

VIRGINIA:

IN THE CIRCUIT COURT OF GREENE COUNTY

MATTHEW HARDIN

Petitioner,

v.

**RECTOR AND VISITORS OF THE
UNIVERSITY OF VIRGINIA**

Respondent

79-CL-1547

Verified Petition for Mandamus
and Injunctive Relief

**VERIFIED PETITION FOR MANDAMUS
AND INJUNCTIVE RELIEF**

NATURE OF THE ACTION

1. MR. MATTHEW HARDIN petitions the court for relief as authorized under the Virginia Freedom of Information Act.
2. Pursuant to Virginia the Virginia Freedom of Information Act (“FOIA”), Va. Code § 2.2-3713, the Petitioner, through counsel, asks the court to:
 - (a) Hold a hearing on this matter within the next seven days as required by Va. Code § 2.2-3713(C).
 - (b) Order the University to conduct a diligent search for responsive records;
 - (c) Order counsel to confer and establish a procedure to verify that this search is conducted in good faith and results in the discovery of all records which are

- responsive, including, at a minimum, those the University has previously released to other parties;
- (d) Grant declaratory relief that unsolicited emails are not exempt from disclosure under the FOIA;
 - (e) Grant declaratory relief finding that the United Nations' Intergovernmental Panel on Climate Change (IPCC) is not a part of the University of Virginia; that the IPCC does not conduct research; and that records produced for or as part of any faculty member's participation in the IPCC are not "collected or produced" by the University in the conduct of its research for purposes of § 2.2-3705.4(4);
 - (f) Order the University to produce all records requested on June 14, 2014 by Mr. Hardin, to include those improperly withheld;
 - (g) Order payment of petitioners reasonable costs and fees associated with this instant matter; and,
 - (h) Order such necessary and proper injunctive relief or other injunctive relief as this Court deems just and proper.

PARTIES

- 3. Matthew Hardin is a citizen of Greene County, conducts business within the County and maintains a domicile at 1262 Barrow Lane, Stanardsville VA 22973.
- 4. The Respondent, Rector And Visitors of the University Of Virginia, more commonly known as the University of Virginia (UVA), is a public body subject to FOIA (*see*, § 2.2- 3705.4) located in Charlottesville, Virginia.

5. Upon information and belief, UVA is represented by Richard Kast, Associate General Counsel, Madison Hall, P.O. Box 400225, 1827 University Avenue, Charlottesville, Virginia 22904-4225, direct telephone number: 434-924-6436, email: rck4p@eservices.virginia.edu.

JURISDICTION AND VENUE

6. This action arises under the Virginia Freedom of Information Act provision authorizing proceedings for enforcement of the Act, codified at Va. Code § 2.2-3713(A). This Court has jurisdiction under Va. Code § 2.2-3713(A).

7. Venue is proper in this Court under Va. Code § 2.2-3713(A)(3) and §8.01-621(1)(a)(1)&(2) because Mr. Hardin maintains a domicile in and regularly and systematically conducts affairs and business activity within Greene County.

8. This Court is empowered to grant the Petitioner's prayers for relief pursuant to Va. Code §§ 2.2-3713(C) & (D).

VIRGINIA FREEDOM OF INFORMATION ACT AUTHORITIES

9. The Virginia Freedom of Information Act (FOIA or "the Act"), codified at Va. Code §2.2-3700 *et seq.*, guarantees citizens of the Commonwealth and representatives of the media access to public records held by public bodies, public officials, and public employees.

10. A public record is any writing or recording - regardless of whether it is a paper record, an electronic file, an audio or video recording, or any other format - that is prepared or owned by, or in the possession of a public body or its officers, employees, or agents in the transaction of public business. All public records are presumed to be open and may only be withheld if a specific, statutory exclusion applies.

11. The policy of FOIA states that the purpose of FOIA is to promote an increased awareness by all persons of governmental activities. In furthering this policy, FOIA requires that the law be interpreted liberally, in favor of access, and that any exclusion allowing public records to be withheld must be interpreted narrowly. Va. Code § 2.2-3700 (emphasis added).

12. “Any public body that is subject to [the Act] and that is the custodian of the requested records shall promptly, but in all cases within five working days of receiving a request, provide the requested records to the requestor or make one of [four specified] responses in writing.” Va. Code § 2.2-3704(B) (*emphasis added*).

13. The fourth allowed response to a request allows additional time to make a written response in the event the public body finds “conditions” that make a timely response “impossible.” Va. Code § 2.2-3704(B)(4).

14. “Failure to respond to a request for records shall be deemed a denial of the request and shall constitute a violation of [the Act].” Va. Code § 2.2-3704(E).

15. The Act allows a university to withhold records in part when such records are a) proprietary; and, b) produced or collected by faculty or staff in the conduct of research sponsored or conducted by the university; and, c) such records have not been released through other channels. All three of these factors must be present in order to justify withholding a document under FOIA. Va. Code § 2.2-3705.4.

FACTS SUPPORTING GOOD CAUSE FOR RELIEF

16. Petitioner Matthew Hardin delivered his Virginia Freedom of Information Act request via electronic mail on June 14, 2014.

17. That request specified that Hardin sought three types of records:

- (a) Emails from John L. Daly or sent from or to Dr. Mann associated with emails sent from John L. Daly.
- (b) Any emails discussing the work of Stephen McIntyre and/or Ross McKittrick or using the term MM, MM2003, MM03, MM2004 or MM04.
- (c) Any emails associated with preparation of a report of the Intergovernmental Panel on Climate Change, or using the term “IPCC” or WG1.

See, Exhibit 1.

18. Mr. Hardin specified in his June 14, 2014 request that the emails he sought relating to the IPCC could not possibly be exempt from production under Virginia law because such records are not generated as a result of research conducted by the University. Specifically, Mr Hardin stated:

Please note, the IPCC does not conduct research or studies. It generates reports. (See: <http://www.ipcc.ch/index.htm>). The IPCC and work done by the IPCC are not sponsored or co-sponsored by the University of Virginia. The University of Virginia is not a member of the United Nations or the IPCC. Therefore, any data, information or records that might exist in the emails I seek could not be collected by or for the faculty or staff of the University of Virginia in the conduct of or as a result of study or research sponsored or co- sponsored by the University of Virginia. The IPCC reports are sponsored exclusively by the IPCC, a unit of the United Nations.

19. Dr. Pat Michaels was a member of the UVA faculty, serving in the same department as Dr. Mann during the period covered by Mr. Hardin’s FOIA request, was cognizant of the work being conducted by Dr. Mann, and within the department, at that time and participated in the IPCC report process during the period covered by the FOIA request. *See* Exhibit 3, Michaels Affidavit. Dr. Michaels explains that none of the records sought under the Hardin FOIA request meet the requirements that allows withholding under Va. Code §2.2-3705.4(4)

20. The University of Virginia’s FOIA Officer responded via email on June 20, 2014, indicating that the University’s cost to fulfill Hardin’s request would likely exceed \$200. The

June 20 email offered Mr. Hardin a chance to either narrow his request or deposit funds with the University in order for it to begin pressing his request. The University did not provide an exact estimate of the costs required to fulfill Mr. Hardin's request.

21. Mr. Hardin narrowed his request via email on June 24, 2014. The University of Virginia acknowledged this narrowed request via email on June 27, 2014.

22. The University provided Mr. Hardin with an estimate of the required expense to fulfill his request for the first time on July 1. The tentative invoice provided on July 1 estimated the University's cost for fulfilling the request to be in the range of \$440 to \$980, and required Mr. Hardin to deposit a minimum of \$220 with the University before it would begin processing records responsive to his request.

23. Mr. Hardin tendered the required deposit on July 3, 2014.

24. The University tendered its response and a final invoice of the costs in incurred processing Mr. Hardin's request via electronic mail on July 22, 2014.

25. Mr. Hardin reviewed the responsive records over the next several days.

26. On August 4, 2014, Mr. Hardin mailed payment for the remainder of the University's costs along with a letter seeking to clarify the basis the University used to justify withholding records. In this letter, Mr. Hardin explicitly noted that he was willing to allow the University an opportunity to amend or supplement its response to provide any additional records or its reasoning for withholding such records.

27. The University replied via electronic mail on August 18. In that communication, the University stated that it "has no other information to provide" in response to Mr. Hardin's FOIA request.

28. On August 22, 2011, the University released at least two emails that are responsive to Mr. Hardin's request (addressing IPCC report editing), in response to a request made by the American Tradition Institute. *See* Exhibit 2: Schnare Affidavit, Attachments 1 & 2. These emails were not exempt under the Virginia Freedom of Information Act at the time the American Tradition Institute made its request, are not otherwise publicly available, and accordingly UVA had no good-faith basis for withholding those records in its response to Mr. Hardin's request.

29. On February 10, 2001, John L. Daly¹, now deceased, wrote an unsolicited email to Dr. Mann, among many others, expounding on Daly's views regarding the use of tree rings when estimating historical temperatures, and in particular was critical of one of Dr. Mann's papers. *See* Exhibit 4. Based on careful examination of Dr. Mann's and Professor Daly's curriculum vitae, Professor Daly and Dr. Mann never collaborated on any research and this email was not collected by anyone at UVA for purposes of UVA (or anyone's) research. It was unsolicited. This email was never publicly released through proper channels but instead was included in the "Climategate" emails that had been subject to numerous (UK) FOI requests but which later were leaked or stolen from the University of East Anglia, and subsequently posted on the internet. This email is likely within UVA custody, being contemporaneous to other emails the University has stated it holds and still others it has already released.

