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Is this finally proof we're NOT causing global warming? The whole of the Earth heated up in medieval times without human CO2 emissions, says new study

- Evidence was found in a rare mineral that records global temperatures
- Warming was far-reaching and NOT limited to Europe
- Throws doubt on orthodoxies around 'global warming'

By [Ted Thornhill](#)

PUBLISHED: 07:21 EST, 26 March 2012 | UPDATED: 07:52 EST, 30 March 2012

Current theories of the causes and impact of global warming have been thrown into question by a new study which shows that during medieval times areas as far apart as Europe and Antarctica both warmed up.

It then cooled down naturally and there was even a 'mini ice age'.

A team of scientists led by geochemist Zunli Lu from Syracuse University in New York state, has found that the 'Medieval Warm Period' approximately 500 to 1,000 years ago wasn't just confined to Europe.

In fact, it extended all the way down to Antarctica.



Cold facts: Antarctica actually warmed up during medieval times, contrary to what climate scientists believe

At present the Intergovernmental Panel on Climate Change (IPCC) argues that the Medieval Warm Period was confined to Europe.

However, Professor Lu has shown that this the Medieval Warm Period had a much broader reach – and the evidence lies with a rare mineral called ikaite, which forms in cold waters.

<http://www.dailymail.co.uk/sciencetech/article-2120512/Global-warmi...> 3/30/2012

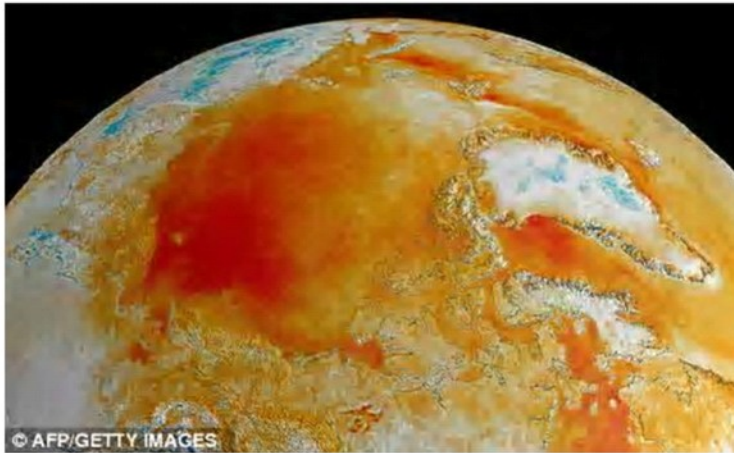
'Ikaite is an icy version of limestone,' said Lu. 'The crystals are only stable under cold conditions and actually melt at room temperature.'

It turns out the water that holds the crystal structure together - called the hydration water - traps information about temperatures present when the crystals formed.

This finding by Lu's research team establishes, for the first time, ikaite as a reliable way to study past climate conditions.

The mineral proved that Antarctica did warm up.

Lu says that his research has no direct bearing on the current climate, and points out that his research is restricted to one area in Antarctica, and is not in itself proof that the whole Earth warmed up.



Evidence that the Earth heated up over a 1,000 years ago was found in a rare mineral called ikaite

The scientists studied ikaite crystals from sediment cores drilled off the coast of Antarctica. The sediment layers were deposited over 2,000 years.

The scientists were particularly interested in crystals found in layers deposited during the 'Little Ice Age,' approximately 300 to 500 years ago, and during the Medieval Warm Period before it.

Both climate events have been documented in Northern Europe, but studies have been inconclusive as to whether the conditions in Northern Europe extended to Antarctica.

Lu's team found that in fact, they did.

They were able to deduce this by studying the amount of heavy oxygen isotopes found in the crystals.

During cool periods there are lots, during warm periods there aren't.

'We showed that the Northern European climate events influenced climate conditions in Antarctica,' Lu says. 'More importantly, we are extremely happy to figure out how to get a climate signal out of this peculiar mineral. A new proxy is always welcome when studying past climate changes.'

The research was recently published online in the journal Earth And Planetary Science Letters and will appear in print on April 1.

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Dear Mr. Thornhill, please fire whoever writes your headlines: "The whole of the Earth heated up in medieval times without human CO2 emissions-new study says" -the new study says nothing of the sort. In fact, it is consistent with medieval heating being regional only -if meridional heat transport increased - it would warm BOTH Europe and Antarctica, but at the cost of cooling the tropics (as more heat is moved away to higher lat.). Hence, the change in temperature of "the whole of Earth" would be ~0. As for: "Is this finally proof we're NOT causing global warming?" - WRONG AGAIN - not only false premise (as shown above) but also fallacious logic - EVEN IF the study proved that "the whole Earth" warmed in medieval times by forces other than CO2, this COULD NOT prove that the humans are

<http://www.dailymail.co.uk/sciencetech/article-2120512/Global-warmi...> 3/30/2012

not causing the warming today, much the same way the fact that people in medieval period weren't killed by nuclear weapons is not: "Finally proof that people cannot be killed with nuclear weapons".

