

# Comments on “Arctic air temperatures climb to record levels”

Thu Oct 16, 2008 Reuters

<http://www.reuters.com/article/environmentNews/idUSTRE49F9OE20081016>

Reuters and others had published articles on record levels of Arctic air temperatures according to the annual report issued by researchers at the U.S. National Oceanic and Atmospheric Administration (NOAA), (<http://www.arctic.noaa.gov/reportcard/>).

## Citation:

**“Fall air temperatures have climbed to record levels in the Arctic due to major losses of sea ice as the region suffers more effects from a warming trend dating back decades, a report released on Thursday showed.”**

*The annual report issued by researchers at the U.S. National Oceanic and Atmospheric Administration and other experts is the latest to paint a dire picture of the impact of climate change in the Arctic.*

*It found that fall air temperatures are at a record 9 degrees Fahrenheit (5 degrees C) above normal in the Arctic because of the major loss of sea ice in recent years that allows more solar heating of the ocean.*

*That warming of the air and ocean impacts land and marine life and cuts the amount of winter sea ice that lasts into the following summer, according to the report.”*

Here I will only comment the temperature data of the NOAA report.

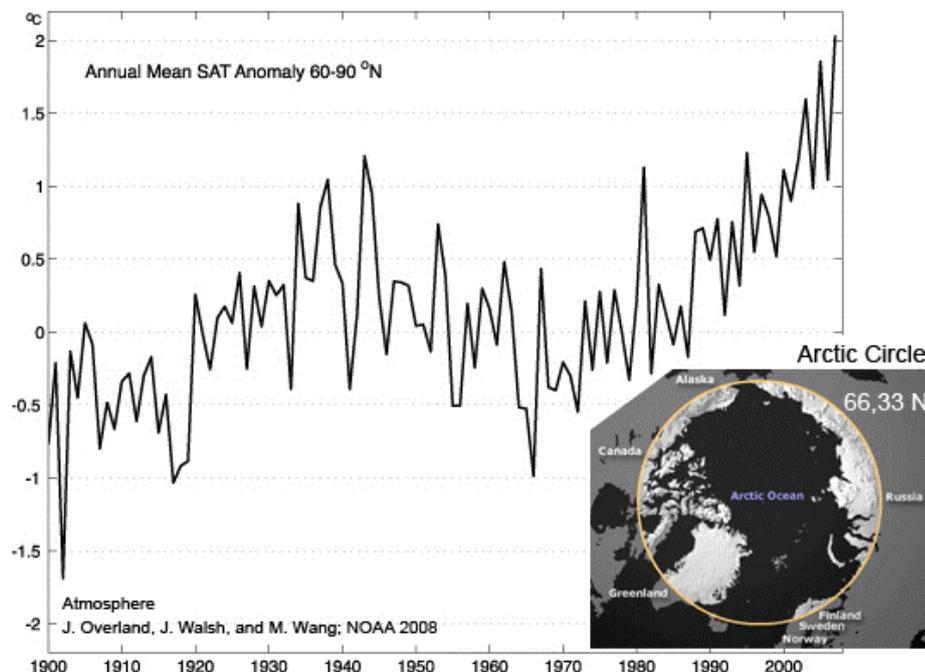
(<http://www.arctic.noaa.gov/reportcard/atmosphere.html>)

A first look on the chart shows, that only a fraction of available information have been used.

## Citation of the summary:

*“Autumn temperatures are at a record 5° C above normal, due to the major loss of sea ice in recent years which allows more solar heating of the ocean. Winter and springtime temperatures remain relatively warm over the entire Arctic, in contrast to the 20th century and consistent with an emerging global warming influence.”*

“Normal” means the longtime average (1960-1990). But the temperature graph does not show autumn temperatures of the Arctic circle but atmospheric temperatures measured at stations on land at a latitude of 60 to 90 N.



