



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



23rd May 00:00 – 24:00 JST Japan Standard Time (UTC+9)

1. Location at noon

Position 39° 5.1022' N, 144° 13.5728' E

IODP-MSP borehole: N/A

Prospectus borehole: N/A

Water Depth: N/A

3. Operation

The ship continued transiting while monitoring the sea surface current. A ~4 knot current was observed around JTPC-01A, and on arrival at Site M0090 (JTPC-03B) at 04:00 hrs surface current measured 2.8 knots. Monitoring of the wind speed and direction continued until 0630 hrs to see if suitability for GPC operations improved, but then the decision was made to move to Site JTPC-09A. The ship arrived at Site JTPC-09A by 1000 hrs, and switching the GPC assembly from 20 m to 40 m barrel string began soon after. At 1130 hrs the bolts securing the emergency releaser unit (the top part of barrel string) were found to be damaged. The decision was made to check the barrel string and replace all bolts, rather than conducting GPC operations. Checking and replacement were completed by 1530 hrs, and the 30 m GPC was assembled for the next run by 1715 hrs. The ship set sail for Site JTPS-06B while monitoring surface current conditions of Sites M0090 (JTPC-03B), JTPC-01A, and JTPS-10A en route.

3. Science Report

N/A

4. Core Recovery Details

| | | |
|---------------------------|--|--|
| Hole | | |
| Barrel length (m) | | |
| Cored length (m) | | |
| Curated length (m) | | |
| Recovery (%) | | |
| Number of sections | | |

5. Time Breakdown

00:00 Transit to Site JTPC-01A

02:00 Arrive at Site JTPC-01A, ~4 knot surface current observed. Decision to continue to Site M0090 (JTPC-03B).

04:00 Arrive at Site M0090 (JTPC-03B). ~2.8 knot surface current observed. Start monitoring wind direction.

06:30 Decision to move to Site JTPC-09A due to poor suitability of wind direction.

10:00 Arrival at Site JTPC-09A. Observe <1 knot of surface current. Begin assembly of 20 m GPC.

11:30 Damaged bolts found at emergency releaser unit of the barrel string. Decision to replace all bolts and the top barrel of the barrel string.

15:30 Complete replacement. Start making 30 m GPC assembly for the next run.

17:15 Complete making up the GPC assembly. Start sailing to JTPS-06B.

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

| | |
|---------------------------------|-------|
| In port | 35.0 |
| Transiting | 146.5 |
| Operating | 478.0 |
| Technical downtime | 4.0 |
| Weather downtime | 310.5 |
| Other downtime (specify) | 0.0 |

7. Weather

Overcast with relatively cool temperature (~15 degC) all day. North to northwesterly wind blew ~8 m/s, and wave heights were ~2 m.

8. Planned Activity for the next 24 hours

Sail to Site JPTS-06B. Conduct 30 m GPC.

9. Health and Safety and Environmental

N/A

10. Photo of the day



1) GPC operation team checking the top of a barrel string (photo by NOKutsu@ECORD/IODP/JAMSTEC)



4) A lab technician checking IW sample vials (photo by NOKutsu@ECORD/IODP/JAMSTEC)



2) Deck crew changing the top barrel (photo by NOKutsu@ECORD/IODP/JAMSTEC)



5) The main dish at dinner (photo by NOKutsu@ECORD/IODP/JAMSTEC)



3) Deck crew and GPC operation team checking barrel alignment (photo by LMaeda@ECORD/IODP/JAMSTEC)