# Daily Drilling and Scientific Report for IODP Expedition 347, Baltic Sea Paleoenvironment



30<sup>th</sup> Sep 00:00 - 30<sup>th</sup> Sep 24:00 GMT

#### 1. Location

11° 40.229' E 56° 37.204' N (M0060B)

BSB-1 – Anholt Water Depth: 31.2 m

#### 2. Activity Summary

Continue operations at M0060B.

#### 3. Science Report

The microbiology hole, Hole M60B, at the Anholt station BSB-1 was initiated just before midnight. The first piston core had retrieved well sorted sand. The second core came up empty. The following cores were somewhat disturbed with free water around the core. Cores improved rapidly in quality, however, over the following 10 m as the sediment gradually changed from clayey sand to clay. The clay content is clearly of importance to microbiology as it makes the sediment coherent and less permeable, thereby reducing the risk of contamination from drilling mud and seawater. Drilling mud was used down to 30 mbsf to stabilize the upper sandy part of the hole. Sea water only was used below 30 mbsf. After the first problematic cores at the top of this hole, the large sampling program for microbiology and geochemistry progressed well. The clayey sediment gave a good return of pore water from the Mannheim squeezer. Due to the instability of the lower part of hole M0060A it was decided not to drill the microbiology hole deeper than 100 mbsf. The depth intervals of requested samples for microbiology and geochemistry were therefore reduced in order to provide a sufficient number of samples.

#### 4. Core Recovery Details

Hole	M0060B
Cores recovered	24
Drilled length	76.3 m
(Coring)	
Drilled length (Open	N/A
hole)	
Recovered length	78.84m
Recovery	103.3 %
Depth at Midnight	85.7 m

#### 5. Weather

Fair, wave heights of 0.4 - 0.6 m; winds ESE - E, 10 - 14 kts, gusting 12 - 17 kts; 7°C. Next 24 hrs: Fair, wave heights of 0.4 - 0.7 m, winds E-ESE, 11 -15 kts, gusting 13 - 19 kts. 8°C. High pressure centre drifting into the southern Baltic Sea, interacting with the low in the west to increase winds.

## 6. Planned Activity for the next 24 hours

Carry out logging at M0060B and commence transit to M0061, via Copenhagen anchorage.

### 7. Health and Safety and Environmental

Alex Wulbers left the vessel.

# 8. Photo of the day



JeroenGroeneveld©ECORD\_IODP