



R/V Shinsei-maru KS-26-J02 Cruise Report



Real-time ocean bottom crustal movement observation

Kumanonada Sea, Off Kiisuido Strait,
off the east coast of Aomori Prefecture

Jan. 27th, 2026 – Feb. 9th, 2026

Ocean Floor Observatory Technology Development Group
R&D Center for Earthquake and Tsunami Forecasting
Research Institute for Marine Geodynamics
Japan Agency for Marine-Earth Science and Technology

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1. Cruise Information

Cruise ID:	KS-26-J02		
Name of vessel:	Shinsei-maru		
Title of cruise:	Real time ocean bottom crustal movement observation		
Chief Scientist:	Affiliation	Duration	
	Shuhei Nishida	JAMSTEC	Jan. 27 th – Feb. 9 th
Boarding Scientist:	Affiliation	Duration	
Takashi	YOKOBIKI	JAMSTEC	Jan. 27 th – Feb. 2 nd
Eiichiro	ARAKI	JAMSTEC	Jan. 27 th – Feb. 2 nd
Ryo	OHYAMA	NME	Jan. 27 th – Feb. 2 nd
Yutaro	MURAKAMI	NME	Jan. 27 th – Feb. 9 th
Hiroto	JIMBA	NME	Jan. 27 th – Feb. 2 nd
Fumiaki	TOMITA	Tohoku University	Feb. 4 th – Feb. 7 nd
Shuichi	SUZUKI	Tohoku University	Feb. 4 th – Feb. 7 nd
Chi-Hsien	TANG	Tohoku University	Feb. 4 th – Feb. 7 nd
Shotaro	MATSUMOTO	Tohoku University	Feb. 4 th – Feb. 7 nd
Ryo	OHSAWA	Tohoku University	Feb. 4 th – Feb. 7 nd
Tatsuya	MIURA	Tohoku University	Feb. 4 th – Feb. 7 nd
Takeru	WADA	Tohoku University	Feb. 4 th – Feb. 7 nd
Cruise period:	Jan. 27 th – Feb. 9 th		
Ports of departure/call/arrival:	Kobe / JAMSTEC Yokosuka HQ / JAMSTEC Yokosuka HQ		
Research area:	Kumanonada Sea, Off Kiisuido Strait, off the east coast of Aomori Prefecture		

2. Research Proposal and Science Party

Science Party List:			
Name		Affiliations	
	Eiichiro	ARAKI	JAMSTEC
	Takashi	YOKOBIKI	JAMSTEC
	Hiroyuki	MATSUMOTO	JAMSTEC
	Shuhei	NISHIDA	JAMSTEC
	Yuya	MACHIDA	JAMSTEC
	Shuhei	TSUJI	JAMSTEC
	Akiko	TOU	JAMSTEC
	Takeshi	KATAYAMA	JAMSTEC
	Masayuki	SUZUKI	JAMSTEC
	Takane	HORI	JAMSTEC
	Shojiro	ISHIBASHI	JAMSTEC
	Toshiya	FUJIWARA	JAMSTEC
	Takashi	TONEGAWA	JAMSTEC
	Aki	ITO	JAMSTEC
	Koichiro	OBANA	JAMSTEC
	Shuichi	KODAIRA	JAMSTEC
	Yusaku	OHTA	Tohoku University
	Ryota	HINO	Tohoku University
	Motoyuki	KIDO	Tohoku University
	Makiko	SATO	Tohoku University

Takumi	HAGIHARA	Tohoku University
Fumiaki	TOMITA	Tohoku University
Shuichi	SUZUKI	Tohoku University
Chi-Hsien	TANG	Tohoku University
Shotaro	MATSUMOTO	Tohoku University
Ryo	OHSAWA	Tohoku University
Tatsuya	MIURA	Tohoku University
Takeru	WADA	Tohoku University
Hajime	SHIOBARA	The University of Tokyo
Masataka	KINOSHITA	The University of Tokyo

3. Activity and Results

From January 27 to February 2, survey operations were planned in the Kumanonada Sea and Off Kiisuido Strait. During this period, three dives using the ROV Hyper Dolphin were conducted at two sites.

