

September 2026

CliSciPol

Climate Science and Policy for Nonscientists

One Picture is Worth a Thousand Words.



There is, in fact, data showing that the Arctic has been warming at twice the world rate. The IPCC predicts that through the year 2100 the Arctic will warm “above two times” the rate of the world. (AR6 p.15). But the Arctic is a huge area. Where is the warming occurring?

2. Arctic Surface Stations Records Show Ordinary Warming



Locations of 118 arctic stations examined in this study and compared to observations at 50 European stations whose records averaged 200 years and in a few cases extend to the early 1700s

A recent extensive analysis of Northern surface temperature records gives no support for Arctic “amplification” fears.

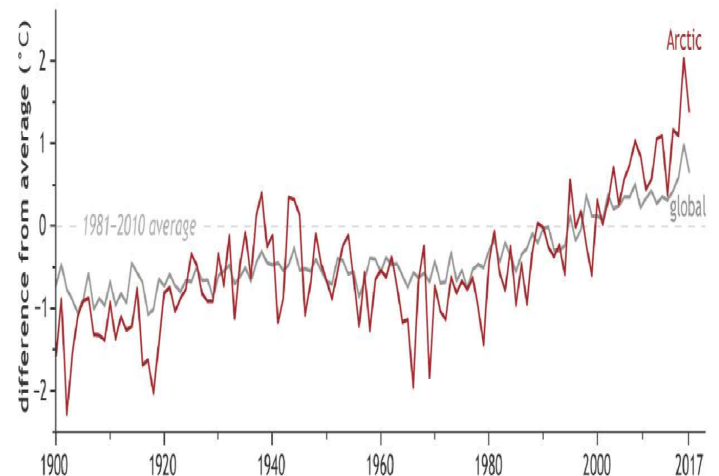
The Arctic has warmed at the same rate as Europe over the past two centuries. Heretofore, it has been supposed that any global warming would be amplified in the Arctic. This may still be true if urban heat island effects are responsible for part of the observed temperature increase at European stations. However, European and Arctic temperatures have remained closely synchronized for over 200 years during the rapid growth of urban centres.

And the warming pattern in Europe and the Arctic is familiar and unalarming.

ARCTIC UPDATE

For over 20 years alarmists have been predicting a melting disaster in the Arctic due to global warming. But these predictions have not been fulfilled. There has been no significant Arctic melting for the last 19 years. Where’s the crisis?

ARCTIC WARMING TWICE AS FAST AS GLOBAL AVERAGE



NOAA Climate.gov
Data: ARC 2017

The surface temperature records from 118 Arctic land stations show warming that is only comparable to European land stations, not greater than.

Influence of temperature fluctuations on equilibrium ice sheet volume

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 Observed fluctuations in Greenland temperature

Surface temperature anomalies were obtained from (KNMI). We use the "Twentieth Century Reanalysis V2c" from the years 1851 to 2011 in a box spanning 68°N to 80°N and 25°W to 60°W. The raw data consists of monthly means and are shown in Figure 2 as the blue curve.

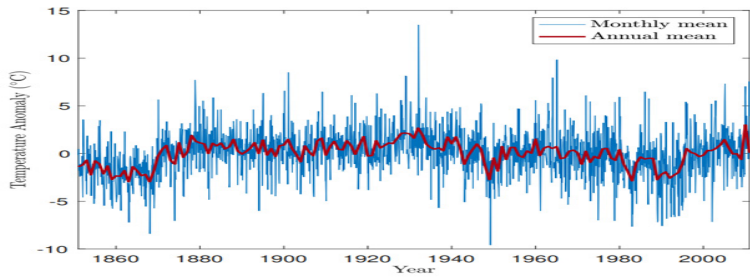
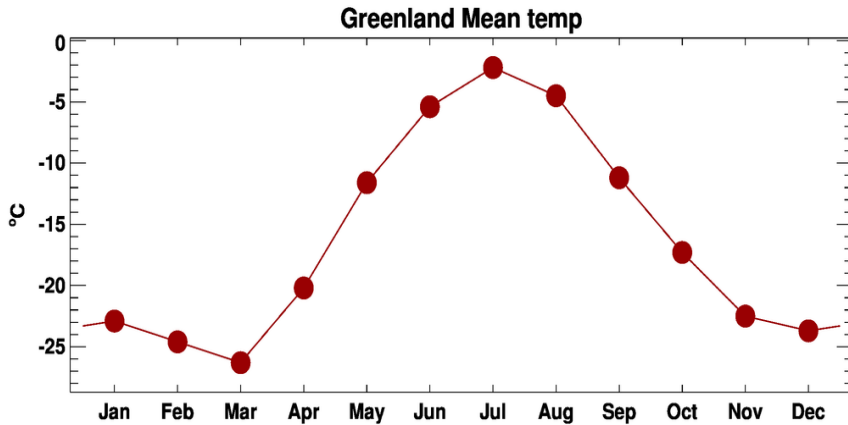


Figure 2. Reanalysis data showing monthly mean surface temperature anomaly (blue curve) over the area 68°N – 80°N, 25°W – 60°W covering a large part of Greenland. The red curve is the annual mean surface temperature anomaly; this has observed variance $\sigma_{T,obs}^2 = 1.55$ °C².

