

Greenland Climate Change

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We provide an analysis of Greenland temperature records and compare the current (1995-2005) warming period with the previous (1920-1930) Greenland warming. We find that the temperature increases are of a similar magnitude, however, the rate of warming in 1920-1930 was about 50% higher than that in 1995-2005.

Although the last decade of 1995-2005 was relatively warm, all decades within 1915 to 1965 were warmer at both the southwestern (Godthab Nuuk) and the southeastern (Ammassalik) coasts of Greenland. The current Greenland warming is not unprecedented in recent Greenland history.

We find no evidence to support the claims that the Greenland ice sheet is melting due to increased temperature caused by increased atmospheric concentration of carbon dioxide. The rate of warming from 1995 to 2005 was in fact lower than the warming that occurred from 1920 to 1930. The temperature trend during the next ten years may be a decisive factor in a possible detection of an anthropogenic part of climate signal over area of the Greenland ice sheet.