



This is the print version of the Skeptical Science article 'IPCC were wrong about Amazon rainforests', which can be found at http://sks.to/amazon.

Comparing what the IPCC and peer-reviewed science say about Amazonian forests

What The Science Says:

The IPCC statement on Amazon rainforests was correct, and was incorrectly reported in some media.

Climate Myth: IPCC were wrong about Amazon rainforests

"The IPCC also made false predictions on the Amazon rain forests, referenced to a non peer-reviewed paper produced by an advocacy group working with the WWF. This time though, the claim made is not even supported by the report and seems to be a complete fabrication." (<u>EU Referendum</u>)

An article in a British newspaper claimed that the Intergovernmental Panel on Climate Change (IPCC) published wrong information about the Amazon Rainforest in their 2007 report. The issue centred on the statement that about 40% of the Amazon was susceptible to the effects of drought, or more specifically "slight reductions in rainfall".

The Amazon is the world's largest tropical rainforest, and due to its immense size, has a global effect on the Earth's climate. Despite being well adapted and resilient to wet and dry periods which occur throughout the year, the rainforest is vulnerable to extended periods of drought. Any major decline in the health of the Amazon rainforest is likely to impact the world climate.

The skeptic claims relate to <u>section 13.4.1 of the IPCC Fourth Assessment Report (2007)</u>which made the statement: 'Up to 40% of the Amazonian forests could react drastically to even a slight reduction in precipitation; this means that the tropical vegetation, hydrology and climate system in South America could change very rapidly to another steady state, not necessarily producing gradual changes between the current and the future situation' (Rowell and Moore, 2000)

The reference is to a non-peer reviewed report prepared by the World Wide Fund for Nature (WWF) which itself cites an original peer reviewed study (<u>Nepstad et al. 1999</u>) as the basis for the claim. The citations in the WWF and IPCC reports are not complete, <u>Nepstad et al. 1994</u>, <u>Nepstad et al. 1999</u> and <u>Nepstad et al.</u> 2004 support the claim that up to half the Amazon rainforest were severely affected by drought. Further studies, carried out since the 2007 IPCC report, reinforce the Amazon's susceptibility to long term reductions in rainfall.

The IPCC could have avoided confusion by simply citing the peer reviewed studies themselves, rather than the WWF report and perhaps "slight reduction" should have been better defined or qualified. Despite the error in citation, the statement made by the IPCC is factually correct. Maybe the last word should go to the lead author of the papers upon which the statements were based, Daniel Nepstad, who made a <u>public press</u> release to clear up the mainstream media confusion over the subject.**Nepstad concludes:**

"In sum, the IPCC statement on the Amazon was correct. The report that is cited in support of the IPCC statement (Rowell and Moore 2000) omitted some citations in support of the 40% value statement.



The Skeptical Science website by <u>Skeptical Science</u> is licensed under a <u>Creative Commons Attribution 3.0 Unported License</u>.





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.



The <u>Skeptical Science</u> website by Skeptical Science is licensed under a Creative Commons <u>Attribution 3.0 Unported</u> <u>License.</u>