

From: gs210@columbia.edu
To: rruedy@giss.nasa.gov
Cc: jhansen@giss.nasa.gov
Subject: Re: more mcintyre
Date: Fri, 03 Aug 2007 18:37:17 -0400

Thanks. That becomes clearer. I think that the suggestion you have for fixing it is a better idea than what is being done now, though possibly it might make more sense to correct the later GHCN data rather than the earlier USHCN numbers (that doesn't make a difference to the trend of course).

Gavin

Quoting Reto Ruedy <rruedy@giss.nasa.gov>:

> Gavin,
>
> In 2000, USHCN provided us with a product in which the US data
> were
> adjusted for changes in procedure/instrumentation to get a
> consistent
> time record. According to the description on their current
> website, 1999
> was their last comprehensive update of those data. Unlike the
> GHCN data,
> the USHCN data are not routinely kept up-to-date (at this point
> they seem
> to end in 2002).
>
> Under the assumption that the adjustments made the older data
> consistent
> with future data, we are replacing the US part of the GHCN data
> up to
> 1999 by the USHCN data that we got in 2000, thereby eliminating
> some
> known systematic biases in the early part of the US records.
>
> However, that assumption may not have been correct. I compared
> the 1999
> data in GHCN and USHCN. Indeed, in 490 of the 1057 stations the
> USHCN
> data were up to 1C colder than the corresponding GHCN data, in 77
> stations the data were the same, and in the remaining 490
> stations the
> USHCN data were warmer than the GHCN data. The differences
> averaged out

> to 0.1 C, i.e. we may have introduced a +0.1C jump in 2000 over
> the US
> by our procedure.
>
> A more careful method would have been to compare the last few
> years of
> the USHCN data and the corresponding years of the GHCN data and
> adjust
> the USHCN data to fit the GHCN data. I'll add this procedure as
> an
> alternate to see what effect it would have.
>
> Reto
>
> On Fri, 2007-08-03 at 13:21 -0400, gs210@columbia.edu wrote:
> > if you didn't see it:
> >
> <http://www.climateaudit.org/?p=1854>
>
> >
> > There is something curious here though, why does 'GISS raw' go
> back
> > to 'USHCN unadjusted' in 2000. Shouldn't it have stayed with
> > USHCN+TOBS?
> >
> > Gavin
> >
> > PS. if this is all as it should be, we need to make clear the
> > reasons why very quickly. Otherwise, the myth of the 'Hansen
> Y2k
> > error' will be all around the place and once it's out, it won't
> go
> > away.
>

From: Gavin Schmidt <gschmidt@giss.nasa.gov>

Reply-To: gschmidt@giss.nasa.gov

To: Reto Ruedy <rruedy@giss.nasa.gov>

Subject: Re: GISS Raw Data

Date: Mon, 6 Aug 2007 11:47:27 -0400 (EDT)

I would suggest being more specific about what was assumed and what you will do now. The stats you had for the number of stations which had positive and negative offsets would be appropriate. You also might want to thank him for bringing this to our attention. The first because he'll ask you anyway or work it out himself, the second since it doesn't hurt to be gracious.

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 Mon, 6 Aug 2007, Reto Ruedy wrote:

> Jim,
>
> I've started to prepare a response to the email below. Steve is the
> person who appointed himself the auditor of all web sites and
> organizations that have to do with global warming in order to debunk
> this "hoax". He is maintaining a blog - a website called
> climate.audit.org, a site containing among justified concerns (caveats
> that we stress in all our papers) obvious fabrications and vicious
> attacks.
>
> I'll send you my suggestion for a response before mailing anything to
> Steve.
>
> Our simple combination of GHCN and USHCN data was based on the
> assumption that the correction made the older data consistent with the
> then current data. Unfortunately, that is not the case and an attempt to
> compute an offset based on the common years within say the 1990-1999
> period would have been more appropriate.
>
> I am re-processing our current data with that modification and wait with

> finishing my response until we can look at the changes caused by it. I
> expect only a minor effect since the offsets average out to almost 0
> over all USHCN stations.

>
> Reto

> On Sat, 2007-08-04 at 17:28 -0400, Steve McIntyre wrote:

>> Dear Sirs,

>>

>> In your calculation of the GISS "raw" version of USHCN series, it
>> appears to me that, for series after January 2000, you use the USHCN
>> raw version whereas in the immediately prior period you used USHCN
>> time-of-observation or adjusted version. In some cases, this
>> introduces a seemingly unjustified step in January 2000.

>>

>> I am unaware of any mention of this change in procedure in any
>> published methodological descriptions and am puzzled as to its
>> rationale. Can you clarify this for me?

>>

>> In addition, could you provide me with any documentation (additional
>> to already published material) providing information on the
>> calculation of GISS raw and adjusted series from USHCN versions,
>> including relevant source code. Thank you for your attention, Stephen
>> McIntyre

>>

>

From: Reto Ruedy <rruedy@giss.nasa.gov>
Reply-To: rruedy@giss.nasa.gov
To: James E. Hansen <jhansen@giss.nasa.gov>, gavin@giss.nasa.gov
Subject: Re: GISS Raw Data
Date: Tue, 07 Aug 2007 10:04:44 -0400

On Sat, 2007-08-04 at 17:28 -0400, Steve McIntyre wrote:

> Dear Sirs,
>
> In your calculation of the GISS "raw" version of USHCN series, it
> appears to me that, for series after January 2000, you use the USHCN
> raw version whereas in the immediately prior period you used USHCN
> time-of-observation or adjusted version. In some cases, this
> introduces a seemingly unjustified step in January 2000.
>
> I am unaware of any mention of this change in procedure in any
> published methodological descriptions and am puzzled as to its
> rationale. Can you clarify this for me?

The basic "GISS Surface Temperature Analysis" page starts with a "Background" section whose first paragraph contains the sentence: "Input data for the analysis ,..., is the unadjusted data of GHCN, except that the USHCN station records were replaced by a later corrected version". A similar statement appears in the "Abstract" and the "Introduction" section of our 2001 paper (JGR Vol 106, pg 23,947-23,948). The Introduction explains the above statement in more detail.

When we got the USHCN data, they ended in 1999 and as far as I know, no major corrections were implemented after that time. Unlike the GHCN data, the USHCN data is not a product that is kept current on a regular basis. Hence we used (as you noticed) the GHCN data to extend the USHCN data.

I agree with you that this simple procedure creates an artificial step in those cases where the correction was applied to the newest data, rather than bringing the older data in sync with the latest measurements - which would seem the natural way to go. Comparing the 1999 data in both data sets showed that in about half the cases where the 1999 data were changed, the GHCN data were higher than the USHCN data and in the other half it was the other way round.

So although an attempt to eliminate those artificial steps should have little impact even on the US temperature trend (much less the global trend - the so-called "Global Warming"), it seems a good idea to do so and I'd like to thank you for bringing this to our attention.

