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

14th May 00:00 – 24:00 JST Japan Standard Time (UTC+9)

1. Location
Position 36° 4.263' N, 144° 44.000' E
IODP-MSP borehole: M0081
Prospectus borehole: JTPS-01A
Water Depth: 8023 m

3. Operation
The ship arrived at Site M0081 and >2 knot of surface current was observed. The surface current gradually decreased in the morning, becoming ~1.5 knot with <9 m/s of wind by 0830 hrs, so the decision was made to run the 2nd 40 m GPC at the site. After setting the inclinometer and transponder on a winch cable at 20 m and 50 m above the GPC weighthead the 40 m GPC assembly was deployed at 0830 hrs and run down with winch speed set to 1.1 m/s. Running the GPC assembly was suspended at 8150 m depth in cable length at 1155 hrs for stabilization and resumed with winch speed at 0.3 m/s after holding for 3 minutes. Holes M0081 E and F were spudded-in and released at 8280 m of cable length at 1206 hrs. The GPC assembly was run back to surface with 1.1 m/s of winch speed and recovered to deck at 1545 hrs. Soon after recovery, the Trigger corer was dismantled, and BW and sediment at the bottom were sampled, while deck crew and GPC operation team began withdrawing and cutting core into 5 m sections. The science party started cutting 5 m segment into 1 m sections while sampling from each section bottom end at 1600 hrs. 1 m sectioning and sampling were completed by 2000 hrs, and curation and IW sampling began. Deck crew and GPC operation team completed making up the 40 m GPC assembly by 2130 hrs. No MBES/SBP survey was conducted due to strong current overnight.

3. Science Report
N/A

4. Core Recovery Details

Hole	Trigger corer (E)	GPC main (F)
Barrel length (m)	1.5	40
Cored length (m)	1.07	37.74
Curated length (m)	1.07	37.74
Recovery (%)	100	100
Number of sections	2	37

5. Time Breakdown
00:00 Continue to sail to Site M0081 while monitoring surface current.
04:00 Stand-by at Site M0081.
08:30 Prepare running the 40 m GPC assembly.
09:00 Set Trigger to GPC assembly.
09:20 Run GPC assembly into water. Set inclinometer and transponder on a winch cable at 20 m and 50 m above the GPC weighthead respectively. Set winch speed at 1.1 m/s.
10:00 Resume running GPC assembly at 1.1 m/s.
11:55 Hold running GPC assembly for 3 minutes at 8150 m depth in cable length for stabilization. Resume running GPC assembly down at 0.3 m/s.
12:06 Spud-in and release from Holes M0084 E and F at 8280 m in cable length (tension before: 5.6 tonf; after: 6.4 tonf; overpull: 11.1 tonf)
12:15 Run GPC assembly back to surface at 1.1 m/s of winch speed.
13:15 Resume running GPC back to surface at 1.1 m/s of winch speed.
15:00 Recover Trigger corer to deck
15:45 Recover GPC to deck.
Dismantle Trigger corer and begin sampling.
Begin withdrawing and cutting core into 5 m segments whilst preparing the next run.
16:00 Begin cutting 5 m segments into 1 m sections whilst sampling from each bottom end.
20:00 Complete cutting core into 1 m sections while sampling from each bottom end.
21:30 Complete making up 40 m GPC assembly.

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

In port	35.0
Transiting	123.65
Operating	372.5
Technical downtime	0.0
Weather downtime	226.9
Other downtime (specify)	0.0

7. Weather
Cloudy and warm (~20 degC) with a north- northeasterly wind (<9 m/s) with 2 m wave heights. The surface current flowed ~1.5 knot to north northeast.

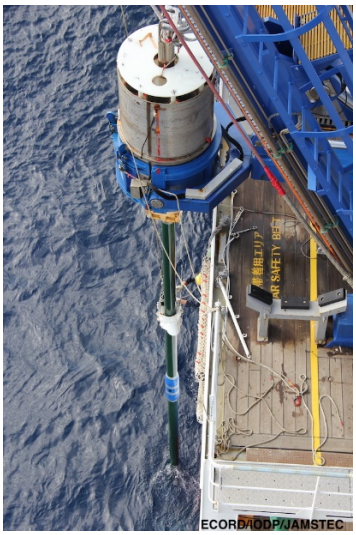
8. Planned Activity for the next 24 hours
Conduct 40 m GPC at Site M0082

9. Health and Safety and Environmental
Toolbox talk before the operation

10. Photo of the day

1) GPC operation team leader confirming barrel release from the hole by a pen recorder (photo by LMaeda@ECORD/IODP/JAMSTEC)

3) A pigeon watching our deck work (photo by TYokoyama@ECORD/IODP/JAMSTEC)



2) A deck crew member setting a barrel clamp for recovery (photo by LMaeda@ECORD/IODP/JAMSTEC)

4) A sample being placed in an aluminum bag (photo by LMaeda@ECORD/IODP/JAMSTEC)

5) The sample is then purged, vacuumed and sealed (photo by LMaeda@ECORD/IODP/JAMSTEC)