30. On December 30, 2004, Michael Mann wrote an email that discussed the work of Stephen McIntyre and Ross McKittrick and using the term MM03. *See* Exhibit 5. Professor McKittrick and Mr. McIntyre never collaborated on any research with Dr. Mann. The email was

¹ At the time of the correspondence, John L. Daly was a professor of economics with expertise in climatology. *See*, John Lawrence Daly 1942-2004 Obituary at www.john-daly.com/obituary.htm.

not collected by anyone at UVA for purposes of UVA (or anyone's) research. This email is likely within UVA custody, being contemporaneous to other emails the University has stated it holds and still others it has already released.

31. On May 24, 2001, Michael Mann wrote an email to John Christy, the "Subject" of which is "Re:FYI: Fwd: Re: IPCC". See Exhibit 6. The email was not collected by anyone at UVA for purposes of UVA (or anyone's) research. This email was never publicly released through proper channels but instead was included in the "Climategate" emails described, *supra*. This email is likely within UVA custody, being contemporaneous to other emails the University has stated it holds and still others it has already released.

32. Under a previous FOIA request (the ATI request) seeking records including some similar to those sought by Mr. Hardin, UVA admitted it holds approximately 12,000 emails for which Dr. Mann is either the sender, recipient or a courtesy copy recipient. See Schnare affidavit. In that previous matter, UVA released 1,793 emails. In the instant case, UVA released only 34 emails.

GOOD CAUSE ARGUMENT

33. UVA's search for responsive records was either inadequate or conducted in bad faith:
- (a) UVA previously conducted a search for records which on their face also are responsive to Hardin request, in response to a request earlier made by counsel for ATI and Delegate Marshall; after this it identified in excess of 12,000 responsive records, 1,793 of which it produced, none of which it released in the instant case;
 - (b) in response to the similar ATI request, the University produced two emails, indisputably responsive to Mr. Hardin's request, which it did not produce to Hardin;

and,

(c) the University also failed to produce an unsolicited email from John Daly to Dr. Mann, an email that can not possibly be exempt from production under FOIA.

Because all of these emails are in searchable electronic form, the above-described failures manifest that UVA has not exhibited the necessary due diligence required under the Freedom of Information Act, under which it has the duty to reasonably search for, find and release all responsive emails, unless they are exempt from disclosure. For the reasons given below, no responsive emails are exempt.

34. UVA's claimed exemption under Va. Code § 2.2-3705.4(4) does not apply to the categories of records Mr. Hardin sought. The only records that may be withheld are those containing

data, records or information of a proprietary nature produced or collected by or for faculty or staff of public institutions of higher education, other than the institutions' financial administrative records, in the conduct of or as a result of study or research on medical, scientific, technical or scholarly issues, whether sponsored by the institution alone or in connection with a governmental body or a private concern, where such data, records or information has not been publicly released, published, copyrighted or patented. *Id.*

35. The records associated with the IPCC that Mr. Hardin sought were not "collected in the conduct of or as a result of University-sponsored study" or research and some of them have been previously released.

36. Unsolicited emails sent to UVA faculty are never "collected in the conduct of or as a result of University-sponsored study or research."

37. The emails discussing the McIntyre/McKitrick papers that identified statistical mistakes by Dr. Mann in one of his papers were not “collected in the conduct of or as a result of University-sponsored study.”

38. Petitioner does not argue whether or not the emails are of a proprietary nature. That question is irrelevant in this matter as UVA may only withhold responsive records under Va. Code § 2.2-3705.4(4) if they meet all the criteria listed in that exception, and they do not.

PRAYERS FOR RELIEF

39. Petitioner Hardin incorporates by reference paragraphs 1 - 38 above and asks the Court to grant the following relief:

40. As required by Va. Code § 2.2-3713(C), conduct a hearing on this matter within seven days of filing of this petition;

41. Order the University to conduct a diligent search for responsive records;

42. Order counsel to confer and establish a procedure to verify that this search is conducted in good faith and results in the discovery of all records which are responsive, including, at a minimum, those the University has previously released to other parties;

43. Order the University to release all responsive records it has otherwise previously released;

44. Find and declare that unsolicited emails are not exempt from disclosure under Va. Code § 2.2-3705.4(4);

45. Find and declare that the United Nations’ Intergovernmental Panel on Climate Change (IPCC) is not a part of the University of Virginia; affirm the IPCC’s assertion that it does not

conduct research; and that records produced for the IPCC are not “collected in the conduct of or as a result of University-sponsored study or research;”

46. Examine the withheld records, including any additional records identified as responsive after the diligent search required in Paragraph 41 above, or a tractable representative subset of those records, to determine whether the University has improperly withheld responsive records;

47. In light of an *in camera* review, order the University to produce all records requested on June 14, 2014 by Mr. Hardin, to include those improperly withheld, within 90 days of the entry of the order;

48. Order payment of petitioners reasonable costs and fees associated with this instant matter; and,

49. Order such necessary and proper injunctive relief or other injunctive relief as this Court deems just and proper.

WHEREFORE, in light of the above, Petitioner Hardin requests the relief sought herein.

MATTHEW HARDIN

BY COUNSEL:

DAVID W. SCHNARE
Va. Bar No. 44522
Free Market Environmental Law Clinic
722 12th St. N.W. Suite 400
Washington, D.C. 20005
Telephone (571) 243-7975
schnare@fmlawclinic.org

Service to:

Rector and Visitors of the University of Virginia
c/o Richard C. Kast,
Associate General Counsel,
Madison Hall
P.O. Box 400225
1827 University Avenue,
Charlottesville, Virginia 22904-4225
rck4p@eservices.virginia.edu

Exhibit 1

VIRGINIA FREEDOM OF INFORMATION ACT REQUEST

June 14, 2014

Office of University Communications
P.O. Box 400229
400 Ray C. Hunt Drive
Charlottesville, VA 22904
foia@virginia.edu

BY ELECTRONIC MAIL—

RE: Freedom of Information Act Request

Dear University of Virginia:

Please provide me within copies of the public records as described below.

Subject Matter

I seek following emails that Dr. Michael Mann produced and/or received while working for the University of Virginia:

1. Emails from John L. Daly or sent from or to Dr. Mann associated with emails sent from John L. Daly.
2. Any emails discussing the work of Stephen McIntyre and/or Ross McKittrick or using the term MM, MM2003, MM03, MM2004 or MM04.
3. Any emails associated with preparation of a report of the Intergovernmental Panel on Climate Change, or using the term “IPCC” or WG1

Please note, the IPCC does not conduct research or studies. It generates reports. (See: <http://www.ipcc.ch/index.htm>). The IPCC and work done by the IPCC are not sponsored or co-sponsored by the University of Virginia. The University of Virginia is not a member of the United Nations or the IPCC. Therefore, any data, information or records that might exist in the emails I seek could not be collected by or for the faculty or staff of the University of Virginia in the conduct of or as a result of study or research sponsored or co-sponsored by the University of Virginia. The IPCC reports are sponsored exclusively by the IPCC, a unit of the United Nations.

Fees

I am prepared to pay up to \$200 in the cost of producing these documents, however because the University has these documents in electronic form and they are easily searchable; and,

because I ask they be provided in electronic form, the cost of production should be small. Further, because what I seek is not subject to the research data exclusion (VA Code §2.2-3705.4(4)), there is no need to expend significant costs on review of the documents.

If you have any questions, please do not hesitate to contact me by the provided electronic mail addresses.

Sincerely,

Matthew D. Hardin
1262 Barrow Lane
Standardsville, VA 22973
matthewdhardin@gmail.com

Exhibit 2

VIRGINIA:

IN THE CIRCUIT COURT OF GREENE COUNTY

MATTHEW HARDIN

Petitioner,

v.

**RECTOR AND VISITORS OF THE
UNIVERSITY OF VIRGINIA**

Respondent

Affidavit of Plaintiff's Counsel
to accompany the Petition for
Mandamus and Injunctive Relief

**AFFIDAVIT OF ATTORNEY IN SUPPORT OF
PETITION FOR MANDAMUS AND INJUNCTIVE RELIEF**

Comes the Affiant, David W. Schnare, Esq., and states as follows:

1. I am an attorney licensed to practice law in the Commonwealth of Virginia and am counsel for petitioner Matthew Hardin.
2. Each of the statements of fact, law and argument showing good cause for the petition and request for injunctive relief, as found in paragraphs 1 through 49 of the Verified Petition for Mandamus and Injunctive Relief ("the Petition") in the above titled action are true based on knowledge, information and belief.
3. I previously served as counsel for the American Tradition Institute (ATI) in litigation against the University of Virginia. That litigation was also brought under the Virginia Freedom of Information Act ("FOIA"). In that litigation, the University admitted to holding approximately

12,000 emails for which Dr. Mann is either the sender, recipient or a courtesy copy recipient. In that matter, UVA released 1,793 emails.

4. In response to the FOIA request at issue in the ATI litigation, the University released two emails to the requesters, which the University did not release in response to Mr. Hardin's request. *See Attachments 1 and 2.*

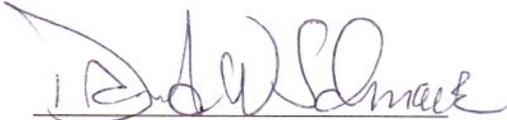
5. These two emails are responsive to Mr. Hardin's request.

6. In 2009, I became aware of an unauthorized release of emails from the Climatic Research Unit at the University of East Anglia. These emails were made available on the internet, without the consent of either the University of East Anglia or the authors of the emails, and have never been publicly released. These emails are often colloquially referred to as being the "Climategate Release."

7. Among the "Climategate" emails is an unsolicited email sent from John Daly to Michael Mann at the University of Virginia. This email would have been responsive to Mr. Hardin's VFOIA request. *See Exhibit 4 of the Petition.*

8. The University of Virginia did not provide the email from John Daly to Michael Mann in its response to Mr. Hardin's VFOIA request.

Further affiant sayeth naught.



David Schnare, Esq.