Starting with our next update (sometime later this week) an offset based on the last 10 years of overlap in the two data sets will be applied and our on-line documentation will be augmented correspondingly.

I tested the modification with the data now on display:
The table data (section 3 on the basic temperature site) differed occasionally by a 1 in the last digit (0.01 C). In the display most sensitive to that change - the US-graph of annual means - the warming decreased by about 0.15 C in the years 2000-2006, well within the margin of error.

> In addition, could you provide me with any documentation (additional"
> to already published material) providing information on the
> calculation of GISS raw and adjusted series from USHCN versions,
> including relevant source code.

I had no idea what code you are referring to until I learned from your article "Hansen's Y2K error" (which should really be "Reto's Y2K error") that GISS is in possession of some magical software that is able to "fix" the defects in surface data. No wonder you would like to get your hands on that - so would I !

Unfortunately, your source totally misled you in that respect. I'm a little amazed that you uncritically present it as a fact given that a large part of your web site is devoted to convincingly prove that such software cannot possibly exist.

All we do is try to make the best of imperfect data by converting absolute temperatures to anomalies and averaging over large regions (using circles of a diameter of 2400 km, the 500 km option was added for debugging purposes only), the only responsible way to use those data.

The software we spend close to 100% of our time in developing and which is the real basis of our work (in addition to general physics and chemistry), is openly available (giss.nasa.gov/tools/modelE) to anybody.

> Thank you for your attention, Stephen McIntyre

>

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

From: Makiko Sato <makis@giss.nasa.gov>
To: rruedy@giss.nasa.gov
Cc: jhansen@giss.nasa.gov
Subject: Re: USHCN, GHCN matching
Date: Tue, 07 Aug 2007 13:22:54 -0400

Yes, I will redo all graphs and tables on GISTEMP Graphs page.

Makiko

At 12:51 2007/08/07, you wrote:

>Makiko,

>

>Thanks - I assume, you will also replace all affected graphs on the
>GISTEMP website.

>

>Reto

>

>On Tue, 2007-08-07 at 12:48 -0400, Makiko Sato wrote:

> > Jim, Reto, Ken,

> >

> > I put a graph which shows the US and global mean temperature change
> > due to matching 1990-1999 mean USHCN and GHCN on
> > http://www.giss.nasa.gov/~makis/GISS_Temp/
> > User ID = guest, Password = 1744.

> >

> > Makiko

> --

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

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>
Subject: Re: GISS Raw Data
Date: Tue, 07 Aug 2007 13:39:41 -0400

Jim,

Thanks - with your suggested change we totally ignore his blogs and only respond to relevant part of his email, as I should have done in the first place.

I'll show you my current version when you come in.

Reto

On Tue, 2007-08-07 at 13:11 -0400, James Hansen wrote:

> Reto, This is very good, but eliminate the last paragraph re
> Hansen-error, Reto error, as it looks like I am passing the buck
> - don't send the e-mail until I come in. Jim

>
> On 8/7/07, Reto Ruedy <rruedy@giss.nasa.gov> wrote:

> Gavin,

>
> Thanks for setting me straight - I completely agree with you:
> any
> attempts to teach or outsmart Steve are counterproductive and
> a total
> waste of time.

>
> As soon as I hear from Jim, I'll send it off - in the mean
> time, Ken
> updated the site including July 07 with the new modification.
> So I'll
> change the end correspondingly.

>
> Reto

>
> On Tue, 2007-08-07 at 11:44 -0400, Gavin Schmidt wrote:

> > I would not engage further than simply dealing with the
> points at hand -

> > it's just going to further the issue. Thus I would suggest
> the following

> > text alone (a couple of minor edits and one new line):

>

> > =====

>
 >
 > The basic "GISS Surface Temperature Analysis" page starts
 > with a
 > "Background" section whose first paragraph contains the
 > sentence:
 > "Input data for the analysis ,..., is the unadjusted data of
 > GHCN,
 > except that the USHCN station records were replaced by a
 > later corrected
 > version". A similar statement appears in the "Abstract" and
 > the
 > "Introduction" section of our 2001 paper (JGR Vol 106, pg
 > 23,947-23,948). The Introduction explains the above
 > statement in more
 > detail.
 >
 >
 > When we originally got the USHCN data, they ended in 1999
 > and as far as I know,
 > no major corrections were implemented after that time.
 > Unlike the GHCN
 > data, the USHCN data is not a product that is kept current
 > on a regular
 > basis. Hence we used (as you noticed) the GHCN data to
 > extend the USHCN
 > data.
 >
 >
 > I agree with you that this simple procedure creates an
 > artificial step
 > in those cases where the correction was applied to the
 > newest data,
 > rather than bringing the older data in sync with the latest
 > measurements
 > - which would seem the natural way to go. Comparing the 1999
 > data in
 > both data sets showed that in about half the cases where the
 > 1999 data
 > were changed, the GHCN data were higher than the USHCN data
 > and in the
 > other half it was the other way round.
 >
 >
 > Eliminating those artificial steps should have little
 > impact even
 > on the US temperature trend (much less the global trend),
 > but it is a good
 > idea to do so and I'd like to thank you for bringing this to
 > our attention.
 >

> > Starting with our next update (sometime later this week)
> > an offset
> > based on the last 10 years of overlap in the two data sets
> > will be
> > applied and our on-line documentation will be augmented
> > correspondingly.
> >
> > I tested the modification with the data now on display:
> > The table data (section 3 on the basic temperature site)
> > differed
> > occasionally by a 1 in the last digit (0.01 C). In the
> > display most
> > sensitive to that change - the US-graph of annual means -
> > the warming
> > decreased by about 0.15 C in the years 2000-2006.
> >
> > You should perhaps note that your post 'Hansen's Y2K
> > error' should
> > really be titled Reto's Y2K error.
> >
> > Respectfully,
> >
> > etc...
> >
> > =====
> >
> > Gavin
> --
> Reto Ruedy <rruedy@giss.nasa.gov>
>
--
Reto Ruedy <rruedy@giss.nasa.gov>

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

To: rruedy@giss.nasa.gov

Cc: Makiko Sato <makis@giss.nasa.gov>

Subject: Re: your vacation

Date: Tue, 7 Aug 2007 14:54:59 -0400

BTW, your note to McIntyre perhaps should include a statement such as. This change and its effect will be noted in our next paper on temperature analysis submitted for publication and in our end-of-year temperature summary. Jim

On 8/7/07, **Reto Ruedy** <rruedy@giss.nasa.gov> wrote:

Makiko,

Reto

On Tue, 2007-08-07 at 13:29 -0400, Makiko Sato wrote:

> Reto,

>

>

>

> Makiko

From: Reto Ruedy <rruedy@giss.nasa.gov>
Reply-To: rruedy@giss.nasa.gov
To: James Hansen <jhansen@giss.nasa.gov>
Cc: Reto Ruedy <cdrrar@giss.nasa.gov>, Makiko Sato <makis@giss.nasa.gov>, klo@giss.nasa.gov
Subject: Re: Fwd: GISS Raw Data
Date: Thu, 09 Aug 2007 11:03:11 -0400

Jim,

For our 2001 paper, which includes a discussion of the various USHCN adjustments, we obtained from USHCN their various stages after each adjustment. The first set we obtained in Feb 2000, a slightly corrected version in Dec 2000. Since we did not adapt their filling in scheme and their urban adjustment scheme, we have been using the "SHAP" version obtained in Dec 2000.

