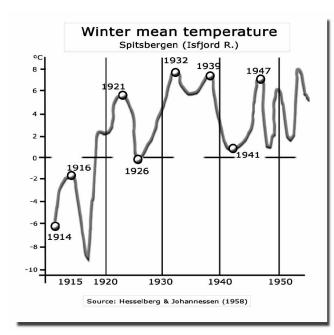
The 20th century climatic changes

After the end of the Little Ice Age (in the middle of 19th century, around 1850), global temperature started to rise, the main reason of this phenomenon being the decrease of the volcanic activities. But naval war interrupted a steady warming trend two times yet.

World War I ended with a severe "bang" in the late 1918.

There is nothing clearer than the beginning of a "big warming" that occurred concomitantly with the end of WWI, in November 1918.



During WWI, naval war was fought around Britain and in the North and Baltic Seas. It actually started seriously only in the autumn of 1916 when new naval weaponry became fully available devastatingly effective (particularly sub-marines (U-boats), charges, and sea mines). During the war year 1917, German U-boats alone sank ships with a total tonnage of 6,200,000. The war total loss was of 12 million tons: 5200 ships and about 650 naval vessels. Most merchant vessels had been fully loaded with cargoes of all kind, from grain, ore, coal, crude oil to whatever the war parties needed. All that stuff

polluted the sea and was taken away by the Gulf Current or by the Norwegian Current up to the North. It was precisely there that the "big warming" occurred. At Spitsbergen, the winter temperatures jumped up by 8°C in only a few years. Suddenly, the Northern Hemisphere became significantly warmer. The terms like "Greening of Greenland" or "Warming of Europe" became common expressions.

World War II (1939 – 1941): In the autumn of 1939, the naval warfare ended within four war months which reversed the two decade warming trend and determined the cooling phenomenon which started with three extreme war winters in Northern Europe and which lasted four decades, until 1980.

If the war in Europe had ended with the winter of 1939/40, a few weeks after Herman Goering's speech (in mid-February 1940)ⁱ, the description of the winter of

1939/40 as "weather modification" would have probably been correct. The extremely icy January and February 1940 would have 'submerged' in weather statistics.

But this didn't happen. The war went on and the war winter of 1940/41 came up in Northern Europe with the same climatic conditions as the year before. The same phenomenon occurred again during the winter of 1941/42, when Germany was at war with Russia (since July 1941), the Baltic Sea became arctic and the temperature was colder than if they were at the North Pole.

World War II (1941 – 1945) saw naval war spreading at a global level and the global weather cooling down for four decades. After having gone through three chilling war winters in Europe (1939-1942), world community was ready to go through an even bigger climate experiment. With Japan's ambush at Pearl Harbor with dozens of ships and hundreds of bomber air planes, on the 7th of December 1941, a new chapter of anthropogenic climate change started and was going to last for about four to five years, until most of the sea mine fields had been eliminated (1946/47). Mission was soon accomplished. Climate changed very pronouncedly to a colder status which lasted until about 1980.

"Global Warming" continued after 1980? The fact is that there was a strong warming between 1918 and 1939, which was interrupted for four decades by the naval war and then re-emerged in the early 1980. At this point, one can guess whether we can talk about a new cause or it is just the follow-up of the interrupted WWI-warming trend of 1918-1939.

i See Chapter A