Excerpt from iUniverse book: "Booklet on Naval War changes Climate" by Arnd Bernaerts

CHAPTER B, Arctic winter 1939/40, page 13

Seas churned by navies

Laws of physics governing Hot Soup in a Cup

Laws of physics also apply to hot soup in a cup. WWII unleashed tremendous military forces unheard-of in history before. Millions of soldiers marched up and down battlefronts. Thousands of naval ships ploughed oceans and seas day and night. In autumn 1939, the most affected seas were the Baltic- and the North Sea. Normally, both of them would have stored heat to their highest capacity by the end of August. Since the last Ice Age, they served in autumn as a substantial heat reservoir for the forthcoming winter season when days are short and sunrays contribution to regional weather conditions is unobservable. Together with the Gulf Current from the west of Great Britain and Norway, these seas ensure moderate winters to Northern Europe. These seas determine the weather of Western Europe (in the north of the Alps): maritime or continental winter climate. Winter 1939/40 in Northern Europe turned out to be an extremely continental one.

Allowing navies to participate in a war at sea, in Northern Europe natural heat reservoir, is like hastily stirring a hot soup to cool it down for quick consumption. Once the soup in a bowl is cooled down, it will never warm up naturally again. Likewise, once the heat storage of Northern- and Baltic Seas has been diminished, water will warm again only during the next year summer. And as navies were out on the sea in autumn 1939, the inevitable happened. Arctic cold wave was due to come in the winter 1939/40. Naval activities during the first four war months (from September until December 1939) represented an important force and the laws of physics didn't remain unnoticed.