Anna-Kerstin Thell

**Swedish Meteorological and Hydrological Institute**
**Oceanographical Laboratory**

2013-07-22
Dnr: S/Gbg-2013-146

# Report from SMHIs monitoring cruise with KBV 002 Triton


**Survey period:** 2013-07-15 - 2013-07-18
**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 and eastern parts 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 and surface nutrient concentrations were normal for this season at most of the visited stations. Oxygen concentrations below 2 ml/l were found at depths exceeding 70-80 metres. Hydrogen sulphide was found deeper than 90 metres in the western Gotland Basin and deeper than 100 metres in the eastern Gotland Basin.

Surface accumulations of cyanobacteria (blue-green algae) were observed in the northern part of the western Gotland Basin. A more detailed report describing observed algae can be found here: http://www.smhi.se/oceanografi/oce_info_data/reports/havmiljoarkiv/oce_reportarchive13.html

The next expedition is planned to take place July 30th to August 3rd.

**Address:**
Sven Källfelts Gata 15
Nya Varvet 31
SE-426 71 Vastra Frolunda
SWEDEN

**Phone:**
+46 11 495 80 00
**E-mail:**
Lars.S.Andersson@smhi.se

**E-mail:**
shark@smhi.se
**WWW:**
http://www.smhi.se/

## PRELIMINARY RESULTS

The cruise began in Oskarshamn July 15th and ended in the same port July 18th.
Due to lack of permits to enter Polish waters, the BCS III-10NE, in Swedish EEZ (E Economic Zone) was sampled instead of the ordinary station.

During the expedition, winds were weak to moderate.

### Baltic Proper

The surface water temperatures were normal throughout the area and varied from 16.9°C in the south-east to 18.4°C in the northern parts. The thermocline was situated at depths between 15 and 30 meters and the upper part of the halocline was found at 60-70 meters below the surface.

Surface phosphate concentrations varied between 0.05 and 0.07 µmol/l and were normal at most stations. The sum of the nitrite and nitrate concentrations showed normal concentrations and was below the detection limit (<0.10 µmol/l). Surface silicate varied between 4.7 and 10.0 µmol/l and were normal or slightly lower than normal.

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

Some plankton activity, based on fluorescence measurements, was visible above the thermocline in the Eastern and Western Gotland Basins. Surface accumulations of cyanobacteria (blue-green algae) were observed in the northern part of the Western Gotland Basin.

## PARTICIPANTS

| Name | | From |
|---|---|---|
| Anna-Kerstin Thell | Cruise leader | SMHI Oceanographic laboratory |
| Kristin Andreasson | | - ” - |
| Daniel Bergman-Sjöstrand | | - ” - |
| Sari Sipilä | | - ” - |
| Ann-Turi Skjevik | | - ” - |

## 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