

Tim Osborn comments on “Yamal, Polar Urals and Muir-Russell”

Recent accusations ([here](#), leading to embellishment across parts of the blogosphere, e.g. [here](#)) that the [Climatic Research Unit](#) (CRU) promoted tree-ring results that fit some preconceived view (e.g. of modern temperatures exceeding those during Medieval times) or curtailed other work because it did not support such a view, and that CRU deceived the [Muir-Russell inquiry](#) about its work in this area, **are all false**.

Two key points to begin:

1. The raw tree-ring data used in our published work are available; anyone is free to use them in any way they wish.
2. We already [responded in detail](#) to criticisms concerning the Yamal chronology. The figure on that webpage (reproduced at the end of this document) shows the impact of including additional tree-ring data (black line) compared to our previously published data (blue and red lines). The impact is relatively small, though note the caveats in the text on that webpage. We are currently working towards a new paper that incorporates additional tree-ring data from the Yamal and Polar Urals region.

Briffa (et al.) published two articles that included tree-ring chronologies from the Yamal region (2000 and 2008); neither used data from the Khadyta River site. We stated to the Muir-Russell inquiry that:

we simply did not consider these [Khadyta River] data at the time

This statement is accurate: “at the time” referred to CRU’s work for these two publications in 2000 and 2008.

The accusation that we deceived the Muir-Russell inquiry over this is completely false. Yes, I did a little bit of work that included some Khadyta River data in early 2006. But that in no way contradicts our statement to Muir-Russell that, at the time of writing the 2008 paper, Keith Briffa simply did not consider the possibility of including that data in the Yamal chronology. It was a year after I had done the work that included Khadyta River, I’m not sure if Briffa even knew which sites I’d used in 2006 (I wasn’t an author of the 2008 paper and had no involvement in it, including the choice of which sites might be used), and had he known, I doubt he would have considered the 2006 work to be appropriate for his 2008 paper because the spatial domains were quite different (my 2006 work included sites separated by more than 20° longitude, while in 2008 they looked at chronologies from regions smaller than this). So, Khadyta River really was not considered.

In relation to the 2008 paper, we also said:

we had intended to explore an integrated Polar Urals/Yamal larch series but it was felt that this work could not be completed in time and Briffa made the decision to reprocess the Yamal ring-width data to hand, using improved standardization techniques, and include this series in the submitted paper

Again, our statement is accurate: our assessment that the work could not be finished in time is true and the implication that the 2006 chronology was complete and could have been used in the 2008 paper is false. The 2006 work was part of an initial exploration of the uncertainty arising from one aspect of tree-ring data processing and to discover how wide a region can sensibly be used to produce a chronology representing the “common” tree-growth signal by using sites from a significantly larger region (spanning more than 20° of longitude) than the immediate Urals-Yamal region. Further, we had already noted that this chronology was preliminary, had not been examined in any detail and could be biased by inconsistencies between some of the measurement data. The 2006 chronology was, therefore, neither complete nor appropriate for the purpose of the 2008 paper.

Similar accusations have been made about an update to the tree-ring data from the nearby Polar Urals site. These too are false. We said:

We had never undertaken any reanalysis of the Polar Urals temperature reconstruction subsequent to its publication in 1995

Again, our statement is accurate. It refers explicitly to a particular temperature reconstruction, based on both ring-width and maximum-latewood density measurements from the Polar Urals mountains. It does not refer to the preliminary wider regional tree-ring-width chronology that we were exploring in 2006, even though that included “updated” data from Polar Urals, since we did not examine those data nor consider how they might be used to reconstruct temperature in this region.

Gavin Schmidt posted an excellent article about the background to these accusations at [RealClimate](#). Our critics, who frequently declare their wish for more debate, instead talk past the main points that Schmidt makes in his posting. This confirms that the most productive route to moving this debate forwards is to complete our paper describing our recent work on tree-ring chronologies in the Yamal and Polar Urals region and publish it in the scientific literature.

Data availability

I re-iterate that the raw tree-ring data used in our published work are available, and in most cases have been so for years. The Polar Urals data (including the “updated” data) have been available from the [International Tree-Ring Data Bank](#) since 2000. The Yamal data have been available from the [CRU website](#) since 2009 and prior to that were available on request from the data owners (e.g. Steve McIntyre received them in 2004 and we are not aware that any such requests have ever been declined). Those data from the extra sites used in our preliminary 2006 work that weren’t already publicly available were placed on the [CRU website](#) in summer 2011 following an FOI request. We had not made these data available prior to that because we had not (and still have not) published work that uses them, and they were not collected by us, but by our Russian colleagues.

