

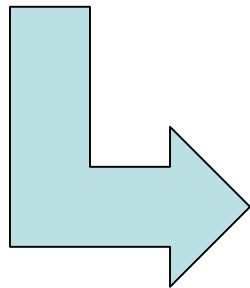
# **The Asian I-Lac project using GLI ocean color and SST data**

**Hiroshi Kawamura**

# IGOS: Integrated Global Observing Strategy (統合地球観測戦略)

## Needs of Earth Observing Strategy for Global Change Monitoring

- Agenda 21
- Kyoto Protocols
- .....



**Space  
Agencies**

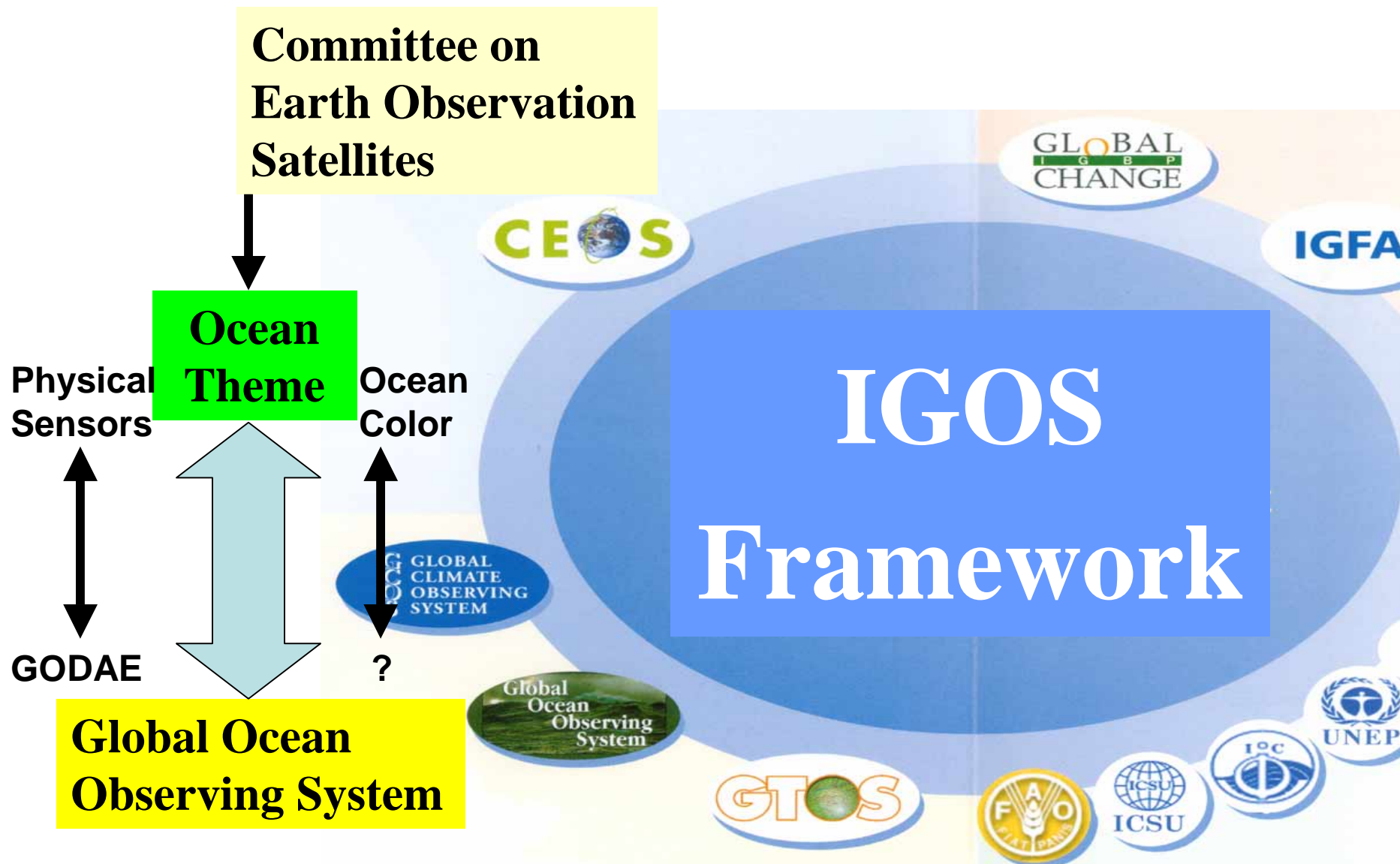
**Earth Observing  
Systems**

**Global research  
Project**

**Sponsor  
Organizations**



# CEOS/Ocean Theme and GOOS



# GOOS and COOP

	1990	2000	Project
<b>Open Ocean</b>		OOPC	ARGO GODAE
H.Kawamura, Shuba S., T. Aarup			

