

Scientists debate the accuracy of Al Gore's documentary 'An Inconvenient Truth'

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There is no question that Al Gore's 2006 documentary *An Inconvenient Truth* is a powerful example of how scientific knowledge can be communicated to a lay audience. What is up for debate is whether it accurately presents the scientific argument that global warming is caused by human activities. Climate change experts express their opinions on the scientific validity of the film's claims in articles just published online in Springer's journal, GeoJournal.

An Inconvenient Truth is about Al Gore's campaign to educate citizens about global warming and inspire them to take action. The papers in GeoJournal agree that it does an excellent job of raising public awareness of man-made global warming and explains why increased atmospheric concentrations of greenhouse gases lead to warming. They also agree that its main weakness is that it tries to use individual extreme events, such as Hurricane Katrina, to prove the existence of global warming.

In the first opinion piece (1), Eric Steig from Washington University states that the film gets the fundamental science right. The minor factual errors do not undermine the main message of the film, which explains the theory that increasing carbon dioxide causes a warming tendency in the lower atmosphere.

John Nielsen-Gammon from Texas A&M University also agrees that the main scientific argument presented in the movie is for the most part consistent with the weight of scientific evidence (2). He comments that

unfortunately, it neglects all information that can be gained from computer models, and instead relies entirely on past and current observational evidence. This increases the film's emotional impact but weakens the scientific argument.

David Legates from the University of Delaware addresses assertions about trends in precipitation, floods, droughts and storms in particular (3). He concludes that there are significant errors in the film, owing to alarmism and exaggeration, which give a false impression of both the current state of climate change and that the science is settled.

In another paper (4), Roy Spencer from the University of Alabama in Huntsville also discredits the scientific validity of the documentary. In his view, the film's main omission is that while humans are almost certainly responsible for global warming, there are other natural causes of climate variability which the film does not address. In his opinion, the "real inconvenient truth is that science has no idea how much of recent warming is natural versus the result of human activities".

After providing a succinct summary of the state of climate change science (5), Gerald North from Texas A&M University concludes the debate by stating that although there are some inaccuracies and exaggerations in the film, on the whole it represents mainstream scientific views on global warming.

Steven Quiring, also from Texas A&M University and author of the issue's introduction (6), comes to the conclusion that whether scientists like it or not, An Inconvenient Truth has had a much greater impact on public opinion and public awareness of global climate change than any scientific paper or report.

References

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