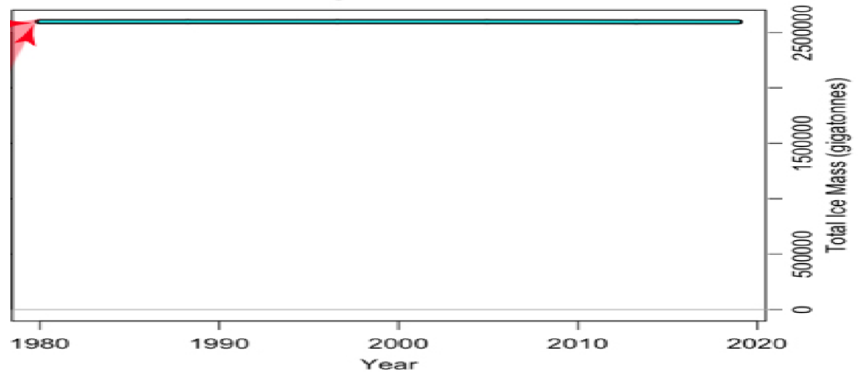
Greenland temperatures jumped up from 1870 to 1880 but have been remarkably stable since 1880.



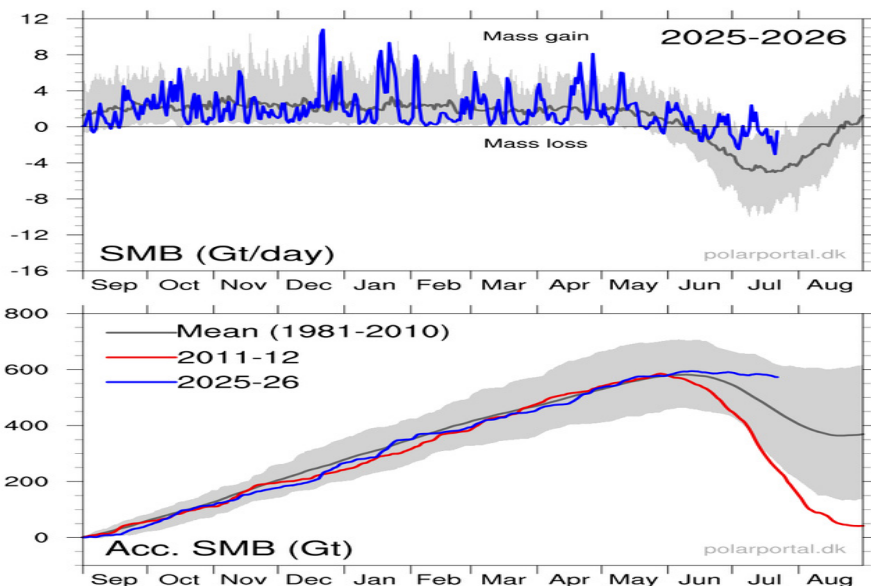
Greenland average temperatures per month never exceed freezing (0 °C = 32 °F), and, for most months, are very far below freezing. Seven months average below -18 °C (0 °F). It is impossible for much ice to melt.

Ice Loss vs. All Greenland Ice

Greenland Total Ice Mass Changes Since 1980

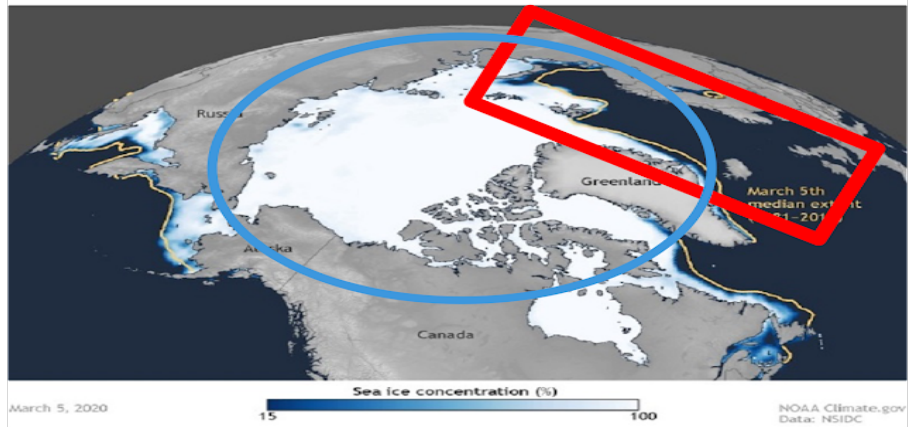


Measurements show Greenland losing ice mass, but the loss is so small that, if the total ice at year end is graphed over more than 40 years, there is no apparent change in the amount of ice. The amount claimed to be lost, while a significant number standing alone, is smaller than the margin of error of the measurements and only a tiny percentage of the total Greenland ice mass..

