‘Climate Realism’

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Last week, the Oredigger (Colorado School of Mines’ school newspaper) published an article titled, “A New Perspective on Global Warning” (actually, that was the title of the online version; the print version was titled, “The Climate Change Debate Heats Up”). This article gave an account of a recent talk by hosted by CSM’s Geophysics department on ‘climate realism’ (full disclosure: I did not attend this talk; my knowledge of what was said at the talk comes entirely from what I take to be a faithful account given in the Oredigger.). The speaker of this talk, Terry Donze, presented his view on climate change: any noticeable changes in climate are not anthropogenic (human caused), or caused by CO2, but rather, are caused by solar cycles. The evidence that Donze presented for his view came in large part from a video titled, “Unstoppable Solar Cycles”. The scholars in this video, astrophysicist Willie Soon and climatologist David R. Legates, give an historical account of how solar activity is thought to have caused marked changes in the Earth’s climate, most notably in Greenland during the ‘little ice age’ of the 14th and 15th century. Given that solar activity is thought to have changed the climate in the past, Donze, along with Soon and Legates, argues that any current changes in climate are due to increased solar activity, not increased CO2 emissions.

Given what this article says, and given some research that I’ve done about the material presented in it, I am quite disappointed with Mines for supporting the content of the lecture. Although I disagree with the conclusions Donze presents, I certainly support anyone who attempts to give good evidence in support of their beliefs. What I am disappointed with is Donze, Soon, and Legates’ attempt to mislead the public, and the use of evidence that seems poor to challenge the conclusion of anthropogenic climate change. Based on the Oredigger article and the video mentioned in it, I find the evidence presented at this talk to be poor for (at least) the following reasons:

1. All of the people mentioned above—Donze, Soon, and Legates—have been connected to funding by industries that have a vested interest in denying anthropogenic climate change. For example, Donze worked in the oil industry for a significant portion of his career; similarly, Soon has received over 1 million dollar from oil companies (http://www.guardian.co.uk/environment/2011/jun/28/climate-change-sceptic-willie-soon). I certainly do not think that these facts are reasons to discredit the speakers outright, but these facts should give one reason to believe that these people may be highly susceptible to confirmation bias and are disingenuous with respect to the overwhelming evidence presented in favor of anthropogenic climate change. In short, we should inspect the evidence that they present with extra care.
2. At least one of the speakers in “Unstoppable Solar Cycles”, Rie Oldenbug, was **tricked** into speaking about historical evidence for non-anthropogenic climate change ([http://www.desmogblog.com/heartland-institute-tricked-video-subject-in-unstoppable-solar-cycles](http://www.desmogblog.com/heartland-institute-tricked-video-subject-in-unstoppable-solar-cycles)). Rie Oldenbug’s research is concerned with the history of Greenland, not climate science. Apparently, she was horrified to hear that her scholarship was used in this video. Use of a video that is known to be deceptive in its content is, in my mind, intellectually vicious, and anyone knowingly making use of such material should be ashamed of their actions.

3. The arguments presented in “Unstoppable Solar Cycles” appear to be pretty weak. For example, the fact that the Earth’s climate has gone through ‘natural’ temperature fluctuations is certainly not an argument against the strong evidence that CO2 emissions is contributing to climate change. It might be the case that the Earth’s climate has, in the past, changed as a function of major solar activity. But that defeats no claim about the greenhouse effect. Also, Dr. Soon, in the video claims that, “the sun...in terms of its light energy output, is probably the only true external driving factor of the earth climate system.” This is almost most certainly true, but it is misleading and likely irrelevant; anthropogenic climate change is an **internal** driving factor. If Dr. Soon is attempting to make the claim that no internal driving factors affect climate, then, it seems to me that he is obviously wrong; the environmental lapse rate—the decrease in temperature with increase in elevation—seems to be a great counterexample to this claim.

From my short time at Mines, I can tell that academic integrity is taken very seriously here. Given that, and given what I’ve presented above, I think that the Mines community should be dissatisfied with the content of this lecture; we deserve better!