Fifth National Climate Assessment, "NCA5:" It is Full of Bogus Claims.





Humanity just lived through the hottest 12 months in at least 125,000 years

By Laura Paddison, CNN ② 5 minute read · Updated 6:34 AM EST, Thu November 9, 2023



Bob Endlich

bendlich@msn.com

Cruces Atmospheric Sciences Forum

15 Dec 2023

Outline:

This presentation (and post) will concentrate on some of the BS claims in NCA5

- 1. Introductory Comments, some editorial
- 2. Using the National Academies of Science, Engineering and Medicine is a good choice to trust the science.
- 3. Present temperatures are the highest in 125,000 years....
- 4. Current temperatures are rising faster than any time in thousands of years "because of greenhouse gases." NCA5 blames CO2, our use of hydrocarbon fuels.
- 5. Increasing <CO2> is causing stronger storms and more storm damage
- 6. <CO2> increases are driving accelerating rates of Sea Level Rise

BS Claims in NCA5

1. Introductory Comments, some editorial

The NCA5 report seems poorly organized. There are many places where the reader needs to click on multiple links to find, or go back to find, important elements.

Many claims are plainly wrong. Time and space limit my work here.

One "smoking gun" of the climate change alarmist playbook is the plainly Anti-Free Market campaign by the Club of Rome, which aims to destroy the economic and cultural dominance of the Western World, and those of us who live in it...

<and, perhaps, those of us who have fought to defend it>.

Here, right, is one of the receipts...



The Club of Rome's fingerprints are all over "Global Warming" as an agenda cause.

from Page 75, this smoking gun:

"In searching for a common enemy against whom we can unite, we came up with the idea that pollution, the threat of global warming, water shortages, famine and the like would fit the bill.

...these phenomena do constitute a common threat which must be confronted by everyone together...

...these dangers are cause by *human* intervention in natural processes...

The real enemy then is humanity itself." <<u>Spacing</u>, underlining added>

The above graphic shows the cover and quotes from the Club of Rome, <u>https://www.clubofrome.org/publication/the-first-global-revolution-1991/</u>

https://www.youtube.com/watch?v=7gfY5KsyVuE

Taken from President Biden's video on his releasing NCA5, 14 Nov 2023



To me the notion that humans can "control Earth temperature" by taking administrative actions, "Climate Legislation," and, e.g., Net Zero CO2 emissions, is daft. https://joannenova.com.au/2023/11/matt-ridley-in-perth-tuesday-cures-vs-consequences-with-government-science/

Cures vs Consequences: How does Government navigate the science?

Join Matt Ridley in PERTH, Novotel Murray Street on Tuesday, November 21 or a thought-provoking discussion on the critical role of Government in shaping climate, health, and energy policies.

Scientists aren't infallible authorities who universally override political disagreements, nor are they unscrupulous fraudsters with hidden political agendas. Somewhere between the two lies the truth: Science is a flawed and all too human affair, but it can generate timeless truths, and reliable practical guidance, in a way that other approaches cannot.

How can the average person make sense of the often-conflicting scientific opinions that have arisen during the COVID pandemic and in the discussions about climate and energy policies? Unfortunately, there's no easy solution when it comes to scientific debate.

The only way to be sure that one scientific claim is solid while another is not, is to check out the evidence for yourself. Relying on the reputation of the scientist, or the reporter reporting it, is the way that many of us go, and is better than nothing, but it is not infallible. *If in doubt, do your homework!*

Matt Ridley is a British author, journalist, businessman and former member of the UK House of Lords known for his writings on science, the environment, and economics.



Matt Ridley



References

https://nca2023.globalchange.gov/

https://www.youtube.com/watch?v=7gfY5KsyVuE

Notes:

Some of the graphics here came from my previous presentation and graphics from <u>https://casf.me/critique-fourth-national-climate-assessment/</u> which was released on 23 Nov 2018, day after Thanksgiving, "Black Friday," 2018, when Donald Trump was President.

NCA4 proclaimed "climate catastrophe is coming!" NCA5 proclaims similarly. SSDD.

<u>Personal notes:</u> I attended Grad School in the Meteorology Department of Penn State, Sept 1967-Jan 1969, as a Master's student. A colleague there was then-PhD student Roger Peilke, Sr, who later had a career at the University of Colorado, Boulder.

Roger's son, Roger Pielke Jr. is also an academic and professor of environmental studies at the University of Colorado, Boulder. I met both Roger and Jr. at an AMS meeting in PHX years ago.

Roger Sr. is a well-known climate alarm skeptic; we've been in touch over the years, and I've used some of Sr's stuff.

Roger Peilke, Jr, is an author and writes extensively. "The Honest Broker" on Substack.com, <u>https://rogerpielkejr.substack.com/</u> is one such example. I use some of Jr's material here.

In 2015, Jr., and a handful of other skeptical authors were trashed by Tucson's congressman Raul Grijalva, D-AZ. Grijalva went on a witch hunt over the offending scientists' published research; this is one report on Pielke, Jr.

https://www.science.org/content/article/targeted-crusading-congressman-scientist-speaks-out-conflicts-climate-and -controversy https://nca2023.globalchange.gov/



Opening the web page I got by searching on <NCA5 Climate>, the top result is:

https://www.globalchange.gov/ourwork/fifth-national-climate-assessment

The fine print in the bottom paragraph:

"...As in previous assessments, NCA5 underwent an extensive, multi-phase process of internal and external review from federal agency experts, the general public, and external peer review by a panel of experts established by the **National Academies of Sciences. Engineering, and Medicine**." <bold added>

Following slides are my take on the National Academies, marked with

Home / Fifth National Climate Assessment

Fifth National Climate Assessment

About Webinars Companion Podcast Engagement Workshops Timeline FAQs

Fifth National Climate Assessment - Read the Report

The <u>Fifth National Climate Assessment</u> (NCA5) analyzes the impacts of climate and global change in the United States.

The development of NCA5 was overseen by a Federal Steering Committee appointed by the Subcommittee on Global Change Research (SGCR) and comprising representatives from USGCRP agencies. NOAA, as the administrative agency for NCA5, is responsible for establishing procedures for the report, releasing Federal Register Notices, and certifying the report meets Information Quality Act and Evidence Act standards.

The process is designed to be transparent and inclusive, offering multiple opportunities for public participation. As in previous assessments, NCA5

underwent an extensive, multi-phase process of internal and external review from federal agency experts, the general public, and external peer review by a panel of experts established by the National Academies of Sciences, Engineering, and Medicine. This approach is designed to result in a report that is authoritative, timely, relevant, and policy neutral; valued by authors and users; accessible to the widest possible audience; and fully compliant with the GCRA and other applicable laws and policies.



Enter Se

BS Claims in NCA5

2. Using the National Academies of Science, Engineering and Medicine is a good choice to trust Science.

Comment: The phrase, "The Science" is typically used by educated elites who do not know anything about Science.

One such: "The Science is settled."

If the science is settled, then why are there 40 different climate models?

SENATOR GERARD RENNICK

Power Point I put together over four years ago after I stumbled upon the National Academies' Climate Web Site.

BS at the National Academies of Science, Engineering and Medicine

Bob Endlich bendlich@msn.com 16 August 2019 Updated 26 Feb 2020



http://sites.nationalacademies.org/sites/climate/index.htm



f 🗾 🖬 🖶 🛨



Climate at the National Academies

Climate change is happening today. Scientists have known for some time, from multiple lines of evidence, that humans are changing Earth's climate, primarily through greenhouse gas emissions.

The evidence is clear and compelling. Earth's atmosphere and oceans are warming, the magnitude and frequency of extreme climate and weather events are increasing, and sea level is rising along our coasts.

http://sites.nationalacademies.org/sites/climate/index.htm



CLIMATE AT THE NATIONAL ACADEMIES

f 🗾 🖾 🖶 🛨



Climate at the National Academies

Bob's Comments: Climate Change is ALWAYS occurring; half the time the atmosphere and oceans are... warming, half they're cooling. Sea Level is a dynamic property of the earth. Sea Level rate of rise has not changed since the 1850s, despite increasing <CO2>

Climate change is happening today. Scientists have known for some time, from multiple lines of evidence, that humans are changing Earth's climate, primarily through greenhouse gas emissions.

The evidence is clear and competing. Earth's atmosphere and oceans are warming, the magnitude and frequency of extreme climate and weather events are increasing, and sea level is rising along our coasts.

http://sites.nationalacademies.org/sites/climate/index.htm



CLIMATE AT THE NATIONAL ACADEMIES

Home About Discover Engage News & Events

f 🔰 🖻 🖶 🕇



Climate at the National Academies

Climate change is happening today. Scientists have known for some time, from multiple lines of evidence, that humans are changing Earth's climate, primarily through greenhouse gas emissions.



The evidence is clear and compelling. Earth's atmosphere and oceans are warming, the magnitude and frequency of extreme climate and weather events are increasing, and sea level is rising along our coasts.

THIS is how the educated at the NAS explain the false hypothesis of human-caused CO2-fueled global warming's catastrophe?

It is as if ...climate never warmed before? It's obvious that who wrote this has not read 1997's SCIENCE magazine.

It is a false statement that magnitude and frequency of extreme climate and weather events are increasing.

