# APPEAL OF UEA FOI\_11-047/EIR\_11-004

On Feb 28, 2011, I submitted a request under the Environmental Information Regulations 2004 (EIR) to the University of East Anglia (UEA) for a regional tree ring chronology referred to an April 28, 2006 Climategate email<sup>1</sup> (the 2006 Chronology or 2006 Regional Chronology), described in the email as follows:

"URALS" (which includes the Yamal and Polar Urals long chronologies, plus other shorter ones).

In addition, I requested the list of tree ring sites used in the 2006 Chronology, plus the list of sites of sites used in the Polar Urals long chronology (the latter is now resolved) -see Appendix 1.

On March 28, 2011, the UEA refused all three requests, citing the exemptions set out in sections 6(1)(b) (available elsewhere), 12(4)(d) (incomplete) and 12(5)(c) (intellectual property rights) - see Appendix 2. On May 25, 2011, I appealed the refusal to the UEA - see Appendix 3.

On July 18, 2011, the UEA once again refused the majority of the request, though they withdrew some of the grounds. They provided the list of sites for the Polar Urals long chronology. They entirely withdrew their use of the section 6(1)(b), conceding that the information was not available elsewhere, as they had originally claimed. They also withdrew their use of section 12(4)(d) in respect to the List of Sites. However, they continued to refuse disclosure of the 2006 Chronology or the list of sites used in the 2006 Chronology (the List of Sites).

I hereby appeal the refusal.

## Background

The Yamal and Polar Urals chronologies that are the subject of the present Appeal are central to the Climategate controversy. Fred Pearce reported as follows:

When I phoned Jones on the day the emails were published online and asked him what he thought was behind it, he said: "It's about Yamal, I think". The word turns up in 100 separate emails, more than "hockey stick" or any other totem of the climate wars. The emails began with it back in 1996 and they ended with it. *(Fred Pearce, The Climate Files, 54)*.

In the following section, I provide detailed background to the longstanding controversy both in order to demonstrate the public interest in disclosure and to rebut untruthful assertions made by UEA about their past practices and policies as support for their exemption claimss. Both Yamal and Polar Urals have been the topic of many posts at Climate Audit<sup>2</sup>.

In 1995, CRU published a temperature reconstruction (Briffa et al, Nature 1995) using tree ring chronologies from the Polar Urals, asserting in the article that the 20<sup>th</sup> century was anomalously warm and that 1032 was the coldest year of the millennium (summer temperatures), an important claim in respect to the ongoing controversy over the Medieval Warm Period.

<sup>&</sup>lt;sup>1</sup> 684. 1146252894.txt

<sup>&</sup>lt;sup>2</sup> www.climateaudit.org/tag/yamal

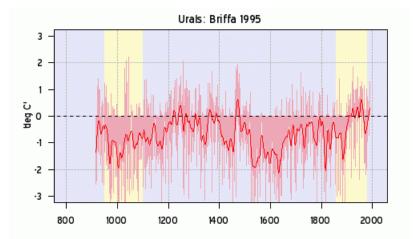


Figure 1. 1995 Polar Urals Temperature Reconstruction (Briffa et al 1995). (Redrawn from original data.)

In 1999, CRU's Russian collaborators sent them additional measurement data from Polar Urals became available<sup>3</sup>, advising them that the additional measurement data provided "better replication". Despite the shortage of well-replicated 1000-year chronologies, according to CRU's evidence to the Muir Russell inquiry, CRU did not test the impact of this additional data on their Polar Urals chronology:<sup>4</sup>

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

This evidence seems questionable, to say the least, given references in the Climategate emails discussed below.

In 2000, CRU published<sup>5</sup> three chronologies (Tornetrask, Taimyr and Yamal) that were subsequently widely used in IPCC temperature reconstructions, but did not archive the measurement data – a point confirmed by the Muir Russell panel<sup>6</sup>. Nor did CRU provide a discussion of methodology. (Both points are relevant to UEA's refusal to disclose the 2006 Chronology.) The Briffa (2000) version of the Yamal chronology (see Figure 2) had a very pronounced hockey-stick shape. Despite the lack of measurement data or methodological discussion, it was applied in numerous multiproxy reconstructions, including ones featured in the IPCC Fourth Assessment Report (AR4)<sup>7</sup>.

<sup>&</sup>lt;sup>3</sup> 121. 0930776203.txt

<sup>&</sup>lt;sup>4</sup> We had never undertaken any reanalysis of the Polar Urals temperature reconstruction subsequent to its publication in 1995: http://www.cce-

review.org/evidence/17%20June%20CRU%20comments%20on%20McKitricks%20FT%20article.pdf <sup>5</sup> Priffe 2000

<sup>&</sup>lt;sup>5</sup> Briffa 2000.

<sup>&</sup>lt;sup>6</sup> It is evidently true that access to the raw data was not simple until it was archived in 2009 and this can rightly be criticized on general principles of transparency, although it may have been common practice at the time of the original publication: Muir Russell.

