

From: Leticia Francisco Sorg - Redação Época - Editora Globo
<lsorg@edglobo.com.br>

To: rruedy@giss.nasa.gov

Subject: Previous table

Date: Wed, 15 Aug 2007 15:10:35 -0300 (14:10 EDT)

Deard Dr. Ruedy, here it's the previous table I used for the comparison. If you could check if I'm using a correct base, it would be great.

Thank you
Leticia

Contiguous 48 U.S. Surface Air Temperature Anomaly (C)

year Annual_Mean 5-year_Mean
DADOS ORIGINAIS

1880	-.41	.13
1881	.15	-.14
1882	-.04	-.34
1883	-.70	-.36
1884	-.73	-.44
1885	-.50	-.48
1886	-.25	-.39
1887	-.21	-.19
1888	-.28	-.05
1889	.28	-.04
1890	.23	-.10
1891	-.24	-.17
1892	-.47	-.21
1893	-.66	-.39
1894	.11	-.31
1895	-.69	-.24
1896	.17	-.14
1897	-.12	-.25
1898	-.17	.00
1899	-.43	-.02
1900	.54	-.01
1901	.07	-.11
1902	-.09	-.11
1903	-.65	-.31
1904	-.41	-.34
1905	-.47	-.37
1906	-.06	-.21
1907	-.22	-.18
1908	.11	-.02
1909	-.25	.01
1910	.31	-.12
1911	.11	-.17

1912	-.89	-.11
1913	-.13	-.21
1914	.03	-.33
1915	-.16	-.36
1916	-.51	-.32
1917	-1.00	-.36
1918	.02	-.42
1919	-.15	-.10
1920	-.45	.12
1921	1.08	.10
1922	.11	-.01
1923	-.09	.15
1924	-.70	-.05
1925	.38	-.04
1926	.04	-.01
1927	.16	.02
1928	.05	-.03
1929	-.54	.16
1930	.11	.12
1931	1.00	.24
1932	-.01	.60
1933	.66	.58
1934	1.24	.42
1935	.05	.40
1936	.18	.43
1937	-.12	.34
1938	.78	.34
1939	.80	.41
1940	.04	.45
1941	.54	.32
1942	.07	.18
1943	.16	.17
1944	.09	.20
1945	-.01	.20
1946	.67	.15
1947	.09	.17
1948	-.08	.13
1949	.18	-.08
1950	-.23	-.04
1951	-.38	.15
1952	.30	.28
1953	.88	.31
1954	.82	.44
1955	-.05	.41
1956	.28	.25
1957	.14	.12
1958	.07	.09

1959	.16	.03
1960	-.22	.00
1961	.00	.02
1962	-.02	-.03
1963	.19	.00
1964	-.08	-.05
1965	-.12	-.07
1966	-.24	-.16
1967	-.10	-.19
1968	-.27	-.19
1969	-.23	-.16
1970	-.12	-.22
1971	-.10	-.11
1972	-.36	-.04
1973	.25	-.05
1974	.15	-.08
1975	-.20	.07
1976	-.23	-.09
1977	.36	-.23
1978	-.51	-.15
1979	-.58	.03
1980	.22	-.12
1981	.65	-.01
1982	-.36	.10
1983	.01	-.02
1984	.01	-.01
1985	-.41	.23
1986	.73	.30
1987	.84	.26
1988	.33	.52
1989	-.17	.51
1990	.88	.41
1991	.69	.26
1992	.31	.38
1993	-.43	.28
1994	.47	.10
1995	.35	.05
1996	-.18	.38
1997	.05	.48
1998	1.24	.54
1999	.94	.55
2000	.65	.88
2001	.89	.76
2002	.67	.68
2003	.65	.75
2004	.54	*
2005	.99	*

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From: Leticia Francisco Sorg - Redação Época - Editora Globo
<lsorg@edglobo.com.br>
To: rruedy@giss.nasa.gov
Subject: RES: RES: RES: U.S. warmest years
Date: Wed, 15 Aug 2007 16:58:13 -0300 (15:58 EDT)

Thank you again and, believe me, it's not being an easy task at all to write this story.

Regards,
Leticia

-----Mensagem original-----

De: Reto Ruedy [<mailto:rruedy@giss.nasa.gov>]
Enviada em: quarta-feira, 15 de agosto de 2007 16:39
Para: Leticia Francisco Sorg - Redação Época - Editora Globo
Assunto: Re: RES: RES: U.S. warmest years

I am a mathematician responsible for the software used for the NASA/GISS climate modeling effort and data analysis. You may abbreviate this any way you want.

I don't envy your task of making an interesting story out of mostly "hot air".

Thanks for your patience and understanding,

Reto

On Wed, 2007-08-15 at 16:21 -0300, Leticia Francisco Sorg - Redação Época - Editora Globo wrote:

- > Mr. Ruedy,
- > I would like to thank you once more the personal attention you have given to my magazine.
- > It will be great to have your opinions on the article.
- > I would like just to check with you how I can present you at the article. Nasa's scientist responsible for software?
- > Thank you very much
- > Best regards
- > Leticia
- >
- > -----Mensagem original-----
- > **De:** Reto Ruedy [<mailto:rruedy@giss.nasa.gov>]
- > **Enviada em:** quarta-feira, 15 de agosto de 2007 15:56
- > **Para:** Leticia Francisco Sorg - Redação Época - Editora Globo
- > **Assunto:** Re: RES: U.S. warmest years

>
>
> Dear Leticia,
>
> This is even more speculative, some people still try to deny in spite of
> the data that it is warming at all. To observe that the warming
> accelerates would take even longer observation times, another 50-100
> years.
>
> It would be bad enough if it keeps increasing at the current rate
> of .2C/decade as it has since 1980. It briefly increased at almost that
> rate in the 1915-1945 period but then it stayed even or even decreased a
> little til about 1980. The period from 1880-1920 was a period of
> basically constant global temperatures.
>
> Again, the frightening thing about today's temperature rise is that it
> was predicted 25 years ago based on solid physics. So chances are it
> will not stop until we deal with the cause of it ! The good thing is
> that we know the cause, and we could use that knowledge if people just
> paid attention to the experts rather than to the bloggers.
>
> Reto
>
> On Wed, 2007-08-15 at 15:15 -0300, Leticia Francisco Sorg - Redação
> Época - Editora Globo wrote:
> > Dear Dr. Ruedy,
> >
> > Thank you very much for your explanation. But could we say that the
> temperature increasing rate is getting bigger in the last decades? It's
> being publicized that the the global temperatures are increasing at a rate
> of 0,2°C per decade in the last to decades, compared to a rate of less
> than 0,1 °C per decade in the beginning of the 20th Century.
> > Is this correct?
> > Thank you,
> > Sincerely
> >
> > -----Mensagem original-----
> > De: Reto Ruedy [mailto:rruedy@giss.nasa.gov]
> > Enviada em: quarta-feira, 15 de agosto de 2007 15:08
> > Para: Leticia Francisco Sorg - Redação Época - Editora Globo
> > Assunto: Re: U.S. warmest years
> >
> >
> > Dear Leticia,
> >
> > I agree with your revised table; I don't know where your previous
table

> > comes from (I'll look into that).
> >
> > To answer your question, given the existing sampling error (.1-.2C):
> >
> > No - we cannot draw any conclusions about our planet from the US data
> > (much less from the rankings you show below):
> >
> > The US has been warming in the period 1980-2006 similarly to the
period
> > from 1920-1934; that earlier 15-year period then was followed by a
> > cooling period and the same might be true for the current 25-year
> > period. The annual US-mean changes are still large compared to any CO2
> > effect.
> >
> > However, the global means show a totally different picture (global
mean
> > year-to-year changes being much smaller than US-mean year-to-year
> > changes); and whereas no scientist, as far as I know, could make a
> > convincing argument for an extended warming period in the US in
> > 1920-1934, our 1982 model runs showed that the effect of CO2 should
> > become noticeable in the global means within the next 2-4 decades. And
> > sadly, the global (not the US) data now available showed that model
was,
> > if anything, underestimating the effect.
> >
> > Sincerely,
> >
> > Reto
> >
> >
> >
> >
> >
> > On Wed, 2007-08-15 at 14:03 -0300, Letícia Francisco Sorg - Redação
> > Época - Editora Globo wrote:
> > > Dear Dr. Ruedy,
> > >
> > > I would like to thank you very much for you attention and precise
> > > information.
> > > The last point I would like to ask you is concerning the ranking of
> > > the warmest years in U.S.
> > > I have organized the data from the previous and the correct table of
> > > temperatures and I got to this ranking:
> > >
> > > Previous table
> > > 1º
> > > 1934
> > > 1º

> > > 1998
> > > 2^o
> > > 1921
> > > 3^o
> > > 1931
> > > 4^o
> > > 2005
> > > 5^o
> > > 1999
> > > 6^o
> > > 2001
> > > 7^o
> > > 1953
> > > 8^o
> > > 1990
> > > 9^o
> > > 1987

> > >

> > > Revised table

> > > 1^o
> > > 1934
> > > 2^o
> > > 1998
> > > 3^o
> > > 1921
> > > 4^o
> > > 2006
> > > 5^o
> > > 1931
> > > 6^o
> > > 1999
> > > 7^o
> > > 1953
> > > 8^o
> > > 1990
> > > 9^o
> > > 1938
> > > 10^o
> > > 1939

> > >

> > > As I've pointed in red, two years from 30's entered in the ranking of

> > > 10 warmest years in U.S.. Considering this change, would it be possible to say that the planet is becoming hotter and hotter?

