



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



25th April 00:00 – 24:00 JST Japan Standard Time (UTC+9)

### 1. Location

Position 39° 49.8' N, 144° 18.9' E

IODP-MSP borehole: N/A

Prospectus borehole: N/A

Water Depth: N/A

### 2. Operations Report

MBES/SBP survey continued around Sites JTPC-05A/04B and in total 9 lines were completed by early in the morning. The original plan to deploy the 20 m GPC at Site JTPC-04B at 06:00 was abandoned due to strong winds (>15 m/s) and surface current (~2 knot). Because wave height was forecast higher in this area, the decision was made to move to Site JTPN-09A at 0620 hrs. The ship arrived at Site JTPN-09A by 1430 hrs, and start MBES/SBP survey after deployment of the XBT. The survey was completed by 1645 hrs. Meanwhile, MSCL logging and IW measurement for cores of M0083 Hole A and B were continued and completed.

### 3. Science Report

From night on Apr 24 to early in the morning on Apr 25, hydroacoustic surveys were conducted along four N-S and six E-W lines at the JTC-07 basin according to the methodology set out in Kioka et al. (2019). The survey confirmed characteristic features of this basin are a flat basin floor surrounded by gentle eastern and steep western slopes, with southern and northern terraces. A clearly stratified acoustic pattern was displayed with several thick acoustically transparent layers distributed in the basin at the location of Site JTPC-05A, while a well-stratified pattern occurs in the terraces and gentle slope at Site JTPC-04B. This suggests different depositional process between the basin and terraces. Acoustic penetration is >50 m at sites JTPC-04B and JTPC-05A.

### 4. Core Recovery Details

N/A

Hole		
Barrel length (m)	N/A	N/A
Cored length (m)	N/A	N/A
Curated length (m)	N/A	N/A
Recovery (%)	N/A	N/A
Number of sections	N/A	N/A

### 5. Time Breakdown

00:00 Continue MBES/SBP survey

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

#5(W-E): From Lat: 38°45.7284' N, Long: 144°09.3227' E to Lat: 38°46.0949' N, Long: 144°06.8574' E

#6(W-E): From Lat: 38°45.1894' N, Long: 144°06.9115' E to Lat: 38°44.8576' N, Long: 144°09.0575' E

#7(W-E): From Lat: 38°44.2242' N, Long: 144°08.8997' E to Lat: 38°44.6029' N, Long: 144°06.7304' E

#8(W-E): From Lat: 38°43.9857' N, Long: 144°06.9171' E to Lat: 38°43.6331' N, Long: 144°09.0499' E

#9(W-E): From Lat: 38°42.9569' N, Long: 144°08.9815' E to Lat: 38°43.3235' N, Long: 144°06.8249' E

03:30 Complete all the survey lines

06:00 Stand-by at 1.5 – 1.7 m upstream from JTPC-04B for 20 m GPC operation

Observed winds >15 m/s (from 220 deg) and surface current ~2 knot (to 25 deg).

06:20 Decided to postpone 20 m GPC at JTPC-04B, to move to JTPN-09A.

06:45 Sail to JTPN-09A

14:30 Arrive at JTPN-09A. Deploy XBT and prepare MBES/SBP survey.

15:30 Start MBES/SBP survey

Lat: 40°21.8301' N, Long: 144°24.4533' E To Lat: 40°27.3734' N, Long: 144°26.6650' E

16:45 Stand-by at JTPN-09A

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

In port	10.0
Transiting	30.4
Operating	100.5
Technical downtime	0.0
Weather downtime	159.9
Other downtime (specify)	0.0

## 7. Weather

Cloudy with mild temperature (~17 degC) and >15 m/s southwesterly winds with ~2 knot surface current flowing north-northeast at JTPC-04B in the morning. Around JTPN-09A in the afternoon, conditions were cloudy with cooler temperature of <6 degC with 4 m/s wind from northeast and 1.6 knot easterly surface current.

## 8. Planned Activity for the next 24 hours

20 m GPC at JTPN-09A

## 9. Health and Safety and Environmental

N/A

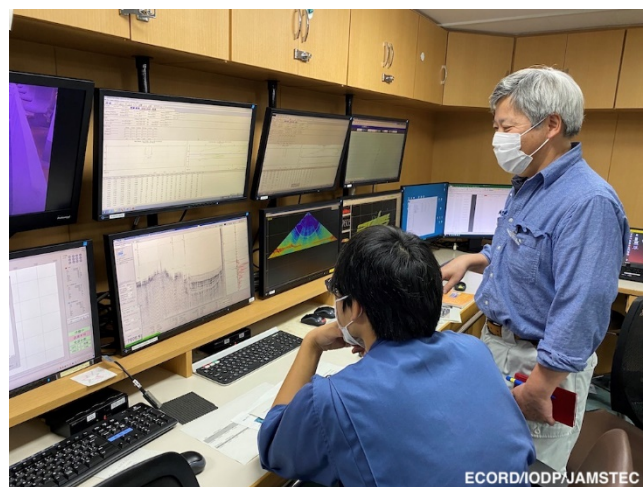
## 10. Photo of the day



1) Weather charts showing dense isobars (photo by NOKutsu@ECORD/IODP/JAMSTEC)



2) Rhizon samplers ready to go but... (photo by LMaeda@ECORD/IODP/JAMSTEC)



3) Co-Chief Ken Ikehara enjoying a real time SBP profile (photo by NOKutsu@ECORD/IODP/JAMSTEC)