From: "Michael E. Mann" <mann@virginia.edu>

To: Tom Wigley <wigley@ucar.edu>

Subject: Re: Fwd: EOS: Soon et al reply Date: Wed, 08 Oct 2003 14:15:37 -0400

Cc: Caspar Ammann <ammann@ucar.edu>, rbradley@geo.umass.edu, Keith Briffa <k.briffa@uea.ac.uk>,
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### Thanks Tom,

In fact, I'm almost done with a brief (<750 word) response that addresses all of these issues, and I'll be looking forward to comments on this. Hope to send it out later today, mike

At 12:05 PM 10/8/2003 -0600, Tom Wigley wrote:

### Folks,

I agree with Kevin that any response should be brief.

On the second page of their comment, SBL quote some of the caveat statements in their earlier papers. The irony is that they do not heed their own caveats. If taken literally, all these proxy data problems would mean that one can draw no conclusions about the existence or otherwise of the MWE or LIA as global phenomena. This is what we say (I hope -- at least I have said this in the paper cited below) -- but our over-bold skeptics say that these anomalous intervals \*did\* exist. You can't have it both ways -- and basically what BS are doing is a confidence trick.

What is still needed here is an analysis of the BS method to show that it could be used to prove anything they wanted.

I am still concerned about 'our' dependence on treerings. Are our results really dependent on one region pre 1400 as SNL state? Is the problem of nonclimate obfuscating factors in the 20th century enough to screw up calibrations on moderate to long timescales? If not, we need to state and document this clearly. Does this problem apply to both widths and densities? Are the borehole data largely garbage? I recall a paper of Mike's on this issue that I refereed last year -- and there was something in GRL (I think) very recently pointing out some serious potential problems.

Finally, did we really say what SBL claim we did in their p. 1 point (2)? Surely the primary motive for all of this paleo work is that it DOES have a bearing on human-induced climate effects?

Tom.

Michael E. Mann wrote:

### Thanks Kevin,

I agree w/ your take on this. We need to come up with a short, but powerful rebuttal. According to Judy Jacobs, we're only allowed 750 words, so we will need to be even more sparing and precise in our words that in the original Eos piece. By the way, we have 3 weeks to submit (i.e., our response is due October 27).

We need to focus on the key new claims, while simply dismissing, by reference to earlier writings, the recycled ones. The Kalnay et al paper seems to be the new darling of the contrarians, and you're precise wording on this will be very helpful. Phil, Tim and others should be able to put to rest, in one or two sentences, the myths about urban heat bias on the CRU record. A few words from Malcolm and Keith on the biological tree growth effects would help too. The comments on the various paleo figures are confusing and inconsistent, but from what I can tell, just plain wrong. I'll draft some words on that.

I'll just continue to assimilate info and suggestions from everyone over the next week or so, and then try to put this in the form a rough draft rebuttal to send out. Thanks for your quick reply. Looking forward to hearing back from others,

At 09:16 AM 10/6/2003 -0600, Kevin Trenberth wrote:

## Hi Mike et al

Firstly, you should know that comments by myself and the group at NCDC (Vose et al) on the Kalnay and Cai Nature paper were accepted (after a rebuttal and review process), and then fine tuned. But it is a slow process and Kalnay and Cai have yet to finalize their rebuttal. I am attaching FYI the "final" version of my comment. NCDC deals with the problems with the records.

My reaction to the reply is as follows:

The first page deals with comments on proxy records and their problems. I think we should agree that there are issues with proxy records, they are not the same as instrumental records (which have their own problems), but they are all we have.

However, some are better than others (e.g. borehole) and annual or better resolution is highly desirable in particular to make sure that anomalies are synchronous. The records are not really the issue here, it is there use (and abuse).

There are several charges about only US or Northern Europe that can be quickly dealt with. However the main points are on p 2.