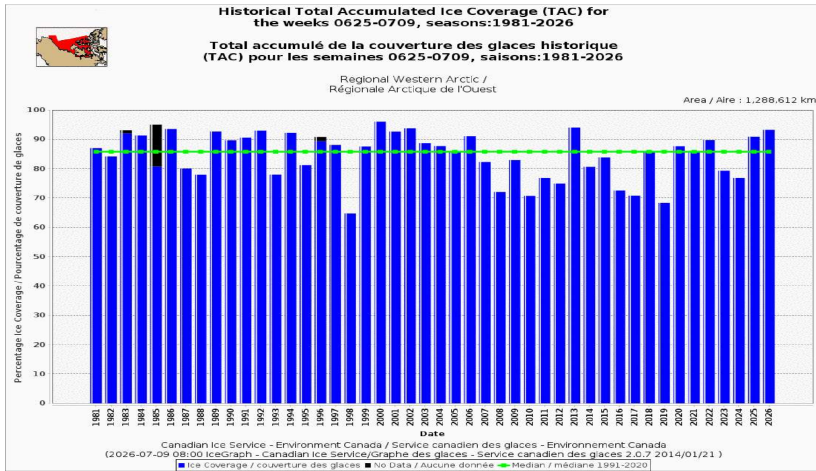


With eleven months gone in the 2025-2026 Greenland ice year, the amount of ice each month is at, or slightly, above the mean for 1981-2010. One study recently concluded that in six of the last nine years Greenland ice formation has been above the long-term average rate.

2019-20 WINTER MAXIMUM



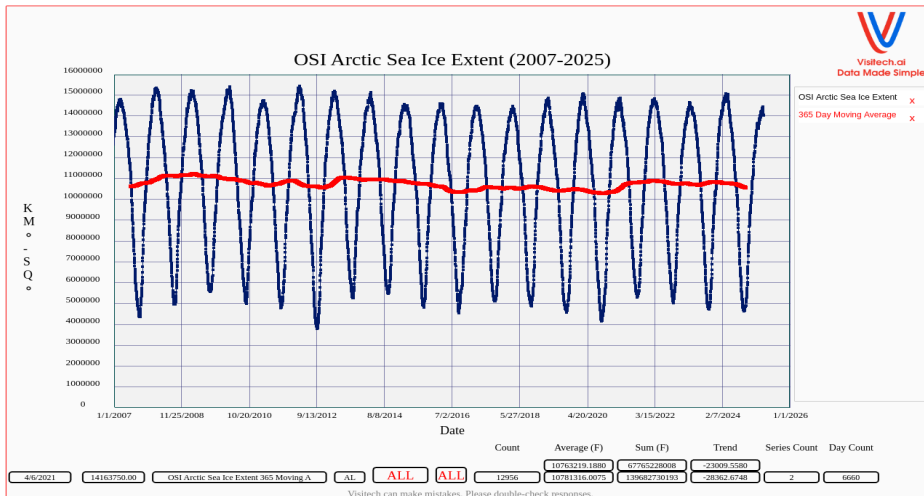
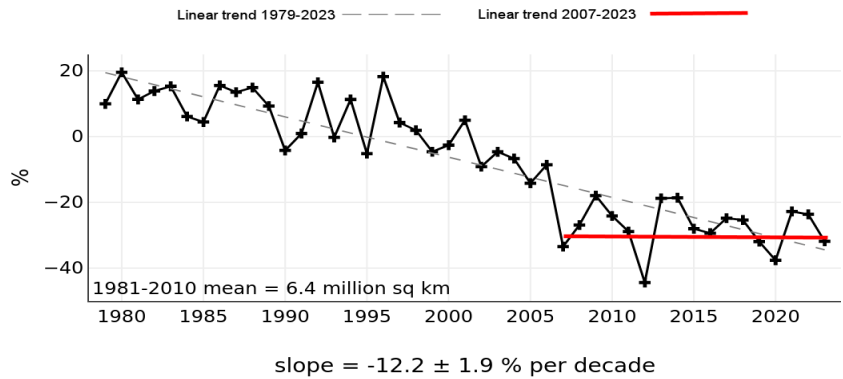
Arctic warming is happening mostly over the Eastern Arctic Ocean between Greenland and Scandinavia and along the North-Western coast of Russia. This is where the sea ice was melting from 1980 to 2007. Melting sea ice does not raise global sea levels, whereas, if the Greenland ice sheet melts, that does raise global sea levels.



