

## FATAL FLAW 5 – IN THE GLOBAL WARMING THEORY

### ANTARCTICA

*“The Polar Regions are the canary in the coalmine” Al Gore*

The Polar Regions are of special interest when discussing the global warming theory, as any effect that carbon dioxide may have, will be magnified in these regions. Normally, carbon dioxide is only approximately one percent of all greenhouse gasses, with water vapour making up the remaining 99%. However, in the Polar Regions, water vapour is scarce<sup>1</sup>, which means the effect of carbon dioxide is significantly increased (e.g. A 1<sup>0</sup>C temperature rise globally, might see a 4-5<sup>0</sup>C rise in the Polar Regions). Consequently, these regions are an ideal place to test the validity of the global warming premise that carbon dioxide is the main driver of global warming.

Before we look at what is happening in these regions, let me re-emphasise the line taken by the Greens about global warming. Global warming is a global phenomenon that affects the entire world. Such a stand is necessary for their ideological goal of having the world's community act as one. In the past for much of the time, the climate in the southern hemisphere was different to that in the northern hemisphere.

The Greens cannot afford to see such a result, as this could encourage division, with at least half the world not accepting their demands. If the only evidence which appears to support their global warming theory is only found in a local or a hemispherical area, then the whole theory is undermined. These effects are more likely to have natural causes, than anything to do with Man. The more this happens, the more confounding it is for their theory. The behaviour of Antarctica in the past 60 years provides us with an example of a fatal flaw in the global warming theory.

#### **Antarctica**

The Antarctic continent, on average, is the coldest, driest, and windiest continent. It also has the highest average elevation of all the continents on the planet. Its location, as the southernmost continent, provides it with unique weather and climate conditions. The 10°C isotherm for the warmest month encompasses about 12 percent of the surface of the globe, an area twice as large as that of the 10°C isotherm for the Arctic (See the map in Handout 3-9B for a comparison.) There are three climatic regions in Antarctica: the interior, the coastal areas, and the Antarctic Peninsula.<sup>2</sup>

**The interior** is elevated and far away from the ocean and, consequently, gets no warming effect from the water. The interior is characterized by extreme cold and light snowfall. The annual average temperature is minus 50°C. The one month

summer, from mid-December to mid-January, can see temperatures reach a warmer minus 30°C<sup>3</sup>!

**The coastal areas** are characterized by somewhat milder temperatures and much higher precipitation rates, mainly occurring as snow. Annual precipitation amounts range from 500 to more than 1,000 mm. The annual mean temperature is minus 12.5° C. The ocean has a tempering influence on coastal temperatures and, in summer, the temperatures can go as high as 9°C. Winter temperatures can drop to minus 50°C.<sup>4</sup>

**The Antarctic Peninsula** extends much further north than the rest of the continent and is characterized by a warmer and wetter climate than the coastal areas, with above-freezing temperatures common. In many locations, especially at the northern end, rain is as common as snow.<sup>5</sup>

Antarctica holds "89.5% of total global land ice"<sup>6</sup>, with Greenland, in effect, holding the rest; 9.9%<sup>7</sup>. Melting of land ice will affect sea levels, whereas all the floating sea ice will have no effect on sea levels if it melts<sup>8</sup>.

According to the global warming theory and all 22 major climate models, the Antarctic region should be warming rapidly compared to the rest of the planet. However, since the 1950s, this region has cooled, and ice on the continent has gradually accumulated. Even the Green dominated IPCC has begrudgingly acknowledged in its 2007 fourth report that " *for the last two decades Antarctica as a whole has not warmed*"<sup>9</sup> This sixty-year period of **not** warming, as global carbon dioxide concentrations have risen steadily, is a fatal flaw for the global warming theory.

Doran *et al.* (2002)<sup>10</sup> looking at temperature trends in the McMurdo Dry Valleys of Antarctica in the period 1986 to 2000, identified a cooling rate of approximately 0.7°C per decade. This significant cooling rate "reflects longer term continental Antarctic cooling between 1966 and 2000." The 14-year cooling in the Dry Valleys occurred in the summer and autumn, just as most of the 35-year cooling over the continent, as a whole, also occurred in the summer and autumn.

