



R/V Yokosuka “Cruise Report”
YK25-14C

Deep-sea ecosystem response to macroalgae deposition

Off Okushiri island

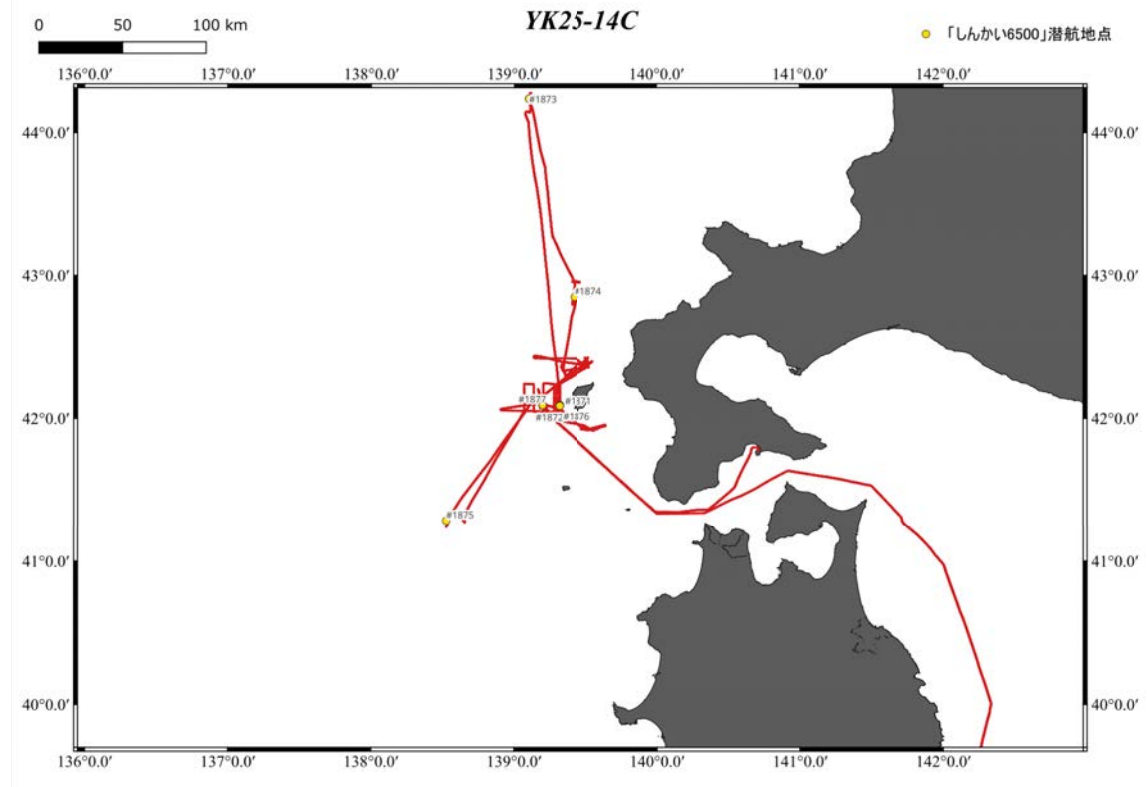
Aug. 27, 2025 – Sep. 9, 2025

Japan Agency for Marine-Earth Science and Technology
(JAMSTEC)

- Cruise ID

- Cruise ID
- Name of vessel
- Title of cruise
- Chief Scientist [Affiliation]
- Cruise period
- Ports of departure / call / arrival
- Research area
- Research map

YK25-14C
R/V Yokosuka
Deep-sea ecosystem response to macroalgae deposition
Shinsuke Kawagucci [JAMSTEC]
27th Aug., 2025 –9th Sep., 2025
Hakodate / JAMSTEC
Off Okushiri, Okushiri ridge, Matsumae plateau



2. Research Proposal and Science Party

- Title of proposal
Deep-sea ecosystem response to macroalgae deposition
- Representative of Science Party [Affiliation]
Shinsuke Kawagucci [JAMSTEC]
- Science Party (List) [Affiliation, assignment etc.]
Shinsuke Kawagucci [JAMSTEC]
Hiroyuki Kashima [JAMSTEC]
Chong Chen [JAMSTEC]
Mitsuki Kuroda [JAMSTEC]
Yasuhito Hayashi [JAMSTEC]

Technical supporting stuffs:

IHO Natsume Nippon Marine Enterprises, Ltd.
SHIMURA Sota Nippon Marine Enterprises, Ltd.

