

Onshore Science Party Log for IODP Expedition 325

Great Barrier Reef Environmental Changes

13th July 2010

Onshore Science Party by Carol Cotterill

The Onshore Science Party for Expedition 325 commenced on Friday July 2nd at the IODP Core Repository in Bremen, Germany. Here, ESO Staff and GBR Scientists who took part in the offshore operation were reunited with the cores after their long journey back from the Great Barrier Reef. For the other members of the Science Party and IODP/ESO staff (incl. from BGS, Universities of Aachen, Bremen (BCR and MARUM), Leicester, and Montpellier) this was their first chance to see the cores and catch up with all the offshore adventures!

The Science Party is composed of specialists from different scientific areas. These include paleoclimatologists, coral and coralline algae specialists, geochemists, dating specialists, sedimentologists, physical properties specialists, paleomagnetists,and that's not to mention the technicians, engineers, catering helpers and core splitters! There are 67 of us in total taking over the IODP lab and office spaces here in the MARUM building on the University of Bremen campus!

Each group has specific sample requirements to enable them to achieve their objectives. The first task was to decide where in the core the samples should be taken and how the core should be divided up. After much discussion between the Sample Allocation Committee (Co-Chief Scientists, Staff Scientist, and IODP Curator (also the ESO BCR Manager!)) and the Science Party, the decisions were made, collaborations established, and it was time to start splitting the cores.

The cores are split to allow detailed visual description, including measuring of physical properties (including colour reflectance, *P*-wave velocity), analysis of pore water composition, mineralogy, and magnetic properties, and sampling including for the scientists' home labs. Half of the core is kept as an archive record. ESO and the scientists work in two shifts spanning 0730 to 2230. A scientist's shift is split between seven hours working on the core and a three hour period of report writing. These shifts are not quite as long as the shifts we worked offshore and give us some time to get out and about in Bremen. After missing out on the good weather in Australia we are finally getting some sunshine in 'tropical' Bremen!



C_Cotterill@ECORD_IODP: photography of massive corals



C_Cotterill@ECORD_IODP: cores laid out in the reefer



C_Cotterill@ECORD_IODP: coral description



C_Cotterill@ECORD_IODP: digital line scanning



C_Cotterill@ECORD_IODP: sampling the cores



C_Cotterill@ECORD_IODP: coral description



C_Cotterill@ECORD_IODP: cores discussions!