



This is the print version of the [Skeptical Science](http://sks.to/oreskes) article '[Naomi Oreskes' study on consensus was flawed](http://sks.to/oreskes)', which can be found at <http://sks.to/oreskes>.

## What does Naomi Oreskes' study on consensus show?

### What The Science Says:

An examination of the papers that critics claim refute the consensus are found to actually endorse the consensus or are review papers (eg - they don't offer any new research but merely review other papers). This led the original critic Benny Peiser to retract his criticism of Oreskes' study.

### Climate Myth: Naomi Oreskes' study on consensus was flawed

The claim of "consensus" rests almost entirely on an inaccurate and now-outdated single page comment in the journal Science entitled The Scientific Consensus on Climate Change (Oreskes 2004). Benny Peiser conducted a search of peer-reviewed literature on the ISI Web of Science database between 1993 and 2003. Dr. Peiser's research demonstrated that several of the abstracts confounded Oreskes' assertion of unanimity by explicitly rejecting or casting doubt upon the notion that human activities are the main drivers of the observed warming over the last 50 years. (source: [Consensus? What Consensus?](#))

In 2004, Naomi Oreskes performed a [survey of all peer reviewed abstracts on the subject "global climate change" published between 1993 and 2003](#). She surveyed the [ISI Web of Science](#) database, looking only at peer reviewed, scientific articles. The survey failed to find a single paper that rejected the consensus position that global warming over the past 50 years is predominantly anthropogenic. 75% of the papers agreed with the consensus position while 25% made no comment either way (eg - focused on methods or paleoclimate analysis).

### Benny Peiser's rebuttal

Benny Peiser repeated Oreskes survey and claimed to have found 34 peer reviewed studies rejecting the consensus. However, an inspection of each of the [34 studies](#) reveals most of them don't reject the consensus at all. The remaining articles in Peiser's list are editorials or letters, not peer-reviewed studies. Peiser has since [retracted his criticism of Oreskes survey](#):

"Only [a] few abstracts explicitly reject or doubt the AGW (anthropogenic global warming) consensus which is why I have publicly withdrawn this point of my critique. [snip] I do not think anyone is questioning that we are in a period of global warming. Neither do I doubt that the overwhelming majority of climatologists is agreed that the current warming period is mostly due to human impact."

### The Viscount Monckton of Benchley's rebuttal

Despite Peiser's retraction, the same argument was repeated by the [Viscount Monckton of Benchley](#) (and [plagiarised by Schulte](#)). Here are the five studies Monckton claims Oreskes should've included in her survey as rejecting the consensus position:

- [Multi-resolution time series analysis applied to solar irradiance and climate reconstructions \(Ammann 2003\)](#) finds a correlation between solar activity and temperature. However, the temperature reconstructions used end in the mid-20th century before the modern global warming trend and don't address the consensus position that warming over the past 50 years is primarily anthropogenic. However, Amman has published a more recent study examining more up-to-date temperature

records, concluding "although solar and volcanic effects appear to dominate most of the slow climate variations within the past thousand years, the impacts of greenhouse gases have dominated since the second half of the last century" ([Ammann 2007](#)).

- [Solar Forcing of Global Climate Change Since The Mid-17th Century \(Reid 1997\)](#) finds a link between solar variability and climate change, concluding that "solar forcing and anthropogenic greenhouse-gas forcing made roughly equal contributions to the rise in global temperature that took place between 1900 and 1955". Considering CO2 forcing before 1955 was much lower while solar forcing was much greater due to increasing solar activity, this conclusion only serves to reinforce the consensus position. [More on the sun...](#)
- [Ad Hoc Committee on Global Climate Issues: Annual Report \(Gerhard 2000\)](#) is non-peer reviewed. Oreske's survey only included peer reviewed studies. This is even conceded by Schulte.
- [Atmospheric Greenhouse-Effect in the Context of Global Climate-Change \(Kondratyev 1995\)](#) is a review, not an article - it doesn't actually include any research but reviews other studies. Oreskes' survey only included articles, not reviews.
- [Review and impacts of climate change uncertainties \(Fernau 1993\)](#) is another review, not an article, and is found in the Social Science Citation Index. Oreskes sampled articles only from the Science Citation Index.

Intermediate rebuttal written by John Cook

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### **Update July 2015:**

Here is a related lecture-video from [Denial101x - Making Sense of Climate Science Denial](#)



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 [college textbook on climate change](#) and the book [Climate Change Denial: Heads in the Sand](#). Skeptical Science content has been used in university courses, textbooks, government reports on climate change, television documentaries and numerous books.



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