METEOR Reise M59, Fahrtabschnitt 1 Ponta Delgada – Reykjavik 1.Wochenbericht, 27. Juni – 6. Juli 2003



The advance and main parties for METEOR cruise M59 leg 1 arrived according to schedule at Ponta Delgada, Azores Islands on June the 24<sup>th</sup> and 25<sup>th</sup> respectively. Containers were smoothly loaded and partly emptied during June 25<sup>th</sup> and 26<sup>th</sup>. All scientific equipment was made sea safe in late afternoon of June 26<sup>th</sup>. During the afternoon of June 26<sup>th</sup> the scientific crew of 21 persons were given a safety on board introduction by a crew-member of METEOR. Five different nationalities are represented on this leg of M59: Swedish, Finnish, British, German and Danish scientists from a number of different institutes in Europe. For more information see expedition folder on the homepage for METEOR at the Institut für Meereskunde Universität Hamburg (www.ifm.uni-hamburg.de).

FS METEOR left the port of Ponta Delgada according to plan on Friday morning, June 27<sup>th</sup> at 1000 marking the start of the programme: Circulation and Variability in the subpolar North Atlantic (Zirkulation und Variabilität im subpolaren Nordatlantik).

Course was set for the first of the three Bundesamt für Seeschiffahrt und Hydrographie, Hamburg (BSH) moorings (K-ost). Weather and sea state were fine during the afternoon of June 27<sup>th</sup> and the estimated time of arrival (ETA) was set to 1600 on June 29th. During the second day winds increased to strong gales (>20 m/s) from the Northeast, these conditions continued into early evening of June 29th. During the night of June 30th wind and wave conditions improved so much that recovery of K-ost commenced at 0600. Due to mooring material defects two releases and one current meter were lost during the recovery operation. After a calibration CTD station the mooring Kost was re-deployed and METEOR headed for the next BSH mooring (K1) at 1440. Mooring work at K1 started Tuesday morning July 1<sup>st</sup> at 0800. Recovery, calibration CTD station and redeployment were completed at 1721 when the upper float of the mooring was observed to submerge. In very fine weather, course was set for the third and final BSH mooring K3. Meteor arrived at the mooring site K3 on the morning of Wednesday July 2<sup>nd</sup> at 0800. Several attempts were made to recover mooring K3 without luck. Analysis of the response of the acoustic releases suggests that the releases are lying on the bottom without any instruments or buoyancy attached above. Recovery attempts were given up in the afternoon and a new K3 mooring was deployed 6 nm Northeast of the old site. The deployment finished at 1851 and course

was set for the first EU ASOF-W (Arctic/Subarctic Ocean Fluxes – West) CTD station located 860 nm to the North in the Irminger Sea. ETA is set to Saturday July 5<sup>th</sup> at 1800.

During the three days of steaming towards the next station weather conditions were perfect for whale and dolphin watching and many encounters were made, even a large shark was observed. When passing the Charlie Gibbs Fracture Zone the colour of the sea changed from azure to Tyrian purple.

Meteor arrived at the first ASOF-W station (59°28N, 37°30W) on Saturday July 5<sup>th</sup> at 1800 began the CTD section toward Greenland and Cape Farvel (see cruise track below). At the time of writing we are continuing to work our way towards Greenland and if the weather (~11 m/s from the North) allows we will finish the section some time Monday morning.

All on board are fine and they send their best wishes to their loved ones back home.

The Figures below show the cruise track of RV METEOR from June 27<sup>th</sup> to July 6<sup>th</sup> (Figure by RV METEOR) and the surface float of BSH mooring K1 during recovery, the instrument in the sphere is an Acoustic Doppler Current Profiler or ADCP (Photo by H. Sander).







