



This is the print version of the [Skeptical Science](http://sks.to/underestimat) article '[IPCC is alarmist](http://sks.to/underestimat)', which can be found at <http://sks.to/underestimat>.

How the IPCC is more likely to underestimate the climate response

What The Science Says:

Numerous papers have documented how IPCC predictions are more likely to underestimate the climate response.

Climate Myth: IPCC is alarmist

"Unquestionably, the U.N. Intergovernmental Panel on Climate Change (IPCC) was formed to build the scientific case for humanity being the primary cause of global warming. Such a goal is fundamentally unscientific, as it is hostile to alternative hypotheses for the causes of climate change." ([Roy Spencer](#))

"Unquestionably, the U.N. Intergovernmental Panel on Climate Change (IPCC) was formed to build the scientific case for humanity being the primary cause of global warming. Such a goal is fundamentally unscientific, as it is hostile to alternative hypotheses for the causes of climate change."

Climate scientist Roy Spencer made this statement. He starts by suggesting something highly questionable isn't open to being questioned. What he seeks to do is suggest, by inference, that the IPCC has an agenda, and this distorts the reports they produce. In other words, Spencer (and others) suggest that the IPCC exaggerates what the science says in favour of anthropogenic global warming. It is perfectly legitimate to question this assertion, since Spencer and others offer no evidence to support it.

Some critics go further, suggesting that the IPCC actively suppresses science that doesn't support the theory that climate change is being caused by human activities. It is notable this 'other science' is rarely produced to support the accusation.

Does the IPCC accurately report the findings of science?

The IPCC was formed to report on a broad range of scientific enquiries into the climate, and our effects on it, and to summarise the science for laypeople. The science they summarise is published so it is simple to compare the primary science with the IPCC reports, and compare both to what actually took place.

There are numerous instances where the IPCC reports, which are summaries of published climate change science, have understated the case - hardly suggesting exaggeration in pursuit of an agenda. Here are some examples:

- CO2 output from fossil fuels: observed emissions are close to the worst-case projections made by the IPCC, despite them offering a range of potential emission scenarios. (In fact, atmospheric CO2 is increasing ten times faster than any rate detected in ice core data over the last 22,000 years).
- Sea-level rise is accelerating faster than the IPCC predicted. Actual sea-level rise is 80% higher than the median IPCC projection. By 2100 sea-level rise was predicted by the IPCC to be in the range of 18-59 cm. It is now believed that figure may be far too low, because estimates of contributions from Greenland and Antarctic ice-caps were excluded from AR4 because the data was not considered reliable. (This omission hardly supports the notion that the IPCC seeks to exaggerate global warming trends).
- Each Arctic summer, sea-ice is melting faster than average predictions in the last IPCC

report. The Arctic is experiencing a long-term loss of multi-year ice which is also accelerating.

- The body of scientific literature has consistently shown that [human greenhouse gas emissions are responsible for more global surface warming than has been observed](#) over the past half century, whereas the IPCC only says that greenhouse gases are responsible for "most" observed warming over this timeframe.

In many similar cases, the evidence suggests that changes in climate are occurring faster, and with more intensity, than the IPCC have predicted. It is not credible to suggest the reports were biased in favour of the theory of anthropogenic global warming when the evidence demonstrates the IPCC were, in fact, so cautious.

In fact, there is evidence however to suggest that the exact opposite is actually the case, both in terms of the scientific evidence itself (see below) and the way the work of the IPCC is reported. A recent study ([Freudenburg 2010](#)) investigated what it calls 'the Asymmetry of Scientific Challenge', the phenomenon in which reports on science fail to evaluate all outcomes, favoring certain probabilities while ignoring others. They found that "...new scientific findings were more than twenty times as likely to support the ASC perspective [that disruption through AGW may be far worse than the IPCC has suggested] than the usual framing of the issue in the U.S. mass media".

Claims that the IPCC is alarmist are not supported by evidence, and there are clear indications that the opposite may be the case.

Basic rebuttal written by [GPWayne](#)

Update July 2015:

Here is the relevant 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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