

Issues for discussion at UEA – 9th April 2010

Background

The issues in the following paper are set out as a series of questions and allegations that Professors Boulton and Clarke wish to examine with Professors Jones and Briffa. They are derived from the submissions made to the Review and related to the emails that are at its heart. As such they should not be assumed to reflect the views of the Review team.

They echo in slightly more detail some of the issues that were identified by the Review team at an earlier stage, and which CRU addressed in its response. The fact that they are repeated and enlarged on here should not be taken to imply that the earlier CRU responses were inadequate, but that they are issues that the team wish to “bottom out” in detail.

Professor Briffa

1.1 Has tree ring data been analysed and selectively presented in a way that is designed to support the so-called “hockey stick” curves of global or hemispheric temperature?

- a) A Yamal tree ring series was used in an influential publication (Briffa 2000) which leads to a strong upward trend in recent years. It is alleged that the figures derived from this publication have been used in influential reports, in preference to legitimate alternative analyses. It is asserted that these alternative data exhibit different trends (both magnitude and sign) in recent years. It is alleged that the variation in these results has not been appropriately described in reports and that legitimate objections have been overruled.
- b) A specific factor contributing to the above is that the number of core counts for the post-1995 period used in Briffa 2000, when the strongest warming is indicated, is well below the replication standard. This information was not made available at the time of publication, or indeed until much later in 2009. Neither the low core count, nor the ensuing uncertainty which must arise, were properly described in the literature.
- c) An adjustment made to the Törnetrask series is described in the source paper Briffa 1992. There are two allegations (i) that this is an unacceptable procedure to adopt in a scientific paper which should not have been accepted by peer review (ii) that even if it were an acceptable procedure, then where results derived from this adjustment are used it is not properly described leading to a false impression of a stronger trend of recent warming.

1.2 In some tree-ring series, there is an unexplained recent decline in tree ring width as temperatures have increased. This is the phenomenon that has been termed “divergence”. It is alleged that this issue has not been properly allowed for or properly exposed in important reports accessible to policymakers.

- a) The implications of the phenomenon of “divergence” were identified by Briffa (1998), discussed openly in the published literature, recognised by Briffa as problematic in private (1155402164) and highlighted in the 2006 US NAS

report. It is alleged that these uncertainties were not properly described in the 1999 WMO statement, and the 2001 and 2007 IPCC reports.

In the WMO front page a figure was presented that was created by truncating tree ring series at 1960/81, and replacing them by the post 1960/81 instrumental record. In the case of the IPCC reports a specific Briffa series was simply stopped at 1960, with the end point being hidden under other lines on the figure.

These reports were important in being accessible to policymakers and it is asserted that the figures and descriptions thereof should have been more open and honest, specifically including the declining series rather than hiding them.

If the post-1960 proxy data had been shown, it would have led the thoughtful reader to question the validity of tree rings as a reliable proxy for temperature prior to the period of the instrumental record.

It is alleged that these manipulations were done in order to promote the message of strong recent global warming, e.g. to “hide the decline” (942777075), and to produce a “nice tidy story” that he was being “pressured to create” (0938031546). “Hiding the decline” was therefore equivalent to promoting a particular policy agenda.

- b) Whilst there are theories and discussions, the reasons for the recent decline are not at this time understood. It is a priori the case that in the absence of an explanation for an effect in data in one period, then no assumption or assertion can be made that such an effect is not present in another period, possibly with an opposite slope.

Therefore at the very least this fact should have been used to determine and then indicate clearly an increased uncertainty on proxy reconstructions in the past. Specifically if the post-1960 data had been included in temperature-tree ring regressions, it would have reduced statistical confidence in the reconstruction of the MWP and made it more difficult to make the statement that the late 20th century warming was unprecedented during the last 1000 years, an important issue in creating public confidence in the concept of anthropogenic climate change.

- c) It is alleged that despite repeated requests to be more open about this issue, influential reports were published without giving in those reports an objective description of the ongoing debate and level of uncertainty which should be associated with such past temperature reconstructions.

1.2 *Has data has been withheld that might call into question some of the CRU conclusions about global warming?*

- a) Tree ring data, including core counts for the Yamal, Tornetrask and Taymir data (published in 2000) were withheld until 2009, after they were required by the Royal Society, and after they had been widely used. It transpired, as noted above, that the latest, most vital part of the record, was based on a very small number of cores.

Professor Jones

- b) The CRUTEM2 and 3 global temperature reconstructions were compiled from a selection of meteorological stations, the data for which is available from the owners or from other repositories around the world. It was (and is) possible for any third party to obtain data themselves from the primary sources, and to perform whichever alternative analysis they wish without reference to CRU. However, some third parties wished to specifically test the validity of the CRU analysis itself. It was impossible to do this because the list of stations identifiers from which it was compiled was withheld, notwithstanding requests to release them, most recently through FoI requests.

Professors Briffa and Jones

2.1 *Has the CRU group attempted improperly to influence journals to discriminate against papers of which they disapproved?*

- a) Professor Jones was part of the group that pressured Climate Research improperly to change its editorial policy in the aftermath of publication of the Soons and Balunias (2003) paper.
- b) Professor Jones' 2009 attempting to suppress contrary views by writing to Hull University suggesting that it should dissociate itself from Dr Christiansen as editor of Energy & Environment.
- c) In an email of 2003 email (1059664704) Prof Briffa sought rejection of papers on other than acceptable scientific grounds.

2.2 *Did the CRU group subvert IPCC procedures by excluding views of which they disapproved from proper consideration, and set aside IPCC rules through concessions to views of which they approved?*

Professor Briffa

- a) The “divergence problem” and the injunction from a reviewer to show the post 1960 tree ring data, was not discussed in the drafts of the IPCC 4th assessment report sent to reviewers by the lead author Briffa. Explanatory text on the issue was included in the final report without review. It is reflected in the comment by Jansen in an email (1141930111) to Briffa that the draft did not deal adequately with “bad proxies”.
- b) Briffa sent IPCC chapter materials, including Reviewer Comments to Wahl of Alfred College, in apparent contravention of IPCC rules, seeking advice on how to respond to review comments about divergence. Wahl supplied Briffa

with unpublished material that had not gone through the IPCC review process (1155402164).

Professor Jones

d) The papers by McKittrick & Michaels (2004) and DeLaat&Maurellis in relation to explaining the instrumental temperature rise by non climatic global phenomena (eg Nino) and socio-economic effects (e.g UHIs) was kept out, by Jones, of the IPCC AR4 first and second drafts, and only reluctantly incorporated in the final draft together with an unsubstantiated dismissive comment. (Note that the argument about the impact of UHIs and other effects on climate reconstructions is a scientific argument, and therefore beyond our remit).

3. *Did CRU fail to release data and relevant information that would permit others to test the validity of CRU conclusions, a process that is fundamental to scientific practice?*

Allegations

- a) CRU refused to release station identifiers that would permit the data set used to compile CRUTEM3 (or CRUTEM2) to be analysed by others.

- b) CRU refused to release the basic station data of CRUTEM other than to their collaborators or those with similar views about the underlying science.

Professor Briffa

c) CRU refused to release the basic data behind the tree ring reconstruction presented in Briffa et al. (1995) a highly influential chronology from the Polar Urals site. and Briffa 2000.