

*METEOR Reise M59, Fahrtabschnitt 1
Ponta Delgada – Reykjavik
2. Wochenbericht, 7. Juli – 13. Juli 2003*



Since our report of last week we have been working hard under unfavourable weather conditions. For the majority of the time since last Sunday July 6th winds have been in the range 13 to 22 m/s from the north to the north-east. One day (from noon July 9th to noon July 10th) was used to ride a strong gale (winds >20 m/s) out. Had it not been for the crew and good sea keeping of RV METEOR half of the work done this week would not have been. The scientific party is also taking the weather surprising stoically.

The CTD (Conductivity (or salinity), Temperature and Depth) section which was started Saturday July 5th was completed on Monday morning July 7th with a CTD station 6 nautical miles (nm) from the coast of Greenland. There was no sea ice in the area and only very few icebergs were in sight. Course was then set for the first of two EU ASOF-W Tube moorings around 189 nm away (63°N, 41°W). After only a few tenths of a nautical mile, winds increased to 17-20 m/s from the north-east slowing down the advance of RV METEOR to 6 to 8 knots.

Mooring work at Tube 04 started on Tuesday morning July 8th at 0630. Due to sea ice conditions last year Tube 04 had not been recovered as planned last year this mooring has thus been in the water for about 2 years. This year Tube 04 was released and recovered without problems. Following recovery, a calibration CTD station was performed and the mooring was redeployed as Tube 11 and completed at 1539 when the 50 meter long tube was observed to submerge. During the operation we had winds in the range of 15 to 17 m/s from north-east with an acceptable sea state. All three recovered microcats contained data for the complete deployment period i.e. ~ 2 years of data. The microcats used in Tube 04 were re-used in Tube 11 and a lot of time was required to make the microcats ready for deployment. Arrangements were made to reduce the time between recovery of Tube 08 and deployment of Tube 12. Recovery of Tube 08 started at 1649 and deployment of Tube 12 was completed at 1949 when the tube submerged. Course was set for the EU ASOF-W section 3 and the first of nine moorings to be recovered along this section. The plan was to start recovery early morning Wednesday July 9th and continue recovery work all day until all moorings were on board. On leaving the tube mooring site winds were still in the range of 15 to 17 m/s from north-east.