Sea Level is a dynamic property of Earth. Sea Level was a lot higher in Roman and Medieval Times, with lower <CO2>. The rate of sea level rise has not changed since the 1850s, before modern increases in <CO2>

<u>http://ruby.fgcu.edu/courses/twimberley/EnviroPhilo/BondPap.pdf</u> "A Pervasive Millennial-Scale Cycle in North Atlantic Holocene and Glacial Climates" Gerard Bond, et al, SCIENCE; 14 Nov 1997; 278, 5341; Research Library

"Thousand year" cycles have been known for over 25 years... published in SCIENCE.

and frequently calledBond Cycles

It would appear as if the National Academy of Science, Engineering and Medicine is quite unaware of this 1997 publication in SCIENCE Magazine RESEARCH ARTICLE

A Pervasive Millennial-Scale Cycle in North Atlantic Holocene and Glacial Climates

Gerard Bond,* William Showers, Maziet Cheseby, Rusty Lotti, Peter Almasi, Peter deMenocal, Paul Priore, Heidi Cullen, Irka Hajdas, Georges Bonani

Evidence from North Atlantic deep sea cores reveals that abrupt shifts punctuated what is conventionally thought to have been a relatively stable Holocene climate. During each of these episodes, cool, ice-bearing waters from north of Iceland were advected as far south as the latitude of Britain. At about the same times, the atmospheric circulation above Greenland changed abruptly. Pacings of the Holocene events and of abrupt climate shifts during the last glaciation are statistically the same; together, they make up a series of climate shifts with a cyclicity close to 1470 ± 500 years. The Holocene events, therefore, appear to be the most recent manifestation of a pervasive millennial-scale climate cycle operating independently of the glacial-interglacial climate state. Amplification of the cycle during the last glaciation may have been linked to the North Atlantic's thermohaline circulation.

Three years later, in 2000, Richard Alley published on the Younger Dryas, using the GISP2 data from Greenland.

It appears as if the National Academy is also quite unaware of these data, which also reveal the ~thousand year "Bond Cycles."

Greenland GISP2 Ice Core - Temperature Last 10,000 Years

http://wattsupwiththat.files.wordpress.com/2013/03/gisp2-ice-core-temperatures.jpg?w=960



https://www.academia.edu/381635/A_new_reconstruction_of_temperature_variability_in_the_extratropical_Northern_Hemisphere_during_the_last_two_millennia

Here is another graphic from a 2010 journal article by F. C. Ljungqvist.

I ask, how can the National Academy be so ignorant of the peer-reviewed literature which shows these pervasive thousand-year temperature cycles, the Bond Cycles?



N. Hemisphere Temperature proxies

http://www.drroyspencer.com/wp-content/uploads/2000-years-of-global-temperatures-industrial-revolution-start.jpg



3. Present temperatures are the highest in 125,000 years....

https://www.cnn.com/2023/11/09/climate/global-warming-hottest-year-history-climate-intl/index.html



Humanity just lived through the hottest 12 months in at least 125,000 years

By Laura Paddison, CNN

⑦ 5 minute read · Updated 6:34 AM EST, Thu November 9, 2023



"Month after month since June, the world has been abnormally hot. Scientists have compared this year's climate-change fallout to "a disaster movie" — soaring temperatures, fierce wildfires, powerful storms and devastating floods — and new data is now revealing just how exceptional the global heat has been.

Two major reports published this week paint an alarming picture of this unprecedented heat: Humanity has just lived through the hottest 12month period in at least 125,000 years, according to one, while the other declared that 2023 is "virtually certain" to be the hottest year in recorded history, after five consecutive months of record-obliterating temperatures.

We have become all too used to climate records falling like dominoes in recent years," David Reay, executive director of the Edinburgh Climate Change Institute at the University of Edinburgh, told CNN. "But 2023 is a whole different ball game in terms of the massive margin by which these records have been broken." INK INSIDE © SEEDLESS-

INTERIEUR ROSE SANSPEPIN

https://www.cbsnews.com/video/earth-just-had-its-hottest-12-months-ever-report-finds/

Search

CLIMATE CENTRAL ANALYZED GLOBAL AVERAGES AND T



0:12/0:26

EARTH EXPERIENCES HOTTEST 12 MONTHS EVER RECORDED

Close

[]

https://www.cbsnews.com/video/earth-just-had-its-hottest-12-months-ever-report-finds/

ABOVE PRE-INDUSTRIAL AVERAGE

SOURCE: CLIMATE CENTRAL

[]

NOVEMBER OF LAST YEAR THROUGH



EARTH EXPERIENCES HOTTEST 12 MONTHS EVER RECORDED



https://climaterealism.com/2023/10/media-fails-to-examine-actual-data-in-making-hottest-summer-ever-claims/



L A Times Article Falsely Asserts U.S. Had "Record" High Summer Temperatures in 2023 https://joannenova.com.au/2023/11/hottest-in-125000-years-say-eu-scientists-a-statement-so-silly-even-cavemen -know-they-are-wrong/

Hottest in 125,000 years say EU scientists as if Cavemen could measure the temperature to a tenth of a degree--Humanity lived through the hottest year in the last 125,000 years.

...Jo Nova, Australian blogger.

Next, we examine some human history and climate history as revealed from Ice Core proxy temperatures.





Humanity just lived through the hottest 12 months in at least 125,000 years

Africa Americas Asia Australia China Europe India Middle East

By Laura Paddison, CNN ② 5 minute read · Updated 6:34 AM EST, Thu November 9, 2023



A firefighter walks toward flames as the Highland Fire burns in Aguana, California, on October 31, 2023.

A glimpse of human history, as we know it today

A Caution....

Some of the time charts have current temperatures on the left, and older temperatures to the right....

But other time charts have current temperatures on the right and older temperatures on the left.

There is no standard used in the literature today.



© Encyclopædia Britannica, Inc.

Homo Sapiens

Homo Sapiens Neathanderthalensis



at Happisburgh, Norfolk, UK.

The earliest human footprints outside Africa

In May 2013 a team of scientists led by the British Museum, Natural History Museum and Queen Mary University of London discovered a series of footprints left by early humans in ancient estuary mud over 800,000 years ago at Happisburgh, Norfolk. Nicholas Ashton, Curator of Palaeolithic and Mesolithic collections at the British Museum has been working on the Happisburgh Palaeolithic excavations.



https://blog.britishmuseum.org/the-earliesthuman-footprints-outside-africa-2

https://www.google.com/maps/place/Norfolk,+UK/@52.9004802,1.1304188



lereford

Bristol

Swansea Cardiff

Plymouth

Oxford

London

outhampton

Dover

Left: East Anglia in England.

We have discovered some new information revealing that our human ancestors inhabited what we now call England over 800,000 years ago, near the present town of Happisburgh, England, the area pictured below.



Think about that. Human ancestors inhabited part of East Anglia, England, about 800,000 to 900,000 years ago.



Human ancestor footprints were found in mudstone dated from that period, in the soft rock at the foot of the cliff of Happisburgh, near the location in this photo, from the British Museum.

https://blog.britishmuseum.org/the-earliest-human-footprints-outside-africa-2/

We found them by pure chance in May last year. We were about to start a geophysics survey on the foreshore, when an old-time friend and colleague, Martin Bates from Trinity St David's University, pointed out the unusual surface. The site lies beneath the beach sand in sediments that actually underlie the cliffs. The cliffs are made up of soft sands and clays, which have been eroding at an alarming rate over the last ten years, and ever more so during the latest winter storms. As the cliffs erode they reveal these even earlier sediments at their base, which are there for a short time before the sea washes them away.



Early human footprints revealed at Happisburgh, UK

Sidebar on the claim, "Hottest in 125,000 years."

At least the past million years have been characterized by "Glacial" conditions maybe 80,000 years long and "Interglacial" conditions maybe 20,000 years long, which repeat every ~100,000 years.



https://www.wunderground.com/cat6/Snow-Stars-and-Stress-Science-Concordia-Station



Changes in Temperatures and CO2 concentration over the past several hundred thousand years, based on analysis of the EPICA Dome C ice core from Antarctica.

https://wattsupwiththat.files.wordpress.com/2012/10/49ff5-6a010536b58035970c0134840e51fd970c-pi.png

This high-resolution temperature time history from the Vostok Ice Core in Antarctica shows the Eemian, the previous interglacial period, **over 4C warmer than the present**. During the Eemian, <CO2> was 275 Parts per Million, Hippos were in the Rhine and Thames Valleys and sea levels were ~ 4m higher than at present. Human ancestors clearly survived the Eemian, <u>so claims of Climate Catastrophe if temperatures exceeded an</u> <u>IPCC-declared critical 1.5C or 2C warmer than pre-Industrial times are nonsense</u>. It happened before, in the Eemian.


https://wattsupwiththat.files.wordpress.com/2012/10/49ff5-6a010536b58035970c0134840e51fd970c-pi.png





https://www.wunderground.com/cat6/Snow-Stars-and-Stress-Science-Concordia-Station



Changes in Temperatures and CO2 concentration over the past several hundred thousand years, based on analysis of the EPICA Dome C ice core.

The data colored in red and hot pink show times in the past temperatures were hotter than today. Our ancestors survived those warm periods, so present temperatures are nowhere near too hot for human survival.



Consider the Human History time-line when compared with several climate history time-lines.

First, comparing with the Vostok Ice Cores, Antarctica, in the following slides

We earlier saw a "multi-proxy" temperature time history from the Northern Hemisphere, published by Ljungqvist, which shows the "thousand year" Bond Cycles in context with past temperatures

In each of these examples, the present warming is but one of **numerous climate cycles**, and show that the **present warming is bringing a return to warmer temperatures which have occurred in the recent past**.

There is nothing in the present warming which would lead a critically-thinking person to think that the present warming is anything other than a continuation of benign warming, bringing Earth closer to warm periods of the recent past.