Va. Bar No. 44522

Free Market Environmental Law Clinic

722 12th St. N.W. Suite 400

Washington, D.C. 20005

Telephone (571) 243-7975

schnare@fmlawclinic.org



Subscribed and sworn before me this the 17 day of March, 2015.



Notary Public

Attachment 1 to Schnare Affidavit

From <(S_F_____ -000000000678) 22-12-2000_16:42:41_
From: "Michael E. Mann" <mann@multiproxy.evsc.virginia.edu>
Sender: <owner-tar2@meto.gov.uk>
To: "Dai, Xiaosu" <xdai@meto.gov.uk>,
 "Folland, Chris" <ckfolland@meto.gov.uk>,
 <tkarl@ncdc.noaa.gov>
Cc: "'TAR Chapter 2'" <tar02@meto.gov.uk>
In-Reply-To:
<596BE2E97AC1D4119E6A0008C70D0306612B30@mailhq01.meto.gov.u k>
Subject: Re: References of Chapter 2
Date: Fri, 22 Dec 2000 12:43:32 -0400
Message-ID:
<3.0.6.32.20001222114332.00f604a0@multiproxy.evsc.virginia.edu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 8bit
X-Mailer: Microsoft Office Outlook 12.0
Thread-Index: AcBsNjM8SMf8S4B1T30Lpiy1jSBcTA==
X-OlkEid: BE842F222896E4FF7FD0AE4AA98E0D96CA3269A8

I've made corrections below.

First, please update the following:

Mann, M.E., Park, J., Oscillatory Spatiotemporal Signal Detection in
Climate Studies: A Multiple-Taper Spectral Domain Approach, Advances
in
Geophysics, 41, 1-131, 1999.

Delworth, T.L., Mann, M.E., Observed and Simulated Multidecadal
Variability
in the Northern Hemisphere, Climate Dynamics, 16, 661-676, 2000.

Mann, M.E., Bradley, R.S., Hughes, M.K., Long-term variability in the
El
Nino Southern Oscillation and associated teleconnections, Diaz, H.F. &
Markgraf, V. (eds) El Nino and the Southern Oscillation: Multiscale
Variability and its Impacts on Natural Ecosystems and Society,
Cambridge
University Press, Cambridge, UK, 357-412, 2000.

Mann, M.E., Gille, E., Bradley, R.S., Hughes, M.K., Overpeck, J.T.,
Keimig,
F.T., Gross, W., Global Temperature Patterns in Past Centuries: An
interactive presentation, Earth Interactions, 4-4, 1-29, 2000.

Further specific corrections indicated below:

At 02:20 PM 12/14/00 +0000, Dai, Xiaosu wrote:
>Dear Colleagues,
>

Petitioners
Exhibit No. 7

>I am now reading through the final draft of Chapter 2 for editorial check. I
>found lots of problems related to references. I'll summarise them as
>follows. I hope related authors can help me sort out them.
>
>
>A. The following references are in the References list but not raised in the
>text. Do you want to delete them?
>
>Page 69, lines 52-54: Bond et al., 1992
>Page 72, lines 8-9: Christy et al., 1997
>Page 72, lines 42-43: Cook et al., 1992
DELETE
>Page 72, lines 49-51: Cook et al., 1996
DELETE
>Page 73, lines 13-14: Crowley and Lowery, 1999
CORRECT REFERENCE is Crowley and Lowery, 2000 (already listed!)
>Page 74, line 2: Dickson, 1999
>Page 74, lines 21-22: Dunbar et al., 1994
DELETE
>Page 75, lines 19-20: Folland and Brown, 1999
>Page 76, lines 22-23: Gagan et al., 1999
>Page 76, lines 31-32: Gallo and Owen, 1999
>Page 76, lines 33-34: Gallo et al., 1999
>Page 77, lines 11-12: Graham, 1994b
>Page 77, lines 13-15: Graham et al., 1994
>Page 77, lines 16-17: Graumlich, 1993
>Page 77, lines 39-40: Groisman et al., 1994
>Page 78, lines 1-3: Haeberli and Hoelzle, 1995
>Page 78, lines 26-27: Hansen et al., 1995
>Page 78, lines 30-31: Hansen et al., 1998b
>Page 79, lines 41: Hulme, 1995
>Page 80, lines 1-2: Hurrell and Trenberth, 1997
>Page 80, line 54: Jones, 1987
>Page 81, lines 29-32: Jouzel et al., 1992
>Page 83, lines 13-14: Kunkel et al., 1999
>Page 83, lines 29-30: Lamb, 1965
>Page 83, lines 49-50: Latif and Barnett, 1996
>Page 83, lines 53-54: Latif et al., 1997
>Page 84, line 54-Page 85, line 1: Mann and Park, 1999
>Page 85, lines 2-3: Mann and Park, 1993
>Page 85, lines 12-13: Mann et al., 1998b
>Page 85, lines 28-29: Maslanik et al., 1999
>Page 85, line 54-Page 86, line 1: Meehl and Arblaster, 1998
>Page 86, lines 36-37: NCDC, 1997
>Page 87, lines 3-5: Neumann et al., 1993
>Page 87, lines 23-24: Norris and Leovy, 1994
>Page 87, lines 42-43: Osterkamp et al., 1994
>Page 88, lines 6-8: Overpeck, 1998
DELETE

>Page 88, lines 11-13: Owen et al., 1998
>Page 89, line 11: Peterson et al., 1995
>Page 89, lines 39-40: Pielke and Landsea, 1998
>Page 89, lines 45-46: Pielke et al., 1999
>Page 90, lines 13-14: Randel et al., 1996
>Page 90, lines 51-53: Ritchie and Harrison, 1993
>Page 91, lines 7-8: Robinson, 1997 (different from lines 3-4:
Robinson,
>1997)
>Page 92, lines 35-36: Salingo, 1999
>Page 94, lines 1-3: Thompson et al., 1997
>Page 94, line 11: Torrence and Webster, 1998b
>Page 94, lines 52-53: Villalba et al., 1998
>Page 97, lines 23-24: Zhai and Eskridge, 1996
>
>
>B. The following references are referred to in the text but don't
appear
in
>the Reference list. Can you give me their detailed information in
order
to
>add them to the Reference list?
>
>Page 14, line 16: Smith et al., 1996
>Page 17, line 1: Shen et al., 1998
>Page 19, line 29: Levitus et al., 1997
>Page 22, line 34: Prabhakara et al., 1998
>Page 23, line 16: Fiorino et al., 1999 (Is it possibly Fiorino, 1999?
See
>page 75, lines 1-2)
>Page 26, line 41: Maslanik et al., 1997 (Is it possibly Maslanik et
al.,
>1999? See page 85, lines 28-29.)
>Page 28, lines 35-36: Romanovsky et al., 1998
>Page 30, lines 37-38: Schindler et al., 1990; Robertson et al., 1992;
Assel
>and Robertson, 1995; Anderson et al., 1996; Wynne et al., 1998
>Page 33, line 34: Crowley et al., 2000 (Is it possibly Crowley, 2000?
See
>page 73, line 15.)
SHOULD BE CROWLEY AND LOWERY (2000)
>Page 34, line 16: Clausen et al., 1998 (Is it possibly Clausen et
al.,
1995?
>See page 72, lines 18-21.)
YES, CLAUSEN ET AL 1995
>Page 35, line 53: Salinger, 1996 (Is it possibly Salinger et al.,
1996?
See
>page 91, lines 31-34.)
YES, SALINGER ET AL 1996

>Page 39, lines 4-5: Dansgaard et al., 1989
>Page 39, line 14: Martinson et al., 1987
>Page 40, line 30: Meese et al., 1994
>Page 40, line 34: deMenocol, 1998
>Page 40, lines 43-44: Barber et al., 1989 (Is it possibly Barber et al.,
>1999? See page 68, lines 53-54 to page 69, line 1.)
>Page 40, line 45: Wick and Tinner, 1997 (Is it possibly Wick and Tinner,
>1999? See page 96, lines 40-41.)
>Page 40, line 49: Stager and Mayewski, 1997
>Page 40, line 50: Hu et al., 1999
>Page 41, line 2: Harrison et al., 1994
>Page 41, line 4: Bradbury and Dean, 1993; Clark et al., in prep.
>Page 41, line 4: Kershaw, 1991 (Is it possibly Kershaw et al., 1991?
See
>page 82, lines 35-36.)
>Page 41, line 11: Ritchie et al., 1989
>Page 41, line 14: Thompson et al., 1989
>Page 41, line 15: Haynes et al., 1989; Pachur and Hoelzmann, 1991
>Page 41, line 22: COHMAP Members, 1988; Huntley and Prentice, 1993
>Page 41, line 31: Fagan, 1999
>Page 42, line 7: Hammer, 1997 (Is it possibly Hammer et al., 1997?
See
page
>78, lines 18-19.)
>Page 42, lines 19-20: Jouzel et al., 1987
>Page 42, line 28: Severinghaus et al., 1999
>Page 42, line 32: Shuman et al., 1998
>Page 44, line 13: Hughen et al., submitted (Is it possibly Hughen et al.,
>1999? See page 79, lines 24-25.)
>Page 44, line 52: Forland and Hanssen-Bauer, 1998 (Is it possibly Forland
and Hanssen-Bauer, 1999? See page 75, lines 44-45)
>Page 45, lines 36-37: Lins and Michaels, 1994
>Page 45, line 43: Arkinremi et al., 2000
>Page 46, line 3: Piervitali et al., 1998; Romero et al., 1998
>Page 46, line 8: Bogdanova and Mescherskaya, 1998
>Page 46, line 11: Georgievsky et al., 1999 (Is it possibly Georgievsky et
>al., 1996? See page 76, lines 45-47.)
>Page 46, line 20: Haylock and Nicholls, 1999 (Is it possibly Haylock and
>Nicholls, 2000? See page 78, lines 43-44.)
>Page 46, line 51: Garcia and Vargas, 1997 (Is it possibly Garcia and Vargas,
>1998? See page 76, lines 35-36.)
>Page 47, lines 20-21: Swetnam and Betancourt, 1998
>Page 47, line 41: Spencer, 1993 (Is it possibly Spencer and Christy, 1993?
>See page 93, lines 1-2.)

