

This is a continuation from my original bit of research, on where the 97% came from, and the survey details. At the end of that bit of research, I decided to actually look for the values that were given for the survey, and if I can plot a graph from the various places that they're stated from.

Now, if you can recall, the survey asked this question:

"1. When compared with pre- 1800s levels, do you think that mean global temperatures have generally risen, fallen, or remained relatively constant?"

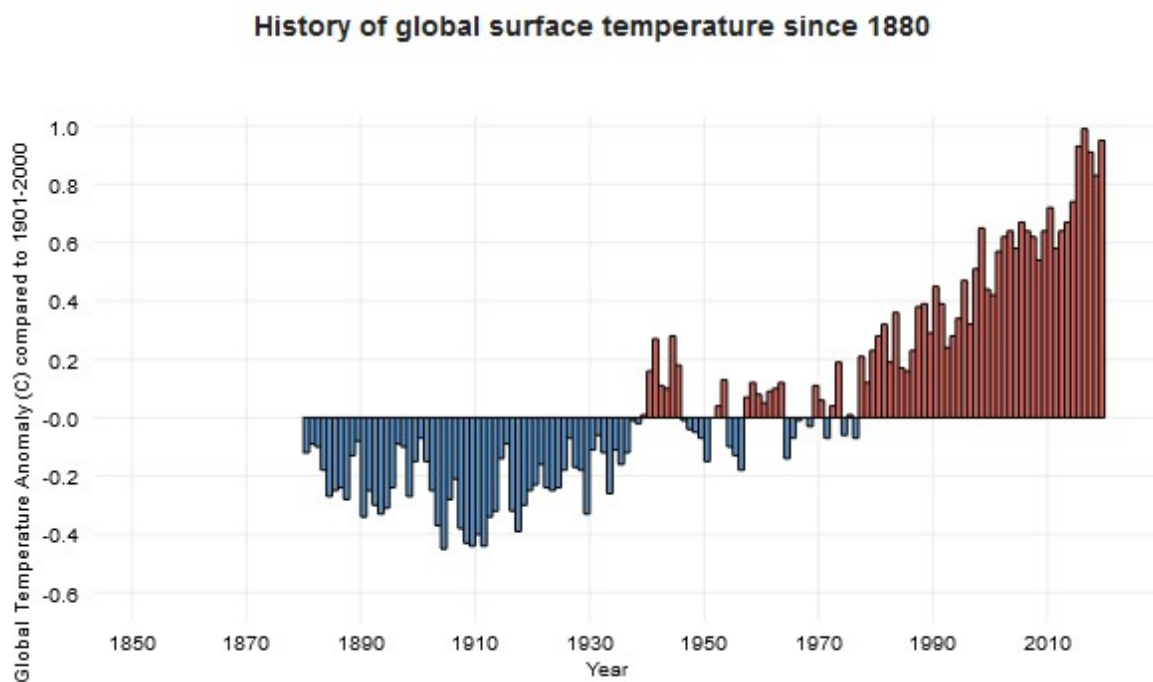
So, that is what I'm looking at. And you know what; I can't find ANY site that offers the pre-1800's levels. What does that mean? Well, for one, the survey was asking a false question. Second, the people filling it in (remember, they had only 2 minutes to complete it) couldn't have determined if they were lower than 1800.

What did I find? Well, let's take a look and then try and plot the graphs of any data I do find. I'll plot all graphs at the end, so it's easier to see at a glance.

First site:

<https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature>

If you look at the graph, it only goes back to 1880, not 1800 or before:



*"The zero line represents the long-term average temperature for the whole planet; blue and red bars show the difference above or below average for each year."*

And the source data comes from here:

[https://www.ncdc.noaa.gov/cag/global/time-series/globe/land\\_ocean/ytd/12/1880-2019](https://www.ncdc.noaa.gov/cag/global/time-series/globe/land_ocean/ytd/12/1880-2019)

Now, the actual image is of both land and sea combined. It offers land, sea and combined. So, we can split them out and create some graphs. But one thing I have noticed on this site, and curious if it's the same elsewhere, is where do they take the readings from? In the case of the main graph, it's Global, but there is a chance to split per region. Now, this will take some time, but I'll do it. I know it creates graphs for you, but I just want to make sure they're correct, as pictures can tell a 1000 words, and if the picture isn't correct....Plus, I want to then compare graphs, far easier if plotted the same way, and not how one website does it, different to the next.

So, the data for this site is stated here:

<https://www.ncdc.noaa.gov/cag/global/data-info>

**Global** National Regional Statewide Divisional County City

Mapping Time Series Rankings Haywood Plots **Data Information** Background

## Global Data Information

Global temperature anomaly data come from the [Global Historical Climatology Network-Monthly \(GHCN-M\)](#) data set and [International Comprehensive Ocean-Atmosphere Data Set \(ICOADS\)](#), which have data from 1880 to the present. These two datasets are blended into a single product to produce the combined global land and ocean temperature anomalies. The available timeseries of global-scale temperature anomalies are calculated with respect to the 20th century average, while the mapping tool displays global-scale temperature anomalies with respect to the 1981-2010 base period. For more information on these anomalies, please visit [Global Surface Temperature Anomalies](#).

So, the first is the GHCN-M:

<https://www.ncdc.noaa.gov/ghcn-monthly>

I actually clicked on Version 4, as that is the latest:

<https://www.ncdc.noaa.gov/data-access/land-based-station-data/land-based-datasets/global-historical-climatology-network-monthly-version-4>

It does state this at the top of that page:

“The Global Historical Climatology Network–monthly (GHCNm) dataset is a set of monthly climate summaries from thousands of weather stations around the world. The monthly data have periods of record that vary by station with the earliest observations dating to the 18th century. Some station records are purely historic and are no longer updated whereas many others are still in operation and provide short time delay updates that are useful for climate monitoring.”

It states that it goes back to the 18<sup>th</sup> century. That's correct, it does...but only to 1880. Not to 1800.

The second link is the ICOADS:

<https://icoads.noaa.gov/>

It states at the top of the page:

“The International Comprehensive Ocean-Atmosphere Data Set (ICOADS) offers surface marine data spanning the past three centuries, and simple gridded monthly summary products for 2° latitude x 2° longitude boxes back to 1800 (and 1°x1° boxes since 1960)—these **data and products** are freely distributed worldwide. As it contains observations from many different observing systems encompassing the evolution of measurement technology over hundreds of years, ICOADS is probably the most complete and heterogeneous collection of surface marine data in existence.”

So, it states on here that it goes back to 1800. So, why isn't it listed on the Ocean options, in their own database?

So, clicking on the “data and products” (which I've bolded) takes you here:

<https://icoads.noaa.gov/products.html>

And from there, I found the site where the data is:

### Monthly Summary Statistics

Ten statistics (such as the mean and median) are calculated for each of 22 observed and derived variables, using 2° latitude x 2° longitude boxes back to 1800

#### Access from NCAR

- Global archive (year-month) files in Monthly Summary Group (MSG) binary format
- User interface for spatial, temporal, and parameter subsetting
  - Data output: tabular ASCII format

Which is here:

<https://rda.ucar.edu/datasets/ds548.1/>

However, you need to have access to view the file, and the contributors are:

**Data Contributors:** [UWA/ATMOS](#) | [UK/MOD/MET](#) | [UCAR/NCAR/CISL/RDA](#) | [UCO/CIRES](#) | [DE/DWD](#) | [U-SOTON/NOG](#) | [FSU/COAPS](#) | [DOC/NOAA/OAR/ESRL/PSL](#) | [DOC/NOAA/NESDIS/NCEI](#)

And I've listed them here as initials means nothing to us mere mortals 😊

Department of Atmosphere Science, University of Washington; Met Office, Ministry of Defence, United Kingdom; Research Data Archive, Computational and Information Systems Laboratory, National Centre for Atmospheric Research, University Corporation for Atmospheric Research; Cooperative Institute for Research in Environmental Sciences, University of Colorado; Deutscher Wetterdienst (German Meteorological Service), Germany; National Oceanography Centre, University of Southampton; Center for Ocean-Atmospheric Prediction Studies, Florida State University; Physical Sciences Laboratory, Earth System Research Laboratory, OAR, NOAA, US Department of Commerce; National Centers for Environmental Information, NESDIS, NOAA, US Department of Commerce.

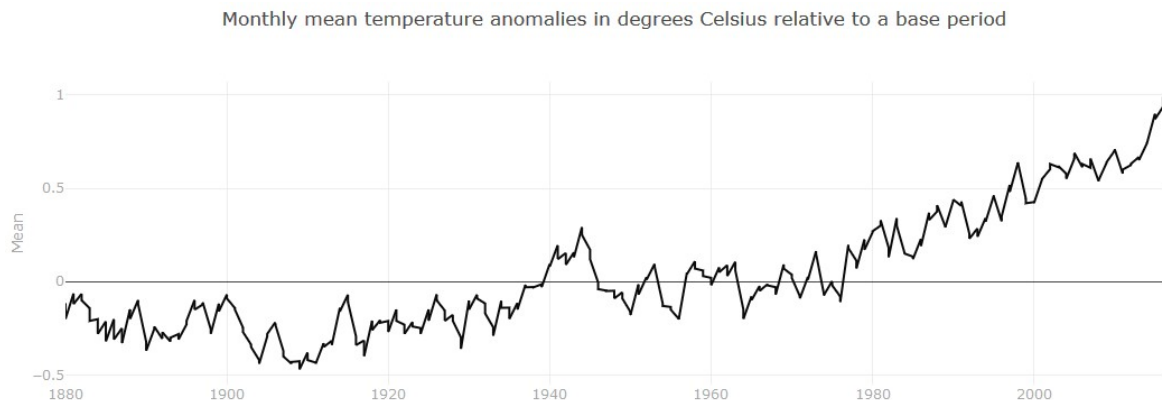
Phew!

But why, if they have the data, don't they plot it? Never mind, we can only go on what they have available.

Second site:

<https://datahub.io/core/global-temp>

Again, 1880 to 2016 only:



This one is actually the monthly temperatures. They have a “Read Me” on where the data comes from:

Global Temperature Time Series. Data are included from the GISS Surface Temperature (GISTEMP) analysis and the global component of Climate at a Glance (GCAG). Two datasets are provided: 1) global monthly mean and 2) annual mean temperature anomalies in degrees Celsius from 1880 to the [read more](#)

And the data comes from two sources.

## Description [🔗](#)

### 1. GISTEMP Global Land-Ocean Temperature Index:

Combined Land-Surface Air and Sea-Surface Water Temperature Anomalies [i.e. deviations from the corresponding 1951-1980 means]. Global-mean monthly [...] and annual means, 1880-present, updated through most recent month.

### 1. Global component of Climate at a Glance (GCAG):

Global temperature anomaly data come from the Global Historical Climatology Network-Monthly (GHCN-M) data set and International Comprehensive Ocean-Atmosphere Data Set (ICOADS), which have data from 1880 to the present. These two datasets are blended into a single product to produce the combined global land and ocean temperature anomalies. The available timeseries of global-scale temperature anomalies are calculated with respect to the 20th century average [...].