<sup>&</sup>lt;sup>7</sup> http://climateaudit.org/2009/09/29/the-impact-of-yamal-on-the-spaghetti-graph/

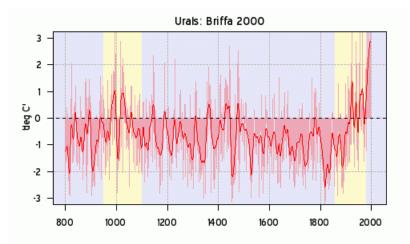


Figure 2. Yamal chronology of Briffa (2000). Redrawn from original data.

In 2002, Hantemirov and Shiyatov (Holocene 2002), using the "corridor method" rather than the "RCS" method used in Briffa 2000, published a Yamal chronology with an entirely different appearance than the 2000 version. Hantemirov and Shiyatov provided information on core counts, but did not report that their data had been used in Briffa 2000. Indeed, they did not link or refer to Briffa 2000 at all nor did they archive their measurement data. Other articles in the same issue also described the Taimyr and Tornetrask sites, again without archiving measurement data. (In 2004, I obtained measurement data from Hantemirov for Hantemirov and Shiyatov 2002, but was unsuccessful in obtaining measurement data for the other two sites nor, in later efforts, did CRU verify that they had used the relatively small Hantemirov and Shiyatov 2002 data set.)

In early 2006, shortly after the Hwang cloning scandal, *Science* finally required Esper to disclose the measurement data and chronologies for the individual sites used in Esper et al (2002). One of the chronologies incorporated the 1999 measurement data for the Polar Urals site of Briffa et al (1995), resulting in a revised chronology with elevated values around AD1000 – an entirely different result than the results of Briffa et al 1995, where 1032 had been reported as the "coldest" year of the millennium (summer temperatures).

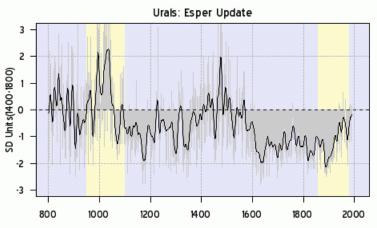


Figure 3. Polar Urals Chronology. Redrawn from data supplied for Esper et al 2002

However, the Esper version of the Polar Urals chronology was not published in academic literature. I reported on it in February 2006 in posts at Climate Audit (on the eve of a workshop convened by a panel of the U.S. National Academy of Sciences to discuss controversies about 1000-year temperature reconstructions). One of CRU's Climategate correspondents wrote to CRU's Osborn<sup>8</sup> at the time saying that Esper "making his data available was probably bad timing".

In February 2006, CRU once again used the Yamal, Taimyr and Tornetrask chronologies in an analysis of temperature data (Osborn and Briffa Science 2006), once again not archiving the underlying measurement data. In March 2006, applying the precedent of their recent decision on Esper's measurement data, I asked *Science* to require CRU to archive the measurement data for the three sites. On March 31, 2006, CRU's Osborn untruthfully told<sup>9</sup> *Science* that he did not possess the underlying measurement data for the three chronologies as follows. (As a result, *Science* did not supply me with the measurement data.)

I don't have any core measurement data and therefore have none to give out!

A few weeks later (April 28, 2006), Osborn sent the email<sup>10</sup> that prompted the present EIR request and the present Appeal. It referred (for the first time in the Climategate dossier) to "regional chronologies" for the regions contiguous with the three sites. Each regional chronology supplemented the data sets for Tornetrask, Taimyr and Yamal used in Briffa 2000 with measurement data from other sites in the same region, referring to these regional chronologies as follows:

we have three "groups" of trees:

"SCAND" (which includes the Tornetrask and Finland multi-millennial chronologies, but also some shorter chronologies from the same region). These trees fall mainly within the 3 boxes centred at: 17.5E, 67.5N; 22.5E, 67.5N; 27.5E, 67.5N

"URALS" (which includes the Yamal and Polar Urals long chronologies, plus other shorter ones). These fall mainly within these 3 boxes: 52.5E [SM: presumably 62.5E], 67.5N; 62.5E, 62.5N (note this is the only one not at 67.5N); 67.5E, 67.5N

"TAIMYR" (which includes the Taimyr long chronology, plus other shorter ones). These fall mainly within these 4 boxes: 87.5E, 67.5N; 102.5E, 67.5N; 112.5E, 67.5N; 122.5E, 67.5N

A subsequent email<sup>11</sup> (March 2007) appears to indicate that the 2006 Chronology had elevated values around AD1000 (as in the Esper version shown in Figure 3), as this email refers to an earlier version with a "higher peak near 1000 AD":

Here is the old version for you to compare with... the only noticeable difference is for the URALS/YAMAL region, which previously had a higher peak near 1000 AD. Although that was quite a big change, once you average it with the other two series, the overall mean series shows very little difference.

This reference to a "higher peak near 1000 AD" strongly suggests that the 2006 Regional Chronology used the additional Polar Urals measurement data referred to in the 1999

<sup>&</sup>lt;sup>8</sup> 651. 1141068509.txt: Rosanne [D'Arrigo] is presenting at the NAS meeting next week, and we have been trying to address many of the criticisms of Macintyre that he is posting on his blog. I think Jan [Esper] making his data available was probably bad timing.