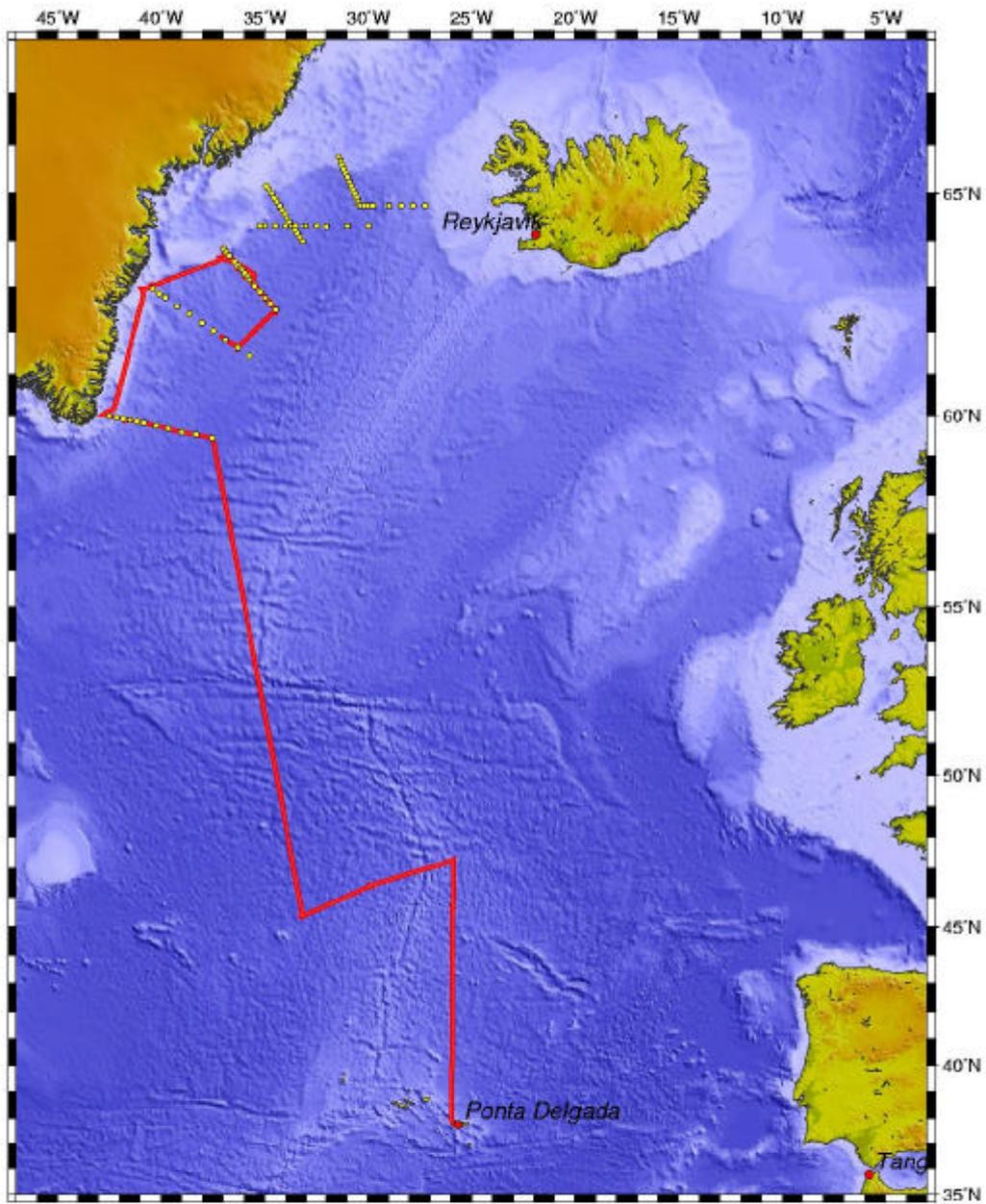
The recovery of the first EU ASOF-W mooring O1 started on Wednesday morning July 9th at 0807. The mooring was on deck 45 minutes later at 0852.

We continued to mooring F1 and could receive no return signal from the releaser. We use a second deck unit and transducer with the same negative result. Winds have now increased to 19-20 m/s and the size of the swell was increasing. We abandoned the station at 1100 and headed for mooring F2. At 1200 we made contact with the F2 releaser but postponed the recovery due to bad weather. This was the third time during the cruise where we experienced a strong gale (>20 m/s) from the north-east. Having made our way to the southern (deepest) end of the mooring array we resumed the recovery work at noon Thursday July 10th at 1200 by the recovery of mooring G2. During the afternoon we recovered moorings: G2, UK2 and G1. In the evening we recovered moorings: UK1, UK1 IES and F2. Our luck ran out with the attempts to recover F2 ADCP and F1. Several recovery attempts were made without results. We had contact with F2 ADCP but no contact with F1 could be established. Recovery attempts of F2 ADCP and F1 were abandoned 40 minutes after midnight and will be resumed later in the cruise.

CTD work commenced along ASOF-W Section 3 on Friday night July 11th at 0212 in the shallowest part the section. The CTD section was delayed for some time whilst a more intense search for mooring F2 ADCP was made. We now had good contact with both releases on the mooring but for some unknown reason remained resolutely stuck to the bottom despite giving a positive response to multiple release commands. CTD work was resumed and section 3 was finished on Saturday evening July 12th at 2240. After a short steam to ASOF-W Section 4 on Sunday morning July 13th at 0510 we began CTD work along this line. This work will be completed near Greenland some time around Monday noon.

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 27th to July 13th (Figure by RV METEOR) and the tube mooring Tube 04 during recovery and on deck (Photo by G. Wiczorek).



M59/1 Ponta Delgada - Reykjavik
26.06.2003 - 22.07.2003
 University of Hamburg
 1:30,000,000 scale
 Mercator projection (WGS 84)
 km
 0 500
 Map processed with GMT on board R/V Meteor of the M59/1
 by R.F. Focke and Ralf H. Gierl

