

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

11th October 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)



1. Location at 24:00

Position: 19°52.620'N, 154°56.376'W

Water Depth: ~ 404 m

2. Operations Report

We successfully completed borehole M102C with all core barrels used and a depth of 73.44 mbsf achieved. The seafloor corer was recovered to deck for some well-earned TLC having been on the sea bed for over 3 days. The cores barrels were removed from the corer and other than 3, were extracted and partially curated by midnight. Transit to HIL-05A was completed and the corer deployed at Site M103. Coring in Hole M103A progressed to 1.85 mbsf at midnight.



3. Science Report

On deck core curation of M101C was nearing completion at midnight; three core barrels were remaining for extraction.

A new blog post titled 'A Conversation with Ana Prohaska' was published on the expedition blog site at <https://expedition389.wordpress.com/>.

4. Core Recovery Details

| Hole | M102C | M103A |
|-------------------------------|-------|-------|
| Cores recovered | 33 | N/A |
| Drilled length (Coring, m) | 73.44 | 1.85 |
| Drilled length (Open hole, m) | 20.00 | N/A |
| Recovered length (m) | 42.32 | N/A |
| Recovery (%) | 79 | N/A |
| Depth at midnight (mbsf) | N/A | 1.85 |

5. Time Breakdown

00:00 – 13:00 Advancing M102C from 66.42 mbsf to the final depth of 73.44 mbsf, recovery to deck

13:00 – 19:00 Transit to HIL-05A and deck operations

19:00 – 21:42 Prepare seafloor corer for deployment

21:42 – 22:48 Seafloor corer deployment and landing

22:48 – 00:00 Advance Hole M103A by rotary coring to 1.85 mbsf

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

| | |
|--------------------|-------|
| In port | 0.0 |
| Transiting | 6.57 |
| Operating | 17.43 |
| Technical downtime | 0.0 |
| Weather downtime | 0.0 |
| Mobilisation | 0.0 |

7. Weather

Partially cloudy, fair visibility. Wave heights of 1.2 – 1.3 m and swell 0.8 – 1.0 m; wind direction NW to SW at 4 – 10 kts, gusting 8 - 15 kts; Temperature 24 - 25°C.

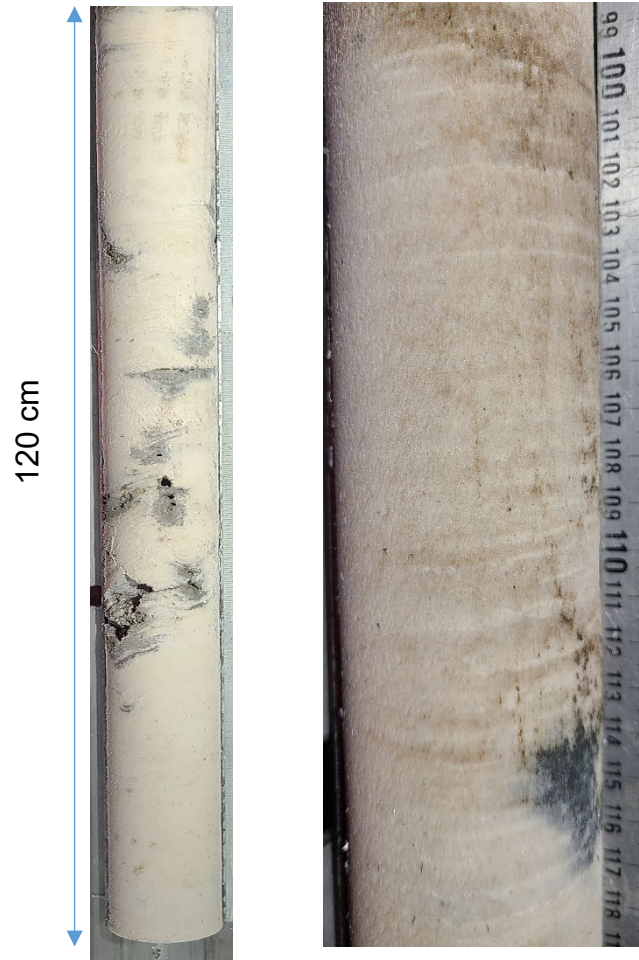
8. Planned Activity for the next 24 hours

- Continue coring operations at M103A.

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



Growth banding excerpt from a massive 120 m+ *Porites* fossil coral (left image) recovered from Hole M102C.
Photos by YouriHamon@ECORD_IODP.