> > >

> > > Thank you once more,

> > > Best regards,

> > > Letícia
> > >
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> > > da Editora Globo.
> > >
--
Reto Ruedy <rruedy@giss.nasa.gov>

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From: Gavin Schmidt <gschmidt@giss.nasa.gov>
Reply-To: gschmidt@giss.nasa.gov
To: lesgiss@verizon.net <lesgiss@verizon.net>
Cc: rruedy@giss.nasa.gov, rschmunk@giss.nasa.gov, jhansen@giss.nasa.gov
Subject: Re: FW: McIntyre Interview
Date: Thu, 16 Aug 2007 11:45:47 -0400 (EDT)

Reto and Rob Schmunk have the details. He was using a robot to automatically download pages that robots weren't allowed to (because of the server demands of interactive scripts) and Rob blocked the IP. After a couple of emails back and forth, he was allowed to continue on weekends/evenings. The idea that this was anything personally directed at McIntyre or to prevent examination of the data is simply bogus.

Gavin

```
*-----*
| Gavin Schmidt           NASA/Goddard Institute for Space Studies |
|                         2880 Broadway                       |
| Tel: (212) 678 5627     New York, NY 10025                   |
|                         |                                     |
| gschmidt@giss.nasa.gov  http://www.giss.nasa.gov/~gavin |
|                         |                                     |
*-----*
```

On Thu, 16 Aug 2007, lesgiss@verizon.net wrote:

> Hi to all:
>
> Dr. McIntyre gave an interview to an organization called TownHall.com in
> which he alleges that NASA blocked his IP address and that because of
> 1.5
> million hits/month on his website, NASA retreated from its position.
She
> wants to know if this is an accurate retelling of what occurred?
>
> The attachment is her ENTIRE 4 page interview which details in greater
> length the timeline and interactions with GISS....
>
> Thanks.
>
> Leslie
>
> Original Message:
> -----
> From: Amanda Carpenter amanda.carpenter@townhall.com

> Date: Thu, 16 Aug 2007 11:11:31 -0400
> To: Leslie.M.McCarthy@nasa.gov
> Subject: McIntyre Interview
>
>
>
>
> Hi, Leslie.
> I've attached the complete version of the interview, but this is the
part I
> was looking for comment on. Basically, I'd just like to know if this is
> true and explanation of what really went on here.
>
> Thanks!!!
>
> Here it is:
>
> McIntyre:I wrote to NASA in May and asked them for the source code for
the
> adjustment software that they used to fix these stations and they
refused
> to provide it. So I got interested in sort of looking at comparing the
> version of the temperature history of individual stations that NASA had
> against original data. I noticed that in some cases there was a very
sharp
> jump in the differences between these two versions. The NASA version
took a
> step in January 2000 relative to the original data. So, I then collected
> the data for both the NASA versions and the original data for all 1200
> stages in the US historical network.
>
> This led to a bit of fight with NASA in May because as I started
> downloading the data in sequence they cut off my access to the data.
>
> Q. Meaning, your computer?
> They blocked my IP address.
>
> Q. Why were they so opposed?
>
> Well, first of all they probably werent used to, they dont have a very
> efficient distribution of the data so I ended up scraping the data off
> various web pages and I had written a computer program to do that. So, I
> was repetitively downloading data. Anyway, even after I was blocked and
I
> explained myself they still didnt want to let me have access to the
data.
> They just said go look at the original data. And I said no, I want to

From: lesgiss@verizon.net <lesgiss@verizon.net>
Reply-To: lesgiss@verizon.net
To: rruedy@giss.nasa.gov
Subject: draft McIntyre statement
Date: Thu, 16 Aug 2007 12:20:00 -0400

Hi Reto:

I have not heard from Jim about the McIntyre allegations of cutting off his IP address...but drafted this short response...what do you think???

On May 16, 2007, an IP address attached to a cable.rogers.com network made 16,000 attempts in several hours to scrape GISTEMP station data. The webmaster had noted that this large volume was dramatically slowing access to the site and data by other users. That address was blocked by the GISS webmaster as it violated rules from using web robots to access off-limits directories. The webmaster had no idea of the identity of the user until Dr. McIntyre emailed the webmaster. He was then advised of the reason for his service denial and advised to contact the GISTEMP research group to explain data needs. On the 17th, Dr. McIntyre again inquired about his access and was again advised to contact the GISTEMP group. Dr. Reto Ruedy of the GISTEMP group contacted Dr. McIntyre to discuss his requests.

(need to add in details about his requests to provide data and/or in a format that we don't have-Reto??)

Shortly after that email exchange, Dr. McIntyre was advised that he could again begin downloading provided that he accepted generally accepted protocols, i.e. doing so at times so as to not adversely affect other users (late nights, weekends, etc.).

Leslie

mail2web.com - Microsoft® Exchange solutions from a leading provider -
<http://link.mail2web.com/Business/Exchange>

Ftpo : Reto Ruedy <rruedy@giss.nasa.gov>
Rj r m- Tp: rruedy@giss.nasa.gov
 Tp: lesgiss@verizon.net
Syblj eu Re: draft McIntyre statement
 Day: Thu, 16 Aug 2007 13:47:22 -0400

Leslie,

It might be good to note, that Steve got the time line wrong; the first time he contacted us was AFTER and BECAUSE his massive downloads got blocked by our webmaster; he never contacted us before that event.

So the claim that he downloaded our data because we refused to honor any of his requests is pure invention.

Blocking that IP address was a routine action any webmaster would take if he sees that one particular user monopolizes access to his web site. He had no idea about the identity of the owner of the IP address.

After he contacted us, his name did not ring any bells; we assumed it was a researcher interested in all station data. Since our data are organized for users to view individual stations rather than for massive downloads, we thought we could help him by directing him to GHCN where we got the data from and where they are organized for easy download.

Some data providers insist that we don't pass on their data; we are asked to refer requests to them, since they want to keep control of the distribution of their data. That is why we have to clear any data requests with Dr. Hansen. We were able to do that the very same day.

His first request for "our code" came in the same email in which he thanked us for giving him full access to our data.

That request was so general, that we had no idea what code he was talking about. Only after consulting his blog site did we learn that he is under the false impression that we have secret software that can "fix" faulty data. Since we don't have any such software, we were unable to honor this particular request.

The truth is that all our programs are fully documented in the literature and on our web site. Their task is to combine the station data into a gridded data set of anomalies. No fixes are applied except a simple well-documented urban adjustment (that happens to reduce the warming trend more than other groups' adjustment schemes). No "magic fix" programs are used. Instead we estimate and take into consideration the resulting margin of error before we draw any conclusions, a habit that distinguishes serious researchers from pranksters.

Reto

On Thu, 2007-08-16 at 12:20 -0400, lesgiss@verizon.net wrote:

> Hi Reto:

>

> I have not heard from Jim about the McIntyre allegations of cutting off his

> IP address...but drafted this short response...what do you think???

>

> -----

>

> On May 16, 2007, an IP address attached to a cable.rogers.com network made

> 16,000 attempts in several hours to scrape GISTEMP station data. The

> webmaster had noted that this large volume was dramatically slowing access

> to the site and data by other users. That address was blocked by the GISS

> webmaster as it violated rules from using web robots to access off-limits

> directories. The webmaster had no idea of the identity of the user until

> Dr. McIntyre emailed the webmaster. He was then advised of the reason for

> his service denial and advised to contact the GISTEMP research group to

> explain data needs. On the 17th, Dr. McIntyre again inquired about his

> access and was again advised to contact the GISTEMP group. Dr. Reto Ruedy

> of the GISTEMP group contacted Dr. McIntyre to discuss his requests.

here we might add: ... requests in an effort to help him to get what he needed.

>

>

> (need to add in details about his requests to provide data and/or in a format that we don't have--Reto??)

>

> Shortly after that email exchange, Dr. McIntyre was advised that he could

> again begin downloading provided that he accepted generally accepted

> protocols, i.e. doing so at times so as to not adversely affect other users

> (late nights, weekends, etc.).

> -----

>

> Leslie

>

> -----

> mail2web.com - Microsoft® Exchange solutions from a leading provider -

> <http://link.mail2web.com/Business/Exchange>

>

>

>

--

Reto Ruedy <rruedy@giss.nasa.gov>

From: @gmail.com>
To: lesgiss@verizon.net
Cc: rschmunk@giss.nasa.gov, rruedy@giss.nasa.gov, jhansen@giss.nasa.gov,
lmccarthy@giss.nasa.gov, gschmidt@giss.nasa.gov
Subject: Re: FW: McIntyre Interview
Date: Thu, 16 Aug 2007 16:09:45 -0400

Hi all,

I am so hence the GMail address as I respond to the e-mail.

Gavin has the essentials correct in responding to Les's question.

On about May 16, around 10:30 or 11:00 p.m. as I was getting ready to leave GISS for the night, I belatedly checked the error logs on the two web servers and discovered that there were several thousand errors in the log on Web2. On a normal day there would be about 500.

The errors in question were all for addresses which didn't exist in either CGI area or in the "work space" area for the GISTEMP station data script. Further investigation revealed that someone had been firing off requests to Web2 since about 2:00 that afternoon for the station data and by the time I looked into the situation, there had been at least 16,000 requests. Perhaps half of these had gone to addresses in the CGI directory, which means that activating CGI scripts to extract data, etc.

The identity of the computer making the requests was consistent, and as best I recall was something in the domain of Rogers Communications, a Canadian phone company and ISP.

Plainly this activity was from an "automated" agent, which in rough parlance is usually called a "robot". Many robots have legitimate purposes, e.g. search engines such as Google or Yahoo, but others do not (spambots), and others one just doesn't know.

