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CLIMATEGATE

How "The Trick" was pulled off

14 years ago
Anthony Watts

by Steve McIntyre

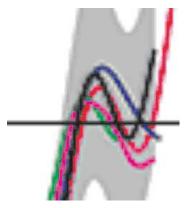


Figure 3. Blowup of IPCC Figure 2-21.

For the benefit of new readers, we discussed some aspects of the "trick" at Climate Audit in the past. Obviously, the Climategate Letters clarify many things that were murky in the past. On the left is a blowup of IPCC 2001 Fig 2.21 showing where the Briffa reconstruction (green) ends. More on this below.

Figure 1 below is the original graphic showing the MBH98-99, Jones et al 1998 and Briffa 2000 temperature reconstructions. I think that it's fair to say that this graphic gives a strong rhetorical impression of the proxy reconstructions all going up throughout the 20th century, lending credibility to the idea that the "proxy" reconstructions would also be responsive to past warm periods - and obviously not giving any "fodder to the skeptics" by revealing the divergence between the Briffa reconstruction and temperatures.

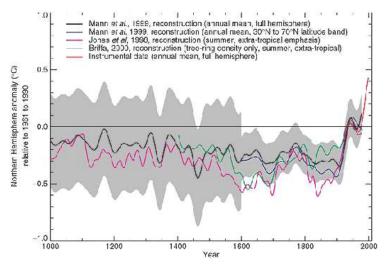
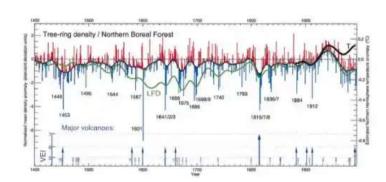


Figure 1. IPCC 2001 Comparison of warm-season (Jones et al., 1998) and annual mean (Mann et al., 1998, 1999) multi-proxy-based and warm season tree-ring-based (Briffa, 2000) millennial Northern Hemisphere temperature reconstructions. The recent instrumental annual mean Northern Hemisphere temperature record to 1999 is shown for comparison.

While the digital version of the Briffa reconstruction has only become available in the past few days, Briffa 2000 (cited in the caption to IPCC Fig 2.21) did show the decline as shown in Briffa 2000 Figure 5 shown below (with its original caption). This series obviously goes down at the end (as does a related series in Briffa et al 1998, referred to by Gavin Schmidt.) What Gavin didn't discuss is how you get from the version below to the IPCC version.



Q

Figure 2. Briffa 2000 Figure 5 An indication of growing season temperature changes across the whole of the northern boreal forest. The histogram indicates yearly averages of maximum ring density at nearly 400 sites around the globe, with the upper curve highlighting multidecadal temperature changes... The LFD curve indicates low-frequency density changes produced by processing the original data in a manner designed to preserve long-timescale temperature signals (Briffa et al., 1998c). Note the recent disparity in density and measured temperatures discussed in Briffa et al., 1998a, 1999b). Note that the right hand axis scale refers only to the high-frequency density data.

Gavin Schmidt stated that everything was "in plain sight". Regular CA readers are used to watching the pea under the thimble. There is no mention in the IPCC report of the deletion of Briffa reconstruction data after 1960. Nor is there any mention of the deletion in the IPCC reference (Briffa 2000) nor, for that matter, in the article cited by Gavin Schmidt (Briffa et al 1998). These articles report the divergence, but do not delete it. (Briffa et al 2001 does delete the post-1960 values.)

Not only was the deletion of post-1960 values not reported by IPCC, as Gavin Schmidt implies, it is not all that easy to notice that the Briffa reconstruction ends around 1960. As the figure is drawn, the 1960 endpoint of the Briffa reconstruction is located underneath other series; even an attentive reader easily missed the fact that no values are shown after 1960. The decline is not "hidden in plain view"; it is "hidden" plain and simple.

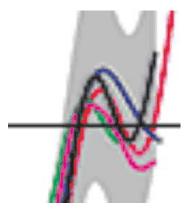


Figure 3. Blowup of IPCC Figure 2-21.

Previous discussion of these issues is at Climate Audit here here here and more recently by Jean S here. Jean S and UC report at CA that the puzzling end point properties can be replicated by replacing actual proxy data after 1960 with instrumental data and then smoothing (truncating back to 1960) – exacerbating the problem. (I haven't personally confirmed this, but Jean S and UC are extraordinarily skilled analysts and know this material as well as I do.) Jean S:

In order to smooth those time series one needs to "pad" the series beyond the end time, and no matter what method one uses, this leads to a smoothed graph pointing downwards in the end whereas the smoothed instrumental series is pointing upwards — a divergence. So Mann's solution was to use the instrumental record for padding, which changes the smoothed series to point upwards as clearly seen in UC's figure (violet original, green without "Mike's Nature trick").

Jean S then drolly quoted Mann:

No researchers in this field have ever, to our knowledge, "grafted the thermometer record onto" any reconstruction. It is somewhat disappointing to find this specious claim (which we usually find originating from industry-funded climate disinformation websites) appearing in this forum.

The Climategate Letters contain a very interesting discussion between Mann, Jones, Briffa, Karl and Folland worrying that showing the discrepancy would provide "fodder to the skeptics". More on this tomorrow.

