



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

28th February 2010 (0000 - 2400 local time)

1. Location

HYD_01C Site 11 (M0035A)

Time zone: Brisbane Australia Time, UTC +10

Position at midnight (drill string):

Latitude: 19° 40.3582 S

Longitude: 150° 14.63005 E

2. Activity summary

Continued coring operations at HYD_01C Site 11 (M0035A). Progress was slow during the morning due to equipment problems, but maintained a steady pace for the remainder of the day.

3. Science report

Core 7R recovered only broken fragments of coralgal-microbialite framestones. Core 8R advanced to 11.58 mbsf and recovered ~ 1 m of continuous coral framestones with thick crusts of coralline algae (encrusted by vermitids) and microbialite. Core 9R advanced another 1 m and once again recovered ~ 50 cm of coral framestones. Core 10R contained coral framestone, which was continued in Core 11R, consisting of several shallow water corals including *Acropora* sp., *Pocillopora* sp. and *Tubipora* sp. Large pieces of massive *Acropora* sp. were recovered, that were coated with coralline algae. Core 12R advanced to 16.48mbsf and consisted of framestone and sands. Packstone was found in the core catcher of Core 13R, with framestones in the main section, which included massive coral. Framestones and massive corals continued in Core 14R. Massive corals with lime pebbles were embedded in Core 15R, in a framestone facies. Cores 16R and 17R were also framestone. Well preserved Faviid was found in section 1 of Core 16R. Core 17R seemed to contain massive microbialite + algae crusts. Core 18R was still framestone. However, the colour of the corals was darker than in earlier sections. Also dominant microbialite structures were seen.

4. Core recovery details

Hole	M0035A
Cores recovered	12

Drilled length	16.8m
Recovered length	7.6m
Recovery	45.24%
Depth at midnight	25.38mbsf

5. Weather

Sea state: moderate (4) with swell of 1.25 – 2.5 m; wind direction E swinging NNW and back to E force 4 (11 - 16 knots); predominantly overcast with periods of heavy rain; 29°C.

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