Well, the first we will go direct to the site and check out (which is looked at fully in the Third Site):

<http://data.giss.nasa.gov/gistemp/>

But the second is the first site we looked at:

<http://www.ncdc.noaa.gov/cag/data-info/global>

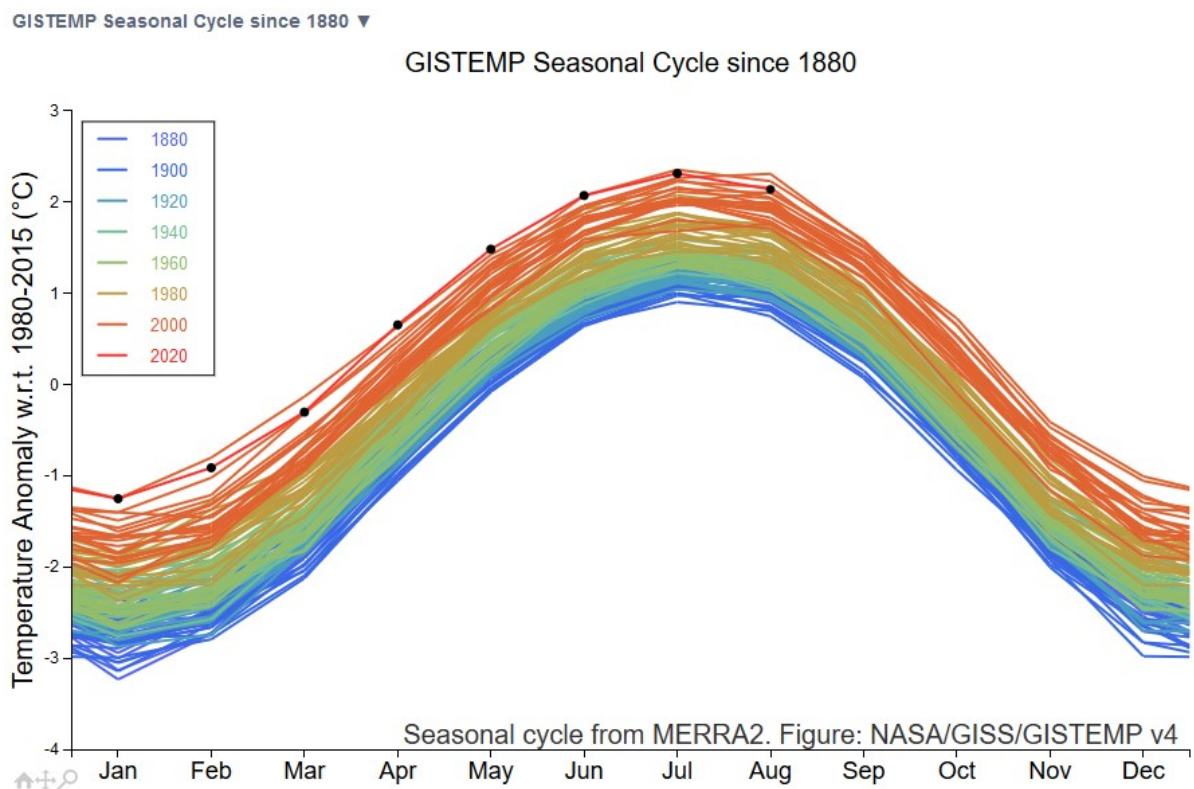
So, no need to look at that one, already have the data. So, the actual site for datahub doesn't have its own data, so onto the third.

Third Site:

<http://data.giss.nasa.gov/gistemp/>

Again, only goes from 1880 to 2015 (spot a pattern anyone)?

[https://data.giss.nasa.gov/gistemp/graphs\\_v4/](https://data.giss.nasa.gov/gistemp/graphs_v4/)



Not as easy to look at compared to the other graphs, but does seem to show it increases/decreases at the exact same months.

And this is what it states at the top of the main page:

“The GISS Surface Temperature Analysis ver. 4 (GISTEMP v4) is an estimate of global surface temperature change. Graphs and tables are updated around the middle of every month using current data files from NOAA GHCN v4 (meteorological stations) and ERSST v5 (ocean areas), combined as described in our publications Hansen et al. (2010) and Lenssen et al. (2019). These updated files incorporate reports for the previous month and also late reports and corrections for earlier months”

But to find out what the actual values that they use, which probably come from a multitude of places, at the very bottom of the main page, it states this:

### Tables of Global and Hemispheric Monthly Means and Zonal Annual Means

The following are plain-text files in tabular format of temperature anomalies, i.e. deviations from the corresponding 1951-1980 means.

#### Combined Land-Surface Air and Sea-Surface Water Temperature Anomalies (Land-Ocean Temperature Index, LOTI)

- **Global-mean monthly, seasonal, and annual means**, 1880-present, updated through most recent month: *TXT, CSV*
- **Northern Hemisphere-mean monthly, seasonal, and annual means**, 1880-present, updated through most recent month: *TXT, CSV*
- **Southern Hemisphere-mean monthly, seasonal, and annual means**, 1880-present, updated through most recent month: *TXT, CSV*
- **Zonal annual means**, 1880-present, updated through most recent complete year: *TXT, CSV*

So, I actually looked at the Global, Northern/Southern Hemisphere details. Strangely enough, on the First Site that we looked at, it goes into a lot more depth (Africa, Mexico etc.), but at NASA its just 2 areas, and global.

[https://data.giss.nasa.gov/gistemp/taledata\\_v4/GLB.Ts+dSST.txt](https://data.giss.nasa.gov/gistemp/taledata_v4/GLB.Ts+dSST.txt)

[https://data.giss.nasa.gov/gistemp/taledata\\_v4/GLB.Ts+dSST.csv](https://data.giss.nasa.gov/gistemp/taledata_v4/GLB.Ts+dSST.csv)

[https://data.giss.nasa.gov/gistemp/taledata\\_v4/NH.Ts+dSST.txt](https://data.giss.nasa.gov/gistemp/taledata_v4/NH.Ts+dSST.txt)

[https://data.giss.nasa.gov/gistemp/taledata\\_v4/NH.Ts+dSST.csv](https://data.giss.nasa.gov/gistemp/taledata_v4/NH.Ts+dSST.csv)

[https://data.giss.nasa.gov/gistemp/taledata\\_v4/SH.Ts+dSST.txt](https://data.giss.nasa.gov/gistemp/taledata_v4/SH.Ts+dSST.txt)

[https://data.giss.nasa.gov/gistemp/taledata\\_v4/SH.Ts+dSST.csv](https://data.giss.nasa.gov/gistemp/taledata_v4/SH.Ts+dSST.csv)

Now, this is a snapshot of the Global values:

Notes: 1950 DJF = Dec

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul |
|------|-----|-----|-----|-----|-----|-----|-----|
| 1880 | -17 | -23 | -8  | -15 | -8  | -19 | -17 |
| 1881 | -18 | -13 | 4   | 7   | 8   | -17 | 2   |
| 1882 | 18  | 16  | 6   | -15 | -13 | -21 | -14 |
| 1883 | -28 | -35 | -11 | -17 | -16 | -6  | -5  |
| 1884 | -12 | -7  | -35 | -39 | -32 | -34 | -31 |
| 1885 | -57 | -32 | -25 | -40 | -44 | -42 | -32 |
| 1886 | -42 | -50 | -42 | -27 | -23 | -33 | -17 |
| 1887 | -70 | -56 | -34 | -33 | -29 | -23 | -24 |
| ---- | --  | --  | --  | --  | --  | --  | --  |

Obviously, they're very large, but there is a calculation that needs to be done to get the correct values:

Divide by 100 to get changes in degrees Celsius (deg-C).  
 Multiply that result by 1.8(=9/5) to get changes in degrees Fahrenheit (deg-F).

Example          --          Table Value :          40  
    change :          0.40 deg-C   or   0.72 deg-F

We'll be doing °C, as the other sites were listed like that. Plus, it offers a mean of Jan-Dec, so again, will use that value, and not individual months, as the other site was overall as well.

But if you actually download the CSV instead of the TXT file, it converts it to the correct decimal points ☺

Fourth Site:

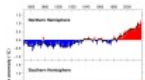
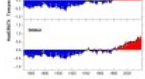
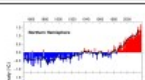
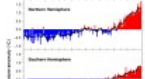
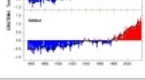
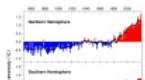
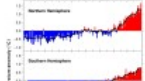
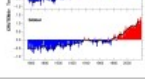
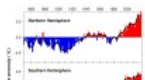
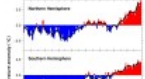
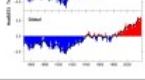

<https://crudata.uea.ac.uk/cru/data/temperature/>

At the very top, it states:

“These datasets have been developed by the Climatic Research Unit (University of East Anglia) in conjunction with the Hadley Centre (UK Met Office), apart from the sea surface temperature (SST) dataset which was developed solely by the Hadley Centre. These datasets will be updated at roughly monthly intervals into the future. Hemispheric and global averages as monthly and annual values are available as separate files.”

And the actual datasets are here:

### Data for Downloading

| Dataset  | Full grid                        | End month Updated     | Hemispheric & global means   | Hadley Centre            |
|--|----------------------------------|-----------------------|--|--------------------------|
| <b>HadCRUT4</b>  | <a href="#">NetCDF</a><br>(21MB) | 2020-08<br>2020-09-23 | <a href="#">NH</a>  | <a href="#">HadCRUT4</a> |
|  |                                  |                       | <a href="#">SH</a>  |                          |
| Combined land [CRUTEM4] and marine [SST anomalies from HadSST3] temperature anomalies on a 5° by 5° grid (Morice et al., 2012) |                                  |                       | <a href="#">GL</a>  |                          |
| <b>CRUTEM4</b>   | <a href="#">NetCDF</a><br>(21MB) | 2020-08<br>2020-09-23 | <a href="#">NH</a>  | <a href="#">CRUTEM4</a>  |
|  |                                  |                       | <a href="#">SH</a>  |                          |
| Land air temperature anomalies on a 5° by 5° grid (Jones et al., 2012)   |                                  |                       | <a href="#">GL</a>  |                          |
| <b>CRUTEM4v</b>  | <a href="#">NetCDF</a><br>(21MB) | 2020-08<br>2020-09-23 | <a href="#">NH</a>  | <a href="#">CRUTEM4</a>  |
|  |                                  |                       | <a href="#">SH</a>  |                          |
| Variance adjusted version of CRUTEM4   |                                  |                       | <a href="#">GL</a>  |                          |
| <b>HadSST3</b>   | <a href="#">NetCDF</a><br>(21MB) | 2020-08<br>2020-09-16 | <a href="#">NH</a>  | <a href="#">HadSST3</a>  |
|  |                                  |                       | <a href="#">SH</a>  |                          |
| Sea surface temperature anomalies on a 5° by 5° grid (Kennedy et al., 2011)  |                                  |                       | <a href="#">GL</a>  |                          |

They are DAT files, which is a lot of copy/paste, and again just the 2 areas and global. But four data sets for each. Some of the dates go back to 1850, so will add them in, even though the previous sites are all 1880.

Fifth Site:

<https://www.metoffice.gov.uk/weather/climate/science/global-temperature-records>

Having a read here is useful, as there is this explaining Anomalies:

“Absolute temperatures are not used directly to calculate the global-average temperature. They are first converted into 'anomalies', which are the difference in temperature from the 'normal' level. The normal level is calculated for each observation location by taking the long-term average for that area over a base period. For HadCRUT4, this is 1961-1990.

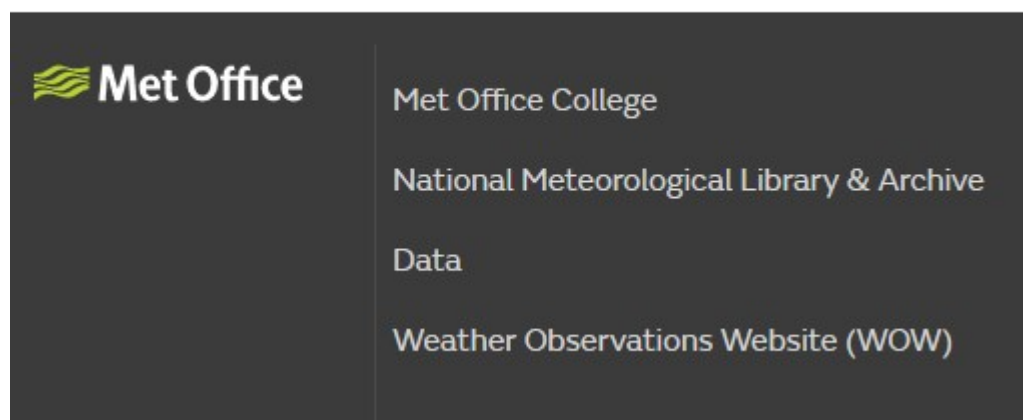
For example, if the 1961-1990 average September temperature for Edinburgh in Scotland is 12 °C and the recorded average temperature for that month in 2009 is 13 °C, the difference of 1 °C is the anomaly and this would be used in the calculation of the global average.

One of the main reasons for using anomalies is that they remain fairly constant over large areas. So, for example, an anomaly in Edinburgh is likely to be the same as the anomaly further north in Fort William and at the top of Ben Nevis, the UK's highest mountain. This is even though there may be large differences in absolute temperature at each of these locations.

The anomaly method also helps to avoid biases. For example, if actual temperatures were used and information from an Arctic observation station was missing for that month, it would mean the global temperature record would seem warmer. Using anomalies means missing data such as this will not bias the temperature record.”

But when you actually look at that page, you will scroll up and down, reading all there is, but can't spot any data. Well, it's there, nicely hidden at the very bottom of the page:

## Help us improve our website



So, when clicking on Data, it takes you to this page:

<https://www.metoffice.gov.uk/services/data>



This has links to various sites, one of which is very interesting if you want to understand about lake levels, fish, glaciers, all sorts of things:

<https://www.ecmwf.int/en/forecasts/datasets>

And in there, if you click on the Copernicus Climate Data Store link, you end up here:

<https://cds.climate.copernicus.eu/#!/home>

And then click on Datasets in the main header, brings you to this page:

<https://cds.climate.copernicus.eu/cdsapp#!/search?type=dataset>

And there are all sorts there. I'm not going to dwell on that, as there is so much I would need a lifetime to sift through that lol.