>From the USHCN site, anybody can download the TOBS and the FILNET stages, i.e. the one immediately before and the one after "SHAP"; a special request is needed to get SHAP. It seems that these data were extended to 2002 in the mean time.

Is it ok to put our copy of the 12/2000 version of SHAP on our web site or do we need to consult with NOAA before doing so ?

Alternatively, of course, we could go back to using GHCN data only. The effect of that change is described in our 2001 paper as well as on USHCN's website (on <http://cdiac.ornl.gov/epubs/ndp/ushcn/ndp019.html#tempdata>); it would decrease the 1900-99 US temperature change by .3 C and have negligible effect on any global trends.

Steve will keep asking me for our "software" and I'm tempted to ignore those requests, since our description of what we do with the data completely describes our procedures.

Reto

On Thu, 2007-08-09 at 05:51 -0400, James Hansen wrote:

> Reto, what is the source of data for the present analysis? Is it
> pratical to provide that? Jim
>
> ----- Forwarded message -----
> From: Steve McIntyre <stephen.mcintyre@utoronto.ca>
> Date: Aug 8, 2007 10:46 AM

> Subject: RE: GISS Raw Data
> To: rruedy@giss.nasa.gov
> Cc: "James E. Hansen" <jhansen@giss.nasa.gov>
>
> Dear Dr Ruedy,
>
> Thank you for this information and for the courteous acknowledgement
> at
> your website. I can now see where your post-2000 data comes from, but
> I
> remain unable to identify a digital source for your data prior to 2000
> from available information. I have compared GISS raw to all the
> archived
> USHCN versions and have been unable to find a match for US data. In
> some
> cases, the differences are substantial.
>
> Can you provide me with (1) a URL from which the U.S. data prior to
> 2000
> (in the version that you used) can be downloaded. (2) If this is no
> longer possible due to the passage of time, could you please provide
> me
> with a copy of the data that you used (or upload it to an area of your
> FTP site) and also provide its provenance and date of acquisition?
> Obviously mere print citations are inadequate for this purpose.
>
> I would like to assess the impact of these modifications on the US
> and
> global averages for myself. I would appreciate a copy of the source
> code
> used for these calculations.
>
> Regards, Steve McIntyre
>
>
>
>
> -----Original Message-----
> From: Reto Ruedy [mailto:rruedy@giss.nasa.gov]
> Sent: Tuesday, August 07, 2007 5:33 PM
> To: Steve McIntyre
> Cc: James E. Hansen; gavin@giss.nasa.gov
> Subject: Re: GISS Raw Data
>
>
> Dear Sir,
>

> As to the question about documentation, the basic "GISS Surface
 > Temperature Analysis" page starts with a "Background" section whose
 > first paragraph contains the sentence: "Input data for the
 > analysis ,... ,
 > is the unadjusted data of GHCN, except that the USHCN station records
 > were replaced by a later corrected version". A similar statement
 > appears
 > in the "Abstract" and the "Introduction" section of our 2001 paper
 > (JGR
 > Vol 106, pg 23,947-23,948). The Introduction explains the above
 > statement in more detail.
 >
 > In 2000, USHCN provided us with a file with corrections not contained
 > in the GHCN data. Unlike the GHCN data, that product is not kept
 > current
 > on a regular basis. Hence we used (as you noticed) the GHCN data to
 > extend those data in our further updates (2000-present).
 >
 > I agree with you that this simple procedure creates an artificial step
 > if some new corrections were applied to the newest data, rather than
 > bringing the older data in sync with the latest measurements - as I
 > naively assumed. Comparing the 1999 data in both data sets showed that
 > in about half the cases where the 1999 data were changed, the GHCN
 > data
 > were higher than the USHCN data and in the other half it was the other
 > way round with the plus-corrections slightly outweighing the
 > minus-corrections.
 >
 > Although trying to eliminate those steps should have little impact
 > on the US temperature trend (much less the global trend), it seems a
 > good idea to do so and I'd like to thank you for bringing this
 > oversight
 > to our attention.
 >
 > When we did our monthly update this morning, an offset based on the
 > last 10 years of overlap in the two data sets was applied and our
 > on-line documentation was changed correspondingly with an
 > acknowledgment
 > of your contribution. This change and its effect will be noted in our
 > next paper on temperature analysis and in our end-of-year temperature
 > summary.
 >
 > The effect on global means and all our tables was less than 0.01 C. In
 > the display most sensitive to that change - the US-graph of annual
 > means
 > - the anomalies decreased by about 0.15 C in the years 2000-2006.
 >

> Respectfully,

>

> Reto A Ruedy

>

> On Sat, 2007-08-04 at 17:28 -0400, Steve McIntyre wrote:

> > Dear Sirs,

> >

> > In your calculation of the GISS "raw" version of USHCN series, it
> > appears to me that, for series after January 2000, you use the USHCN
> > raw version whereas in the immediately prior period you used USHCN
> > time-of-observation or adjusted version. In some cases, this
> > introduces a seemingly unjustified step in January 2000.

> >

> > I am unaware of any mention of this change in procedure in any
> > published methodological descriptions and am puzzled as to its
> > rationale. Can you clarify this for me?

> >

> > In addition, could you provide me with any documentation (additional
> > to already published material) providing information on the
> > calculation of GISS raw and adjusted series from USHCN versions,
> > including relevant source code. Thank you for your attention,

> Stephen

> > McIntyre

> >

>

>

>

--

Reto Ruedy <rruedy@giss.nasa.gov>

From: James Hansen <jhansen@giss.nasa.gov>
To: Reto Ruedy <cdrar@giss.nasa.gov>, Makiko Sato <makis@giss.nasa.gov>
Subject: temperature data
Date: Thu, 9 Aug 2007 10:01:02 -0400

As an alternative to attempting to reconstruct the origins of all station records in the present analysis, is it easier to use current GHCN data per se and show that the difference that causes in global result is negligible? Jim

From: Reto Ruedy <rruedy@giss.nasa.gov>
Reply-To: rruedy@giss.nasa.gov
To: Gavin Schmidt <gschmidt@giss.nasa.gov>
Cc: Reto Ruedy <cdrar@giss.nasa.gov>, Jim Hansen
<jhansen@giss.nasa.gov>
Subject: Re: revisions to annual temps
Date: Thu, 09 Aug 2007 16:45:37 -0400

We might add, that none of the figures in our latest (2001) paper on temperatures was affected, since it was written in 2000, and only data up to 1999 were used for the figures in that paper.

