

The Four Temperature Datasets

There are four bodies around the world that produce global temperature records (air and surface temperatures):

- Remote Sensing Systems in California. Uses satellite data only: www.junkscience.com/MSU_Temps/RSSglobe.html
- University of Alabama in Huntsville (UAH), using the NASA Aqua satellite. Uses satellite data only: www.junkscience.com/MSU_Temps/UAHMSUglobe.html
- The Hadley Centre in the UK. Uses a mix of satellite data and land-based thermometers: www.junkscience.com/MSU_Temps/HadCRUG.html
- The Goddard Institute for Space Studies (GISS) at NASA, which is run by Jim Hansen. Uses land-based thermometers and a few ocean thermometers, but no satellite data (despite the “Space” in GISS): www.junkscience.com/MSU_Temps/GISSglobal.html

Satellite data is the only temperature data we can trust, but it only goes back to 1979. The satellites go around 24/7, measuring the temperature across broad swathes of the world, both land and ocean, everywhere except the poles.

Land-based thermometer readings are corrupted by the urban heat island (UHI) effect—the microclimate around a land-based thermometer can change due to urban encroachment, such as nearby asphalt, concrete, buildings, air conditioners, or tree removal. In the US, only 11% of land-based thermometers are sited according to the official guidelines. GISS say their algorithms correct for UHI, but they won’t release the algorithms and the land-based thermometers show temperatures rising faster in areas with higher population growth. To get a graphic idea of why, see

www.surfacestations.org/odd_sites.htm

or

wattsupwiththat.wordpress.com/test/

Most of the world has no or little coverage from land-based thermometers. GISS and Hadley use the same raw land-based thermometer data, but process it differently—especially in estimating temperatures in areas far away from any land-based thermometers.

The GISS data shows temperatures rising more than the other datasets, especially in 2002 - 2005, so the alarmists used to only use the GISS data. Now that the GISS data also shows cooling, they have switched again—to ocean temperatures. But ocean temperatures have only been measured in any detail or to any depth for five years, by the Argo buoys:

[http://en.wikipedia.org/wiki/Argo_\(oceanography\)](http://en.wikipedia.org/wiki/Argo_(oceanography))

And as that article says, “Josh Willis of NASA’s Jet Propulsion Laboratory has reported that the Argo system has shown no ocean warming since it started in 2003. “There has been a very slight cooling, but not anything really significant,””. On the one hand the alarmists want you to believe only trends of over 10 years are valid (air has been cooling since 2001), but on the other they want you to believe oceans are warming from five years worth of data.