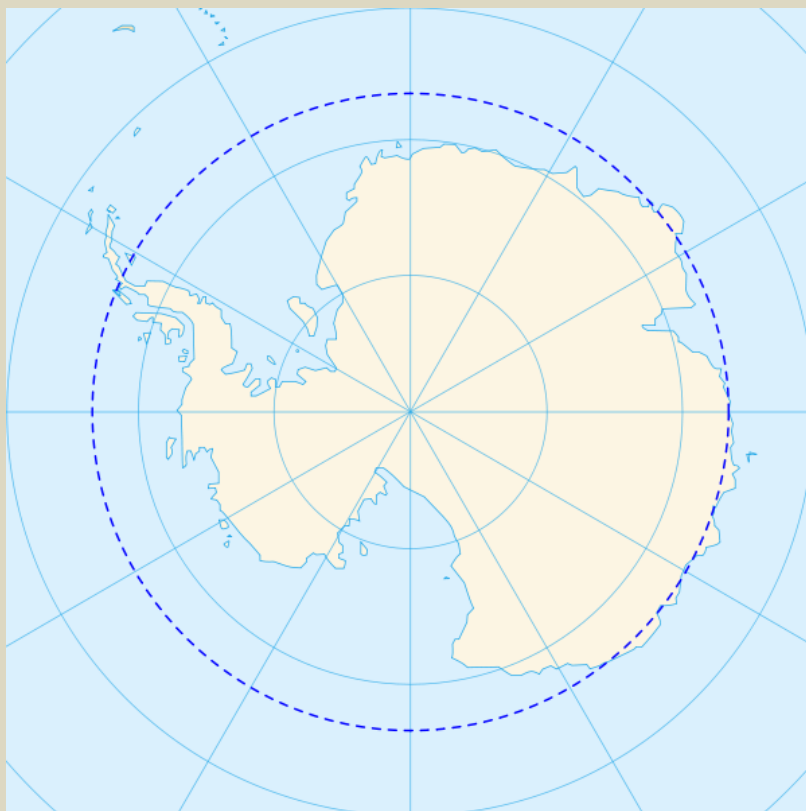
Kwok and Comiso (2000)<sup>11</sup> analyzed Antarctic temperature data from 21 surface stations and from infrared satellites operating since 1979 to find Antarctic temperatures had declined by between 0.08°C and 0.42°C per decade. Thompson and Solomon (2002)<sup>12</sup> also report a cooling trend for the interior of Antarctica. Joughin and Tulaczyk (2002)<sup>13</sup>, studying satellite temperature records believe the Antarctic region is cooling at 0.090C per decade. These Antarctic *cooling rates* are greater than the *warming rate* that the rest of the world has seen in 150 years.

Further evidence that Antarctica as a whole is in the midst of a cooling trend comes from Watkins and Simmonds (2000)<sup>14</sup> who studied region-wide changes in sea ice. Reporting on trends over the period 1987 to 1996, they found statistically

significant increases in sea ice area and total sea ice extent, as well as an increase in sea ice season length since the 1990s. Combining these results with those from a previous study revealed these trends to be consistent to at least 1978. And in two other studies of Antarctic sea ice extent, Yuan and Martinson (2000)<sup>15</sup> and Turner (2009)<sup>16</sup> it was found that the net trend in the mean Antarctic ice edge over the past 18 years has been a northerly expansion of approximately one kilometer per year.

One small area of Antarctica that has *not* cooled is the Antarctic Peninsula/Bellingshausen Sea region. This area is the small finger of land shown in Figure 1 at the 10 o'clock position outside the Antarctic Circle (the dotted blue line). Its area is less than 3% of the total Antarctic area.

However tempting it might be to attribute this local warming to man-made global warming, Vaughn et. al.<sup>17</sup> says “it would be superficial to do so without offering a mechanism to explain such rapid regional warming”. They believe much of the warming can be explained by the changes in the Southern Hemispheric Annular Mode (SAM) – westerly winds encircling Antarctica. Other explanations have ranged from undersea volcanic activity to warm ocean sea currents. Come what may, this regional warming cannot be attributed to global warming<sup>18</sup>.



**Figure 1 – Map of Antarctic** (dotted blue line is the Antarctic Circle)

However, these scientific and common sense findings did not stop the Green propaganda machine from having United Nations Secretary General Ban Ki-moon, and IPCC staff, visit the Antarctic Peninsula in 2007 on a public relations exercise for

the IPCC. Mr Ban announced to the world that "The Antarctic Peninsula is one of the three [climate change] hotspots on earth..."<sup>19</sup>, and was further proof of global warming. This exercise achieved the Greens' propaganda aim of convincing millions of the world's uninformed citizens that temperatures were rising in the whole Antarctic region, and man-made global warming was melting the ice all over this continent.