How can the present rate of climate change be a "Climate Emergency" and "An Existential Threat," when present temperatures aren't nearly as warm as 1000, 2000 and 8000 years ago we saw in Patzelt's & ice core time series? When Homo Sapiens survived the Eemian Interglacial, 125,000 years ago, and the interglacial 250,000 years ago? When Neanderthals survived the interglacials of 125,000, 250,000, 330,000 and 410,000 years ago?



http://en.wikipedia.org/wiki/File:Vostok-ice-core-petit.png Antarctic Ice Cores



BS Claims in NCA5

4. Current temperatures are rising faster than any time in thousands of years "because of greenhouse gases." NCA5 blames CO2 and our use of hydrocarbon fuels

https://nca2023.globalchange.gov/#overview-section-2

The Fifth National Climate Assessment

The Fifth National Climate Assessment is the US Government's preeminent report on climate change impacts, risks, and responses. It is a congressionally mandated interagency effort that provides the scientific foundation to support informed decision-making across the United States.





Rapid and Unprecedented Changes

This part is true

	800k years	Present-day levels of greenhouse gases in the atmosphere are higher than at any time in at least the past 800,000 years, with most of these emissions occurring since 1970.
This is NOT true	3,000 years	The rate of sea level rise in the 20th century was faster than in any other century in at least the last 3,000 years.
This is NOT true	2,000 years	Global temperature has increased faster in the past 50 years than at any time in at least the past 2,000 years.
	1,200 years	The current drought in the western US is now the most severe drought in at least 1,200 years and has persisted for decades.

Current climate conditions are unprecedented for thousands of years.

FIGURE 1.6. Human activities since industrialization have led to increases in atmospheric greenhouse gas concentrations that are unprecedented in records spanning hundreds of thousands of years. These are examples of some of the large and rapid changes in the climate system that are occurring as the planet warms. (Greenhouse gas concentrations {2.1}; sea level rise

Current climate changes are unprecedented over thousands of years

Global greenhouse gas emissions from human activities continue to increase, resulting in rapid warming (Figure <u>1.5</u>) and other largescale changes, including rising sea levels, melting ice, ocean warming and <u>acidification</u>, changing rainfall patterns, and shifts in timing of seasonal events. Many of the climate conditions and impacts people are experiencing today are unprecedented for thousands of years (Figure <u>1.6</u>). {<u>2.1</u>, <u>3.1</u>; Figures <u>A4.6</u>, <u>A4.7</u>, <u>A4.10</u>, <u>A4.13</u>}

This claim is stunningly Ignorant, Wrong, and Deceptive!

The next several graphics are from my course, "Weather, Climate, and Climate Change--What the Data Tell Us," which I taught at NMSU-A in 2019, <u>https://casf.me/nmsu-a-week-five/</u>

These came specifically from the class, "Climate History and El Nino (ENSO)" which I taught on 30 Sept 2019.

These slides have this marker:



Proxies for Temperature

Liquid-in-glass thermometer record available, at best, since 1800s

Proxies for temperature: Objects in the physical record dependent on temperature during their formation -- used to determine temperature history.

Example: Ice Core Data.

Water consists of H2O. Oxygen consists of isotopes of O16 and O18. The O16/O18 ratio can be used to determine temperature of the water substance, vapor, which became snow... then ice after burial...hundreds...thousands of years.

"The heavier isotope (¹⁸O) condenses more readily as <u>temperatures</u> decrease and falls as <u>precipitation</u>, while the lighter isotope (¹⁶O) can fall in even colder conditions. The farther <u>north</u> elevated levels of an ¹⁸O isotope are detected signals a warming over time.^[8]"

Often written in the technical literature as δ^{18} O.



Typically used for Greenland and Antarctic Ice Cores

http://wattsupwiththat.com/2011/01/24/easterbrook-on-the-magnitude-of-greenland-gisp2-ice-core-data/



http://wattsupwiththat.files.wordpress.com/2011/01/easterbrook_gisp2_fig2.jpg

Seventeen Sets positive (red), negative (blue) Temperature change Deg F / 100 years Dr Don Easterbrook's analysis of GISP2 proxy temperatures.

Highest rate: +14F in 40 years (younger Dryas)

30

NCA5 tries to tell us that present rates of temperature are extraordinarily large... when they are extraordinarily **small!**



Time Domain: Last 10,000 years, the Holocene

More Climate Cycles 1000-1450 year periodicity





 \bigwedge

X-Axis, TimeOldest on Left,Present on RightY-Axis, Temperaturefrom the O16/O18 ratio , Greenland GISP2 Ice CoreColdest Down, Warmer Up.

6181 BC: Sudden cooling kills numerous trees, trunks of which are found by Swiss Geologist Christian Schluchter at the base of the Mont Mine' Glacier, Switzerland, about 5 miles north of the Italian border and 10 miles west of Zermatt.

http://notrickszone.com/2014/06/09/giant-of-geologyglaciology-christian-schluechter-refutes-co2 -feature-interview-throws-climate-science-into-disarray/





Voars Rofaro Drocont (2000 AD)



https://nca2023.globalchange. gov/#overview-section-2

US and Global Changes in Average Surface Temperature



FIGURE 1.5. The graph shows the change in US annual average surface temperature during 1895–2022 compared to the 1951–1980 average. The temper Google Chrome Inges color as data become available for more regions of the US, with Alaska data added to the average temperature for the contiguous US (CONUS) beginning in 1926

https://casf.me/wp-content/uploads/2019/01/PDF_Climate-Impact-of-Increasing-Atmospheric-Carbon-Dioxide Science 28_August_1981_Hansen81_CO2_Impact.pdf

The chart at right is adapted from Fig 3 in "Climate Impact of increasing Atmospheric Carbon Dioxide," by J Hansen et al, SCIENCE, 28 Aug 1981. Vol 213, No 4511.

Notice the distinct fall in temperatures From 1940-1970, despite <CO2> **increasing** during this period.



This comes from Slide 51 of my presentation to CASF: <u>https://casf.me/wp-content/uploads/2020/11/PDF_</u> _Bob_s-Analysis-of-Dave-Dubois-Climate-Education-presentation_21_Nov_2020.pdf

> Starting to count temperatures about 1970 is deliberately deceptive. There is a prominent 60-year cycle in North American Temperatures—the Atlantic Multi-decadal Oscillation...(AMO). https://climatedataguide.ucar.edu/climate-data/atlantic-multi-decadaloscillation-amo





Global temperature has increased faster in the past 50 years than at any time in at least the past 2,000 years.

This claim is blatantly and stunningly not true!

The GISP2 data show that about 13,000 years ago temperatures rapidly warmed to almost the present Temperatures then cooled again, the cooling we now call the Younger Dryas Cold Period.

The magnitude of those changes was roughly 14F in 100 years, as shown by Don Easterbrook, <u>http://wattsupwiththat.com/2011/01/24/easterbrook-on-the-magnitude-of-greenland-gisp2-ice-core-data</u>

Let's look at Easterbrook's charts again....

http://wattsupwiththat.com/2011/01/24/easterbrook-on-the-magnitude-of-greenland-gisp2-ice-core-data/



http://wattsupwiththat.files.wordpress.com/2011/01/easterbrook_gisp2_fig2.jpg

Seventeen Sets positive (red), negative (blue) Temperature change Deg F / 100 years Dr Don Easterbrook's analysis of GISP2 proxy temperatures.



Here is the best surface temperature time series in the world for a continent-sized area, the USCRN:

https://www.ncei.noaa.gov/access/monitoring/national-temperature-index/time-series/anom-tavg/1/0

Average Temperature Anomaly

🔲 ClimDiv 🔴 USCRN



plainly there is no NCA5-claimed Human-Caused, CO2-Fueled Global Warming.

BS Claims in NCA5

5. Increasing <CO2> is causing stronger storms and more storm damage

Risks from extreme events are increasing

One of the most direct ways that people experience climate change is through changes in extreme events. Harmful impacts from more frequent and severe extremes are increasing across the country—including increases in heat-related illnesses and death, costlier storm damages, longer droughts that reduce agricultural productivity and strain water systems, and larger, more severe wildfires that threaten homes and degrade air quality. {2.2, 4.2, 12.2, 14.2, 15.1, 19.2; Focus on Western Wildfires}

Extreme weather events cause direct economic losses through infrastructure damage, disruptions in labor and public services, and losses in property values. The number and cost of weather-related disasters have increased dramatically over the past four decades, in part due to the increasing frequency and intensity of extreme events and in part due to increases in assets at risk (through population growth, rising property values, and continued development in hazard-prone areas). Low-income communities, communities of color, and Tribes and Indigenous Peoples experience high exposure and vulnerability to extreme events due to both their proximity to hazard-prone areas and lack of adequate infrastructure or disaster management resources. {2.2, 4.2, 17.3, 19.1; Focus on Compound Events}

In the 1980s, the country experienced, on average, one (inflation-adjusted) billion-dollar disaster every four months. Now, there is one every three weeks, on average. Between 2018 and 2022, the US experienced 89 billion-dollar events (Figure <u>1.7</u>). Extreme events cost the US close to \$150 billion each year—a conservative estimate that does not account for loss of life, healthcare-related costs, or damages to ecosystem services. {<u>2.2</u>, <u>19.1</u>; Ch. <u>2</u>, Introduction; Figures 4.1, A4.5}

This is what NCA5 claims, so let's look at some data...

https://climatlas.com/tropical/



Global Tropical Cyclone Frequency -- 12 month Running Sums -- @RyanMaue Updated August 31, 2023

Recent historically low global tropical cyclone activity: Geophys. Res. Lett. (2011), Abstract:

Tropical cyclone accumulated cyclone energy (ACE) has exhibited strikingly large global interannual variability during the past 40-years. In the pentad since 2006, Northern Hemisphere and global tropical cyclone ACE has decreased dramatically to the lowest levels since the late 1970s. Additionally, the frequency of tropical cyclones has reached a historical low. Here evidence is presented demonstrating that considerable variability in tropical cyclone ACE is associated with the evolution of the character of observed large-scale climate mechanisms including the El Nino Southern Oscillation and Pacific Decadal Oscillation. In contrast to record quiet North Pacific tropical cyclone activity in 2010, the North Atlantic basin remained very active by contributing almost one-third of the overall calendar year global ACE.



https://climatlas.com/tropical/





ACE is calculated by summing kinetic energy ~<M>V**2 of Tropical Storms and Hurricanes, each storm, every 6 hrs.



