

Daily Drilling and Scientific Report for IODP Expedition 386 Japan Trench Paleoseismology, 2021



25th May 00:00 - 24:00 JST Japan Standard Time (UTC+9)

1. Location at noon

Position 36° 54.663' N, 143° 25.431' E

IODP-MSP borehole: M0092 Prospectus borehole: JTPS-06B

Water Depth: 7700 m

3. Operation

MBES/SBP survey continued from the 24th and was completed by 0145 hrs. The ship stood-by at Site JTPS-06B, and began 40 m GPC operations at 0800 hrs. The GPC assembly was deployed at 0850 hrs and run down at 1.0 m/s winch speed after setting the inclinometer on a winch cable at 20 m above the GPC weighthead. Running was suspended at 7800 m depth in cable length at 1105 hrs for stabilization and resumed after holding for 3 minutes at 0.3 m/s. Holes M0092 C and D were spudded-in and released at 7932 m of cable length at 1114 hrs. The GPC assembly was run back to surface with winch speed at 1.0 m/s and recovered to deck at 1415 hrs. Soon after recovery, the Trigger corer was dismantled, and BW and sediment at the bottom of the core were sampled, while the deck crew and GPC operation team began withdrawing and cutting the core into 5 m sections. The science party started cutting 5 m segments into 1 m sections while sampling from each section bottom end at 1445 hrs. Section cutting and sampling were completed by 1630 hrs, and then curation and IW sampling was started. After securing the GPC assembly, the ship set sail for Sendai port for medical evacuation.

3. Science Report

N/A

4. Core Recovery Details

Hole	C (Trigger corer)	D (GPC main)
Barrel length (m)	1.5	40
Cored length (m)	0.785	36.205
Curated length (m)	0.785	36.205
Recovery (%)	100	100
Number of sections	2	36

5. Time Breakdown

00:00 Continue MBES/SBP around Site M0092.

#3(W-E): From Lat: 36°55.1527' N, Long: 143°25.2008' E to Lat: 36°55.1406' N, Long: 143°27.1780' E #2(N-S): From Lat: 36°56.5383' N, Long: 143°27.9160' E to Lat: 36°52.8189' N, Long: 143°23.6536' E

- 01:45 Complete survey. Stand-by at Site M0092
- 08:00 Prepare running 40 m GPC
- 08:25 Set Trigger corer to GPC assembly
- 08:50 Run GPC assembly into water. Set inclinometer on a winch cable at 20 m above the GPC weighthead. Start running down the GPC assembly with winch speed at 1.0 m/s
- Hold running GPC for 3 minutes at 7800 m depth in cable length for stabilization. Resume running the GPC assembly down at 0.3 m/s.
- 11:14 Spud-in and released from Holes M0092 C and D at 7932 m in cable depth (tension before: 5.2 tonf, 6.2 tonf, overpull 12.3 tonf).
- 11:15 Run GPC back to surface with winch speed at 1.0 m/s.
- 13:30 Recover Trigger corer on deck
- 14:15 Recover GPC assembly on deck.

Dismantle Trigger corer, cut core and collect BW.

Start withdrawing and cutting core into 5 m segments.

- 14:45 Start cutting core into 1 m sections while collecting sediment samples from each section bottom end
- 16:30 Complete cutting core into 1 m sections.
- 17:15 Sail to off Sendai for medevac.

6. Hours (inc. cumulative total) - no contractual implications can be made from these figures

In port	35.0
Transiting	151.75
Operating	514.0
Technical downtime	4.0
Weather downtime	310.5
Other downtime (specify)	6.75

7. Weather

Fine with some clouds and warm (~20 degC) all day. Westerly wind blew <8 m/s and wave heights were ~1.5 m. A <1.2 knot surface current was observed at the site.

8. Planned Activity for the next 24 hours

Sail to off Sendai port.

9. Health and Safety and Environmental

Toolbox talk before the operation A scientist had swollen and severely painful gums.

10. Photo of the day



1) Soon after recovering the GPC on deck (photo by TYokoyama@ECORD/IODP/JAMSTEC)



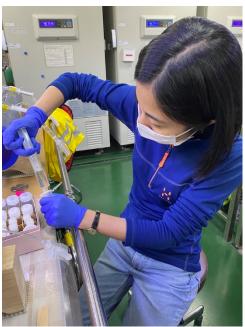
2) Laying down the Trigger corer for cutting core liner and sampling (photo by LMaeda@ECORD/IODP/JAMSTEC)



3) Washing Trigger weighthead (photo by LMaeda@ECORD/IODP/JAMSTEC)



4) Co-Chief Ken Ikehara setting a core bit on a hydraulic pusher (photo by NOkutsu@ECORD/IODP/JAMSTEC)



5) Scientist Kana Jitsuno collecting IW in a sample vial (photo by NOkutsu@ECORD/IODP/JAMSTEC)



6) Various ropes for various work (photo by LMaeda@ECORD/IODP/JAMSTEC)