

„This third weekly report is coming early as we have left the experiment area and are now steaming on a dead calm sea under blue skys towards Lisbon ... This morning we ended station work with a second 12 hour long vertical seismic profiler (VSP) with 10 hydrophones attached to the heavy load winch cable. RRS Discovery therewhile steamed in a star shaped pattern around us continuously shooting her air gun arrays...

Since the last weekly report we had continued towards the southern connecting corner of the two intended sections. From the corner we continued another 25 miles crossing the location of a recent earthquake. Over these 25 miles we deployed 7 OBH systems while RRS Discovery finished the section and turned around to pass over the OBH. After that we rushed to quickly recover the OBH and catch up with RRS Discovery. Some 10 hours later we met her again as they had turned aroun to pass again over a particularly interesting hydrographic feature they had discovered in the seismic data. A rather strong horizontal boundary was visible between relatively pure Mediterranean Overflow Water (MOW), possibly a meander of the boundary current, and the surrounding background of diluted MOW. We decided to delay the original plan of the second section towards Cape St.Vincent and do a more detailed study of the region. While FS Poseidon took center in the MOW with a 12 hour long Yoyo CTD RRS Discovery looped twice around us overall crossing 5 times between the areas of the two waterbodies. Thereafter we continued on the interrupted section to stop safely outside of the Traffic Separation Scheme at the Cape. Crossing it towing a 2.4km streamer would just have been too dangerous. We then turned westsouthwest to again find the border of the two watermasses. Another turn to the eastsoutheast brought us back to the location of the Yoyo CTD. There we did the second VSP over strong MOW with a very sound-reflective layer embedded intrusion of diluted MOW. Before we began this station we used the last chance and the continuously improving weather to get the two ships close together and lower a zodiac. After exchanging some small gifts ... we took a good memory card-load of pictures and some video footage. Tomorrow most of us will fly back home after a mostly successful cruise on FS Poseidon.“