Figure: Last 50-years+ of Global and Northern Hemisphere Accumulated Cyclone Energy: 24 month running sums. Note that the year indicated represents the value of ACE through the previous 24-months for the Northern Hemisphere (bottom line/gray boxes) and the entire global (top line/blue boxes). The area in between represents the Southern Hemisphere total ACE.

http://www.drroyspencer.com/2018/10/florida-major-hurricane-strikes-still-no-trend/



https://rogerpielkejr.substack.com/ p/what-the-media-wont-tell-youabout An increase in heat extremes has emerged or will emerge in the coming three decades in most land regions (*high confidence*) (Chapter 11; King et al., 2015; Seneviratne and Hauser, 2020), relative to the pre-industrial period, as found by testing significance of differences in distributions of yearly temperature maxima in simulated 20-year periods. In tropical regions, wherever observed changes can be established with statistical significance, and in most mid-latitude regions, there is *high confidence* that hot and cold extremes have emerged in the historical period, but only *medium confidence* elsewhere.

Clearly, with the exception perhaps of only extreme heat, the IPCC is badly out of step with today's apocalyptic zeitgeist. Maybe that is why no one mentions what the IPCC actually says on extreme events. It may also help to explain why a recent paper that arrives at conclusions perfectly consistent with the IPCC is now being retracted with no claims of error or misconduct.

I've done research on climate change and extreme weather for almost 30 years (yowza!). I know the literature and have contributed quite a bit to it. My view is that the IPCC has accurately summarized that literature (if perhaps overlooking some key work, ahem).

I wonder if the IPCC is next in line to be attacked by champions of the apocalyptic zeitgeist. After all, how can science like this co-exist with an end-of-times panic? Something would seem to have to give, right?

https://rogerpielkejr.substack.com/ p/what-the-media-wont-tell-youabout

The Honest Broker



1. The Intergovernmental Panel on Climate Change, in its latest report, concluded that there remains "no consensus" on the relative role of human influences on Atlantic hurricane activity.

Here is what the IPCC says exactly:

"[T]here is still no consensus on the relative magnitude of human and natural influences on past changes in Atlantic hurricane activity, and particularly on which factor has dominated the observed increase (Ting et al., 2015) and it remains uncertain whether past changes in Atlantic TC activity are outside the range of natural variability."
What the IPCC Actually Says About Extreme Weather

I promise, you'll be utterly shocked

ROGER PIELKE JR. JUL 19, 2023 The IPCC has concluded that a signal of climate change has *not yet emerged* beyond natural variability for the following phenomena:

- River floods
- Heavy precipitation and pluvial floods
- Landslides
- Drought (all types)
- Severe wind storms
- Tropical cyclones
- Sand and dust storms
- Heavy snowfall and ice storms
- Hail
- Snow avalanche
- Coastal flooding
- Marine heat waves

https://climaterealism.com/2023/04/false-washington-post-climate-change-isnt-making-tornado-seasons-worse/



U.S. Annual Count of Strong to Violent Tornadoes (F3+) 1954-2020 Data Source: NOAA/NWS Storm Prediction Center

This figure shows the frequency of strong to violent tornadoes (tornadoes registering EF3 or stronger) has been declining since the early 1970s. Sources: Graph by Anthony Watts using official NOAA/Storm Prediction Center data. Source: National Oceanic and Atmospheric Administration, "Historical Records and Trends, <u>https://www.ncdc.noaa.gov/climate-information/extreme-events/us-tornado-climatology/trends</u> Graph data from National Oceanic and Atmospheric Administration's National Weather Service, Storm Prediction Center website. <u>https://www.spc.noaa.gov/wcm</u>

The NCA5 BS continues...so I will continue the counter-arguments...

Risks from extreme events are increasing

One of the most direct ways that people experience climate change is through changes in extreme events. Harmful impacts from more frequent and severe extremes are increasing across the country—including <u>increases in heat-related illnesses and death</u>, costlier storm damages, <u>longer droughts that reduce</u> <u>agricultural productivity</u> and strain water systems, and <u>larger, more severe wildfires that threaten homes</u> and degrade air quality. <Underlining added> {2.2, 4.2, 12.2, 14.2, 15.1, 19.2; Focus on Western Wildfires}

Note well the underlined sections above....

Cold waves kill many more people than heat waves.

If the Alarmists were correct, there'd be a lot more deaths from heat than cold. The Climate Alarm makes no sense.

Percent of Deaths Due to Moderate and Extreme Episodes of Heat and Cold



Fraction of all-cause mortality attributable to moderate and extreme hot and cold temperature by country. (Source: Gasparrini et al., 2015).

About those "longer droughts that reduce agricultural productivity..."

The Devastating Impact of CO₂ on Agriculture



Ammonia consumption goes to the Haber Process which turns natural gas into Ammonium Nitrate fertilizer.

From Wikipedia:

"The Haber process now produces 450 million tons of nitrogen fertilizer per year, mostly in the form of anhydrous ammonia, ammonium nitrate, and urea. Three to five percent of the world's natural gas production is consumed in the Haber process (around 1–2% of the world's energy supply)...

In combination with pesticides, these fertilizers have quadrupled the productivity of agricultural land."

U.S. Corn Grain Yields, 1900-2005









https://casf.me/wp-content/uploads/2023/09/Bob-and-Edward s-Top-Dozen-Graphics-Showing-the-Insanity-of-Alarmist-Ideas 12 Sep-2023.pdf

Damages by State from Billion-Dollar Disasters (2018–2022)





The number of weather- and climate-related disasters exceeding \$1 billion has

https://nca2023.globalchange.gov/chapter/appendix-4/#fig-a4-5

FIGURE A4.5. This indicator provides insight into the frequency of events exceeding \$1 billion in damages (adjusted for inflation) from 1980 to 2022 across seven disaster types, each represented by its own color. The severe storm category includes events such as tornadoes, hail, and damaging winds but not tropical cyclones or winter storms. The only year with no billion-dollar events was 1987. Since then, the number of events each year has generally increased, with 2020 and 2021 having the two highest number of events on record. The number and cost of these disasters are due to several complex factors. Climate change is leading to increases in the frequency and intensity of extreme events, and, at the same time, there have been continual increases in the numbers of buildings, infrastructure, and people in climate-sensitive areas where these events may occur.²⁸ Economic factors can also play a role. For example, there is potential for property values to increase at rates higher than the Consumer Price Index, which can lead to higher damage assessments compared to previous years. An interactive version of this indicator, including the total annual cost and a breakdown by state and region, can be found at https://www.ncei.noaa.gov/access/billions/time-series/ 2.29 Adapted from USGCRP 2023.30

This is the caption for the Billion-dollar Disasters graphic.

I think NCA5 is being deliberately deceptive, because **economic** factors, not storm strength, are dominant.

My reasoning is in the next slides.



Billion-Dollar Disasters

6

The number of weather- and climate-related disasters exceeding \$1 billion has substantially increased since 1980 "What we can say with a very high degree of certainty is that the damages from tropical cyclones (both in the U.S. and globally) have increased dramatically over the past century.

It is also highly certain that the main reason for this is the ever-increasing amount of wealth we place in their path."

<spacing edited for clarity>

ABSTRACT

Hurricanes are the costliest natural disasters in the United States. Understanding how both hurricane frequencies and intensities vary from year to year as well as how this is manifested in changes in damages that occur is a topic of great interest to meteorologists, public and private decision makers, and the general public alike. Previous research into long-term trends in hurricane-caused damage along the U.S. coast has suggested that damage has been quickly increasing within the last two decades, even after considering inflation.

However, to best capture the year-to-year variability in tropical cyclone damage, consideration must also be given toward two additional factors: <u>coastal population changes and changes in wealth</u>. Both population and wealth have increased dramatically over the last several decades and act to enhance the recent hurricane damages preferentially over those occurring previously. More appropriate trends in the United States hurricane damages can be calculated when a normalization of the damages are done to take into account inflation and changes in coastal population and wealth.