>Page 50, line 43: Lawrimore and Peterson, 2000
>Page 51, line 26: Tuomenvirta et al., 2000
>Page 53, line 36: Kestin et al., 1998 (Is it possibly Kestin et al., 1999?)
>See page 82, lines 37-38.)
>Page 53, line 44: Trenberth and Hoar, 1997
>Page 53, line 54: Allan et al., 1999 (Is it possibly Allan, 1999 or Allan
and D'Arrigo, 1999? See page 68, lines 10-14.)
>Page 56, line 2: Thompson et al., 1999
>Page 56, line 11: Hagen, 1995 (Is it possibly Hagen et al., 1995? See
page
>78, lines 9-12.)
>Page 56, line 11: Siggurdsson and Lonsson, 1995
>Page 56, line 43: Smith et al., 1999b
>Page 59, line 39: Plummer et al., 1999
>Page 59, line 41: Michaels, 2000 (Is it possibly Michaels et al.,
2000?)
See
>page 86, lines 11-12.)
>Page 61, lines 4-5: Stone et al., 1999
>Page 61, line 25: Shinoda et al., 1999
>Page 62, line 51: Landsea, 1999 (Is it possibly Landsea et al., 1999?)
See
>page 83, lines 43-44.)
>Page 63, line 29: Graham and Diaz, 2000
>Page 63, line 53: Kushnir et al., 1997
>Page 65, line 10: Changnon and Changnon, 1999 (Is it possibly
Changnon
and
>Changnon, 2000? See page 71, lines 34-35.)
>Page 102, Figure 2.5, line 8: Smith et al., 1996
>Page 106, Figure 2.8, line 4: Jones, 1997b (Is it possibly Jones et
al.,
>1997b? See page 81, lines 20-21.)
>Page 111, Figure 2.13, line 14: Robinson et al., 1993
>Page 112, Figure 2.14, lines 7-8 & Page 114, Figure 2.16, line 8:
Grumbine,
>1996
>Page 121, Figure 2.23, lines 3-4: de Beaulieu et al., 1995 (Is it
possibly
>de Beaulieu and Reille, 1995? See page 73, lines 40-41.)
>Page 121, Figure 2.23, line 4: MacManus et al., 1998 (Is it possibly
>MacManus et al., 1999? See page 84, lines 36-37.)
>Page 121, Figure 2.23, line 4: Budziak et al., submitted
>Page 127, Figure 2.28, line 8 & Page 128, Figure 2.29, line 7: Rayner
et
>al., 1999
>Page 129, Figure 2.30, line 4: Thompson et al., 2000a
>Page 130, Figure 2.31, line 6: Kiladis and Mo, 1998 (Is it possibly
Kiladis
>and Mo, 1999? See page 82, lines 44-45.)

>Page 133, Figure 2.34, line 3 & Page 134, Figure 2.35, line 7:
Groisman
et
>al., 1999b (Is it possibly Groisman et al., 1999? See page 77, lines
36-38.)
>Page 136, Figure 2.37, line 7: Landsea, 1999 (Is it possibly Landsea
et
al.,
>1999? See page 83, lines 43-44.)
>Page 136, Figure 2.37, line 8: Karl et al., 1996
>
>
>C. There are some confusions in the following references. Would you
like
to
>change them?
>
>1. There are two Karl et al., 1995 in the Reference list (see page
82,
lines
>15-16 & 19-20). So in the following situations, which reference do
you
>exactly refer to (you may need assign one of them 1995a and the other
1995b)
>?
>Page 9, line 18: Karl et al., 1995a
>Page 59, line 15: Kar et al., 1995
>Page 64, lines 16-17: Karl et al., 1995
>
>2. There are two Kumar et al., 1994 (although they are different
person)
in
>the Reference list (see page 83, lines 1-2 & 7-8). However in the
text,
you
>only raised once. So which reference do you exactly refer to
(accordingly
>another one has to be deleted)?
>Page 13, lines 22-23: Kumar et al., 1994
>
>3. There are two Rayner et al., 1998 in the Reference list (see page
90,
>lines 25-26 & 30-31). However in the text, you only raised once. So
which
>reference do you exactly refer to (accordingly another one has to be
>deleted)?
>Page 15, line 42: Rayner et al., 1998
>
>4. There are two White et al., 1998 in the Reference list (see page
96,
>lines 29-31 & 32-33). So in the following situations, which reference
do

you

>exactly refer to (you may need assign one of them 1998a and the other 1998b)

>?

>Page 19, line 34: White et al., 1998a

>Page 32, line 20: White et al., 1998

>Page 34, line 11: White et al., 1998

>

>5. There are two Gaffen et al., 2000 in the Reference list (see page 76,

>lines 18-19 & 20-21). So in the following situations, which reference do

you

>exactly refer to (you may need assign one of them 2000a and the other >2000b)?

>Page 21, lines 22-23: Gaffen et al., 2000b

>Page 21, line 39: Gaffen et al., 2000b

>Page 21, line 52: Gaffen et al., 2000b

>Page 24, line 24: Gaffen et al., 2000a; Gaffen et al., 2000

>Page 25, lines 30-31: Gaffen et al., 2000a

>Page 25, line 32: Gaffen et al., 2000a

>

>6. There are only two references Santer et al., 1999 and Santer et al.,

2000

>in the Reference list (see page 91, lines 43-45 & 46-48). So in the

>following situations, which reference do you exactly refer to (should

you

>add some extra references)?

>Page 21, lines 28-29: Santer et al., 1999a

>Page 23, line 16: Santer et al., 1999a, 1999b

>Page 23, line 21: Santer et al., 1999a

>Page 25, line 12: Santer et al., 2000b

>Page 25, line 14: Santer et al., 2000b

>Page 25, line 21: Santer et al., 2000b

>Page 25, line 34: Santer et al., 2000

>Page 31, line 37: Santer et al., 2000

>

>7. There are two Vinnikov et al., 1999 in the Reference list (see page

95,

>lines 6-7 & 8-9). So in the following situations, which reference do

you

>exactly refer to (you may need assign one of them 1999a and the other >1999b)?

>Page 26, line 47: Vinnikov et al., 1999

>Page 113, Figure 2.15: Vinnikov et al., 1999

>

>8. There are Stahle et al., 1998 (page 93, lines 3-4) and Stahle et al.,

>1998b (page 93, lines 5-8) in the Reference list. I suppose Stahle et al.,

>1998 should be deleted while Stahle et al., 1998 wherever is raised
in
the

>text should be Stahle et al., 1998b.

>Page 33, line 15: Stahle et al., 1998 - should be Stahle et al.,
1998b

>Page 53, lines 10-11: Stahle et al., 1998 - should be Stahle et al.,
1998b

ALL OF THE ABOVE CITATIONS REFER TO WHAT IS NOW INDICATED AS "STAHLE
ET AL

1998B". IF THERE IS NO INCIDENCE OF A REFERENCE TO WHAT IS INDICATED
AS

"STAHLE ET AL 1998" I SUGGEST WE SIMPLY REPLACE ALL CITATIONS AS
"STAHLE

ET

AL 1998"

WITH THE REFERENCE INDICATED AS:

Stahle, D.W., R.D. D'Arrigo, P.J. Krusic, M.K. Cleaveland, E.R. Cook,
R.J.

Allan, J.E. Cole, R.B. Dunbar, M.D. Therrell, D.A. Gay, M.D. Moore,
M.A.

Stokes, B.T. Burns, J. Villanueva-Diaz, and L.G. Thompson,
Experimental

Dendroclimatic Reconstruction of the Southern Oscillation, Bulletin of
the

American Meteorological Society, 79 (10), 2137-2152, 1998.

>

>9. There are two Yiou et al., 1997 in the Reference list (see page
97,

lines

>10-12 & 13-14). So in the following situations, which reference do
you

>exactly refer to (you may need assign one of them 1997a and the other
>1997b)?

>Page 40, line 30: Yiou et al., 1997

>Page 43, line 27: Yiou et al., 1997

>

>10. There are Groisman et al., 2000a (see page 77, lines 30-31) and
Groisman

>et al., 2000b (see page 77, lines 34-35) in the Reference list. So in
the

>following situations, which reference do you exactly refer to?

>Page 45, line 35: Groisman et al., 2000 - 2000a or 2000b?

>Page 45, line 38: Groisman et al., 2000 - 2000a or 2000b?

>Page 62, line 1: Groisman et al., 2000 - 2000a or 2000b?

>Page 62, line 3: Groisman et al., 2000 - 2000a or 2000b?