Another website that the Met Office links to is:

<https://www.eumetsat.int/website/home/index.html>

After clicking to access the data, and selecting to look at the catalogue, I selected a search of Global Surface, which brought up 195 hits, all of which you either need to be a member, or pay. So, that site is out.

So, at the bottom of the main page, is Met Office Weather DataHub:

<https://metoffice.apiconnect.ibmcloud.com/metoffice/production/>

I thought looking at the first one would be of use, so I clicked on the Learn More:

<https://metoffice.apiconnect.ibmcloud.com/metoffice/production/learn-more>

Seems you have to pay. Now this is a poor thing, as the Met Office is one of the main sites out there for temperatures, and to have it hidden unless you pay is not good.

Other Sites:

So, I looked at some other places, and yes the UN has stuff, but as usual it's in a report, as they don't collate the data themselves:

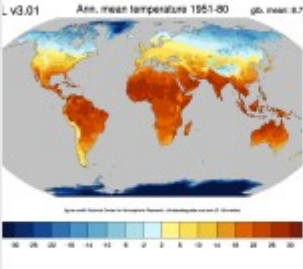
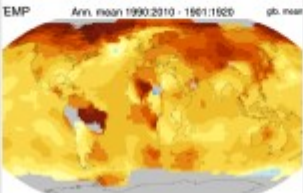
<https://www.un.org/en/climatechange/reports>

But I will be explaining in a separate video about this kind of thing, as again, I don't have the time or energy to read this lot.

This one is very in-depth:

<https://climatedataguide.ucar.edu/climate-data/global-temperature-data-sets-overview-comparison-table>

But there is a lot to look for. At the bottom it gives images, and the Name of the data Sets:

| Name▲   | Temperature change  | Source   | Period of Record   | ava time |
|---|---|--|--------------------|----------|
| Global (land) precipitation and temperature: Willmott & Matsuura, University of Delaware          |  | U. Delaware / Cort J. Willmott, Kenji Matsuura           | 1900/01 to 2014/12 | Clim M   |
| Global surface temperature data: GISTEMP: NASA Goddard Institute for Space Studies (GISS) Surface |  | NASA GISS / R. Reudy, M. Sato, K. Lo, formerly J. Hansen | 1880/01 to 2020/03 | M        |

Clicking on the left column will open the related page:

<https://climatedataguide.ucar.edu/climate-data/global-land-precipitation-and-temperature-willmott-matsuura-university-delaware>

And at the top is Get Data:

Summary
Expert Guidance
Metadata
Get Data (External)
References

**Data Access: Please Cite data sources, following the data providers' instructions.**

1. UDEL: Terrestrial Air Temperature: 1900-2010 Gridded Monthly Time Series (V 3.01), ascii
2. UDEL: Terrestrial Precipitation: 1900-2010 Gridded Monthly Time Series (V 3.02), ascii
3. NOAA ESRL: monthly values and long-term means of T and P in netCDF (versions 3.01 and 4.01)
4. UDEL: Terrestrial Air Temperature: 1900-2014 Gridded Monthly Time Series (V 4.01), ascii
5. UDEL: Terrestrial Precipitation: 1900-2014 Gridded Monthly Time Series (V 4.01), ascii

And yes, you can click on all of these, and plod away with more numbers. But as there is 6 comparison charts, and each may have 5 or six data sets, I'll be here till the end of time. But you're all free to look at them ;)

The final site I looked at was:

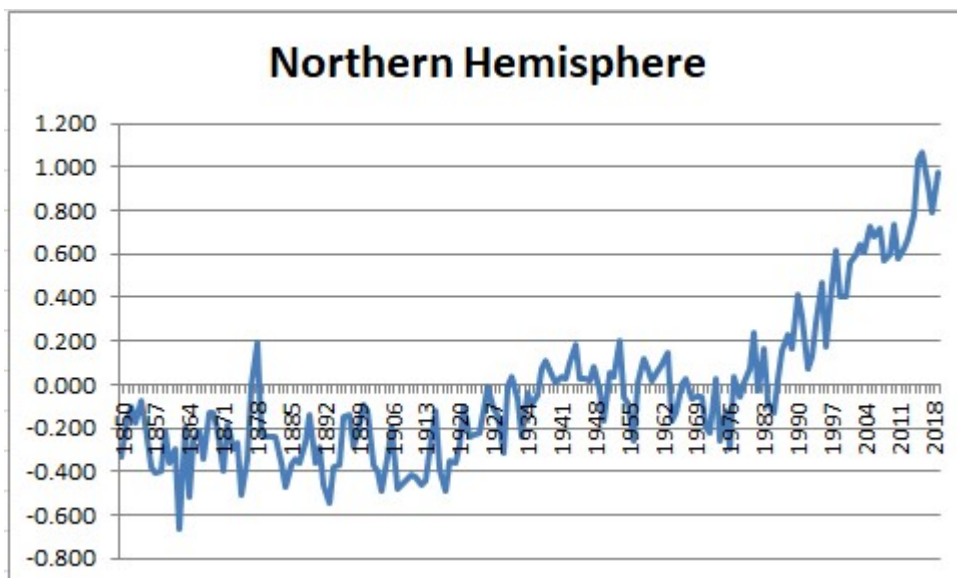
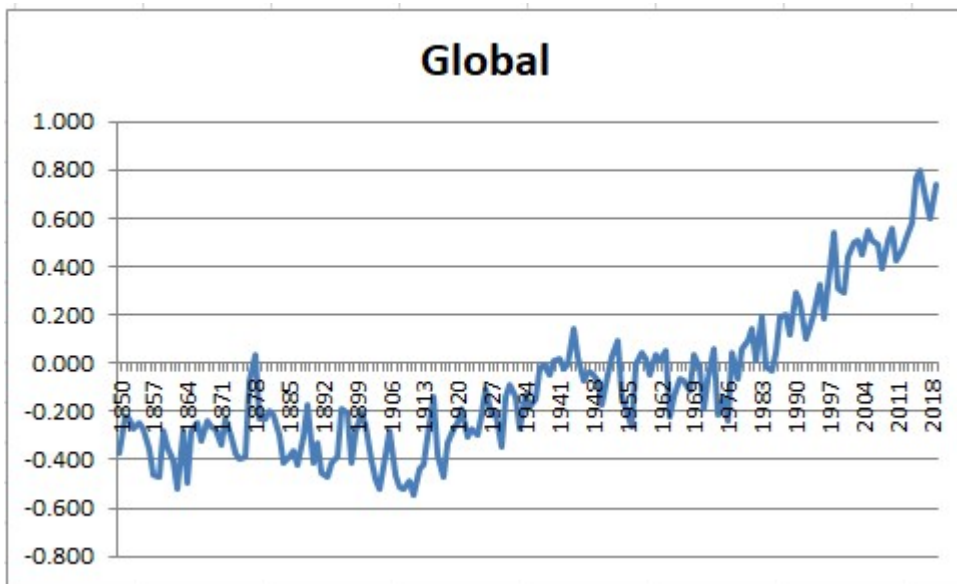
<https://www.nap.edu/catalog/11676/surface-temperature-reconstructions-for-the-last-2000-years#toc>

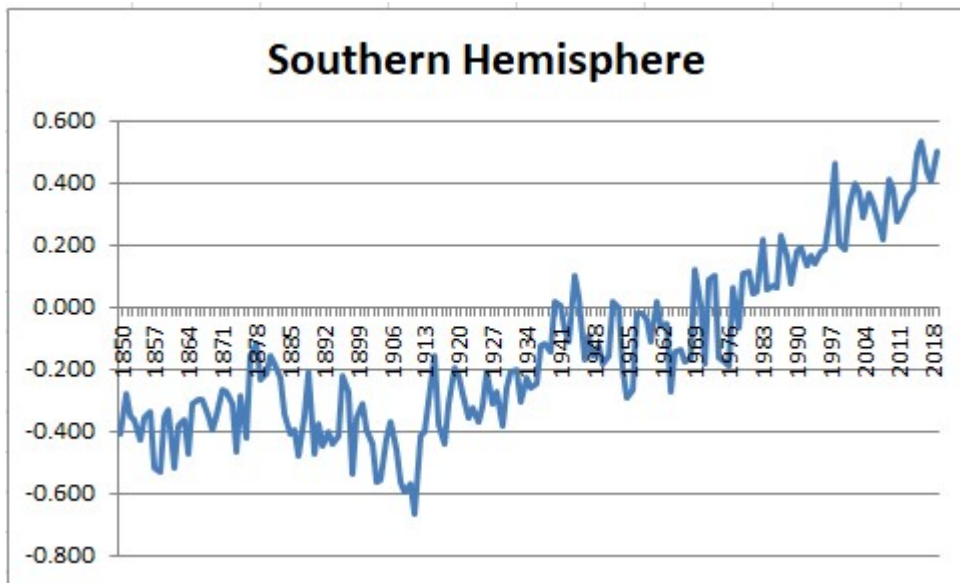
Again, this is just one report, and yes you can download it for free, but in that site there are hundreds to look at. I may look at the report, out of any that I've glanced at, this one looks interesting, and for me I mean lol.

So, I've since plotted all the graphs from all the above. I've plotted them as individual graphs from each respective data and combined. I'll attach the excel graphs and the values in my article, but for ease I've put the image here:

