



The paper provides an indication that the annual average (Feb-Jan, 5-year series) at Spitsbergen increased from about 1918/19 to 1921/22 by four degree, but that the trend from the 1930s to the mid 1990s showed a general cooling, contrary to a warming over the whole century. With these facts at hand it seems strange when the paper says:

_____With the IPCC report released during 2007 the scientific community is adding confidence to the relation between global warming and the boost of the greenhouse effect via anthropogenic emissions. Modelling work after the previous IPCC report have shown that the Arctic region is likely to warm up faster than the global average, and that the Arctic may be one of the regions to have the quickest response to global warming.
 _____The reason for this Arctic warming is debated, but was likely an effect of enhanced atmospheric circulation triggered by heat excess in its source region.

LEFT:
Air-temperature
Dec. to Feb.
1917/18=-21,7°C
1918/19=-10,1°C

RIGHT:
Annual mean

Pohjola:
 The North Atlantic drift is a powerful contributor of heat into the Nordic Seas and further into the Arctic Ocean, where the northern branch of the drift splits at Svalbard.

How can such a high rise in winter occur when the location is almost enclosed by sea ice?

Pohjola: One of the "hotspots" in this Arctic warming may be Svalbard, due to the fact that this archipelago is positioned right where the Arctic front separates the polar and extra-tropical air and water masses.
Pohjola: How well the Svalbard region senses global climatic variability is exemplified by the much larger warming the archipelago experienced in the 1920–30s event than what was recorded at other North Atlantic/Arctic sites.