

From Geoffrey Boulton to Professor Phil Jones 15 April 2010

Dear Professor Jones

I write to follow up the evidence session that we had at CRU last Friday, when it was difficult to pursue issues relating to the IPCC in the detail that is needed by the ICCER. The purpose of this letter is to set out an issue on which we would like evidence from you.

The relevant terms of reference are: to “review CRU’s policies and practices for acquiring, assembling, subjecting to peer review and disseminating data and research findings, and their compliance or otherwise with best scientific practice”. In relation to this it has been alleged that IPCC procedures have been misused in attempting to prevent the publication of opposing ideas. This specifically relates to your role as coordinating lead author for chapter 3 in the IPCC Fourth Assessment Report (FAR).

As context for the allegation, we quote the Principles Governing IPCC Work adopted in 1999 and amended in 2003: “In preparing the first draft (of a Report), and at subsequent stages of revision after review, Lead Authors should clearly identify disparate views for which there is significant scientific or technical support, together with relevant arguments.” An amplification of the IPCC approach has been quoted to us from Dr Pachauri’s interview with an Australian reporter (<http://www.abc.net.au/7.30/content/2009/s2700047.htm>): “Whatever we do is very transparent. Every stage of the drafting of our report is peer reviewed, and whatever comments we get from the peer review process are posted on the website of the IPCC, and the reasons why we accept or reject those comments are clearly specified. Where we accept a comment we say, “Yes. Accepted.” Where we don’t, we have to adduce very clear reasons why the authors don’t agree with the comment. So it’s a very transparent process.”

I have reviewed the allegations below and ask you to respond to them in detail, giving evidence to support your statements where possible. There is considerable overlap between them, particularly 2 & 3, but it would help if you could deal with them separately.

I stress that these allegations do not necessarily represent the views of the Review team, but are a reflection of the issues raised in submissions made to us, many of which have now been put on the ICCER website. It is our role to investigate them as rigorously as possible, which is the rationale for this letter.

Although the issues that are addressed below overlap with considerations of scientific debate, which is beyond our remit, it has been suggested that they reveal a pattern of behaviour designed to exclude improperly from IPCC consideration arguments that conflict with those of the CRU group. The basis for this allegation is the email quote in the following paragraph.

1. Excluding a paper from appropriate consideration on improper grounds.

On 8th June 2004, you sent an email to Mann: “The other paper by MM (McKittrick & Michaels, 2004) is just garbage. ... I can’t see either of these papers being in the next IPCC report. Kevin (Trenberth, the other coordinating lead author for ch. 3 in FAR) and I will keep them out somehow – even if we have to redefine what the peer-review literature is!” This paper argued that a large proportion of the measured recent warming was a consequence of increased economic activity and change in land use.

When the IPCC released the First Order Draft in August 2005 the relevant section of the

Draft (Chapter 3, pages 3-9 to 3-10) contained no mention of the McKittrick and Michaels (2004) paper (or supporting work by de Laat and Maurellis). This was consistent with the intent expressed in the email. IPCC Expert Reviewer Vincent Gray criticized the omission as follows: (<http://pds.lib.harvard.edu/pds/view/7795947?n=7&imagesize=1200&jp2Res=.25>), as did expert review comments from McKittrick. In the IPCC Second Order Draft, released in March 2006, and despite reviewer demands, there was still no mention of these papers. McKittrick provided lengthy feedback objecting to this omission. In June 2006 the expert review period closed.

Questions.

- **Was the choice not to include reference to the M&M paper yours as Coordinating Lead Author?**
- **What was the justification for omitting to include a paper with very strong implications for understanding the nature of recent warming from the First and Second Order Drafts and from consideration by reviewers?**
- **Is this not a *prima facie* case of excluding views of which you disapproved?**

2. Dismissing opposing views on an inadequate foundation and thereby subverting IPCC principles of transparency and rigour.