Western Arctic Ocean ice has been remarkably unchanged for 45 years since 1981. The Arctic Ocean at 5.4-5.5 million square miles is 75% larger than the continental US.

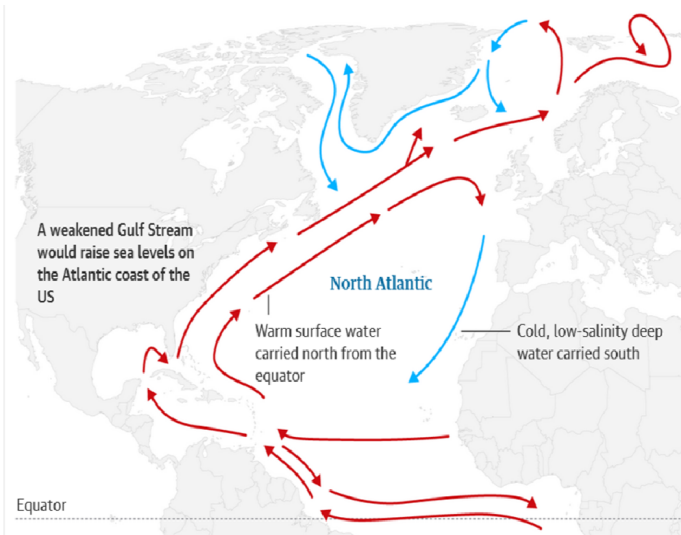
Total Arctic Ocean ice declined dramatically from 1980 to 2007, which resulted in warnings from alarmists, such as appeared at the start of this newsletter.

Northern Hemisphere Extent Anomalies Sep 1979 - 2023

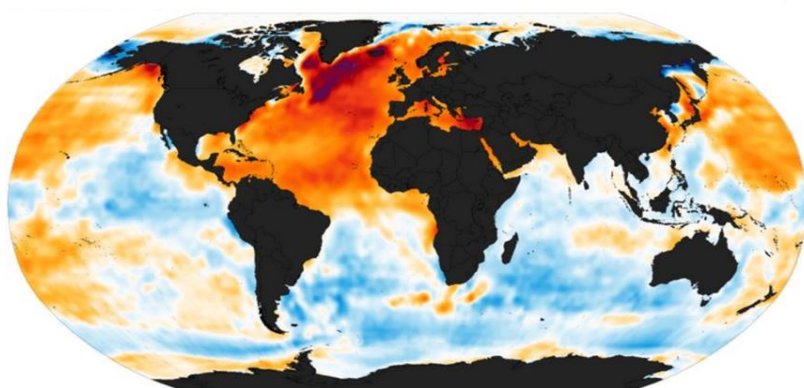


But from 2007 to 2025 Arctic Ocean ice was remarkably stable in average extent while varying greatly annually by season.

Advocates of the CO2 Control Knob Theory contend that the decline in Arctic sea ice was due to global warming caused by rising CO2 levels. This theory does not explain the difference in Eastern and Western Arctic Ocean melting. An alternative theory is that the melting was caused by an ocean current, the Atlantic Meridional Overturning Circulation, of which the Atlantic Multidecadal Oscillation (AMO) and the Gulf Stream are a part. The areas where sea ice has been melting match the areas warmed by the AMO.



Atlantic Multidecadal Oscillation

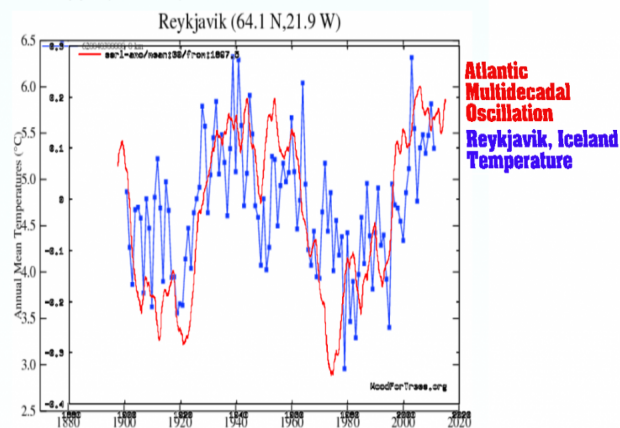


The map represents the hot phase of the AMO cycle. The total cycle lasts roughly 60-70 years. The map shows how, during the hot phase, the AMO sweeps warm water into the Eastern Arctic Ocean. The Bering Strait between Russia and Alaska is too small to allow any significant amount warm Pacific Ocean water to enter the Western Arctic Ocean. During the AMO cold phase the amount of Eastern Arctic Ocean ice increases.

The effect of the hot/cold AMO cycle is demonstrated by the high correlation it has had with temperatures in Iceland since 1900.