We know from the observational record that global or hemispheric means are typically small residuals of large anomalies of opposite signs so that large warm spots occur simultaneously with large cold regions (witness last winter).

This fact means that we need high temporal resolution (annual or better) AND an ability to compute hemispheric averages based on a network. The Soon and Baliunas approach fails dismally on both of these critical points.

BS point out that Fig 2 of Mann and Jones show some temperatures as high as those in the  $20th\ C.$  (They are wrong, do they mean Fig 2 of

M03?) You can counter that by looking at China where this is far from true. I would be inclined to respond with a fairly short minimalist but powerful rebuttal, focussing mostly on the shortcomings of BS and not defending the M03 and other records. It should point out (again) that their methodolgy is fundamentally flawed and their conclusions are demonstrably wrong. For this, the shorter the better. Regards

Kevin

Michael E. Mann wrote:

# Dear Colleagues,

Sorry to have to bother you all with this-- I know how busy our schedules are, and this comes at an unfortunately busy time for many of us I would guss. But I think we \*do\* have to respond, and I'm hoping that the response can be, again, something we all sign our names to.

I've asked Ellen for further guidance on the length limits of our response, and the due date for our response. The criticisms are remarkably weak, and easy to reply to in my view. S&B have thus unwittingly, in my view, provided us with a further opportunity to expose the most egregious of the myths perpetuated by the contrarians (S&B have managed to cram them all in there) in the format of a response to their comment.

Their comment includes a statement about how the article is all based on Mann et al [1999] which is pretty silly given what is stated in the article, and what is shown in Figure 1. It would be appropriate to begin our response by pointing out this obvious straw man.

Then there is some nonsense about the satellite record and urban heat islands that Phil, Kevin, and Tom W might in particular want to speak to. And Malcolm and Keith might like to speak to the comments on the supposed problems due to non-biological tree growth effects (which even if they were correctly described, which they aren't, have little relevance to several of the reconstructions shown, and all of the model simulation results shown). There is one paragraph about Mann and Jones [2003] which is right from the Idsos' "Co2 science" website, and Phil and I and Tim Osborn and others have already spoken too. I will draft a short comment on that.

I'd like to solicit individual comments, sentences or paragraphs, etc. from each of you on the various points raised, and begin to assimilate this into a "response". I'll let you know as soon as I learn from Ellen how much space we have to work with. Sorry for the annoyance. I look forward to any contributions you can each provide towards a collective response.

Thanks,

mike

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Date: Sun, 05 Oct 2003 08:23:03 -0400

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Comments?
Mike
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Date: Sat, 04 Oct 2003 12:33:04 -0400
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Dear Dr. Mann (and co-authors of the Forum piece that appeared in EOS),

Dr. Willie Soon and his co-authors have submitted a reply to your Forum piece that I have accepted. Let me outline below the official AGU procedure for replies so that you know the options available. I have sent these same instructions to Dr. Soon.

As you wrote the original piece you now have the opportunity to see their comment (attached) on your Forum piece. You may decide whether or not to send a reply. If you choose not to reply - their reply will be published alone.

Should you decide to reply then your response will be published along with their comment on your paper. One little twist is that if you submit a reply, they are allowed to see the reply, but they can't comment on it. They have two options: they can let both their and your comments go forward and be published together or (after viewing your reply) they also have the option of withdrawing their comment. In the latter case, then neither their comment or your reply to the comment will be published. Yes this is a little contorted, but these are the instructions that I received from Judy Jacobs at AGU.

I have attached the pdf of their comment. Please let me know within the next week whether you and your colleagues plan to prepare a reply. If so, then you would have several weeks to do this.

I have copied Lee Zirkel and Judy Jacobs of AGU as this paper is out of the ordinary and I want to be sure that I am handling all this correctly.

I look forward to hearing from you regarding your decision on a reply.

Best regards,

Ellen Mosley-Thompson

EOS, Editor

cc: Judy Jacobs and Lee Zirkel

attachment

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