

Sampling of Scientific Reality Checks on Mount Kilimanjaro:

New Study in Arctic, Antarctic, and Alpine Research Reveals warming not cause of Kilimanjaro ice loss – September 24, 2008

Excerpt: It has become clear to all but the most blind, that rising temperatures have had little to do with Kilimanjaro's disappearing ice, as the findings of Duane et al. (2008) also suggest. [...] Stating that their work shows "the importance of moisture transport upslope to the summit of Kilimanjaro," Duane et al. thus come down on the side of the many other researchers who have concluded, in their words, that "the reasons for the rapid decline in Kilimanjaro's glaciers are not primarily due to increased air temperatures, but a lack of precipitation."

<http://co2science.org/articles/V11/N39/C1.php>

Yet another study disproves Gore's Kilimanjaro claims – July 28, 2008

Excerpt: The latest issue of Arctic, Antarctic, and Alpine Research contains yet another article on the snows of Kilimanjaro that should further end the nonsense on this subject hyped by the global warming advocates. The work was conducted by scientists from Brunei, the United Kingdom, Massachusetts, and Arizona, and the work "is based in part on work supported by the National Science Foundation and NOAA Office of Global Programs, Climate Change Data and Detection Program." Duane et al. begin noting "The impact of any climate change on high altitude regions is of fundamental importance to the region itself, its resources, and its surrounding environments. [...] Map showing location of the 10 meteorological data logger sites on the south-western slopes of Kilimanjaro (from Duane et al., 2008). Figure 2 shows the average monthly temperatures for seven of the ten locations (as numbered in Figure 1), and what do you notice about the high elevation stations? Of course, the temperatures are consistently below freezing all year! Figure 3 shows the hourly temperatures for these stations, and again, the temperatures high on the mountain stay below freezing at all times of the day! Duane et al. conclude "It has been argued that the reasons for the rapid decline in Kilimanjaro's glaciers are not primarily due to increased air temperatures, but a lack of precipitation. Indeed our data show that temperatures remain well below freezing at site 10, with daytime maxima averaging -2.1°C . Such low air temperatures keep sensible heat supply to the glacier small and make radiative exchanges more significant. Thus, patterns of cloud cover and humidity are central to understanding glacier-climate interactions." In other words, even if Gore's claim of elevated temperatures in the region would be correct (and it isn't), the increase in temperatures thus far would have had no effect on the frozen world at the top of Kilimanjaro. [...] The mountaintop needs more water to sustain the snow, ice, and glaciers, and as many other have noted, any increase in global temperature should increase global evaporation thereby possibly saving the snows of Kilimanjaro.

<http://www.worldclimatereport.com/index.php/2008/07/28/back-to-africa-kilimanjaro-update/>

Tanzania official now declares ice caps on Mt Kilimanjaro 'increasing' – May 2008

Excerpt: A Cabinet minister has allayed fears that ice caps on Mt Kilimanjaro that is a big tourist attraction in the region could disappear permanently. The minister for Natural Resources and Tourism, Ms Shamsa Mwangunga, says contrary to reports that the ice caps were decreasing owing to effects of global warming, indications were that the snow cover on Africa's highest mountain were now increasing. "Among the signs of more snow is the decrease in temperatures in areas surrounding the mountain, heavy rainfall this year and increased precipitation and spring water flow on the slopes of the mountain," she pointed out.

<http://astuteblogger.blogspot.com/2008/05/update-tanzania-official-now-declares.html>

Researchers from the U.S. and Austria say global warming isn't the cause of Kilimanjaro ice loss
– June 13, 2008

Excerpt: Al Gore has made the disappearing snows of Mount Kilimanjaro a cornerstone of his crusade against global warming. In his film "An Inconvenient Truth" for example, he says: "Within the decade, there will be no more snows of Kilimanjaro." But now researchers from the U.S. and Austria say global warming isn't the cause, and the fluctuations are nothing new. American Science magazine reports most of the current snow retreat occurred before 1953 — nearly two decades before any conclusive evidence of atmospheric warming was available. One of the scientists writes: "It is certainly possible that the icecap has come and gone many times over hundreds of thousands of years." The article says the disappearance of Kilimanjaro's ice is not driven by warming air temperature, but by solar radiation — and that much of the ice is not melting, but vanishing by sublimation where ice at very low temperatures converts straight to water vapor.

<http://www.foxnews.com/story/0,2933,282033,00.html>

Another study: 'Deforestation behind loss of Mt Kili snow' - Using Kilimanjaro for warming called 'awfully inaccurate' - August 14, 2008

Excerpt: A scientific theory has linked the loss of snow on Mount Kilimanjaro to deforestation and dismissed suggestions that the dwindling of glaciers on Africa's highest peak was due to global warming. The theory is highlighted in a recent study report compiled by two researchers from Britain's Portsmouth University, Nicholas Pepin and Martin Schaefer, who surveyed the mountain's glaciers for 11 days. The researchers, who revealed their findings at a news conference in Dar es Salaam yesterday, said the mountain's glacier surface had shrunk from 20 km in 1880 to a mere two kilometres in 2000. They said the development was caused more by local than regional factors, with Pepin suggesting that deforestation mainly due to extensive farming as the major cause. "Deforestation of the mountain's foothills is the most likely culprit because without forests there is too much evaporation of humidity into outer space. The result is that moisture-laden winds blowing across those forests have become drier and drier," he explained. [...] Revealing the findings they first published last year in the American Scientist magazine, the experts cautioned that using Mount Kilimanjaro as a "poster child" for climate change was awfully inaccurate.