With this normalization, the trend of increasing damage amounts in recent decades disappears. Instead, substantial multidecadal variations in normalized damages are observed: the 1970s and 1980s actually incurred less damages than in the preceding few decades. Only during the early 1990s does damage approach the high level of impact seen back in the 1940s through the 1960s, showing that what has been observed recently is not unprecedented. Over the long term, the average annual impact of damages in the continental United States is about \$4.8 billion (1995 \$), substantially more than previous estimates. Of these damages, over 83% are accounted for by the intense hurricanes (Saffir–Simpson categories 3, 4, and 5), yet these make up only 21% of the U.S.-landfalling tropical cyclones. <spacing, bolding, underlining, added for emphasis>

https://scholar.google.com/scholar_lookup?title=Normalized%20hurricane%20damage%20in%20the%20United%20States

[PDF] tropicalstormrisk.com **Normalized hurricane damage in the United States: 1900–2005** RA Pielke Jr, J Gratz, CW Landsea, D Collins, MA Saunders, R Musulin

Natural hazards review, 2008-ascelibrary.org

After more than two decades of relatively little Atlantic hurricane activity, the past decade saw heightened hurricane activity and more than \$150 billion in damage in 2004 and 2005. This paper normalizes mainland U.S. hurricane damage from 1900–2005 to 2005 values using two methodologies. A normalization provides an estimate of the damage that would occur if storms from the past made landfall under another year's societal conditions. Our methods use changes in inflation and wealth at the national level and changes in population and housing units at the coastal county level. Across both normalization methods, there is no remaining trend of increasing absolute damage in the data set, which follows the lack of trends in landfall frequency or intensity observed over the twentieth century. The 1970s and 1980s were notable because of the extremely low amounts of damage compared to other decades. The decade 1996–2005 has the second most damage among the past 11 decades, with only the decade 1926–1935 surpassing its costs. Over the 106 years of record, the average annual normalized damage in the continental United States is about \$10 billion under both methods. The most damaging single storm is the 1926 Great Miami storm, with \$140–157 billion of normalized damage: the most damaging years are **1926 and 2005.** Of the total damage, about 85% is accounted for by the intense hurricanes (Saffir-Simpson) Categories 3, 4, and 5), yet these have comprised only 24% of the U.S. landfalling tropical cyclones. **Unless action** is taken to address the growing concentration of people and properties in coastal areas where hurricanes strike, damage will increase, and by a great deal, as more and wealthier people increasingly inhabit these **coastal locations.** <bolding added>

https://rogerpielkejr.substack.com/p/what-the-media-wont-tellyou-about

https://www.nature.com/articles/s41893-018-0165-2

nature sustainability

Explore content 🖌 About the journal 🖌 Pu

Publish with us 🗸 🛛 Subscribe

nature > nature sustainability > analyses > article

Analysis Published: 26 November 2018

Normalized hurricane damage in the continental United States 1900–2017

Jessica Weinkle, <u>Chris Landsea</u>, <u>Douglas Collins</u>, <u>Rade Musulin</u>, <u>Ryan P. Crompton</u>, <u>Philip J. Klotzbach</u> & <u>Roger Pielke Jr</u> ☑

Nature Sustainability 1, 808–813 (2018) Cite this article

			na pase i		2022 Demos	
Rank	Year	Hurricane	Category	States	(Lilliana C)	
	1024	Creat Minuri	4		(billions \$)	
2	1926	Great Miami	4	AL, MS, FL	\$261.6	
2	1900	Galveston	4		\$153.7	
3	2005	Katrina	3	FL, LA, MS, AL	\$129.7	
4	1915	Galveston	4	TX, LA	\$121.8	
5	1992	Andrew	5	FL, LA	\$117.6	
6	2012	Sandy	I	NY	\$81.5	
7	1944	Cuba-Florida	3	FL	\$81.5	
8	2017	Harvey	4	TX	\$69.0	
		Great New				
9	1938	England	3	LA, NY	\$64.I	
10	2021	Ida	4	LA, MS	\$62.I	
н	1928	Lake Okeechobee	4	FL, GA, SC	\$60.3	
				FL, NC, VA, NY,		
12	1960	Donna	4	CT, RI, MA	\$53.7	
13	2008	lke	2	TX, LA	\$39.0	
14	1954	Hazel	4	SC, NC	\$36.8	
15	2005	Wilma	3	FL	\$35.4	
16	2017	Irma	4	FL	\$34.4	
17	2004	Charley	4	FL, SC	\$29.8	
18	1969	Camille	5	LA, MS	\$29.3	
				FL, MD, NY, PA,		
19	1972	Agnes	1	VA	\$28.8	
20	2004	Ivan	3	AL, FL	\$28.7	
21	1989	Hugo	4	SC, NC	\$27.8	
22	1961	Carla	4	TX	\$27.8	
23	1949	Florida	4	FLGA	\$26.8	
24	1947	Fort Lauderdale	4	FL. LA. MS	\$26.6	
		. or character dute		NC. NY. CT. BI	42010	
25	1054	Canal	2		£24 I	

How much damage would past hurricanes cause in 2022?

How much damage would past hurricanes cause in 2022?

Bank	Year	Hurricane	Category	States	2022 Damage
nalik					(billions \$)
I	1926	Great Miami	4	AL, MS, FL	\$261.6
2	1900	Galveston	4	TX	\$153.7
3	2005	Katrina	3	FL, LA, MS, AL	\$129.7
4	1915	Galveston	4	TX, LA	\$121.8
5	1992	Andrew	5	FL, LA	\$117.6
6	2012	Sandy	I.	NY	\$81.5
7	1944	Cuba-Florida	3	FL	\$81.5
8	2017	Harvey	4	TX	\$69.0
		Great New			
9	1938	England	3	LA, NY	\$64.I
10	2021	Ida	4	LA, MS	\$62.1

How much damage would past hurricanes cause in 2022?

R	ank	Year	Hurricane	Category	States	2022 Damage (billions \$)
	П	1928	Lake Okeechobee	4	FL, GA, SC	\$60.3
					FL, NC, VA, NY,	
	12	1960	Donna	4	CT, RI, MA	\$53.7
	13	2008	lke	2	TX, LA	\$39.0
	14	1954	Hazel	4	SC, NC	\$36.8
	15	2005	Wilma	3	FL	\$35.4
	16	2017	Irma	4	FL	\$34.4
	17	2004	Charley	4	FL, SC	\$29.8
	18	1969	Camille	5	LA, MS	\$29.3
					FL, MD, NY, PA,	





6. <CO2> increases are driving accelerating rates of Sea Level Rise

https://nca2023.globalchange.gov/chapter/9

Sea level is projected to continue to increase this century by amounts related to future global warming levels.

FIGURE 9.1. This figure shows accelerating sea level rise (SLR) trends and SLR scenarios along the contiguous US coastline. It also shows the relationship between projected SLR under different global surface temperature increases in 2100 (KM 2.2). The **left panel** shows observed increasing average sea levels during 1920–2020 (solid black line), an extrapolation out to 2050 based on observed sea levels over 1970-2020 (dashed black line), a range of scenarios describing plausible sea level rise out to 2150 (multicolored lines), and an overlapping stacked bar showing a range of projected changes in 2100 SLR under different levels of global surface temperature increase, based on the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. The right panel shows expanded versions of the projections shown in the stacked bar in the left panel. Black lines indicate the median value, the bars show the extent of the *likely* range (17th–83rd percentile) of SLR by 2100, and the associated warming levels are indicated above each bar. The "High warming, low confidence" case (yellow bar) refers to the potential range of rising seas under higher temperatures with rapid ice melt. The lack of overlap in 2100 between the High sea level scenario and the "High warming, low confidence" case in 2100 is not an indication of overestimation but rather a result of how the low-confidence processes are analyzed. Adapted from Sweet et al. 2022.²

https://nca2023.globalchange.gov/chapter/9/



Accelerating Relative Sea Level Rise in the Contiguous US

This chart is full of BS, IMHO.

Tide gage records go back to 1856, when Franklin Pearce was US President.

Why start the record some ~sixty-five years later, 1920? Why is the data line so thick?

Why ignore published data and literature which contradict The Narrative?

We KNOW the reasons; these inflict fatal wounds to The Narrative of Human-Caused CO2-Fueled Global Warming

The next slides show tide gage data, and analysis of tide gages from Houston and Dean from the Journal of Coastal Research.

Data for the Battery tide gage, at the southern end of New York's Manhattan Island, begins in January,1856. The data plots are provided by Dave Burton's site, <u>http://sealevel.info/</u>. The blue line is the monthly average for sea level measured by the tide gage. The green lines are the <CO2> from the ice cores up to 1958, and thereafter by the Mauna Loa site, operated by UC San Diego.

There is no acceleration in the rate of sea level rise originating from increases in <CO2> in the data.

Sea Level is rising faster on the East Coast than the West Coast, which I speculate has to do with differential resultant continental buoyancy forces of Earth's mantle under the continent of North America.

The reason for the multidecadal fluctuations in the rate of sea level rise at the Battery might be a result of multidecadal migrations in the mean position of the Bermuda-Azores Ridge of High Pressure, in addition to the well-known annual migration of this feature.

When the Bermuda High is near New York, high atmospheric pressure depresses sea level there. When strong sea level pressure falls occur, such as when a hurricane approaches, sea level rises. Strong Sea Level Rise in such situations is called **Storm Surge**.

More about the multidecadal changes in rate of sea level rise... speculation on my part...l've not seen any information in the literature on this, but it is clearly present in the data. See the first few decades, sea level seems to have dropped 1856-1878 at the Battery, before the data drop out which lasted until 1893.

https://sealevel.info/



...by cicking on the Sea-level data tab (red arrow)

http://sealevel.info/MSL_graph.php?id=Battery

$\underline{Sealevel.info} \rightarrow \underline{Data} \rightarrow 8518750$



The mean sea level (MSL) trend at The Battery, NY, USA is +2.92 mm/year with a 95% confidence interval of ± 0.08 mm/year, based on monthly mean sea level data from 1856/1 to 2023/10. That is equivalent to a change of 0.96 feet in 100 years. (<u>R-squared</u> = 0.840)

http://sealevel.info/MSL_graph.php?id=9414290

 $\underline{Sealevel.info} \rightarrow \underline{Data} \rightarrow 9414290$



The mean sea level (MSL) trend at San Francisco, CA, USA is +1.50 mm/year with a 95% confidence interval of ± 0.13 mm/year, based on monthly mean sea level data from 1854/7 to 2023/10. That is equivalent to a change of 0.49 feet in 100 years. (<u>R-squared</u> = 0.589)

.

