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



18th October 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)

1. Location at 24:00

Position: 18°51.398'N, 155°41.295'W

Water Depth: ~ 149 m

2. Operations Report

Having arrived on location KAL-01A yesterday evening and found our planned site was not suitable to core, today we continued by "bumping over" to a new location which was better, and the seafloor corer was lowered to the sea bed. Coring progressed at a reasonable rate until a problem with the drive head was identified which caused the corer to be recovered to deck. The core barrels were removed from the corer, the fault was repaired and the seafloor corer deployed again. M106B was advanced by rotary coring following a wash down to 7.0 mbsf, coring continued until midnight by which time 16.13 mbsf had been achieved.



3. Science Report

Cure curation, MSCL logging and lithological descriptions were completed for M106A.

4. Core Recovery Details

Hole	M106A	M106B
Cores recovered	4	N/A
Drilled length (Coring, m)	4.76	9.26
Drilled length (Open hole, m)	0.0	6.88
Recovered length (m)	1.47	N/A
Recovery (%)	19.57	N/A
Depth at midnight (mbsf)	N/A	16.14

5. Time Breakdown

00:00 – 05:14 Advancing M106A by rotary coring. Borehole terminated at 7.41 mbsf due to drive head issue.

05:14 - 09:36 Recover corer to deck, remove core barrels and complete repairs

09:36 – 10.09 Deploy corer to sea bed and conduct sea bed visual survey.

10:09 – 24:00 Spud in and advance by wash bore to 7.0 mbsf and then rotary coring to 16.13 mbsf

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

In port	0.0
Transiting	0.0
Operating	16.22
Downtime	7.79
Weather downtime	0.0
Mobilisation	0.0

7. Weather

Partially sunny, good visibility. Wave heights of 0.8 - 1.0 m and swell 0.6 - 1.5 m; wind direction ENE to E at 14 - 19 kts, gusting 18 - 25 kts; Temperature 24 - 25°C.

8. Planned Activity for the next 24 hours

• Continue coring operations at M106.

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



Deck curation and transfer of core from split aluminum liners to plastic liners. From left to right: Patrizia Gepraegs (ESO Curator), Pankaj Khanna (Sedimentologist) and Marc Humblet (Coral Specialist). Photo by ELB@ECORD_IODP.