

22-29/01/2011: week 1 - From La Valletta (Malta) to Pylos (Greece)

We left La Valletta on a magnificent Monday morning, warm and sunny as it is hard to imagine in January (especially coming from the Netherlands!). On board, scientists are mainly Dutch (with a few Latin exceptions), mainly from the Oceanographic Institute NIOZ, but a bunch of astrophysicists is also present. They follow the testing phase new designed compact mooring device with a lot of interest. The purpose of the cruise is further testing of this device for KM3NeT, a submerged neutrino telescope that will be searching for astrophysical neutrinos in one of the less noisy environment on Earth, the deep sea (~3000 m). In this framework, different Earth and Marine science measurements are also required, exploring and monitoring the deep sea conditions.

From Monday to Thursday morning the weather has been nice, allowing us to follow the cruise plan. The 2000 m long mooring that was deployed a year ago has been recovered successfully, bringing us tons of data from the NIOZ High Sampling rate Thermistor string, from current meters and an optical device.

Moreover, we deployed twice a lander on the bottom of the sea (near Italian NEMO site and near Greek NESTOR site) for 24 hours, obtaining a series of nice pictures of life down there that we disturb with our iron blocks and bait (Fig. 1).

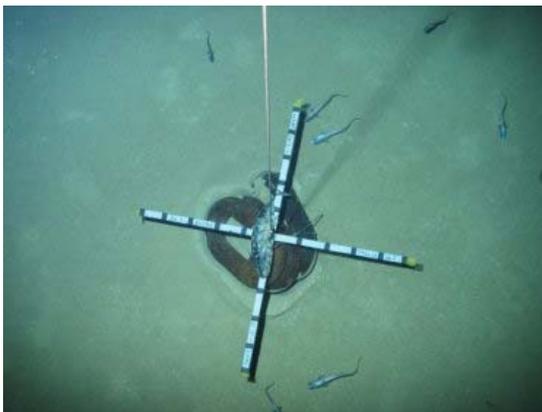


Fig. 2: One of the pictures taken by the lander at 3400 m, near NEMO site. Group of Coryphaenoides Mediterraneus

Thursday afternoon. The (first) deployment (Fig. 2), immediately after the sunset, was followed by recovery with a very tough winch session, with the wind starting blowing hard. The big sphere and the line with all 25 glass spheres (of

Up to now, and due to the weather conditions, we have performed just one night of deep CTD yo-yo (plus a short German lesson to be able to speak with the winch man through the radio!).

The deployment and recovery of the compact mooring took from Wednesday to



Fig. 1: First deployment of the compact mooring

which 20 instrumented) came back on deck. The video from the camera mounted on the bottom weight, and the accelerometers in the spheres have been immediately analyzed, in order to understand the performance for the next launch.

Despite the weather conditions, some other short-term moorings have been deployed on our way to Pylos (Greece), included a clever NIOZ-prototype for a compact, self-unrolling oceanographic mooring. For the visible part, the launch and the unfolding of the line with the two current meters worked as predicted, but we will check better after the recovery.

After the shacking night with wind into force 9, the bay of Pylos welcomed us on Friday afternoon to stretch our legs, to exchange some scientists and to re-mount quietly the entire big sphere, without the need for running after the spheres, rolling on deck with each wave!