- Piotr, Canada, 30/3/2012 14:45

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Hi Phil, Bucks, 30/3/2012 00:57, I think your real name must be Mr Topsy Turvy, from Opposite Land! How can you suggest that it is solar cycles (solar output has slightly dropped over the last 40 years) or that Arctic and Antarctic ice have increased (without cherry picking). You are either intentionally trying to mislead (troll) or you need to find a more reputable source for your climate research. I can't post links, but as a 'Skeptical Scientist' I recommend you do a little more research. Regards, Paul

- Paul, Crawley, 30/3/2012 08:11

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Paul, Crawley, 28/3/2012 12:38 - "how do you explain the melting of Arctic sea ice" etc. Simple, it's natural climate variability. Solar cycles, ocean currents, insolation, all vary. Climate alarmists have cherry picked time periods to support alarmism. How do you explain that Arctic and Antarctic ice have increased in recent years? The evidence is that the CO2 contribution is minimal. A climate sensitivity value of 0.5 degrees per doubling of CO2 would result in a two degrees increase, from four doublings above pre-industrial levels, i.e. an increase in CO2 from 250 to 4000 parts per million. Why does B. want to hide the decline? Why does T. say the missing heat is a travesty? How has H. made a 25 year career predicting disaster in 5 years? The increase in CO2 may or may not be anthropogenic. Who cares?

- Phil, Bucks, 30/3/2012 00:57

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Leslie, Piotr, Paul, et al: Lu would be nuts to publish any conclusion that goes against the anthropogenic line, risking their grant opportunities. What they have done is provide a new (and dangerous) proxy for demonstrating global warming during that period. The question you are resisting is the quantitative contribution of human CO2. Warming is occurring: can you possibly have all the facts that demonstrate conclusively the percentages? Before you go off on the US and European emission controls (highest on the planet) please go and sit down with the government officials in China, India, and So. America and insist that they have to raise their standards to ours. By the time you get out of prison, the planet may very well have cooled again. The political maneuvering to shut down the US by environmental policies have become increasingly clear, esp. by UN committees. Do you get it?

- Scott R, New York, 29/3/2012 17:39

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This is from the Syracuse University website - Zunli Lu: It is unfortunate that my research, "An ikaite record of late Holocene climate at the Antarctic Peninsula," recently published in Earth and Planetary Science Letters, has been misrepresented by a number of media outlets. Several of these media articles assert that our study claims the entire Earth heated up during medieval times without human CO2 emissions. We clearly state in our paper that we studied one site at the Antarctic Peninsula. The results should not be extrapolated to make assumptions about climate conditions across the entire globe. Other statements, such as the study "throws doubt on orthodoxies around global warming," completely misrepresent our conclusions. Our study does not question the well-established anthropogenic warming trend.

- Paul A, Planet Earth (unlike DM readers), 28/3/2012 21:53

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to JHarnes, I am an historian and you are correct, thanks. I have been telling associates this since Al Gore made this thing up. One more thing the media has forgotten and or doesn't report. I met Senator Gore in the mid 1980s and he was adamant that there would be an "ice age" by the early to mid 1990s! To anyone who points to the Arctic, I say look at the Antarctic, the ice is miles thick and has been steadily increasing. I am not a physicist but to me, it seems to point to a minor shift in the earth's axis, not global warming, but as I said my PhD is in History. Thanks JHarnes

- justaguy, Bridgewater, NJ U.S.A., 28/3/2012 17:33

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NO article "what - so - ever" can EVER be treated seriously if it contains the words will appear in print on April 1. And ESPECIALLY if those words appear at the "end" of the article ! As Dr. Killpatient sez, "Move along, there - there's nothing here to see"

- RobinClay, North Dorset, 28/3/2012 16:15

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The evidence is that climate sensitivity has been over estimated, and CO2 could go up to four thousand parts per million, ten times present atmospheric concentration, without significant effect. - Phil, Bucks, 27/3/2012 20:35-----Hi Phil, If this is true, how do you explain the melting of Arctic sea ice, the increase in average air temperatures, the huge increase in heat contained in the oceans and the increasingly rapid rate of decline of the Greenland ice shelf? Oh, and don't forget the satellite measurements which prove that CO2 is trapping heat as the physics expects. If your evidence is able to disprove the satellite measurement, please let me know what it is, I would like to read it.

- Paul, Crawley, 28/3/2012 12:38

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Don't know if anyone has noted. that. "'Medieval Warm Period' approximately 500 to 1,000 years " Combine this with the results from the Ice cores that Al-Gore used to start all this global warming stuff with.. These ice cores noted, that First temperature increased, then CO2 would increase approximately 800 years later... So, we had a MWP period 500-1000 years ago, this maps exactly with the present day, thus a significant part of the CO2 increases we are seeing today, may indeed be a result of the MWP, the next 100 years would show this.. Note also, that between 300 - 500 years ago we had a little ice age.. That is a cold cyclus around 500 years after the MWP, now again, co-incidentally that's 500 years ago, indicating a possible natural 800 - 1000 year cycle.. I find it interesting, as it indicates that the increase in temperature might be natural.

- Michael Nielsen, Denmark, 28/3/2012 11:08

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Nothing to see here...move along. Please be sure to tune in to The Discovery Channel's new series: "Frozen Planet", where we focus on cute baby fur seal pups being boiled to death.

- Dr. Killpatient, Tampa, FL, 28/3/2012 02:26

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