Daily Drilling and Scientific Report for IODP Expedition 357 Atlantis Massif Serpentinization and Life, 2015



16th Nov 00:00 - 24:00 Local Time (-2 GMT)

1. Location

30° 7.621' N 42° 7.065' W IODP-MSP M0076B Prospectus borehole AM-11A Water Depth: 768m

2. Science Report

RD2 drilling at M0076B (proposal site AM-11) continued. By the end of the day, the drill had penetrated 11.154m and started cutting core 8. Additional excursions in methane and oxidation-reduction potential signals on the rock drill mounted sensors package were observed during drilling, particularly around 10.3m penetration. When correlated with lithological variations in recovered cores, these variations may provide information about gas-producing reactions in the seafloor. The science party continued with shipboard analyses of tracer and gas concentrations in samples as well as preliminary visual core description.

3. Core Recovery Details

N/A

4. Weather

Wind WNW becoming NE, 12 knots increasing to 18 before dropping back to 12. Fine and clear with passing squalls. 6/8 cloud cover becoming patchy by evening. Maximum temperature of 24.4°C. Next 24 hours: Monitoring wind and swell. Cloudy with scattered showers expected due to a front passing through.

5. Planned Activity for the next 24 hours

Continue coring operations at AM-11A (M0076B)

6. Health and Safety and Environmental

N/A

7. Photos of the day



Local wildlife posing for a subsea photograph. IainPheasant@ECORD_IODP



Image from one of the subsea cameras of the drill rod at the breakout table. lainPheasant@ECORD_IODP