As far as further revisions are concerned, we are considering just using GHCN data (which would reduce the 1900-1999 warming over the US by .3 C and have no noticeable effect on global means).

Needless to say, the whole thing is another red herring.

Reto

On Thu, 2007-08-09 at 15:04 -0400, Gavin Schmidt wrote:

> I was going to reply thusly, but let me know if you'd rather I left it
> to you.

>
> Gavin

>
> =====

> Andy, this hasn't got much to do with me, but briefly, the issue was as
> follows. USHCN is a dataset just for the US which has included a number
> of appropriate corrections to the individual stations based on known
> site moves and changes in when the data was taken (there has been a
> shift towards taking data in the morning rather than in the afternoon
> over the decades). This data is not updated that frequently.

>
> The main source of data is GHCN which is a global product, but that does
> not take into account the USHCN corrections.

>
> The error was made in assuming that recent values of the GHCN and USHCN
> were the same. It turns out they weren't and so when the USHCN-corrected
> stations were extended to the present day using GHCN, there were a
> number of small jumps (of both sign) in the data. The correction that
> was put in was then to re-align the GHCN and USHCN data using the
> 1990-1999 data. This made approximately 0.15 deg C difference in the
> 2000-2006 period for the US mean, but it is negligible in the global
> mean. The data were reprocessed and the online values now incorporate
> that fix.

>
> Given the nature of the error, this is purely a US issue (USHCN doesn't
> apply to the global data) , and as far as I'm aware, no further
> revisions related to this issue are likely to be forthcoming.

>
> Gavin

>
> On Thu, 2007-08-09 at 14:28, Andrew Revkin wrote:

> > hi,

> >

> > you probably noticed the mcintyre et al depiction of GISS annual temp
> > estimates for US over time.

> >

> > were the revisions published yet, or are they updated in databases
> > alone?

> >

> > also, are you doing same for global mean temp or is this specific
> > issue related to US?

> >

> >

> >

> >

> >

> > ANDREW C. REVKIN

> > The New York Times / Environment

> > 620 Eighth Ave., NY, NY 10018-1405

> > 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

--

Reto Ruedy <rruedy@giss.nasa.gov>

From: James Hansen <jhansen@giss.nasa.gov>
To: Andrew Revkin <anrevk@nytimes.com>
Cc: gschmidt@giss.nasa.gov, cdrar@giss.nasa.gov
Subject: Re: revisions to annual temps
Date: Sat, 11 Aug 2007 11:04:14 -0500 (12:04 EDT)

sorry, just noticed this, my box being overfull. The warming (during the industrial era, since the 1800s) in the U.S. is similar to the global warming. Of course, as the contiguous U.S. is only 2% of the global area, the unforced variability is much greater.

Not sure what you mean though -- the "reanalysis" has not changed anything, as you can see by looking at the two graphs that I sent out. The past decade, 1998-2007, is extremely warm in the U.S., about 1.2F warmer than 1951-1980 climatology. The "reanalysis" did not change the fact that we found 1934 to be a hair warmer than 1998 and 2006, but the differences are smaller than the uncertainty. (NOAA NCDC finds 1934 a hair cooler, also insignificant difference.)

As for the future in the U.S., you can look for the warming to become more obvious during the next decade or two, as the competition between GHGs and aerosols shifts more heavily to GHGs.

Jim

On 8/10/07, **Andrew Revkin** <anrevk@nytimes.com> wrote:
hey jim,

given that quite a few folks (gore and some enviros particularly) have often used the USA temp trends in arguments for action (string of record years) it's hard for me to ignore the reanalysis of those annual temps -- even though my own focus remains global mean temp.

essentially, should people always have paid less attention to US (48 state) trend as a meaningful signal of AGW?
(now that all those earlier warm years intrude, it certainly makes the case that regional data can be a red herring)

happy to discuss briefly by phone.
til 6 p.m. or so

At 11:34 PM 8/9/2007, you wrote:

|Hi Andy,

This seems to be a tempest inside somebody's teapot dome. One of the changes that we made in our analysis in 2001 was to include improvements that NOAA had made in station records in the U.S., their corrections being based mainly on station-by-station information about station movement, change of time-of-day at which max-min are recorded, etc.

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The net effect averaged over the U.S. was an error of about 0.15C or less in the post-2000 years, well within the uncertainty bar that we give. The effect on the global mean was of the order of a thousandths of a degree, i.e., entirely negligible.

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Jim

(Reto, please correct if there is anything in the above that is not right.)

On 8/9/07, **Andrew Revkin** <anrevk@nytimes.com

> wrote:

hi,

you probably noticed the mcintyre et al depiction of GISS annual temp estimates for US over time.

were the revisions published yet, or are they updated in databases alone?

also, are you doing same for global mean temp or is this specific issue related to US?

ANDREW C. REVKIN

The New York Times / Environment
620 Eighth Ave., NY, NY 10018-1405
phone: 212-556-7326 fax: 509 -357-0965
Arctic book: The North Pole Was Here

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From: Andrew Revkin <anrevk@nytimes.com>
To: James Hansen <jhansen@giss.nasa.gov>
Cc: gschmidt@giss.nasa.gov, Reto Ruedy <cdrrar@giss.nasa.gov>
Subject: Re: revisions to annual temps
Date: Thu, 09 Aug 2007 23:42:50 -0400

thanks.

on this front, i'm mainly intrsted in global mean temp trends in any case.,

just need to keep track.

in the meantime, more melting up north>

<http://www.nytimes.com/2007/08/09/science/10cnd-arctic.html>

At 11:34 PM 8/9/2007, James Hansen wrote:

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Acoustic-roots band Uncle Wade

From: lesgiss@verizon.net <lesgiss@verizon.net>
Reply-To: lesgiss@verizon.net
To: jhansen@giss.nasa.gov, rruedy@giss.nasa.gov
Subject: Question on GISS temperature data changing warmest year
Date: Fri, 10 Aug 2007 11:00:44 -0400

Hi Jim:

Just left you a voice mail....you should have received an email inquiry from Charlie Lewis of the National Post newspaper in Canada asking for your comment and answer to some questions about new claims by Steve McIntyre that the GISS temperature data wrongly orders the warmest year on record...

Here's a story on the accusations:

<http://newsbusters.org/blogs/noel-sheppard/2007/08/09/did-media-or-nasa-withhold-climate-history-data-changes-public>

<http://www.dailytech.com/Blogger+finds+Y2K+bug+in+NASA+Climate+Data/article8383.htm>

Unfortunately, McIntyre's site, www.climateaudit.org, does not appear to be operational.

How do you wish to address this inquiry and any others that may come in??

Thanks.

Leslie

Original Message:

From: Lewis, Charles (National Post) clewis@nationalpost.com
Date: Fri, 10 Aug 2007 10:16:09 -0400
To: lnolan@giss.nasa.gov
Subject: Request

I have a media request. I was told you were the best person to get in touch with and it was best to reach you by email. The National Post is a

national

Canadian newspaper. My number is 416-383-2472. Hope to hear from you soon.

