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

27th February 2010 (0000-2400, local time)

1. Location

HYD_01C Site 11 (M0035A)

Time zone: Brisbane Australia Time, UTC +10

Position at midnight:
Latitude: 19° 40.45 S
Longitude: 150° 14.65 E

2. Activity summary

Coring operations recommenced at HYD_01C Site 11 (M0035A) following improvement in the weather. Slow progress with coring was made due to electrical problems and drilling issues.

3. Science report

Core 1R rubble included bryozone, bivalve, coralline algae and *Halimeda*, believed to mostly come from the seafloor. Core 2R was also rubble, and consisted of the same bioclasts. The core catcher and material from the bottom of section 1 of Core 3R contained massive *Acropora* and reef framework. A shallow water facies seemed to be starting from this core. Pieces of branching corals were found in Core 4R, and Giant Clam (*Tridacna gigas*) fragments indicated a shallow water environment. Core 5R recovered 1.1m that consisted of fragmented framestone. It contained branching corals, *Halimeda*, and coralline algae. Core 6R advanced to 8.58 mbsf and recovered ~ 40 cm of broken coral framestone composed of massive *Acropora palifera/cuneata* with thin microbialite crusts.

4. Core recovery details

Hole	M0035A
Cores recovered	6
Drilled length	8.58m
Recovery length	2.21m
Recover	25.76%
Depth at midnight	8.58m

5. Weather
Sea state: rough (5) decreasing to moderate (4) with swell of 2 - 3.5 decreasing to 1.5 - 2 m; wind direction E to ESE force 6 (22 – 27 kts) decreasing force 4 (11 - 16 kts); overcast with periods of heavy rain; 29°C.

Next 24 hrs: Sea state slight with swell of 1.2 – 1.5m; wind direction SE/E 10/15 kts; scattered showers and isolated thunderstorms.