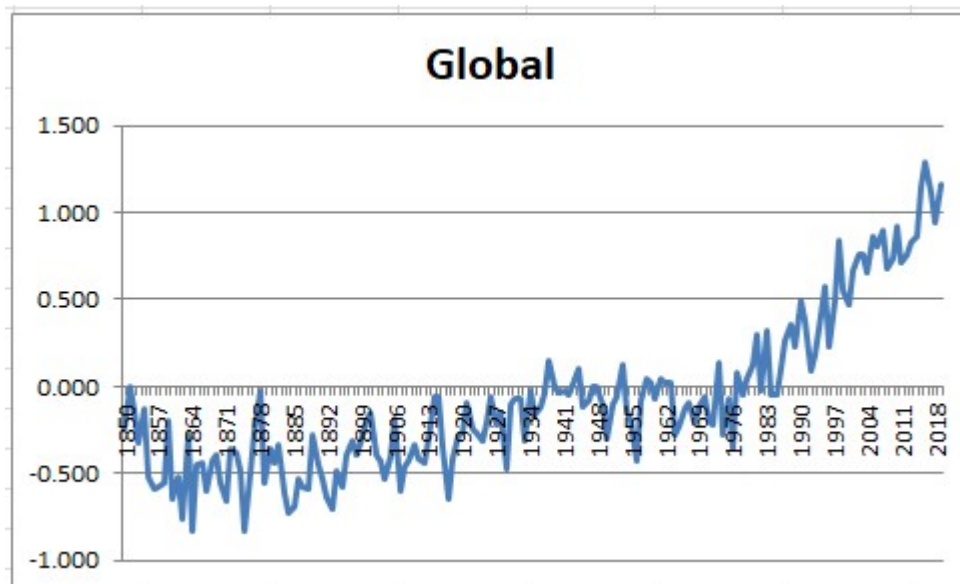
## CRUDATA

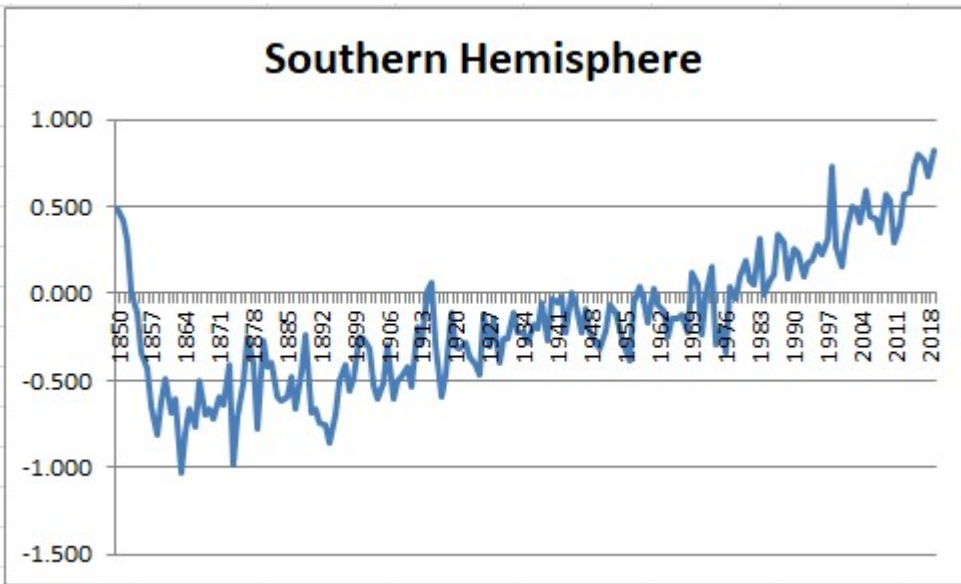
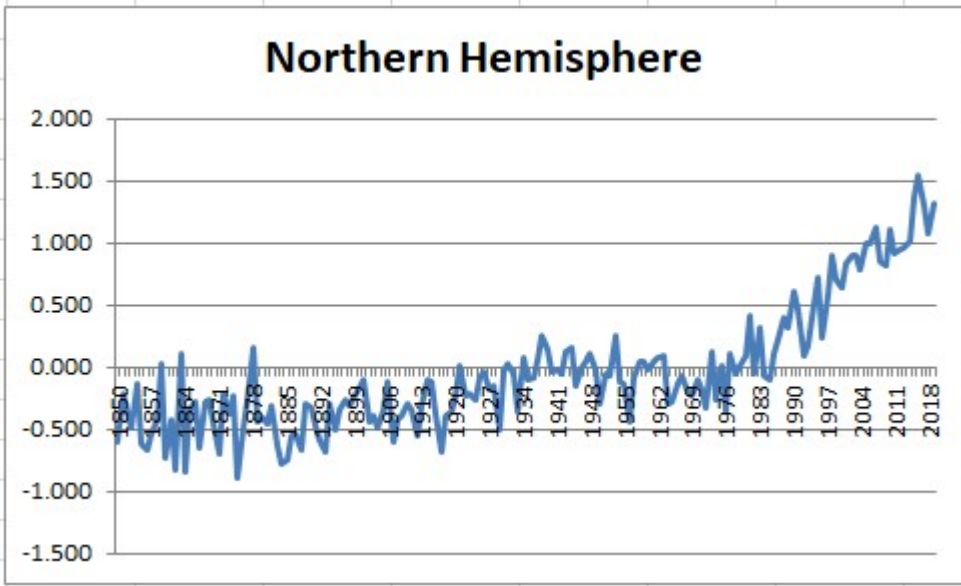
### HadCRUT4



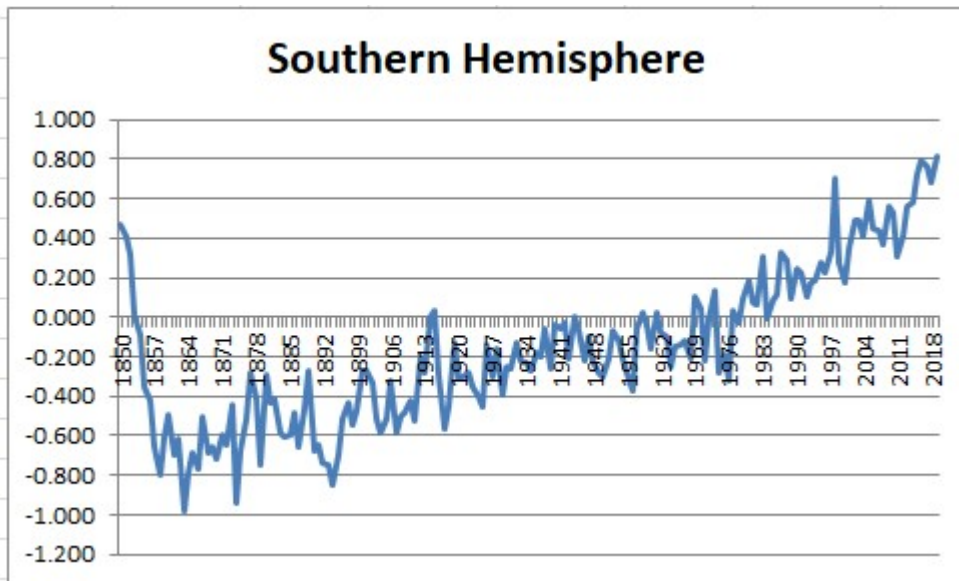
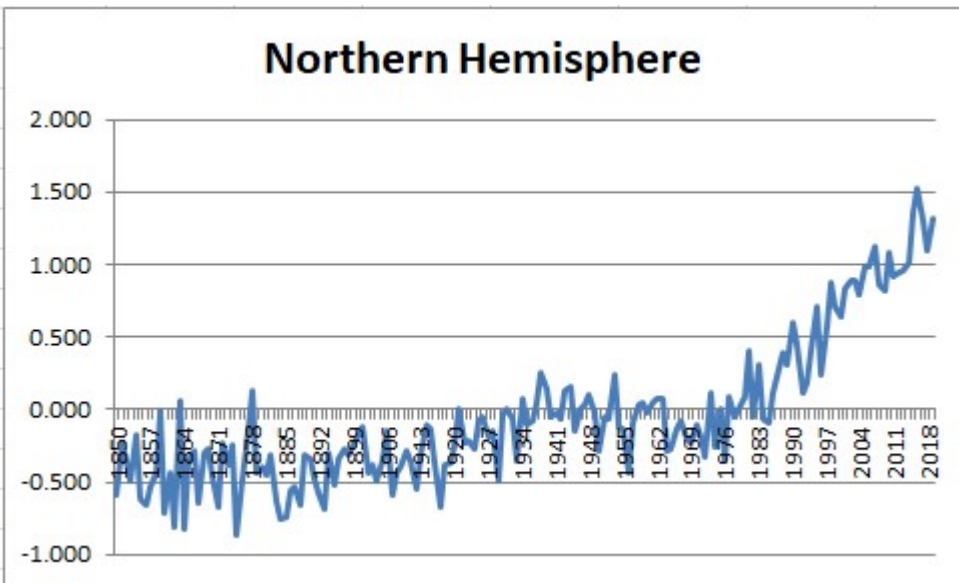
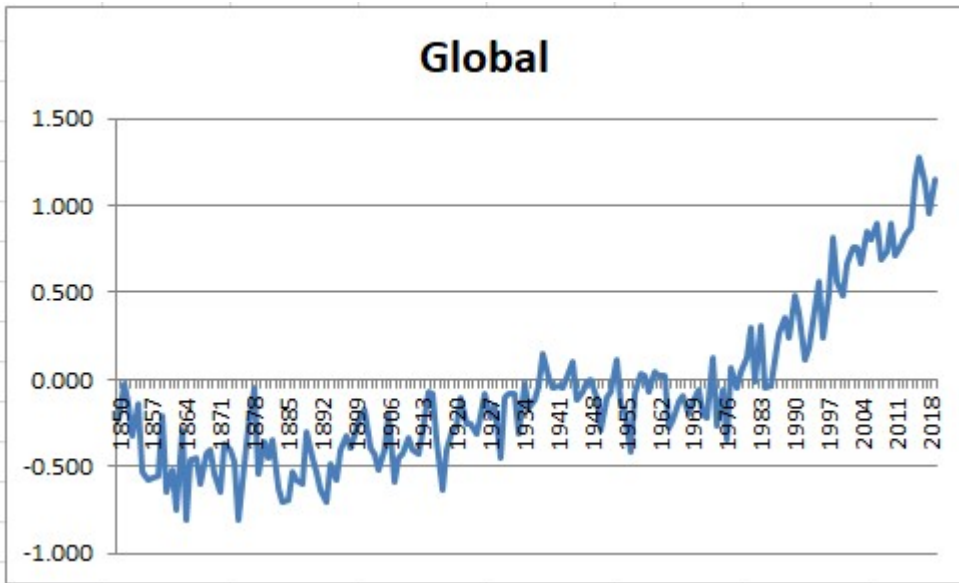


CRUTEM4

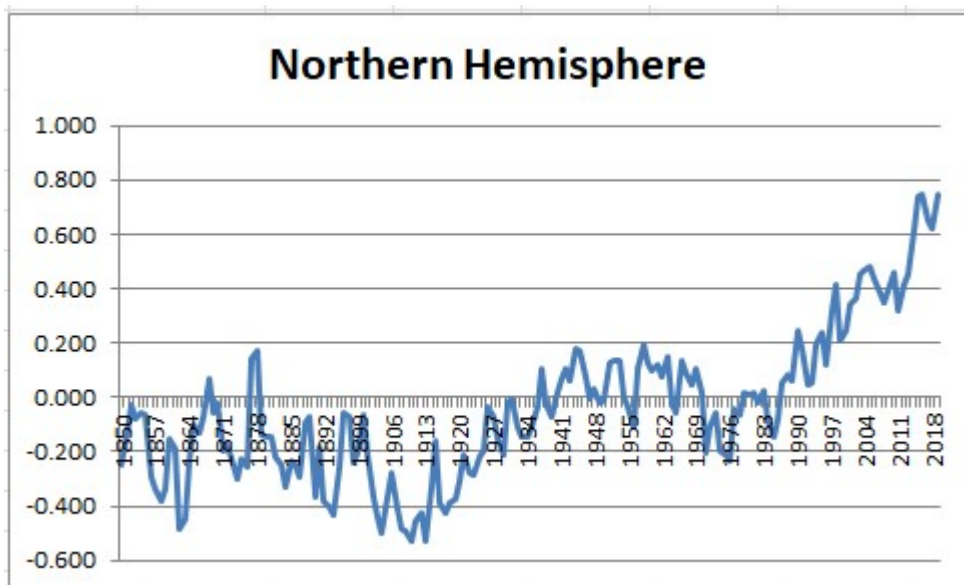
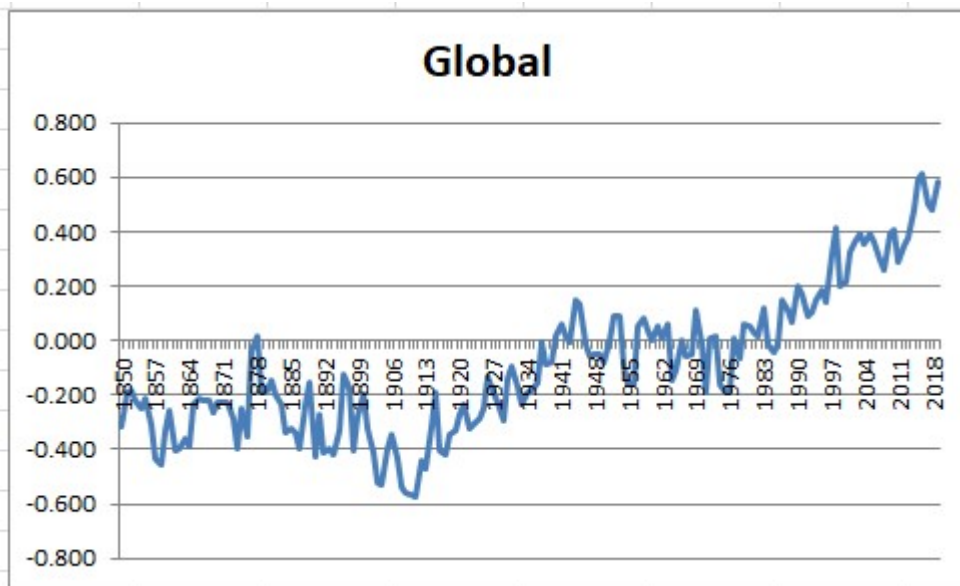