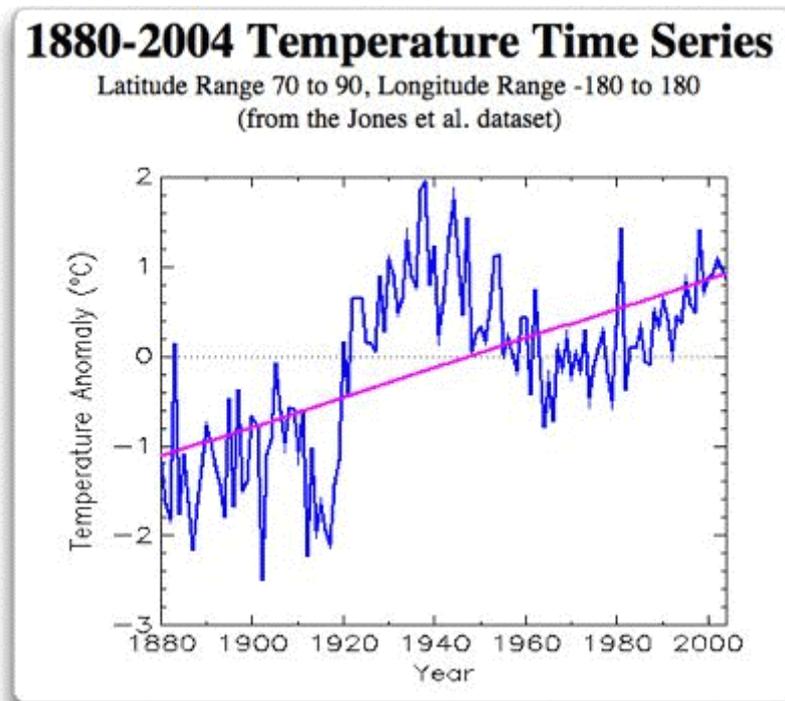
**Figure A1.** Arctic-wide annual averaged surface air temperature anomalies (60°–90°N) based on land stations north of 60°N relative to the 1961–90 mean. From the CRUTEM 3v dataset, (available online at [www.cru.uea.ac.uk/cru/data/temperature/](http://www.cru.uea.ac.uk/cru/data/temperature/)). Note this curve does not include ship observations.

Arctic circle added egb08

It is easy to see that the rise of temperature was about 1,5 °C since 1960 in average on land stations.

We know that the Arctic circle is northern of a latitude of 66,33 north covering an area of about 26 million km<sup>2</sup>. About 12 million km<sup>2</sup> are land (Greenland, Canada, Russia etc. ) and 14 million km<sup>2</sup> the Arctic Ocean.

The real averaged temperatures of the whole Arctic circle (70-90 N) can be found in the same data base used by NOAA (CRU, Phil Jones):



The graph shows a strong Arctic warming during 1918 and 1960, stronger than today with a rise of about + 4°C up to 1938. Referencing only a rise since 1960 we got the illusion of a dramatic rise in modern times.

### Conclusion:

The news item: "*Arctic air temperatures climb to record levels*" is selective science and wrong because the Arctic Ocean ( covering an area of more than 50% of the Arctic circle) has been left unconsidered.

The NOAA study summarizes: „5°C record levels in temperature in autumn“, presents the averaged temperatures only on land stations and discusses melting sea ice as a cause! This is pseudoscience.

In contrast the current Arctic warming mimics the 1920s-1940s event, as a recent study from the Ohio State University reveals. The scientists recognized from using weather station records, maps and photos from the past century that temperatures in Greenland had warmed in the 1920s at rates equivalent to the recent past. (<http://researchnews.osu.edu/archive/grnIndice.htm>)

**Citation:** “ The fact that recent changes to Greenland's ice sheet mirror its behavior nearly 70 years ago is increasing researchers' confidence and alarm as to what the future holds. Recent warming around the frozen island actually lags behind the global average warming pattern by about 1-2 degrees C.”