

Report

Hydrographic Field Investigations in Norway during 1955.

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1. Cruises.

During 1955 24 cruises were undertaken by "G.O.Sars", "Johan Hjort", "Krill" and 6 chartered vessels.

Hydrographic investigations were carried out in Norwegian coastal waters each month of the year, in the Barentz Sea in February, March, May, July, August, October, November, in the Norwegian Sea in January, February, June, July, August, September, November, December, in the Skagerak in June and off West Greenland in June and July.

At 1064 hydrographic stations 11411 observations of temperature and 11312 of salinity were taken. In addition analyses of 2384 O_2 - and 1688 P_2O_5 - samples were made.

Current measurements, by help of serial current meters, were made during March and April in the Lofoten area and in June off the coast of Jan Mayen and at the Eggvin bank in the Norwegian Sea between Jan Mayen and Greenland, discovered by the "G.O.Sars" on June 12th 1955. Minimum depth of the bank is 25 m. Position: $70^{\circ}54'N.$, $12^{\circ}50'W.$

2. Fixed Oceanographic Stations.

Routine observations of salinity and temperature from surface to bottom were continued during the year at the oceanographic stations Utsira I and II, Sognesjøen and Skrova. Two new fixed oceanographic stations have been established: 1. Off North Cape ($71^{\circ}10.6'N.$, $25^{\circ}55.6'E.$) from May 20th 1955. 2. In the Hardangerfjord ($59^{\circ}55.7'N.$, $5^{\circ}45.6'E.$) from October 3rd 1955.

3. Sea Surface Thermograph Service.

Thermograph records were obtained from 6 liners running the following routes from Bergen:

- 1: to Newcastle,
- 2: to Rotterdam,
- 3: to New York,
- 4: to Kirkenes (East Finmark),
- 5: to Oslo.

Salinity samples were collected in fixed positions on these routes. Thermograph records were also obtained from a liner running between Southampton and the Canarie Islands in January, February, September and October.

Flødevigen Sea-Fish Hatchery, Arendal.

By the "G.M. Dannevig" hydrographic investigations were carried out in Skagerrack along the Arendal-Hirtshals section in January, April, and August, in fjords of Southern Norway in January, September and October and in coastal water between Hållø and Rakkebåene in January and Oksø-Grønningen in September.

Geophysical Institute, University of Bergen.

Field investigations 1/1 - 31/12, 1955.

The M/S "Armauer Hansen" carried out hydrographical investigations along a number of parallel sections off Stad in August, finding also this time a stratification which remained nearly unaltered during one week. Due to repair works investigations in the fjords of western Norway were made only in March, June, August, October and December.

Weather Ship Station M.

The regular investigations at Weather Ship Station M (66°00'N, 2°00'E) were continued (S/S "Polarfront I" and S/S "Polarfront II"). These investigations include 6 stations per week, of which one station to 150 m, four stations to 1000 m and one station to about 2500 m depth.

In addition sea surface thermograph records at the same station and between this station and Bergen have been continued.

Sea surface samples have been collected in fixed positions between station M and Bergen.