Charles Lewis
National Post
1450 Don Mills Road
Toronto, Ontario M3B 2X7
Tel (416) 383-2472 Fax (416) 510-6830
e-mail: clewis@nationalpost.com
visit us at <http://www.nationalpost.com>
The News. When You Want It. Where You Want It.

mail2web - Check your email from the web at
<http://link.mail2web.com/mail2web>

From: lesgiss@verizon.net <lesgiss@verizon.net>
Reply-To: lesgiss@verizon.net
To: jhansen@giss.nasa.gov, rruedy@giss.nasa.gov
Subject: more on McIntyre allegations
Date: Fri, 10 Aug 2007 11:07:53 -0400

Jim and Reto:

More...scroll down...on the accusations McIntyre is making about the GISS temperature data..

Leslie

Original Message:

From: Lewis, Charles (National Post) clewis@nationalpost.com
Date: Fri, 10 Aug 2007 10:53:17 -0400
To: lnolan@giss.nasa.gov
Subject: FW: Fyi

Charles Lewis
National Post
1450 Don Mills Road
Toronto, Ontario M3B 2X7
Tel (416) 383-2472 Fax (416) 510-6830
e-mail: clewis@nationalpost.com
visit us at <http://www.nationalpost.com>
The News. When You Want It. Where You Want It.

----- Forwarded Message

From: "Lewis, Charles (National Post)" <clewis@nationalpost.com>
Date: Fri, 10 Aug 2007 09:18:08 -0400
To: National Post <clewis@nationalpost.com>
Conversation: Fyi
Subject: Fyi

Steve McIntyre, of Toronto operates www.climateaudit.org and began to investigate the data and the methods used to arrive at the results that were graphed by NASA's Goddard Institute for Space Studies (GISS).

What he discovered was truly amazing. Since NASA does not fully publish the computer source code and formulae used to calculate the trends in the graph, nor the correction used to arrive at the 'corrected' data. He had to reverse engineer the process by comparing the raw data and the processed data..

Here is one of his first posts where he begins to understand what is happening. 'This imparts an upward discontinuity of a deg C in wintertime and 0.8 deg C annually. I checked the monthly data and determined that the discontinuity occurred on January 2000 - and, to that extent, appears to be a Y2K problem. I presume that this is a programming error.'

He further refines his argument showing the distribution of the error, and the problems with the USHCN temperature data. He also sends an email to NASA GISS advising of the problem.

He finally publishes it here, stating that NASA made a correction not only on their own web page, attributing the discovery to McIntyre, but NASA also issued a corrected set of temperature anomaly data which you can see here:

<http://data.giss.nasa.gov/gistemp/graphs/Fig.D.txt>

Steve McIntyre posted this data from NASA's newly published data set from Goddard Institute of Space Studies (GISS) These numbers represent deviation from the mean temperature calculated from temperature measurement stations throughout the USA.

According to the new data published by NASA, 1998 is no longer the hottest year ever. 1934 is.

Four of the top 10 years of US CONUS high temperature deviations are now from the 1930s: 1934, 1931, 1938 and 1939, while only 3 of the top 10 are from the last 10 years (1998, 2006, 1999). Several years (2000, 2002, 2003, 2004) fell well down the leaderboard, behind even 1900. (World rankings of temperature are calculated separately.)

Top 10 GISS U.S. Temperature deviation (deg C) in New Order 8/7/2007

Year	Old	New
1934	1.23	1.25
1998	1.24	1.23
1921	1.12	1.15
2006	1.23	1.13
1931	1.08	1.08
1999	0.94	0.93
1953	0.91	0.90
1990	0.88	0.87
1938	0.85	0.86
1939	0.84	0.85

Here's the old order of top 10 yearly temperatures.

Year	Old	New
1998	1.24	1.23
1934	1.23	1.25
2006	1.23	1.13
1921	1.12	1.15
1931	1.08	1.08
1999	0.94	0.93
1953	0.91	0.90
2001	0.90	0.76
1990	0.88	0.87
1938	0.85	0.86

I salute the work of Steven McIntyre, he has now made two major contributions to climate science.

- 1) Proving how the Mann ³hockey stick² used in all Gore's movie, An Inconvenient Truth, was based on unsupportable data and methods.
- 2) Proving how yearly temperature anomalies for the USA are based on data that had been processed incorrectly.

Dr. Roger Pielke of the University of Colorado also deserves credit because

he was the one who encouraged me to pursue the www.surfacestations.org project due to his broad work on land use change and it's affect on regional and local climate.

Posted by Anthony Watts at 04:08 PM | [Permalink](#) |

Charles Lewis
National Post
1450 Don Mills Road
Toronto, Ontario M3B 2X7

Tel (416) 383-2472 Fax (416) 510-6830
e-mail: clewis@nationalpost.com
visit us at <http://www.nationalpost.com>
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----- End of Forwarded Message

mail2web LIVE — Free email based on Microsoft® Exchange technology -
<http://link.mail2web.com/LIVE>

From: Reto Ruedy <rruedy@giss.nasa.gov>
Reply-To: rruedy@giss.nasa.gov
To: Keith Winstein <@MIT.EDU>
Subject: Re: yr 2000 corr.
Date: Fri, 10 Aug 2007 18:54:19 -0400

In our 2001 paper (JGeophysRes vol 106), which we wrote in 2000 without having access to the full year 2000 data, (bottom of pg 23,958)

The annual US mean temperature is slightly warmer in 1934 than in 1998 in the GISS analysis. This contrasts with the USHCN-adjusted data which has 1998 as the warmest year of the century ...

I talked to the person who does the US calculation every year and she still had the old map series saved. With her program I recomputed the means and indeed: 1934: 1.23 1998: 1.24

And the bloggers might have had a download from before January 2007.

Lots of noise about noise.

Reto

On Fri, 2007-08-10 at 18:24 -0400, Keith Winstein wrote:

> Yes, if that's the case, it does seem like this kerfluffle is totally
> unrelated to the year-2000 correction. (Or at least, even if you had
never
> fixed the bug, the new files posted in February 2008 would have caused
a
> kerfluffle.)

> Thank you so much for all your time.

> Regards,
> Keith

> On Fri, 10 Aug 2007, Reto Ruedy wrote:

> > Hi Keith,

> > We compute these means every month, but since these are annual means,
> > they are copied to the web site only once a year (on February).

> > So the change that caused all the havoc must have happened after one
of
> > the previous routine updates.

