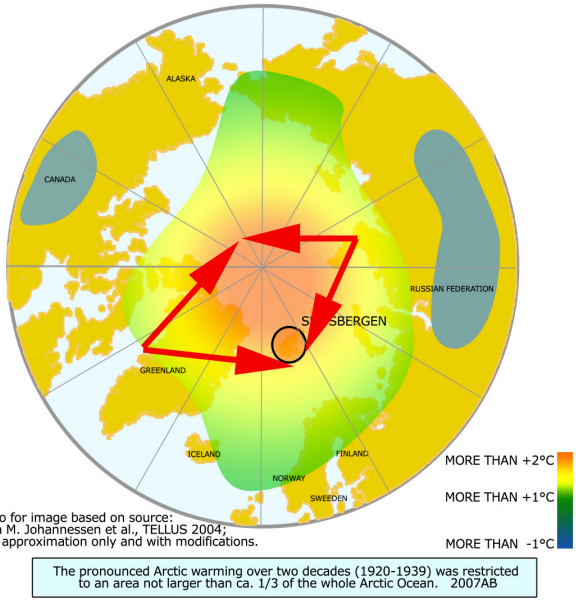
2004

Johannessen, Ola M., et al. (2004);
"Arctic climate change – Observed and modeled temperature and sea ice variability",
Tellus 56A , p. 328 –341, Corr. 559-560.

A selection of aspects from the paper Abstract read as follows:

1. Changes apparently in the arctic climate system in recent years require evaluation in a century-scale perspective in order to assess the Arctic's response to increasing anthropogenic greenhouse-gas forcing.
2. We show that two pronounced 20th-centrury warming events, both amplified in the Arctic, were linked to sea-ice variability.
3. SAT observations and model simulations indicate that the nature of the arctic warming in the last two decades is distinct from the early 20th-centrury warm period.
4. It is suggested strongly that the earlier warming was natural internal climate-system variability.

WINTER HALF-YEAR SURFACE TEMPERATURES TREND, 1920-1939



The pronounced Arctic warming over two decades (1920-1939) was restricted to an area not larger than ca. 1/3 of the whole Arctic Ocean. 2007AB

Comment: Figure 2 of the paper includes an image of seasonal SAT trends north of 30°N. The general indication for a 6 months winter season for the two decades 1920-1939 (which are in great conformity with the R. Scherhag data from 1936, and H.H. Lamp from 1982) the following graphic has been prepared. These and other graphics show, that the intensive early warming was not throughout the Arctic, but only in the North Atlantic sector. One of the co-authors, V.F. Zakharov noted this already 1997, as mentioned in Chapter 1, by saying: "*Why are the maximum climate fluctuations confined to the Atlantic sector of the Arctic? (*Zakharov, 1997). Neither he, nor any of his 11 (et al.) colleagues pay any attention to this aspect. Although they assume sea-ice variability as applicable to the early warming, they do not even realize that the early warming commenced in 1918/19 despite the fact that the winter sea ice was not reduced (see: April sea-ice in Chapter 2), and that they should have at least acknowledged the suddenness of the temperature rise since winter 1918/19. But as their oldest reference material dates from 1982 (Kelly, 1982), they ignored all research material published over 50 years since 1930.