GISS Surface Temperature Analysis

Station Data: Reykjavik (64.1 N, 21.9 W)



Since 1855 the AMO cycles have had a high correlation with global temperature rise and fall.

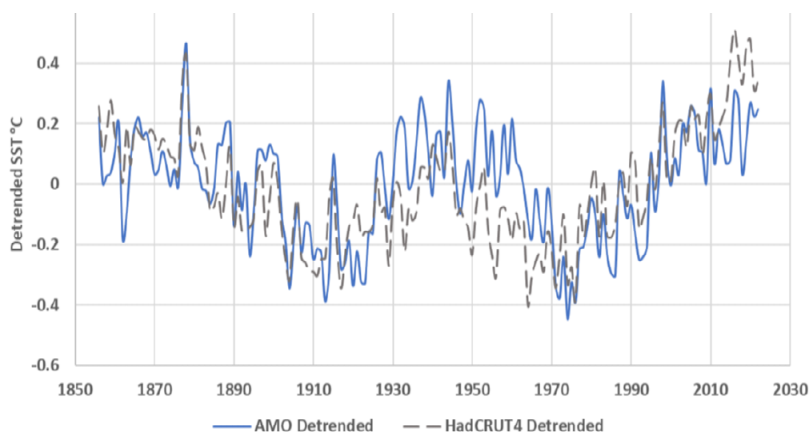


Figure 1. The Atlantic Multidecadal Oscillation (AMO) Index and HadCRUT4 detrended global surface temperature record. Source: (May & Crok, 2024).

By contrast, atmospheric CO2 levels correlate poorly with the world temperature decline from 1880 to 1910, with the temperature rise from 1910 to 1940, and with the temperature decline from 1940 to 1975.

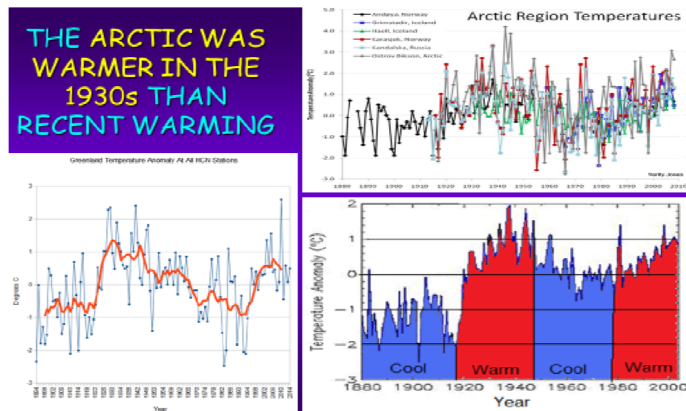
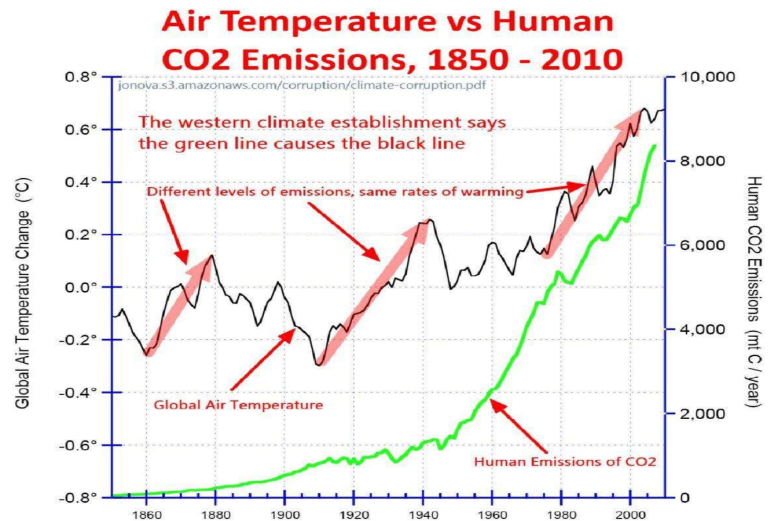


Figure 9. Arctic temperatures were warmer in the 1930s than today. The graph on the left shows temperatures in Greenland from 1894 to 2014 (high temperatures in left center during the 1930s) were warmer than today (right side). Upper right graph is Arctic temperature from Iceland, Russia, and Norway showing that the 1930s were warmer than recent decades. Lower right shows Arctic temperatures from 1880 to 2000 for 70–90° latitude. Note that the 1920s and 1930s were warmer than 2000. (Easterbrook, 2016).



Reconstructions of Arctic temperatures during the prior AMO warm phase, centering in the 1930s, show that the Arctic was warmer then than today, which further confirms that Arctic temperatures change cyclically. The general consensus is that the end of the present AMO warm phase is overdue, and that the next cold phase will begin within a very few years.

