

From: "Michael E. Mann" <mann@virginia.edu>  
 To: Tim Osborn <t.osborn@uea.ac.uk>, Tom Crowley <tcrowley@duke.edu>, Phil Jones <p.jones@uea.ac.uk>  
 Subject: Re: Fwd: Soon & Baliunas  
 Date: Wed, 12 Mar 2003 12:12:02 -0500  
 Cc: rbradley@geo.umass.edu, mhughes@ltrr.arizona.edu, srutherford@gso.uri.edu, k.briffa@uea.ac.uk, mann@virginia.edu

Dear Tim,

Thanks for your rapid replies and your help. This is all very useful.

Well, lets see what this gives...

There are some notable differences just between our relative comparisons of the different series which must have something to do with the relative scaling and aligning of the series. The position of Crowley and Lowery, in particular, is quite inconsistent between our respective comparisons. When we scale the various series to the full N. Hem instrumental annual mean CRU record 1856-1980, we get a a very different relative ordering of the different series, as shown in the attached figure from my Science perspective piece from last year

This should not, however, influence the EOF decomposition if all series are zero-mean and standardized prior to the EOF analysis, but the scaling and alignment of the result, in the end, will be sensitive to all of these various issues.

So, in short, lets see what we get, and then discuss any similarities/differences w/ your result, then make a decision as to what to show in the Eos piece. I'm sure we can come up w/ something we're all happy with...

Please do send us your & Keith's preferred version of the MXD reconstruction--we'll collect the others from the individual sources (most we already have, I think)...

mike

At 04:53 PM 3/12/2003 +0000, Tim Osborn wrote:

At 16:29 12/03/03, Michael E. Mann wrote:

but there are many variables here [not the least of which is the choice of scaling the series to an extratropical summer mean, which as we have argued before, we don't think is appropriate for a full N. Hem mean because of changes in meridional temperature gradient over time, and the choice of calibration period--I wonder if 1856-1960 or 1856-1980 gives a more stable result).

True, but as I indicated I have tried alternatives. The attached is what I get with annual mean temperature as the target series - still taken only from land >20N though [but I have extracted that domain from your spatial reconstructions to produce the time series that I used for "Mann et al." - which should make it reasonably appropriate back to 1400 at least]. I have also tried different calibration periods (including not calibrating against instrumental data at all!). All give qualitatively similar results - see attached .pdf and compare with the first one I sent.

The point is, that (I believe) the approach will introduce a \*new\* result and while that is interesting it wouldn't be appropriate for a short EOS piece - and having found this out, I was trying to save you the effort.

But, on reflection, it would be good if you went ahead and did this anyway, because the results might well be useful to publish in another paper, even if they weren't deemed suitable for the EOS piece.

I could provide the 7 series that I have used, but would prefer that you got them from the original sources to ensure that you have the most up-to-date/correct versions.

Cheers

Tim

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University of East Anglia	[1] <a href="http://www.cru.uea.ac.uk/~timo/">http://www.cru.uea.ac.uk/~timo/</a>
Norwich NR4 7TJ	sunclock:
UK	[2] <a href="http://www.cru.uea.ac.uk/~timo/sunclock.htm">http://www.cru.uea.ac.uk/~timo/sunclock.htm</a>

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[3]<http://www.evsc.virginia.edu/faculty/people/mann.shtml>

Attachment Converted: "c:\eudora\attach\mannpersp2002.gif"

#### References

1. <http://www.cru.uea.ac.uk/~timo/>
2. <http://www.cru.uea.ac.uk/~timo/sunclock.htm>
3. <http://www.evsc.virginia.edu/faculty/people/mann.shtml>