



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



**24th April 00:00 - 24:00 JST Japan Standard Time (UTC+9)**

### 1. Location

Position 38° 45.413' N, 144° 07.755' E

IODP-MSP borehole: M0083

Prospectus borehole: JTPC-05A

Water Depth: 7534 m

### 2. Operations Report

The *R/V Kaimei* arrived at Site JTPC-05A by 0500 hrs and conduct XBT, MBES/SBP survey on the same line of the previous *RV Sonne* survey. Preparation for running 20 m GPC was completed by 0800 hrs and GPC was run into water at 0900 hrs. After attaching inclinometer and transponder on the winch cable at 20 m and 50 m above the weighthead of GPC, the winch speed was set at 0.5 – 1 m/s by 100 m depth of cable length, then increased 1.2 – 1.5 m/s by 7750 m depth of cable length. Running GPC down was paused at 7750 m depth of cable length for stabilization, and resumed after 3 minutes with 0.3 m/s of winch speed. Spud-in and release M0083 Holes A and B was confirmed at 1133 hrs, and GPC was running back to surface. The Trigger corer and GPC were recovered to deck at 1350 hrs and 1430 hrs respectively. The GPC assembly was secured, and Trigger corer dismantled while the collection of BW and trigger core cutting commenced. Meanwhile deck crew and GPC operation team started withdrawing and cutting GPC core into 5 m sections. The science party cut core into 1 m sections while collecting sediment samples from each section bottom end from 1530 hrs and sampling was completed by 1600 hrs.

Preparation of the 20 m GPC for the next run was completed by 1945 hrs, and the ship began further MBES/SBP survey.

In the laboratory, MSCL logging and IW measurement for cores of M0082 Hole A and B were completed.

### 3. Science Report

N/A

### 4. Core Recovery Details

Hole	A (trigger corer)	B (GPC main)
Barrel length (m)	1.5	20
Cored length (m)	1.615	19.52
Curated length (m)	1.615	19.52
Recovery (%)	100	100
Number of sections	3	20

### 5. Time Breakdown

00:00 Continue to sail to Site JTPC-05A  
05:00 Arrive at 1 mile upstream from MBES/SBP survey line. Prepare survey  
05:30 Deploy XBT  
05:45 Conduct MBES/SBP survey  
From Lat: 38°42.1092N, Long: 144°07.3104E to Lat: 38°48.4735N, Long: 144°08.4674E  
08:00 Prepare 20 m GPC deploy  
08:35 Set GPC to vertical position and set Trigger corer  
09:00 Run GPC assembly into water. Set inclinometer and transponder on winch cable 20 m and 50 m above the weighthead of GPC respectively. Set winch speed 0.5 – 1.0 m/s by 100 m depth of cable length, and 1.2 – 1.5 m/s from 100 to 7750 m depth of cable length.  
11:20 Pause running GPC and hold 3 minutes for stabilization of GPC assembly. Resume running GPC with 0.3 m/s.  
11:33 Spud-in M0083 Holes A and B and release at 7876 m of cable length (tension before 3.9 tonf; after 4.3 tonf; overpull 6.8 tonf).  
11:45 Run GPC back to surface with 1.2 – 1.5 m/s  
13:50 Recover Trigger corer on deck  
14:30 GPC on deck. Start dismantling Trigger corer while sampling BW  
15:00 Withdraw and cut core into 5 m segments, while preparing for the next 20 m GPC.  
15:30 Cut core into 1 m sections while collecting sediment samples

16:00 Complete 1 m section cutting and sampling

19:45 Complete preparation for next 20 m GPC. Start MBES/SBP survey.

#1(N-S): From Lat: 38°42.8913' N, Long: 144°07.8117' E to Lat: 38°47.1081' N, Long: 144°08.5254' E

#2(N-S): From Lat: 38°47.1087' N, Long: 144°08.0267' E to Lat: 38°42.8911' N, Long: 144°07.3325' E

#3(N-S): From Lat: 38°42.8931' N, Long: 144°07.1046' E to Lat: 38°47.1093' N, Long: 144°07.8006' E

#4(N-S): From Lat: 38°46.7074' N, Long: 144°06.9033' E to Lat: 38°46.3262' N, Long: 144°09.3606' E

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

In port	10.0
Transiting	22.65
Operating	92.5
Technical downtime	0.0
Weather downtime	152.65
Other downtime (specify)	0.0

#### 7. Weather

Fine but cloudy with relatively cool temperature of ~13 degC, and gentle northeasterly winds (< 5 m/s). Surface current flowed northeast at ~1 knot. Generally fine weather.

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

Continue site survey. Conduct 20 m GPC

#### 9. Health and Safety and Environmental

N/A

#### 10. Photo of the day



1) Fine weather for GPC operation (photo by NSakurai@ECORD/IODP/JAMSTEC)



2) Assistant offshore EPM Nori Sakurai cutting core into 1 m sections (photo by LMaeda@ECORD/IODP/JAMSTEC)



3) BW pumped from Trigger core (photo by LMaeda@ECORD/IODP/JAMSTEC)



6) GPC operation tech washing the deck after Trigger core sampling and cutting (photo by LMaeda@ECORD/IODP/JAMSTEC)



4) Curatorial staff marking section ID on a top end cap (photo by LMaeda@ECORD/IODP/JAMSTEC)



7) Rhizon sampling (photo LMaeda@ECORD/IODP/JAMSTEC)



5) Scientist Toshiya Kanamatsu checking sampling logsheet (photo by LMaeda@ECORD/IODP/JAMSTEC)



8) Scientist Kana Jitsuno working on BW for microbiological study (photo by NOKutsu@ECORD/IODP/JAMSTEC)