



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

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

1. Location

NOG_01B Site 6

Time zone: Brisbane Australia Time, UTC +10

Position at midnight (on station M0053A):

Latitude: 17° 06.07036 S

Longitude: 146° 34.57966 E

2. Activity summary

Coring operations continued at NOG_01B Site 6, with multiple entries of M0052 due to technical and weather related issues. After the core barrel became stuck in the BHA, requiring the pipe to be tripped to recover it, the vessel moved onto site M0053A, where preparations for HQ coring began. However, it was decided to return to API coring after problems with the bumper sub during the set-up.

3. Science report

Core 1X (M0052A) advanced to 1.4 mbsf and recovered ~1 m of light grey carbonate sands with visible benthic forams and Halimeda. Core 1R (M0052B) recovered similar carbonate sediments but this time with several broken coral pieces (*Acropora*, *Pocillopora*, *Pachyseris*, *Favid*, *Seriatopora*) down to 3 mbsf. Core 2R advanced to 4.5 mbsf but recovered no material. Core 3R continued to 5.4 mbsf but recovered only 3 cm of carbonate sediments and broken coral fragments. Again there was no recovery from Core 4R, and M0052B had to be abandoned at 6.9 mbsf.

M0052C was open holed down to 6.9 mbsf. Core 1R core catcher material consisted of sediments with rubble including corals. Core 2R had no recovery.

4. Core recovery details

Hole	M0052A	M0052B	M0052C
LAT water depth	97.6m	97.6m	97.6m
Cores recovered	1X	1R – 4R	1R – 2R
Drilled length	1.4m	6.9m	1.9m
Recovered length	1.3m	0.46m	0.1m
Recovery	92.85%	6.67%	5.26%

Depth at midnight	1.4mbsf (final depth)	6.9mbsf(final depth)	8.8mbsf(final depth)
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5. Weather

Sea state: rough (5) with a swell of 2.5 – 4m; wind direction ESE force 7 (28 – 33 kts) dropping to force 6 (22 – 27 kts); overcast with periods of heavy rain and sunny spells around early afternoon; 29°C.

Next 24 hrs: Sea state moderate with swell of 1.8 m in open waters; wind direction SE 15 – 20 kts; rain and isolated thunderstorms. Next 24 hrs: Sea state moderate with swell of 2.2 m in open waters; wind direction SE 20 – 25 knots; showers and isolated thunderstorms.