As the robot on May 16 came from a generic ISP address rather than, say, an academic address and further because it's "user-agent" tag provided no further information about who was running it, and also because the GISS websites have "robots.txt" files which instruct all well-behaved web robots to stay out of the CGI directories, I cut off access to the ISP in question to the websites on Web2.

The next day I received e-mail from McIntyre asking what was up. He did not identify himself or on whose behalf he was acting.

At some point Reto got involved in the communications, and he must have mentioned to Jim what was up. Later on Reto indicated to me that Jim had said to go ahead and re-grant McIntyre access to the material.

I do not know if at any point McIntyre actually asked Jim or Reto if it was possible to obtain the GISS copy of the station data in a single or small number of files. All I know is that my first contact with him came because he was blasting umpteen thousand requests at the webservers.

I have no idea how much traffic McIntyre's website gets, and I don't know that I have ever even looked at it. His tone in his e-mail was on the arrogant side, so I had no desire to prolong communication with him any longer than was necessary.

@panix.com

From: lesgiss@verizon.net <lesgiss@verizon.net>
Reply-To: lesgiss@verizon.net
■ **To:** jhansen@giss.nasa.gov, lesgiss@verizon.net, _____@gmail.com,
dcain@giss.nasa.gov, rruedy@giss.nasa.gov, ...
Subject: Re: response on McIntyre IP claims??
Date: Thu, 16 Aug 2007 17:11:29 -0400

I agree...but in this case we are in the right. I think we should just make the point clear that McIntyre's story is a fabrication in a very generic way.

Take a look at it...I'm also sending it to Reto and Gavin as well.

Leslie

Original Message:

From: James Hansen jhansen@giss.nasa.gov
Date: Thu, 16 Aug 2007 16:33:28 -0400
To: lesgiss@verizon.net, _____@gmail.com, dcain@giss.nasa.gov
Subject: Re: response on McIntyre IP claims??

Do we want to lower ourselves to debating with a court jester? Of course, that is what he wants.

I don't have a strong preference as long as it is not taking a significant amount of my time.

I have not read the stuff that you are referring to, but as I recall, as soon as I was told about the matter, I said that he was welcome to the data.

Jim

On 8/16/07, lesgiss@verizon.net <lesgiss@verizon.net> wrote:

>
> Hi Jim:
>
> Amanda Carpenter of Townhall.com has inquired if we will have a response
> to
> McIntyre's claims in their interview yesterday that NASA blocked his IP
> address? I've heard from both Reto and Robert and can draft something
> if
> you want...please let me know.
>

> Thanks.

>

> Leslie

>

> -----
> mail2web.com - What can On Demand Business Solutions do for you?
> <http://link.mail2web.com/Business/SharePoint>

>

>

>

>

mail2web.com - Enhanced email for the mobile individual based on
Microsoft®
Exchange - <http://link.mail2web.com/Personal/EnhancedEmail>

Word document attachment (mcintyre isp 08-15-07.doc), "mcintyre isp 08-15-07.doc"

On May 16, 2007, an IP address attached to an address in the domain of Rogers Communications, a Canadian phone company and ISP made 16,000 attempts in several hours to scrape GISTEMP station data. The webmaster had noted that this large volume was dramatically slowing access to the site and data by other users. He identified that this activity was from an "automated" agent which, in rough parlance, is usually called a "robot". That address was blocked by the GISS webmaster as it violated rules from using web robots to access off-limits directories. The webmaster had no idea of the identity of the user until Dr. McIntyre emailed the webmaster seeking clarification on why he was unable to log in. It should be noted that this was routine; denials of service have been made in the past under similar circumstances to other users as well.

Dr. McIntyre was then advised of the reason for his service denial and advised to contact the GISTEMP research group to explain data needs. On the 17th, Dr. McIntyre again inquired about his access and was again advised to contact the GISTEMP group. Dr. Reto Ruedy of the GISTEMP group contacted Dr. McIntyre to discuss his requests. Data on the GISS site is organized for users to view individual stations rather than for massive downloads and in an attempt to assist him, he was directed to NOAA's Global Historical Climatology Network (GHCN).

Some data providers insist that NASA GISS does not pass on their data and, as such, we are asked to refer requests to them, since they want to keep control of their own data. Dr. McIntyre's first request for "our code" came in the same email in which he thanked GISS for giving him full access to data. His request was so general that GISS had no idea what code he was talking about. Only after consulting his blog site was it learned that he was under the false impression that GISS has secret software that can "fix" faulty data. As NASA GISS does not have any such software, we were unable to honor his particular request.

Shortly after that email exchange, Dr. McIntyre was advised that he could again begin downloading provided that he accepted generally accepted protocols, i.e. doing so at times so as to not adversely affect other users (late nights, weekends, etc.). He replied "thank you for this. I will observe this condition."

Steve McIntyre interview on August 15, 2007
Over the phone 4:30 pm

Q. Can you explain to me in layman's terms how you found this error?

Yeah. Quickly, a fellow in California named Anthony Watts noticed that some of the weather stations used to make historical U.S. statistics were located in places they weren't supposed to be. One of them was in a parking lot and the trend for the station in a parking lot was way up and a nearby station that was in a proper location in a rural area was relatively flat. So, this led to some controversy and he started a volunteer effort where people started surveying these weather stations and seeing what they looked like.

Now, defenders of the weather station system argued that NASA had software that could fix that data. And, so it really didn't matter if the station was in a parking lot in Tucson or something like that. NASA software could fix it. So, that type of adjustment is a statistical issue that interests me. And, so I wrote to NASA in May and asked them for the source code for the adjustment software that they used to fix these stations and they refused to provide it. So I got interested in sort of looking at comparing the version of the temperature history of individual stations that NASA had against original data. I noticed that in some cases there was a very sharp jump in the differences between these two versions. The NASA version took a step in January 2000 relative to the original data. So, I then collected the data for both the NASA versions and the original data for all 1200 stations in the US historical network.

This led to a bit of fight with NASA in May because as I started downloading the data in sequence they cut off my access to the data.

Q. Meaning your computer?
They blocked my IP address.

Q. Why were they so opposed?

Well, first of all they probably weren't used to they don't have a very efficient distribution of the data so I ended up scraping the data off various web pages and I had written a computer program to do that. So, I was repeatedly downloading data. Anyway, even after I was blocked and I explained myself they still didn't want to let me have access to the data. They just said go look at the original data. And I said no, I want to see the data you used. I know what the original data looks like. I want to see the data that you used. But one of the nice things about having a blog that gets a million and half hits a month is that I then was able to publicize this block in real-time and they very quickly withdrew their position and allowed me to have access.

Once they did that, I downloaded all 1200 stations and calculated the value of this step in the year 2000. In some cases it was a negative step and in some cases it was a positive step, but it became clear that what they had done they had, for some reason, changed the version of data that they were using in 2000. Before 2000 they were using an adjusted version of data and after 2000 they were using an unadjusted version.

After the controversy broke out NASA has said that the reason they did that was because the adjusted version was never available after 2000. That's actually untrue. The adjusted version is sitting in exactly the same data directory. It just seems to be an error of some kind on their part.

The amount on individual stations and this is where we started, trying to explain problems with individual stations, had jumps of up to one degree centigrade. I calculated a distribution of these jumps for all 1200 stations. Many of the jumps were negative but the number of small jumps was itself only a fraction. Probably 75 percent of the stations had jumps of at least a quarter degree in the year 2000. But the average, because there both positive and negative ended up being somewhat over .15 degrees. That doesn't necessarily seem that much, but when the entire increase in temperature in the United States had been previously reported to be about half a degree, this .15 degree is not a small number when you are measuring half degree numbers.

So, I sent them an email notifying them of this error on Saturday August 4th and I pointed out that I thought they had changed data sources and on Tuesday August 7th they sent me a note agreeing that there was an error and they had, when I looked at their website, they had replaced the data for all 1200 U.S. historical weather stations and they'd also replaced their U.S. temperature history. While they added a mention of me on their webpage describing their methodology, but didn't provide any notice to readers that they had replaced all this data. So, for example, if you had been doing a study which required that you knew what the temperature was in Reno there was no notice that the data you'd had downloaded prior to August 2007 had contained an error. And in some cases a very large error.

When I looked at what their restated U.S. temperature history was, I noticed there as a change in the leading years. So, I wrote a light-hearted post on my blog that said there's a change in the leader board at the U.S. Open and that even though people thought that the years 1934 and the years 1998 had been in the clubhouse and had a shower, in fact they were still on the course and that 1934 had a late birdie and 1998 had a late bogie and 2006 had a late-triple bogie and when the dust settled 1934 was now the leader of the U.S. Open

Q. It seems at the heart of this was that NASA was unwilling to give you the methodology?

There are a couple of layers of issues. One issue was that they had an error. After I had identified this particular error to them and asked them for their source code so I could see how the rest of their adjustments actually worked, and this was really kind of an incidental point in checking their adjustment process. One of the things I started from was trying to evaluate whether their adjustment process was equal in adjusting bad data. One of the things I think you can conclude from this exercise is that their adjustment software was obviously incapable of picking up fictional jumps even as big as one degree centigrade in the year 2000 and the proof was in the pudding because they hadn't picked it up. In fact, they hadn't only failed to fix it, they created it. So, the claim that their adjustment methodology was capable of fixing bad data, I mean, that's the point I want people to take home from this. What they've done now is inserted a patch into an error

that I identified for them but they haven't established that the rest of their adjustment methodology is any good. The adjustments are not small. The adjustments that they make are fully equal to the total amount of warming in the United States the past century. So, you're dealing with adjustments that are the same size as the effect that you are trying to measure. So, it's worth spending a minute or two trying to understand exactly what they did. Now, my interest in these things is understanding exactly what they did. Now, they're point of view is well, Gavin Schmidt of NASA says well "I don't get this audit mean." What he calls the audit mean. Well you know, everyone in the world, if you aren't an academic and you're doing business offerings or you work in a company, you get audited. And you can't say to an auditor, here are the invoices, you do your own financial statements if you don't like ours. Then, the auditor says my only interest how you did yours. So, when Gavin Schmidt says well you don't think we've done an adjustment methodology, why don't you do your own calculation and you can publish it, try to publish it in peer-reviewed literature and we can start from there. My take is well, I've had other experiences with folks like that before and then they think if you mis-implemented their methodology they scream to high heaven. So, I said "No" and they said "You are asking to be spoon-fed" and I said "No, I'm not asking to be spoon-fed." I'll deal with raw code, it's just that the verbal descriptions in academic articles do not meet the kind of engineering, quality level that I expect from things or that I am looking for and that represents one point of dispute between me and them. They don't seem to accept the idea. This is an important issue and therefore academics have to stop being precious and arguing that these codes are their private property.

