

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



17th Oct 00:00 – 17th Oct 24:00 GMT

1. Location

18° 15.240' E 58° 37.330' N

BSB-9 Landsort Deep, Hole M0063E

2. Activity Summary

Commence coring operations at Hole M0063E (Microbiology).

3. Science Report

Hole M0063E is dedicated to microbiological sampling down to c. 90 mbsf. To avoid the errors introduced by the expanding sediments it was decided to take 2 metre cores down to 54 mbsf. By doing so it was assumed that the sediment would expand inside the core liner and not further than the length of the liner and no therefore no sediment would be lost for sampling purposes.

The general stratigraphy of site M0063 was repeated with a black or blackish gyttja-clay recorded down to 19 mbsf. Below this level a very dark to dark greenish grey gyttja-clay was recovered. This gyttja-clay gradually tuned into a pure clay and at 35 mbsf a potentially varved glacial clay was recovered. It also contained sulphid grains and stains. However at 37 mbsf, although it was still weakly varved, there were no signs of sulphids. Weakly varved glacial clay with sulphide banding or stains are well known from the area and are commonly representative of the brackish phase of the Yoldia Sea stage.

4. Core Recovery Details

Hole	M0063E
Cores recovered	21
Drilled length (Coring)	42m
Drilled length (Open hole)	0
Recovered length	57.69m
Recovery	137.36%
Depth at Midnight	42mbsf

5. Weather

Isolated showers, heavy at times, wave heights of 0.5 – 1.5 m; winds SW to W, 15 - 30 kts, gusting to 35 kts; Max 10°C.

Next 24 hrs: Isolated showers, brightening later, wave heights of 0.7– 1.9 m, winds NNW, 18 –39 kts, gusting to 50 kts. 10°C.

Area of low pressure moving quickly across the region on Thursday night. The following cooler air will cause near gale force winds and seas will build quickly.

6. Planned Activity for the next 24 hours

Continue coring operations at Hole M0063E (microbiology)

7. Photo of the day



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Microbiology sampling from Hole M0063E