The start into the second week has been gearing up for the turn of the year. Since station work had not begun, the hangar was decorated nicely for the New Year’s Eve. The galley prepared a delicious buffet that provided something for everybody’s taste. We celebrated the turn of the year all together on the working deck and in the hangar while the sea was calm and the temperatures pleasant.

After a relaxed New Year’s Day we arrived at the first recovery position in the early morning of January 2nd. At 24 out of 26 positions ocean-bottom seismometer (OBS) and magnetotelluric (OBMT) stations were deployed with a distance of two to three cables one year ago. The stations are equipped with an acoustic release system. By sending codes specific for each instrument we are able to wake them up and finally to ask them to release the anchor made of iron or concrete. The release unit answers successful commands by typical signal sequences. Furthermore, we are able to measure the distance to the instrument. By triangulation we can get an accurate position of the instrument at the seafloor. And we can control the successful release from the anchor. The information of a decreasing distance to the instrument proofs that the OBS or OBMT is rising towards the sea surface. It takes approximately one hour for the instrument to reach sea surface depending on the absolute water depth. At sea surface we can find it visually by a flag or flashlight during night as well as acoustically.
by a radio beacon. Afterwards the most difficult operation takes place, especially in case of a rough sea as we had during the last days: the ship’s manoeuvre to approach the swimming instrument that way that the deck’s crew on the starboard working deck can catch the swim line of the instrument by a entering hook and finally can heave it to the deck by crane. We reach a recovery position approximately every eight hours. The work at the stations lasts about three to four hours. Up to now we have visited 13 positions and recovered all 25 stations.
After the ocean bottom stations are fixed on deck by tension belts, the internal data loggers are synchronized by GPS time signal and the recording is stopped. Afterwards we retrieve the data from the recorders, dismantle the instruments and start to pack things already for shipping back to our institutes or for following expeditions.

Yesterday afternoon we were close to Tristan da Cunha for the first time so that we were able to see it at the horizon. Unfortunately, we were a little bit late too land the same day. Today’s planned landing had to be postponed due to strong winds and rough sea conditions. We hope that there will be more stable weather conditions during the next days, so that our geologist Sebastian Kollenz from University of Heidelberg can disembark to sample rocks on Tristan da Cunha. Furthermore, we want to dismantle three land stations on the neighbouring island Nightingale.

In the evenings we play table tennis or kicker and sit together in a relaxed atmosphere. Despite the fact that the wind got stronger and the sea is much more rough than eleven months ago, we are all in good mood. We wish you all a Happy New Year.

06.01.2013, 38° 34.54’ S 11° 56.89’ W, 14°C

Wolfram Geissler