Q. If NASA were to handle this all better, or to your liking, what are some recommendations you'd give them?

One of the main recommendations I've consistently made both to NASA and to journals is that when people publish articles they should have to archive the data as they used it. The exact provenance of their data if they downloaded it from an internet archive they should have to post the URL of the place where they got the data and the date they downloaded it so you can know the exact version they got in case the versions change. And, they should archive the code in which they obtained the calculations. This is not by any means an impossible or far-fetched set of protocols. In econometrics right now, if you want to get an article published in the American Economic Review, a leading journal, that's exactly what you have to do. That policy was instituted by the then-editor who is now chairman of the federal reserve system. It's a policy that is easy to implement and there is a lot more riding right now on climate policy than there is on labor market studies or studies of inflation. So, I think there's every reason to require NASA and other contributors to climate science to improve their game in terms of how they provide disclosure to other readers and other researchers of their methodology and data.

In some cases there are some real problems. You know Lonnie Thompson the ice guy has published sort of summaries of his data which are mutually inconsistent and I've tried to get original sample data to try and reconcile these and he's refused and he's published articles in journals and the journals have refused to require him to do it and the National Science Foundation which has funded it has refused to require it so it's not just NASA it's a very widespread problem in climate science right now.

From: Gavin Schmidt <gschmidt@giss.nasa.gov>
To: lesgiss@verizon.net
Cc: Jim Hansen <jhansen@giss.nasa.gov>, dcaim@giss.nasa.gov, rruedy@giss.nasa.gov, [@gmail.com](mailto:),
Subject: Re: response on McIntyre IP claims??
Date: 16 Aug 2007 17:31:31 -0400

a few suggested edits. I don't advise getting rhetorical so I deleted the third paragraph.

gavin

On Thu, 2007-08-16 at 17:11, lesgiss@verizon.net wrote:

> I agree...but in this case we are in the right. I think we should just
> make the point clear that McIntyre's story is a fabrication in a very
> generic way.
>
> Take a look at it...I'm also sending it to Reto and Gavin as well.
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> Leslie
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> Original Message:
> -----
> From: James Hansen jhansen@giss.nasa.gov
> Date: Thu, 16 Aug 2007 16:33:28 -0400
> To: lesgiss@verizon.net, [@gmail.com](mailto:), dcaim@giss.nasa.gov
> Subject: Re: response on McIntyre IP claims??
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> Do we want to lower ourselves to debating with a court jester? Of
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> > mail2web.com What can On Demand Business Solutions do for you?
> > <http://link.mail2web.com/Business/SharePoint>
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> > -----
> > mail2web.com Enhanced email for the mobile individual based on
Microsoft®
> > Exchange - <http://link.mail2web.com/Personal/EnhancedEmail>
> >

Word document attachment (mcintyre_isp_08-15-07.doc)

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From: Reto Ruedy <rruedy@giss.nasa.gov>
Reply-To: rruedy@giss.nasa.gov
To: Gavin Schmidt <gschmidt@giss.nasa.gov>
Subject: Re: response on McIntyre IP claims??
Date: Thu, 16 Aug 2007 18:08:31 -0400

Gavin,

So you don't think it is worth to point out that the whole first part of the interview section below is a total fabrication, and his first request for source code came with the "thank you" note mentioned at the end of the response, still May 17. Also, his reasons for our "reluctance" is wild speculation that is light years away from reality.

On second thought, it's not worth going into these details, especially in a case where the interviewer is more likely to believe Steve than us.

So, I'm fine with the edits.

Reto

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>> From: James Hansen jhansen@giss.nasa.gov
>> Date: Thu, 16 Aug 2007 16:33:28 -0400
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>> Subject: Re: response on McIntyre IP claims??

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> > > mail2web.com What can On Demand Business Solutions do for you?
> > > <http://link.mail2web.com/Business/SharePoint>
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> > > -----
> > mail2web.com Enhanced email for the mobile individual based on Microsoft®
> > Exchange - <http://link.mail2web.com/Personal/EnhancedEmail>
> >
> >

Reto Ruedy <rruedy@giss.nasa.gov>

From: Gavin Schmidt <gschmidt@giss.nasa.gov>
To: rruedy@giss.nasa.gov
Subject: Re: response on McIntyre IP claims??
Date: 16 Aug 2007 18:16:22 -0400

the issue is here that you are dealing with a hostile interviewer. In such circumstances, it is much better simply to point out clear errors. If you open up another front they will dive on that instead and abandon all the previous positions (since they are not sincere in any case).

It does however highlight the rhetorical power of saying that the code is secret and things are being kept from the public. It may still be worth putting up a clean version of the adjustment program on the website in order to have something to point to in such cases.

gavin

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> > > > mail2web.com What can On Demand Business Solutions do for you?
> > > > <http://link.mail2web.com/Business/SharePoint>

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To: Gavin Schmidt <gschmidt@giss.nasa.gov>
Cc: lesgiss@verizon.net, @gmail.com, dcain@giss.nasa.gov,
rruedy@giss.nasa.gov
Subject: Re: response on McIntyre IP claims??
Date: Fri, 17 Aug 2007 10:59:56 -0400

I agree that the shortened version is better. What are you going to do with this?

On 16 Aug 2007 17:31:31 -0400, **Gavin Schmidt** <gschmidt@giss.nasa.gov> wrote:
a few suggested edits. I don't advise getting rhetorical so I deleted
the third paragraph.

gavin

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From: lesgiss@verizon.net <lesgiss@verizon.net>
Reply-To: lesgiss@verizon.net
To: jhansen@giss.nasa.gov, gschmidt@giss.nasa.gov, dshindell@giss.nasa.gov,
rruedy@giss.nasa.gov
Cc: dcain@giss.nasa.gov, robert.j.gutro@nasa.gov
Subject: FW: BBC TV series
Date: Wed, 22 Aug 2007 16:40:10 -0400

Good afternoon, gentlemen:

See the below invitation to participate in TV programming by the BBC "looking at the effects of artificial chemicals (all things toxic!) on our environment on a global scale."

Please let me know if you have an interest in speaking/emailing with Mr. Morgan, and possibly participating in the project.

Thanks.

Leslie

Original Message:

From: James Morgan-GW James.Morgan3@bbc.co.uk
Date: Wed, 22 Aug 2007 21:00:21 +0100
To: Leslie.M.McCarthy@nasa.gov
Subject: BBC TV series

Dear Lesley,

- > I am a researcher from the BBC, in the UK. I am developing a landmark
- > television series, looking at the effects of artificial chemicals (all
- > things toxic!) on our environment on a global scale.
- > It will be the ultimate global health check - an update on where we
- > stand now, 45 years since Rachel Carson wrote her influential and
- > controversial book Silent Spring. Using similar headings as Carson
- > for the chapters in her book, the six episodes will be as follows:
- >
- > Planet
- > Oceans (and Rivers)
- > Humans
- > Insects, Soils and Funghi
- > Animals, Birds & Fish
- > Our Green Mantle (trees, plants etc)
- >

Regarding the first episode, "Planet", I am keen to speak to NASA

scientists who are using satellites to measure atmospheric pollution from space. Your colleague Rob, in the Goddard media relations office, has recommended four scientists, who you may be able to put me in touch with:

James Hansen
Drew Schindel
Gavin Schmidt
Reto Reudy

> I am keen to get a clear and informed idea of how the Earth has
> changed in the past four decades, how NASA is measuring these changes,
> and how we could illustrate these changes in a TV programme in the
> future. Also, I would like to know about any new and positive
> developments where chemicals which have been a problem in the
> atmosphere have been remedied by new and advanced methods?
>
> I look forward to hearing from you.
> Kind regards,
James

James Morgan
> BBC - Area 2.27 - Pacific Quay - Glasgow - G51 1DA
> T: +44 (0) 7812 198238 - E: james.morgan3@bbc.co.uk
>
>

<http://www.bbc.co.uk/>

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mail2web.com – What can On Demand Business Solutions do for you?
<http://link.mail2web.com/Business/SharePoint>

From: James Hansen <jhansen@giss.nasa.gov>

To: Andrew Revkin <anrevk@nytimes.com>

Cc: gschmidt@giss.nasa.gov, Reto Ruedy <cdrar@giss.nasa.gov>, Makiko Sato <makis@giss.nasa.gov>

Subject: Re: just to be sure..

