## Analysis of meteorological observations from Station "M" (MIKE) 1949-2002.

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Weather information became very important to secure the civil air traffic between Europe and America that developed after the Second World War. A net of weather ships was therefore established in the North Atlantic with start in 1948. The net consisted of 13 ships and the main purpose was to take meteorological observations. Secondly they would participate in rescuing of airplanes in trouble and thirdly participate in air traffic control and other radio securing duties. All the weather ships in this net are now history with exception for W/S Polarfront holding the position "M" (MIKE) in the Norwegian Sea (66°N, 2°E). Besides the meteorological observations W/S Polarfront has been measuring important oceanographic parameters from the bottom of the sea (2000 m) up to the surface. The record of oceanographic variables is one of the longest of its kind in the world. Especially the radiosonde data from W/S Polarfront is very important input for the numeric weather prognoses. Several environmental data both from air and sea has been measured and are still measured from W/S Polarfront. Here we will concentrate on the analyses of the long series of meteorological parameters near the sea surface.