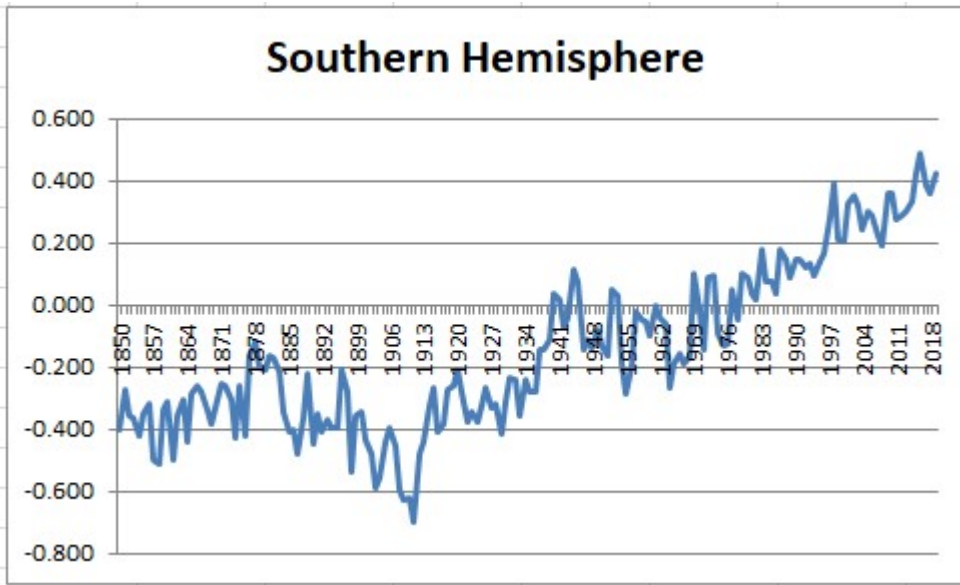


CRUTEM4v

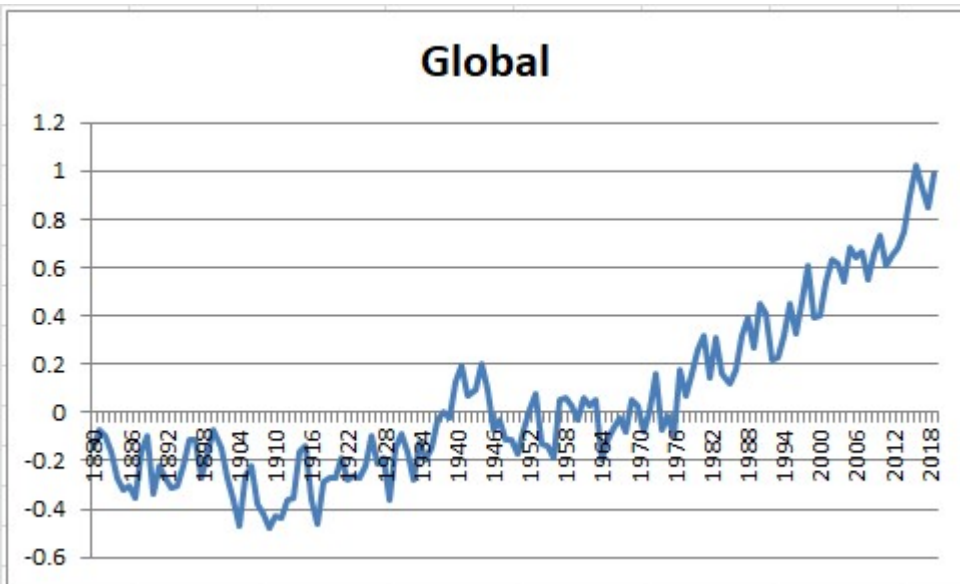


## HadSST3

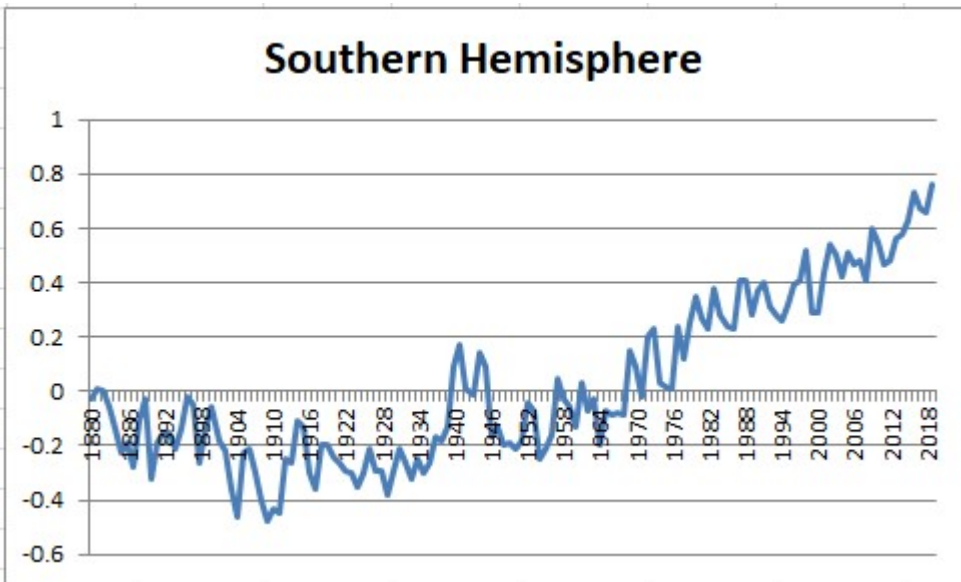
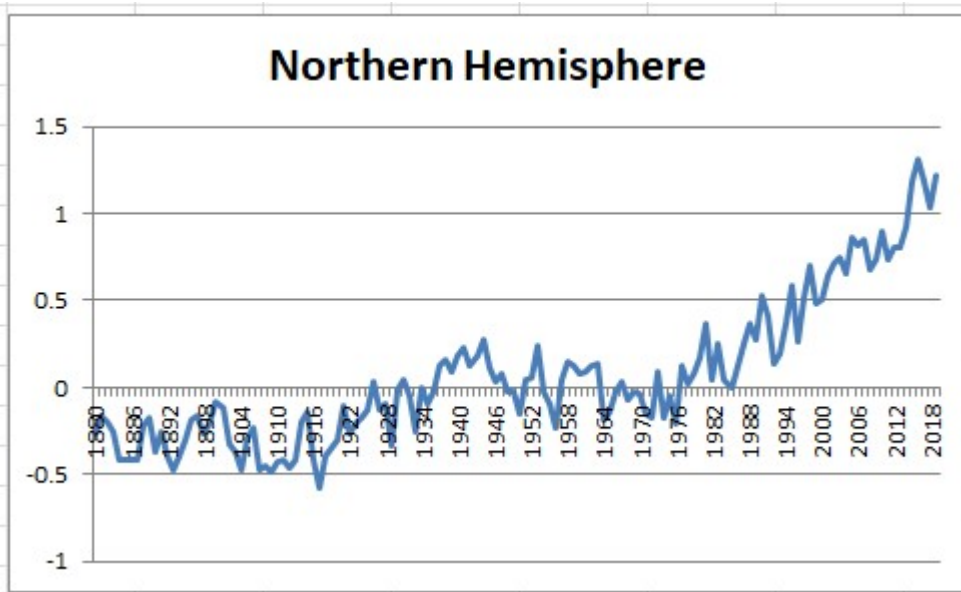




NASA

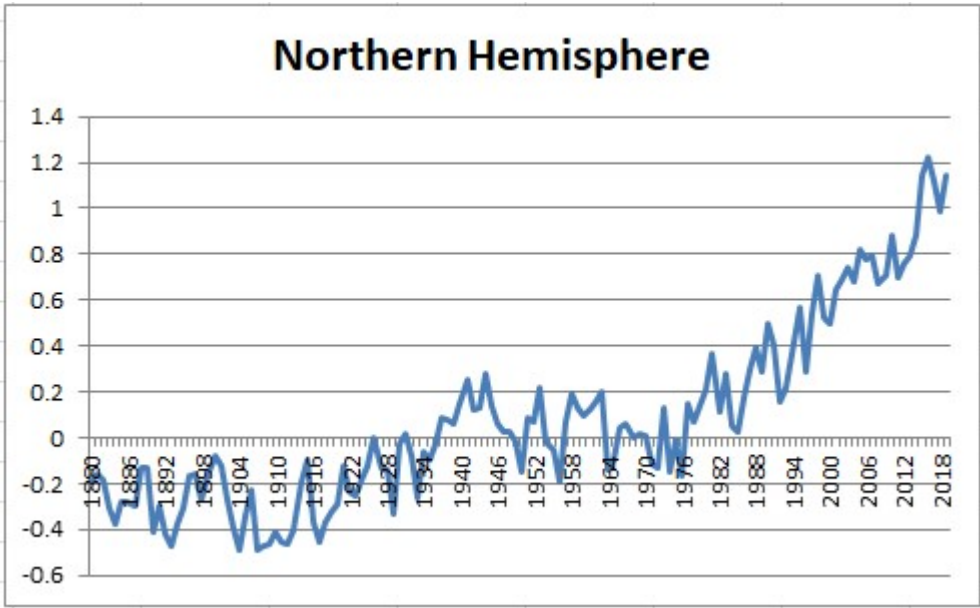
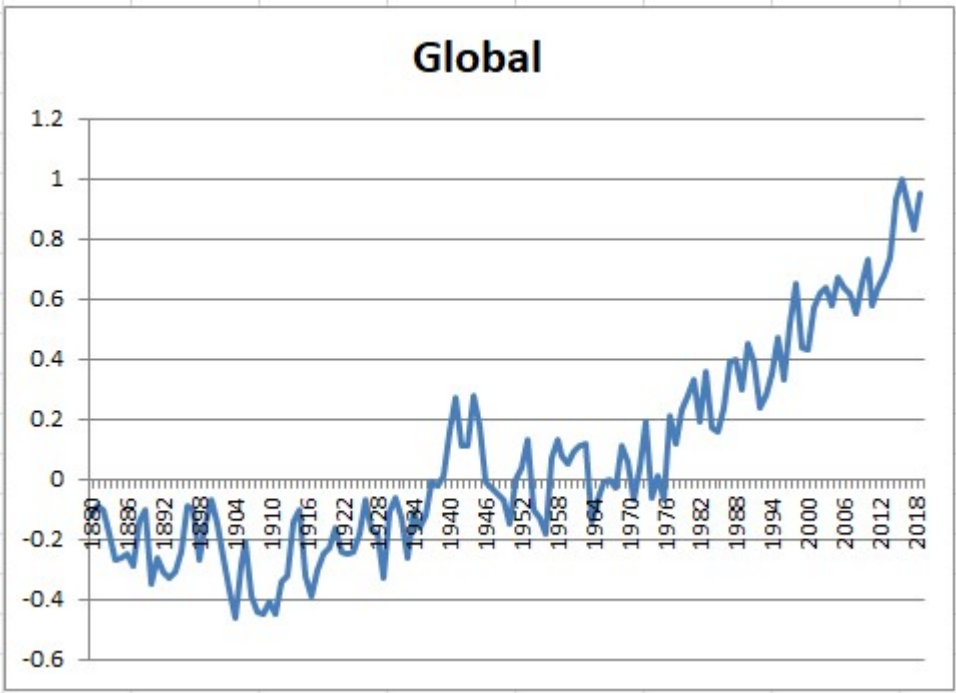




