

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



15th Sep 00:00 – 15th Sep 24:00 GMT

1. Location

10° 6.507' E 55° 0.299' N
BSB-3 – Lille Baelt
Water Depth: 31.2m

2. Activity Summary

Coring terminated at BSB-3 M0059A and new hole was established at M0059B.

3. Science Report

Advanced piston coring continued from 65 mbsf in late glacial clay. Good full cores were retrieved. The clay had no distinct structure and no detectable microfossils. Around 80 mbsf the clay began to contain fine sand and benthic foraminifera appeared. At 83 mbsf the piston core fired into pure medium sand and only 1m core was obtained. Seismic data indicate that this sand layer may be several tens of meters deep. Due to a technical issue (see Operations section below), Hole 59A had to be abandoned following this core, and the vessel moved 20m to Hole M0059B. Having reviewed the seismic, sedimentological and magnetic susceptibility data, it was decided to open hole down to 60mbsf and re-commence coring from that point. This would hopefully capture a magnetic susceptibility “kick” that could act as an accurate tie between the holes. The first core from Hole M0059B was on deck 17.20. The core consisted of 3.3 m of varved glacial clay (judging from the core catcher) with a visible varve thickness of c. 8 mm. Fast track MSCL results indicated that the magnetic susceptibility kick anticipated had been captured in this core run.

4. Core Recovery Details

Hole	M0059A&B
Cores recovered	6
Drilled length	74.9 m
Recovered length	12.5 m
Recovery	85.3 %
Depth at midnight	66.6 m

5. Weather

Fair with isolated showers, sea state slight with swell of 0.4 – 0.5 m; wind direction W - WSW, winds of 15 - 19 kts gusting 19 - 23 kts; 15°C.
Next 24 hrs: Rain, sea state slight with swell of 0.6 – 0.9 m, winds of 21 – 26kts, gusting 19- 23 kts. 14°C.
Weakening winds as front passes and low diminishes.

6. Planned Activity for the next 24 hours

Continue coring operations on the second Paleooceanographic hole (M0059B) at BSB-3.

7. Photo of the day



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