

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



24<sup>th</sup> September 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)

### 1. Location at 24:00

Position 19°50.1144'N, 156°5.5463'W

Water Depth: approximately 140 m

### 2. Operations Report

Curation of cores from M99C was completed mid-morning whilst repairs to the seafloor corer were ongoing. The corer was deployed and borehole M99D was wash bored to 27.71 mbsf when a water ingress fault was detected. Tests were carried out sub sea and the location of the ingress determined. The corer was recovered to deck for a short time to allow modifications to take place. The vessel was repositioned to an offset location and coring and casing commenced on M99E progressed to 2.93 mbsf by midnight.



### 3. Science Report

Core curation, aDNA and geochronological sampling, and MSCL logging completed for Hole M99C. Lithological descriptions and sample processing for Hole M99C ongoing at midnight.

### 4. Core Recovery Details

Hole	M99C	M99D	M99E
Cores recovered	27	N/A	N/A
Drilled length (Coring, m)	38.34	N/A	N/A
Drilled length (Open hole, m)	N/A	27.71	2.93
Recovered length (m)	25.50	N/A	N/A
Recovery (%)	66.51	N/A	N/A
Depth at midnight (mbsf)	N/A	N/A	2.93

### 5. Time Breakdown

00:00 – 02:30 Prepare seafloor corer for deployment for KAW-02Cd. Continue core extraction from barrels Hole M99C (final curation details above, coring completed on 23<sup>rd</sup> September).  
02:30 – 03:15 Launch and landing of seafloor corer.  
03:15 – 04:00 Start wash bore KAW-02Cd (M99D). Core extraction from barrels for Hole M99C completed.  
04:00 – 09:30 Continue wash bore M99D. Curation of cores from Hole M99C.  
09:30 – 15:25 Wash bore M99D to 27.71 mbsf, technical problem identified on seafloor corer.  
15:25 – 16:30 Hole M99D abandoned, seafloor corer recovery.  
16:30 – 20:00 Move to KAW-02Ce and seafloor corer maintenance.  
20:00 – 21:30 Seafloor corer launch and landing.  
21:30 – 24:00 Start coring KAW-02Ce (M99E).

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

In port	0.0
Transiting	0.0
Operating	4.08
Technical downtime	19.92
Weather downtime	0.0
Mobilisation	0.0

### 7. Weather

Mostly cloudy, good visibility, high humidity. Wave heights of 0.8 – 0.9 m and swell 0.5 m; wind direction NNE to W at 4 – 10 kts, gusting 7 - 12 kts; Temperature 24 - 25°C.

#### 8. Planned Activity for the next 24 hours

- Continue coring operations in Hole M99E.

#### 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.
- Weekly safety meeting at 11:00 for oncoming day shift and 13:00 for the night shift.

#### 10. Photo(s) of the day



Sedimentologist Pankaj Khanna hosting a live webinar and tour of the ESO Main Street on the 23<sup>rd</sup> September. From L-R: Director Marc Humblet, Interviewee Patrizia Gepreags and Host Pankaj Khanna. Photo by ELB@ECORD\_IODP.