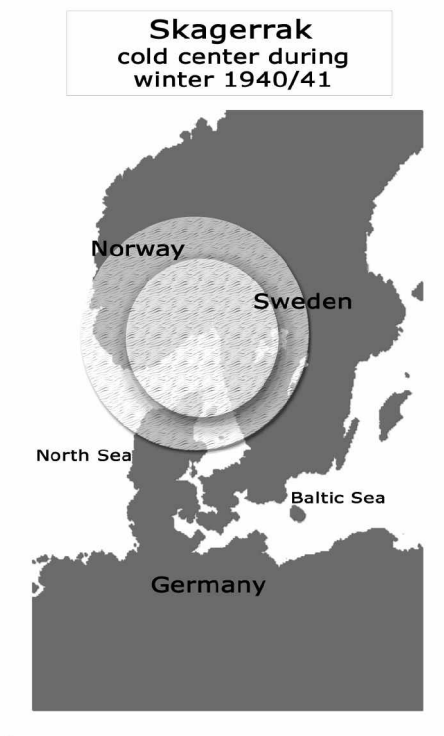


### Summing up Skagerrak Arctic Winter

In climatologic terms, Norway is a maritime country. Its weather is highly influenced by the warm Gulf Currents and by the Norwegian Current flowing northwards, along the coast. This weather extends its influence on the Strait of Skagerrak. In Oslo, average air temperatures for January ran amok in Oslo: 2°C lower than the next lowest averages during a January without war since 1816, viz. 1867 that accounted – 11°C, while January 1941 recorded –13°C, in a city with a long-term January means of – 3,5°C. January 1941 beats Little Ice Age conditions in the early 19<sup>th</sup> century and nobody has ever wondered why.



By all means, the answer is possibly the easiest in the world. During the previous nine months, all water areas and many fjords along the Norwegian coast became the battleground of the naval warfare. Naval vessels, bombs and depth charges did not only churn and turn seasonally warmed and cooled surface layer of the water (40-60 meter deep), but also operated along a 200-700 meter deep trench, along the coast of Norway, from Sweden (Gothenburg) to the Atlantic Ocean (north of the Shetland Islands). Deep water and surface water temperatures differ by 10 degrees, or even more at peak time, in August/September. Warfare at sea can easily 'restructure' the thermocline at any water level below.

A convincing proof for this causal relation between the war and the cold weather is the fact that all coastal areas around Skagerrak were dragged into exceptional cold conditions with record temperatures never experienced before. This leads us to only one conclusion: the German war machinery (used for Norway's occupation) and the naval warfare are responsible for the cold centre winter of 1940/41

which was established at Skagerrak and which influenced Oslo, Gothenburg and Vyborg with record low temperatures.

### The 3rd War winter – The Baltic Sea experiment

Mainframe of the Experiment

How can one make an arctic winter and how can one prove it? The first condition for an interesting climate experiment is to exclude the sun. We did it by concentrating

research on the winter period during the 1<sup>st</sup> and the 2<sup>nd</sup> war winters of WWII. The second condition for improving experimental conditions is to exclude the external influence of the water influx coming from different sources, e.g. the Atlantic Ocean. The Baltic Sea is almost completely disconnected from the oceanic system, salinity is low or inexistent (Gulf of Bothnia) and the current system affected by local forces (wind, temperature, salinity, and influx of river water). For the completion of an excellent climate change, the third condition is easy to imagine: the forceful stirring and shaking of the water basin. This all happened between June and December 1941 and the following winter proved the effectiveness of the experiment. Northern Europe fell pray to a record icy winter.