Date: Thu, 23 Aug 2007 20:51:59 +0200 (14:51 EDT)

We can add an uncertainty, indeed we already include a bar at several points on our temperature curve, but we note that it only includes the largest source of uncertainty in the temperature change (incomplete spatial coverage).

As far as I know we do not make such a list. We don't like such lists, because the results are not significant and are certain to differ from one group to another. It is generally the media that makes a list. We look for a new record high, but note that it is a virtual tie if the difference is small.

Just look at our published paper. It has 1934 as the warmest year, by an insignificant amount, with 1998 second. The same result that we have now. This ranking was not affected by the flaw in post 2000 data.

Of course it is good to improve the station data. Temperature is an absolute measurement, however, so errors over time are not cumulative. When there are several thousand stations it is easy to find what seem like a huge number of stations with problems.

Jim

On 8/23/07, **Andrew Revkin** <anrevk@nytimes.com> wrote:

noaa folks are saying they're working on adding a description of uncertainty levels to year-to-year temp time series.

and lawrimore says they could do better in press outreach to stress this.

do you agree that this should be more clearly communicated... should GISS or NOAA or others even try to make a list of individual years as sharp data points?

separately, i'm still a bit confused about whether GISS ever had 1934 as hottest 48-state year or not.

can you help clarify?

finally, do you agree that generally we (globally) should be doing a lot more to improve surface temperature tracking?

i never, til today, visited www.surfacestations.org and found it quite amazing. if our stations are that shoddy, what's it like in Mongolia?

ANDREW C. REVKIN

The New York Times / Environment

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phone: 212-556-7326 fax: 509 -357-0965

Arctic book: *The North Pole Was Here*

Amazon book: *The Burning Season*

Acoustic-roots band *Uncle Wade*

From: Makiko Sato <makis@giss.nasa.gov>
To: James Hansen <jhansen@giss.nasa.gov>
Cc: rruedy@giss.nasa.gov
Subject: Re: just to be sure..
Date: Fri, 24 Aug 2007 06:41:33 -0400

Jim,

Of course Reto thinks the ranking that shows which year was warmer by 0.01 deg is stupid. But as long as I give the table of US mean temperature on our web site, people can make rankings themselves. What Reto wanted to tell you was from Jan. 7 - Aug. 7, 2007, we had 1998 warmer than 1934 by 0.01 deg in the table I show on our web page. (The reason was those numbers keep changing by such a small amount by adding station data, and probably as Reto pointed out, we processed data in January before a lot of data came in. These recent data can change numbers in old time by small amounts.) From next time I will update the US mean table every month. I was doing it only once a year because I didn't think people would make such a mess out of 0.01 deg difference in US. 0.01 deg is negligible globally but even 2% of that for the US!!

Makiko

On 8/24/07, James Hansen <jhansen@giss.nasa.gov> wrote:

- > Not sure that I understand this. It mentions 1934 and 1998 were tied for
- > several months in our monthly updates, but later you say that 1998 was
- > warmest (presumably by a meaningless 0.01, although I do not remember
- that -
- > and why would we have cared or why would we have checked that)? In
- general
- > I think that we want to avoid going into more and more detail about
- ranking
- > of individual years. As far as I remember, we have always discouraged
- that
- > as being somewhat nonsensical, other than the question of what is the
- > warmest year, with uncertainty. Also I don't think that people, such as
- > Gore, are being unreasonable when they make statements such as (about) 9
- of
- > 10 warmest years were in the past two decades, or however they say that
-
- > but this of course refers to global temperature, which is much less
- noisy
- > and more relevant to the question of human-made climate change. The
- > contrarians are cleverly mixing up these two matters, global and U.S.,
- thus
- > completely confusing the public discussion, and again winning more time

in
> their attempt to keep things confused, not without aid from their
unwitting
> ally, the media. As I tried to make clear in 'Usufruct', that is the
real
> battle, as we are running out of time. They will live in infamy, but
they
> either do not understand or they don't give a damn. Jim
>
>
> On 8/23/07, Reto Ruedy <rruedy@giss.nasa.gov> wrote:
> > Jim,
> >
> > I don't know whether Andrew Revkin is interested in the details below:
> >
> > The US temperature graph in our 1999 paper, based on GHCN data, shows
> > 1934 0.5C warmer than 1998; 1998 was in 5th place behind 1921, 1931,
> > 1938, 1953.
> >
> > In the corresponding graph in our 2001 paper, now based on the
carefully
> > corrected USHCN data, 1934 and 1998 are in first, 1921 in third place
> > (NOAA who provided the USHCN data had 1998 slightly ahead of 1934).
> >
> > The US table we had posted during all of 2006 showed 1998 and 1934
even
> > at 1.24C. (I got a copy from a journalist in Brazil, we don't save
these
> > data).
> >
> > As far as I know, the US table on our site from Jan to Aug 2007 was
the
> > first and only one with 1998 ahead of 1934 - some US stations must
have
> > still been missing in the GHCN file we downloaded on January 8, 2007.
> > (Each month, GHCN regenerates the whole file over a period of a few
> > days; in previous years we had to wait til mid January for the US
> > stations to be added in again).
> >
> > Reto
> >
> > On Thu, 2007-08-23 at 20:51 +0200, James Hansen wrote:
> > > We can add an uncertainty, indeed we already include a bar at
several
> > > points on our temperature curve, but we note that it only includes
the
> > > largest source of uncertainty in the temperature change (incomplete

> > > spatial coverage).
> > >
> > > As far as I know we do not make such a list. We don't like such
> > > lists, because the results are not significant and are certain to
> > > differ from one group to another. It is generally the media that
> > > makes a list. We look for a new record high, but note that it is a
> > > virtual tie if the difference is small.
> > >
> > > Just look at our published paper. It has 1934 as the warmest year,
by
> > > an insignificant amount, with 1998 second. The same result that we
> > > have now. This ranking was not affected by the flaw in post 2000
> > > data.
> > >
> > > Of course it is good to improve the station data. Temperature is an
> > > absolute measurement, however, so errors over time are not
cumulative.
> > > When there are several thousand stations it is easy to find what
seem
> > > like a huge number of stations with problems.
> > >
> > > Jim
> > >
> > >
> > > On 8/23/07, Andrew Revkin <anrevk@nytimes.com> wrote:
> > > noaa folks are saying they're working on adding a
description
> > > of uncertainty levels to year-to-year temp time series.
> > > and lawrimore says they could do better in press outreach to
> > > stress this.
> > >
> > > do you agree that this should be more clearly
communicated...
> > > should GISS or NOAA or others even try to make a list of
> > > individual years as sharp data points?
> > >
> > > separately, i'm still a bit confused about whether GISS ever
> > > had 1934 as hottest 48-state year or not.
> > > can you help clarify?
> > >
> > > finally, do you agree that generally we (globally) should be
> > > doing a lot more to improve surface temperature tracking?
> > > i never, til today, visited www.surfacestations.org and
found
> > >
> > > it quite amazing. if our stations are that shoddy, what's it
> > > like in Mongolia?
> > >

From: Makiko Sato <makis@giss.nasa.gov>
To: James Hansen <jhansen@giss.nasa.gov>
Cc: Andrew Revkin <anrevk@nytimes.com>, Reto Ruedy
<cdrrar@giss.nasa.gov>, gschmidt@giss.nasa.gov
Subject: Re: one last request (data for the graph below)
Date: Fri, 24 Aug 2007 06:24:57 -0400

I can give you the data easily when I come in to work later today. The base period is 1951-1980.

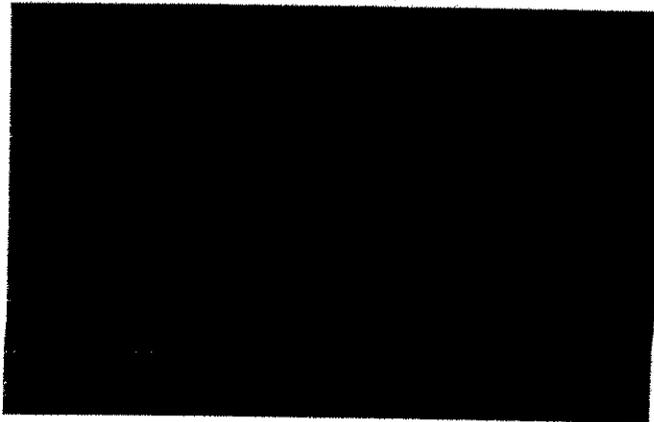
Makiko Sato

On 8/24/07, James Hansen <jhansen@giss.nasa.gov> wrote:

Andy, I am but Makiko or Reto should have the data -- it is Makiko's plot. Jim

On 8/23/07, Andrew Revkin <anrevk@nytimes.com> wrote:
one last query.