CONCLUSION

There is much disagreement and uncertainty as to the climate effect of the AMO and other ocean currents. The exact mechanisms involved have not been established, and ocean data before around the year 2000 is relatively sparse and subject to question. Advocates of the CO2 Control Knob Theory generally deny the AMO's significance. But scientists have found a number of correlations that suggest a major AMO impact. The AMO is now associated with rain in Brazil and the Sahel, with rainfall and drought in North America, and with severe hurricanes in the Atlantic. The effect of the AMO has been so prominent that it has been described as likely the most powerful natural oscillation.

THE NEPAL DISASTER

The recent Nepal disaster has received wide coverage in the media. NPR, the New York Times, the AP, and other alarmists have immediately blamed climate change. The claim has been that global warming caused glacier melting and collapse that, in turn, led to a massive flood. But a single disaster does not establish the existence of climate change.

CLIMATE CHANGE DEFINED

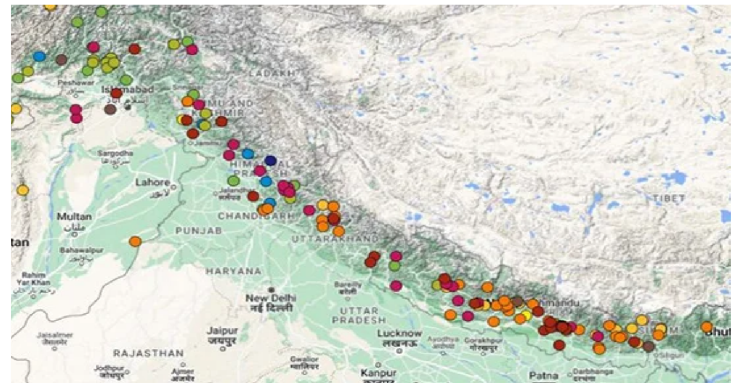
A statistically significant change (usually at the 90% confidence level) of some measured or counted climate variable (such as temperature or hurricane frequency).

Over a significant period of time (usually at least 30 years but a much longer period of time may be required depending on the natural variability of the particular variable).

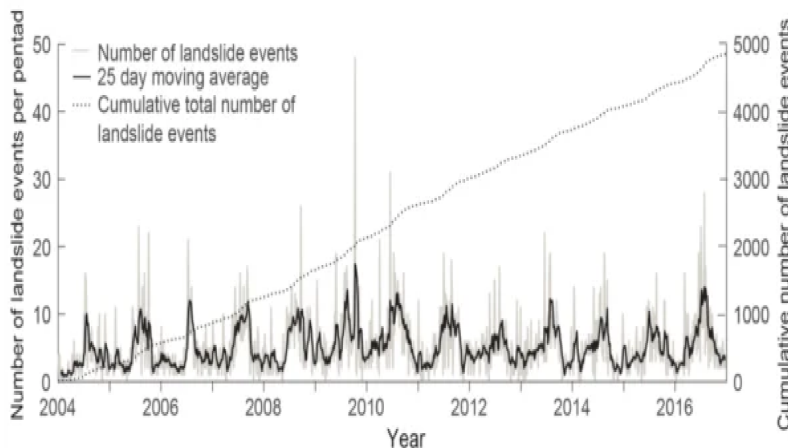


All sorts of natural disasters happen regularly and randomly without there being any climate change, such a flash floods in Texas’s Flash Flood Alley.

The region in Nepal where the recent landslide/flood disaster occurred is infamous for such disasters. Each circle on the map shows a fatal landslide that occurred along the slopes of the Hamalayas between China and Nepal in just the single year 2024.



From Dave Petley, *The Landscape Blog*. 2024 Fatal landslides in the Himalayas.

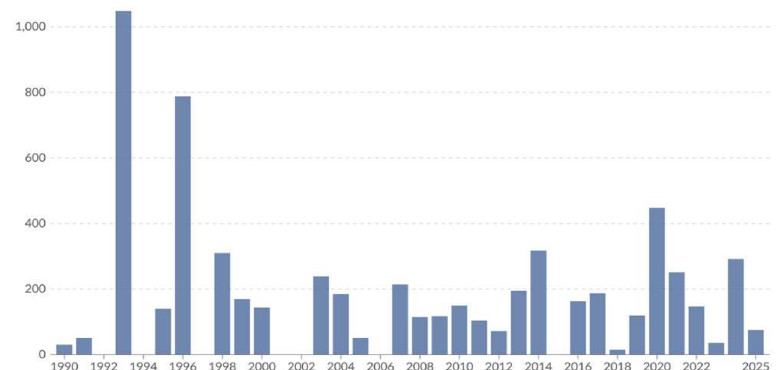


The Himalayas are geologically unstable and prone to landslides. Satellite images now suggest that the disaster started with a massive landslide/avalanche that temporarily blocked and dammed up the Lhende Khola River, but then the temporary dam failed, releasing a flood of water, mud, and boulders. Landslides, such as those in the Himalayas, are not caused by climate change but by geological instability. There is no evidence globally of increased landslides over time.