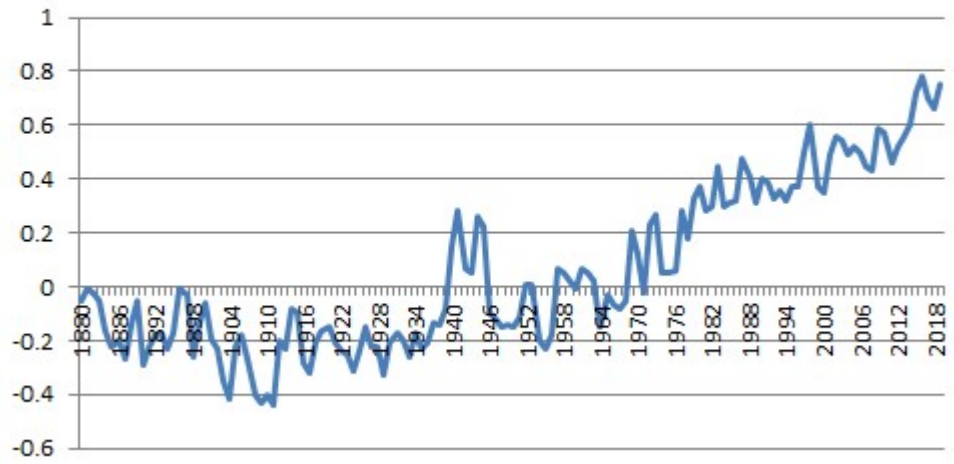


NCDC

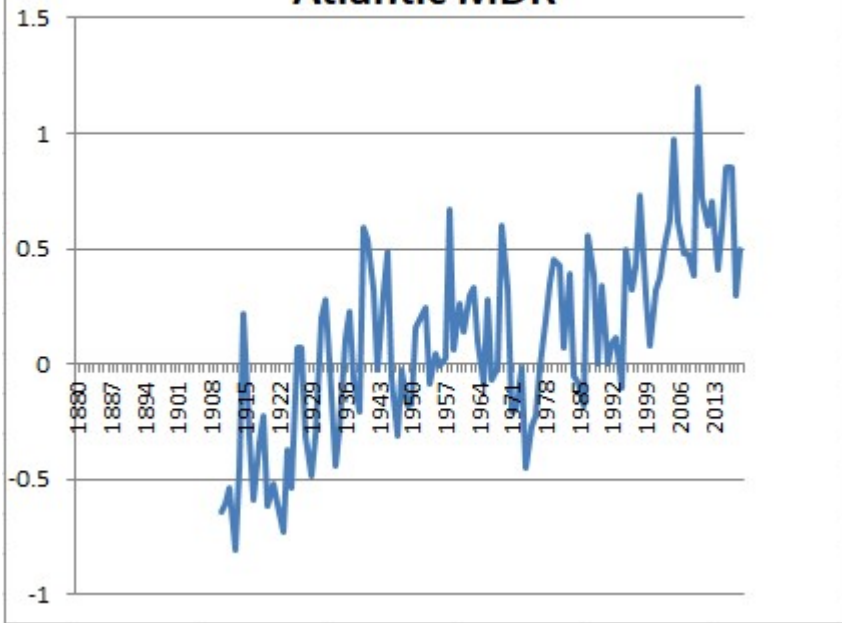
Land and Ocean

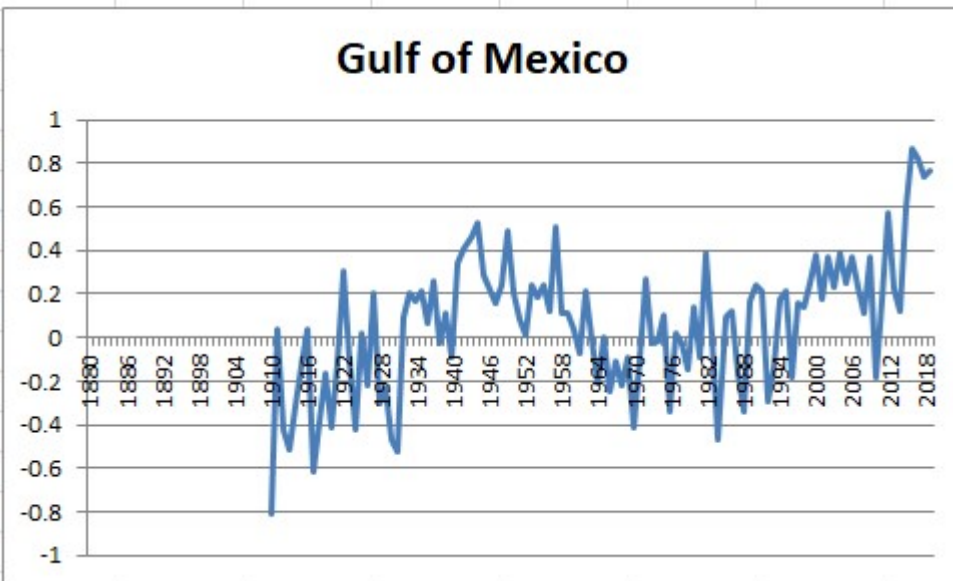
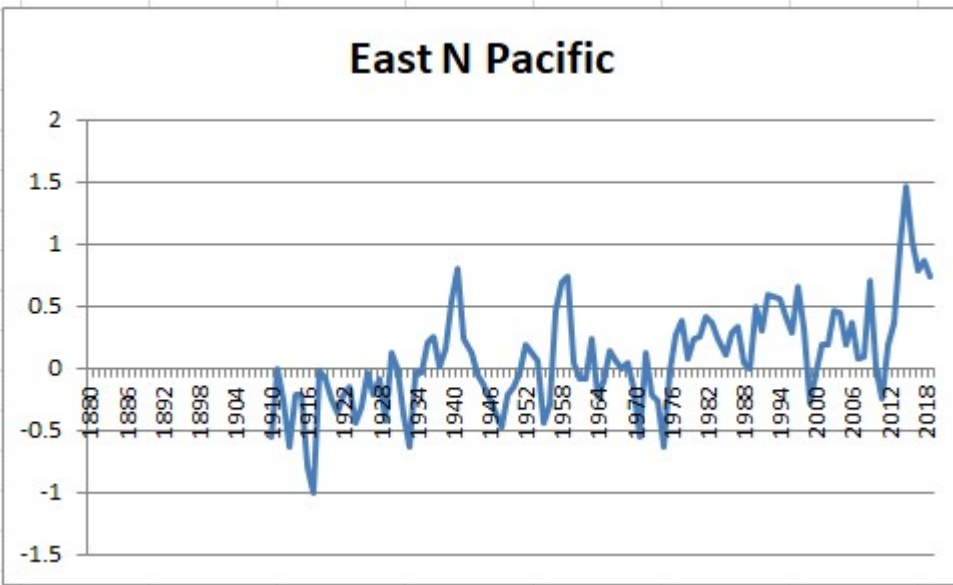
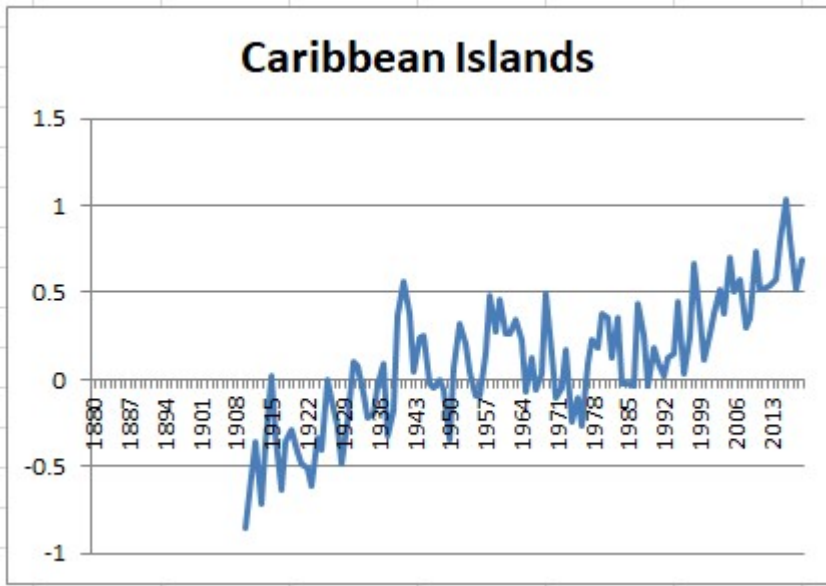