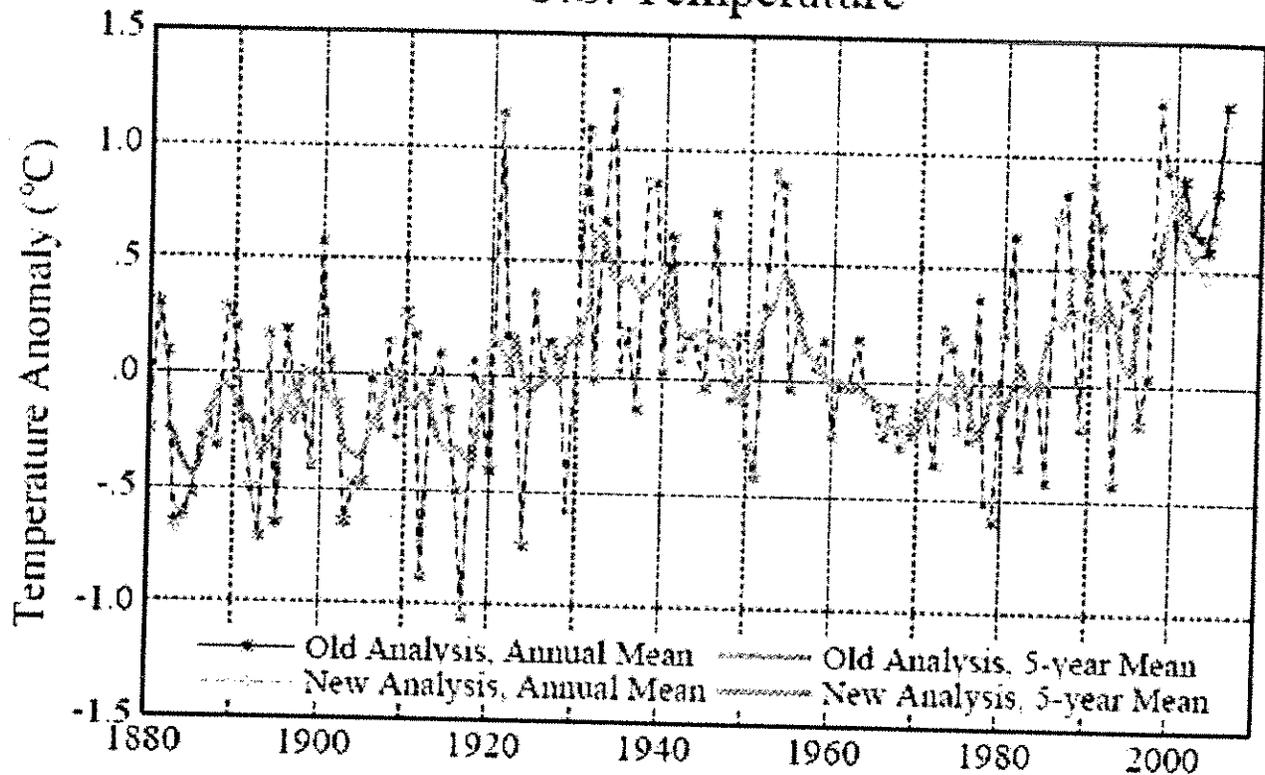
do you have the data easily available for this graph?
(our graphix folks would need to redraw to our style.. and that is anomaly compared to what baseline?)



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U.S. Temperature



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<http://nytimes.com/learning/globalwarming> Amazon book: *The Burning Season*

<http://www.islandpress.org/burnings> New teachers and Uncle Wade <http://www.myspace.com/unclewade>

From: Reto Ruedy <rruedy@giss.nasa.gov>
Reply-To: rruedy@giss.nasa.gov
To: lesqiss@verizon.net
Subject: [Fwd: Re: response on McIntyre IP claims??]
Date: Thu, 16 Aug 2007 18:36:55 -0400

Leslie,

Sorry that my response by mistake only was sent to Gavin. So below is what I wrote and above it Gavin's response. I don't think Jim is interested in hearing any more about it.

Reto

----- Forwarded Message -----
From: Gavin Schmidt <gschmidt@giss.nasa.gov>
To: rruedy@giss.nasa.gov
Subject: Re: response on McIntyre IP claims??
Date: 16 Aug 2007 18:16:22 -0400

the issue is here that you are dealing with a hostile interviewer. In such circumstances, it is much better simply to point out clear errors. If you open up another front they will dive on that instead and abandon all the previous positions (since they are not sincere in any case).

It does however highlight the rhetorical power of saying that the code is secret and things are being kept from the public. It may still be worth putting up a clean version of the adjustment program on the website in order to have something to point to in such cases.

gavin

On Thu, 2007-08-16 at 18:08, Reto Ruedy wrote:
> Gavin,
>
> So you don't think it is worth to point out that the whole first part of
> the interview section below is a total fabrication, and his first
> request for source code came with the "thank you" note mentioned at the
> end of the response, still May 17. Also, his reasons for our
> "reluctance" is wild speculation that is light years away from reality.
>
> On second thought, it's not worth going into these details, especially
> in a case where the interviewer is more likely to believe Steve than us.
>
> So, I'm fine with the edits.

>
> Reto
>
> On Thu, 2007-08-16 at 17:31 -0400, Gavin Schmidt wrote:
> > a few suggested edits. I don't advise getting rhetorical so I deleted
> > the third paragraph.
> >
> > gavin
> >
> >
> > On Thu, 2007-08-16 at 17:11, lesgiss@verizon.net wrote:
> > > I agree...but in this case we are in the right. I think we should
> > > just
> > > make the point clear that McIntyre's story is a fabrication in a
> > > very
> > > generic way.
> > >
> > > Take a look at it...I'm also sending it to Reto and Gavin as well.
> > >
> > > Leslie
> > >
> > >
> > > Original Message:
> > > -----
> > > From: James Hansen jhansen@giss.nasa.gov
> > > Date: Thu, 16 Aug 2007 16:33:28 -0400
> > > To: lesgiss@verizon.net, @gmail.com,
> > > dcain@giss.nasa.gov
> > > Subject: Re: response on McIntyre IP claims??
> > >
> > >
> > > Do we want to lower ourselves to debating with a court jester? Of
> > > course,
> > > that is what he wants.
> > >
> > > I don't have a strong preference as long as it is not taking a
> > > significant
> > > amount of my time.
> > >
> > > I have not read the stuff that you are referring to, but as I
> > > recall, as
> > > soon as I was told about the matter, I said that he was welcome to
> > > the data.
> > >
> > > Jim
> > >
> > > On 8/16/07, lesgiss@verizon.net <lesgiss@verizon.net> wrote:

> > > >

> > > > Hi Jim:

> > > >

> > > > Amanda Carpenter of Townhall.com has inquired if we will have a response

> > > > to

> > > > McIntyre's claims in their interview yesterday that NASA blocked his IP

> > > > address? I've heard from both Reto and Robert and can draft something if

> > > > you want...please let me know.

> > > >

> > > > Thanks.

> > > >

> > > > Leslie

> > > >

> > > >

> > > > mail2web.com What can On Demand Business Solutions do for you?

> > > > <http://link.mail2web.com/Business/SharePoint>

> > > >

> > > >

> > > >

> > > >

> > >

> > >

> > > -----

> > > mail2web.com Enhanced email for the mobile individual based on Microsoft®

> > > Exchange - <http://link.mail2web.com/Personal/EnhancedEmail>

> > >

--

Reto Ruedy <rruedy@giss.nasa.gov>

From: lesgiss@verizon.net <lesgiss@verizon.net>
Reply-To: lesgiss@verizon.net
To: jhansen@giss.nasa.gov, rruedy@giss.nasa.gov, gschmidt@giss.nasa.gov, lesgiss@gmail.com
Cc: dcain@giss.nasa.gov, ltravis@giss.nasa.gov, robert.j.gutro@nasa.gov
Subject: Town Hall Story on NASA blocking McIntyre access
Date: Fri, 17 Aug 2007 07:37:44 -0400

Good morning:

Here is the Town Hall story entitled "NASA Blocked Climate Change Blogger from Data"...

http://www.townhall.com/Columnists/AmandaCarpenter/2007/08/17/nasa_blocked_climate_change_blogger_from_data?page=full&comments=true

Leslie

mail2web.com - Microsoft® Exchange solutions from a leading provider -
<http://link.mail2web.com/Business/Exchange>

From: Reto Ruedy <rruedy@giss.nasa.gov>
Reply-To: rruedy@giss.nasa.gov
To: James Hansen <jhansen@giss.nasa.gov>
Cc: Gavin Schmidt <gschmidt@giss.nasa.gov>, Reto Ruedy <cdrar@giss.nasa.gov>, Makiko Sato <makis@giss.nasa.gov>
Subject: Re: Town Hall Story on NASA blocking McIntyre access
Date: Fri, 17 Aug 2007 19:28:05 -0400

I understand, that was just meant as a suggestion to bring up on Gavin's RealClimate site, if he needs to counter requests for our "fixing" code.

Reto

On Fri, 2007-08-17 at 19:06 -0400, James Hansen wrote:

> Technical arguments with a jackass or a jester, which most observers
> not wanting to understand the details, can appear to lower one to a
> comparable level. Better not argue with him about whether we fix
> data; we do an urban adjustment, for example. Jim

> On 8/17/07, Reto Ruedy <rruedy@giss.nasa.gov> wrote:

> TOBS does not have the station history adjustment (SHAP) -
> FILIN has it
> and is the last stage before their urban adjustment. I can run
> with or
> without the filled-in data (filling in added .05C/century to
> the US mean
> trend in our analysis).

> Once the new USHCN data are reformatted, it's just a question
> of what to
> do with years 2006 and 2007. Otherwise it's simply switching
> an input
> file.

> I still think, Steve (in the Town Hall interview below and
> when he talks
> to anybody but us) mixes us up with Tom Karl's group - they
> "fix"
> station data, we don't. If we get this misunderstanding out in
> the open,
> it might die down as well.

