



## **Cruisereport**

### **R/V Skagerrak Cruise 01 2004: Hydrographic conditions in the Skagerrak**

**Department** Oceanography, Göteborg University

**Projectleader** Leif Djurfeldt

**Cruisearea** Kattegat-Skagerrak

**Cruiseleader** Mattias Green

**Ass. Cruiseleader** Carina Erlandsson

**Port of departure** Göteborg 10-05-2004

**Port of call** Skagen 11-05-2004

**Port of arrival** Göteborg 13-05-2004

#### **Scientific crew**

Mattias Green, Cruise leader

Carina Erlandsson Ass. Cruise leader

Lena Viktorsson

Angelina Johansson

Caroline Edsgren

Olle Jörsved

#### **Aim of the survey**

The cruise aimed at obtaining data of stratification, current velocities, SPM, and chlorophyll. The data is to be used to describe the hydrographical conditions and to quantify and describe the mechanisms behind transport of different water masses, and with them sediments and nutrients, in the Kattegat-Skagerrak. Data were collected using standard hydrographic instrumentation.

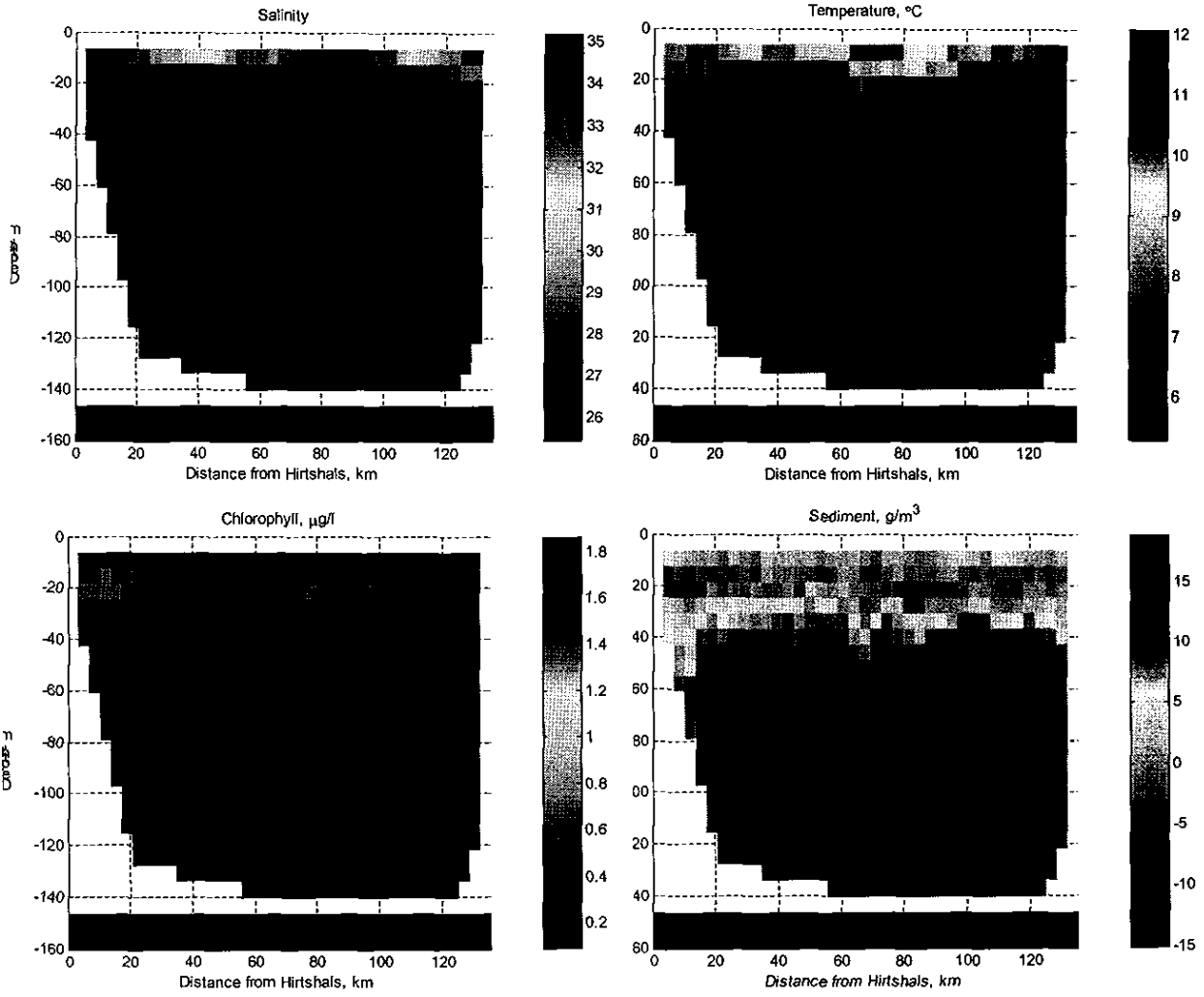
#### **Survey performance**

The survey was carried out in accordance with the survey plan. A towed undulating profiler, ScanFish MkII or a SeaBird 911 CTD were used for sampling of salinity, temperature, transmission, chlorophyll, whereas a ship borne ADCP (RDI WorksHorse) and Haamer gelatin pendulum current meters were used to obtain current velocity. The cruise went along three transect: outbound from Gothenburg via Läsö to Skagen, from Hirtshals to Torungen and back, and from Skagen via Marstrand back to Gothenburg. On the transect between Hirtshals and Torungen data were sampled using Scanfish and ADCP from the surface down to about 150 m depth. On the return transect, the CTD was used instead of the Scanfish to obtain data of salinity, temperature, transmission, chlorophyll down to the bottom.

During the outward transect, a minor computer problem prevented sampling for about 30 minutes. The rest of the cruise went without interruptions.

#### **Achieved goals**

The data sampled is of good quality and the goals of the survey were fulfilled, although the data has yet to be analyzed in detail. The preliminary results from the outward hydrographic survey are shown below.



Clockwise from top left: Salinity, temperature, chlorophyll-a, and sediment concentration on the Hirtshals-Torungen transect. Data obtained using Scanfish MkII.