***-2. Ship Crew of the YOKOSUKA**

Captain	NAKAMURA Yoshiyuki
Chief Officer	FURUKAWA Yuki
Jr.1st Officer	SAMMORI Yasuhiko
2nd Officer	MATSUDA Riku
3rd Officer	MIYAI Wataru
Jr.3rd Officer	OJIMA Takumi
Chief Engineer	TSUKADA Minoru
1st Engineer	GIBU Daisuke
2nd Engineer	ONO Kazuki
3rd Engineer	SHIMIZU Koki
Jr.3rd Engineer	KURIHARA Riku
Jr.3rd Engineer	IDOSAKA Atsushi
Chief Electronic Operator	MABARA Takayuki
2nd Electronic Operator	YOKOYAMA Konosuke
Boat Swain	IWASAKI Naoki
Quarter Master	OKADA Masashige
Quarter Master	ISHIZUKA Nao
Quarter Master	KOJIMA Shinya
Quarter Master	SAGA Toshiya
Sailor	ADACHI Kaneyoshi
Sailor	MATSUDA Taisei
No.1 Oiler	HIGASHIGAWA Yuji
Oiler	HIDAKA Toru
Assistant Oiler	MANNA Shota
Assistant Oiler	MATSUMURA Kota
Assistant Oiler	OCHIAI Kenzo
Chief Steward	HIRAYAMA Kazuhiro
Steward	SAITO Takeshi
Steward	KUNITA Masanao
Steward	YAMAMOTO Koki
Steward	TANAKA Tsugumi

Submersible Tec. Manager	CHIBA Kazuhiro
Deputy Submersible Op. Manager	KONDO Tomoe
1st Submersible Staff	UEKI Mitsuhiro
1st Submersible Staff	ISHIKAWA Akihisa
1st Submersible Staff	SAITO Fumitaka
1st Submersible Staff	ONISHI Takuma
2nd Submersible Staff	UEKI Hirofumi
2nd Submersible Staff	CHIDA Yousuke

2nd Submersible Staff
2nd Submersible Staff
2nd Submersible Staff
2nd Submersible Staff

SUZUKI Keigo
SAIGO Ryo
IJIMA Satsuki
MINAMINO Naoto

3. Research/Development Activities

We conducted submersible dives to investigate deep-sea ecosystem responses following the deposition of large macroalgae on the seafloor. The study area was the eastern margin of the Japan Sea, characterized by bottom-water temperatures below 1 °C. Seven dives were carried out using the manned submersible Shinkai 6500—four off western Okushiri Island and three in surrounding waters. In the western Okushiri area, macroalgae were placed on the seafloor. Along with in situ sensing using CTD, DO sensors, and turbidity meters, biological and geological samples were collected with a slurp gun and push cores. Seafloor topography of the surrounding region was also surveyed with MBES aboard the research vessel Yokosuka. The deep Japan Sea, likely due to its low temperature, exhibited low biological diversity, consistent with previous reports. Future work will include chemical analyses of geological samples and genetic analyses of biological specimens.

4. Cruise Log

8/27 Departure from Hakodate
8/28 Dive 6K-1871, off Okushiri, for the macroalgae deposition and baseline survey
8/29 Dive 6K-1872, off Okushiri, for visual observation, samplings, and recovery of standalone video system
8/30 Dive 6K-1873, NE slope of Okushiri Ridge, for baseline survey of natural macroalgae
8/31 Dive 6K-1874, E slope of Okushiri Ridge, for baseline survey of natural macroalgae
9/1 No operation due to bad weather and limitation of working hours
9/2 No dive but MBES survey, off Okushiri Island
9/3 Dive 6K-1875, Matsumae Plateau, for baseline survey of natural macroalgae
9/4 No Dive due to trouble in R/V Yokosuka
9/5 Dive 6K-1876, off Okushiri, for visual observation, samplings, and recovery of the macroalgae and baseline survey
9/6 Dive 6K-1877, off Okushiri, for the macroalgae deposition and baseline survey
9/7 Run
9/8 Run
9/9 Arrival to JAMSTEC

5. Notice on Using

This cruise report is a preliminary documentation as of the end of cruise.
This report is not necessarily corrected even if there is any inaccurate description (i.e. taxonomic classifications). This report is subject to be revised without notice. Some data on this report may be raw or unprocessed. If you are going to use or refer the data on this report, it is recommended to ask the Chief Scientist for latest status.
Users of information on this report are requested to submit Publication Report to JAMSTEC.

<https://www.godac.jamstec.go.jp/darwin/en/note.html#report>

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