> Reto

> On Fri, 2007-08-17 at 16:23 -0400, Gavin Schmidt wrote:

> > I didn't suggest using their urban adjustment, but that the
> most

> up-to-date USHCN data may have more in the way of documented
> station
> adjustments and more data earlier on. The FILIN data do not
> include
> their urban adjustment as far as I can tell. I get the
> impression from
> the USHCN web site that you should be able to extract just
> the TOBS
> corrected data without the FILIN.
>
> The point is to make sure that the difference between the
> earlier USHCN
> data set we were using and the latest version does not make
> a
> significant difference to the results. Since any independent
> replication
> of the GISS procedure will use the currently available data
> set (not the
> one we are using), we should probably be ahead of the game
> in
> understanding what impact it has.
>
> As is usual in these cases, the smarter of the court jesters
> have
> already stopped talking about 1934 and are now pushing the
> transparency
> 'meme'. That has a lot more resonance....
>
> Gavin
>
> On Fri, 2007-08-17 at 16:10, James Hansen wrote:
> > What is the matter with the way that we do it? Among
> other things, we
> > have a more realistic urban adjustment. Changing has
> various
> > drawbacks. Jim
> >
> > On 8/17/07, Reto Ruedy < rruedy@giss.nasa.gov> wrote:
> > Jim,
> >
> > Gavin suggested some time ago that we should do
> the analysis
> > with the
> > current USHCN.
> >
> > I downloaded the "FILIN" USHCN data; the filled-in
> numbers are

> > marked.
> > So I can use or ignore them. I have to write a
> program anyway
> > to
> > reformat this file to the format used by GHCN.
> This includes
> > the easy
> > conversion from F to C, but they also use a
> different set of
> > ID-numbers
> > to characterize the station. So first, I'll have
> to construct
> > and check
> > a conversion table to identify the stations
> properly.
> >
> > Reto
> >
> > On Fri, 2007-08-17 at 11:44 -0400, Reto Ruedy
> wrote:
> > > What I wrote was true last week - today it says
> that monthly
> > data are
> > > available from 1900-2005. They must have updated
> it in the
> > last few
> > > days.
> > >
> > > Reto
> > >
> > > On Fri, 2007-08-17 at 11:35 -0400, Reto Ruedy
> wrote:
> > > > Jim,
> > > >
> > > > On the USHCN site it says that the data
> available from
> > their web site go
> > > > to 2002. I never downloaded them since the
> stage we use is
> > not stored at
> > > > that site - we would have to make a special
> request.
> > >
> > > > Reto
> > > >
> > > > On Fri, 2007-08-17 at 11:18 -0400, James
> Hansen wrote:

>

--

Reto Ruedy <rruedy@giss.nasa.gov>

From: James Hansen <jhansen@giss.nasa.gov>
To: Andrew Revkin <anrevk@nytimes.com>
Cc: Reto Ruedy <cdrar@giss.nasa.gov>, Makiko Sato <makis@giss.nasa.gov>
Subject: Re: can we talk briefly?
Date: Thu, 23 Aug 2007 21:01:57 +0200 (15:01 EDT)

I believe that we have clearly stated several times that the ranking does not make much sense. Although we have discouraged it, anyone can see the results, so they can do the ranking themselves.

The uncertainty due to incomplete spatial coverage is objective, based on sampling a complete data set with realistic temporal-spatial variability with the actual station locations. Incomplete spatial coverage is probably the largest source of error. It is the reason that other groups did not find 2005 to be the warmest year, because they did not include the complete Arctic, which had a huge positive anomaly. We included it via our interpolations, and we verified from satellite measurements that the Arctic anomaly was, if anything, actually larger than we obtained with our interpolations.

Other components of the complete error bar must, indeed, involve some subjectivity, and they are a function of time, i.e., the uncertainty in comparing two near by years is much less than in comparing recent results to those many decades earlier..

Jim

On 8/23/07, **Andrew Revkin** <anrevk@nytimes.com> wrote:
howdy,

hoping we can chat briefly about the temperature-record revision.

much of this seems simply to reflect the importance of anyone (noaa, nasa, etc) clearly stating when uncertainties preclude designating years (particularly regionally) as a string of firm points, one of which can be deemed a 'record.'

noaa says it's working on an error-bar approach to its time series (but also said there are subjectivity issues that come in when doing so..?).

212 556 7326 if you get 5-10 mins.
(except for 1-2 p.m .)

thanks jim.

andy

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Arctic book: *The North Pole Was Here*

Amazon book: *The Burning Season*

Acoustic-roots band Uncle Wade

From: Andrew Revkin <anrevk@nytimes.com>
To: rruedy@giss.nasa.gov
Cc: @mailhub1.nytimes.com
Subject: Re: US data
Date: Fri, 24 Aug 2007 16:02:44 -0400

Reto,

is there a simple way to determine which shifts are NOT statistically significant?

in graphic we're doing, i'd love to be able to indicate that (by shading or label or the like)

At 12:53 PM 8/24/2007, Reto Ruedy wrote:

Dear Mr.Revkin,

Below are the data you requested. We really should round (as some other groups do) to the nearest tenth of a degree rather than showing 2 digits.

I tried to answer your question whether GISS ever showed a US table with 1934 warmer in the US than 1998 in an email to Jim. He found it confusing, so here is another attempt to answer it:

the answer is "yes", all our publications and all previous tables had it that way, the table we put on our web on Jan 8, 2007 seems to have been the lone exception.

Hope that is clearer.

Sincerely,

Reto

Annual mean US temperature (degrees C)
(anomalies with respect to 1951-1980)

Year	uncorrected	corrected
1880	-0.25	-0.26
1881	0.31	0.29
1882	0.09	0.07
1883	-0.65	-0.68
1884	-0.61	-0.63
1885	-0.53	-0.54
1886	-0.28	-0.28
1887	-0.17	-0.17
1888	-0.31	-0.32
1889	0.28	0.28

1890	0.20	0.20
1891	-0.21	-0.20
1892	-0.50	-0.51
1893	-0.71	-0.72
1894	0.17	0.17
1895	-0.65	-0.66
1896	0.20	0.19
1897	-0.08	-0.08
1898	-0.14	-0.15
1899	-0.40	-0.41
1900	0.57	0.57
1901	0.06	0.05
1902	-0.13	-0.13
1903	-0.64	-0.65
1904	-0.48	-0.48
1905	-0.47	-0.47
1906	-0.02	-0.02
1907	-0.23	-0.24
1908	0.15	0.14
1909	-0.27	-0.27
1910	0.28	0.28
1911	0.17	0.17
1912	-0.88	-0.88
1913	-0.03	-0.03
1914	0.09	0.09
1915	-0.15	-0.15
1916	-0.50	-0.50
1917	-1.06	-1.06
1918	0.06	0.06
1919	-0.10	-0.10
1920	-0.41	-0.41
1921	1.14	1.15
1922	0.18	0.18
1923	-0.07	-0.07
1924	-0.74	-0.74
1925	0.36	0.36
1926	0.04	0.04
1927	0.15	0.15
1928	0.07	0.07
1929	-0.58	-0.58
1930	0.16	0.16
1931	1.08	1.08
1932	0.00	0.00
1933	0.68	0.68
1934	1.25	1.25
1935	0.04	0.04
1936	0.21	0.21

1937	-0.13	-0.13
1938	0.86	0.86
1939	0.85	0.85
1940	0.03	0.03
1941	0.61	0.61
1942	0.09	0.09
1943	0.17	0.17
1944	0.13	0.14
1945	-0.04	-0.03
1946	0.72	0.72
1947	0.09	0.10
1948	-0.08	-0.08
1949	0.20	0.20
1950	-0.28	-0.28
1951	-0.42	-0.42
1952	0.32	0.32
1953	0.90	0.90
1954	0.85	0.85
1955	-0.03	-0.03
1956	0.29	0.29
1957	0.14	0.14
1958	0.06	0.06
1959	0.17	0.17
1960	-0.24	-0.24
1961	-0.02	-0.02
1962	-0.02	-0.02
1963	0.19	0.19
1964	-0.07	-0.07
1965	-0.11	-0.11
1966	-0.24	-0.24
1967	-0.10	-0.10
1968	-0.28	-0.28
1969	-0.23	-0.23
1970	-0.11	-0.11
1971	-0.09	-0.10
1972	-0.35	-0.35
1973	0.24	0.24
1974	0.16	0.15
1975	-0.20	-0.20
1976	-0.25	-0.25
1977	0.37	0.37
1978	-0.52	-0.52
1979	-0.60	-0.60
1980	0.22	0.22
1981	0.64	0.64
1982	-0.36	-0.36
1983	-0.01	-0.01

1984	0.00	0.00
1985	-0.42	-0.42
1986	0.73	0.73
1987	0.83	0.83
1988	0.32	0.32
1989	-0.19	-0.19
1990	0.87	0.87
1991	0.69	0.69
1992	0.30	0.30
1993	-0.43	-0.44
1994	0.47	0.46
1995	0.35	0.34
1996	-0.17	-0.17
1997	0.04	0.03
1998	1.23	1.23
1999	0.94	0.93
2000	0.65	0.52
2001	0.90	0.76
2002	0.68	0.53
2003	0.65	0.50
2004	0.59	0.44
2005	0.85	0.69
2006	1.23	1.13

--
Reto Ruedy <rruedy@giss.nasa.gov>

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Arctic book: *The North Pole Was Here*
Amazon book: *The Burning Season*
Acoustic-roots band Uncle Wade

From: Andrew Revkin <anrevk@nytimes.com>
To: rruedy@giss.nasa.gov
Subject: Re: US data
Date: Sat, 25 Aug 2007 17:21:24 -0400

thanks reto.
this is helpful.
the story (running tonite/sunday) stresses the importance of trend over year-to-year.

At 01:14 PM 8/25/2007, you wrote:

Andrew,

I'd like to add a few notes to yesterday's response:

The estimate $+0.1C$ ($+0.2F$) tries to account for gaps in spatial coverage and missing or erroneous reports as well as, for longer time periods, changes in instrumentation or even station location and reporting procedures (how to compute the reported daily mean).

