

Lars Andersson

Swedish Meteorological and Hydrological Institute Oceanographical Laboratory 2013-08-24 Dnr: S/Gbg-2013-159

Report from SMHIs monitoring cruise with KBV 002 Triton



Survey period:2013-08-20 - 2013-08-23Survey 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 and eastern part of the Baltic Proper.

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

Surface water temperatures as well as surface nutrient concentrations were normal in the whole investigated area.

Oxygen concentrations below 2 ml/l were present at depths exceeding 70-80 metres.

Hydrogen sulphide was found deeper than 80 metres in the western Gotland Basin and deeper than 100 metres in the eastern Gotland Basin.

No surface accumulations of cyanobacteria (blue-green algae) were observed.

The next expedition is planned to take place September 12th to September 15th.

PRELIMINARY RESULTS

The cruise began in Oskarshamn on August 20th and ended in Slite on Gotland the 23rd. Winds during the expedition were weak to moderate.

Baltic Proper

Surface water temperatures were normal throughout the area, just above 18°C. The thermocline, which was very distinct, was found at a depth of 20 meters. The halocline was found at depths between 60 and 80 meters.

All nutrients, in the surface water, showed typical concentrations for the season. Phosphate varied between 0.05 and 0.08 μ mol/l, while the sum of nitrite + nitrate was below detection limit (<0.10 μ mol/l). Surface silicate varied between 4.9 and 6.6 μ mol/l.

Oxygen concentrations below 2 ml/l were present at depths exceeding 70-80 metres. Hydrogen sulphide was found at depths below 80 to 90 metres in the Western Gotland Basin and deeper than 100 to 125 meters in the Eastern Gotland Basin.

Some plankton activity, based on fluorescence measurements, was found above the thermocline, but no surface accumulations of cyanobacteria (blue-green algae) were observed.

PARTICIPANTS

Name		From
Lars Andersson	Chief Scientist	SMHI Oceanographic laboratory
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APPENDICES



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