

Extend Your Listening What's for English

Global Warming.... Or Cooling



Pre-Questions

1. Do you believe that Global Warming is occurring?
2. Are you convinced that there is enough evidence for global warming?
3. Do you believe that computer models of the climate are accurate?
4. Do you accept as FACT that human activities and CO₂ in the atmosphere are the main causes of global warming?

If so, you are a believer in global warming.

5. Do you believe the climate is too complex to be able to model accurately by computer?
6. Do you believe there is not enough evidence that global warming is occurring?
7. Do you feel there may be other causes of global warming, such as solar activity or cycles in the ocean currents?
8. Do you think that it is just unlikely that man could have such a major effect on the Earth's climate?

If so, you are a global warming skeptic. You are skeptical that global warming is a fact.

Read further to find out why some believers are turning into skeptics and why other believe the evidence is stronger than ever!

The topic today is going to be about global warming. In particular, I'm going to be talking about a short article that I read on the BBC about global warming. The article is called [What Happened to Global Warming](#).

When it comes to global warming, are you a **believer**? Or are you a **skeptic**? A believer in global warming accepts that the earth is getting warmer. A believer is convinced by scientific evidence that it is happening. A skeptic is a person who wants to see more facts. He or she doesn't believe there's enough evidence to show that global warming is occurring. Or if the skeptic does accept that the Earth is getting warmer, he or she might not be convinced that CO2 and human activities are the cause.

In my case, I was rather skeptical at first. Back in the 1990s, I didn't believe that computer models could really **predict** global warming. I didn't believe they could be accurate. I thought the **phenomenon** of global warming was too complex for us to **to model** in a computer. But over the past ten years, I've become more and more of a believer. I mean: look around. Read the newspaper. The shrinking ice in the Arctic. Shipping companies are now planning on using the Northwest Passage to travel from Europe to Asia. The shrinking glaciers in the Alps, the Rocky Mountains and Canada. Animals that **hibernate** through the winter are waking up earlier than usual. Various bird populations are declining because their particular food supply is shrinking. Hurricanes in the Atlantic are getting stronger - so-called "storms of the century" happening every ten years or so. These details and hundreds like them are too hard to ignore. Besides, most of the scientists appear to be convinced. And many hundreds of research studies all find similar evidence that global warming is occurring. That it is occurring faster than we believed. And that CO2 and other greenhouse gases are the cause.

But sometimes you do see stories that remind you that not all the patterns point in the same direction. For example, this story in the [BBC](#). The headline asks, "[What happened to Global Warming?](#)"

Skepticism (n) - Skeptical (adj) - Skeptic (n)
Skepticism is a feeling of doubt or unbelief - especially in matters that require faith.

*I'm very **skeptical** about fortune tellers.*
*She is such a **skeptic** - she doesn't believe in UFOs?*

Believe (v) - Belief (n) - Believer (n)
*Do you **believe** in life after death?*
*Is he a **believer**?*
*When did you develop those **beliefs** about your government?*

to predict: to declare or tell in advance; to foretell the future.

phenomenon: a fact or occurrence that can be observed.

to model: to simulate with a computer.

to hibernate: to sleep deeply throughout the winter.



Receding glaciers in Greenland. (Photo by Bastique / Wikimedia Commons)

Huh? It begins by pointing out that the warmest year on record was.... in 1998. Every year since then has been cooler. Is something changing? Did we make the right predictions? Is the earth getting **cooler**, now? Well, first of all, let's remember that we are dealing with the Earth. Which is very old. Ten years to us seems like a significant passage of time, but to the Earth, it's just a few nanoseconds. So I don't think we can make any judgement one way or the other over a very short ten-year period. If 1998 - just nanoseconds ago - was the hottest year on record, we'd still have to say the Earth is warming up, wouldn't we? Or? But, on the other hand, how long have we been keeping records? One hundred years? Two hundred? One or two hundred years is also pretty short by the standards of Earth time. So we still might not know if the earth has entered a warming trend - based on these temperature records.