When the final IPCC FAR was published in May 2007, it included a new paragraph in Chapter 3, on page 244, that referred to the McKittrick and Michaels (2004) and De Laat and Maurellis (2006) papers, and that had not been included in either of the drafts shown to reviewers. It is assumed that this was either written by you, or in consultation with Trenberth, but in any case, the two of you, as Coordinating Lead Authors, bear responsibility for its inclusion. It reads: “*McKittrick and Michaels (2004) and De Laat and Maurellis (2006) attempted to demonstrate that geographical patterns of warming trends over land are strongly correlated with geographical patterns of industrial and socioeconomic development, implying that urbanisation and related land surface changes have caused much of the observed warming. However, the locations of greatest socioeconomic development are also those that have been most warmed by atmospheric circulation changes (Sections 3.2.2.7 and 3.6.4), which exhibit large-scale coherence. Hence, the correlation of warming with industrial and socioeconomic development ceases to be statistically significant* (highlighting added). *In addition, observed warming has been, and transient greenhouse-induced warming is expected to be, greater over land than over the oceans (Chapter 10), owing to the smaller thermal capacity of the land*”.

Questions.

- **What is the justification for what appears as an *ad hoc* conclusion not based on published research that summarily dismisses an argument that is based on peer-reviewed research?**
- **Why were these conclusions not shown to or discussed with expert reviewers during the IPCC Report preparation?**
- **The references to sections 3.2.2.7 and 3.6.4 of the IPCC Report are misleading since neither section presents evidence that warming due to atmospheric circulation changes occurs in the regions of greatest socioeconomic development. Neither section even mentions industrialization, socioeconomic development, urbanization or any related term. How can they therefore be used to justify the stance of the above quotation?**
- **No justification is given for the claim of statistical insignificance, which has a precise meaning. Do you have a *p* value that justifies this statement, and if not, what does it mean?**

3. Arbitrary searching for any support for a position that was in reality a foregone conclusion

Your response to the Gray comment quoted above was: “the locations of socioeconomic development happen to have coincided with maximum warming, not for the reasons given by McKittrick and Michaels (2004) but because of the strengthening of the Arctic Oscillation and the greater sensitivity of land than ocean to greenhouse forcing owing to the smaller thermal capacity of land”.

(<http://pds.lib.harvard.edu/pds/view/7795947?n=7&imagesize=1200&jp2Res=.25>)

It has been suggested that this was *ad hoc* reasoning unsupported by any evidence. It has been suggested that the statement gives the impression that you had no credible reason to exclude the McKittrick and Michaels evidence, but were determined to do so nevertheless.

Evidence of your seeking any argument that could be explain away the results of McKittrick and Michaels and de Laat and Maurellis has been suggested to be your endorsement of Schmidt’s hypothesis that spatial autocorrelation explains their results, even though this contradicts your own hypothesis that it is the Arctic Oscillation explains them, emphasizing that “it is all down to the calculation of spatial degrees of freedom.” It has been suggested that you were prepared to accept anything that would create an appearance of scientific support for what was in reality a foregone conclusion.

Question.

Could you add to any comments made in response to 2) that would account for an apparently changing position on this issue?

4. Compounding the failings of 2) by using an unsubstantiated premiss as a basis for an important statement in the Summary of Policymakers

Global temperature trends are presented in Table 3.2 on page 243 of the IPCC Report. The accompanying text (page 242) states that the CRU data uncertainties “take into account” biases due to urbanization. The Executive Summary to the chapter (page 237) asserts that “*Urban heat island effects are real but local, and have not biased the large-scale trends...the very real but local effects are avoided or accounted for in the data sets used.*” The influential Summary for Policymakers stated: “*Urban heat island effects are real but local, and have a negligible influence (less than 0.006°C per decade over land and zero over the oceans) on these values.*” The supporting citation was to Section 3.2, which relied on the unsubstantiated material on page 244. IPCC Chapter 9 provides the summary of evidence attributing warming to greenhouse gases. The problem of CRU surface data contamination is set aside as follows (p. 693): “*Systematic instrumental errors, such as changes in measurement practices or urbanisation, could be more important, especially earlier in the record (Chapter 3), although these errors are calculated to be relatively small at large spatial scales. Urbanisation effects appear to have negligible effects on continental and hemispheric average temperatures (Chapter 3).*” The rationale for ignoring these potential data problems relies on a citation to Chapter 3, which in turn relied upon the apparently unsubstantiated evidence on page 244.

Question

- **The statement to policymakers is arguably the most important document produced by IPCC. It is vital that uncertainties are expressed clearly. Is the unequivocal statement for policymakers justified on the basis of rigorous**

science available to the FAR team, and if so, what is that evidence?

As we are hoping to complete our work by the end of May, it would be very helpful to have an early response, and particularly useful if you could let me know when that might be.

Yours sincerely

Geoffrey Boulton