

Course Schedule (tentative as of 10 November, 2021)

("Zoom" will be used)

➤ **Webinar 1: Nov. 30 – Dec. 2, 2021(Mapping Seagrass by Optical Sensors)**

Day	Time (JST)	Program	Lecturers
Nov 30	14:00 – 14:10	Introduction and housekeeping	Makoto Hayashi and Genki Terauchi
	14:10 – 14:50	Seagrass beds and its ground truthing (L) 40 mins	Teruhisa Komatsu
	14:50 – 15:20	Case study in Nanao Bay (L) 30 mins	Akira Kozuka and Genki Terauchi
	15:30 – 17:00	Preparation of training data sets from ground truth data (H) 90 mins	Genki Terauchi
Dec 1	14:00 – 14:40	Theory of detecting seagrass by remote sensing and basics of image classifications and accuracy assessment (L) 40 mins	Tatsuyuki Sagawa
	14:40 – 15:10	Introduction to Seagrass Mapper and Seagrass Trainer (L) 30 mins	Genki Terauchi
	15:30 – 17:00	Classification of satellite images and accuracy assessment (H) 90 mins	Genki Terauchi
Dec 2	14:00 – 15:30	Hands-on for preparing training data and classification (H) 90 mins	All together
	15:40 – 16:30	Wrap up and Q&A 50 mins	Genki Terauchi and Tatsuyuki Sagawa

➤ **Webinar 2: Dec. 14-16, 2021 (Monitoring and Assessment of Water Quality by Ocean Color Remote Sensing)**

Day	Time (JST)	Program	Lecturers
Dec 14	14:00 – 14:10	Introduction and housekeeping 10 mins	Makoto Hayashi and Genki Terauchi
	14:10 – 14:50	Introduction to satellite biological oceanography and ocean color remote sensing (L) 40 mins	Joji Ishizaka

	15:00 – 15:50	Application of ocean color products (H) 50 mins Introduction to the global eutrophication watch	Eligio Maure
	16:00 – 17:00	Working with satellite swath imagery (H). 60 mins Introduction to the online match-up tool	Eligio Maure
Dec 15	14:00 – 14:40	Application of ocean color products (L) 40 mins Introduction to eutrophication and Harmful algal blooms (HABs)	Wonkook Kim
	15:00 – 17:20	Time-series analysis (H) 90 mins i) Browse and download NOWPAP- Marine Env. Watch data ii) Generate monthly composites from daily iii) Create animations from monthly images	Eligio Maure
Dec 16	14:00 – 15:40	Time-series analysis (H) 90 mins iv) Extract annual max from monthly images v) Extract point/region of interest vi) Perform trend detection	Eligio Maure
	15:50 – 16:50	Wrap up and Q&A 60 mins	Eligio Maure and Genki Terauchi

*JST=Japan Standard Time

* (L)=lecture session, (H)=hands-on session

Organizer:

Northwest Pacific Action Plan (NOWPAP)

Secretariat:

NOWPAP CEARAC

Course Fee:

Training course is provided for free of charge.
All course materials are provided online in advance.

Language:

Training course is conducted in English.

Organization Committee:

Name	Organization
Difeng WANG	Second Institute of Oceanography, Ministry of Natural Resources, China
Joji ISHIZAKA	Institute for Space-Earth Environmental Research (ISEE), Nagoya University, Japan
Teruhisa KOMATSU	Japan Fisheries Resource Conservation Association, Japan
Jong-Kuk CHOI	Korea Ocean Satellite Center, Korea Institute of Ocean Science and Technology, Korea
Vasily ZHARIKOV	Pacific Geographical Institute, Far Eastern Branch of the Russian Academy of Sciences, Russia
Kiril BAZAROV	Pacific Geographical Institute, Far Eastern Branch of the Russian Academy of Sciences, Russia
Vasily KACHUR	Institute of Automation and Control Processes, Far Eastern Branch of Russian Academy of Sciences, Russia

How to apply:

Those who are interested in attending the course are required to complete the application form. The [application form](#) can be downloaded from [CEARAC Website](#).

Application form should be submitted to:

CEARAC Secretariat

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Submission deadline for Webinar 1 is 22 Nov, and for Webinar 2 is 30 Nov.

Electronic submissions are required.

Successful applicants for Webinar 1 will be notified by the weekend of 22 Nov, and for Webinar 2 will be notified by 8 Dec.