> > Thanks for noticing that,
> >
> > Reto
> >
> > On Fri, 2007-08-10 at 17:52 -0400, Keith Winstein wrote:
> >> Thanks, this is very interesting -- even playing this "which is
> >> numerically higher" game (if you will indulge that for a bit more),
the
> >> correction did not affect the relative ordering of the years. 1934
was at
> >> 1.25 before and after the correction, and 1998 was at 1.23 before and
> >> after the correction.
> >>
> >> Do you have any idea why the "before_correction" data doesn't match
the
> >> version that Google downloaded on July 23, 2007 from
> >> <http://data.giss.nasa.gov/gistemp/graphs/Fig.D.txt> ?
> >>
> >>
[http://64.233.169.104/search?q=cache:vskwzroreeQJ:data.giss.nasa.gov/gistemp](http://64.233.169.104/search?q=cache:vskwzroreeQJ:data.giss.nasa.gov/gistemp/graphs/Fig.D.txt)
> >> /graphs/Fig.D.txt
+[http://data.giss.nasa.gov/gistemp/graphs/Fig.D.txt&hl=en&c](http://data.giss.nasa.gov/gistemp/graphs/Fig.D.txt&hl=en&ct=clnk&cd=1&gl=us&client=firefox-a)
> >> t=clnk&cd=1&gl=us&client=firefox-a
> >>
> >> In _that_ version, 1934 was at 1.23 and 1998 was at 1.24.
> >>
> >> Perhaps the July 23 2007 version had not yet incorporated the June
2007
> >> data? Any insights would be much appreciated.
> >>
> >> Thanks, and best regards,
> >> Keith Winstein
> >> 617-654-6864
> >> The Wall Street Journal
> >>
> >> On Fri, 10 Aug 2007, Reto Ruedy wrote:
> >>
> >>> Hi Keith,
> >>>
> >>> Hope you got my data; by the way, the standard deviation of the US
> >>> series is about .47 C . So the .5C is about 1 standard deviation.
> >>>
> >>> We got part of our estimate based on comparing means of model data
with
> >>> applying our method to the same data after removing some of these
data
> >>> similar to what we had available in observations.

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

From: James Hansen <jhansen@giss.nasa.gov>
To: Reto Ruedy <cdrar@giss.nasa.gov>, Makiko Sato <makis@giss.nasa.gov>
Subject: Fwd: Request
Date: Fri, 10 Aug 2007 10:23:20 -0500 (11:23 EDT)

Reto,

I am being besieged by e-mails and calls about this, so we need to do something promptly, as there will be stories written today for publication tomorrow. Let me know what the chances are that you will be able to have the comparative global temperature curves that we discussed yesterday.

By the way, Makiko, do you remember if we ever make any statement about how different years ranked for the United States temperatures? There are several demands that we issue a press release correcting our wrong results and declaring that 1934 is now the warmest year on record in the U.S., also that 4 of the 10 warmest years were in the 1930s and only 3 in the last 10 years.

Jim

----- Forwarded message -----

From: Lewis, Charles (National Post) <clewis@nationalpost.com>
Date: Aug 10, 2007 9:40 AM
Subject: Request
To: jhansen@giss.nasa.gov

Leslie McCarthy suggested I call you. A researcher in Toronto (Steve McIntyre) says he sent information to NASA to correct annual U.S. Temperature data. His point is that 1934 now becomes the warmest year. I'd like to talk to you for a few minutes about this and what significance, if any, it has. I can be reached at 416-383-2472. Thanks

Charles Lewis
National Post
1450 Don Mills Road
Toronto, Ontario M3B 2X7
Tel (416) 383-2472 Fax (416) 510-6830
e-mail: clewis@nationalpost.com
visit us at <http://www.nationalpost.com>
The News. When You Want It. Where You Want It.

From: Makiko Sato <makis@giss.nasa.gov>
To: James Hansen <jhansen@giss.nasa.gov>, rruedy@giss.nasa.gov
Subject: Re: Fwd: Request
Date: Fri, 10 Aug 2007 15:54:35 -0400

At 11:23 2007/08/10, you wrote:

>Reto,

>

>I am being besieged by e-mails and calls about this, so we need to
>do something promptly, as there will be stories written today for
>publication tomorrow. Let me know what the chances are that you will
>be able to have the comparative global temperature curves that we
>discussed yesterday.

>

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>about how different years ranked for the United States
>temperatures? There are several demands that we issue a press
>release correcting our wrong results and declaring that 1934 is now
>the warmest year on record in the U.S., also that 4 of the 10
>warmest years were in the 1930s and only 3 in the last 10 years.

>

Let's try to remember what statements we made about US temperature

(1) In our 2001 paper

GISS 1934 warmest, USHCN 1998 warmest, difference being a
few hundredths of a degree

(2) Summation

2001-2003, only global T

2004 US for 1950-2003 (no 1934)

2005-2006, global and low latitudes

(3) In January 2007, I showed on my "Some Extra" page which most
people don't look

1934 1.23, 1998 1.24 and 2006 1.23

We made rankings to the public only for the global mean. NOAA
usually does for the US.

Makiko

From: lesgiss@verizon.net <lesgiss@verizon.net>
Reply-To: lesgiss@verizon.net
To: rruedy@giss.nasa.gov
Cc: jhansen@giss.nasa.gov
Subject: RE: [Fwd: Re: revisions to annual temps]
Date: Fri, 10 Aug 2007 12:21:16 -0400

Thanks, Reto...I'll leave it to Jim to reply to these inquiries...do you know if he's around today? I left him a voice mail earlier on his cellphone...thanks!

Leslie

Original Message:

From: Reto Ruedy rruedy@giss.nasa.gov
Date: Fri, 10 Aug 2007 11:49:35 -0400
To: lesgiss@verizon.net, jhansen@giss.nasa.gov
Subject: [Fwd: Re: revisions to annual temps]

Hi Leslie,

Andy Revkin asked the same question and Jim's answer below says it all in the clearest and most beautiful way.

The blog you attached is a prime example of what gives bloggers a really bad name; somebody with no idea what he is talking about is spouting absolute nonsense, making no distinctions between what is essential (the facts he conveniently omits) and what is pure noise (which he is concentrating on exclusively).

He omits that the global mean time series (which is generally considered the standard measure for global warming) is unaffected

He concentrates on US time series which (US covering less than 2% of the world) is so noisy and has such a large margin of error that no conclusions can be drawn from it at this point; showing the plot of annual means before and after the correction would have made the whole article a joke since the differences are barely visible.

He had to use the device of ranking the years rather than showing the plots to make any point at all. The problem with rankings is that there are large clumps of years which are equal within the margin of error and rankings within these clumps are purely accidental.

He finds it astounding that years 1934 and 1998 reversed ranks, not remembering that the corrections only affected years 2000-2006, hence that there is no possible connection there.

By speaking of warmest year (rather than warmest year in the US time record) he successfully deceived people like Mark Taylor.

Reto

----- Forwarded Message -----

From: James Hansen <jhansen@giss.nasa.gov>
To: Andrew Revkin <anrevk@nytimes.com>
Cc: gschmidt@giss.nasa.gov, Reto Ruedy <cdrar@giss.nasa.gov>
Subject: Re: revisions to annual temps
Date: Thu, 9 Aug 2007 22:34:43 -0500

Hi Andy,

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databases alone?

also, are you doing same for global mean temp or is this
specific issue related to US?

