

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

7th October 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)



1. Location at 24:00

Position: 20°17.399'N, 155°39.051'W

Water Depth: ~ 412 m

2. Operations Report

Borehole M101B was completed at 45.15 mbsf, just beyond the proposed target depth of 45 mbsf. The final core runs were very good with maximum penetration being achieved in approximately 20 minutes each. The core barrels were recovered from the corer and cores extruded from the barrels and the vessel transited to the location of KOH-01A/M102A to attempt to obtain material from deeper than 26.19 mbsf. After completing repairs and general maintenance, the seafloor corer was launched and landed on the sea bed just before midnight.

3. Science Report

On deck core operations were completed by 22:45 and at midnight, core curation was in progress.

A new blog post titled 'The Bright Lights' was published on the expedition blog site at <https://expedition389.wordpress.com/>.

4. Core Recovery Details

Hole	M101B
Cores recovered	27
Drilled length (Coring, m)	10.48
Drilled length (Open hole, m)	0.00
Recovered length (m)	26.44
Recovery (%)	58.56
Depth at midnight (mbsf)	N/A

5. Time Breakdown

00:00 – 11:35 Advancing borehole M101B by coring from 34.67 mbsf to TD at 45.15 mbsf.

11:35 – 13:35 Recover seafloor corer to deck

13:35 – 17:00 Remove barrels from corer, extrude and curate cores. Transit to site KOH-01A / M102

6. Hours – no contractual implications can be made from these figures

In port	0.0
Transiting	0.0
Operating	17.0
Technical downtime	7.0
Weather downtime	0.0
Mobilisation	0.0

7. Weather

Sunny, good visibility. Wave heights of 1.4 – 3.1 m and swell 0.6– 1.2 m; wind direction E to ENE at 8 – 15 kts, gusting 10 - 20 kts; Temperature 24 - 26°C.

8. Planned Activity for the next 24 hours

- Coring operations at location KOH-01A.
- Weekly safety meeting



9. Health and Safety and Environmental

- Toolbox talks at 11:30 and 23:30 for all on shift. EPM and Ops Manager attended Contractor Toolbox talk at 11.45 and EPM at 23:50. Information disseminated to remainder of Science Party.

10. Photo(s) of the day



The first time Expedition 389 has captured the contact representing the initiation of reef growth on basement!
From left to right: Luzie Schnieders and Jody Webster. Photo by HannahGrant@ECORD_IODP.