## Coastal Ocean

HOTO

LMR

C-GOOS

COOP

**COOP: Coastal Ocean Observing Panel**

**Goal: Design and Implementation of Initial COOS  
(Coastal Ocean Observing System)**

# **Phenomena for Design of COOS Backbone Observation**

## **Coastal marine services**

- P1 Shoreline changes
- P2 Natural hazards (i.e., storm surges)
- P3 Change in sea states (i.e. storms)
- P4 Changes in bathymetry
- P5 Coastal flooding
- P6 Relative sea level
- P7 Coastal circulation (i.e., beach safety, safe and efficient marines ops)
- P8 Sea ice
- P9 Coastal circulation

## **Ecosystem health & living marine resources**

- P10 Accumulation of organic matter
- P11 Invasive species
- P12 Harmful algae events
- P13 Oxygen depletion
- P14 Water quality
- P15 Habitat modification and loss
- P16 Changes in species and functional diversity
- P17 Changes in fisheries landing (commercial and artisinal)
- P18 Changes in exploitable living marine resources
- P19 Disease and mortality of marine organisms

## **Public health**

- P20 Contamination of seafood (chemical and biological)
- P21 Changes in pathogen concentrations

# IOC/WESTPAC

**Project: Remote Sensing for  
Integrated Coastal Area  
Management (H. Kawamura)**

## **Ocean Color Promotion in Asia**

**/ADEOS-I Research in Asia  
(1996-1998)**

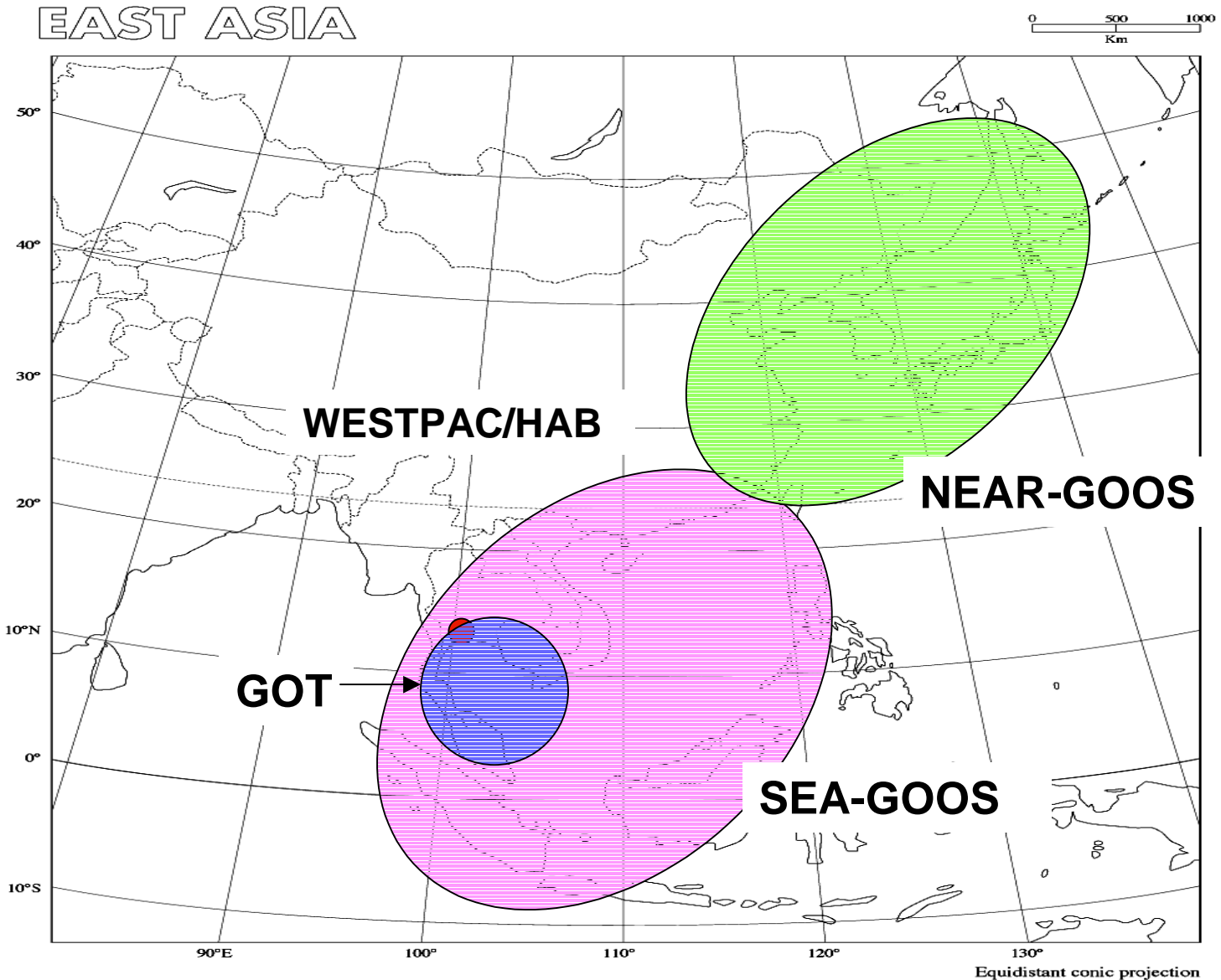
**Promotion of OC studies  
Capacity Building**

