Katastrophaler Rückzug der Gletscher auf Spitzbergen! Brandheiße Meldung von: 1934!

Section 162. Warming of the Arctic

Along with the fluctuations in ice abundance in each individual sea from year to year, in late years a most interesting phenomenon has been observed--a warming of the arctic, as evidenced by a gradual and universal decrease in ice abundance. The main evidences of this general warming of the arctic are:

1. Receding of glaciers and "melting away" of islands. According to the testimony of Wegener, all the Greenland glaciers which descend into Northeast Bay and Disko Bay, have been receding since approximately the beginning of the present century. In particular the Jakobshavn glacier receded about 20 m during the period 1880 to 1902. As has already been mentioned, the glaciers of these two bays produce the main mass of the Greenland icebergs. Receding of glaciers during recent years has likewise been observed on Spitzbergen, Franz Joseph Land, and Novaya Zemlya.

On Franz Joseph Land during recent years several islands have appeared as if broken in two. It turned out that they had been connected up to that time by ice bridges.

During voyages on the *Perseus* in 1934 and the *Sadko* in 1935, I carefully compared the descriptions of glaciers on Jan Mayen and Spitzbergen in some English sailing directions of 1911 with what I observed and everywhere I noted a great decrease in size of glaciers.

Ahlman explored the glaciers of Spitzbergen in 1934 and found that these glaciers are now melting faster than they grow on account of fall of snow. Ahlman terms the rapid receding of the Spitzbergen glaciers "catastrophic."

Sumgin informed me that the southern boundary of permafrost in Siberia is everywhere receding northward. In 1837 this boundary, for example, ran somewhat south of the town of Mezen and was found at a depth of 2 m. In 1933 the Academy of Sciences Expedition found this boundary at the village of Semzha 40 km further north.

The washing away of the Lyakhoskiye Ostrova and the disappearance of Vasilevski Ostrov in the Laptev Sea belong to the same type of phenomena.

Die Wortwahl aus diesem Absatz von Seite 471 (oben) wirkt vertraut, nur die Jahresangabe 1934 nicht:

Ahlman explored the glaciers of Spitzbergen in 1934 and found that these glaciers are now melting faster than they grow on account of fall of snow. Ahlman terms the rapid receding of the Spitzbergen glaciers "catastrophic."

Nun, die Realisten wissen, wie warm **1934** war (nur Hansens GISS und die übrigen **Leugner** versuchen die Warmphase der 1930er Jahre und die anschließende Abkühlung abzustreiten).

In diesem Abschnitt werden temperaturanomalien von bis zu 10°C erwähnt:

2. Rise of air temperature. Since 1920 the average temperature of the winter months has steadily increased on the coasts of Baffin Bay, the Greenland Sea (Jacobshavn), Spitzbergen, Bear Island, Barents and Kara Seas. Even in the winter of 1928-29, when there was bitter cold in Europe, the winter temperature on Spitzbergen and Bear Island was only slightly under normal. Vize points out that at Vardo (northeast Norway) the average annual air temperature starting with 1918 is higher than the average for the century. The year 1926 represents an exception with temperature lower than normal by 0.2°.

Starting with 1930, in the whole arctic sector from Greenland to Cape Chelyuskin there has not been a single anomaly of average annual and monthly winter temperatures, while the positive anomalies have been very high. Thus, for example, in the winter of 1934-35 the positive anomalies of average monthly temperature in the region from Dickson Island to Cape Chelyuskin were from 4° to 10°. In November 1935 the positive anomaly on Spitzbergen amounted to 10°.*

Vize points out that if one compares the average air temperatures on the *Fram* and *Sedov* when the position of these vessels more or less coincided in respect to coordinates (average latitude of the *Fram* was 81°59' north longitude, 113°26' east; *Sedov*, 82° 48' north, 121°30' east) and in respect to season (November 1893 to August 1895 for the *Fram*; November 1937 to August 1939 for the *Sedov*), it turns out that the average annual air temperature on the *Sedov* was 4.1° higher than on the *Fram*. In the six months from September through February this difference even amounted to 7.5°.

---

*The deviation of average air temperatures from the 50 year averages exceeded +4° in January to March, 1921 to 1931.

Das Eis ist in großen Gebieten verschwunden:

3. Rise in temperature of Atlantic water which enters the Arctic Basin. This rise is most clearly seen in existent systematic observations along the meridian of Kola (33°30' east). Taking the average temperatures of this section at depths of 0 to 200 m from 69°30' north to 72°20' north, and dividing existing observations into two periods, cold (1900 to 1906) and warm (starting with 1921), I have obtained a rise of average temperatures for May and August of about 0.7°. From this it follows that on the average a column of water of the Norwegian current 1 square cm in section and 200 m high has 14,000 g-cal more heat supply at the present time than at the start of the present century.