<http://www.ippmedia.com/ipp/guardian/2008/08/14/120550.html>

Dr. Kelvin Kemm, formerly a scientist at South Africa's Atomic Energy Corporation who holds degrees in nuclear physics and mathematics, refuted Kilimanjaro warming link. "Former US Veep Al Gore is being totally simplistic in his movie by just saying that Mount Kilimanjaro's loss of ice-cap volume is a sign of global warming. Most of Al's movie exhibited the same absence of genuine science, and rather presented itself as part of an election campaign," Kemm wrote in an April 27, 2007 op-ed in South Africa's Engineering News. Kemm noted that warming temperatures did not cause a ice-cap melt on Kilimanjaro. "It is also a scientific fact that there has been no measurable atmospheric warming in the region of Kilimanjaro. Satellites have been measuring the regional temperature since 1979 in the free troposphere between 1 000-m and 8 000-m altitude and they show no troposphere warming in that area. None. So what is causing the ice cap to melt? The answer appears to be trees, or rather lack of them," Kemm wrote. "...Since the locals have cut down so many trees over the last century, there is much less wet air moving up the mountain than there used to be, so less ice forms at the top," he added. ([LINK](#))

[Snow Returns to Mount Kilimanjaro \(International Herald Tribune – January 21, 2008\)](#)

Excerpt: I had wanted to climb to the roof of Africa before climate change erased its ice fields and the romance of its iconic "Snows of Kilimanjaro" image. But as we trudged across the 12,000-foot Shira plateau on Day 2 of our weeklong climb and gazed at the whiteness of the vast, humpbacked summit, I thought maybe I needn't have worried. [...] And four days later, when we reached 19,340-foot Uhuru, the highest point on Kibo, we beheld snow and ice fields so enormous as to resemble the Arctic. It looked nothing like the photographs of Kibo nearly denuded of ice and snow in the Al Gore documentary "An Inconvenient Truth." Nor did it seem to jibe with the film's narrative: "Within the decade, there will be no more snows of Kilimanjaro." [...] But several weeks of heavy rain and snow preceded the arrival of our group, 10 mountaineering clients and a professional guide from International Mountain Guides, based near Seattle. That made for a freakishly well-fed snow pack and the classic snowy image portrayed on travel posters, the label of the local Kilimanjaro Premium Lager and the T-shirts hawked in Moshi's tourist bazaars. But to many climate scientists and glaciologists who have probed and measured, the disappearance of the summit's ice fields is inevitable and imminent. [...] Patchy snow covered the upper slopes above approximately 18,500 feet. At dawn, as we reached Stella Point at the lower lip of Kibo's summit crater, the fluted walls of the flat-topped Rebmann Glacier stretched out to our left. Snow blanketed the summit area, a mile and a half wide and hemmed by glaciers. Uhuru, the highest point in all Africa, was a 45-minute slog ahead. - See photo of snows return on Mount Kilimanjaro [here](#).

A 2006 New York Times article noted that there is 'dubious evidence' that Kilimanjaro is melting due to global warming. "The ice on Kilimanjaro has been in retreat since at least the 1880's, with the greatest decline occurring at the beginning of that period, when greenhouse gas concentrations were much lower," says the New York Times article of July 4, 2006 by Philip M. Boffey. "The National Academies panel judged that Kilimanjaro's glaciers 'may be shrinking primarily as a continuing response to precipitation changes earlier in the century,'" Boffey noted.

http://epw.senate.gov/public/index.cfm?FuseAction=PressRoom.Facts&ContentRecord_id=4B688FCD-7943-4859-905D-6AD3FE4EE7DF

2004 Study in Nature says less snowfall on Kilimanjaro due to less moisture

Gore's claim that global warming is causing the snows of Mt. Kilimanjaro to disappear has also been debunked by scientific reports. For example, a 2004 study in the journal Nature makes clear that Kilimanjaro is experiencing less snowfall because there's less moisture in the air due to deforestation around Kilimanjaro.

http://epw.senate.gov/public/index.cfm?FuseAction=PressRoom.PressReleases&ContentRecord_id=725B7C34-101C-48C7-B573-4BFDEBD55448

'Climatological processes other than air temperature control the ice recession' on Kilimanjaro - International Journal of Climatology – June 22, 2006

Excerpt: Kilimanjaro. The snows of Kilimanjaro are melting not because of global warming but because of a local climate shift that began 100 years ago. The authors of a report in the International Journal of Climatology "develop a new concept for investigating the retreat of Kilimanjaro's glaciers, based on the physical understanding of glacier-climate interactions." They note that, "The concept considers the peculiarities of the mountain and implies that climatological processes other than air temperature control the ice recession in a direct manner. A drastic drop in atmospheric moisture at the end of the 19th century and the ensuing drier climatic conditions are likely forcing glacier retreat on Kilimanjaro."

http://epw.senate.gov/public/index.cfm?FuseAction=PressRoom.Facts&ContentRecord_id=3AF85E1B-D27B-417F-9E7A-084232C7D8D7