**/IOCCG OC Training Course  
(Dec. 1999 two weeks)**

**/NASDA OC Training Course  
(Dec. 2000 one week)**



# IOC/WESTPAC Research and Monitoring Project



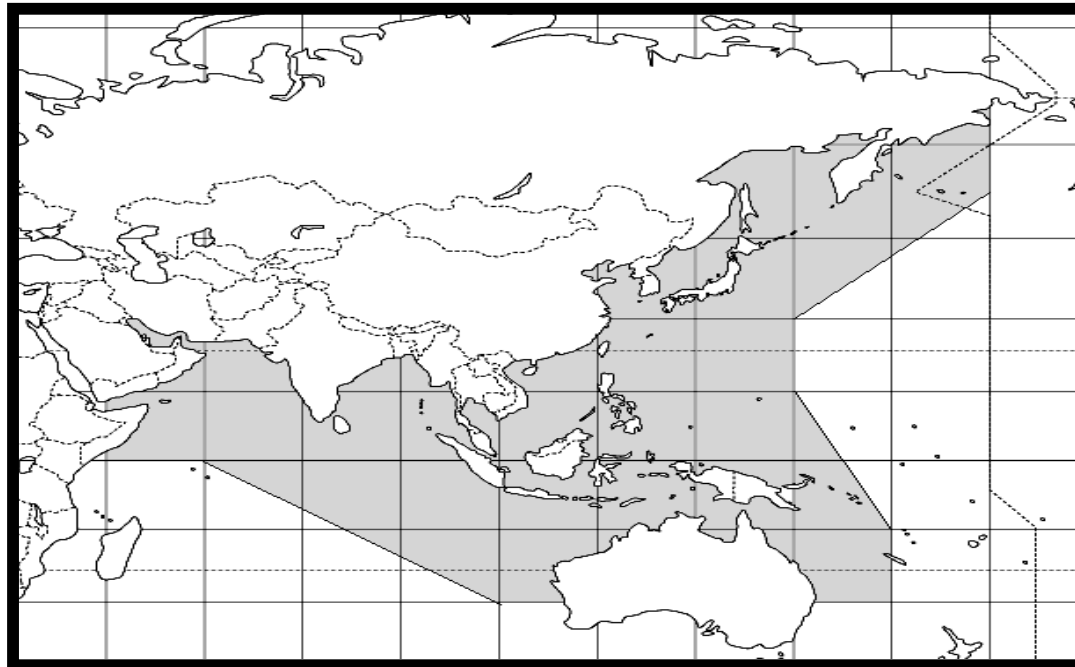
# **Asian I-Lac**

## **Continuous Time Series of Ocean Color Images Starting from OCTS Toward Ocean monitoring system in 2000**

**/Production