U.S. Tide Gauges: No Acceleration in Sea Level rise

http://www.jcronline.org/doi/abs/10.2112/JCOASTRES-D-10-00157.1



"worldwide-temperature increase has <u>not produced acceleration</u> of global sea level over the past 100 years" Many of the succeeding slides came from my course, "Weather, Climate, and Climate Change—What the Data Tell Us"

...and in particular, the class I taught at NMSU-A, 15 Oct 2019:

"Climate History 2, and...History Falsifies Climate Alarmist Sea Level Claims"

Slides are on the web site <u>https://casf.me/nmsu-a-week-seven/</u>

The slides here are a subset of the slides in the original lesson.

https://wattsupwiththat.com/2018/01/09/sea-level-rise-and-fall-part-4-getting-a-rise-out-of-nothing/



The IPCC AR5 SPM22 makes the following statements regarding global sea level rise: "Over the period 1901–2010, global mean sea level rose by 0.19 [0.17 to 0.21] m" [about 7-8 inches] "It is very likely that the mean rate of global averaged sea level rise was 1.7 [1.5 to 1.9] mm yr–1 between 1901 and 2010... and 3.2 [2.8 to 3.6] mm yr–1 between 1993 and 2010. It is likely that similarly high rates occurred between 1920 and 1950."

The rate of global mean sea level rise as portrayed in the IPCC AR5 is shown in below.

Rav & Douglas Trends (mm yr⁻ Altimeter 3 2 18-year GMSL 0 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 Year

Dr Judith Curry written testimony to US Senate, 8 Dec 2015 http://upload.wikimedia.org/wikipedia/commons/c/c0/Sea_level_temp_140ky.gif

Late Quaternary Sea Level History shows sea level higher within the Holocene ...and a drop in Sea Level during the Little Ice Age within the past 1000 years.

http://en.wikipedia.org/wiki/Sea_level



Please look at the data for the last 2000 years.

Wikipedia, an Alarmist Organization, shows sea levels distinctly higher 1000 years ago, the Medieval Warm Period, than sea levels today.

Sea level references throughout History:

We study European or Western History because of language: The Romans wrote things down and we can read today what they wrote then...

Especially in Europe, towns and civic groups celebrate and advertise local history....often having references to the sea and sea level...

the sea's influences on local historical events, locations.

Historic event timeline in Europe extends back to the Roman Warm Period and the Medieval Warm Periods, before the Little Ice Age

Modern, post-Little Ice Age sea levels have not yet reached the heights reached in the Roman Warm Period and the Medieval Warm Period.

Our historic tour of the Middle East and Europe:

Modern Iraq, Greece, Turkey, Italy, England, France

Sea level changes over relatively recent geologic and human history demonstrate that alarmist claims of human cause do not withstand scrutiny.

After the last (Wisconsin) ice age, sea levels in the Holocene rose significantly, fell during the Little Ice Age, and have been rising again since the LIA ended around 1850.

In fact, Roman Empire and Medieval port cities are now miles from the Mediterranean, because sea levels actually fell during the Little Ice Age. http://en.wikipedia.org/wiki/File:Post-Glacial_Sea_Level.png

More information revealed with Clicks of the mouse.



Adapted from Bob Carter's presentation May 2010 Heartland Institute Climate Conference

Historical data from Europe show sea levels were higher in the Roman and Medieval Warm Periods than sea levels today:

Why use Europe? Written records, and artifacts from the Roman Empire and the Medieval Warm periods are dated by history.

Much of Europe is sedimentary rock and unconsolidated sediments...

and less likely to be affected by tectonic forces than say, for instance Japan, which is part of an Island Arc and on a plate boundary, or Guatemala.



How the next section is organized:

Sea levels higher than today in the recent past

Present country

Within that country, from oldest to youngest

Historic sea levels higher than today:

Iraq

Greece

Turkey

Italy

England

France




Ur was a **city** in the region of **Sumer**, southern **Mesopotamia**, in what is modern-day Iraq. According to biblical tradition, the





as a small village in the Ubaid Period of Mesopotamian history (5000-4100 BC)

and was an established city by 3800 BC continually inhabited until 450 BC."

http://www.archatlas.org/SitesFromSatellites/sites.php?name=uruk-ur



"... a landscape now radically different from the fourth and third millennia BC... Uruk and Ur are far from the present head of the Persian Gulf; ..<u>Ur was a sea-port and Uruk was situated on a major riverine artery.</u>

Sea Level was a lot higher at the time of Ur's prominence, 3000 BC.

http://www.archatlas.org/SitesFromSatellites/sites.php?name=uruk-ur

The idea to use Ali Air Base, Iraq, came from Jack Suther, MSgt USAF, Ret., my former colleague at NMSU. Jack deployed to Iraq from Cannon AFB, NM, when F-16s of the 27th TFW deployed to Ali Air Base.

The Ziggurat is a prominent visibility marker at Ali AB, also known as Tallil Air Base.



The present-day setting of Ur, next to the Tallil air-base (rectangle) and its supply-roads. Landsat TM imagery provided by NASA. The elevation of Ali Air Base (Tallil) is 13 Ft MSL <u>https://en.wikipedia.org/wiki/Ali_Air_Base</u>



https://en.wikipedia.org/wiki/Battle_of_Thermopylae Thermopylae: 480 BC

Thermopylae ("hot gates") is a place in <u>Greece</u> where a narrow coastal passage existed in <u>antiquity</u>. It derives its name from its <u>hot sulphur springs</u>...

Thermopylae is world-famous for <u>the battle</u> that took place here between the <u>Greek</u> forces including the <u>Spartans</u> and the <u>Persian</u> forces...

This passage from north to south along the east coast of the <u>Balkan peninsula</u> requires use of the pass, and for this reason Thermopylae has been the site of several battles.



http://photos1.blogger.com/x/blogger/1021/213/1600/752562/thermopylae.jpg





http://earlyworldhistory.blogspot.com/2012/02/persian-invasions.html

... Spartans sent their famed hoplite infantry to meet the advance of the Persians at the pass of Thermopylae. They withstood the continual Persian onslaught, aided by the narrow ground, which limited the number of Persian troops able to attack at one time...

https://en.wikipedia.org/wiki/Battle_of_Thermopylae#/media/File: Thermopylae_ancient_coastline_large.jpg



Present day view of the Thermopylae pass at the area of the Phocian Wall. In ancient times the coastline was even closer to the mountain than where the modern road lies.







http://en.wikipedia.org/wiki/Ephesus



Blue Star is Ephesus; yellow arrow points to Patara, next slides.





WI	KIPEDIA	
The Fr	ee Encyclopedia	

Main page	
Contents	
Featured content	
Current events	
Random article	
Donate to Wikipedia	
Wikipedia store	
Interaction	
Hala	

Patara, Lycia

From Wikipedia, the free encyclopedia

Patara (Lycian: Pttara), later renamed **Arsinoe** (Greek: Ἀρσινόη), was a flourishing maritime and commercial city on the south-west coast of Lycia on the Mediterranean coast of Turkey near the modern small town of Gelemiş, in Antalya Province. It is the birthplace of St. Nicholas, who lived most of his life in the nearby town of Myra (Demre).

History

Help

- About Wikipedia
- Community

portal

Recent changes

Possessing a natural harbour, Patara was said to have been founded by <u>Patarus</u>, a son of <u>Apollo</u>.^[1]

...Ancient writers mentioned Patara as one of the principal cities of Lycia.⁶

It was Lycia's primary seaport, and a leading city
of the Lycian League, having 3 votes, the maximum.

Patara was formally annexed by the <u>Roman Empire</u> in 43 AD and attached to <u>Pamphylia</u>.

Patara is mentioned in the <u>New Testament^[7]</u> as the place where <u>Paul of Tarsus</u> and <u>Luke</u> changed ships.

https://en.wikipedia.org/wiki/Patara,_Lycia

Patara



A picture of some of the ruins in Patara. Note a city gate at the lower left corner and the theatre set on the hillside.



Shown within Turkey

https://en.wikipedia.org/wiki/Patara,_Lycia

Ruins

The name Patara is still attached to the numerous ruins of the city.

... The town walls surrounded an area of considerable extent; they may easily be traced **as well as the situation of a castle which commanded the harbour**, and of several towers which flanked the walls.



A view of the partially restored main street ⁶⁷ of Patara



A view back across the city ruins from the top of the theatre

...The situation of the harbor is still apparent, but it is a swamp, choked up with sand and bushes. (Beaufort, *Karmania*, pp. 2, 6.)

Therefore, Sea Level was higher in 190 AD.





History Sea Level Lessons from Ostia Antica, port city of ancient Rome











Ostia Antica Video. Tiber River Bend is at the 9-Second Mark.

https://www.youtube.com/watch?v=7rPHHyB7mpU







https://en.wikipedia.org/wiki/Portus



Portus was a large artificial <u>harbour</u> of <u>Ancient Rome</u>. Sited on the north bank of the mouth of the <u>Tiber</u>, on the <u>Tyrrhenian coast</u>, it was established by <u>Claudius</u> and enlarged by <u>Trajan</u> to supplement the nearby port of <u>Ostia</u>.^[1]

Rome's original harbor was Ostia. Claudius constructed the first harbor on the Portus site, 4 km (2.5 mi) north of Ostia...

In AD 103 <u>Trajan</u> constructed another harbor farther inland—a hexagonal basin, enclosing an area of 39 hectares (97 acres), and communicating by canals with the harbor of Claudius, with the Tiber directly, and with the sea....

