

Daily Coring and Scientific Report for IODP Expedition 389 Hawaiian Drowned Reefs



10th September 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)

1. Location at 24:00

Position 19° 56.5148 N, 156° 3.7432 W

Water Depth: approximately 414 m

2. Operations Report

The seafloor corer was recovered and all barrels unloaded to the core reception area for extraction and curation. The seafloor corer was checked and fresh barrels loaded to the magazine in preparation for Hole M97B.

The beacon used to calibrate the USBL was recovered and then the seafloor corer deployed to the seabed and borehole M97B was washed down to 13 m.



3. Science Report

Core recovered from Hole M97A was received on deck by the night shift in the early hours of the morning. Cores were transferred from aluminium to plastic liners (if applicable), sectioned and nominated science party members undertook a quick visual analysis and sample selection (where required)

At midday the day shift took on curation and data entry in the curation container and the curated core sections were transferred into the MSCL container for temperature equilibration for 6.5 hours. At 20:30 MSCL logging began followed by the first lithological descriptions by the lithology team. At midnight nine sections had been run through the MSCL, and lithological descriptions completed for five sections.

4. Core Recovery Details

Hole	M97A	M97B
Cores recovered	25	N/A
Drilled length (Coring, m)	35.05	N/A
Drilled length (Open hole, m)	N/A	13.8
Recovered length (m)	26.42	N/A
Recovery (%)	75	N/A
Depth at midnight (mbsf)	N/A	13.8

5. Time Breakdown

00:00 – 00:50 Continue recovering core barrels in seafloor corer magazine for recovery to deck

00:50 – 01:35 Seafloor corer recovery

01:35 – 03:10 Unloading of the core barrels to the catwalk

03:10 – 10:30 Core extraction from barrels / Seafloor corer preparation

09:05 – 10:40 Beacon recovery

10:30 – 13:30 Core curation / Seafloor corer launched at 15:10 for Hole M97B

15:54 – 24:00 Seafloor corer begins washing down Hole M97B.

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

In port	0.0
Transiting	0.0
Operating	24
Technical downtime	0.0
Weather downtime	0.0
Mobilisation	0.0

7. Weather

Fair, partially sunny, good visibility, wave heights of 0.7 – 0.9 m and swell 0.7 – 0.9 m; wind direction variable at 1 – 4 kts, gusting 7 - 11 kts; Temperature 24 - 26°C.

8. Planned Activity for the next 24 hours

- Continue washing down and casing Hole M97B to ~34.5 mbsf then resume coring operation.

9. Health and Safety and Environmental

- Toolbox talks at 11:30 and 23:30 for all on shift. EPMs and Ops Manager attended Contractor Toolbox talk at 11.45 and EPMs at 23:50. Information disseminated to remainder of Science Party.
- Weekly safety meeting at 11:00 for day shift and 13:00 for night shift.

10. Photo(s) of the day



Photograph by Marley Parker © ECORD_IODP. Science Party Petrophysicist Stephan Jorry (L) and ESO Petrophysics Staff Scientist Marisa Rydzy (R) processing MSCL core data from Hole M97A on the Multi-Sensor Core Logger (MSCL).