The warming of Atlantic water in the arctic is likewise seen in the following condition: in the regions adjacent to Spitzbergen and Franz Joseph Land there has recently been observed a rise of the lower boundary of the cold intermediate water layer from a depth of 150 to 200 m, as observed at the start of the present century, to a depth of 75 to 100 m in the present period.

The warming of Atlantic water is still more sharply seen by comparing temperature observations at the deep water observation stations which the *Fram* and *Sedov* made at almost the same geographical points. Figure 195 shows the vertical distribution of temperatures at two of such points from which may be seen the extent of the warming of Atlantic water during the past 40 years. At none of the observation stations of the *Fram* in the Arctic basin did the temperatures of deep Atlantic water exceed 1.13°. On the *Sadko* in 1935 we observed a temperature of Atlantic water of 2.68°, while according to observations of the *Sedov* in 1938, temperatures of Atlantic water even in regions North and east of the *Fram* drift (i.e., where it should have colder) were up to 1.8°.

Table 120, borrowed from Shokalski, shows the average yearly temperatures of surface water in the Florida current (in the region bounded by 25° to 30° north and 79° to 80° west) in Yucatan Strait (in the region bounded by 21° to 23° north and 84° to 87° west) and in the Gulf of Mexico (in the region bounded by 21° to 25° north and 90° to 94° west).

From the table it may be seen that the temperature of surface water and of Gulf Stream water has steadily risen starting with the first decade of the present century.

A rise in temperature of surface water has likewise been noted in other ocean regions which are under the influence of the Gulf Stream and the North Atlantic Drift, as may be seen from table 121 (likewise taken from Shokalski).

4. Decrease in ice abundance. We may judge about the decrease in ice abundance in the Greenland and Barents Seas from the ice maps of the Danish Meteorological Institute. According to Karelin's reckoning, the ice area in the Greenland Sea in April to August for the period 1921 to 1938 is 15 to 20 per cent less than for the period 1898 to 1920. From my calculations, the ice abundance in the Barents Sea for the same months from 1920 to 1933 was 12 per cent less than for the period 1900 to 1919.

It must be remembered that the ice in the Barents Sea is mainly of local origin. A decrease in its quantity is connected with a rise of temperature and speed of the Norwegian current.

Vize shows that the southern part of the Kara Sea (south of the parallel of Matochkin Shar), from the year 1929 has been free of ice in September of every year while for the period 1869 to 1928 the probability of finding ice in this part of the sea in the first half of September was about 30 per cent.

Wind scheint eine Rolle beim Verschwinden des Eises aus dem arktischen Becken gespielt zu haben:

TABLE 120. AVERAGE TEMPERATURE OF SURFACE WATER

Year / Region	1912 to 1918	1919 to 1925	1926 to 1933	Temperature Rise
Florida Current	25.90° C	26.11° C	26.33° C	0.43° C
Yucatan Straits	26.77	26.71	27.03	0.26
Gulf of Mexico	25.24	26.09	25.88	0.64

TABLE 121. AVERAGE TEMPERATURES OF SURFACE WATER IN THE ENGLISH CHANNEL

Years	1903 to 1911	1912 to 1919	1920 to 1947	Temperature Rise
Temperatures	11.7°	11.8°	12.1°	0.4°

The decrease in ice abundance has been felt in an increase in amplitudes of tides (which are generally dampened by the ice cover). For example, Vize shows that on Franz Joseph Land and on Dickson Island the amplitudes of the tide have increased by 20 per cent to 30 per cent during the period of warming of the arctic.

5. Increase in speed of drift of ice. The main mass of ice in the Greenland Sea is carried there from the Arctic Basin. The decrease in its quantity is likewise connected with an increase in speed and rise in temperature of the Norwegian and Spitzbergen currents, and with wind action. At first glance it would appear, however, that a decrease in ice abundance in the Greenland Sea should indicate a decrease in transfer of ice into the Greenland Sea from the Arctic Basin. The facts, however, indicate the reverse. During recent years Soviet sea expeditions have thrown out numerous buoys in the Greenland, Barents and Kara Seas in order to study sea currents and the drift of sea ice. Many of these buoys were subsequently found on the shores of Greenland, Iceland and Norway, and it turned out that all the buoys which were put out after 1933, upon calculation, show speeds of current and drift three to four times greater than before 1933. The drift speed of the station "North Pole" was 2.4 times greater than had been expected. The *Sedov* drift began and ended considerably further south than the *Fram* drift and ran further north, but the *Fram* drift lasted 1,055 days while the *Sedov* drift lasted only 812 days.