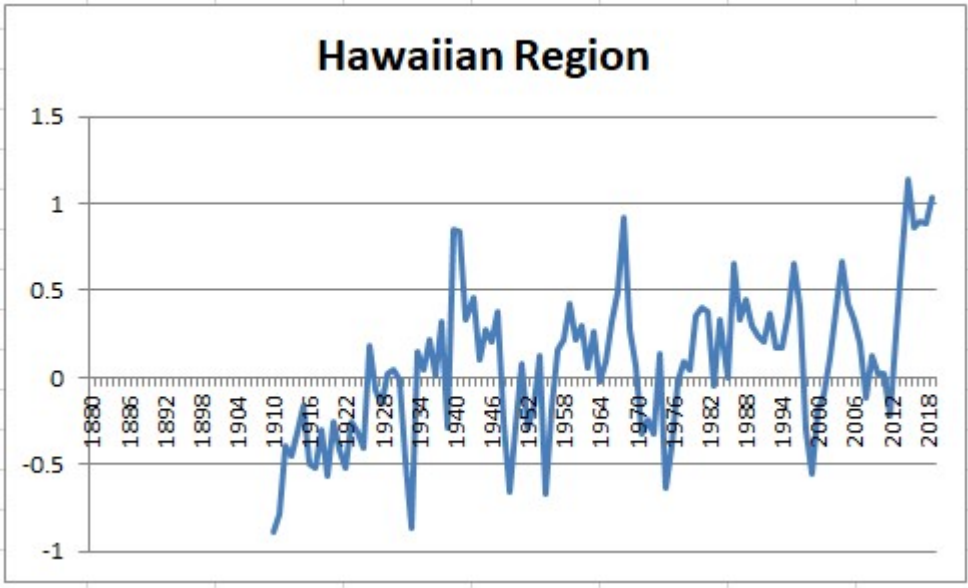
### Southern Hemisphere



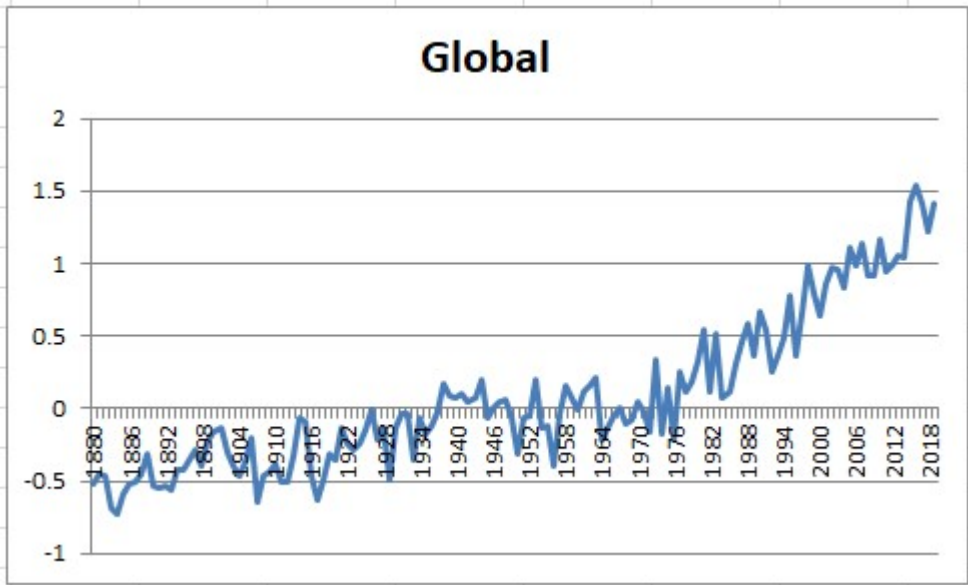
### Atlantic MDR

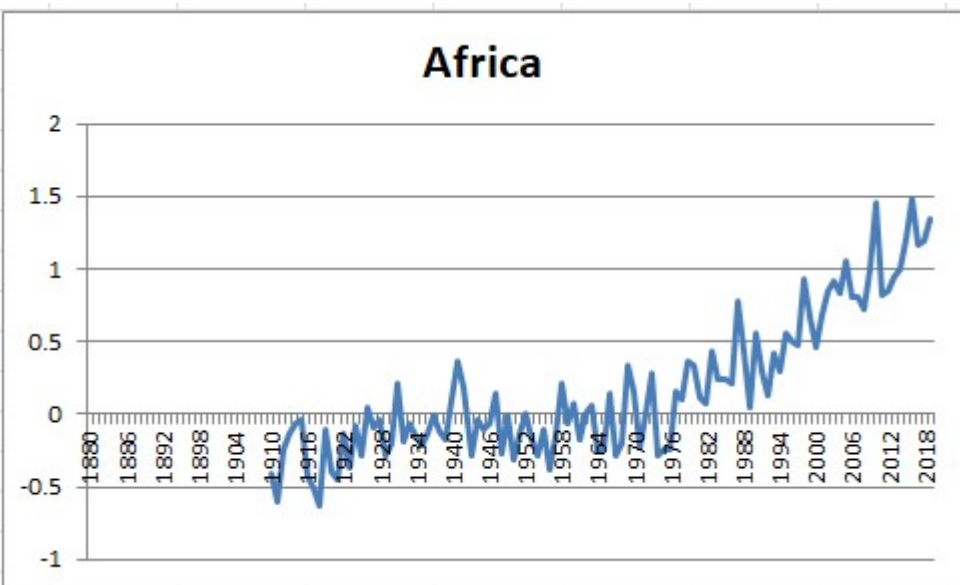
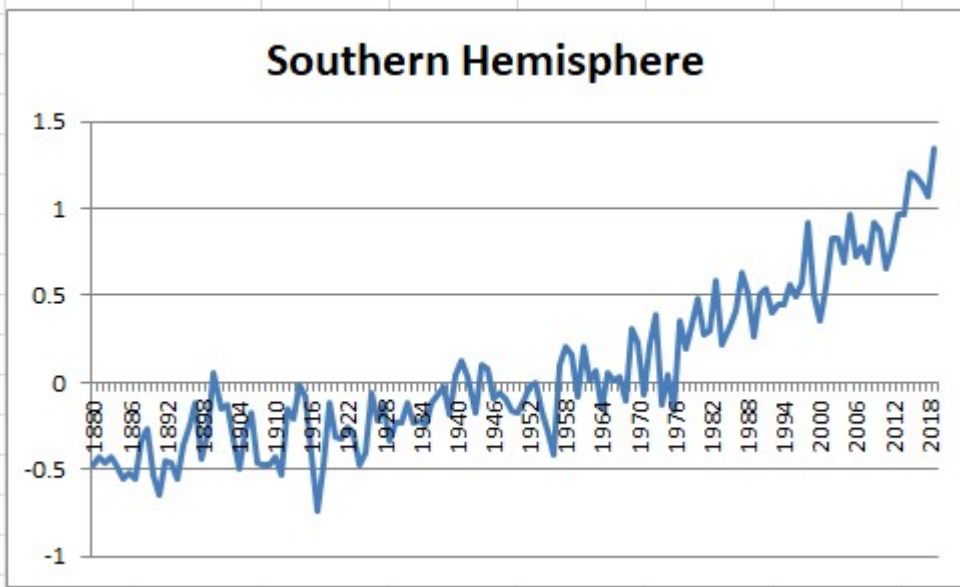
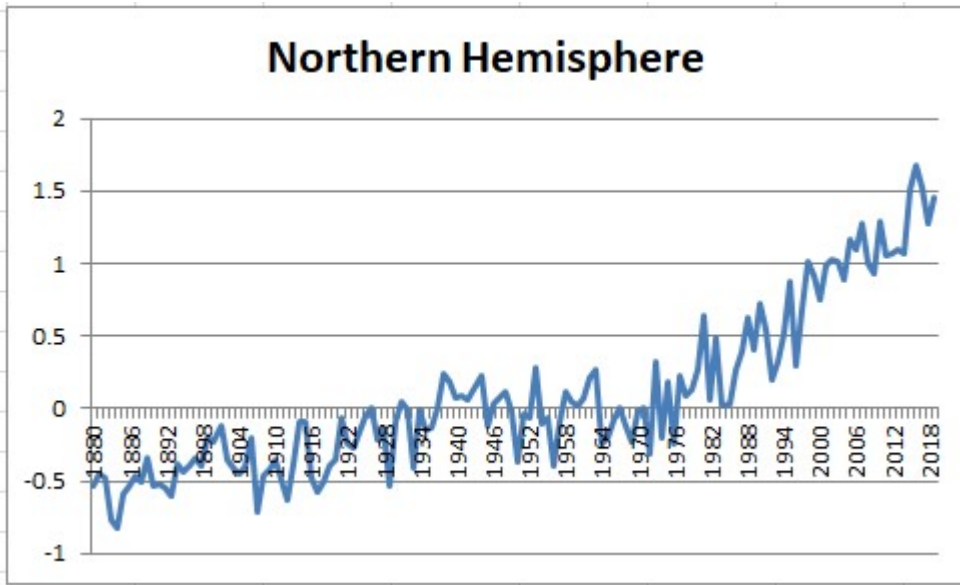


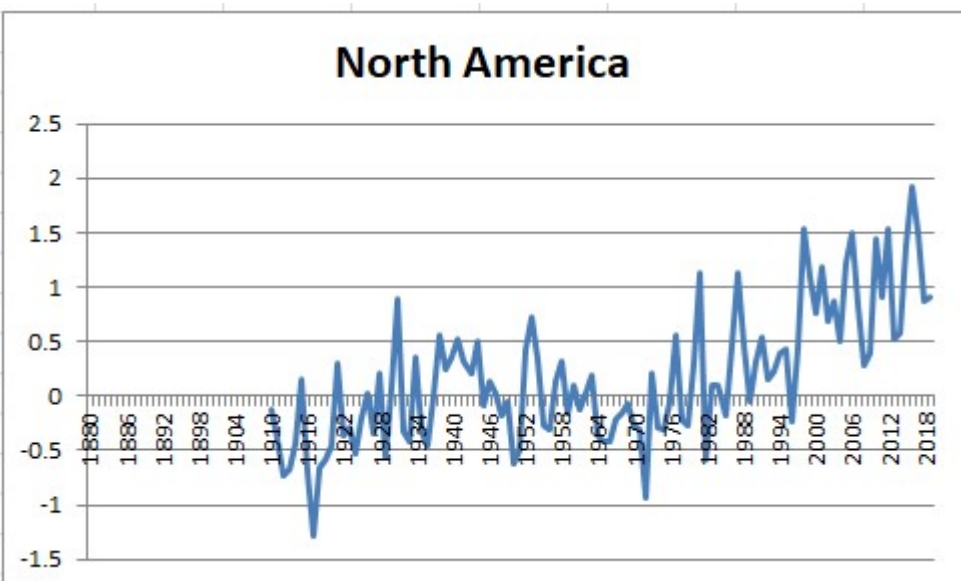
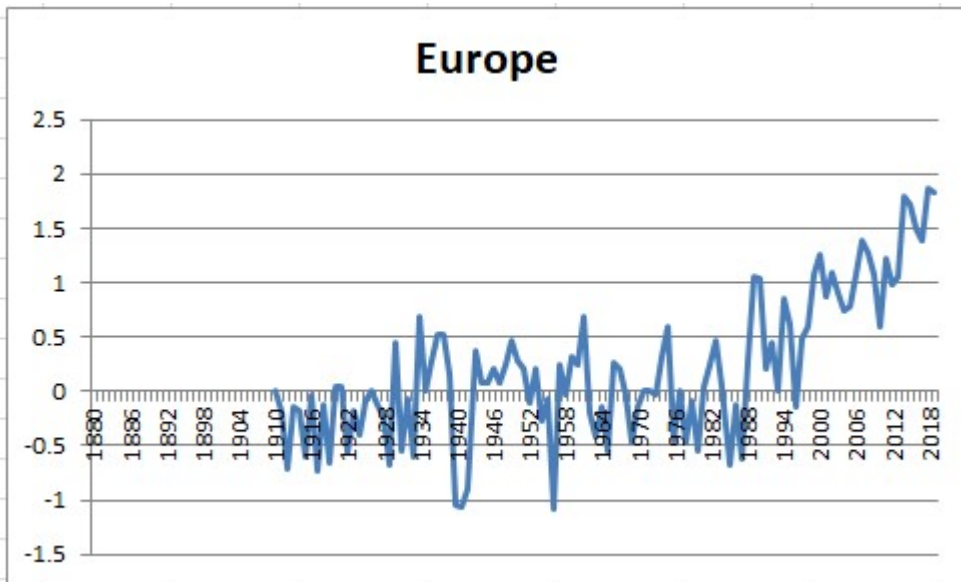
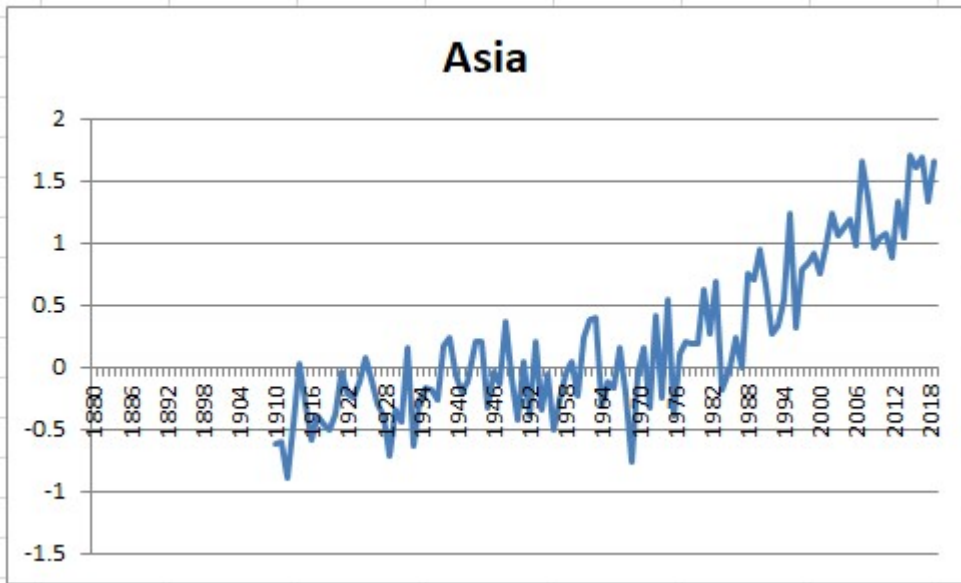


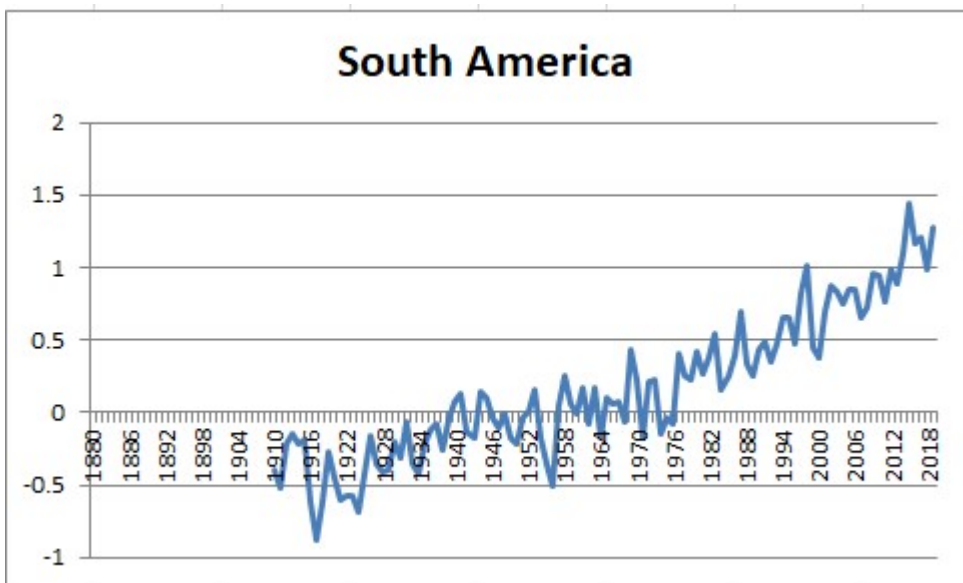
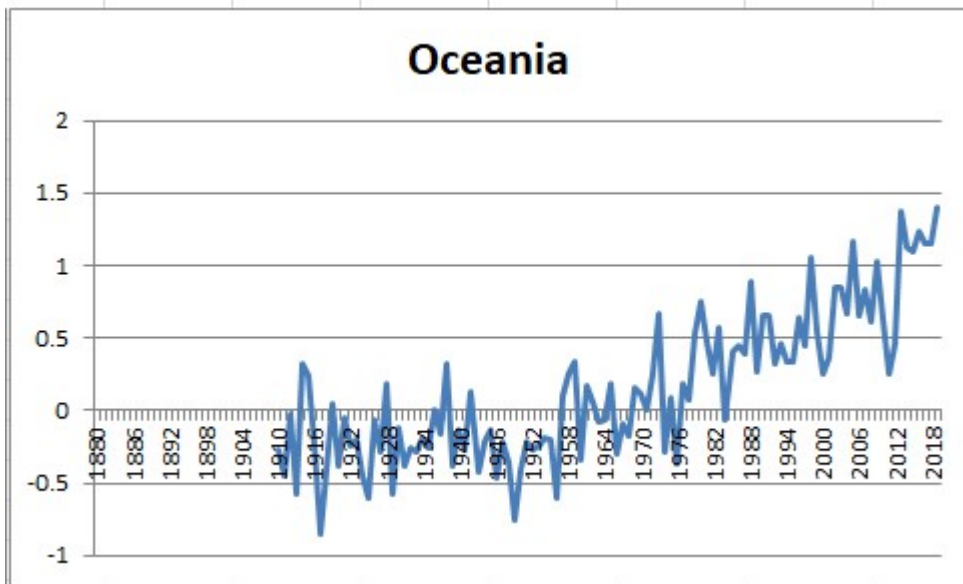


