

Melting ice raising sea levels is speculative nonsense
January 15, 2008

Editor:

In his second letter following my talk to the Cariboo Regional District (CRD) Mr. Lettinga continues to try and recover his position as the representative of environmentalists in Williams Lake by pointing to errors in my presentation. Unfortunately, he only provides more evidence of his lack of understanding of what I said and the scientific facts. He begins by getting my name wrong and again ends by saying his views are not those of his employer. I hope not, I would hope they are better informed.

He uses sleight of hand to suggest there are multiple errors by claiming he picked "two of 28 to dispute. Interestingly, the two he chose are not the main focus of my presentation, which was the fact that climate changes significantly all the time, it is happening now and it is not due to CO₂. He chooses to confront me on sea ice and the ozone layer.

He concedes the point that sea levels won't rise from the melting of sea-ice. He then says they won't drop either, but I never said they would as it relates to sea-ice.

The point I made was with regard to the Antarctic and Greenland ice sheets. I posed the question about what happens to the water level when an ice cube is placed in a glass which is then filled to the brim and the ice melts. The correct answer is the water level drops because the space occupied by the ice is greater than that occupied by the water it contains. Water expands when it freezes.

I then applied that analogy to Antarctica and Greenland since a majority of that ice is already in the water. Lettinga identifies them as land-ice, which is technically correct, but they are grounded on the land below sea level for most of their area. His claim about portions of the ice slipping into the oceans and raising sea levels is speculative nonsense as is his claim there is already evidence this is happening.

He completes his errors by mixing in a series of disconnected and in this argument irrelevant points about warming due to changes in albedo and expansion of the oceans due to water temperature increase.

He then claims I said, "There is no evidence for the ozone hole (over Antarctica)." I hope his students are better at listening and recording what is actually said.

I never said that at all. I said there was no hole in the ozone because even at its thinnest the so-called hole is one third the average thickness of the ozone layer. The concept there is an actual hole with no ozone is simply incorrect.

He then totally incorrectly defines the hole "as the area over Antarctica where stratospheric ozone is reduced by 50 per cent."

First, it often extends well outside Antarctica and often doesn't even cover the continent; second, it varies in size and shape with atmospheric circulation, temperatures, and formation of Polar Stratospheric Clouds among other factors, and third there is absolutely no evidence whatsoever that these changes are caused by CFCs.

He claims "NASA images clearly support the fact the ozone hole had been growing almost every year." It may have in some years because the area of thinning called the ozone hole varies in size from year to year. He should specify which years he is talking about. How about the years the thinning has diminished or hardly shown at all? He should also note that ozone is created by variations in sunlight, specifically ultraviolet radiation in a process called photo disassociation.

The computer models incorrectly assumed sunlight and therefore UV were constant. They are not, as even the IPCC acknowledged in its 2001 Report. Actually, the UV varies by up to 200 percent so obviously the amount of ozone created is going to vary.

There are many other facts about ozone and the ozone layer especially over the Antarctic but Mr. Lettinga can research those for himself, maybe on his employers' time because they really need a better informed instructor.

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