

The impact of global warming on Himalayan glaciers and the WAIS

Cha-am Jamal, 2004

All rights reserved
<http://www.chaamjamal.com/opinions/wais.pdf>

The West Antarctic Ice Sheet (WAIS)

The Greens claim that the burning of fossil fuels is responsible for global warming which in turn is the cause of the melting of the West Antarctic Ice Sheet (WAIS) whose total disintegration will raise sea levels by 4.9 meters. These statements are made to create a sense of alarm. If one looks at the facts more carefully one cannot but suspect that the scenario presented by the Greens is a case of deliberate misinformation. Consider the following data taken from the British Antarctic Survey, the study usually cited by the Greens.

1. The data show that the WAIS is indeed moving and chunks of it periodically break off and become icebergs. This process is contributing 0.24 millimeters per year to the sea level. Assuming that this process will sustain over the long haul, it will take 4 years to raise sea levels by one millimeter and 20,000 years to raise sea levels by five meters.
2. The melting of the WAIS is a process that started thousands of years before we discovered fossil fuels.
3. There have been prior geological epochs when the earth was much warmer than it is today. The data show that the WAIS was intact during these epochs and had not disintegrated. The total disintegration of the WAIS a fanciful speculation.
4. Global warming has a dual effect on the WAIS. It melts ice but it also increases snowfall. Melting decreases the thickness of the ice sheet and snowfall increases it. It is a non-linear relationship whose net effect on the WAIS has not been estimated.
5. A causal relationship between human activity and global warming has not been established and is highly unlikely given the re-absorption of CO₂ by photosynthesis and given that the CO₂ generated by the burning of fossil fuels represents a minute fraction of the CO₂ production by biological processes.
6. The British Antarctic Survey does not speculate on the cause of the glacial melting conceding that it could be part of a natural variation. The idea that human activity is causing the melting has been inserted by the Greens.
7. The region under the WAIS contains many active volcanoes. A major volcanic eruption could cause a cataclysmic melting and rise in sea levels. It is nature and not human activity that one should fear if to fear is what one wants to do.
8. All the rivers, lakes, and glaciers of the world outside of Antarctica account for only 10% of the fresh water on the planet. The other 90% of our fresh water supply is locked up in Antarctic ice. As our population and demand for water grow we may find the icebergs from the WAIS to be a blessing.

Himalayan glaciers

The World Wildlife Fund has put out a press release that contains some carefully selected data on the observed melting of Himalayan glaciers. In the press release they outline a very scary scenario and try to tie the phenomenon to global warming. Human activity and fossil fuels are identified as the ultimate cause. It is suggested that reducing CO₂ emissions will halt or reverse the observed changes. I am writing this letter to point out that the glacial melt data are not consistent with this interpretation.

The glaciers had been in retreat in the past, most recently prior to 1350 when the trend reversed. The Himalayan glaciers increased steadily in mass from 1350 to 1850. Since 1850, the glaciers have once again been in retreat and there is evidence of an acceleration of glacial retreat in the since the 1960s.

The cause of these glacial cycles is not known but the phenomenon is not global because even though the eastern Himalayan glaciers are receding, those to the west in the Karakoram range are not. In fact the Karakoram glaciers are growing. Also, consider that the current warming trend began in the late 1970s. Prior to that time the planet was cooling and there were predictions of an impending ice age. The Himalayan glaciers were in accelerated retreat right through that global cooling period. Therefore, the glacial melt cannot be tied to global warming. The WWF does not take note of the data that interfere with the global warming hypothesis. They pick their data carefully. They mean to scare us and to push their particular agenda forward.

The Greens that are now trying to scare us with the global warming hypothesis are the same guys that raised all the fuss about the ozone hole over Antarctica. Human activity was to blame, they had said. Well, the ozone hole turned out to be a cyclical phenomenon of nature having to do with atmospheric vortex formations that distribute the ozone from the equatorial regions, where ozone is formed, to the poles. I surmise that there is a doomsday cult within our scientific community who, having been denied a nuclear holocaust, are now placed in the uncomfortable position of having to find another scientific scenario for Armageddon.

<http://www.chaamjamal.com/opinions/wais.pdf>