<sup>&</sup>lt;sup>9</sup> 680. 1143819006.txt

<sup>&</sup>lt;sup>10</sup>684. 1146252894.txt

<sup>&</sup>lt;sup>11</sup> 780. 1172776463.txt

Climategate emails<sup>12</sup>, as otherwise the higher values near 1000 AD are hard to derive. If so, this raises questions about CRU's evidence to Muir Russell that they had not considered the additional measurement data – questions that can readily be resolved through the present EIR request.

In April 2006, almost contemporary with the 2006 email discussed above, the Second Draft of the IPCC Fourth Assessment Report (AR4) was sent to reviewers. CRU's Briffa was Lead Author of the section assessing 1000-year temperature reconstructions. The Yamal chronology (the 2000 version) was illustrated in IPCC Box 6.4 Figure 1, where it had the largest closing value of any of the proxy reconstructions illustrated in the figure. The Yamal chronology was used in 5 of the 8 reconstructions illustrated in the IPCC spaghetti graph<sup>13</sup> (Figure 6.10). In June 2006, as an IPCC reviewer, in multiple comments(see here<sup>14</sup>), I asked that IPCC to state clearly that proxy series from nearby sites may give very different results, referring specifically to the Yamal chronology. Briffa, as IPCC Lead Author, refused as follows. For example:

6-1205 You need to state clearly that proxy series from nearby sites may give very different results e.g. Yamal and the Polar Urals update. [Stephen McIntyre (Reviewer's comment ID #: 309-100)]

Rejected – this would imply a greater instability than current evidence support.

It is my belief that the requested 2006 Chronology will show that CRU was aware that that my review comment was correct.

On August 11, 2006, just after the House Energy and Commerce Committee hearings, Hans von Storch, a prominent climate scientist, wrote to Briffa raising concerns about CRU's continuing refusal to supply data:<sup>15</sup>

Dear Keith,

I read this comment on the prometheus-weblog of Roger Pielke jr:

"Ask Briffa for site identifications for Briffa et al 2001? While you're at it, ask him for the measurement data for Taimyr, Tornetrask update and Yamal? Ask Briffa why he didn't publish the updated Polar Urals results."

The background of this inquiry seems to be the replicability of your studies. I think this is a reasonable request, but some people claim that you would "stonewall" any such attempts. ("The issue of data access was discussed in the dendro conference in Beijing - some people suggesting that withholding data was giving the trade a black eye. Industry leaders, such as presumably Briffa, said that they were going to continue stonewalling.") I can not believe this claim, and I would greatly appreciate if you would help me to diffuse any such suspicions.

As you possibly have heard, I had a chance to hear a lot what is said on Capitol Hill (see attachment) - and I am concerned if we do not apply a truly open data and algorithm-policy, our credibility will be severly damaged, not only in the US but also in Europe. "Open" means also to provide data to groups which are hostile to our work - we have done so with our ECHO-G data, which resulted in two hostile comments in "science", which were, however, useful as they helped to clarify some issues.

All the best, Hans

<sup>&</sup>lt;sup>12</sup> 121. 0930776203.txt

<sup>&</sup>lt;sup>13</sup> http://climateaudit.org/2009/09/29/the-impact-of-yamal-on-the-spaghetti-graph/

<sup>&</sup>lt;sup>14</sup> http://climateaudit.org/2009/10/05/yamal-and-ipcc-ar4-review-comments

<sup>&</sup>lt;sup>15</sup> 731. 1155333435.txt

Briffa told von Storch that he would "supply the stuff when I get five minutes". In fact, Briffa appears to have had no intention of living up to his undertaking to von Storch as he took no steps whatever to supply the requested measurement data for the three sites<sup>16</sup>:

just too bogged down with stuff to even read their crap - but I have no intention of withholding anything. Will supply the stuff when I get five minutes!! no idea what the so-called update stuff is about, Keith

In early 2008, CRU published<sup>17</sup> an article purporting to report regional chronologies for Tornetrask, Taimyr and Yamal. The Taimyr and Tornetrask regional chronologies used in Briffa et al 2008 were presumably based on or identical to the regional chronologies referred to in the 2006 email cited above. They were both substantial expansions of the corresponding datasets of Briffa 2000. However, for the Yamal/Polar Urals region, instead of using the expanded 2006 Regional Chronology referred to in the emails, Briffa et al 2008 reverted to the data set of Briffa 2000, even though this data set was already much smaller than the other data sets. Nor did Briffa et al 2008 report the consideration of an expanded Yamal/Polar Urals regional chronology or explain why they reverted to the much smaller 2000 data set for this one region (notwithstanding UEA's recent claims that such disclosure is essential to chronology publication.)

