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

CHAPTER C, The three years cold package & the war, page 49

'Barbarossa' - Germany attacks Russia

Under the codename 'Barbarossa', Germany planned and ambushed Russia with an Army of 3,000,000 men, 3000 tanks, 7000 artillery pieces, 2500 aircrafts and other war relevant equipment. This happened on the 22nd of June 1941, along a battle line of 2000 km.

It is a well-known fact that, in June 1941, during a few months of invasion, the German Army encountered winter conditions in Western Russia, the severity of which cannot be imagined. It was totally out of tune with the climatic records over many years. So far, it is not so much of a surprise that the German armies had not been prepared to face the harsh winter conditions. They fell prey to a misjudgement similar to that of the Russian Army in Finland, in December 1939. While the war at sea 'pushed the weather' to very cold temperatures under the Arctic Circle during the winter of 1939/40, the Germans drove the weather conditions 'over the edge' by turning the Baltic Sea 'up-sidedown'. This 6-month 'treatment' of the Baltic Sea, in 1941, was several times more intensive than in 1939. A little bit later, snow, freezing and ice conditions became extremely severe along the entire German-Russian front line, from the west of Murmansk, Leningrad, Kalini, Mazhaisk (west of Moscow) to Belowgrad, Rostov, and Sevastopol (Krim). Since mid-November 1941, temperature during daytime was of -3°C, and at night it went down to -7°C. By the end of November, temperature fell to minus 25 degrees Celsius on the Eastern Front. Along the frontlines close to Leningrad, heavy snowfall blocked almost all German mechanized operations. On the 7th of December, the German High Command stated in a communiqué that harsh winter conditions forced abandonment of big operations in the north until spring. In December, temperatures went down to -40°C.

Before the severe cold wave hit the Eastern Front, there was a heavy 'mud-period' which lasted from early October until freezing began. It all started with snow on about the 7th of October and went on with rain, bearing quite a number of similarities with the situation discussed in an earlier chapter concerning rain-making on the Western Front, along the river Rhine, in late 1939. Until the end of December 1941, the costs of invasion for the German Army were: 174,000 dead men, 600,000 wounded and 36,000 missing. Germany also lost 758 bomber planes, 568 fighter planes, and 767 other types of airplanes, not to mention the loss of tanks, flaks and vehicles, which was huge. The Russians' loss was considerably higher because of the death of 3,000,000 men, plus 1,3 million wounded and sick men.