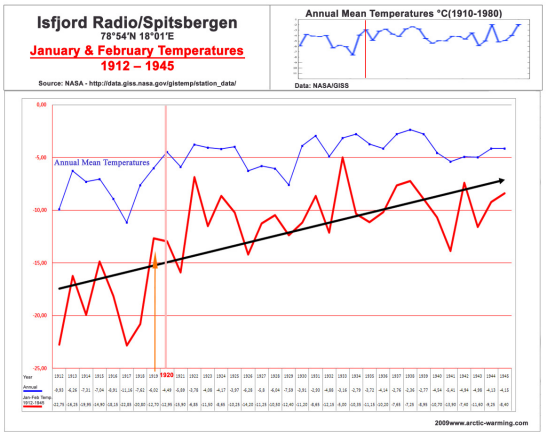
Graversen et al., 2008, on: Vertical structure of recent Arctic warming

Rune G. Graversen, T.Mauritsen, M.Tjernström, E.Källén, G.Svensson; Nature, 3 January 2008, 451, p. 53-56

How much contributes this study on the "structure of recent Arctic warming" to understand the 'climatic revolution' (Ahlman, 1946) during the first half of last Century? Rune G. Graversen et al.'s article in the first 2008 issue of NATURE[1] got immediate attention world wide. The authors conclude: "We regress the Arctic temperature field on the atmospheric energy transport into the Arctic and find that, in the summer half-year, a significant proportion of the vertical structure of warming can be explained by changes in this variable. We conclude that changes in atmospheric heat transport may be an important cause of the recent Arctic temperature amplification." Some understood this immediately as confirmation that nature is pushing the Arctic to the edge, too. The study confirms according Seth Borenstein (AP[2]) that "There's is a natural cause that may account for much of the warming". 'Climate Feedback'[3] disagreed: Graversen conclusion only means: "Changes in the circulation in the atmosphere might have had a much larger effect than previously thought, but these changes may also have been induced by greenhouse gases". Does the explanation explain anything? Already back in the year 1938 C.E.P. Brooks asked: to account for the change in circulation.

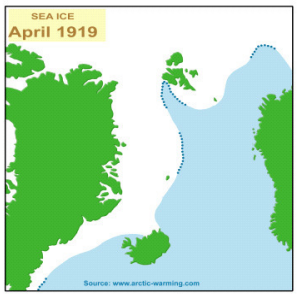


"Water is the driver of nature", Leonardo da Vinci (1452-1519)

Theses from Stockholm University, 2008, R. G. Graversen: „On the recent Arctic Warming"

Extract from: http://www.arctic-warming.com, 22 April 2008

Rune Grand Graversen' Doctor Thesis assumes[4] that: „A major topic is the linkage between the midlatitude circulation and the Arctic warming. It is suggested that the atmospheric meridional energy transport is an efficient indicator of this linkage". When Graversen concludes that the snow and ice-albedo feedbacks are a contributing but not dominating mechanism behind the Arctic amplification, and that a coupled climatemodel experiment with a doubling of the atmospheric CO2 concentration reveals a considerable Arctic surface-airtemperature amplification in a world without surface-albedo feedback, one is left to wonder, why such a thesis ignores completely the extreme winter warming from 1918 to 1922 which lasted until 1940. In this scenario CO2 is presumably the weakest mean to influence surface temperatures, and climate modeling is hardly a helpful tool, as long as not more distinctions between the sunless winter season and summer time is made.



[1] Rune G. Graversen, T.Mauritsen, M.Tjernström, E.Källén, G.Svensson; Nature, 3 January 2008, 451, p. 53-56
[2] Pioneer Press, 02 Jan. 2008; Nature giving global warming a nudge in Arctic, scientist says
[3] http://blogs.nature.com/climatefeedback/2008/01/arctic_amplification_1.html#more
[4] Theses from Stockholm University; http://www.divaportal.org/su/theses/abstract.xsql?dbid=7473.