In 2008, I asked publisher of Briffa et al 2008 (Phil Trans B) to require CRU to archive the measurement data for the three chronologies. This time, the request was successful. However, CRU delayed compliance for yet another year, not archiving the data until September 2009 (shortly before Climategate). When the data set was finally made available, I noticed (1) the discrepancy between CRU's construction of the Yamal regional chronology and their construction of the Taimyr and Tornetrask regional chronology; and (2) the much smaller size of the Yamal "regional" chronology compared to the other two regional chronologies. I therefore examined the Schweingruber data set for potential analogues in the Yamal region for the supplements to the Taimyr regional chronology, immediately identifying the Schweingruber Khadyta River measurement data as meeting the principles used for the other regions. (Later other sites, including Polar Urals itself, would be identified.) This resulted in a number of posts at Climate Audit<sup>18</sup> and considerable controversy at the time, even in mainstream media.

In October 2009, CRU responded to the controversy by publishing three articles at their website responding to the controversy:

- "Examining the validity of the published RCS Yamal tree-ring chronology"<sup>19</sup>,
- "Exploring potential biases in the Yamal RCS Chronology: sensitivity to the inclusion of modern data from specific sites"<sup>20</sup>, and
- "Comments on the use of the Yamal ring-width chronology in Northern Hemisphere temperature reconstructions"<sup>21</sup>.

<sup>&</sup>lt;sup>16</sup> 731. 1155333435.txt

<sup>&</sup>lt;sup>17</sup> Briffa et al, Phil. Trans. B, 2008

<sup>&</sup>lt;sup>18</sup> See www.climateaudit.org/tag/yamal in Sept and Oct 2009.

<sup>&</sup>lt;sup>19</sup> http://www.cru.uea.ac.uk/cru/people/briffa/yamal2009/

<sup>&</sup>lt;sup>20</sup> http://www.cru.uea.ac.uk/cru/people/briffa/yamal2009/sensit.htm

<sup>&</sup>lt;sup>21</sup> http://www.cru.uea.ac.uk/cru/people/briffa/yamal2009/cautious/cautious.htm

The three website articles reported a new version of the Yamal chronology, this one supposedly based on "all the data". The articles directly criticized me, with the Abstract stating:

At http://www.climateaudit.org/?p=7168, Steve McIntyre reports an analysis he undertook to test the "sensitivity" of the "Regional Curve Standardised" tree-ring chronology (Briffa, 2000; Briffa *at al.*, 2008) to the selection of measurement data intended to provide evidence of long-term changes of tree growth, and, ultimately inferred temperature variation through two millennia in the Yamal region of northern Russia. It would be a mistake to conclude that McIntyre's sensitivity analysis provides evidence to refute our current interpretation of relatively high tree growth and summer warmth in the 20<sup>th</sup> century in this region. A reworked chronology, based on additional data, including those used in McIntyre's analysis, is similar to our previously published chronologies. Our earlier work thus provides a defensible and reasonable indication of tree growth changes during the 20<sup>th</sup> century and in the context of long-term changes reconstructed over the last two millennia in the vicinity of the larch tree line in southern Yamal. McIntyre's use of the data from a single, more spatially restricted site, to represent recent tree growth over the wider region, and his exclusion of the data from the other available sites, likely represents a biased reconstruction of tree growth. McIntyre's sensitivity analysis has little implication, either for the interpretation of the Yamal chronology or for other proxy studies that make use of it.

The website articles need to be closely examined in light of UEA reliance in their Refusals on the premise that they would be "adversely affected" by disclosure of the 2006 Chronology on the internet. UEA willingly published the 2009 chronology on the internet, together with supporting information and data far more extensive than that requested in the present EIR Appeal.

In the website articles, CRU also conceded that the Khadyta River (KHAD) site met reasonable criteria for inclusion in a regional chronology, but claimed that they "simply did not consider" this site in a regional chronology:

Our current practice when selecting data to incorporate in a regional chronology, is to include data exhibiting high levels of common high-frequency variability (i.e. on the basis of high inter-site correlations, where these are calculated using high-pass filtered data). Judged according to this criterion it is entirely appropriate to include the data from the KHAD site (used in McIntyre's sensitivity test) when constructing a regional chronology for the area. However, we simply did not consider these data at the time, focussing only on the data used in the companion study by Hantemirov and Shiyatov and supplied to us by them.

This claim appears to be very implausible given the direct reference in the 2006 Climategate email<sup>22</sup>cited above, in which the inclusion of "other shorter" chronologies is mentioned. Given that the Schweingruber Khadyta River site is in Yamal and that Schweingruber sites were used in the contemporary Taimyr regional chronology, it seems unlikely that Khadyta River would not have been one of the sites used in the 2006 Chronology. (It is, of course, possible, a point that would be resolved by complying with the present EIR request.)

CRU's website article stated on several occasions that their 2009 chronology version included "all the data":

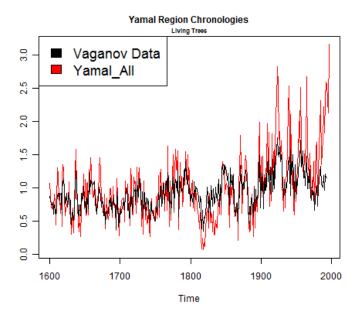
"So what is the "best" indication of relative ring-width changes in this Yamal region? One approach is to judge this by making use of all the data to hand. ..

the new chronology based on all of the available data up until 1990 can be considered as a more 'conservative' indicator of the likely history of wider-regional tree growth in the southern Yamal area.

