



This is the print version of the Skeptical Science article 'It's a 1500 year cycle', which can be found at http://sks.to/1500cycle.

What relevance does past natural cycles have with recent global warming?

What The Science Says:

Ancient natural cycles are irrelevant for attributing recent global warming to humans.

Climate Myth: It's a 1500 year cycle

"Every one of them [climate records of the past] show this (roughly 1500 year) cycle. It was first discovered in ice cores in Greenland. Then it was seen in ocean sediments in the Atlantic. And now it's been found everywhere, including in stalagmites in caves. [...] it could well account for the current warming." (Fred Singer)

For someone to state that the global warming we're experiencing is actually part of a 1500-year natural cycle of global temperature variation is interesting for two reasons. First — in contradiction to the great majority of sceptic arguments that actually deny global warming — this argument requires that the person promoting this explanation must first agree that <u>climate change is, indeed, happening</u>.

Second, they must also refuse to accept the<u>greenhouse effect</u>, a theory first proposed more than 100 years ago and which even many sceptics of the human contribution to climate change, readily accept.

The 1500-year cycle in question has been observed mainly through ice core data as a warming in the northern hemisphere matched at precisely the same time by a cooling in the southern hemisphere. So it's a heat distribution issue: a global temperature 'see-saw' effect. The total heat in the global system remains constant.

In contrast, human-produced global warming has been caused by the<u>rapidly increasing CO2 concentrations</u> in the atmosphere over the last 200 years — rising over 400 parts per million after remaining below 300 parts per million for the previous 800,000 years. And unlike natural heat variations, the current temperature increase caused by CO2 is being recorded occurring all around the globe – on the ground, in the air and in the oceans.



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Skeptical Science explains the science of global warming and examines climate misinformation through the lens of peer-reviewed research. The website won the Australian Museum 2011 Eureka Prize for the Advancement of Climate Change Knowledge. Members of the Skeptical Science team have authored peer-reviewed papers, a <u>college textbook on climate change</u> and the book <u>Climate Change Denial: Heads in the Sand</u>. Skeptical Science content has been used in university courses, textbooks, government reports on climate change, television documentaries and numerous books.



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