

CRUISE REPORT FROM R/V ARGOS

Survey period: 980525-980607

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

Principal: SMHI

SUMMARY

The expedition was performed within SMHI's regular marine monitoring programme and covered the Skagerrak, the Kattegat, the Sound, and the Baltic Proper. The surface water temperatures were normal for the whole area. The nutrient concentrations were low in all sea areas, which is normal for the season due to the ongoing algal blooms. Detailed algal situation reports are available on <http://www.smhi.se/sgn0102/nodc/reports/> for the survey period. Oxygen concentrations below 2 ml/l were found on depths under 80 m in the Western and Eastern Gotland Basin, and under 70 m in the Bornholm Basin. Hydrogen sulphide was present near the bottom in the Eastern Gotland Basin and in the Bornholm Basin. Optical measurements on total and suspended organic matter were also carried out within the RESE project.

PRELIMINARY RESULTS

The expedition, which was a part of the SMHI ordinary monitoring programme, began in Göteborg on the 25th of May and ended in the same place on the 7th of June with a interruption between 28th of May and 2nd of June due to holidays. The weather was dominated by weak winds.

Optical measurements on total and suspended organic matter were carried out within the RESE project during this expedition. A detailed algal situation report is available on <http://www.smhi.se/sgn0102/nodc/reports/>.

The Skagerrak

The sea surface temperature varied between 11°C and 12°C. The nutrient concentrations were low, which is typical for the season. The nitrogen concentration at station HS5, where a high concentration was found on the previous expedition, was now a little lower than normal.

Optical measurement experiments were performed at additional stations near the coast as well as on near coast standard stations.

The Kattegatt and the Sound

The sea surface temperature varied between 12.5°C in the north-western part and 14.3°C in the south-eastern part. In the Sound the temperatures varied between 12°C and 13.4°C. The nutrient concentrations were low, which is typical for the season. Optical measurements were carried out at some of the visited stations.

The Baltic Sea

The sea surface temperature varied between 7.8°C in the northern part to 11.5°C in the southern part. The nutrient concentrations were low for the whole Baltic, which is normal for the season. Oxygen concentration less than 2 ml/l were found on depths greater than 80 m in the eastern and western Gotland Basin, and at depths greater than 70 m in the Bornholm Basin. Hydrogen sulphide was found near the bottom in the Bornholm Basin and in the eastern Gotland Basin. Optical measurements were carried out at some of the visited stations.

PARTICIPANTS

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APPENDICES

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