**Expedition Log for IODP Expedition 325**
**Week 1**
**Great Barrier Reef Environmental Changes**

**18th February 2010**

**Curation by Alex Wuelbers**

S_Green@ECORD/IODP – The curators palace!

This is what I call home, office and lab for the time offshore. This container has sailed on many Expeditions before coming to the Great Barrier Reef, including the North Pole as well as the tropical reefs off Tahiti and we have become close friends; it has put some patina on, but I like it very much in here - as long as the air-conditioning is working! Sometimes it's a bit leaky and we have just installed an in-house drainage system, which works well as long we don't forget to empty the little bucket once in a while.

The main purpose of this lab container is to curate the cores the drillers "deliver" to us. There are two curators on board the *Greatship Maya*: Christian and me (Alex), both from the MARUM Institute at the University of Bremen, Germany.

M_Mowat@ECORD/IODP – Alex Wülbers entering the core/section information into the DIS

C_Cotterill@ECORD/IODP - Christian collects the core from the drilling deck

Curation means we have to make sure that all the material that is brought up on deck from under the sea bed is correctly labelled and marked (top/bottom direction!). Liners are permanently engraved and all data are entered into the Expedition's database which includes drilling parameters and section ID's. We are also responsible for all the shipboard sampling. We have to make sure the cores and the majority of the samples are stored at +4º C in the reefer container. Other samples for geochemistry and microbiology are stored at temperatures between -20º C and -80ºC in special refrigerators in order to preserve them for onshore analyses.

The curation container is THE place to be when core sections arrive on deck! Everybody gathers together once the core sections are onboard – we are the (market) place where all scientists on shift can have a first look at the "never seen before" material from under the sea bed. Discussions start and sometimes it's hard to do my job with so many people around in such a small place, before the next core comes up….

By the time we sail a lot of work has already been done at home in Bremen, long before any offshore work has started. We have to make sure all the consumables, from pens to sample bags and label-printers; sampling tools and microscopes, are shipped to the drill ship.

All the sample requests from the scientists that are offshore and those that will participate in the onshore phase later have to be coordinated. All tools and instruments they need have to be on board in one of the many Expedition boxes we

have packed.  It's a job for someone who likes to be organised and plan well ahead – even for the unforeseen situations. What you don't bring, you don't have! – There is no store or shop next door - but this is something everybody has to deal with here, ship's crew as well as the drillers.

At the end of the day, it's a very interesting job we are doing not only out here at sea but once we are back onshore. We are looking forward to meeting each other again back in Bremen for the onshore phase and more new adventures!

C_Cotterill@ECORD_IODP – Alex filming coring operations on a sunny afternoon