

MOVIE REVIEW

An Inconvenient Truth

Southwest Hydrology set out to learn what climate scientists are saying about former Vice President Al Gore's movie, "An Inconvenient Truth," released last summer. The movie, adapted from his book of the same name, follows Gore's crusade to educate the public about what he views as the major environmental crisis our planet is headed toward if we don't collectively and immediately act to avert it. Did Gore get the science right?

The movie's supporters, including a large contingent at *realclimate.org*, a blog site about "climate science from climate scientists," praise its effectiveness in making science interesting to the general public, to the extent that the movie was a hit and has raised the public's literacy level on climate issues. They commend Gore's clear, (mostly) accurate, and not overly alarmist presentation of what is likely to occur if human-induced greenhouse gas emissions continue unabated.

Spiegel Online investigated the integrity of Gore's science and found that the strongest criticism has come from individuals who receive funding from coal and oil industries, such as Robert C. Balling Jr., professor of climatology at Arizona State University, and organizations such as the Competitive Enterprise Institute. CEI

calls the movie "one-sided, misleading, exaggerated, speculative, wrong" and lists 25 "truths" that it believes Gore left out. Critics generally focus on specific points in the movie, some of which even the supporters concede could be misleading. Examples include:

The effect of carbon dioxide on temperature: CEI says a graph showing CO₂ concentrations correlated to temperature over time is misleading because the relationship is not linear and projecting the future temperature increases based on predicted CO₂ increases is incorrect. Supporters agree that the graph could be misinterpreted, although they say Gore's linkage of temperature and CO₂ in ice cores is valid.

Melting snowfields and glaciers: In a movie review published by *TCSDaily.com*, Balling says the snows of Kilimanjaro, cited in the movie as evidence of global warming, are melting because of a local shift to drier conditions that began about a century ago. CEI argues that glaciers have been receding worldwide for more than a century. Scientists at *realclimate.org* counter that the snowpack retreat on Kilimanjaro cannot be fully accounted for by changes in atmospheric moisture. Furthermore, focusing on one specific example ignores the point that worldwide, glaciers are retreating.

Katrina: Both Balling and CEI cite studies finding no correlation between global temperature and an increase in the strength or frequency of hurricane-force storms. *Realclimate.org* says that Gore used scenes of Hurricane Katrina destruction to illustrate that society is vulnerable to weather extremes, but that he stopped short of making a strong climate change-hurricane connection, as the science remains uncertain.

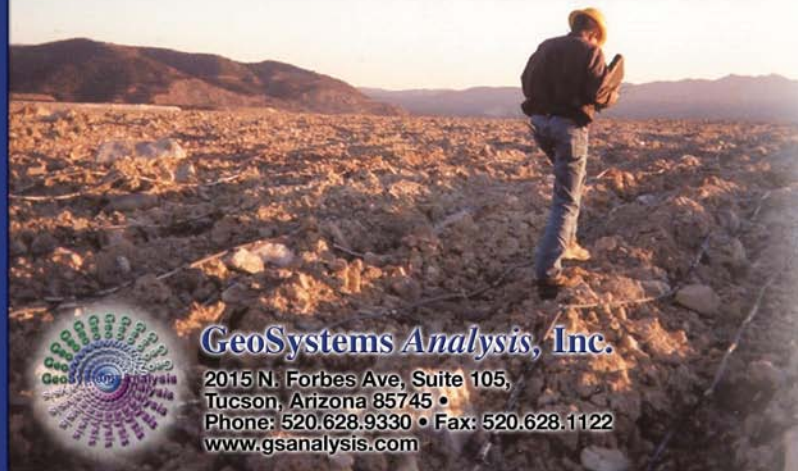
Effect of the Clean Air Act: All scientists agree that Gore incorrectly claims that the effect of the Clean Air Act can be seen in changes of aerosol concentrations in Antarctic ice cores in just two years.

Invasive Species: Gore suggests, but does not directly state, that climate change alone is the cause for invasive species. Scientists agree that invasive species are opportunistic and capable of surviving in a range of environments, thus they may thrive where other species cannot, but other factors also must come into play, including their introduction to an area.

In spite of these points, the consensus seems to be that Gore basically *did* get the science right. A few of his visual data presentations are potentially misleading, but he chose his words carefully and made few technical mistakes.

Visit www.realclimate.org, www.cei.org, tcsdaily.com, and www.spiegel.de/international/.

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GeoSystems Analysis, Inc.

2015 N. Forbes Ave, Suite 105,
Tucson, Arizona 85745 •
Phone: 520.628.9330 • Fax: 520.628.1122
www.gsanalysis.com