>

>11. There are Kumar et al., 1999a (see page 83, lines 3-4) and Kumar
et

al.,
>1999b (see page 83, lines 5-6) in the Reference list. So in the following
>situation, which reference do you exactly refer to?
>Page 46, line 40: Kumar et al., 1999 - 1999a or 1999b?
>
>12. There are Cook et al., 1999a (see page 72, lines 52-53) and Cook et al.,
>1999b (see page 72, lines 44-46) in the Reference list. So in the following
>situation, which reference do you exactly refer to?
>Page 47, line 15: Cook et al., 1999 - 1999a or 1999b?
COOK ET AL 1999a
>
>13. There are Sun et al., 2000a (see page 93, lines 25-26) and Sun et al.,
>2000b (see page 93, lines 27-28) in the Reference list. So in the following
>situation, which reference do you exactly refer to (you only raised this
>reference once, so accordingly another one has to be deleted)?
>Page 48, line 31: Sun et al., 2000 - 2000a or 2000b?
>
>14. There are two Wang and Gaffen, 2000 in the Reference list (see page
page
95,
>lines 43-44 & 45-47). So in the following situations, which reference do
you
>exactly refer to (you may need assign one of them 2000a and the other
>2000b)?
>Page 48, line 33: Wang and Gaffen, 2000
>Page 59, line 46: Wang and Gaffen, 2000
>
>15. There are two Smith et al., 2000a (although they are different person)
>in the Reference list (see page 92, lines 40-41 & 46-47). So in the
>following situation, which reference do you exactly refer to (you only
>raised this reference once, so accordingly another one has to be deleted)?
>Page 49, line 34: Smith et al., 2000a
>
>16. There are Bajuk and Leovy, 1998a (see page 68, lines 47-48) and Bajuk
Bajuk
>and Leovy, 1998b (see page 68, lines 49-50) in the Reference list. So in
in
the
>following situation, which reference do you exactly refer to?
>Page 51, line 47: Bajuk and Leovy, 1998 - 1998a or 1998b?
>

>17. There are Dai et al., 1997a (see page 73, line 22) and Dai et al., 1997b
>(see page 73, lines 23-24) in the Reference list. So in the following
>situation, which reference do you exactly refer to?
>Page 56, line 10: Dai et al., 1997 - 1997a or 1997b?
>
>18. There are Zhai et al., 1999a (see page 97, lines 28-29) and Zhai et al., 1999b (see page 97, lines 30-31) in the Reference list. So in the following
>situation, which reference do you exactly refer to?
>Page 59, line 46: Zhai et al., 1999 - 1999a or 1999b?
>
>19. There are Jones et al., 1999a (see page 81, lines 18-19) and Jones et al., 1999b (see page 81, lines 25-26) and Jones et al., 1999c (see page 81, lines 12-13) in the Reference list. So in the following situations, which
>reference do you exactly refer to?
>Page 59, line 51: Jones et al., 1999 - 1999a or 1999b or 1999c?
>Page 63, line 24: Jones et al., 1999 - 1999a or 1999b or 1999c?
>Page 63, lines 36-37: Jones et al., 1999 - 1999a or 1999b or 1999c?
>
>
>D. Also I assumed there were some typing mistakes that should be changed
>although I am not very sure. Would you like to confirm them?
>
>Page 21, line 6: Bindoff and McDougall, 1999 must be Bindoff and McDougall,
>2000 (see page 69, lines 37-38);
>Page 35, line 36: Pfister et al., 1999a should be Pfister and Brazdil,
>1999a
>(see page 89, lines 28-30);
YES. CHANGE IS CORRECT.
>Page 56, lines 23 & 27: Deser et al., 1999 must be Deser et al., 2000
(see
>page 73, lines 50-51).
>
>
>E. For the IPCC report, we only accept published references. Although we
may
>accept references that are "in press" or "accepted", we don't accept
>references that are only "submitted" or "in preparation" (those would
be
>eventually deleted before publication if we don't get any updated

>information). I have tried to find some information from the library
of
UK

>Met Office. The following references are those I didn't get
information
>through the library. Could you please let me know any updated
information
>about them?

>

>References "in press":

>Page 68, lines 10-12: Allan, 1999
>Page 73, lines 18-19, Cullen et al., 2000
>Page 77, lines 30-31: Groisman et al., 2000a
>Page 79, lines 1-2: Higgins et al., 2000
>Page 79, lines 39-40: Hughes et al., 2000
>Page 82, lines 39-40: Kley et al., 2000
>Page 85, lines 6-9: Mann et al., 2000a
PUBLISHED. SEE TOP OF THIS MESSAGE
>Page 85, lines 14-15: Mann et al., 2000b
PUBLISHED. SEE TOP OF THIS MESSAGE
>Page 85, line 19: Manton, 2000 (also no title)
>Page 88, line 33: Parkinson, 2000
>Page 90, lines 15-17: Randel et al., 2000
>Page 93, line 20: Stocker, 1999
>Page 95, lines 35-36: Wang and Gong, 1999

>

>References "accepted":

>Page 72, lines 32-33: Collins et al., 2000
>Page 77, lines 41-42: Groisman et al., 2000
>Page 78, lines 32-33: Hanssen-Bauer and Førland, 2000
>Page 92, lines 46-47: Smith et al., 2000a
>Page 96, lines 4-5: Waple et al., 2000

>

>References "submitted":

>Page 69, line 10: Bates and Jackson, 2000
>Page 69, lines 11-12: Bates et al., 2000
>Page 70, lines 7-8: Bonsal et al., 2000
>Page 72, lines 14-15: Christy et al., 2000
>Page 76, lines 53-54: Golubev et al., 2000
>Page 79, lines 3-4: Higgins et al., 2000
>Page 80, line 48: Jones, 2000
>Page 81, lines 8-9: Jones et al., 2000
>Page 81, lines 40-42: Jouzel et al.
>Page 84, lines 46-47: Maloney and Hartmann, 2000
>Page 85, lines 22-23: Marengo, 1999
>Page 85, lines 36-38: Masson et al., 2000
>Page 91, lines 21-22: Ross and Elliott, 2000
>Page 91, lines 37-38: Salinger et al.
>Page 94, lines 19-20: Trenberth et al., 2000
>Page 95, lines 21-22: Wadhams and Davis, 2000
>Page 95, lines 43-44: Wang and Gaffen, 2000
>Page 96, lines 47-48: Williams et al., 1999

>
>Reference "in preparation"
>Page 75, lines 1-2: Fiorino, 1999
>
>Reference "unpublished"
>Page 90, lines 25-26: Rayner et al., 1998
>
>
>F. In addition, Sylvia sent a email (15 Nov.) with some changes about
>references in Chapter 2. I have a couple of questions about them.
>
>1. You added a reference Folland et al., 2000. However, in the
Reference
>list, there is already a Folland et al., 2000 (see page 75, lines 29-
30).
So
>in the text when you raised Folland et al., 2000, which one do you
refer
to?
>Page 14, line 26: Folland et al., 2000
>Page 17, Table 2.2: Folland et al., 2000
>Page 58, line 41: Folland et al., 2000
>Page 101, Figure 2.4: Folland et al., 2000
>
>2. You asked to delete two references Kagan (I suppose correct
spelling
is
>Kagan), 1997 and Kekhut (I suppose correct spelling is Keckhut) et
al.,
>1998. But they are still raised in the text. Why delete them?
>Page 17, line 2: Kagan, 1997
>Page 22, line 47: Keckhut et al., 1998
>
>
>I would appreciate your any help. Any response before next March
would be
>very helpful. After that we'll have to make any necessary changes
(e.g.,
>deleting all unpublished references).
>
>Best Regards,
>
>Su
>
>-----
>Dr. Xiaosu Dai
>IPCC WG I TSU
>Hadley Centre, Met Office
>London Road, Bracknell
>RG12 2SY, UK
>
>Phone: +44-1344-856695

>Fax: +44-1344-856912
>email: xdai@meto.gov.uk

>-----
>
>
>
>
>

—
Professor Michael E. Mann
Department of Environmental Sciences, Clark Hall
University of Virginia
Charlottesville, VA 22903

—
e-mail: mann@virginia.edu Phone: (804) 924-7770 FAX: (804) 982-2137

<http://www.evsc.virginia.edu/faculty/people/mann.html>

Attachment 2 to Schnare Affidavit

From: "Michael E. Mann" <mann@virginia.edu>
To: "Ian Macadam" <imacadam@meto.gov.uk>
Cc: "Michael E. Mann" <mann@multiproxy.evsc.virginia.edu>,
"John Christy" <christy@atmos.uah.edu>,
"Chris Folland" <ckfolland@meto.gov.uk>
Subject: Re: Second revision of IPCC TAR Figures 2.20 and 2.21.
Date: Thu, 24 Aug 2000 09:47:30 -0400
Message-ID: <02ed01cc2637\$3f313cf0\$bd93b6d0\$@edu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
X-Mailer: Microsoft Office Outlook 12.0
Thread-Index: AcAN0difvVljUnRGRImEDHvrhOA5Hw==
X-OlKId: BEE42122B89B9122F79FA54F90E6808958090541

Hi Ian,

They both look good to me, so I'm happy if Chris (and John?) are too...

Chris pointed out one small thing I need to update for Figure 2.2.1: The smoothed instrumental series needs to be updated through 1999. Will fix that and get it you shortly, so Figure 2.2.1 will require that one small additional revision. More soon...

mike

At 06:30 PM 8/24/00 +0100, Ian Macadam wrote:

>"Michael E. Mann" wrote:

>>

>> Hi Ian,

>>

>> Fig 2.2.0 looks good, two small things:

>>

>> 1) The dashed line should point to *1998* not 1999 (perhaps I misinformed

>> you before?) The idea is to highlight that 1998 is outside the uncertainty

>> range of the past reconstructions (this is certainly *not* the case for 1999).

>>

>> 2) My guess is that we probably can't avoid color here, given the

>> complexity of the plot. So I think the color scheme is fine, unless Chris

>> thinks that we need to eliminate color from consideration here.

>>

>> Fig 2.2.1 looks the same as before, but there was no reason to revise

it
>> anyways. Its just Figure 2.2.0 that we needed to revise. Am I
missing
>> something here.
>>
>> Thanks,
>>
>> mike
>
>
>Mike,
>
>I've just made a few very slight cosmetic changes to Figure 2.21 to
make
>it more consistent in style with other figures in chapter 2.
>
>Ian.
>
>Attachment Converted: c:\program files\eudora\attach\fig2201.ps
>
>Attachment Converted: c:\program files\eudora\attach\fig2211.ps

Exhibit 3

VIRGINIA:

IN THE CIRCUIT COURT OF GREENE COUNTY

MATTHEW HARDIN

Petitioner,

v.

