



This is the print version of the [Skeptical Science](http://sks.to/dropped) article '[Dropped stations introduce warming bias](http://sks.to/dropped)', which can be found at <http://sks.to/dropped>.

# Why are there fewer weather stations and what's the effect?

## What The Science Says:

Dropped stations show more warming than kept stations.

## Climate Myth: Dropped stations introduce warming bias

'Two American researchers allege that U.S. government scientists have skewed global temperature trends by ignoring readings from thousands of local weather stations around the world, particularly those in colder altitudes and more northerly latitudes, such as Canada.' ([Vancouver Sun](#))

An oft-cited skeptic argument is that the decrease in available temperature measuring stations during the 1990s introduces an increased bias towards warming. The argument is based upon the premise put forward by some climate change skeptics that stations which show more warming were kept and ones that show less warming were dropped. The reason this assumption is made is because during the 1990s there was a large reduction in the number of meteorological stations being used for global temperature analyses.

In order to test this theory, several independent researchers ([Tamino](#), [Ron Broberg](#), [Zeke Hausfather](#), [Joseph at Residual Analysis](#) and others at the [Clear Climate Code Project](#)) and have calculated whether the stations dropped showed less warming than the ones kept. The results? Several find no difference and several find that **dropped stations show more warming**.

Furthermore, it is also important to note that the methods used in global temperature analyses make them robust to the loss of stations because they use techniques which incorporate multiple nearby stations into analysis of any individual region.

So to conclude: Independent researchers have shown that there is **no truth** to the claim that cooling stations were removed, in fact evidence suggests that if these stations were included, warming would be shown to be slightly greater.



The Skeptical Science website by [Skeptical Science](#) is licensed under a [Creative Commons Attribution 3.0 Unported License](#).



Skeptical Science explains the science of global warming and examines climate misinformation through the lens of peer-reviewed research. The website won the Australian Museum 2011 Eureka Prize for the Advancement of Climate Change Knowledge. Members of the Skeptical Science team have authored peer-reviewed papers, a [college textbook on climate change](#) and the book [Climate Change Denial: Heads in the Sand](#). Skeptical Science content has been used in university courses, textbooks, government reports on climate change, television documentaries and numerous books.



The [Skeptical Science](#) website by Skeptical Science is licensed under a Creative Commons [Attribution 3.0 Unported License](#).