From February 4 to 9, a GNSS/A survey was scheduled in the area off the east coast of Aomori Prefecture. The vessel moved to the off Miyako by February 5 to conduct the GNSS/A survey at site G25. However, a storm warning was issued beginning on February 6. Considering the influence of stormy weather conditions, the GNSS/A survey was cancelled, and the vessel subsequently returned to Yokosuka.

3.1. 1B-S1@Kumanonada Sea

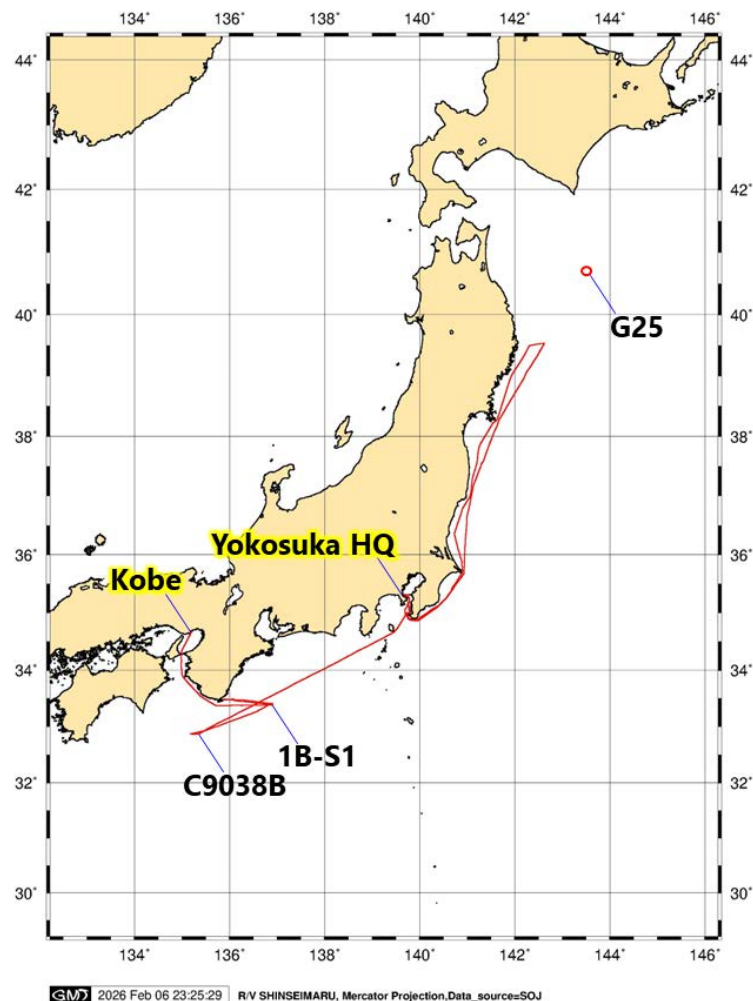
- The tiltmeter installed at 8m below the seafloor at KM25-11 was connected to the DONET interface device, and continuous observation was started.
- We have recovered the four ROV Homers that were deployed during the our previous operations for constructing the observatories.

3.2. C9038B@off Kiisuido Strait

- The optical connector was connected, and borehole optical fiber sensing was performed from the ship via the ROV.

