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## The results of Polish oceanographic investigations focused on interannual variability of the Greenland Sea energoactive zones

STUDIA I MATERIAŁY OCEANOLOGICZNE, no. 65, POLAR MARINE RESEARCH (2), pp. 3-223, 1993

**Key words:** water circulation, , Norwegian-Barents Sea, interannual variability, hydrometeorological regime, water and heat exchange, zooplankton, air - sea interaction, light attenuation and fluorescence, fine structure and mixing

Manuscript received December 6, 1992; in final form December 20, 1993

## **Abstract**

In the years the years 1987 - 1989 the Institute of Oceanology of Polish Academy of Sciences in Sopot accomplished oceanographical investigations in the energoactive zones of the Northern Atlantic within the "Greeland Sea Project". The aim of the Polish part of the project was to examine the intermonthly and interannual variability of hydrophysical fields and the dynamics of the near - surface atmospheric layer in the selected regions of the ocean, in order to determine the role of these factors in the formation of climatic anomalies of the ocean - atmosphere interaction during summer months: July and August. The main research region were the confluence zone of the Norwegian Sea and Barents Sea. The 3 - year program of meteorological, hydrological and biological empirical investigations accomplished onboard the research vessel 'Oceania'. This paper is a presentation of aero- and hydrophysical characteristics obtained from the technical processing of empirical data, whose analysis made it possible to reveal a number of features characterizing the intermonthly and interannual variability of aero- and hydrophysical fields in the regions examined, as well as the causal nexus of hydrological and hydrobiological anomalies. This paper is not a final synthesis. The empirical data and analytical results presented herein can be used for futher investigations.