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Report from SMHIs monitoring cruise with KBV 002 Triton

Survey period: 2013-11-07 - 2013-11-10
Survey area: The Baltic Proper.
Principal: SMHI and the Swedish Agency for Marine and Water Management

SUMMARY

The expedition was part of the Swedish regular marine monitoring programme and covered the Western, Eastern and Northern part of the Baltic Proper.

Data presented in this report have been subject to preliminary quality control procedures only.

Surface water temperatures were normal in the whole area.
Salinity in the surface water were normal in the main part of the area, except for the Eastern Gotland Basin were it was below normal.
Surface nutrient concentrations in the whole investigated area were normal for the season.
Oxygen concentrations below 2 ml/l were present at depths exceeding 60-80 metres.
Hydrogen sulphide was found from 60 metres depth in the Western Gotland Basin, 20 metres more shallow than during the previous measurement. In the Northern Gotland Basin hydrogen sulphide was found deeper than 90 metres and in the Eastern Gotland Basin from100 metres depth.
Plankton activity was low.

The next expedition is planned to take place November 22 to 25, when Skagerrak, Kattegat and the Southern Baltic Proper will be visited.

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PRELIMINARY RESULTS

The cruise began in Slite on Gotland on November 7th and ended in Oskarshamn the 10th.
Winds during the expedition increased from weak to strong. Air temperature was around 9°C.

Baltic Proper

Surface water temperatures were normal, for the season, in the whole area and varied between 7.9 to 9.4°C.The thermocline, which was distinct, was found at 25 to 50 metres depth. The halocline was found at depths between 50 and 70 metres. The surface salinity in the Eastern Gotland Basin was below normal, about 6.5 psu.
All nutrients showed, for the season, typical values, surface phosphate concentrations varied between 0.21 and 0.48 µmol/l. The sum of nitrite + nitrate was between 0.25 and 1.46 µmol/l, while surface silicate varied between 6.7 and 12.0µmol/l.
Oxygen concentrations below 2 ml/l were present at depths exceeding 60-80 metres.
Hydrogen sulphide was found in the Western Gotland Basin deeper than 60 metres, in the Northern Gotland Basin deeper than 90 metres and in the Eastern Gotland Basin deeper than 100 metres.
Plankton activity, based on fluorescence measurements and oxygen saturation was low.

PARTICIPANTS

Name		From
Anna-Kerstin Thell	Cruise leader	SMHI Oceanographic laboratory
Johan Håkansson		-”-
Sara Johansson		-"-
Vivi Månsson		-”-
Sari Sipilä		-”-

APPENDICES

Plots

Click on the button to open appendices.
Note that this will only work when connected to Internet!

- Track chart
- Table over stations, parameters and sampling depths
- Map showing bottom oxygen concentrations
- Monthly average plots for selected stations
- Profiles for selected stations