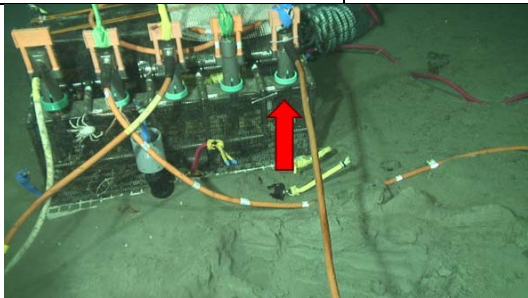
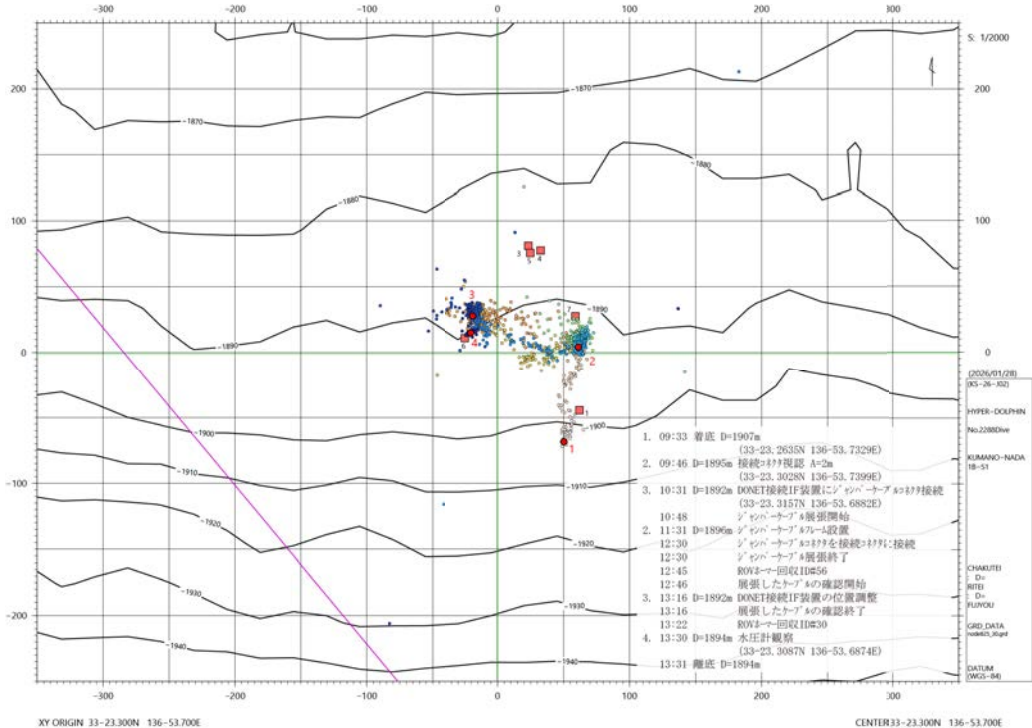
3.3. G25@off the east coast of Aomori Prefecture

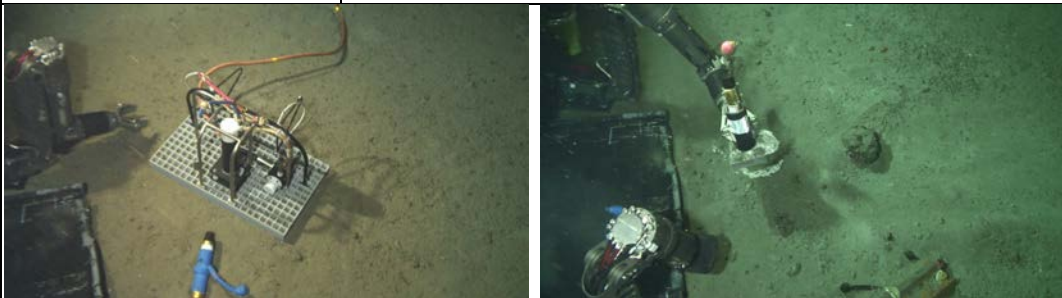
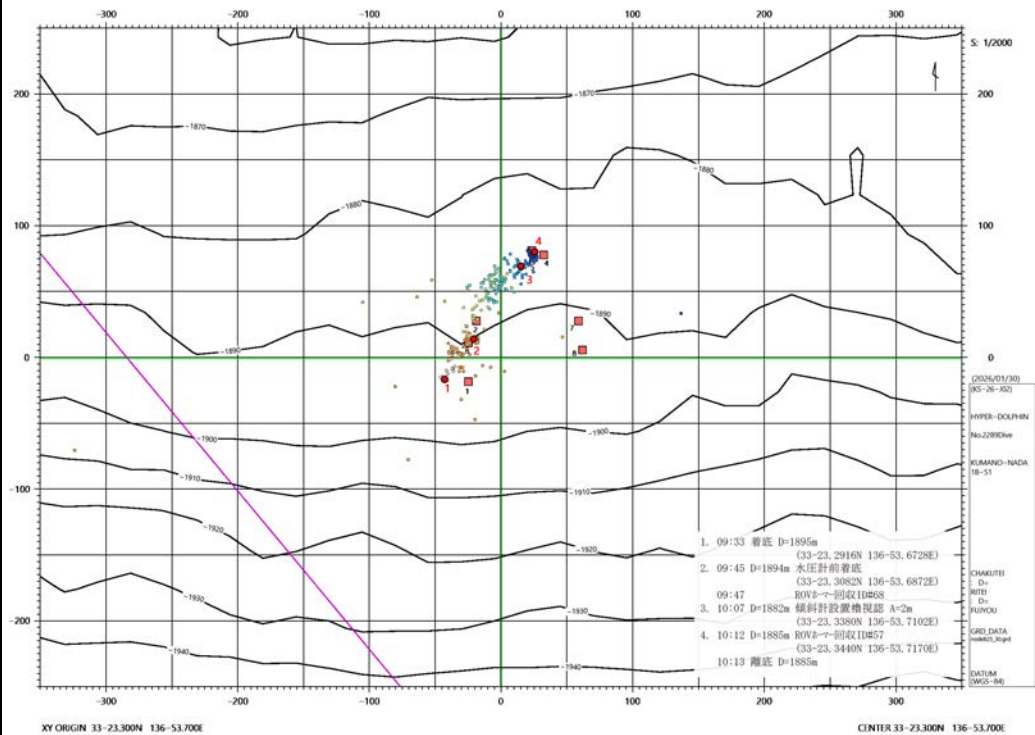
- The acoustic ranging operation to the seafloor station at G25, intended for crustal deformation measurement, was aborted due to rough sea conditions.

