

26<sup>th</sup> Oct 00:00 – 26<sup>th</sup> Oct 24:00 GMT

### 1. Location

15° 29.539' E 55° 27.773' N

BSB-7D, Bornholm Basin

### 2. Activity Summary

Completed coring operations at M0065C before moving to BSB-7D, carrying out a camera survey and commencing coring operations at M0066A and M0066B.

### 3. Science Report

The microbiology Hole M0065C in the Bornholm Basin was nearly finished by the start of the day. The last core taken for microbiology was from 38 to 40 mbsf. Then the sediment changed from glacial sandy clay to permeable silt and fine sand and it was no longer possible to obtain uncontaminated microbiology samples. The hole ended with two piston cores for OSL dating going down to 47.9 mbsf.

The next hole to be drilled at BSB-7 was site BSB-7D. This site was selected originally due to the thin Holocene layer and the possibility to core older sediment than at the first station. At this site, M0066A, the upper 10 metres recovered brownish grey glacial clay without pronounced varves on top of a 4 metre thick unit of very well sorted fine sand displaying some organic remnants. A very hard and compacted diamicton was recorded from 15 mbsf down to 18 mbsf where the sediment changed into a compacted silty clay interlayered with silty sandy sequences down to 24 mbsf. The entire sediment unit between 18 and 24 mbsf was more or less distinctly varved and contained foraminifera and plant macrofossils. After three cores returning only well sorted fine sand barren of fossils it was decided to end the hole and move to Hole M0066B. The first core returned brownish grey varved glacial clay and the next two cores silty clay down to 9 mbsf.

### 4. Core Recovery Details

Hole	M0065C	M0066A	M0066B
Cores recovered	1	21	8
Drilled length (Coring)	3.0m	26.66m	14.4m
Drilled length (Open hole)	N/A	3.12m	2m
Recovered length	2.87m	21.27m	13.47m
Recovery	95.67%	79.78%	93.54%
Depth at Midnight	47.90 mbsf	28.0 mbsf	16.4 mbsf

### 5. Weather

Fair with overcast periods and rain showers in the evening, wave heights of 0.5 – 1.25 m; winds SW, 12 - 23 kts, gusting to 30 kts; Max 16°C.

Next 24 hrs, Patchy fog and mist with showers later, wave heights of 1.2 – 2.0 m, winds becoming SSW, 26 - 33 kts, gusting to 41 kts. 12°C.

A series of low pressure systems move through the region over the next several days keeping winds fresh to near gale force and seas moderate to rough.

### 6. Planned Activity for the next 24 hours

Complete coring and logging operations at BSB-7D, Bornholm Basin and commence transit to BSB-4, Lille Baelt.

7. Photo of the day



Awaiting the first core at BSB-7C – Additional PPE due to the potential for surface chemical contamination.  
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