However, this too was inaccurate as they did not even use "all the data" that they had used in the 2006 Regional Chronology, as the 2009 version notably omitted the Polar Urals data. Nor did it

<sup>&</sup>lt;sup>22</sup> 684. 1146252894.txt

use any of the Schweingruber measurement data sets within the region other than the Khadyta River site identified at Climate Audit. In a 2011 post at Climate Audit<sup>23</sup>, I showed that there were numerous Schweingruber and Vaganov data sets within the region defined in Briffa et al 1998 (Nature) and showed that inclusion of all the Vaganov data had a substantially different effect than that shown in CRU's website article.



### Figure 4. Comparison of modern portion of chronology from CRU 2009 website (Yamal\_All) with regional chronology supplemented by the inclusion of Vaganov data in the region ([plus] Vaganov Data)<sup>24</sup>

In late November 2009, the Climategate dossier was published, resulting in multiple inquiries, with the Muir Russell inquiry being specifically requested to examine the emails for evidence "of the manipulation or suppression of data which is at odds with acceptable scientific practice and may therefore call into question any of the research outcomes." In my submission<sup>25</sup> to the Muir Russell "inquiry", I specifically drew their attention to the April 28, 2006 email discussed above<sup>26</sup> referring to an unpublished Yamal/Polar Urals regional chronology. Unfortunately, Muir Russell neglected to examine the 2006 Regional Chronology.

CRU's evidence to Muir Russell showed that, despite their failure to report this in academic publications, they were aware that different choices of data yielded a high chronology values in the Medieval Warm Period<sup>27</sup>:

When McIntyre advocates substituting different versions of either the CRU Tornetrask or CRU Yamal series for versions he prefers, this may be because he knows that his "preferred" versions of the chronologies indicate a relatively warmer medieval period – yet we have clear scientific reasons why we

<sup>&</sup>lt;sup>23</sup> http://climateaudit.org/2011/04/09/yamal-and-hide-the-decline/

<sup>&</sup>lt;sup>24</sup> http://climateaudit.org/2011/04/09/yamal-and-hide-the-decline/

<sup>&</sup>lt;sup>25</sup> http://www.cce-review.org/evidence/StephenMcIntyre.pdf

<sup>&</sup>lt;sup>26</sup> 684. 1146252894.txt

<sup>&</sup>lt;sup>27</sup> http://www.cce-review.org/evidence/6%20May%20Briffa%20Osborn%20response.pdf

believe his preferred versions of chronologies are flawed. True this is not published but we explained the reasons to the Review Team. We have been involved in responding to the needs of these and other inquiries for some considerable time now, but plan to publish this information in the near future.

The Review Team will appreciate that we strongly refute McIntyre's claim of bias or 'cherry picking' and it is he who is misleading this Review by promoting the use of the "updated Polar Urals" chronology though he has presented no analysis of why, other than the fact that the medieval tree growth appears higher. The AR4 Chapter 6 made use of what were considered valid, published reconstructions available at the time.

In June 2010, CRU told the Muir Russell panel that their failure to use an expanded Yamal/Urals regional chronology in Briffa et al 2008 was not because the expanded chronology had elevated values around Ad 1000, but because they could not complete the chronology "in time"<sup>28</sup>. (The references to a Yamal/Urals regional chronology as early as April 2006 were left unexamined by the Muir Russell panel):

Some time ago we began work on a multi-institution paper intended to describe the sensitivities in producing tree-ring-based climate reconstructions to the methods of chronology construction and subsequent climate calibration, illustrated using the examples of various tree-ring chronologies across northern Eurasia. When we later received a request to submit a paper to a planned themed issue of the *Philosophical Transactions of the Royal Society* about 'The boreal forest and global change', Briffa and colleagues decided to use some of the material to hand in preparing a draft. It was intended that this should describe 3 continuous 2000-year ring-width series, each originally planned to represent the integration of a large-regional data set of subfossil and living tree data. The focus was to be on representing large-regional growth signals and initial comparisons with equivalent regional temperature data. The western, 'Fennoscandia', series would incorporate near tree-line pine data from northern Sweden and Finland; the Avam-Taimyr series would integrate larch data from near the Taimyr peninsula tree-line region. Between these 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.

In July 2010, the Muir Russell report on the emails was published, but, although they referenced Yamal, they did not report on the 2006 Regional Chronology (which they do not appear to have examined) or reconciled CRU's "explanation" with the contemporary emails.

On February 28, 2011, I initiated the present EIR request.

