

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



15th September 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)

1. Location at 24:00

Position 19°56.542 N, 156°03.8506 W
Water Depth: approximately 417 m

2. Operations Report

- Coring of M98A using a series of rotary coring and wash boring through the very hard intervals. A depth of 20.1 mbsf was achieved before an Amber Alert was given due to the necessary shutting down of one of the ship engines which meant we may not be able to hold on DP. Shortly after a Red Alert was given which meant the borehole had to be abandoned.
- Due to the increasing wind and sea state, the decision to move to a more sheltered location was taken.
- The engine fault having been repaired we transited to an offset location to Site M97.



3. Science Report

Core descriptions from Hole M97B were completed by the science team. Curation was completed for Hole M98A and MSCL logging for Hole M98A was in progress.

Nancy Prouty presented her work on modern corals in the inaugural 'Science Bites' discussion group.

A new blog post titled 'Physics prevails' was uploaded to the expedition blog site at <https://expedition389.wordpress.com/>.

4. Core Recovery Details

Hole	M98A	M97C
Cores recovered	N/A	N/A
Drilled length (Coring, m)	18.53	2.0
Drilled length (Open hole, m)	N/A	N/A
Recovered length (m)	N/A	N/A
Recovery (%)	45	N/A
Depth at midnight (mbsf)	N/A	2.0

5. Time Breakdown

00:00 – 13:58 Continue coring operations in Hole M98A, Amber Alert at 13:58 due to shutting down of one of the ships engines. Casing pulled and winch switched on in readiness for recovery to deck.

14:05 – 17:50 Red light at 14:05. Recovery to deck of seafloor corer at 14:58. Barrels removed and placed on catwalk. Green light to transit back to Site M97 (KAW-04B), arrived 17:50.

21:25 – 22:25 Seafloor corer deployment at offset to location KAW-04B (Site M97).

22:25 – 24:00 Coring of Hole M97C by rotary coring.

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

In port	0.0
Transiting	1.6
Operating	21.4
Technical downtime	1.0
Weather downtime	0.0
Mobilisation	0.0

7. Weather

Mostly cloudy, low cloud and haze with limited visibility and high humidity. Wave heights of 1.2 – 1.8 m and swell 0.2 – 0.5 m; wind direction ENE to NNW at 4 – 18 kts, gusting 5 - 28 kts; Temperature 24 - 26°C.

8. Planned Activity for the next 24 hours

- Continue coring Hole M97C.

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.

10. Photo(s) of the day



Photograph by Marley Parker © ECORD_IODP. Physical Properties Specialist Brian Boston assessing cores from M97B prior to MSCL logging.