

Subject: Question 9 Transcript (unedited) Wed 17 Feb 2010

Please find below the unedited transcript for John Boscawen's oral question to the Minister of Research, Science and Technology.

9. JOHN BOSCAWEN (ACT) to the Minister of Research, Science and Technology: Does the National Institute of Water and Atmospheric Research maintain an up-to-date schedule of adjustments of all changes made to the raw temperature data that are used in calculating the official series "Mean annual temperature over New Zealand, from 1853 to 2008", published on the institute's website; if not, why not?

Hon Dr WAYNE MAPP (Minister of Research, Science and Technology) : The "Mean annual temperature over New Zealand, from 1853 to 2008" analysis, which was referred to by the member, does make adjustments to the raw data from the seven stations. The reason that is necessary is that in some cases the location of the stations has changed. For instance, the Wellington site has been moved from Thorndon to Kelburn, a difference in height of 125 metres. That requires an adjustment. All of the information to explain the methodology used to adjust the data is on the institute's website. The original methodology to do so was developed in Dr Salinger's PhD thesis, which is also publicly available.

John Boscawen: Given that we have been through the information the Minister refers to and found no schedule of adjustments, can he point to where in this mass of information it is contained; if he cannot, can he commit to table in Parliament the simple schedule of adjustments?

Hon Dr WAYNE MAPP: The member is correct; there is a complex range of information on the institute's website. The methodology for the site changes is published in the peer-reviewed *International Journal of Climatology*, which has been referred to a number of interlocutors on this case. That particular article is by Rhodes and Salinger, and is called "Adjustment of temperature and rainfall measurements for site changes". The huge volume of information indicates that this is quite a complex area.

Hon Rodney Hide: I raise a point of order, Mr Speaker. With great respect, the Minister did not answer the question. The question is a very simple one. It is not about the methodology; it is about the simple schedule of adjustments. In his answer to the primary question he said that the schedule was on the institute's web page, amongst this mass of information. We have been through it. There is no schedule of adjustments. So the Minister was asked whether he could point to the actual schedule of adjustments, not the methodology, and if he could not, whether he could table in the House the schedule of adjustments—not the methodology; the schedule.

Mr SPEAKER: I hear the honourable member, and I am sympathetic to the member's point of order, because the question was on notice. The question asks specifically whether the institute maintains an up-to-date schedule of adjustments of all changes made to the raw temperature data. It does not ask why changes are made to raw temperature data, or how those changes are made; the primary question asks whether the institute maintains an up-to-date schedule of the adjustments made. That information should be available, and I believe that the House deserves an answer. I invite the Minister to give the House an answer.

Hon Dr WAYNE MAPP: As I indicated in my answer, the information is contained in a wide range of information, rather than in a simple one-page schedule, which the member seems to be requesting. In fact, that has been previously advised to the member in this regard. As I indicated, it is a complex issue. As Minister, I have advised the institute that it should provide as much information as possible on how the adjustments were made, so that they can be independently analysed.

Hon Rodney Hide: I raise a point of order, Mr Speaker. With the greatest of respect, I have two points. One is that the PhD thesis referred to is not publicly available. We have had a great deal of difficulty getting it, because it is subject to copyright and is not available to the public. The second thing is that, as the Speaker pointed out, the question is not about a mass of data; the question is whether there is a schedule of adjustments. The Minister said that it is somewhere in the data on the institute's web page. We have been right through it, because we got this information last Christmas. We cannot find it. Is it there or not?

Mr SPEAKER: This should not be debate by point of order, but, again, I am sympathetic to the member's point of order. The question was on notice. The institute has had at least a couple of hours to advise the Minister on a very simple question: basically, is there a schedule of the data that has been adjusted, or is there not? The question is not about how it is adjusted or why it is adjusted; it simply asks whether a schedule of the data changes is kept. That is either available or it is not. I believe that the House deserves better, because this issue is of interest to the House. The House deserves better. I am very sympathetic to the Minister, too; if the Minister has not been provided with the information, maybe he should acknowledge that to the House. But I believe that, on such a straight question that was on notice, no Government agency should be allowed to not provide an answer—unless to do so is not in the public interest; it may not be in the public interest, and I accept that. I invite the Minister to indicate that the information is available, or that he has not been advised, or whatever the answer is. *[Interruption]* We will hear the answer.

Hon Dr WAYNE MAPP: As I indicated in my previous answer, the information is not set out as a singular document in the way that has been noted here. Rather, it is a range of material, all of which is available on the institute's website. Effectively, it is not in a schedule in the form of a one-page document, but, rather, a methodology, and I have indicated the sources of information for that methodology. Mr Speaker, I believe I have addressed the question in precisely the terms that you as Speaker have requested me to do.

Hon Rodney Hide: I raise a point of order, Mr Speaker. I say this carefully because I think the Minister is trifling with your ruling. You said that the question was on notice and that the question asks whether there is a schedule of adjustments. The Minister has said that it is in a mass of data, that it is not in one place, which I guess is sort of saying no, but he is actually trifling with you, because you have said that the question was on notice: is there a schedule of adjustments—yes or no?

Mr SPEAKER: I think I have made very clear my concern. The question was on notice, and the answer sought is very simple. The question does not ask about methodology; it simply asks whether the data has been maintained. That is not a matter of whether it has been maintained on a single sheet or anything; it is a matter of whether the data is available. I have tried to support the member's point of order as far as is reasonable today. There are more days to question the Minister on this issue, if it is one that concerns the relevant members, but I think the House should move on today.

John Boscawen: Is the Minister aware of revelations involving the previously prestigious climate research institute at the University of East Anglia, which has been found to be deliberately breaking official information laws, arbitrarily adjusting raw data, hiding the reasons for those adjustments, and contriving to lose the original unadjusted data so that it could not be independently checked? Does it not concern him that the same could be happening to the records of the National Institute of Water and Atmospheric Research, particularly when Dr Jim Salinger previously worked there?

Hon Dr WAYNE MAPP: Yes, I am aware of the extensive controversy on these issues. Can I also make it clear that no changes at all have been made to the raw temperature data itself. Obviously, adjustments have been made because of the variations, but the original information is available on the institute's database, and members are able to have their own independent analysis made of it to effectively check, verify, or, indeed, disprove the institute's information.

Hon Rodney Hide: I raise a point of order, Mr Speaker. With the greatest respect, given the difficulty that we have had with this question I seek leave of the House to ask one extra supplementary question of the Minister.

Mr SPEAKER: Leave is sought for the Hon Rodney Hide to ask an additional supplementary question. Is there any objection to that? There is no objection.

Hon Rodney Hide: Is the Minister aware that the raw data of the graph in question shows no warming for the period in question—that is, from 1853 till now—and that the entire warming indicated in the graph, which has been used to highlight the 0.92 degrees of warming a century that the National Institute of Water and Atmospheric Research has been talking about, is entirely a consequence of the adjustments that the scientists made, and it is those adjustments that need to be explained?

Hon Dr WAYNE MAPP: Yes, I am very much aware of the issues that have been raised by the member. That is precisely why adjustments are made when locations are shifted. For instance, it is a very significant difference to change the location from being virtually at sea level to being 125 metres above sea level. That is precisely why the methodology that I referred to in previous answers had to be applied to achieve the adjusted result. A rigorous scientific process has been undertaken to achieve that.