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

--

Reto Ruedy <rruedy@giss.nasa.gov>

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

From: KrFrench@ngs.org
To: rruedy@giss.nasa.gov
Subject: Re: Y2K correction
Date: Fri, 10 Aug 2007 14:45:58 -0400

Hi Reto,

Thanks for the heads up on this and glad we don't have to change anything because it's printed and done. Looks very nice and I'll be sending complimentary copies your way once it is published. We'll keep your email in the file in case we receive letters about this.

Best,
Kris

Kris French
National Geographic Maps
Senior Research Cartographer
1145 17th Street NW
Washington, D.C. 20036
Tel. 202-775-6173 Fax 202-429-5704
email: krfrench@ngs.org

Reto Ruedy <rruedy@giss.nasa.gov>

To KrFrench@ngs.org

cc

Subject Y2K correction

08/10/2007 02:42 PM

Please respond to
rruedy@giss.nasa.gov

Hi Kris,

Steve McIntyre, a former mining executive, now a blogger and global warming denier, is blowing a small correction in our procedure of handling US data way out of proportion. The correction has absolutely no impact on the global mean temperature time series, over the US it made a difference of .15 C.

I checked what this correction does to your map and it does change the colors somewhat over parts of the US; the rest of the world is unaffected. Even the change over the US is way within the margin of error (0.5 C). So there is little need to make any changes.

The timing is a bit awkward, though. Sorry for that,

Reto

From: James Hansen <jhansen@giss.nasa.gov>
To: Makiko Sato <makis@giss.nasa.gov>, Reto Ruedy <cdrar@giss.nasa.gov>
Subject: Fwd: Fwd: FW: <no subject>
Date: Tue, 14 Aug 2007 13:01:14 -0400

----- Forwarded message -----

From: James Hansen <jhansen@giss.nasa.gov>
Date: Aug 14, 2007 1:00 PM
Subject: Re: Fwd: FW: <no subject>
To: "DEMIAN MCLEAN, BLOOMBERG/ NEWSROOM:" <dmclean8@bloomberg.net>

Demian,

No, we have not changed ranking of warmest year in the U.S. As you will see in our 2001 paper we found 1934 slightly warmer, by an insignificant hair over, 1998. We still find that result. The flaw affected temperatures only after 2000, not 1998 and 1934.

Yes, our analysis algorithm is available, described fully in publication, and other researchers have taken that description, applied it to the raw data and come up with the same results that we get.

Jim

On 8/14/07, **DEMIAN MCLEAN, BLOOMBERG/ NEWSROOM:**
<dmclean8@bloomberg.net> wrote:

james, pardon me: i see the records volz was referring to are *global*. the u.s. figures showed 1998 as the warmest year. nevertheless, nasa has indeed newly ranked 1934 as the warmest year. also, i'd be grateful if you could respond to the second question, regarding your algorithm and making it public.

best,
demian

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

From: James Hansen <jhansen@giss.nasa.gov>
At: 8/14 12:15:10

Demian, I am running to a meeting and may not get back in time for your deadline -- following may help answer your question -- presumably you saw my "Upstairs" note? Jim Hansen

----- Forwarded message -----

From: James Hansen <jhansen@giss.nasa.gov>
Date: Aug 14, 2007 2:52 AM
Subject: Re: FW: <no subject>

To: Donald Anderson <donald.anderson-1@nasa.gov>, Jack Kaye <jack.a.kaye@nasa.gov>
Cc: Leslie McCarthy <lnolan@giss.nasa.gov>

Don,

These are some desperate characters trying to make a mountain out of a mole hill. I presume that my note "A Light on Upstairs?" should have clarified things for scientists (Leslie, you can send it to anybody), but perhaps a few of additional comments are warranted.

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On 8/13/07, Donald Anderson <donald.anderson-1@nasa.gov> wrote:

>

> Jim:

> FYI

> Any comment?

> Don

>

>

> _____
> Don Anderson

> 3G84

> Modeling, Analysis and Prediction (MAP)

> Earth Science Division

> Science Mission Directorate

> NASA HQ

> Washington, DC, 20546-0001

> 202-358-1432 Fax: x2770

> email: Donald.Anderson-1@nasa.gov

>

>

> ----- Forwarded Message

> *From: *"Volz, Stephen M. (HQ-DK000)" <svolz@nasa.gov>

> *Date: *Mon, 13 Aug 2007 12:01:06 -0400

> *To: *"Anderson, Donald (HQ-DK000)" <donald.anderson-1@nasa.gov>, "Maring, Hal (HQ-DK000)" <hal.maring@nasa.gov>

> *Cc: *"Kaye, Jack A. (HQ-DK000)" <jack.a.kaye@nasa.gov>, "Brown, Dwayne C. (HQ-NB060)" <dwayne.c.brown@nasa.gov>

> *Conversation: *<no subject>

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> Program Executive, Science Mission Directorate

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Demian, I am running to a meeting and may not get back in time for your deadline -- following may help answer your question -- presumably you saw my "Upstairs" note? Jim Hansen

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Date: Aug 14, 2007 2:52 AM

Subject: Re: FW: <no subject>

To: Donald Anderson <donaald.anderson-1@nasa.gov>, Jack Kaye
<jack.a.kaye@nasa.gov>

Cc: Leslie McCarthy <lnolan@giss.nasa.gov>

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----- End of Forwarded Message

From: Makiko Sato <makis@giss.nasa.gov>
To: James Hansen <jhansen@giss.nasa.gov>, Reto Ruedy
<rruedy@giss.nasa.gov>
Subject: Re: Fwd: FW: <no subject>
Date: Tue, 14 Aug 2007 14:09:34 -0400

I am sure I had 1998 warmer than 1934 at least
once because on my own temperature web page
(which most people never look at), I have

US annual

(Last Modified: 2007-01-12)

and since it was made in January when I updated
all the graphs, I had my US mean table which is
consistent with this until last Monday.

I didn't keep all the data, but some of them are

	1934	1998
1999 July	1.459	0.918
2000 Nov.	1.273	1.151
2001 Jan.	1.235	1.199

<= These
changes in early years may be due to different analysis
2006 Jan. 1.235 0.930 <= This
is questionable, I may have kept some data which I was checking.
2007 Jan. 1.227 1.242 <= This
is only time we had 1998 warmer than 1934, but one web for 7 months.
2007 Mar. 1.247 1.234 <= Somehow
I recomputed in March, but didn't make changes to the web page.
2007 Aug. 1.249 1.226 <= Most
recent with corrections, and with July data

I am sorry, I should have kept more data, but I
was not interested in US data after 2001 paper.