## Conclusion

The cooling of Antarctica not only confounds predictions of temperature rises made by *all* of the 22 major climate models that the IPCC and the Greens rely on as the basis for their global warming campaign, but also shows that there is a fatal flaw in the global warming theory. The temperature history of Antarctica provides no evidence for the CO<sub>2</sub> induced global warming hypothesis. In fact, it argues strongly against it. After reading Handout 3-9B on the Arctic, you will also find that there is little to suggest that Al Gore's "canary in the coal mine" is anything but a very fit bird in both Polar Regions and, at this stage, is showing no signs of dying.

## Post Script:

We are told that the IPCC's reports are based on the best scientific information in the world. In the 2007 IPCC Report<sup>9</sup>, the authors told us that the Antarctic region is not warming. Yet the very same IPCC staff felt it was necessary to take the Secretary General of the UN, Mr Ban Ki-moon down to Antarctica in November 2007, on a public relations exercise<sup>19</sup> to show the world the effects of global warming. You would have to question such behaviour.

This action also presents us with a quandary. Should we believe the political spin of the UN, and treat the best available scientific knowledge (i.e. their Reports) as pap, or should we distrust the IPCC knowing it will not hesitate to deceive us with their public relations 'spin' campaigns?

## Notes:

1. "For example, at -60°C and 100% relative humidity there is only 0.05% as much water in the air as there is at room temperature and 100% humidity" Hayden, Howard C., "A Primer on CO<sub>2</sub> and Climate", Second Edition, Vales Lake Publishing, Pueblo West USA, 2008., Page 34.
2. <http://www.antarcticconnection.com/antarctic/weather/climate.shtml> 1133, 11th July 2010.
3. Ibid.
4. Ibid.
5. Ibid.
6. Michaels, Patrick J., Balling Jnr., Robert C., "Climate of Extremes", Cato Institute, Washington, 2009, p132.
7. Michaels, Patrick J., Balling Jnr., Robert C., "Climate of Extremes", Cato Institute, Washington, 2009, p102.

8. As with ice blocks in a glass, as they melt they do not change the fluid level in the glass. As ice, they have already displaced their own weight in water.
9. IPCC, Fourth Assessment Report (2007), Chapter 10, p.816.
10. Doran, P.T., Priscu, J.C., Lyons, W.B., Walsh, J.E., Fountain, A.G., McKnight, D.M., Moorhead, D.L., Virginia, R.A, Wall, D.H., Clow, G.D., Fritsen, C.R., McKay, C.P. and Parsons, . “*Antarctic climate cooling and terrestrial ecosystem response.*” Nature advance online publication AN. 2002, 13 January 2002 (DOI 10.1038/nature710).
11. Kwok, R. and Comiso, J.C. “*Variability and trends in Antarctic surface temperatures from in situ and satellite infrared measurements.*”, Journal of Climate **13**, 2000, pp. 1674-1696.
12. Thompson, D.W.J. and Solomon, S. “*Interpretation of recent Southern Hemisphere climate change.*” Science **296**, 2002, pp. 895-899.
13. Joughin and S. Tulaczyk, Science, **295** (January 18, 2002), p. 476. Antarctic. Also, the, satellite temperature records have the continent cooling at 0.090C per decade. University of Alabama-Huntsville at <http://www.nsstc.uah.edu/data/msu/t2lt/uahncdc>
14. Watkins, A.B. and Simmonds, I., “*Current trends Antarctic sea ice: The 1990s impact on a short climatology*” Journal of Climate **13**, 2000, pp 4441-4451.
15. Yuan, X. and Martinson, D.G., “Antarctic sea ice extent variability and its global connectivity.” Journal, Climate **13**, 2000, pp 1697-1717.
16. Turner, John, et al, “ *Non-annular atmospheric circulation change induced by stratospheric ozone depletion and its role in the recent increase of Antarctic sea ice extent.*”, Geophysical Research Letters **36**, 2009, p.L08502
17. Vaughan, D.G., Marshall, G.J., Connolley, W.M., King, J.C. and Mulvaney, R., “*Devil in the detail*”, Science **293**, 2001, pp.177-179
18. Carbon dioxide cannot concentrate itself over 5% of a land mass and create global warming while ignoring the other 95% of the land mass.
19. BBC News, “*UN chief’s Antarctic climate tour*”, 11 November 2007. You should also note that such a view contradicted the finding of his own UN IPCC 2007 report, and was made while he was accompanied by members of the IPCC staff who just happen to remain silent – see Note 9.