of nLw, Chl-a and SST images 1km spatial resolution  
( Infrastructure of the Asian Water research)**

**/Promotion of environmental research using ocean color data  
(Scientific and application researches, and education)**

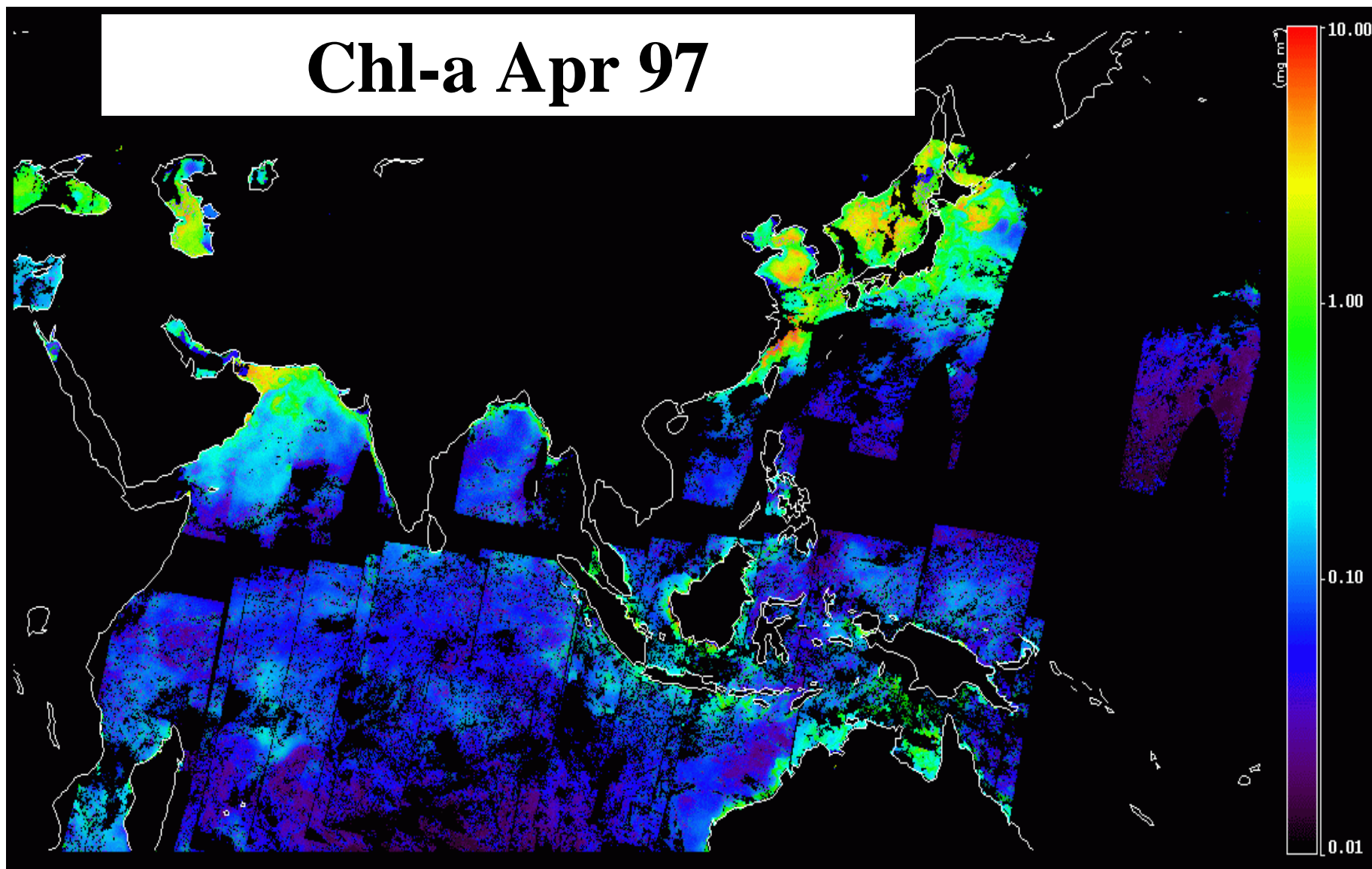
**/Networking of Asian oceanographers and remote sensing experts**