## **The Present Appeal**

The outstanding exemption claims that are the subject of the present appeal are summarized in Table 1 below:

Request Item	12(4)(d)- In course of completion	12(5)(c)- IPR
1. URALS Regional Chronology (2006	Yes	Yes
Chronology) 2. List of Sites for 2006 Chronology	No	Yes

#### Table 1. Exemptions Relied on in Second Response

<sup>&</sup>lt;sup>28</sup> http://www.cce-

review.org/evidence/17%20June%20CRU%20comments%20on%20McKitricks%20FT%20article.pdf

In my opinion, UEA failed to show that either of these exemptions are engaged, and, in the alternative, UEA should not have found that the public interest in disclosure is outweighed by UEA's commercial interest, supposedly protected under section 12(5)(c).

#### Exemption 12(4)(d) – In Course of Completion

CRU claimed the exemption under section 12(4)(d) only for the 2006 Regional Chronology itself and not for the List of Sites. However, this aspect of their claim relies on untruthful assertions about CRU's practices and their argument completely fails to engage the exemption.

First, in their "explanation" as to why the 2006 Regional Chronology was "incomplete", UEA gave a totally untruthful account of past CRU practices regarding the archiving of metadata (especially measurement data). The lengthy chronology provided above shows that CRU not only failed to archive measurement data (or provide detailed methodological descriptions) for the three major chronologies (Yamal, Taimyr and Tornetrask), but actively refused to provide the data, even untruthfully telling Science in April 2006 that they did not possess the requested measurement data (see above). Despite this lengthy history, UEA has the gall to claim that CRU's past practice has included the archiving of metadata (including measurement data) at the time of publication:

As part of this research some composites may be created that are sub-optimal and these need to be explained. We maintain [2] that a completed composite is not just a series of data but also includes the associated metadata descriptors; this would include formal written explanation of how the composite was derived along with a candid critique of its value. In this sense the composite that you have requested is not complete....

[2] Support for our position is provided by considering previous practice in the field. While not universal, good practice is to provide associated metadata and explanation. For examples, chronologies published at ITRDB usually include the chronology series, the raw measurements, cross-dating metadata e,g, http://www.ncdc.noaa.gov/paleo/metadata/noaa-tree-2811.html together with the standardisation metadata (for the same example chronology

ftp://ftp.ncdc.noaa.gov/pub/data/paleo/treering/updates/schweingruber/chronologies/id007/id007w\_out.txt).

Additionally the publication of chronologies in the peer review literature have been accompanied by a broad presentation of the chronology production, interpretation and limitations (e.g. Briffa et al, 1996 among many others.)

While I agree that the archiving of measurement data is an essential component of proper publication of tree ring chronologies, UEA's claim that this has been CRU's practice is untrue and mendacious.

Second, in their claiming of an exemption under section 12(4)(d), UEA provided inconsistent stories in their First Refusal and their Second Refusal. Neither story should be accepted.

In their First Refusal (page 2), UEA stated that the 2006 Regional Chronology was only a "first draft" and that the data "will be revised in the near future":

the 1,001 composite data sets and the lists of sites from which the data is drawn was created in 2006 as a first 'draft' of work that was meant to be carried forward and refined with a view to future publication...

The data will be revised in the near future as the project moves towards publication of papers based on the work in constructing the composites.

In the Second Refusal (page 4), CRU gave a different and inconsistent excuse. This time, they say that they now plan to publish the 2006 regional chronology without revision in late 2012 as "one of a suite of composite chronologies", a departure from their previous position.

...while Dr Osborn and his colleagues do not necessarily view this particular composite as an optimum regional chronology, they do consider it an integral part of their ongoing exploration of this issue and intend to include it in the publication of this research....

The composite that I believe you have requested is, therefore, one of a suite of composite chronologies that are being used as part of a current research project. This research project is due for completion in October 2012 and the requested information will be made available in finished form at the time of publication of the results which is expected to be no later than October 2012.

The letters considered together show that CRU had no intention, as of March 2011, of publishing the 2006 Regional Chronology in the proposed October 2012 article. The proposed inclusion of the 2006 Regional Chronology in the contemplated article should be viewed for what it is – an opportunistic ruse to delay disclosure (a delay that, in the present case, will delay disclosure until close to the final date for inclusion in IPCC AR5<sup>29</sup>, thereby forestalling the opportunity for criticisms within the IPCC deadline.)

Third, quite aside from UEA's untruthfulness in the above excuses, in my UEA Appeal, I drew attention to ICO Guidance No. 3, which clearly directs agencies to provide required metadata in situations such as the present, rather than use its absence as an excuse:

It may sometimes be argued that information is too complicated for the applicant to understand or that disclosure might misinform the public because it is incomplete (for instance because the information consists of a policy recommendation that was not followed). Neither of these are good grounds for refusal of a request. If an authority fears that information disclosed may be misleading, the solution is to give some explanation or to put the information into a proper context rather than to withhold it.

I made the following observation about ICO Guidance No 3 in my UEA Appeal:

That clearly applies in the present case. If you are concerned that the existing "description of how [the regional chronology] was created or why the "selected" methods were chosen", then, as the ICO suggests, the solution is to "put the information into a proper context rather than to withhold it".

