



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

12th March 2010 (0000 - 2400 local time)

1. Location

HYD_02A Site 8 (M0045A&46A) and Site 12 (M0047A).

Time zone: Brisbane Australia Time, UTC +10

Position at midnight (transit):

Latitude: 20° 38.2 S

Longitude: 149° 47.11 E

2. Activity summary

M0047A was completed to a depth of 33.2m. The vessel then moved to M0048A where a camera survey took place and coring operations commenced. However, operations had to be aborted due to deteriorating weather. The vessel moved into Hydrographer's Passage to await a supply boat, and then began to transit northwards, monitoring weather conditions at all three locations.

3. Science report

Core 13R (M0047A) advanced to 33.2mbsf and recovered only broken coral fragments and carbonate sands.

Core 1R (M0048A) recovered about 30 cm of disturbed carbonate sediments and broken fragments of coralgal-microbialite framestones. Coral composed of Pocilloporids and Faviids. Cores 2R-3R advanced to 6mbsf and recovered similar lithologies – broken and ground coral framestones composed of Acropora, Faviids and Pocilloporids with carbonate sands and gravels. Core 4R recovered no material due to poor drilling conditions related to the weather.

4. Core recovery details

Hole	M0047A	M0048A
LAT water depth	99m	97m
Cores recovered	1	4
Drilled length	1.5m	7.1m
Recovered length	0.31m	0.69m
Recovery	20.6%	9.72%
Depth at midnight	33.2mbsf (final depth)	7.1mbsf (final depth)

5. Weather

Sea state: rough (5) becoming very rough (6) with swell of ~4.5 m offshore, dropping to moderate to rough (2.5 – 4m) inside Hydrographer's Passage; wind direction SE force 7 (28-33 knots); mainly overcast with sunny intervals; periodic heavy squally showers; 28°C.

Next 24 hrs: Sea state rough with swell of 3.5 m in open waters; wind direction SE 25 – 35 reaching 30 – 40 knots offshore; scattered squally showers. Strong wind warning is in place.