Makiko

At 13:27 2007/08/14, James Hansen wrote:
>Makiko, Reto, could you please clear this
>up. Other people keep saying the same thing
>that Demian does, i.e., that we previously
>claimed that 1998 was warmer than 1934. Is that
>right? I am quite sure that our 2001 paper

>shows 1934 slightly warmer, as we still
>find. Of course, scientifically this is all
>nonsense, as the difference of 0.02 is much less
>than the accuracy, so practically it should be
>stated as a tie. I know that whenever new
>stations are added to the record it can change
>things by small amounts. Did we once find 1998
>as warmer??? Jim (I will be away from e-mail for a few hours).
>
>On 8/14/07, DEMIAN MCLEAN, BLOOMBERG/ NEWSROOM:
><<mailto:dmclean8@bloomberg.net>dmclean8@bloomberg.net> wrote:
>Thanks, James. I'm not familiar with that paper from 2001. Is it not
true,
>though, that NASA's rankings, as available at:
>
><<http://data.giss.nasa.gov/gistemp/graphs/Fig.D.txt>><http://data.giss.nasa.gov/gistemp/graphs/Fig.D.txt>
>
>now show 1934 as the hottest year, where 1998 used to hold that position?
>
>thanks,
>demian
>----- Original Message -----
>From: James Hansen <<mailto:jhansen@giss.nasa.gov>jhansen@giss.nasa.gov>
>At: 8/14 13:00:38
>
>Demian,
>
>No, we have not changed ranking of warmest year in the U.S. As you will
see
>in our 2001 paper we found 1934 slightly warmer, by an insignificant hair
>over, 1998. We still find that result. The flaw affected temperatures
only
>after 2000, not 1998 and 1934.
>
>Yes, our analysis algorithm is available, described fully in publication,
>and other researchers have taken that description, applied it to the raw
>data and come up with the same results that we get.
>
>Jim
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global.

> > the u.s.
> > figures showed 1998 as the warmest year. nevertheless, nasa has
indeed
> > newly
> > ranked 1934 as the warmest year. also, i'd be grateful if you could
> > respond to
> > the second question, regarding your algorithm and making it public.
> >
> > best,
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> > From: James Hansen
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> > > Washington, DC, 20546-0001
> > > 202-358-1432 Fax: x2770
> > > email: <mailto:Donald.Anderson-1@nasa.gov>Donald.Anderson-1@nasa.gov
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> <mailto:svolz@nasa.gov>svolz@nasa.gov>
> > > *Date: *Mon, 13 Aug 2007 12:01:06 -0400
> > > *To: *"Anderson, Donald (HQ-DK000)" <
> <mailto:donald.anderson-1@nasa.gov>donald.anderson-1@nasa.gov>,
> > > "Maring, Hal (HQ-DK000)" <
> <mailto:hal.maring@nasa.gov>hal.maring@nasa.gov >
> > > *Cc: *"Kaye, Jack A. (HQ-DK000)"
> <<mailto:jack.a.kaye@nasa.gov>jack.a.kaye@nasa.gov>, "Brown, Dwayne
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> <mailto:dwayne.c.brown@nasa.gov>dwayne.c.brown@nasa.gov>
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> >
> >
> >
>
>
>Demian,
>
>No, we have not changed ranking of warmest year
>in the U.S. As you will see in our 2001 paper we
>found 1934 slightly warmer, by an insignificant
>hair over, 1998. We still find that
>result. The flaw affected temperatures only after 2000, not 1998 and
1934.
>
>Yes, our analysis algorithm is available,
>described fully in publication, and other
>researchers have taken that description, applied
>it to the raw data and come up with the same results that we get.
>
>Jim
>
>On 8/14/07, DEMIAN MCLEAN, BLOOMBERG/ NEWSROOM:
><<mailto:dmclean8@bloomberg.net> dmclean8@bloomberg.net> wrote:
>james, pardon me: i see the records volz was
>referring to are *global*. the u.s.
> figures showed 1998 as the warmest year. nevertheless, nasa has indeed
newly
>ranked 1934 as the warmest year. also, i'd be
>grateful if you could respond to
>the second question, regarding your algorithm and making it public.
>
>best,
>demian
>----- Original Message -----
>From: James Hansen <<mailto:jhansen@giss.nasa.gov>
jhansen@giss.nasa.gov>
>At: 8/14 12:15:10
>
>Demian, I am running to a meeting and may not get back in time for your
>deadline -- following may help answer your question -- presumably you saw
my
>"Upstairs" note? Jim Hansen
>
>----- Forwarded message -----
>From: James Hansen <<mailto:jhansen@giss.nasa.gov>jhansen@giss.nasa.gov>
>Date: Aug 14, 2007 2:52 AM
>Subject: Re: FW: <no subject>

>To: Donald Anderson
 ><<mailto:donald.anderson-1@nasa.gov>donald.anderson-1@nasa.gov>, Jack
 Kaye <
 ><mailto:jack.a.kaye@nasa.gov>jack.a.kaye@nasa.gov>
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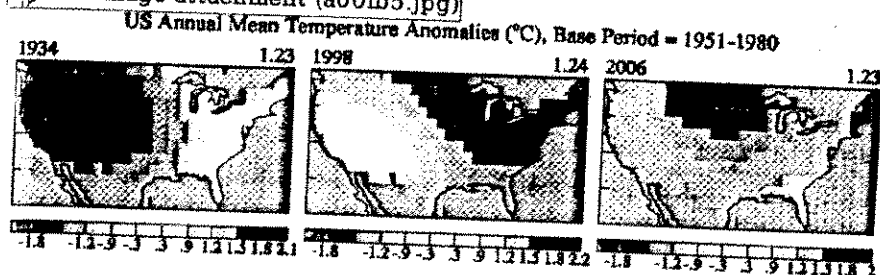
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>- Yoda, Jedi Master

>----- End of Forwarded Message

>
>
>
>
>
>

JPEG image attachment (a00fb5.jpg)



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

To: rruedy@giss.nasa.gov

Subject: RES: RES: U.S. warmest years

Date: Wed, 15 Aug 2007 16:21:28 -0300 (15:21 EDT)

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

Letícia

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

De: Reto Ruedy [<mailto:rruedy@giss.nasa.gov>]

Enviada em: quarta-feira, 15 de agosto de 2007 15:56

Para: Letícia 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, Letícia 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: Letícia 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
> > 1ª
> > 1934
> > 1ª
> > 1998
> > 2ª
> > 1921
> > 3ª
> > 1931
> > 4ª
> > 2005
> > 5ª
> > 1999
> > 6ª
> > 2001
> > 7ª
> > 1953
> > 8ª
> > 1990
> > 9ª
> > 1987
> >
> > Revised table
> > 1ª
> > 1934
> > 2ª
> > 1998
> > 3ª
> > 1921
> > 4ª
> > 2006
> > 5ª
> > 1931
> > 6ª

> > 1999
> > 7º
> > 1953
> > 8º
> > 1990
> > 9º
> > 1938
> > 10º
> > 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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> >

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Reto Ruedy <rruedy@giss.nasa.gov>

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