



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



6<sup>th</sup> May 00:00 – 24:00 JST Japan Standard Time (UTC+9)

### 1. Location

Position 40° 5.586' N, 144° 19.541' E

IODP-MSP borehole: M0088

Prospectus borehole: JTPN-07A

Water Depth: 7525 m

### 2. Operations Report

The last GPC operation of the first half of the expedition was a 40 m operation at Site M0088 (Site JTPN-07A). After attaching the inclinometer and transponder to the winch cable at 20 m and 50 m above the GPC weighthead respectively, the 40 m GPC assembly was deployed into the water at 0720 hrs, and run down with winch speed at 0.5 – 1.0 m/s (from 0 to 100 m depth in cable length) and 1.2 – 1.5 m/s (from 100 to 7700 m depth in cable length). The GPC assembly was held at 7700 m depth in cable length at 0945 hrs for stabilization, and then resumed running down at 0.3 m/s of winch speed. Holes M0088 C and D spudded in and released at 0954 hrs at 7781 m of cable length. The GPC assembly was recovered to deck by 1315 hrs, and soon after the Trigger corer was dismantled, sampled and cut. Meanwhile the deck crew and GPC operation team began withdrawing and cutting core. The core was extremely gassy and a large amount of gas expansion occurred. The science party began cutting the 5 m segments into 1 m sections while sampling from each section bottom end at 1400 hrs, and this was completed by 1615 hrs. The deck crew and GPC operation team broke out the GPC assembly to wash the parts, finishing by 1700 hrs. The ship left the site for Hachinohe and the mid expedition Port Call at 1715 hrs.

### 3. Science Report

N/A

### 4. Core Recovery Details

Hole	A (Trigger core)	B (GPC main)
Barrel length (m)	1.5	40
Cored length (m)	0.96	36.465
Curated length (m)	0.96	36.465
Recovery (%)	100	100
Number of sections	2	37

### 5. Time Breakdown

00:00 Continue stand-by at Site M0088.  
05:30 Prepare 40 m GPC operation  
06:55 Set Trigger corer to GPC assembly  
07:20 Run GPC assembly into water. Set inclinometer and transponder on a winch cable at 20 m and 50 m above the weighthead of GPC respectively. Set winch speed 0.5 – 1.0 m/s (to 100 m depth in cable length) and 1.2 -1.5 m/s (7700 m depth in cable length).  
09:45 Hold running GPC assembly for 3 minutes at 7700 m depth in cable length for stabilization. Resume running GPC assembly with 0.3 m/s of winch speed.  
09:54 Spud-in and release from Holes M0088 C and D at 7781 m in cable length (tension before: 5.8 tonf, 6.3 tonf, overpull 10 tonf).  
10:00 Run GPC back to surface with 1.0 – 1.5 m/s winch speed.  
12:10 Recover Trigger corer on deck.  
13:15 Recover GPC assembly on deck. Dismantle Trigger corer, cut core and collect BW.  
Start withdrawing and cutting core into 5 m segments, while breaking out and washing the assembly.  
14:00 Start cutting 5 m segment into 1 m sections while sampling at each section bottom end.  
16:15 Complete cutting and sampling. Start curation and IW sampling.  
17:00 Complete breaking out and washing the assembly  
17:15 Leave the site for Hachinohe port.

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

In port	10.0
Transiting	37.15
Operating	270.25
Technical downtime	0.0
Weather downtime	226.9
Other downtime (specify)	0.0

**7. Weather**

Fine and cloudy and warm (~16 degC) with calm sea conditions and a southwesterly wind: (<10 m/s). The surface current flowed <1.2 knot to northeast, and wave heights were ~1 m all day.

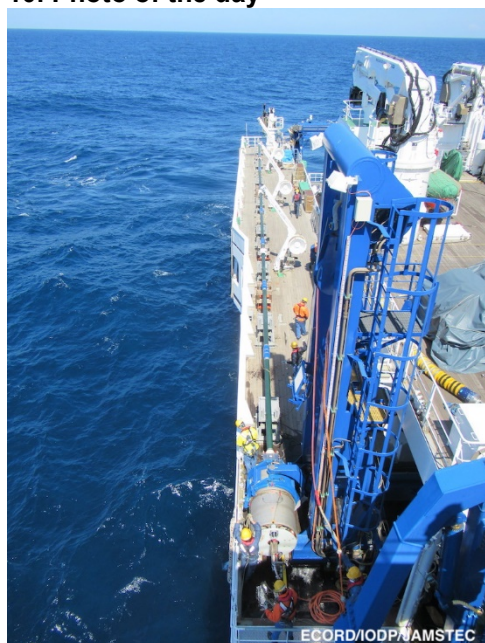
**8. Planned Activity for the next 24 hours**

Port-call at Hachinohe, loading/offloading core containers, loading consumables and provisions.

**9. Health and Safety and Environmental**

Toolbox talk before the operation

**10. Photo of the day**



1) A great day for 40 m GPC operations (photo by NSakurai@ECORD/IODP/JAMSTEC)



2) A deck crew hanging rope on the GPC weighthead using bamboo pole (photo by LMaeda@ECORD/IODP/JAMSTEC)



3) Co-Chief Ken Ikehara and the curatorial staff taking care of overflowing sample (photo by NSakurai@ECORD/IODP/JAMSTEC)



4) GPC operation team transferring 5 m segment using trolleys (photo by LMaeda@ECORD/IODP/JAMSTEC)



5) GPC operation staff washing inside of barrel string (photo by LMaeda@ECORD/IODP/JAMSTEC)