Daily Drilling and Scientific Report for IODP Expedition 325, Great Barrier Reef Environmental Change

2nd March 2010 (0000 - 2400 local time)

1. Location
HYD_01C Site 11 (M0036A)

Time zone: Brisbane Australia Time, UTC +10

Position at midnight (drill string):
Latitude: 19° 40.34388 S
Longitude: 150° 14.63781 E

2. Activity summary
Coring operations were completed at M0036A and downhole wireline logging was conducted.

3. Science report
Cores 17-18R advanced to 26.5mbsf and were again characterised by low recoveries. They were comprised of massive coral framestones (ie. Acropora dominates) but with abundant microbialites. Core 19R continued to 28mbsf and recovered 45 cm of broken framestone pieces. The core catcher was composed of encrusting corals (ie. Turbinaria, Montipora) and large fragments of a coarse, dark grey grainstone/packstone. This material is well lithified and composed of Halimeda and benthic forams, and the surface is extensively bored and encrusted by serpulids. The depth of this horizon is somewhere between 26.6 - 28mbsf (similar to M0035A) and similar to M0035A likely represents older Pleistocene deposits. Core 20R recovered the same material. Core 21R went a further 1.5 m to 31mbsf and recovered 50 cm un lithified light grey carbonate sediments. Microbiology and pore water samples taken from these sediments. Core 22R advanced 3 m, but unstable hole conditions (likely related to un lithified sands) made further recovery impossible. Coring of M0036A finished at a depth of 34mbsf and preparation for logging commenced.

4. Core recovery details

<table>
<thead>
<tr>
<th>Hole</th>
<th>LAT water depth</th>
<th>Cores recovered</th>
<th>Drilled length</th>
<th>Recovered length</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0036A</td>
<td>98.89m</td>
<td>6</td>
<td>10.5m</td>
<td>1.89m</td>
</tr>
</tbody>
</table>
Recovery 18%
Depth at midnight 34mbsf (final depth)

5. Weather
Sea state: slight becoming moderate (3 - 4) with swell of 0.5 – 2 m; wind direction NNE swinging NNW force 4 increasing to 5 (17 - 2 knots); partly cloudy becoming overcast; 29°C.

Next 24 hrs: Sea state moderate with swell of 1.2 – 1.7m; wind direction SW/NW 10/15 knots, tending S/SE 10/15 knots during the day; SE winds reaching 15/20 knots in the afternoon and evening; showers and possible thunderstorms.