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

21st April 00:00 - 24:00 JST Japan Standard Time (UTC+9)

1. Location

Position 36° 06.050' N, 142° 45.508' E
IODP-MSP borehole: M0082
Prospectus borehole: JTPS-02A
Water Depth: 7989 m

2. Operations Report

The ship drifted to Site JTPS-02A and arrived at the location by 0600 hrs. Ship's crew and GPC operation team completed preparations for running GPC by 0830 hrs. After attaching a transponder and inclinometer on the winch cable, winch speed was set to 1.2 – 1.5 m/s at 0930 hrs. GPC reached 8150 m of the cable length at 1205 hrs and was held for 3 minutes to stabilize GPC assembly. M0082 Holes A & B were spudded in at 1217 hrs. Trigger corer and GPC were on deck at 1500 hrs and 1530 hrs respectively, and the science party collected BW and cut the trigger core. Withdrawing the core liner from the Hole B Core while cutting into 5 m segments were completed by 1800 hrs, and the science party started cutting into 1 m sections while sampling from the bottom ends. All 1 m sections were delivered to No.3 laboratory by 2000 hrs, when curation and IW sampling were able to begin.

In the container laboratories, MSCL logging and measurements of refractive index, pH/Alkalinity, and NH4 of BW/IW for M0081 Hole A and B cores began at 0300 hrs and were completed by 1600 hrs.

3. Science Report

N/A

4. Core Recovery Details

Hole	A (trigger corer)	B (GPC main)
Barrel length (m)	1.5	20
Initial recovery (m)	1.455	20
Curated length (m)	1.455	18.71
Recovery (%)	97	94
Number of sections	3	19

5. Time Breakdown

00:00 Stand-by at Site JTPS-02A
06:00 Prepare for running GPC
08:00 Start 20 m GPC operation at 1.6 miles upstream from Site JTPS-02A
08:40 Set trigger and fill seawater in GPC.
09:00 Set and run Trigger corer into water
09:30 Deploy GPC into water and set transponder and inclinometer at 50 m and 20 m above the weighthead respectively. Run GPC down to 8150 m of cable length (winch speed from 0 to 100 m: <1m/s, 100 to 8150 m ~1.5 m/s)
12:05 Hold GPC at 8150 m of cable length to stabilize the assembly for 3 minutes, then resume running.
12:17 Spud-in M0082 Holes A and B (tension before shoot: ~3.9 tonf, after shoot: 4.3 tonf, overpull: 6.9 tonf)
12:30 Run GPC back to surface with ~1.5 m/s
14:50 Recover transponder and inclinometer
15:00 Recover Trigger corer on deck
15:20 Recover GPC on deck
15:30 Dismantle trigger corer, remove bottom water, withdraw core liner and collect samples from the surface.
Withdraw core liner from the GPC barrel and cut into 5 m segment.
18:00 Cut into 1 m sections while collecting sediment sample from the bottom of each section, and preparing GPC assembly for the next operation.
20:00 Start curation and IW sampling

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

In port	10.0
Transiting	22.65
Operating	60.0
Technical downtime	0.0
Weather downtime	113.15
Other downtime (specify)	0.0

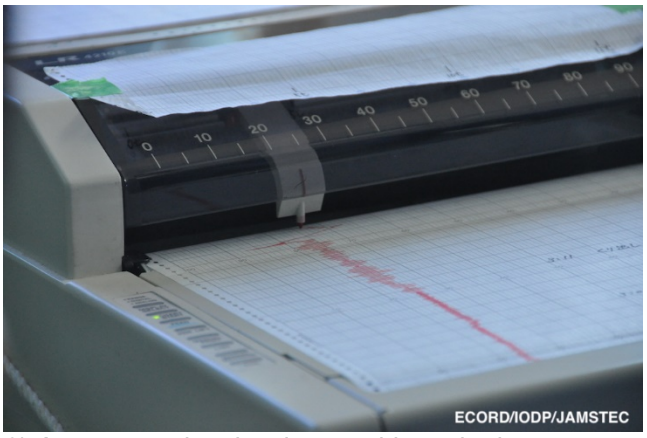
7. Weather
Fine but cloudy with and ~18 degC. Northeasterly > 11 m/s wind early in the morning lessening to <10 m/s after 0800 hrs. The surface current kept <1.3 knot toward northeast.

8. Planned Activity for the next 24 hours
Conduct 40 m GPC at Site JTPS-01

9. Health and Safety and Environmental
N/A

10. Photo of the day

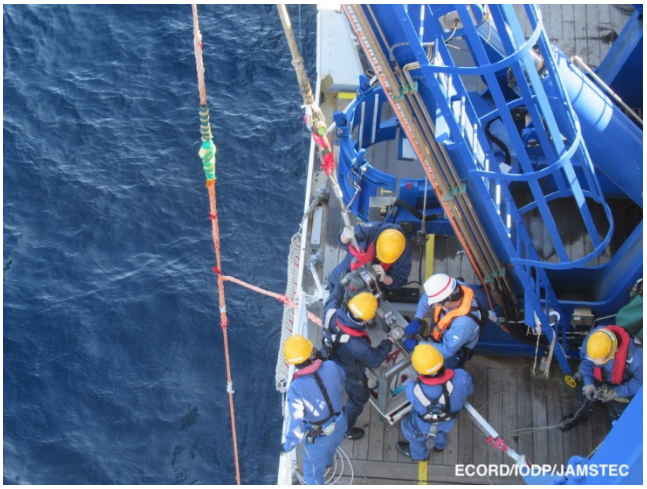
1) Morning meeting with Captain (2nd from right) and Chief Officer (right): get started on GPC! (photo by NOkutsu@ECORD/IODP/JAMSTEC)



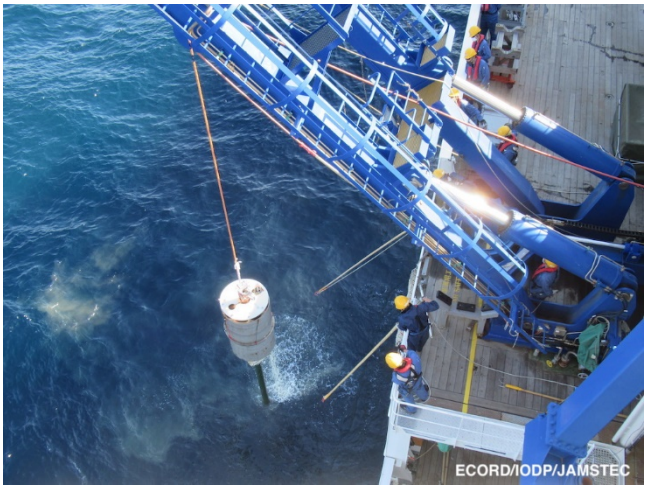
2) A pen recorder showing spud-in and release (photo by LMaeda@ECORD/IODP/JAMSTEC)

3) Deck crews recovering Trigger corer (photo by LMaeda@ECORD/IODP/JAMSTEC)

4) A wild bird visiting Kaimei (photo by NSakurai@ECORD/IODP/JAMSTEC)



5) Deck crews recovering Trigger balance (photo by NSakurai@ECORD/IODP/JAMSTEC)



7) A lab tech logging the cores with MSCL (photo by LMaeda@ECORD/IODP/JAMSTEC)

6) Deck crews catching weighthead of GPC by a bamboo pole (photo by NSakurai@ECORD/IODP/JAMSTEC)

8) A lab tech preparing auto-titrator (photo by LMaeda@ECORD/IODP/JAMSTEC)