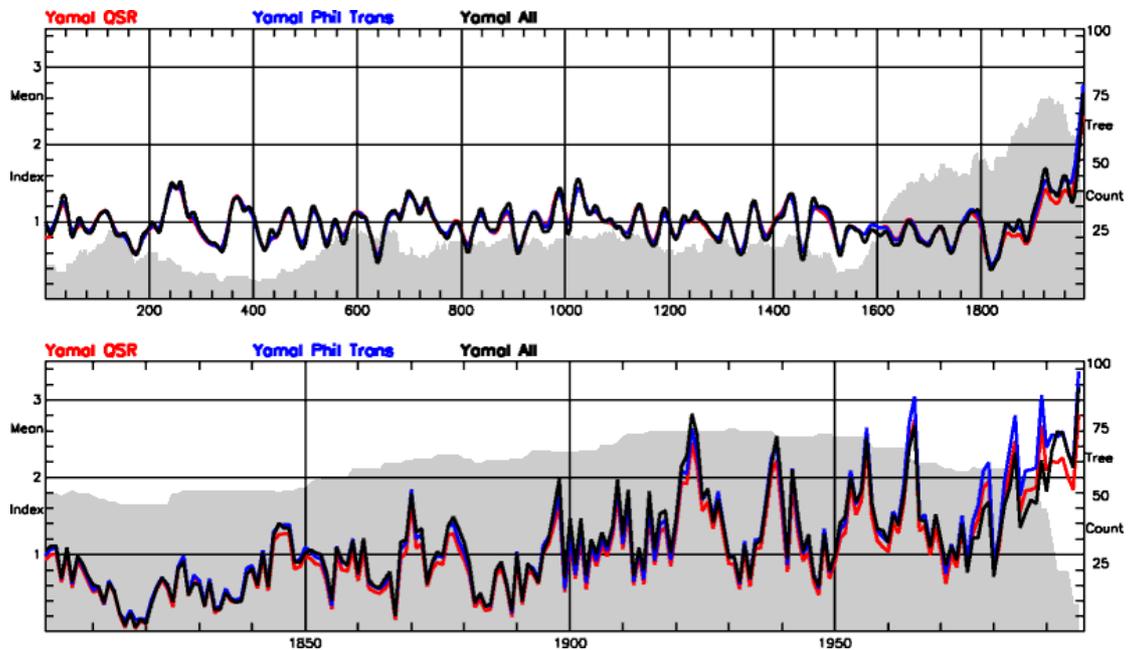
Anyone, including our critics, has therefore been free to undertake their own analysis of these data for a considerable time and to construct and publish their own chronologies of tree-growth in this region and to use those, if they felt the data were appropriate, to produce alternative reconstructions of past temperatures in this region. Indeed others have done so.

It is misleading, therefore, to imply that because we have not yet published all of our work in this area, we are somehow restricting the advance of scientific knowledge in this area. A recommendation of the Muir Russell report that is directly relevant to the issue of scientific advancement and to the current accusations is:

We note that much of the challenge to CRU’s work has not always followed the conventional scientific method of checking and seeking to falsify conclusions or offering alternative hypotheses for peer review and publication. We believe this is necessary if science is to move on, and we hope that all those involved on all sides of the climate science debate will adopt this approach.

Excerpt from “Examining the validity of the published RCS Yamal tree-ring chronology” by K.R. Briffa and T.M. Melvin

From <http://www.cru.uea.ac.uk/cru/people/briffa/yamal2009/>:



Comparison of published and reworked Yamal chronologies.

This Figure shows the two earlier versions of the Yamal RCS larch chronology in red (published in Briffa, 2000) and blue (Briffa *et al.*, 2008) compared to the new version, based on all of the currently available data (Yamal_All) for the original (POR, YAD and JAH) sites and including the additional data from the KHAD site (in black). Tree sample counts for this 'new' chronology are shown by the grey shading. The upper panel shows the data smoothed with a 40-year low-pass cubic smoothing spline. The lower panel shows the yearly data from 1800 onwards. All series have been scaled so the yearly data have the same mean and standard deviation as the Yamal_All series over the period 1-1600.