The landslide/avalanche started at an elevation of around 17,000 feet where the temperature was much too cold to allow for melting to be a factor. Even if the event is viewed as a flood rather than as a landslide, flood deaths in Nepal show no upward trend over the last 35 years.

Annual deaths from floods Nepal, 1990 to 2025

Floods include riverine, coastal, and flash floods, as well as glacial lake outburst floods (when water held back by a glacier or moraine is suddenly released).



Data source: EM-DAT, CRED / UCLouvain (2026)

OurWorldinData.org/natural-disasters | CC BY

Note: Based on recorded events; coverage is more limited before the year 2000. Longer historical trends may partly reflect reporting improvements.



The European Heat Wave

Western Europe and Great Britain suffered an extreme heatwave in July 2026, which the media claims constitutes a “climate crisis.”

But this heat wave was a limited, regional event. Most of the world experienced a colder than usual July, and the world average temperature for 2026 has been colder than it was for 2025.

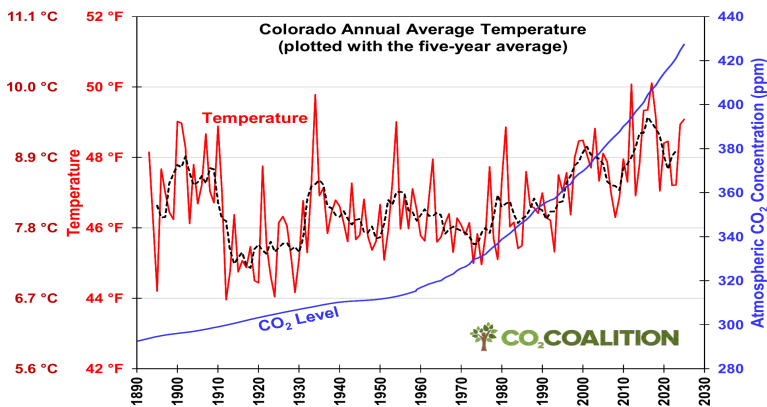
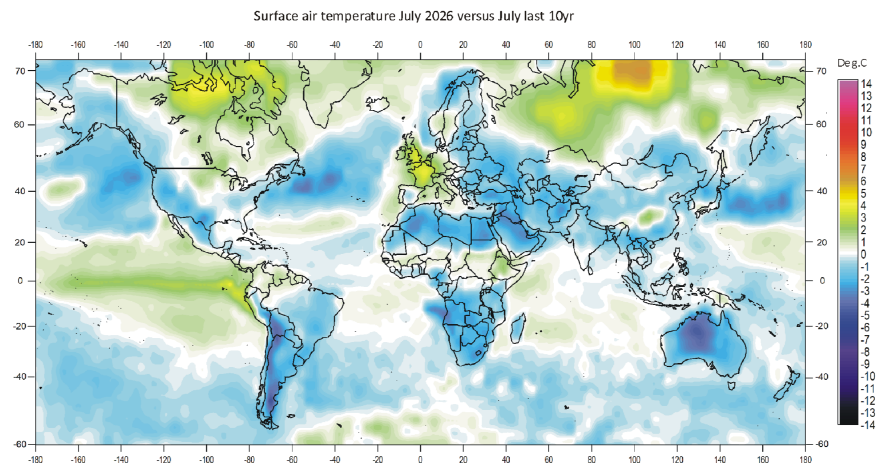
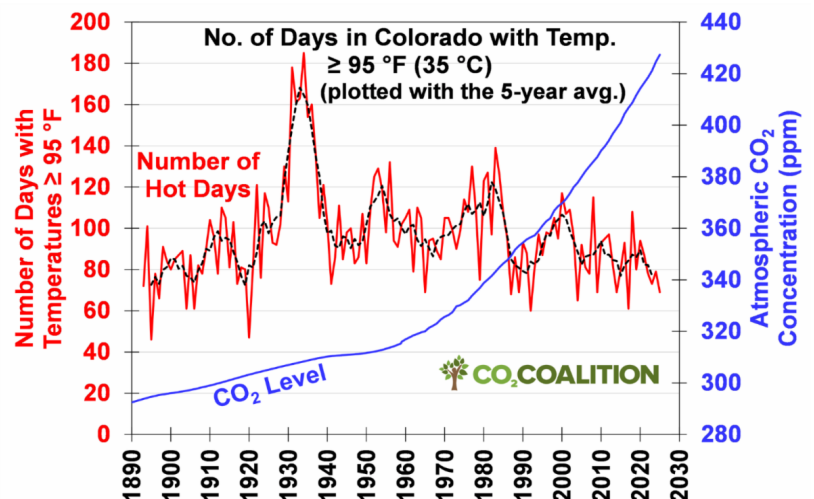


Figure 3: Colorado annual average temperature vs. atmospheric CO₂.