**RECTOR AND VISITORS OF THE
UNIVERSITY OF VIRGINIA**

Respondent

Affidavit of Patrick Michaels

**AFFIDAVIT OF DR. PATRICK
MICHAELS**

Comes the Affiant, Patrick Michaels, and states as follows:

1. I am currently employed as Director of the Center for the Study of Science at the Cato Institute.
2. I am past president of the American Association of State Climatologists and a former program chair for the Committee on Applied Climatology at the American Meteorological Society.
3. I worked at the University of Virginia for 30 years, and was engaged in research in the Environmental Sciences department.
4. I was a contributing author of the United Nations Intergovernmental Panel on Climate Change.
5. I hold a Ph.D. in ecological climatology from the University of Wisconsin at Madison.

6. When I was employed at the University of Virginia, I sometimes received unsolicited correspondence from the public or other academics regarding my work.
7. In my experience it is common for other professors and researchers to receive similar correspondence.
8. Such correspondence is not collected in the pursuit of research.
9. The quality of scientific research is adjudicated by academic institutions through the peer review process and through professional presentations, not through unsolicited correspondence.
10. Faculty can and do use email to discuss other scientist's work and publications. This reflects the normal activity of faculty as they stay abreast of their fields of study. Those communications, however, are not "research," and are not collected to support research. They are no different from other government workers' communication about issues associated with their professional activities, communications that are routinely released under the Virginia Freedom of Information Act.
11. I cannot recall ever having seen a scientific research paper specifically citing "unsolicited correspondence".
12. As a contributing author and reviewer working with the United Nations Intergovernmental Panel on Climate Change, I am familiar with the work of that body.
13. The United Nations Intergovernmental Panel on Climate Change does not conduct research, as it is not chartered to do so. Instead, the Intergovernmental Panel reviews literature that has been previously published at various institutions, and compiles those reviews for broader distribution.

14. Because the United Nations does not conduct climatology research, it is incapable of co-sponsoring such research with other institutions.
15. In my time at the University of Virginia, I worked with academics at other institutions on co-sponsored research. I have also worked with other academics on the United Nations' Second Assessment Report, which was not university sponsored research with extramural funding. These are two distinct undertakings.
16. When two institutions co-sponsor research, academics from each institution are involved in collecting data and drawing conclusions from that data. This often leads to co-authored publications in peer-reviewed journals.
17. When working on United Nations projects, I summarized the research of myself and others from other institutions on extratropical cyclones. There was no attempt to conduct research jointly with these institutions or with the United Nations itself.
18. I understand that Mr. Hardin's Freedom of Information Act request sought the following:
 - (a) Emails from John L. Daly or sent from or to Dr. Mann associated with emails sent from John L. Daly.
 - (b) Any emails discussing the work of Stephen McIntyre and/or Ross McKittrick or using the term MM, MM2003, MM03, MM2004 or MM04.
 - (c) Any emails associated with preparation of a report of the Intergovernmental Panel on Climate Change, or using the term "IPCC" or WG1.
19. In light of my statements above, no public records sought by Mr. Hardin would constitute data, records or information produced or collected by or for faculty or staff of public institutions of higher education, in the conduct of or as a result of study or research, whether sponsored by the institution alone or in connection with a governmental body or a private concern. The emails

Mr. Hardin sought do not appear to have been collected as input for a research project conducted at UVA.

Further affiant sayeth naught.


Patrick Michaels, Ph.D.

Subscribed and sworn before me this the 13 day of March, 2015.


Notary Public



Exhibit 4

From: "John L. Daly" <daly@microtech.com.au>
To: Chick Keller <ckeller@igpp.ucsd.edu>
Subject: Re: Hockey Sticks again
Date: Sat, 10 Feb 2001 21:47:57 +1100
Reply-to: daly@microtech.com.au
Cc: "P. Dietze" <p_dietze@t-online.de>, mmaccrac@usgcrp.gov, **Michael E Mann** <mann@virginia.edu>, rbradley@geo.umass.edu, wallace@atmos.washington.edu, Thomas Crowley <tom@ocean.tamu.edu>, Phil Jones <p.jones@uea.ac.uk>, sfbtett@meto.govt.uk, daly@vision.net.au, onar@netpower.no, jarl.ahlbeck@abo.fi, richard@courtney01.compulink.co.uk, McKitrick <rmckit@css.uoguelph.ca>, Bjarnason <agust@rt.is>, Harry Priem <priem@dds.nl>, vinmary.gray@paradise.net.nz, balberts@nas.edu, Martin Manning <m.manning@niwa.cri.nz>, Albert Arking <arking@jhu.edu>, Sallie Baliunas <baliunas@cfa.harvard.edu>, Jack Barrett <100436.3604@compuserve.com>, Sonja Boehmer-Cristianse <sonja.b-c@geo.hull.ac.uk>, Nigel Calder <nc@windstream.demon.co.uk>, John Christy <christy@atmos.uah.edu>, cpaynter@greeningearthsociety.org, driessen@global-commpartners.net, dwojick@shentel.net, Myron Ebell <mebell@cei.org>, Ellsaesser <hughel@home.com>, John Emsley <j.emsley@ic.ac.uk>, Jim Goodridge <jdg@mcn.org>, gsharp@montereybay.com, Peter Holle <cog@escape.ca>, Douglas V Hoyt <dhoyt1@erols.com>, "W. S. Hughes" <wsh@unite.com.au>, Wibjörn Karlén <wibjorn.karlen@natgeo.su.se>, kidso@hotmail.com, Klirill Kondratyev <kirill.kondratyev@niersc.spb.ru>, "Dr. Theodor Landscheidt" <theodor.landscheidt@ns.sympatico.ca>, Ross McKitrick <rmckitri@uoguelph.ca>, omcshane <omcshane@wk.planet.gen.nz>, Pat Michaels <pmichael@cato.org>, pbrekke@esa.nascom.nasa.gov, "David M. Ritson" <dmr@SLAC.Stanford.EDU>, robert.balling@asu.edu, Tom Segalstad <t.v.segalstad@toyen.uio.no>, Fred Singer <singer@sepp.org>, Roy Spencer <roy.spencer@msfc.nasa.gov>, Hartwig Volz <Hartwig.Volz@rwedea.de>, Gerd-Rainer Weber <gerd-rainer.weber@gvst.de>, tlowery@ocean.tamu.edu, Rosanne D'Arrigo <druidrd@ldeo.columbia.edu>, k.briffa@uea.ac.uk

Dear Chick & all

> the first is Keith Briffa's rather comprehensive treatment of getting
> climate variations from tree rings: Annual climate variability in
> the Holocene: "interpreting the message of ancient trees", Quaternary
> Science Reviews, 19 (2000) 87-105 begin_of_the_skype_highlighting 19 (2000) 87-105
end_of_the_skype_highlighting. It should deal with many of the
> questions people raise about using them to determine temperatures.

Take this from first principles.

A tree only grows on land. That excludes 70% of the earth covered by water. A tree does not grow on ice. A tree does not grow in a desert. A tree does not grow on grassland-savannahs. A tree does not grow in alpine areas. A tree does not grow in the tundra

We are left with perhaps 15% of the planet upon which forests grow/grew. That does not make any studies from tree rings global, or even hemispheric.

The width and density of tree rings is dependent upon the following variables which cannot be reliably separated from each other.

sunlight - if the sun varies, the ring will vary. But not at night of course.
cloudiness - more clouds, less sun, less ring.
pests/disease - a caterpillar or locust plague will reduce photosynthesis
access to sunlight - competition within a forest can disadvantage or advantage some trees.
moisture/rainfall - a key variable. Trees do not prosper in a drought even if there's a heat wave.
snow packing in spring around the base of the trees retards growth
temperature - finally!

The tree ring is a composite of all these variables, not merely of temperature. Therefore on the 15% of the planet covered by trees, their rings do not and cannot accurately record temperature in isolation from the other environmental variables.

In my article on Greening Earth Society on the Hockey Stick, I point to other evidence which contradicts Mann's theory. The Idso's have produced more of that evidence, and a new article on Greening Earth has `unearthed' even more.

Mann's theory simply does not stack up. But that was not the key issue. Anyone can put up a dud theory from time to time. What is at issue is the uncritical zeal with which the industry siezed on the theory before its scientific value had been properly tested. In one go, they tossed aside dozens of studies which confirmed the existence of the MWE and LIA as global events, and all on the basis of tree rings - a proxy which has all the deficiencies I have stated above.

The worst thing I can say about any paper such as his is that it is `bad science'. Legal restraint prevents me going further. But in his case, only those restraints prevent me going *much* further.

Cheers

John Daly

--

John L. Daly

`Still Waiting For Greenhouse'

<http://www.microtech.com.au/daly>

replies to: daly@microtech.com.au

PLEASE NOTE:

WEBSITE URL HAS BEEN CHANGED TO <http://www.microtech.com.au/daly>

EMAIL ADDRESS HAS BEEN CHANGED TO daly@microtech.com.au

BOOKMARKS AND ADDRESS ENTRIES, IF ANY, SHOULD BE AMENDED ACCORDINGLY.

Exhibit 5

Date: Thu, 30 Dec 2004 09:22:02 -0500

To: Phil Jones <p.jones@uea.ac.uk>

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

Subject: Re: Fw: Rutherford et al. [2004]

X-UEA-MailScanner-Information: Please contact the ISP for more information

X-UEA-MailScanner: Found to be clean

X-UEA-MailScanner-SpamScore: s

Phil,

I would immediately delete anything you receive from this fraud.

You've probably seen now the paper by Wahl and Ammann which independently exposes McIntyre and McKittrick for what it is--pure crap. Of course, we've already done this on "RealClimate", but Wahl and Ammann is peer-reviewed and independent of us. I've attached it in case you haven't seen (please don't pass it along to others yet). It should be in press shortly. Meanwhile, I would NOT RESPOND to this guy. As you know, only bad things can come of that. The last thing this guy cares about is honest debate--he is funded by the same people as Singer, Michaels, etc...

