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CRUISE REPORT FROM R/V ARGOS

Survey period: 000425-000429

Survey area: The Skagerrak, the Kattegat, the Sound, and the Baltic Proper

Principal: SMHI

SUMMARY

The expedition was performed within SMHIs regular marine monitoring program and covered the Skagerrak, the Kattegat, the Sound and the Baltic Proper.
The temperatures varied between 4.6°C in the northern Baltic Sea to 10°C in the Kattegatt. The nutrient concentrations were normal for the season with a few exceptions. An intense alagal bloom was observed in the eastern Baltic Sea and an oxygen saturation of almost 140% was measured. A more detailed algal report is available at http://www.smhi.se/nodc/reports.
Hydrogen sulphide was present on depths greater than 140 m in the southern part of the eastern Gotland Basin and below 125 m in the northern part.

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PRELIMINARY RESULTS

The expedition, which was a part of the regular SMHI monitoring program began in Göteborg on April 25 and ended in the same port on April 29. The weather was dominated by clear skies and light winds.

The Skagerrak

The sea surface temperature varied between 7.1 and 8.7°C. The Baltic current was pronounced at station Å13 where the salinity increased 10 psu over 5 meters.
The nutrient concentrations were normal for the season with an exception in phosphate at station P2, which was much higher than normal.

The Kattegatt and the Sound

The sea surface temperature varied between 8.4° in the Kattegatt and 10°C in the Sound.
The nutrient concentrations were below detection limits, which is expected for the season. No intense algal bloom was observerd. Lowest oxygen concentration of 5.15 ml/l was observed at W Landskrona 48 m.

The Baltic Sea

The sea surface temperature varied between 4.6°C in the northeastern part and 6.9°C in the southeastern Gotland basin. An intense algal bloom was observed in the eastern Baltic sea where the oxygen saturation reached 140% in the surface water. More details about the algal bloom can be found in the algal report.
Where the algal bloom was ongoing, nitrogen concentrations were below detection limits. The phosphate concentration were normal or a little lower than normal in the blooming areas, and normal to a little higher than normal in the southern Baltic sea.
Oxygen concentrations below 2 ml/l were observed from 90 m and downwards in both the eastern and western Gotland basin, and below 80 m in the Bornholm basin. Oxygen concentration below 2 ml/l was observed from 70 m in the Hanö Bight. Hydrogen sulphide was observed on depths greater then 140 m at stations BY10 and BY15 and on depths greater than 125 m at station BY20.

PARTICIPANTS

Name	From
Bengt Yhlen, Chief scientist	SMHI Oceanographical lab.
Tuulikki Jaako	- ″ -
Nils Kajrup	- ″ -
Richard Nygren	- ″ -
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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