Portus was the main <u>port</u> of ancient Rome for more than 500 years and provided a conduit for everything from glass, ceramics, marble and slaves to wild animals caught in <u>Africa</u> and shipped to Rome for spectacles in the Colosseum."^[4]

http://www.ostia-antica.org/portus/claudius.htm The harbor of Claudius

The river harbour of Ostia had several limitations. Large ships could not enter it, because there was a sand bar in front of the mouth. Therefore, goods that arrived in large ships had to be transferred to smaller ships on the sea. Shallow-draught vessels could moor at the Tiber quays, but here there was not enough capacity for Rome's growing needs.



Aerial view Portus' hexagonal artificial harbor, built by Emperor Trajan, alongside the Tiber. <u>http://upload.wikimedia.org/wikipedia/commons/6/6d/Fiumicino_03_%28RaBoe%29.jpg</u>



View from west, from over the Tyrrhenian Sea. Rome's Fiumicino Airport to the left.





Pisa

The history of Pisa: ... after 1300 AD ships were unable to reach the port of Pisa, causing the loss of Pisa's economic engine.

Presence of meanders of the Arno River upstream of Pisa shows me that sea level was constant for a long period and then fell, beginning around 1300, beginning of LIA.

There are no meanders downstream of Pisa.



Wikipedia mentions that the reason why Pisa declined is because the River Arno "silted up in the 1300s.,"

clearly not true, observed by looking at the landforms.

Examples of rivers silting up because they reach grade, and the rivers shift course over time, forming a River Delta.

Examples include the Mississippi delta of Louisiana,

but in Europe, the Ebro River in Spain is a textbook example.

http://en.wikipedia.org/wiki/File:Valle_del_Ebro.jpg



http://en.wikipedia.org/wiki/File:EbroRiverDelta_ISS009-E-09985.jpg



Textbook example of a river delta,

Triangular shape, many traces of meanders. Right: Mouth of the Arno River Downstream of Pisa. River flows straight to the sea. No meanders, barrier beaches, Or lakes, no delta.







Left:

Delta of the Ebro River in Spain. Meander marks, lakes, barrier beaches, and numerous lakes are evidence of an at-grade river with well developed Delta.



Caesar's invasions of Britain

55 and 54 BC

From Wikipedia, the free encyclopedia

For the conquest begun in AD 43, see Roman conquest of Britain.

In the course of his Gallic Wars, Julius Caesar invaded Britain twice: in 55 and 54 BC.^[1] The first invasion, in late summer, was unsuccessful: gaining the Romans little else besides a beachhead on the coast of Kent.





http://www.athenapub.com/caesar1.htm



Deal Beach in Kent.

This shoreline near Walmer Castle is probably the area where Julius Caesar and his troops landed during the two Roman excursions to Britain of 55 and 54 BC. In the distance, the cliffs of Dover may be seen, to the south. The beach is made up of small stones, or shingles.



Deal, Kent

From Wikipedia, the free encyclopedia

Not to be confused with Seal, Kent.

Deal is a town in Kent, England which lies on the English Channel, eight miles north-east of Dover and eight miles south of Ramsgate. It is a former fishing, mining and garrison town. Close to Deal is Walmer, a possible location for Julius Caesar's first arrival in Britain.



https://www.google.com/maps/place/Walmer,+UK



The Strand, Walmer, Deal, Kent, UK. The Strand is now over 500 ft from the ocean but, The Strand is a name for the land bordering water, a beach.

Sea level was higher when Julius Caesar landed here, and when this street was named.



http://news.bbc.co.uk/2/hi/uk_news/england/kent/7648033.stm

Dig uncovers Roman invasion coast

Comment:

I find this BBC article astounding! BBC is a climate alarmist organization.

For BBC to present a story showing Sea levels meters higher in Roman Times than today... clearly showing with today's 417 PPM <CO2> sea levels are lower than in Roman Times... falsifying their own Narrative... astounding! An archaeological dig at a Kent fort has uncovered the coastline at the time of the Roman invasion of Britain in 43AD - <u>two miles from</u> today's shore.

The team was excavating a 295ft (90m) stretch of collapsed Roman wall, when they found a small medieval dock.

English Heritage archaeologist Tony Wilmott said they...found a "hard surface", in a water-filled trench, which was the Roman beach.



The medieval dock was found next to a fallen Roman wall

<Bolding, paragraphing added for clarity>

In the Roman era, Richborough Roman Fort overlooked a sheltered lagoon, where the invading Roman forces first landed


WIKIPEDIA Ihe Free Encyclopedia

- Main page Contents
- Featured content
- Current events
- Random article
- Donate to Wikipedia
- Wikipedia store
- nteraction
- Help
- About Wikipedia
- Community
- portal
- Recent changes

https://en.wikipedia.org/wiki/Notitia_Dignitatum

Notitia Dignitatum

From Wikipedia, the free encyclopedia

Notitia Dignatatum: C 420 AD

The *Notitia Dignitatum* (Latin for "The List of Offices") is a unique document of the late Roman Empire. One of the very few surviving documents of Roman government, it details the administrative organization of the Eastern and Western Empires, listing several thousand offices from the imperial court down to the provincial level, diplomatic missions and army units. It is usually considered to be up to date for the Westerr Roman Empire in the 420s and for the Eastern or Byzantine Empire in the 390s. However, no absolute date is given in the text itself and omissions complicate deriving an absolute date from its content.

	Contents [hide]
1	Copies of the manuscript
2	Contents
3	Interpretation
4	Depictions
5	See also
6	Citations
7	Sources and references

Page from a medieval copy of the *Notitia Dignitatum* commissioned in 1436 by <u>Pietro Donato</u>, depicting shields of *Magister Militum Praesentalis II*, a late Roman register of military commands



https://en.wikipedia.org/wiki/Saxon_Shore#/media/File:Litus_Saxonicum.png



From Notitia Dignatum: Saxon Sea Forts

Latin Name	English Name		
Branodunum	Brancaster	Each of these local Graphics in the Clashowing the Saxon	ations has several ass Notes, n Sea Forts
Gariannonum	Burgh	are today well inla above today's sea	nd and maybe 13 ft levels.
Othona	Bradwell-on-Sea	Sea Levels in the were well above to	Roman Warm Period oday's sea level.
Portus Adurni	Portchester	Clearly more <co higher="" level.<="" sea="" td=""><td>2> does not cause</td></co>	2> does not cause
Rutupiae	Richborough Castle		
Dubris	Dover		
Portus Lemanis	Lympne		
Anderitum	Pevensey		

Locations of major events in 1066





Pevensey Castle Today



Today, Pevensey Castle is over a mile inland from the English Channel



FRANCE

https://en.wikipedia.org/wiki/Narbonne



WIKIPEDIA The Free Encyclopedia

Main page Contents Featured content Current events Random article Donate to Wikipedia Wikipedia store

Internation



Narbonne

From Wikipedia, the free encyclopedia

Narbonne (French pronunciation: [naʁ.bɔn]; Occitan: *Narbona*, Occitan pronunciation: [nar.'bu.no]; Latin: *Narbo*) is a commune in southern France in the Languedoc-Roussillon region. It lies 849 km (528 mi) from Paris in the Aude department, of which it is a sub-prefecture. Once a

Once a prosperous port, and a major city in Roman Times, it is now located about 15 Km or 9.3 Miles from the shores of the Mediterranean Sea

Once a prosperous port, and a major city in Roman times, Narbonne is now located about 15 km (9.3 mi) from the shores of the <u>Mediterranean Sea</u>.



When it was a bustling port, distance from Narbonne to the coast was about 5 to 10 km



Google Map of Arles, France and development of the Rhone River Delta since Roman Times. Arles is now about 20 km, or 12 miles from the Mediterranean.



Holocene Highstands of Sea Level above present day MSL

highstand: A time during which sea levels are at their highest.

http://jsedres.geoscienceworld.org/content/66/3/632.abstract

GSW Home Search Browse My Tools

Information and Services

Journal of Sedimentary Research

HOME | CURRENT ISSUE | ARCHIVES | CONTACT | SUBSCRIBE | RSS FEEDS 🖾 | ALERTS | HELP

GeoRef, Copyright 2008, American Geological Institute.

Sea-level highstand recorded in Holocene shoreline deposits on Oahu, Hawaii

Charles H. Fletcher and Anthony T. Jones

+ Author Affiliations

Abstract

Unconsolidated carbonate sands and cobbles on Kapapa Island, windward Oahu, are 1.4-2.8 (+ or - 0.25) m above present mean sea level (msl). Agreeing with Stearns (1935), we interpret the deposit to

\$	« Previous Next Articl Table of Contents	e » Most	t Recent Issue	
5	This Article	Journal of Sedimentary Research	November 2015, 85	
	doi: 10.1306/D42683CE- 2B26-11D7- 8648000102C1865D v. 66 no. 3 p. 632- 641	Alert r	Alert me to new issues of Journal of Sedimentary Research	
	» Abstract Full Text (PDF)	Sedim		
	- Classifications	About		
land,	Articles	Editor	rial Board	
i sea sit to	- Services	Instru Autho	ctions for ors	

Unconsolidated carbonate sands and cobbles on Kapapa Island, windward Oahu, are 1.4-2.8 (+ or - 0.25) m above present mean sea level MSL).