Other than this distraction, I hope you're enjoying the holidays too...

talk to you soon,

mike

At 09:02 AM 12/30/2004, you wrote:

Mike,

FYI. Just in for an hour or so today as still off until Jan 4.

Not replied to this - too much else with IPCC etc. Not read this in detail - just printed it off.

Have a good New Year's Eve.

Cheers

Phil

From: "Steve McIntyre" <stephen.mcintyre@utoronto.ca>

To: "Phil Jones" <p.jones@uea.ac.uk>

Subject: Fw: Rutherford et al. [2004]

Date: Wed, 29 Dec 2004 10:08:18 -0500

X-Mailer: Microsoft Outlook Express 6.00.2800.1158

X-UEA-MailScanner-Information: Please contact the ISP for more information

X-UEA-MailScanner: Found to be clean

Dear Phil,

I have noticed the following statements in Rutherford et al [2004], in which you are a co-author. As compared with some of your co-authors, I get the impression that, while you feel very strongly about your views, you are also concerned with getting to the bottom of matters and are less concerned with scoring meaningless debating points. In this spirit, I draw your attention to some incorrect statements in Rutherford et al. [2004] concerning our material. There is really a quite serious problem with the PC methods in MBH98 and the comments made in Rutherford et al [2004] are really quite misleading. For the reasons set out below, I request that these comments be removed from the manuscript.

Regards, Steve McIntyre

----- Original Message -----

From: [1]Steve McIntyre

To: [2]David Randall

Cc: [3]Scott Rutherford ; [4]Paul Kushner ; [5]Cindy Carrick ; [6]Ross McKittrick

Sent: Tuesday, December 28, 2004 1:48 PM
Subject: Rutherford et al. [2004]
Dear Dr. Randall,

Recently, at the website [7]www.realclimate.org, Michael Mann publicized a submission by Rutherford et al. to Journal of Climate, entitled Proxy-based Northern Hemisphere Surface Temperature Reconstructions: Sensitivity to Method, Predictor Network, Target Season, and Target Domain. This paper contains some untrue statements and mischaracterizations regarding criticisms we (McIntyre and McKittrick) made of Mann et al. (1998) [MBH98] in a 2003 paper and subsequent exchanges under the auspices of Nature. We are writing to request that these untrue statements be removed from the paper before any further processing of the document by Journal of Climate takes place.

First, Rutherford et al. states that McIntyre and McKittrick [2003] used an incorrect version of the Mann et al. (1998) proxy indicator dataset. The history of this matter is summarized below (all relevant emails and other documentation are available at [8]<http://www.climate2003.com/file.issues.htm> .

In April 2003, we requested from Mann the FTP location of the dataset used in MBH98. Mann advised me that he was unable to recall the location of this dataset and referred the request to Rutherford. Rutherford eventually directed us to a file (pcproxy.txt) located at a URL at Manns FTP site. In using this data file, we noticed numerous problems with it, not least with the principal component series. We sought specific confirmation from Mann that this dataset was the one used in MBH98; Mann said that he was too busy to respond to this or any other inquiry. Because of the many problems in this data set, we undertook a complete new re-collation of the data, using the list of data sources in the SI to MBH98 and using original archived versions wherever possible. After publication of McIntyre and McKittrick [2003], Mann said that dataset at his FTP site to which we had been referred was an incorrect version of the data and that this version had been prepared especially for me; through a blog, he provided a new URL which he now claimed to contain the correct data set. The file creation date of the incorrect version was in 2002, long prior to my first request for data, clearly disproving his assertion that it was prepared in response to my request. Mann and/or Rutherford then deleted this incorrect version with its date evidence from his FTP site.

It is false and misleading for Rutherford et al. to now allege that we used the wrong dataset. We used the dataset they directed us to at their FTP site. More importantly, for our analysis, to avoid the problems with the principal component series, we re-collated the tree ring data identified in MBH98 from ITRDB archives, calculated fresh principal component series; in addition, we re-collated other proxy data from archived versions wherever possible. Thus, our own calculations were not affected by the errors in the supplied file as we did NOT use the incorrect version in our calculations. To suggest otherwise, as is done in Rutherford et al [2004], is highly misleading. To date, no source code or other evidence has been provided to fully demonstrate that the incorrect version (now deleted) did not infect some of Manns and Rutherfords other work. In this respect, we note that the now deleted file pcproxy.txt occurs in a legend in a graphic at Rutherfords website, indicating possible use elsewhere by Rutherford of the incorrect version.

Accordingly, we request that the above claim be removed from the manuscript.

Secondly, Rutherford et al. [2004] argues that the difference between MBH98 results and **MM03** results occurs because of our misunderstanding of a stepwise procedure in MBH98 for the calculation of principal component series for tree ring networks. Again, this claim is misleading on its face. While our 2003 paper did not implement the (then undisclosed) stepwise procedure, as soon as this matter was raised in subsequent correspondence in

November 2003, we implemented it and we continued to observe the discrepancies in principal component series and final results. The current manuscript ignores a refereed exchange at Nature in which we specifically clarified (in response to a reviewers question) that we had obtained such results while using the exact stepwise procedure described in MBH98. Mann is aware of this refereed exchange.

The reason for the difference between our results and MBH98 results is primarily due to the fact that the tree ring principal component series in MBH98 cannot be replicated using a conventional principal components method. The MBH98 principal component series can only be replicated by standardizing on a short segment a procedure nowhere mentioned in MBH98 and only recently acknowledged in the SI to the Corrigendum of Mann et al. [Nature 2004] in response to our concerns on the subject expressed to Nature. In effect, MBH98 did not use a conventional centered PC calculation, but used an uncentered PC calculation on de-centered data. The impact of this method is the subject of ongoing controversy, which is well-known to the authors, but the existence of the method in MBH98 is no longer in doubt. In discussions of PC calculations in 2004 exchanged with the authors through Nature, we implemented the stepwise procedures of MBH98 referred to in the present manuscript and demonstrated that important differences remain even with stepwise procedures, as long as the uncentered and decentered methods of MBH98 are used. The differences in PC series resulting from using centered and uncentered series has been fully agreed to by all parties in the Nature exchange, although the parties continue to disagree on the ultimate effect on final NH temperature calculations. Accordingly, the discussion in Rutherford et al. [2004] is very incomplete and misleading in this respect. While we recognize that Mann et al. have argued that they can salvage MBH98-type results using alternative methodologies (e.g. increasing the number of PC series used in the 1400-1450 period), these salvage efforts are themselves a matter of controversy and do not validate the claims being put forward in the Rutherford et al. paper.

Accordingly we ask that this claim also be deleted from the manuscript.

Regards,
Stephen McIntyre and Ross McKittrick

Prof. Phil Jones
Climatic Research Unit Telephone +44 (0) 1603 592090 begin_of_the_skype_highlighting
+44 (0) 1603 592090 end_of_the_skype_highlighting
School of Environmental Sciences Fax +44 (0) 1603 507784
University of East Anglia
Norwich Email p.jones@uea.ac.uk
NR4 7TJ
UK

Professor Michael E. Mann
Department of Environmental Sciences, Clark Hall
University of Virginia
Charlottesville, VA 22903

e-mail: mann@virginia.edu Phone: (434) 924-7770 begin_of_the_skype_highlighting (434)
924-7770 end_of_the_skype_highlighting FAX: (434) 982-2137
[9]<http://www.evsc.virginia.edu/faculty/people/mann.shtml>

Prof. Phil Jones
Climatic Research Unit Telephone +44 (0) 1603 592090 begin_of_the_skype_highlighting
+44 (0) 1603 592090 end_of_the_skype_highlighting
School of Environmental Sciences Fax +44 (0) 1603 507784
University of East Anglia
Norwich Email p.jones@uea.ac.uk
NR4 7TJ
UK

Attachment Converted: "c:\documents and settings\tim osborn\my
documents\leudora\attach\Wahl_MBH_Recreation_JClimLett_Nov22.pdf"

References

1. <mailto:stephen.mcintyre@utoronto.ca>
2. <mailto:randall@atmos.colostate.edu>
3. <mailto:srutherford@rwu.edu>
4. <mailto:j.climate@atmosph.physics.utoronto.ca>
5. <mailto:cindy@atmos.colostate.edu>
6. <mailto:rmckitri@uoguelph.ca>
7. <http://www.realclimate.org/>
8. <http://www.climate2003.com/file.issues.htm>
9. <http://www.evsc.virginia.edu/faculty/people/mann.shtml>

Exhibit 6

From: "Michael E. Mann" <mann@virginia.edu>
To: christy@nsstc.uah.edu
Subject: Re: FYI: Fwd: Re: IPCC
Date: Thu, 24 May 2001 11:33:02 -0400
Cc: rbradley@geo.umass.edu, tkarl@ncdc.noaa.gov, tom crowley <tom@ocean.tamu.edu>, mhughes@ltrr.arizona.edu, jto@u.arizona.edu, rbradley@geo.umass.edu, p.jones@uea.ac.uk, k.briffa@uea.ac.uk, "Folland, Chris" <ckfolland@meto.gov.uk>, jouzel@lsce.saclay.cea.fr, trenbert@cgd.ucar.edu, steig@ess.washington.edu, mann@virginia.edu

<x-flowed>

John:

For future reference, I think its also important to clarify for you what the Dahl-Jensen, Clow et al borehole results actually show (see Dahl-Jensen et al, "Past Temperatures Directly from the Greenland Ice Sheet", Science, 282, October 1998).

In fact, the results show that the amplitude of variability over the past 1000+ years differs by a factor of 2 between the GRIP and Dye 3 borehole estimates (the latter only 865 km to the south). This is an example of extreme regional-scale variability, which should give pause to those who want to draw large-scale inferences.