In their Second Refusal, UEA simply ignored ICO Guidance No 3. In the case at hand, because the underlying measurement data (according to UEA's own admission) is already online, all that is missing is the List of Sites (also requested in the present Appeal), provision of which is trivial.

Thus, on multiple grounds (without even considering public interest arguments), it is abundantly clear that the exemption under section 12(4)(d) is not engaged.

## Exemption 12(5(c) – Adverse Effect on Intellectual Property Rights

CRU claimed exemption 12(5)(c) – adverse effect on intellectual property rights (IPR) – for both (1) the 2006 Regional Chronology; and (2) the List of Sites used in the Yamal/Polar Urals regional chronology

Regulation 12(5)(c) states that,

<sup>&</sup>lt;sup>29</sup> https://www.ipcc-wg1.unibe.ch/AR5/AR5.html

"a public authority may refuse to disclose information to the extent that its disclosure would adversely affect – (c) intellectual property rights"

The UEA claimed both copyright and database right. I agree that the UEA has copyright over the 2006 Regional Chronology, but do not agree that it has a database right. Neither the 2006 Regional Chronology nor the List of Sites used in the 2006 Regional Chronology meets past ICO standards for assertion of database right.

I agree that UEA has copyright over the 2006 Regional Chronology. However, I do not agree that the mere existence of copyright is sufficient to engage the exemption under section 12(5)(c).

First, the copyright itself would not be prejudiced by disclosure under EIR. Whatever rights existed previously continue to exist. In several past decisions (e.g. *Re Ofcom 2006*), the ICO has favourably cited DEFRA Guidance Note 7, which observed that the mere existence of copyright did not prevent public authorities from releasing information that they hold (while informing the recipient of continuing copyright):

The Commissioner notes that section 7.5.4 of the Defra guidance on exceptions under the EIR states that, "copyright does not prevent authorities releasing information they hold. However, where such information is subject on copyright, it should be made clear to applicants that the copyright still exists". Further, "if an applicant wishes to use any such information in a way that would infringe copyright, for example by making multiple copies, or issuing copies to the public, he or she would require a licence from the copyright holder". The Commissioner agrees with the approach set out in the guidance and takes the view that Ofcom could release the requested information and make the complainant aware that it is subject to copyright. The complainant would then need to contact the mobile operators, as copyright owners, if they planned to use the information in a way which would infringe copyright. This approach also accords with that set out above in respect of database rights.

Second, while the ICO has observed that arguments concerning the potential adverse impact of disclosure are necessarily "highly speculative" (Keiller v University of East Anglia, 2011), the ICO has consistently rejected previous attempts by public authorities to refuse disclosure under section 12(5)(c): Re Ofcom (2006); Anglers Conservation Association v Veterinary Medicines Directorate (2009); Re Walsall Council (2010); Re Colchester Borough Council (2010); Keenan v Queen's University Belfast (2010); Re Wycombe District Council (2011); Keiller v University of East Anglia (2011 Jones v University of East Anglia (2011), and, in the case at hand, the UEA has not made the slightest effort to distinguish the facts in the present case.

The UEA's "justification" requires an improbable concatenation of events, the improbability of which is made even more implausible by CRU's own past conduct. Their "justification" is based entirely on a claimed commercial interest. UEA argued that disclosure of the 2006 Regional Chronology and/or the List of Sites would, on balance of probability, render it impossible to publish their contemplated (and already funded) assessment of chronologies in a "high-impact" journal, which, in turn, would damage their ability to obtain further research funding. As support for this claim, they cited a policy of *Science* against prior publication. Their main argument was as follows (Second Refusal, page 4):

#### Mr Palmer stated that

The 'adverse affect' to intellectual property rights is based upon the fact that release of these data sets and the methodology used in their construction would, effectively, be publication of the creative work of the CRU staff. This would seriously reduce the likelihood that any high impact journal would publish the results pertaining to this work, thus effectively causing the

University financial harm via adverse impact upon reputation, ability to attract research funding, and funding arising from the citation of the publications within the REF process by which universities in the United Kingdom receive funding based on the quality of research undertaken. (First Refusal).

As evidence that this potential harm is probable, here is an extract from the information for authors provided by the scientific journal *Science*, which is one of the most prestigious journals in this area of research and in which we have previously published and plan to publish our future work:

"Prior publication Science will not consider any paper or component of a paper that has been published or is under consideration for publication elsewhere. Distribution on the Internet may be considered prior publication and may compromise the originality of the paper as a submission to Science. Please contact the editors with questions regarding allowable postings."

Key components of this work and of this paper that will describe the work include the selection method, the outcome of the selection method, the processing methods, and the final chronology obtained. Prior distribution of these components on the internet would jeopardise the acceptance of the work for publication by a high impact journal such as Science

In their First Refusal (page 3), UEA referred to their expectation of "financial gain" as follows:

Additionally, the intellectual property rights of the copyright holder in the final version are protected by ensuring that earlier, non-published versions of copyrighted work are not made available 'in competition' with the copyrighted version that the copyright holder has an expectation of making financial gain from.

However, it completely improbable that the disclosure of the 2006 Regional Chronology would have these supposedly dire consequences.

