Expedition Log for IODP Expedition 325 Week 2 Great Barrier Reef Environmental Changes

23<sup>rd</sup> February 2010

## Weather and Wildlife by Sophie Green

So with many of us being British, it was never going to be long before we reported on the weather! After leaving the UK firmly in the grip of winter it came as something as a shock to arrive in Tropical Queensland to humid conditions and 30 degree heat (not that I'm complaining!). The weather has been more changeable than you might expect and we've experienced a range of conditions, although as yet, snow isn't one of them!

We have arrived pretty much in the middle of cyclone season which lasts from November to April. Cyclones form from low pressure systems over warm waters (>26 degrees). They are characterised by spiralling high winds (clockwise in the Southern hemisphere), thunderstorms and heavy rains, and may produce storm surges. So far this hurricane season there have been two cyclones that have affected Western Australia; *Laurence* and *Magda* both reaching category 5 status but weakening as they moved inland. The Australian Bureau of Meteorology predicts that the tropical cyclone impact on the eastern coast this season will be reduced, due to a comparatively weak El Nino event (<a href="www.bom.gov.au/weather/qld/cyclone/seasonal">www.bom.gov.au/weather/qld/cyclone/seasonal</a>). So far we've been lucky and the worst we've seen is a half hour down pour. Weather systems are constantly monitored to give us the longest possible warning period.

Changes in the weather can be spotted pretty far off. On a couple of evenings we've seen ominous convective cumulous clouds on the horizon with significant vertical extent, and feared thunderstorms were headed our way. However, whilst we've seen some heavy rain we've yet to see a proper thunderstorm.



D\_Potts@ECORD\_IODP; Convection clouds building



A\_Puga-Bernabeu@ECORD\_IODP; Sunrise over the Coral Sea

Other mornings we wake up to sunny skies with a few clouds and sun streaming in. We've even got some sun-loungers and some of us can find time for a spot of sunbathing, although in the fierce sun this is often limited to a quick 10 minutes!



M\_Mowat@ECORD\_IODP\_IMG\_5236. Sunny skies as we assemble at the muster station for a drill



C\_Cotterill@ECORD\_IODP; Sun loungers come out when off shift

Those of us who are lucky (?!) enough to be awake at about 6am have seen some stunning sunrises and rainbows. So far the sunsets have been largely obscured by cloud. Sunset also coincides with meal time so perhaps this explains why we haven't seen that many!



C\_Cotterill@ECORD\_IOD P; Another sunrise vision in pastel



C\_Cotterill@ECORD\_IOD
P; Pastels turn fiery
orange as the sun appears



C\_Cotterill@ECORD\_IOD P; Rainbows often follow the sunrise

Wildlife wise we haven't seen that much. We've had a few sightings of distant Minke Whales and some dolphins closer to the ship. When we see marine mammals, the

binoculars come out and the trained MMO's on board fill out sighting forms detailing the animals' behaviour. On the transits we often see flying fish leaping out of our bow wave. During operations at one site a sea snake was spotted at the bow, later reappearing inside the moon pool, giving one of the drillers a shock when the seabed frame was lifted up! We hope that wildlife sightings will increase when we work closer to the modern reefs.



D\_Potts@ECORD\_IODP; Seasnake



A\_Suzuki@ECORD\_IODP; There is a whale in this picture, honest!