Given that the purpose of our effort is to compute long term trends, a simpler and more meaningful measure for the statistical significance is the interannual variability of the US means; its standard deviation is $0.8F$ (after subtracting the small linear trend). The corresponding number for the global means is $0.3F$.

To be remarkable, an observed change has to be a multiple of that standard deviation; compared to that, the errors caused by "bad" stations, urban heat island effect, etc. are of little importance.

Reto

On Fri, 2007-08-24 at 16:02 -0400, Andrew Revkin wrote:

> Reto,

>

> is there a simple way to determine which shifts are NOT statistically significant?

>

> in graphic we're doing, i'd love to be able to indicate that (by shading or label or the like)

>

> At 12:53 PM 8/24/2007, Reto Ruedy wrote:

> > Dear Mr.Revkin,

> >

> > Below are the data you requested. We really should round (as some other

> > groups do) to the nearest tenth of a degree rather than showing 2
 > > digits.
 > >
 > > I tried to answer your question whether GISS ever showed a US table
 > > with
 > > 1934 warmer in the US than 1998 in an email to Jim. He found it
 > > confusing, so here is another attempt to answer it:
 > >
 > > the answer is "yes", all our publications and all previous tables
 > > had it
 > > that way, the table we put on our web on Jan 8, 2007 seems to have
 > > been
 > > the lone exception.

> > Hope that is clearer.

> > Sincerely,

> > Reto

> > Annual mean US temperature (degrees C)
 > > (anomalies with respect to 1951-1980)

> > Year	uncorrected	corrected
> > 1880	-0.25	-0.26
> > 1881	0.31	0.29
> > 1882	0.09	0.07
> > 1883	-0.65	-0.68
> > 1884	-0.61	-0.63
> > 1885	-0.53	-0.54
> > 1886	-0.28	-0.28
> > 1887	-0.17	-0.17
> > 1888	-0.31	-0.32
> > 1889	0.28	0.28
> > 1890	0.20	0.20
> > 1891	-0.21	-0.20
> > 1892	-0.50	-0.51
> > 1893	-0.71	-0.72
> > 1894	0.17	0.17
> > 1895	-0.65	-0.66
> > 1896	0.20	0.19
> > 1897	-0.08	-0.08
> > 1898	-0.14	-0.15
> > 1899	-0.40	-0.41
> > 1900	0.57	0.57
> > 1901	0.06	0.05
> > 1902	-0.13	-0.13

> > 1903	-0.64	-0.65
> > 1904	-0.48	-0.48
> > 1905	-0.47	-0.47
> > 1906	-0.02	-0.02
> > 1907	-0.23	-0.24
> > 1908	0.15	0.14
> > 1909	-0.27	-0.27
> > 1910	0.28	0.28
> > 1911	0.17	0.17
> > 1912	-0.88	-0.88
> > 1913	-0.03	-0.03
> > 1914	0.09	0.09
> > 1915	-0.15	-0.15
> > 1916	-0.50	-0.50
> > 1917	-1.06	-1.06
> > 1918	0.06	0.06
> > 1919	-0.10	-0.10
> > 1920	-0.41	-0.41
> > 1921	1.14	1.15
> > 1922	0.18	0.18
> > 1923	-0.07	-0.07
> > 1924	-0.74	-0.74
> > 1925	0.36	0.36
> > 1926	0.04	0.04
> > 1927	0.15	0.15
> > 1928	0.07	0.07
> > 1929	-0.58	-0.58
> > 1930	0.16	0.16
> > 1931	1.08	1.08
> > 1932	0.00	0.00
> > 1933	0.68	0.68
> > 1934	1.25	1.25
> > 1935	0.04	0.04
> > 1936	0.21	0.21
> > 1937	-0.13	-0.13
> > 1938	0.86	0.86
> > 1939	0.85	0.85
> > 1940	0.03	0.03
> > 1941	0.61	0.61
> > 1942	0.09	0.09
> > 1943	0.17	0.17
> > 1944	0.13	0.14
> > 1945	-0.04	-0.03
> > 1946	0.72	0.72
> > 1947	0.09	0.10
> > 1948	-0.08	-0.08
> > 1949	0.20	0.20

> > 1950	-0.28	-0.28
> > 1951	-0.42	-0.42
> > 1952	0.32	0.32
> > 1953	0.90	0.90
> > 1954	0.85	0.85
> > 1955	-0.03	-0.03
> > 1956	0.29	0.29
> > 1957	0.14	0.14
> > 1958	0.06	0.06
> > 1959	0.17	0.17
> > 1960	-0.24	-0.24
> > 1961	-0.02	-0.02
> > 1962	-0.02	-0.02
> > 1963	0.19	0.19
> > 1964	-0.07	-0.07
> > 1965	-0.11	-0.11
> > 1966	-0.24	-0.24
> > 1967	-0.10	-0.10
> > 1968	-0.28	-0.28
> > 1969	-0.23	-0.23
> > 1970	-0.11	-0.11
> > 1971	-0.09	-0.10
> > 1972	-0.35	-0.35
> > 1973	0.24	0.24
> > 1974	0.16	0.15
> > 1975	-0.20	-0.20
> > 1976	-0.25	-0.25
> > 1977	0.37	0.37
> > 1978	-0.52	-0.52
> > 1979	-0.60	-0.60
> > 1980	0.22	0.22
> > 1981	0.64	0.64
> > 1982	-0.36	-0.36
> > 1983	-0.01	-0.01
> > 1984	0.00	0.00
> > 1985	-0.42	-0.42
> > 1986	0.73	0.73
> > 1987	0.83	0.83
> > 1988	0.32	0.32
> > 1989	-0.19	-0.19
> > 1990	0.87	0.87
> > 1991	0.69	0.69
> > 1992	0.30	0.30
> > 1993	-0.43	-0.44
> > 1994	0.47	0.46
> > 1995	0.35	0.34
> > 1996	-0.17	-0.17

From: Andrew Revkin <anrevk@nytimes.com>

To: thomas.r.karl@noaa.gov, jay.lawrimore@noaa.gov, jhansen@giss.nasa.gov,
gschmidt@giss.nasa.gov

Cc: rruedy@giss.nasa.gov

Subject: scrunched, but done

Date: Sat, 25 Aug 2007 21:27:44 -0400

well, in my highly imperfect universe of limited space, tried to cut thru the caricatures and focus on what is *not* in dispute. not something i could ignore -- even after a week on a boat off central america (wish i was still out there).

<http://www.nytimes.com/2007/08/26/us/26climate.html>

thanks for your input.

on to more interesting issues.

tom, i didn't hear back on budget for the climate reference network.. is that on track?

ANDREW C. REVKIN

The New York Times / Environment

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From: Andrew Revkin <anrevk@nytimes.com>
To: rruedy@giss.nasa.gov
Subject: Re: scrunched, but done
Date: Sun, 26 Aug 2007 10:18:41 -0400

i love that.
'an intrsting article about a non issue.'
great review .

it's almost a law of physics how situations like this end up demanding coverage (and distracting).

At 10:01 AM 8/26/2007, you wrote:

Thanks for your balanced and well-written article. Journalists I spoke to noted the difficulty writing an interesting article about a non-issue. Great job.

Reto

On Sat, 2007-08-25 at 21:27 -0400, Andrew Revkin wrote:

- > well, in my highly imperfect universe of limited space, tried to cut
- > thru the caricatures and focus on what is *not* in dispute.
- > not something i could ignore -- even after a week on a boat off
- > central america (wish i was still out there).
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- >
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- > ANDREW C. REVKIN
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- >
- >
-

Reto Ruedy <rruedy@giss.nasa.gov>

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From: James Hansen <jhansen@giss.nasa.gov>
To: lesgiss@verizon.net, @gmail.com, ltravis@giss.nasa.gov,
gschmidt@giss.nasa.gov, rruedy@giss.nasa.gov
Subject: Re: FW: Washington Times--from HQ PAO
Date: Mon, 13 Aug 2007 20:50:56 -0400

send them "A Light on Upstairs?"

At 03:42 PM 8/13/2007, lesgiss@verizon.net wrote:

Hi Jim, Reto and Gavin:

Tabatha Thompson is an SMD PAO at HQ and is inquiring about the GISTEMP changes....do you want to respond to her directly?? Reto did send me Jim's response to Andy Revkin, as well as a bit more clarification, but I don't know if you want that sent, so I'll wait until instructed.

Please let me know ASAP.

Thanks.

Leslie

Original Message:

From: Thompson, Tabatha (HQ-NB000) Tabatha.Thompson-1@nasa.gov
Date: Mon, 13 Aug 2007 13:28:05 -0400
To: leslie.m.mccarthy@nasa.gov, lesgiss@verizon.net,
scole@pop600.gsfc.nasa.gov, dherring@climate.gsfc.nasa.gov,
edward.s.campion@nasa.gov, alan.d.buis@nasa.gov
Subject: Washington Times

All --

Can any of you help me find the place on the NASA site to which he's referring? I need to get back to a reporter, so I'd love any help I can get. Our HQ scientists aren't familiar with any change. Thanks!
Tabatha

From: Dunbar, Brian (HQ-NB050)
Sent: Monday, August 13, 2007 10:43 AM
To: Brown, Dwayne C. (HQ-NB060); Thompson, Tabatha (HQ-NB000)
Subject:

<http://www.washingtontimes.com/article/20070813/COMMENTARY08/108130024/1012/commentary>

Not sure what web site he's referring to.

bd

mail2web.com - Microsoft® Exchange solutions from a leading provider -
<http://link.mail2web.com/Business/Exchange>

<http://www.washingtontimes.com/article/20070813/COMMENTARY08/108130024/1012/commentary>

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