Why I am a skeptic.

The early edition paper by Anderegg et al. (2010) [1] in the *Proceedings of the National Academy of Sciences* on June 22nd will get a lot of attention from the media for pointing out that not all experts on climate change are equal. The title of the paper is *Expert Credibility in Climate Change*. The authors show using statistics that the 'top researchers who are convinced by the evidence (CE) of anthropogenic climate change (ACC) have much stronger expertise in climate science than those top researchers who are unconvinced by the evidence (UE)' [1].

Of the four authors on the paper, only Professor S.H. Schneider appears on their list of climate experts, and is likely the driving force for this paper. He is the same scientist who was warning us about catastrophic global cooling in the late 1970s. He is also one of those who believe that CE scientists need to be more aggressive in pressing the case of ACC to a public that remains unconvinced. In fact the public has grown more skeptical of ACC in the wake of the East Anglia e-mail scandal and the fudging on the dates of arctic sea ice loss and glacier loss in the Himalaya Mountains.

This study is a sign of just how desperate warmers are to capture the public's attention and approval. They imply that policy makers should listen to only the credible experts (as defined by this study?). The study also leads to the implication that information on climate change should be controlled by credible experts, again, as defined by this study?

The study ultimately points out rightly that there are problems with the methodology that might make the list less than comprehensive. They also correctly imply that their methodology is subjective. They also state that 'publication and citation are not perfect indicators of researcher credibility' [1]. They even find that their conclusions may have biases that cannot be dealt with such as self citation and clique citation. None of these shortcomings will be discussed by those using the article as support for their position.

The latter could be a major problem as there are cultural pressures that could make clique citation and biases problematic. For example, in the late 1500's there were religious pressures on scientists making the acceptance of Copernicus's ideas dangerous, especially in the public arena. In more modern times, I would bet that a similar study to Anderegg et al. would have shown similar results in the literature against the acceptance of Darwin in the mid-to-late 1800s, or the against the acceptance of plate tectonics and Milankovitch's orbital parameter theories in the 20th century. In modern times, these cultural pressures could be issues such the pressure to get funded or politics, the latter which unfortunately has become intertwined with the climate change debate.

Additionally, the Anderegg et al study seems to be a case study for introductory statistics classes. In these classes we are cautioned that "if you torture the data long enough it will confess". Otherwise, the paper does not deserve any attention, but unfortunately it is getting a lot of ink.

Finally, the publication has generated some excitement because it has resulted in lists and rankings of climate researchers, and the one getting the most attention is a list of 496 "climate deniers" [2], which has been called a "blacklist". This is the list of UE experts whose credentials were found not to be on par with those of the CE community. Scientists are generally reticent to talk about themselves, but one might ask those of us on that list (and I have been asked many times) how can you be a skeptic in the face of overwhelming consensus among the scientific community?

Consensus should not determine one's position on any scientific matter, only the weight of the evidence gathered from self-examination should be considered. The evidence suggests that the climate changes of the last 150 years are not unusual when comparing to our best reckoning of the last 2000 years [3], [4], and the further back in time one goes, the less unusual the current climate changes seem [5]. There are many things that we still do not understand about climate and climate change, and new information and ideas are constantly coming to light [6]. Lastly, there are problems with the model forecasts that are well-documented and make the projection of future climate change difficult [7], [8]. These "forecasts" are scenarios, not predictions, there is a big difference.

These are but some of the arguments that lead to my own skepticism that ACC is a major driver of changes we're seeing in climate now. There are literally thousands of publications out there that support these points. If you ask any skeptic on the "climate deniers" list, they would agree with me. Many of these people I have come to know through their writings or by personal contact, and they are top-notch scientists who support their position with integrity and passion. Many of them are brave and stand on their principles in spite of the "overwhelming consensus" brought to us by [1]. I am honored to be on the same list with them.

References:

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- [5] Simmons, A, and D.L. Hoffman, 2009: The Resilient Earth, 269 pp., http://theresilientearth.com/
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