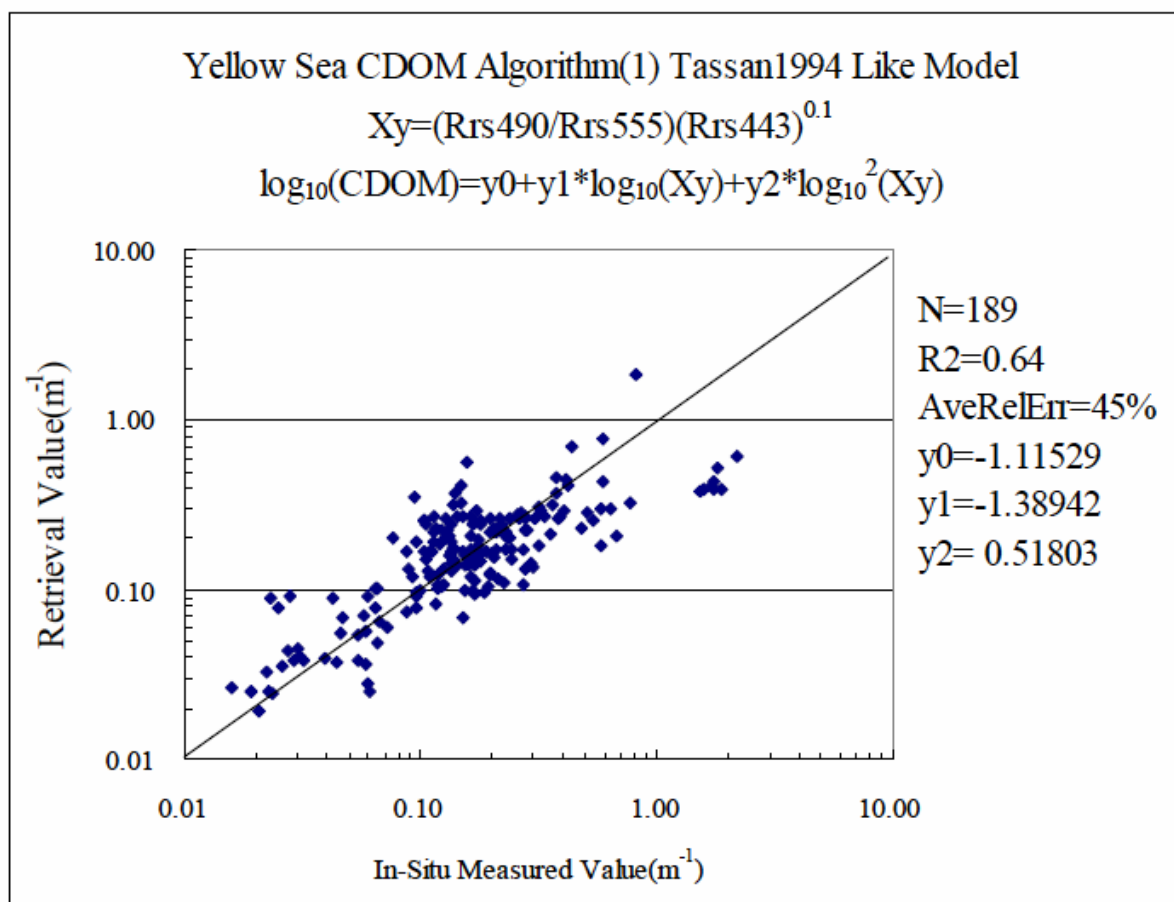
#### Local Staff

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**ANNEX 3 Selected in-water algorithm of Chl-a, TSM and CDOM**






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**ANNEX 4 YOC-2007 outreach: session of WESTPAC symposium in May 2008**

**Case-II algorithm development  
in the Yellow/East China Sea**

**Ishizaka, J. and Y-H. Ahn**

(Ocean Color Project    Co-Chairs)

YOC-2007 overview	Kawamura
Primary production – YSLME requirements	Yoo
NOWPAP requirements for marine environment	Terauchi
In situ data and their characteristics	Ahn, Ishizaka, Ryu, Kim, Tang Yoo
In-Water algorithm selection	Tang
SeaWiFS retrieval of Chl-a, TSM and CDOM	Eko

(Invited speakers, Half-day session, Almost fixed)