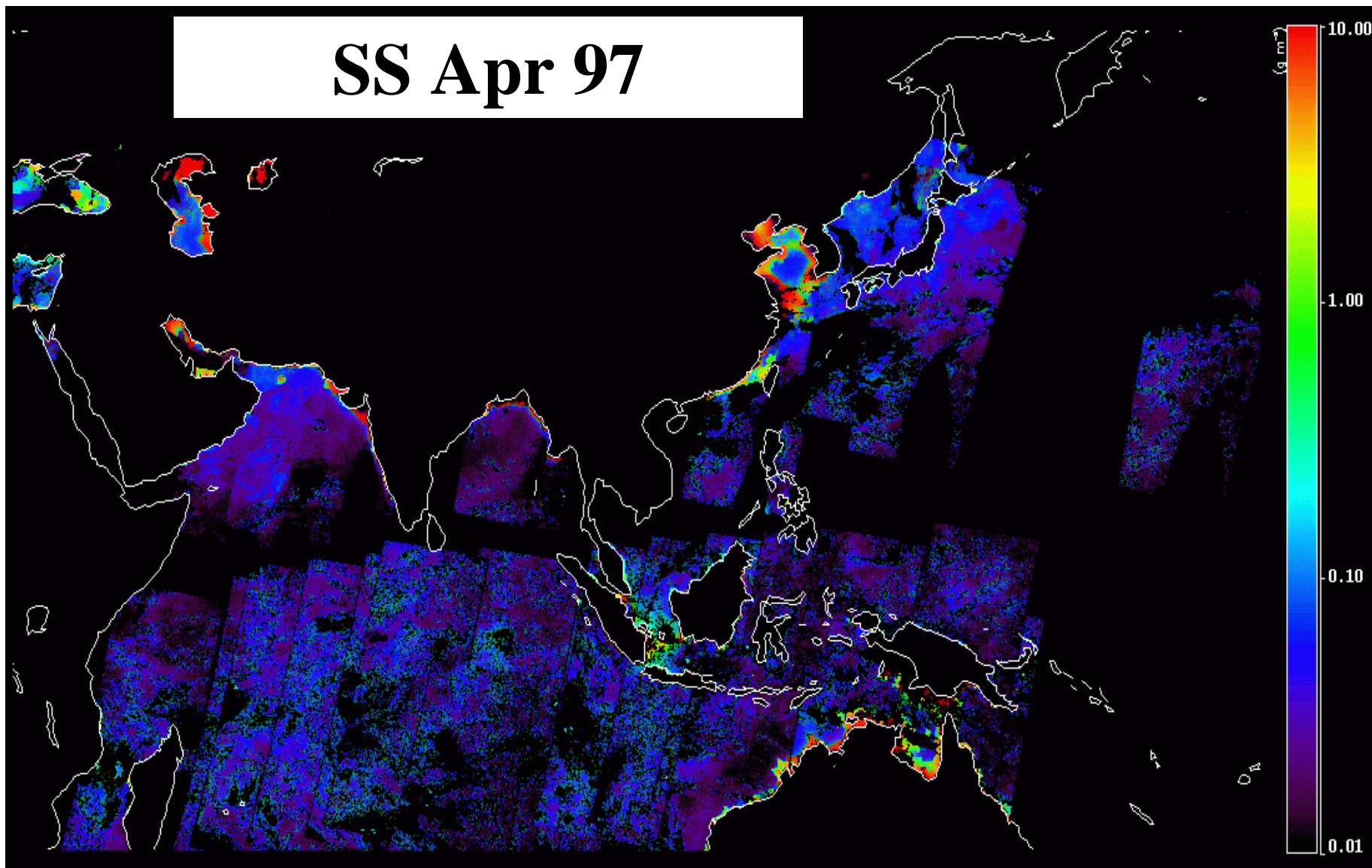
# OCTS New Algorithm for Case2 Water

**Chl-a Apr 97**



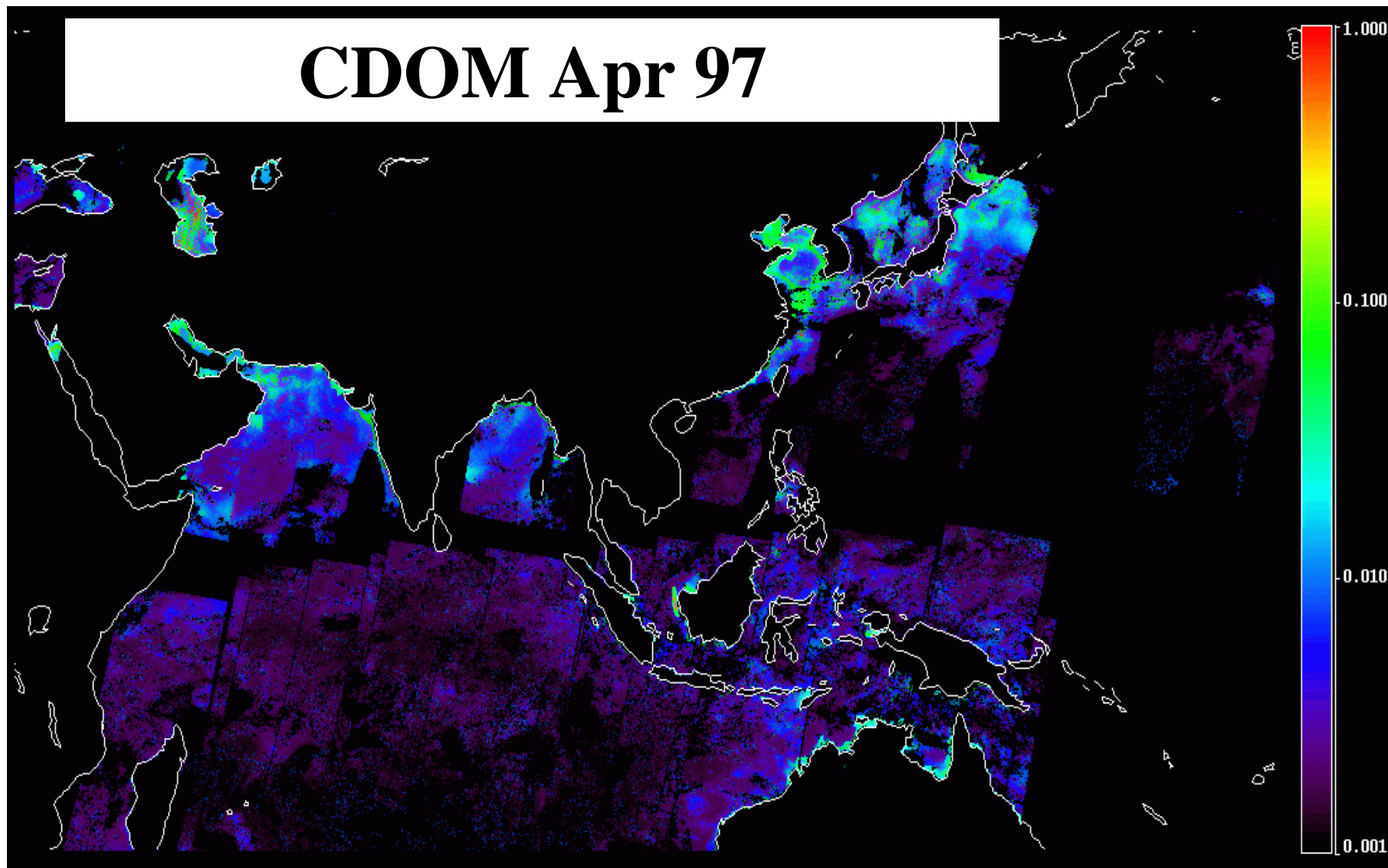
# OCTS New Algorithm for Case2 Water

SS Apr 97



# OCTS New Algorithm for Case2 Water

**CDOM Apr 97**





**Ocean Color Remote sensing technology**

**Asian I-Lac project**

**Tool for Oceanography and Coastal Application**

## **The present status of Asian I-Lac project**

/System development has been finished

/Algorithm development scheme is established

**/Now in the Phase of Application Study and Demonstration of Asian I-Lac**

**/Linkage with IOC/WESTPAC remote sensing project**

**Development of Oceanography Community Satellite OC Products**

# **Proposal of New GLI Ocean Project**

**/Use GLI and ADEOS-II Capabilities for the Asian Water Researches and Monitoring**

**/Use the Asian I-Lac Scheme for the WESTPAC RC project**  
**The RC project can be infrastructure of the other**  
**WESTPAC projects**  
**Strong corroborations with the Asian in situ**  
**oceanography community**

**/Use a part of GLI resources for the Asian Water research**  
**250m spatial-resolution images,**  
**Human resources, Cal/Val resources, ..**