

Arctic cap on course for record melt: US scientists

August 22 2012, by Shaun Tandon



Ice melts next to the village of Ny-Aalesund in Norway in 2009. The Arctic ice cap is melting at a startlingly rapid rate and may shrink to its smallest-ever level within weeks as the planet's temperatures rise, US scientists said Tuesday.

The Arctic ice cap is melting at a startlingly rapid rate and may shrink to its smallest-ever level within weeks as the planet's temperatures rise, US scientists said Tuesday.

Researchers at the University of Colorado at Boulder said that the summer ice in the [Arctic](#) was already nearing its lowest level recorded, even though the summer melt season is not yet over.

"The numbers are coming in and we are looking at them with a sense of amazement," said Mark Serreze, director of the National Snow and Ice Data Center at the university.

"If the melt were to just suddenly stop today, we would be at the third lowest in the satellite record. We've still got another two weeks of melt to go, so I think we're very likely to set a new record," he told AFP.

The previous record was set in 2007 when the [ice cap](#) shrunk to 4.25 million square kilometers (1.64 million square miles), stunning scientists who had not forecast such a drastic melt so soon.

The Colorado-based center said that one potential factor could be an Arctic cyclone earlier this month. However, Serreze played down the effects of the [cyclone](#) and said that this year's melt was all the more remarkable because of the lack of special weather factors seen in 2007.

Serreze said that the extensive melt was in line with the [effects of global warming](#), with the ice being hit by a [double whammy](#) of rising temperatures in the atmosphere and warmer oceans.

"The ice now is so thin in the spring just because of the general pattern of warming that large parts of the pack ice just can't survive the summer melt season anymore," he said.

Russia's Roshydromet environmental agency also reported earlier this month that the Arctic melt was reaching record levels. Several studies have predicted that the cap in the summer could melt completely in coming decades.

The thaw in the Arctic is rapidly transforming the geopolitics of the region, with the long forbidding ocean looking more attractive to the shipping and energy industries.

Five nations surround the Arctic Ocean -- Russia, which has about half of the coastline, along with Canada, Denmark, Norway and the [United States](#) -- but the route could see a growing number of commercial

players.

The first ship from China -- the Xuelong, or Snow Dragon -- recently sailed from the Pacific to the Atlantic via the Arctic [Ocean](#), cutting the distance by more than 40 percent.

Egill Thor Nielsson, an Icelandic scientist who participated in the expedition, said last week in Reykjavik that he expected China to be increasingly interested in the route as it was relatively easy to sail.

But the rapid melt affects local people's lifestyles and scientists warn of serious consequences for the rest of the planet. The [Arctic ice cap](#) serves a vital function by reflecting light and hence keeping the earth cool.

Serreze said it was possible that the rapid melt was a factor in severe storms witnessed in recent years in the United States and elsewhere as it changed the nature of the planet's temperature gradients.

The planet has charted a slew of record temperatures in recent years. In the continental United States, July was the hottest ever recorded with temperatures 3.3 degrees Fahrenheit (1.8 Celsius) higher than the average in the 20th century, according to the National Oceanic and Atmospheric Administration.

Most scientists believe that carbon emissions from industry cause global warming. Efforts to control the gases have encountered resistance in a number of countries, with some lawmakers in the United States questioning the science.

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Citation: Arctic cap on course for record melt: US scientists (2012, August 22) retrieved 25 April 2024 from <https://phys.org/news/2012-08-arctic-cap-scientists.html>

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