And ultimately this is the point of the article. Changes in climate - ice ages or warming phases - take place on the Earth's time table - not ours. And to us even if things may look like they are cooling off - in fact they may be warming up. Or it could be the other way around. It may look as though the Earth is in a pattern of getting warmer - but in the long term it's actually getting cooler.

The article mentions two areas that are particularly confusing right now, and they may become even more confusing in the near future: **solar activity** and ocean currents.

Many global warming skeptics have insisted that solar activity is likely to be responsible for any warming trends that we see. The sun's energy obviously **fluctuates**, and these fluctuations probably have a large effect. The article points out, though, that most scientists now rule out solar activity as a cause of global warming. Solar activity is not a cause. But then they end this section by mentioning one more scientist, [Piers Corbyn](#), who does believe he has evidence for the effects of solar activity on climate. In fact, he believes his solar models can also predict other weather events such as hurricanes and gale storms.

Cool (n) - Cool (adj) - Cool (v)

*I love the **cool** of the night.*

*Tonight is so much **cooler** than last night. Allow the dish **to cool** before eating it.*

Warmth (n) - warm (adj) - warm (v)

*What would we do without the **warmth** of the Sun?*

*Every year it's getting **warmer**. If the planet **warms up** too much, we may lose a few islands.*

Solar activity: sun spots or other phenomena on the sun.

to fluctuate: to shift back and forth. *The price of gold **has fluctuated** over the past year.*

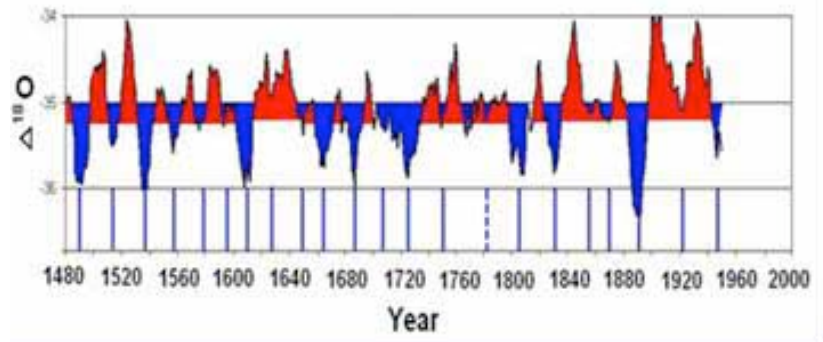
So I don't know where that leaves us. Most of the scientists now **rule out** solar activity as a cause of global warming, but at least one claims to have evidence that shows otherwise.

Ocean currents are also interesting. The scientist mentioned in the article, [Dr. Don Easterbrook](#), has learned much about how ocean currents and ocean temperatures, and how they move in 30-year cycles. And according to this research, the global climate also moves in 30-year cycles, following the cycles of the ocean currents. He has compiled records showing 30-year cycles of cooling and warming going back hundreds of years. He notes that we are now entering a cycle of cooling. Yes, cooling! He says that for the next thirty years or so, temperatures are going to be getting a lot cooler - not warmer.

Is Easterbrook a global warming skeptic? In fact, I'm not sure - but his website and his research seem to show that the Earth's climate fluctuates and changes a lot - and that it changes a lot with or without CO₂ in the atmosphere. But the article points out that there are other scientists who model the climate, and they agree that global cooling is going to be an issue in the short term.... But then it's really going to get warm.

So... how about you? Are you a skeptic or a believer? Or do your beliefs fluctuate like ocean currents or solar activity? What I would point out at this point is that if temperatures do cool down for any period of years, I really doubt we'll be able to convince people to continue reducing their emissions of CO₂. People have to feel the heat in order for them to start changing their behavior.

Alternating climatic warming and cooling has occurred about every 27 years since 1470 AD, well before atmospheric CO₂ began to increase



Warming and cooling cycles over history. (See [here](#))

to rule out: to eliminate; to prove to be unrelated.

*Police have **ruled out** Mr. Jones as a suspect in the murder.*