Application of hydrographic and surface current data to describe water properties in the Porsangerfjorden, Norway

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This presentation is a part of the NORDFLUX project, and describes some of the results from experimental work carried out in 2014 in the Porsangerfjorden located in the area of the European Arctic. The fjord borders the Barents Sea. This is a region of high climatic sensitivity and our interest in the basin stemmed from this fact. One of our long-term goals is to develop an improved understanding of the undergoing changes and interactions between this fjord and the large-scale atmospheric and oceanic conditions.

In present work we focus on data sets collected with High Frequency (HF) radars monitoring surface currents in the outer part of the Porsnagerfjorden. In our analysis we also use data on water salinity and temperature collected as part of the NORDFLUX experiment, and data from sea level and meteorological station located in Honningsvaag.

Analysis of data sets enabled us to describe water salinity, temperature, density distributions and their variability. What is more, we have related aforementioned results to tides, meteorological conditions, and sea surface currents speed and directions.

During the poster session the Author will present the schemes of water masses movement in the area of interest.