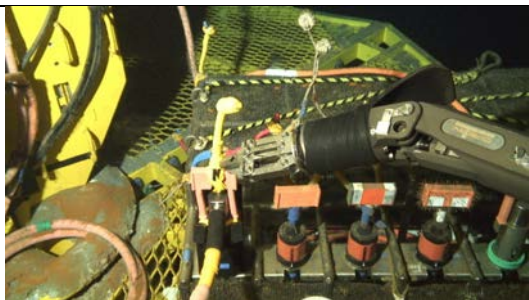
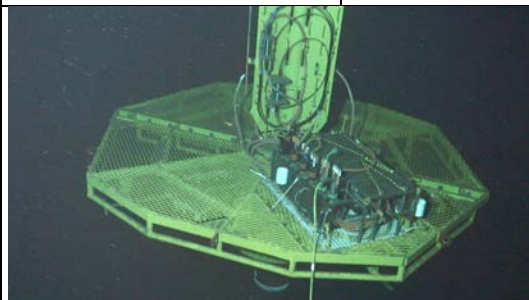
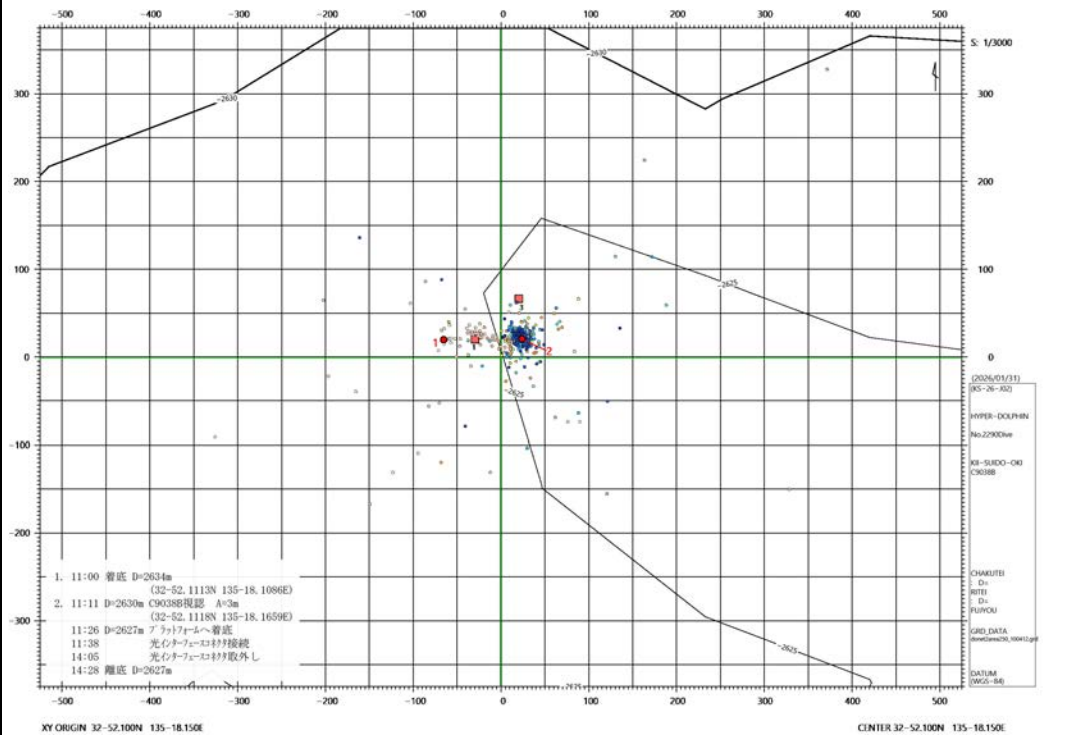