Unfortunately there is no standard definition of a heat wave. How many days make a “wave?” A recent study of the Colorado climate found that temperatures there have been rising. But the daily temperatures used in most temperature studies are the average of the high and low temperature of the day.

One way to avoid the “wave” issue is to count the number of days during a year where the high temperature reaches a particular number. But what should that number be? In the US some use 90 F, others 95 F, or even 100 F. Other countries use other numbers, both higher and lower. Some use relative numbers. The Colorado study chose 95 F and found that, although the average daily temperature was rising, the number of hot days per year declined from a high in the 1930s.



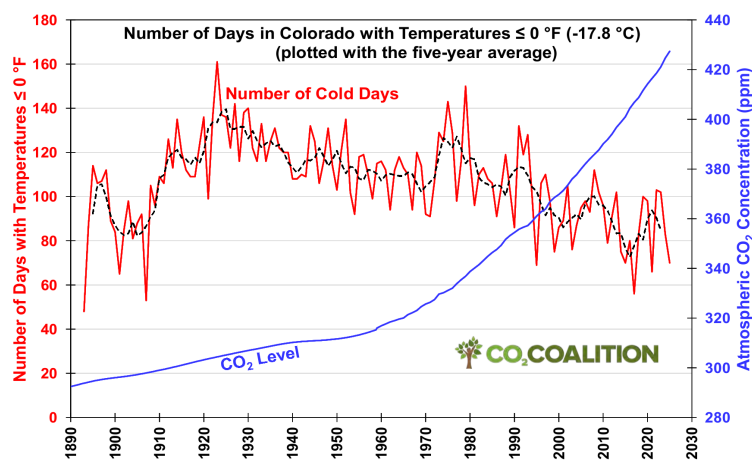
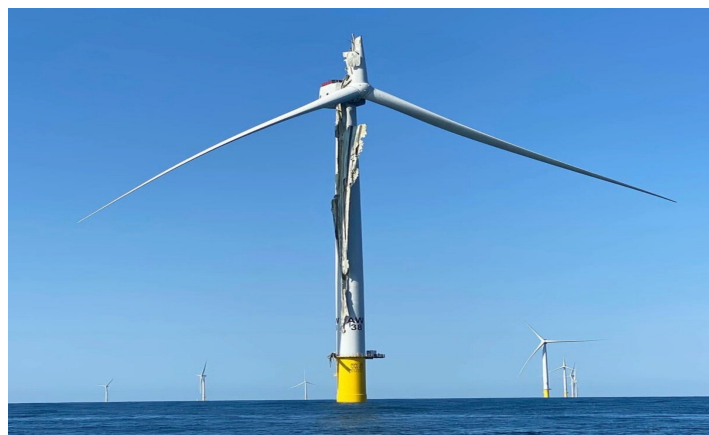


Figure 13: Annual number of cold nights in Colorado vs. atmospheric CO₂.

And, if cold days are defined as days with a temperature below 0 F, the number in Colorado has declined steadily from around 1920. The reductions in hot days and in cold days can both be considered beneficial. From around 45 F in 1910 the average temperature in Colorado rose to around 49 F in 2025. Most residents of Colorado might well consider that temperature rise to be beneficial.

WIND UPDATE

Vineyard Wind off the coast of Massachusetts was the US's first commercial-scale off-shore wind farm. On July 13, 2024, a blade broke off one of the installed turbines, causing construction to be halted. (See CliSciPol newsletter: July 2024). The resulting inspection eventually found that 68 of 72 blades were cracked or had serious defects. Resulting damages have now reached nearly one billion dollars. More than two years after the initial accident, production is still less than half what was promised.



Wind farms are experiencing large unanticipated repair costs and operating costs. Not only is wind power unreliable (no power when the wind does not blow), but it is becoming increasingly clear that on a fully distributed cost basis (as opposed to a marginal cost basis) wind power is much more expensive than coal or gas power.

Wind Waste Is a Problem on and Offshore

And disposing of wind farm waste is a growing problem. Broken or damaged blades are, in general, too difficult and expensive to recycle.





OCEAN PLASTICS

Plastic disposal is indeed a problem, but there have been over 2,000 studies of the problem over the last 50 years, and these studies show that the problem is very different from the way the problem is usually presented in the media. Most developed countries do a reasonably good job of controlling plastic pollution.

Unfortunately low-income countries tend to do a poor job of managing their waste. Approximately 100 rivers in South and South-East Asia account for about a half of the total plastic in the oceans.



And a substantial amount of the other plastic in the oceans is fishing nets discarded by the fishing fleets from those same Asian countries.



All footnote citations are to the Intergovernmental Panel on Climate Change's publication, Climate Change 2021 The Physical Science Basis, the first part of the Sixth Assessment Report (AR6).