6. Change in cyclone routes. There is no doubt that the increase in air temperatures, increase in Atlantic water temperatures, intensification of ice drift, etc. are closely connected with an intensification of atmospheric circulation, and in particular with a change in cyclonic activity in the high latitudes.

Vize shows that the Atlantic cyclones are now shifting considerably north (by several hundred km) from their courses in the period before the warming of the arctic. This is felt in changes in wind conditions. For example, in Yugorski Shar before 1920 winds of easterly components (cold) prevailed, while after 1920 southwesterly winds (warm) began to prevail.

Die Erwärmung ist nicht beendet:

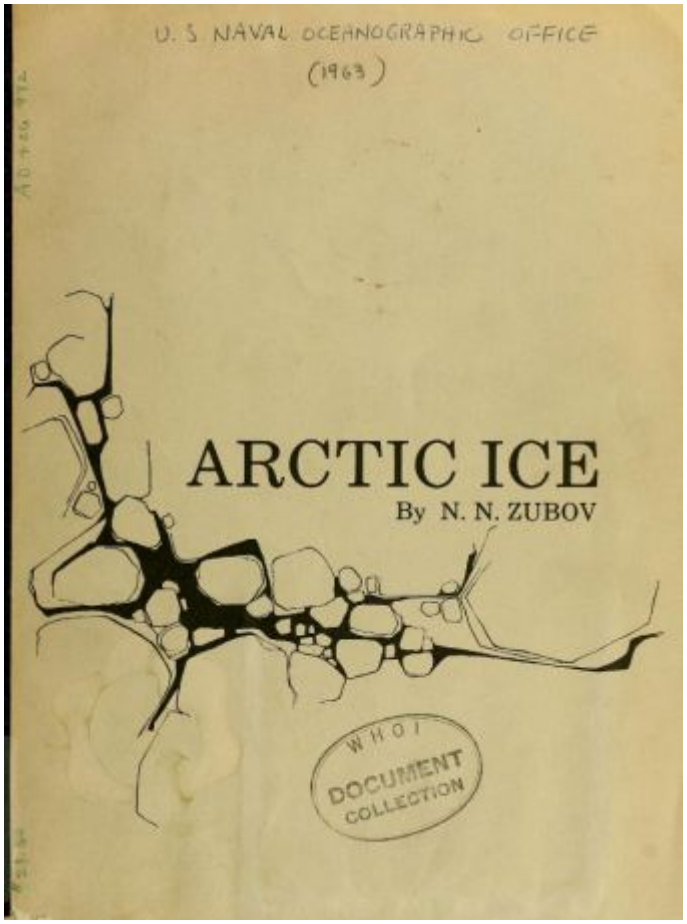
ular region. In actuality, the same signs of warming of the atmosphere and hydrosphere are found in the Bering Strait in the Pacific Ocean as in the western sector of the Soviet Arctic.

A warming of the antarctic is evidently also going on simultaneously, although there are as yet no data to permit reliable judgement concerning this.

On the background of general warming of the arctic we are observing warmer years and colder years, but there are not signs as yet that this warming is terminating, and this question, in connection with a deeper analysis of the causes of the warming, is one of the most interesting problems of contemporary oceanography.

LITERATURE: 14, 33, 35, 58, 62, 70, 72, 77, 144.

Hier ist der Buchtitel:



All diese Mitteilungen über einen katastrophalen Eisschwund klingen vertraut, nur eben das Jahr der Veröffentlichung nicht:

I also wish to express my indebtedness to Rear Admiral I. D. Papanin and to V. D. Novikov, who by their care and attention have aided in the completion and publication of this book.

Moscow. May, 1943.

N. N. Zubov, Naval Captain,
Professor, Doctor of
Geographical Sciences

Ganz offensichtlich hat es in der Arktis schon immer ein Auf und Ab des Eises gegeben. **Veränderung ist die Normalität**, nicht – wie uns die Alarmisten etwa beim NSIDC oder Rahmstorf einreden wollen – ein absolut stabiler Zustand, der bis zum „Eingriff" durch den Menschen in Gestalt der „Treibhausgas-Emissionen" andauerte.

Von Klimaskeptikerinfo
Quelle (englisch, externer Link)