Trajectory during KS-26-J02

4. Operation and Dive Log

No.	Dive Num. Date	Site	Arrive Time	North Latitude	East Longitude	Depth [m]			
			Leave Time						
1	HPD2288 2026/01/28	1B-S1	0933	33:23.2635	136:53.7329	-1,907			
			13:31	33:23.3087	136:53.6874	-1,894			
	Work Summary		The tiltmeter installed 8 m below the seafloor at KM25-11 was connected to the DONET interface device. After that, power supply from the land station commenced, and continuous observation was initiated. At the end of this operation, two ROV Homers, which were no longer needed for operations, were then recovered.						
									
 1. 09:33 着底 D=1907m (33-23.2635N 136-53.7329E) 接続ケーブル確認 A=2m (33-23.3028N 136-53.7399E) 2. 09:46 D=1895m (33-23.3028N 136-53.7399E) 3. 10:31 D=1892m DONET接続IF装置にケーブル接続 (33-23.3157N 136-53.6882E) 10:48 ケーブル接続開始 2. 11:31 D=1896m ケーブル接続完了 12:30 ケーブル接続完了 12:45 ROV回収開始 3. 13:16 D=1892m DONET接続IF装置の位置調整 13:16 調整完了 13:22 ROV回収完了 4. 13:30 D=1894m 水圧計観察 (33-23.3087N 136-53.6874E) 13:31 離底 D=1894m XY ORIGIN 33-23.300N 136-53.700E CENTER 33-23.300N 136-53.700E									

No.	Dive Num. Date	Site	Start Time	North Latitude	East Longitude	Depth [m]
			End Time			
	HPD2289 2026/01/30	1B-S1	09:33	33:23.2916	136:53.6728	-1,895
			10:13	33:23.3440	136:53.7170	-1,885
	Work Summary		Two ROV Homers that had been deployed during the previous operations were no longer needed and were subsequently recovered.			
						
2						

No.	Dive Num. Date	Site	Arrive Time	North Latitude	East Longitude	Depth [m]
			Leave Time			
3	HPD2290 2026/01/31	C9038B	11:00	32:52.1113	135:18.1086	-2,634
			14:28	32-52.1118	135-18.1659	-2,627
	Work Summary		The optical connector was connected, and borehole optical fiber sensing was performed from the vessel via the ROV.			
  1. 11:00 着底 D=2634m (32-52.1113N 135-18.1086E) 2. 11:11 D=2630m C9038B見跡 A=3m (32-52.1118N 135-18.1659E) 11:26 D=2627m プラットフォームへ着底 11:38 光心ケーブル接続 14:05 光心ケーブル取り外し 14:28 離底 D=2627m XY ORIGIN 32-52.100N 135-18.150E CENTER 32-52.100N 135-18.150E 2026/01/31 RC-26-A02 VESSEL: OCEANUS No.2290000 XB-SURDO-001 C9038B CHARACTER : CH : RTTI : CH : FUSION GRID DATA diveData20100412.grd DATUM (WGS-84)						

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.

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