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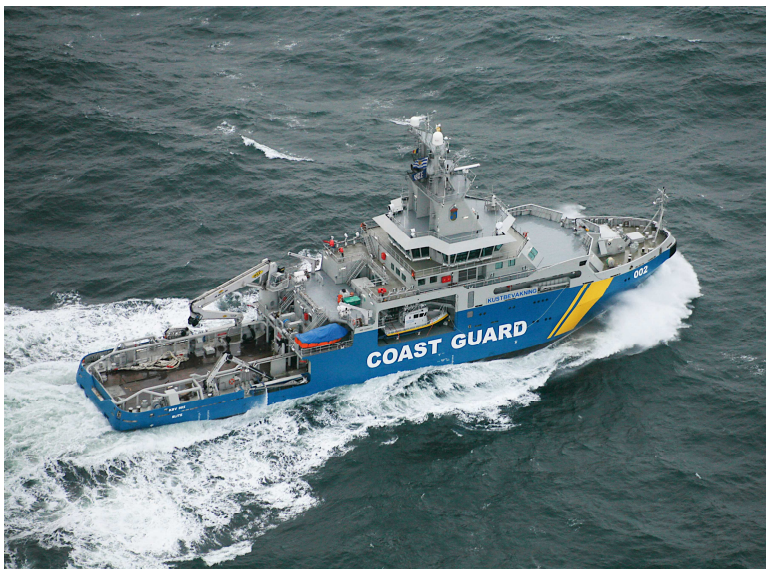
Report from SMHIs monitoring cruise with KBV 002 Triton



Survey period: 2013-09-12 - 2013-09-15
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 part of the Baltic Proper.

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

Surface water temperatures were above normal in the whole area.
Salinity in the surface water of the Eastern Gotland Basin was clearly below normal.
Surface nutrient concentrations were normal at most stations.
Oxygen concentrations below 2 ml/l were present at depths exceeding 70-90 metres.
Hydrogen sulphide was found deeper than 90 metres in the Western Gotland Basin and deeper than 125 metres in the Eastern Gotland Basin.
Plankton activity was low.

The next expedition is planned to take place September 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 September 12th and ended in Oskarshamn the 15th.
Winds during the expedition were weak to moderate. Air temperature was around 17°C.

Baltic Proper

Surface water temperatures were above normal, for the season, in the whole area and varied between 17.2 to 18.2°C.
The thermocline, which was very distinct, was found at a depth of 20 meters, where the temperature dropped from ca. 17 to 4°C over just a few meters.
All nutrients showed, for the season, typical values, surface phosphate concentrations varied between 0.05 and 0.08 µmol/l. The sum of nitrite + nitrate was below detection limit (<0.10 µmol/l), while surface silicate varied between 4.6 and 6.5µmol/l.
Oxygen concentrations below 2 ml/l were present at depths exceeding 70-90 metres.
Hydrogen sulphide was found deeper than 90 metres in the Western Gotland Basin and deeper than 125 metres in the Eastern Gotland Basin.
Plankton activity, based on fluorescence measurements and oxygen saturation was low.

PARTICIPANTS

Name		From
Lars Andersson	Chief Scientist	SMHI Oceanographic laboratory
Kristin Andreasson		- ” -
Daniel Bergman-Sjöstrand		- ” -
Martin Hansson		- ” -
Vivi Månsson		- ” -

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