First, as noted above, the evidence is very clear that UEA had no intention prior to their Second Refusal in July 2011 of ever publishing the 2006 Regional Chronology. Given that they had no such intention, UEA can hardly argue that they planned to derive "financial gain" from publication of the 2006 Regional Chronology.

Second, as also noted above, CRU published extensive material in October 2009 on their website, supporting and documenting the 2009 version of the Yamal chronology. The October 2009 website publication is vastly more extensive than the requested disclosure of the 2006 Regional Chronology and accompanying List of Sites. UEA has failed to provide any evidence or argument showing why disclosure of the 2006 Regional Chronology would be fatal to their prospects, while publication of the 2009 chronology was justified.

Nor was the October 2009 publication an obstacle to CRU subsequently being funded in May 2010 to produce the presently contemplated article. Indeed, the opposite seems to be the case. Disclosure of the information on their website as a response to the controversy appears to have enabled CRU to obtain specific funding to support their side of the argument.

Third, UEA's refusal presupposes that the only method of complying with the EIR request was to post the data digitally on the internet. The present request was merely that they disclose the data to me. As the ICO has observed in other precedents, public authorities can readily "release

the requested information and make the complainant aware that it is subject to copyright". Given that CRU voluntarily placed the 2009 chronology and supporting information on its website, it is my belief that they should do the same for the 2006 Regional Chronology, but I note that they could comply with the EIR request by providing the information by email rather than on their website.

## **Public Interest**

As noted above, I submit that the UEA has failed to show that exemptions under either section 12(4)(d) or 12(5)(c) were engaged. Even if the ICO finds otherwise, I submit that the public interest in disclosure far outweighs the only interest that the UEA has argued for: UEA's naked commercial interest.

In my Appeal to UEA(see Appendix 3), I cited and discussed principles itemized in ICO Guidance No 3. UEA's Second Refusal totally failed to rebut the discussion in my UEA Appeal, instead, in effect, doing little more than re-iterating their reliance on the supposed incompleteness of the metadata accompanying the 2006 Regional Chronology - an argument already rebutted in my discussion of section 12(4)(d).

First, as against UEA's commercial interest in the funding stream that they anticipate from the publication of the 2006 Regional Chronology is the public interest in informing itself on a controversial chronology that, as noted above, was used in IPCC AR4 both directly and as a component of 5 multiproxy temperature reconstructions. As one Climate Audit reader put it:

It is disappointing in the extreme that UEA's decision is that its interest in further research funding outweighs the public interest shared by the entire planet in informing itself on the information used (or in this case omitted) in presenting a picture to policy makers of unprecedented 20th century temperatures (and possibly the existence or not of the MWP, or at least its extent and/or its similarity with today).

The public interest is self evident in relation to this information. UEA is saying that its future funding is more important than the public interest that must be present on the basis of a UK parliamentary commission, the negligent "inquiries", climategate itself, notwithstanding the ongoing policy issues. It beggars belief in my opinion.<sup>30</sup>

Second, ICO Guidance encourages the principle of "promoting accountability and transparency of public authorities and decisions taken by them." CRU's conduct has been the subject of prolonged controversy and multiple inquiries. UEA should be bending over backwards to demonstrate openness, transparency and accountability to the extended public, instead of obstructing it. Again citing a Climate Audit reader on this issue:

the over-riding public interest is dispelling or confirming allegations that CRU cherrypicked data that supported the existence of a cool MWP and buried data that contradicted this conclusion<sup>31</sup>

CRU's alacrity in publishing the 2009 version of the Yamal chronology and their reticence in disclosing the requested 2006 Regional Chronology simply fuels suspicion that their reason for refusal is because the 2006 Regional Chronology showed a warmer Medieval Warm Period than the chronologies presented to date and that the List of Sites used in the 2006 Regional

<sup>&</sup>lt;sup>30</sup> http://climateaudit.org/2011/04/25/cru-refuses-foi-request-for-yamal-climategate-chronology/#comment-265032

<sup>&</sup>lt;sup>31</sup> http://climateaudit.org/2011/04/25/cru-refuses-foi-request-for-yamal-climategate-chronology#comment-264564

Chronology will contradict previous statements by CRU, either at their website or to the Muir Russell panel.

## Conclusion

For all of the above reasons, I appeal UEA's refusal of the 2006 Regional Chronology and the associated List of Sites. In order that the information be available in sufficient time to permit commentary prior to the deadline for submissions to IPCC AR5, I request that the ICO deal with the matter expeditiously.

As you are undoubtedly aware, the University of East Anglia entered into a consent order<sup>32</sup> with the Information Commissioner (ICO) to comply with freedom of information requests. Unfortunately, they have failed to comply with that consent order in the present case, continuing to make untruthful assertions in order to avoid compliance with EIR.

Stephen McIntyre Sept 18, 2011

<sup>&</sup>lt;sup>32</sup> http://www.ico.gov.uk/~/media/documents/pressreleases/2010/uea\_foi\_undertaking\_20101222.ashx