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

3rd March 2010 (0000 - 2400 local time)

1. Location

HYD_01C Site 9 (M0037A) and HYD_01C Site 8 (M0038A)

Time zone: Brisbane Australia Time, UTC +10

Position at midnight (drill string):
Latitude: 19° 40.24497 S
Longitude: 150° 14.77592 E

2. Activity summary

The vessel completed wireline logging operations at M0036A and transited to M0037A, where coring operations commenced.

3. Science report

Core 1R (M0037A) recovered a 1.83m section consisting of sand (including the CC), lime pebbles, debris of *Halimeda*, encrusting forams, bryozone, and echinoids. Lime pebbles continuously appeared in Core 2R, whose core catcher contained pieces of cemented limestone. Core 3R had zero recovery. Core 4R advanced to 6.0mbsf and obtained well cemented graystone. Cores 5R and 6R consisted of lime pebbles with fragments of small branching corals, forams, molluscs and *Halimeda*. Cores 7R and 8R were still mixtures of lime pebbles and gravels. No planktonic forams had been observed so far. Lime pebbles and sand continued in Core 9R, but with less *Halimeda* fragments and more benthic forams. Core 10R recovered 1.5 m of sediments, again sand and gravels with forams. Lime pebbles and gravels continued to occur through Cores 11R - 13R, to a depth of 19.5mbsf. The lithologies likely represent slope deposits sourced from upslope.

4. Core recovery details

Hole	M0037A
LAT water depth	122.29m
Cores recovered	13
Drilled length	19.5m
Recovered length	7.39m
Recovery	37.9%
Depth at midnight	19.5mbsf

5. Weather
Sea state: moderate becoming slight (4 - 3) with swell of <1.25 m; wind direction NW swinging SE force 5 decreasing to 3 (7 - 10 knots) by late afternoon; partly cloudy; 30°C.

Next 24 hrs: Sea state slight with swell of 1.2m; wind direction S/SE 10/15 knots; showers and possible thunderstorms.