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

10th March 2010 (0000 - 2400 local time)

1. Location

HYD_02A Site 12 (M0043A) and HYD_02A Site 8 (M0044A and M0045A)

Time zone: Brisbane Australia Time, UTC +10

Position at midnight (drill string):
Latitude: 19° 47.90526 S
Longitude: 150° 28.77651 E

2. Activity summary

Following completion of coring operations at M0043A, the post coring camera survey was conducted before moving to HYD_02A Site 8 (M0044A) and commencing operations. M0044A was terminated at 11mbsf due to a problem with the overshot wire. The vessel moved to M0045A (whilst live camera footage was viewed) and commenced operations. A further small shift in position was required after the first attempt failed to penetrate due to the sea bed topography.

3. Science report

Core 1R (M0044A) penetrated 2.5mbsf and recovered broken coral fragments. Core 2R advanced to 4.0mbsf with only a well preserved corymbose (branching) *Acropora* jammed in the core catcher. Coral framestone continued until Core 8R, with poor recovery. Core 9R was the final core of M0044A, containing coral framestone with massive tabular *Acropora sp*.

The vessel then moved approximately 5 m away to recommence coring. Several attempts were made, however Cores 1R - 4R all had zero recovery.

4. Core recovery details

Hole	M0044A	M0045A
LAT water depth	106.41m	106.6m
Cores recovered	9	9
Drilled length	11m	14.6m
Recovered length	1.67m	0m
Recovery	15.18%	0%
Depth at midnight	11mbsf (final depth)	14.6mbsf (final depth)

5. Weather

Sea state: moderate (4) with swell of 1.25 – 2.5 m; wind direction SE occasionally ESE force 6 (22-27 knots); partly cloudy becoming periodically overcast with showers; 28°C.

Next 24 hrs: Sea state moderate to rough with swell of 2.5 – 3 m in open waters; wind direction SE 20 - 25 knots, increasing to 25 - 33 knots by the evening; scattered showers.