**Land**



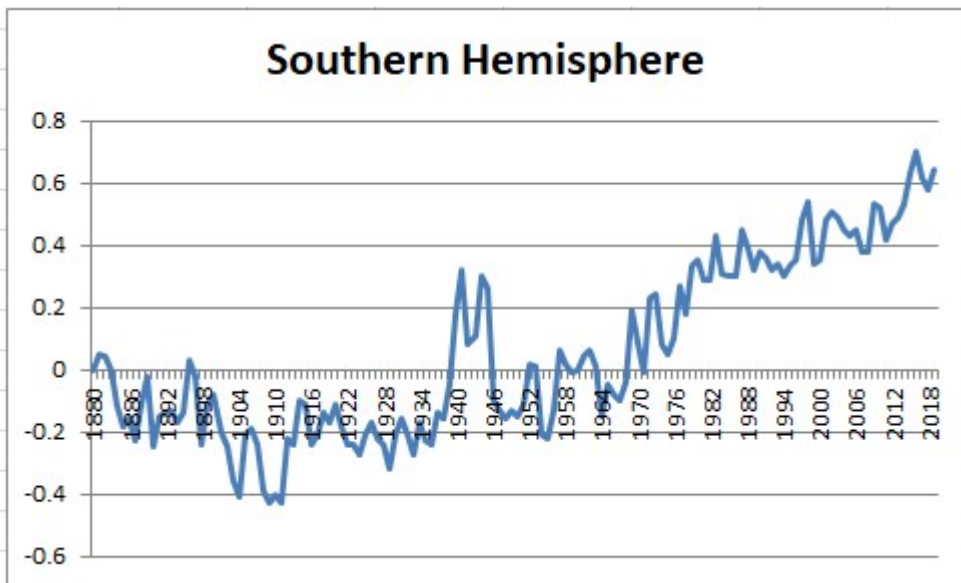
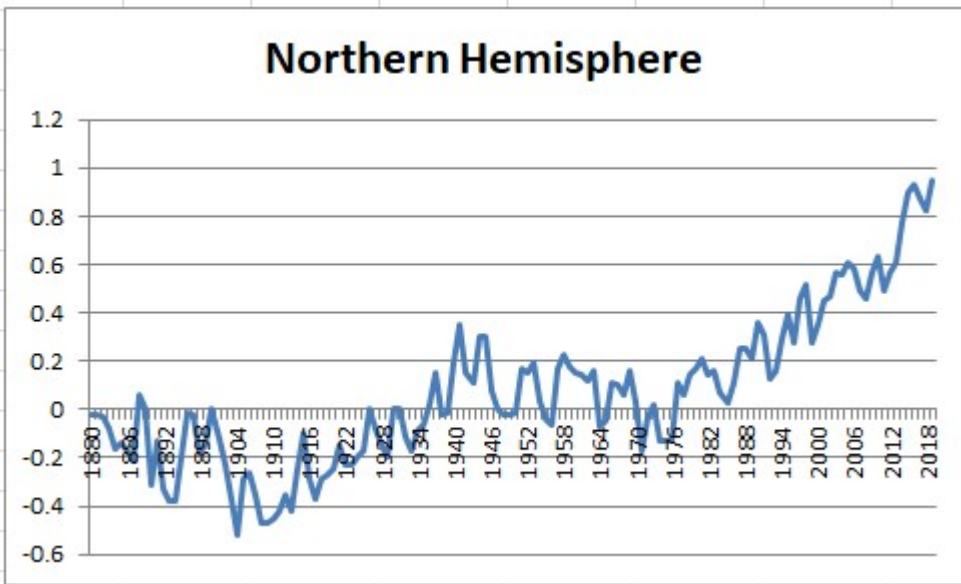
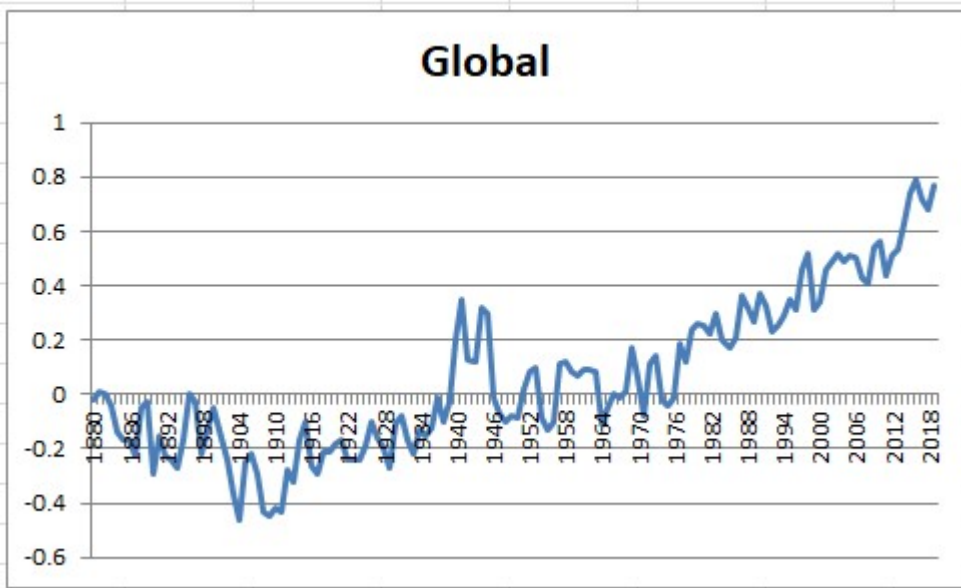






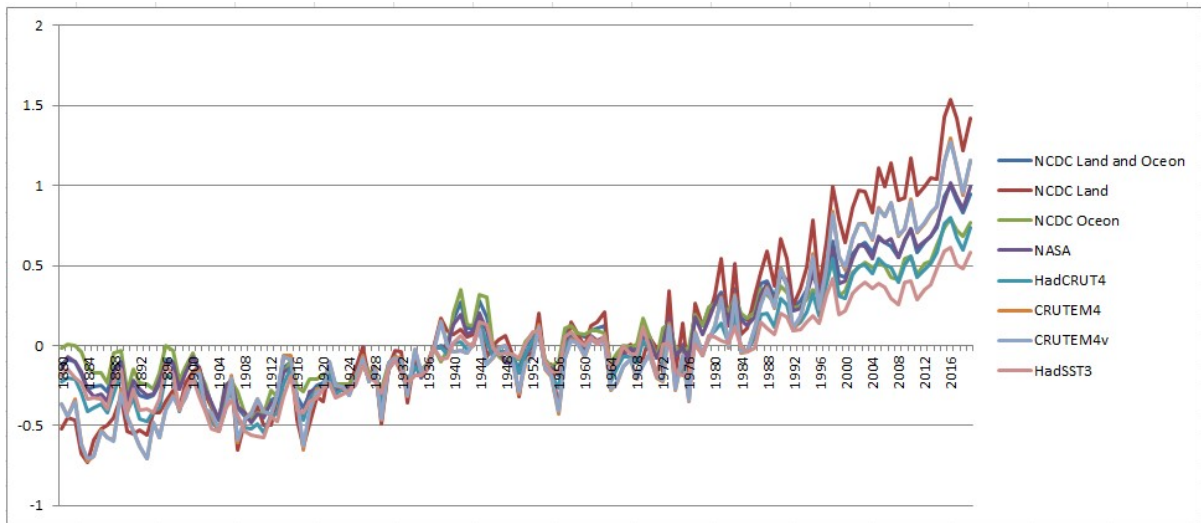
Ocean



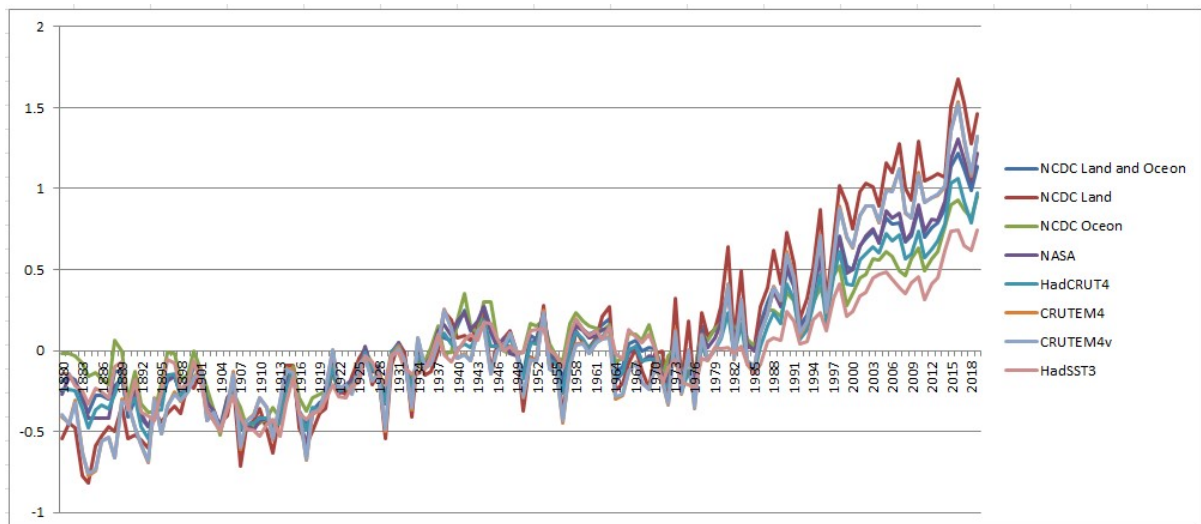


As you can tell, there are a lot and you can't really see any correlation. So, I replotted them all, but in one graph per main area. The main three and not the random ones that the NCDC had 😊

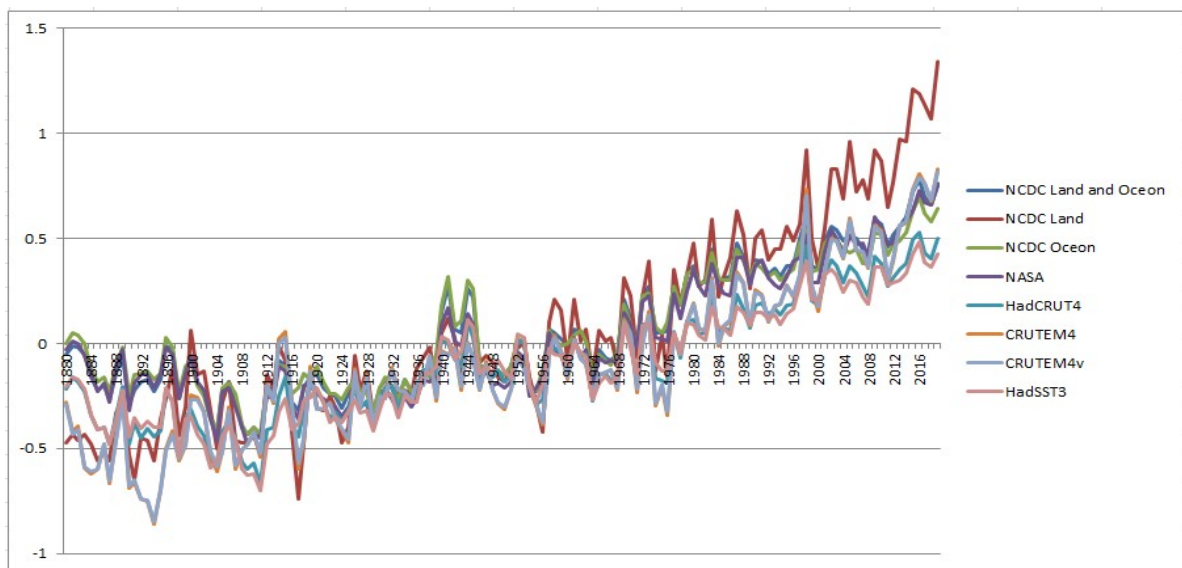
## Global



## Northern Hemisphere



## Southern Hemisphere



Okay, that is 'easier' to see, instead of many graphs. You can see various things here. Yes, it's rising. Strangely enough, just around the industrial revolution. And it seems to peak during World War 2. But they are vastly different depending on where it's taken, and by which recording site, so to speak.

Southern Hemisphere is not even at 1 for all, except the NCDC Land. Bear in mind that the others that are not NCDC don't state they're land or water. The Northern Hemisphere, not all are at one, we have some just hovering above 0.5.

And Global, yes it's at 1, but again not for all. Some are a lot lower, again near 0.5.

I could drill down into this further, but I haven't got the time or energy, and what I have already done is a lot more than even many scientists, news sites or other researchers do.

So, my conclusions based on the actual numbers are that it's not over 1 for everywhere. It all depends on which location you take the readings from, and which site to use to collate the data. I know that many will argue this point, but I'm looking at all of the values that are available in the public domain. If people cite something hidden, then I can't agree on that, as we cannot see the numbers.

It's like me saying 'I have over £1000 in a bank account, and its investing big time, and making £100's daily. I can't say who I'm investing with, the shares etc., or even show you the account, but its real, as I'm telling you'.

Anyway, as always please let me know what you think of this research and thank you for viewing 😊