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

27th October 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)

1. Location at 24:00 Position: 20°03.9097'N, 156°16.017'W Water Depth: ~ 1235 m

2. Operations Report

Borehole M109A was spudded in and finished today. Unfortunately the borehole was terminated early due to a corer malfunction. The seafloor corer was then recovered to deck where repairs commenced immediately. Core barrels were recovered from the magazines later than expected and curatorial activities continued past midnight. Repairs to the corer were extensive as a fault with the telemetry was noted which also required this to be investigated before a launch and wet test could be run just before midnight.

3. Science Report

MSCL logging and lithological descriptions of M108B were complete.

A new blog post titled 'Sedimentology and core description: a conversation with Youri Hamon' was published on the Expedition blog site at https://expedition389.wordpress.com/.

4. Core Recovery Details

Hole	M109A
Cores recovered	12
Drilled length (Coring, m)	4.62
Drilled length (Open hole, m)	4.62
Recovered length (m)	N/A
Recovery (%)	N/A
Depth at midnight (mbsf)	N/A

5. Time Breakdown

00:00 - 16:28 Advance borehole M109A to 4.62 mbsf.

16:28 - 20:30 Seafloor corer recovered to deck: maintenance & repairs commenced

20:30 – 21:30 Core barrels removed from corer.

21:30 – 24:00 Continue with repairs to corer including launch with wet tests.

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

In port	0.0
Transiting	0.0
Operating	14.18
Downtime	9.82
Weather downtime	0.0
Mobilisation	0.0

7. Weather

Mostly sunny with good visibility. Wave heights of 0.1 - 0.9 m and swell 0.2 - 0.7 m; wind direction variable at 2 - 8 kts, gusting 5 - 12 kts; Temperature 25 - 26°C.

8. Planned Activity for the next 24 hours

• Transit to and commencement of coring operations at KAW-03C.

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 Physical Properties Team at shift changeover. From left to right: Stephan Jorry, Brian Boston, Andrew McIntyre, and Marisa Rydzy. Photo by HannahGrant@ECORD_IODP.