However, even more importantly, they show in the case of Dye 3, the mid 20th century warm period in the record actually exceeds the Medieval warm peak! (see Fig 4, lower panel, blue curve). So here we have two temperature histories less than 1000 km apart in Greenland, which give different stories regarding the level of Medieval warmth, with at least one of the histories conforming precisely to the hemispheric trends presented in IPCC chapter 2 (note that in the chapter, we actually discuss the evidence of conflicting temperature trends in Greenland, though not specifically referring to Dahl-Jensen et al).

So do I understand correctly that you are referring to the results of Dahl-Jensen et al as conflicting with what we say in the chapter? At the face of it, this argument has no merit whatsoever. I think we should all use a better explanation from you, since you seem to be arguing publically that the Dahl-Jensen et al record undermines what we've said in the chapter.

Thanks in advance,

mike

p.s. I've cc'd in Eric Steig, a collaborator of Clow's and a Greenland & Antarctic Ice Core expert, to make sure my facts above have been presented accurately. Perhaps Eric would be kind enough to forward my email to Gary Clow, and Gary can let us know directly if he disagrees with any of my remarks above.

At 03:30 PM 5/23/01 -0400, Michael E. Mann wrote:

>John,

>

>I appreciate your reply.

>

>However, I don't agree at all w/ your assessment. It was determined early on that the ice core borehole results would be discussed in the context of

>the millennial-scale variability section, as they arguably don't have the
>resolution to address the timescales relevant to the past 1000 years. So
>this was in Jean's domain, not mine, and if the cross-references between
>the sections aren't clear enough in that regard, that is indeed our fault.

>

>However, there is considerable discussion of the fact that the
>Arctic/North Atlantic regions are inappropriate for inferences into
>hemispheric-scale temperature patterns, and this remains fundamentally
>from any reasonable treatment of the underlying climate dynamics that
>influence that region.

>

>The various hemispheric temperature reconstructions discussed in our
>chapter (the emphasis was on the commonality between them), including Mann
>et al, Jones et al, Briffa et al, Crowley and Lowery, and others, make
>considerable use of just about all of the available reliable low-res and
>high-res paleo data available, and come to a clear consensus regarding the
>relative warmth of the Medieval period at the hemispheric/global scale.
>Crowley's modeling results come to the same conclusion, and it entirely
>independent of
>any empirical paleoclimate reconstructions.

>

>You misrepresent the Mann et al reconstruction--it is not based on "tree
>rings", but uses all high-resolution proxy information commonly available.
>We have shown, in fact, that our reconstruction is robust to the
>inclusion/exclusion of tree ring information. The Crowley and Lowery
>reconstruction, which is discussed in our chapter, makes use of almost no
>tree ring data, and employs lower-resolution proxy indicators, including
>the very records (Keigwin, Lamb's central England temperature record,
>GISP2 018) that are often used to argue for a warmer MWP, and yet comes to
>the same conclusion. And Tom shows that when averaged across the
>hemisphere, a warmer-than-present-day MWP just doesn't hold up.

>

>Our treatment of this subject in the chapter was far more careful, far
>more inclusive and detailed, and far more nuanced than you give us credit
>for. Your comments below remain disturbingly selective and myopic, and we
>have dealt w/ similar comments many times over...

>

>If ABC is looking to do a hatchet job on IPCC so be it (this doesn't
>surprise me--Stossel has an abysmal record in his treatment of
>environmental issues, from what I had heard), but I'll be very disturbed
>if you turn out to have played into this in a way that is unfair to your
>co-authors on chapter 2, and your colleagues in general. This wouldn't
>have surprised me coming from certain individuals, but I honestly expected
>more from you...

>

>Mike

>

>>Date: Wed, 23 May 2001 13:50:49 -0500
>>From: John Christy <christy@nsstc.uah.edu>
>>X-Mailer: Mozilla 4.04 (Macintosh; I; PPC)
>>To: "Michael E. Mann" <mann@multiproxy.evsc.virginia.edu>
>>Subject: Re: IPCC

>>

>>Hi Mike:

>>

>>Here's what happened. ABC News 20/20 with Stossel wanted me to be part

>>of a segment that will air at the end of June on the climate change
>>issue. Specifically the piece will be dealing with the alarmist
>>rhetoric that tends to be found in the media. I am more than happy to
>>talk about that because I've been very disappointed with what has gone
>>on even with respect to some of the IPCC elders and their pronouncements
>>for forthcoming disasters.

>>

>>In one of the pre-interviews they asked about the "Hockey Stick". I
>>told them of my doubts about the intercentury precision of the record,
>>especially the early part, and that other records suggested the period
>>1000 years ago was warmer. I remember saying that "you must give the
>>author credit for including the large error bars for that time series in
>>the figure." I also specifically said that the most precise record of
>>century scale precision, Greenland Borehole temps, was very important to
>>note but that the figure was not in the IPCC. I then looked quickly at
>>the IPCC reference list and saw the citation of Dahl-Jensen and assumed
>>that it was at least commented on in the 1000 year time series material
>>and told ABC as much.

>>

>>ABC called back a few days later and said they couldn't find a reference
>>to the Greenland stuff in the IPCC discussion of the past 1000 years.
>>So I read the final version, and ABC was right. I said this was an
>>omission that should not have happened - and that I take part of the
>>blame because I had mentioned it at each of our Lead Author meetings.

>>

>>Last Thursday night, I was one of the guys flown to NY City for the
>>taping of the show. There was only one question on this particular
>>issue (it was even after Stossel had left the room) and I gave much the
>>same answer as I indicated above (as best as I can remember)- that the
>>"Hockey Stick" (I don't think I used the term "Hockey Stick", and I'm
>>almost positive I did not mention your name at any point) is one
>>realization of temperatures but that other data are not included and
>>that I had thought the "other" data were clearly mentioned in the IPCC,
>>but weren't. I mentioned the large error bars (as a credit to you) and
>>that I was partly to blame for this omission. If they use my remark,
>>they could slice and dice it to make it as provocative as possible.

>>

>>Four of us were taped for almost 2 hours, and from this they will select
>>about 8 minutes, so I doubt my remarks will make the show. When Stossel
>>came back in after all was said and done, he said to me that I might be
>>a good scientist but I didn't have the emotion and passion necessary to
>>excite the audience. In one way, that is a compliment I suppose. I
>>think Pat M. will have a good chunk of air time (I don't remember
>>whether he added any comments on the 1000-year time series, but he may
>>have).

>>

>>Whatever is shown, just keep it in context. There is no way a clear
>>scientific point with all the caveats and uncertainties can come across
>>in such venues. However, I do agree with Stossel's premise (though I
>>don't know what the piece will actually look like so I may be
>>disappointed) that the dose of climate change disasters that have been
>>dumped on the average citizen is designed to be overly alarmist and
>>could lead us to make some bad policy decisions. (I've got a good story
>>about the writers of the TIME cover piece a couple of months ago that
>>proves they were not out to discuss the issue but to ignore science and
>>influence government.)

>>
>>It is not bad science to look at arguably the most precise measure of a
>>point temperature (actually two boreholes) when that point shows a 600+
>>year period of greater warmth than today. On that time scale, the
>>equivalent spatial scale is much larger than any of the regional
>>oscillations we now identify. But, there are several other (admittedly
>>less robust) measures that suggest greater warmth 1000 years ago that
>>are outside the N. Atlantic area. I just don't think tree rings, if
>>averaged over a century, can tell us which century was warmest. We've
>>never had two complete, independent centuries of global instrumental
>>data (separated by more than one century) to even test this idea. (By
>>the way, I came to my own conclusions long before Broekers piece
>>appeared.) This is an area of further work that I promoted to the NRC
>>about 2 months ago (more funding for Paleo work to assess intercentury
>>precision of all proxy records.)

>>
>>Regarding the IPCC. The IPCC TAR is good, but it is not perfect nor
>>sacred and is open to criticism as any document should be. In some
>>cases it is already outdated. Some of the story lines used to generate
>>high temperature changes are simply ridiculous. The IPCC is us. We are
>>under no gag rule to keep our thoughts to ourselves. I thought our
>>chapter turned out pretty good overall, and I attribute that to the
>>open, working relationship we all had (some other chapter groups did not
>>experience this) and to the tireless efforts of our convening lead
>>authors.

>>
>>Good to hear from you.

>>
>>John C.

>>
>>
>>--

>>*****

>>John R. Christy
>>Director, Earth System Science Center voice: 256-961-7763 begin_of_the_skype_highlighting
256-961-7763 end_of_the_skype_highlighting
>>Professor, Atmospheric Science fax: 256-961-7751
>>Alabama State Climatologist
>>University of Alabama in Huntsville
>><http://www.atmos.uah.edu/atmos/christy.html>

>>
>>Mail: University of Alabama in Huntsville, Huntsville AL 35899
>>Express: NSSTC/ESSC 320 Sparkman Dr., Huntsville AL 35805

>
>

> Professor Michael E. Mann
> Department of Environmental Sciences, Clark Hall
> University of Virginia
> Charlottesville, VA 22903

>e-mail: mann@virginia.edu Phone: (804) 924-7770 begin_of_the_skype_highlighting (804) 924-
7770 end_of_the_skype_highlighting FAX: (804) 982-2137
> <http://www.evsc.virginia.edu/faculty/people/mann.shtml>
>

Professor Michael E. Mann
Department of Environmental Sciences, Clark Hall
University of Virginia
Charlottesville, VA 22903

e-mail: mann@virginia.edu Phone: (804) 924-7770 begin_of_the_skype_highlighting (804) 924-
7770 end_of_the_skype_highlighting FAX: (804) 982-2137
<http://www.evsc.virginia.edu/faculty/people/mann.shtml>

</x-flowed>