

## **Expedition Log for IODP Expedition 325**

### **Week 4**

### **Great Barrier Reef Environmental Changes**

**6<sup>th</sup> March 2010**

#### **Loggers' Delight**

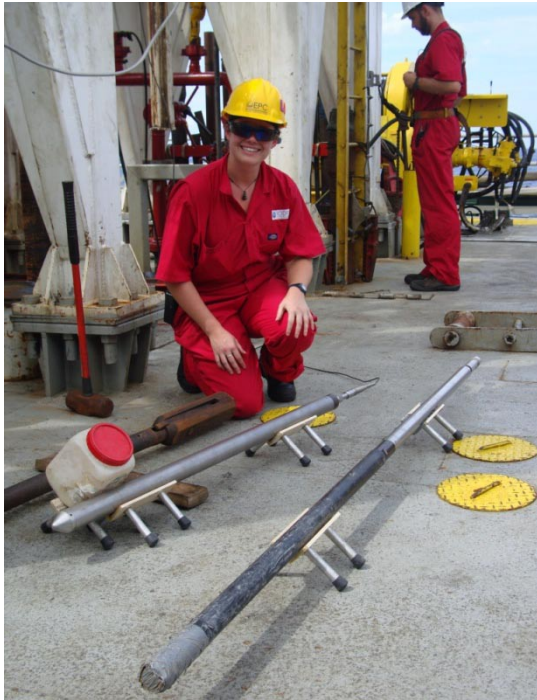
We (Richard and Simon, the EPC logging engineers from Montpellier) are onboard the Greatship Maya to perform the wireline borehole geophysics (logging). Our work consists of sending a suite of probes down the cored borehole to measure the numerous physical properties of the continental shelf below our feet. The probes each measure a different property of the rock, for example electrical resistivity, acoustic properties, imagery, natural radioactivity, magnetic susceptibility and borehole geometry.



C\_Cotterill@ECORD\_IODP; Simon prepares to lower a probe down the drill pipe

Thanks to all of these measurements, the information we gather will help in further characterising and understanding each of the geological horizons encountered down the entire length of the borehole.

Our job is two fold. We carry out our observations with both a technical and scientific eye. Whilst operating the winch, not only do we have to make sure that all is functioning properly mechanically and electronically, but more importantly we have to verify and validate the quality of the data as the measurement is made.

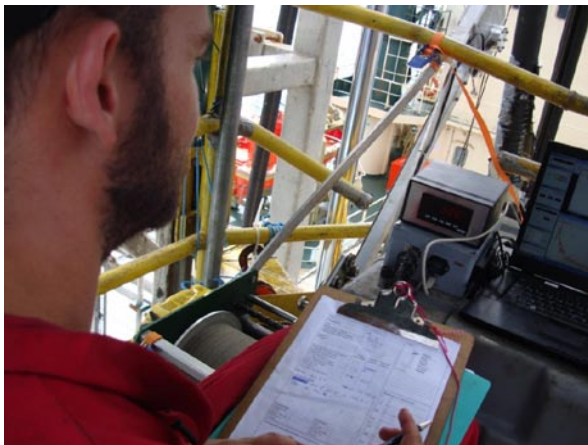


D\_Smith@ECORD\_IODP; Louise Anderson, Petrophysics Staff Scientist, calibrates one of the probes prior to deployment



D\_Smith@ECORD\_IODP; Graham Tulloch and Sally Morgan preparing one of the probes on the drill floor

The logging set up, on this expedition, toys with the extreme. Perched up at around 5m high on the rooster box, we have to not only evolve in a confined area for around 12 hours, but also deal with the fact that the entire ship is moving up and down around us with the ocean swell.



D\_Smith@ECORD\_IODP; Working in cramped quarters for a 12 hour shift



D\_Smith@ECORD\_IODP; View down to the drill floor from the rooster box

Deployment becomes an operation all of its own – having to hoist up the winch, laptop, probes....and the all important chair!



D\_Smith@ECORD\_IODP; Sending a probe up to the rooster box, with safety tag line attached