Agreeing with Stearns (1935), we interpret the deposit to be a fossil beach or shoreline representing a highstand of relative sea level during middle to late Holocene time.

http://www.soest.hawaii.edu/ericg/kap_paper.pdf

Sea level higher than present 3500 years ago on the northern main Hawaiian Islands Eric E. Grossman and Charles H. Fletcher, III

Department of Geology and Geophysics, School of Ocean and Earth Science and Technology University of Hawaii, 1680 East-West Road, Honolulu, Hawaii 96822 ericg@soest.hawaii.edu



Figure 1. Geomorphology, stratigraphy, and geochronology of emerged fossil beach sediments on Kapapa Island, Oahu, Hawaii.

ABSTRACT:

New data from an emerged coastal bench and associated fossil beach on Kapapa Island (Oahu), Hawaii, preserve a detailed history of middle to late Holocene sea level.

These include 29 new calibrated radiocarbon ages and elevations indicating mean sea level reached a <u>maximum position of $2.00 \pm 0.35m$ ca. 3500 yr B.P.</u> These results correlate with additional evidence from Hawaii and other Pacific islands and provide constraints on Oahu's long-term uplift rate (0.03-0.07 mm/yr), previously based solely on Pleistocene age shorelines.

Our sea-level reconstruction is consistent with geophysical model predictions of Earth's geoid response to the last deglaciation and with observations of increased Antarctic ice volume during the late Holocene.

3500 years ago sea level was ~2 meters higher than today, Kapapa Island, Oahu.



Australia





Modified fromFielding et al, "Holocene Depositional History of the Burdekin River Delta of Northeastern Australia," Journal of Sedimentary Research, 2006, v 76, 411-428, p. 419 Wikimedia Commons: Burdekin River



G. C. Lessa et al, "HOLOCENE STRATIGRAPHY IN THE PARANAGUA" BAY ESTUARY, SOUTHERN BRAZIL," JOURNAL OF SEDIMENTARY RESEARCH, VOL. 68. NO. 6, NOVEMBER, 1998, P. 1060-1076

5000 years ago sea levels in the Paranagua estuary were 2-4 meters higher than today



http://www.tulane.edu/~tor/documents/GSAB2004.pdf

Deciphering Holocene sea-level history on the U.S. Gulf Coast: A high-resolution record from the Mississippi Delta

ABSTRACT Holocene relative sea-level (RSL) curves for U.S. Gulf Coast are in... conflict....

some characterized by a smooth RSL rise akin to widely accepted eustatic sea-level curves

others... a "stair-step" pattern with prolonged (millennium-scale) RSL stillstands alternating with rapid (meter-scale) rises.

In addition, recent work in Texas and Alabama has revitalized the notion of a middle Holocene RSL highstand, estimated at 2 m above present mean sea level...

(underlining, editing, added)



Search

http://jsedres.geoscienceworld.org/content/71/4/581.abstract

search

Journal of Sedimentary Research

My Tools

Browse

HOME | CURRENT ISSUE | ARCHIVES | CONTACT | SUBSCRIBE | RSS FEEDS 🖾 | ALERTS | HELP

Middle Holocene Sea-Level Rias and Highstand at + 2M Central Texas Coast

From the Abstract:

GSW Home

"...a series of ridges along the Copano Bay.....shelly mud and fine sand... foram assemblages, at elevations of 1.95 m above the modern intertidal zone...

... calibrated radiocarbon ages on foram tests of ca. 6.8 to 4.8 ka.

These ridges are ... shallow subtidal to intertidal spits...

and are now emergent because of later sea-level fall..."



"... This ...(is).. evidence of a late Holocene sea-level at least 0.5 m higher than at present.

¹⁴C dating: they formed 1–2 k.y. before present.

This corresponds to a higher than present sea-level highstand supported by independent evidence from other areas in south Florida.



Fig. 6. Holocene sea-level fluctuations inferred from sea-level index points from the southern Langebaan Lagoon salt marsh, South Africa. Horizontal error bars refer to analytical uncertainty in radiocarbon age calibration (2σ range), and vertical error bars refer to uncertainty in sea level predictions derived from organic matter and shell material indicators (modified from Compton, 2001).



Fig. 7. Holocene sea-level envelope for Peninsula Malaysia (modified from Tija, 1996). Data points with arrows indicate directional (limiting) index points. Some index points have vertical error bars, where the vertical range of the sea-level indicator is understood. No age errors are considered, radiocarbon ages are plotted. The boundaries of the envelope are drawn midway between the extreme data points and the neighbouring points within the envelope (Tija, 1996).



Fig. 8. A summary of linear and oscillating regression models from sea-level index points created using fixed biological indicators from SE Australia for the past 5000 years. Dotted line—4th order polynomial (r^2 =0.69), smooth line—5th order polynomial (r^2 =0.78) (after Baker et al., 2001).

Map of New South Wales



Sea Level History from New South Wales



Fig. 5. Summary of key sea-level data from New South Wales (compiled in Sloss et al., 2007).

http://joannenova.com.au/2016/04/the-media-is-bored-of-climate-change-blame-abbott -and-those-climate-deniers-for-fooling-the-dumb-voters/



Map of Queensland, Australia.



Kwajalein

http://wattsupwiththat.com/2016/03/28/ooops-alarm-over -sinking-islands -premature-as-sea-level-falls-at -kwajalein-atoll

Map of Oceania showing Islands. **Kwajalein** is shown with the arrow, it is approximately 9 N and 168 E..





http://www.thedailystar.net/global-warming-washes-up-wwii-dead-27562

Global warming washes up WWII dead

High tides expose 26 Japanese soldiers' graves, sending warnings that low-lying islands face existential threat from rising sea levels

BBC Online



Kwajalein is one of Islands of the Marshall Islands, which are made up of 29 atolls. Photo: Google Map

Driven by global warming, waters in this part of the Pacific have risen faster than the global average.

With a high point just two metres above the waters, the Marshall Islands are one of the most vulnerable locations to changes in sea level.

The 29 atolls that make up the Marshall Islands are home to around 70,000 people.

The corals that have formed the island chain are highly vulnerable to the surrounding seas.

This graphic was probably the proximate cause of the previous article.



Graphics such as this one are used by the Alarmist Community to show that the rate of sea level rise is accelerating, a similar claim is made for satellite-derived sea level time series, which purport to show satellite-based sea level rates of rise tripling.



Mean Sea Level at Kwajalein, Marshall Islands, USA (NOAA <u>1820000</u>, 720-011, PSMSL <u>513</u>)

The rest of the story:

It turns out that the previous time series was too short to correctly diagnose the long-term rate of change in sea level rise.

Further, there is a component which is determined by the weather, specifically by ENSO, El Nino Southern Oscillation.

http://darwin-online.org.uk/EditorialIntroductions/Chancellor_CoralReefs.html

DARWIN ONLINE

Publications Manuscripts Biography Media About us Search Advanced search

Introduction to Coral reefs

Coral reefs (1842) was Darwin's first monograph. It addressed an immensely ambitious subject. It is perhaps second only to the *Origin* for its masterful deduction from observation, leading to the construction of a theory that if proved would exceed all previous attempts and virtually solve its subject. The power of Darwin's monograph was well recognised by his contemporaries as a major scientific work. It was for this book and his monographs on barnacles that Darwin was awarded the Copley Medal by The Royal Society in 1864.

This introduction is not intended to repeat the bibliographical history of *Coral reefs* which, as with all Darwin's books, was dealt with extensively by R. B. Freeman. *Coral reefs* was first published in May 1842. Darwin brought out a revised second edition in 1872 and a third edition, with a substantial appendix by T. G. Bonney, appeared in 1889. The first edition was enthusiastically reviewed by Jackson 1842.



You read that correctly! Charles Darwin told the world in 1842 (!) that the origin of coral reefs was coral animal colonies growing from submerged seamounts.

Corals have kept pace with 400 ft of sea level rise since the depths of the Wisconsin Ice age, 23,000 years ago.

The notion that corals are susceptible to human-caused sea level rise acceleration is stunning ignorance.

https://wattsupwiththat.files.wordpress.com/2016/03/1820000_kwajalein_2016-03_vs_enso2.png



Notice the anti-correlation of sea level at Kwajalein with El Nino. It appears as if when El Nino brings warm surface water temperatures offshore the Americas, and heavy rainfall to the Mountain West, that's when cooler water and accompanying sea level falls occur at Kwajalein.

"Rising seas spurred record number of 'high-tide' floods in U.S. last year"

https://www.usatoday.com/story/weather/2017/06/16/rising-seas-spurred-record-number-high-tide-floods-us-last-year/102918538/

Doyle Rice, USA TODAY Published 1:20 p.m. ET June 16, 2017 | Updated 1:20 p.m. ET June 16, 2017



Nick Trace drives through a flooded parking lot to put his boat in at a boat ramp on Nov. 14, 2016, in North Miami, Fla. The flood waters are caused by the combination of the lunar orbit which causes seasonal high tides, also known as a King tide, <u>and what some scientists believe</u> is rising sea levels due to climate change.(Photo: Joe Raedle, Getty Images) <u>Underlining added</u>.
https://therealdeal.com/miami/2017/03/10/miami-beach-mayor-says-coastal-cities-needmore-state-and-federal-help-to-deal-with-sea-level-rise/



New York Los Angeles

Miami Beach mayor says coastal cities need more state and federal help to deal with sea-level rise

Mayor Philip Levine says red tape makes it hard to get money for mitigation efforts

Miami

By James Teeple | March 10, 2017 08:45AM



Calling sea level rise an "existential threat," Miami Beach Mayor Philip Levine Thursday called on federal and state authorities to do more to help coastal cities like Miami Beach deal with rising tides that he says are threatening cities like his.

https://www.google.com/maps/place/Miami+Beach,+FL/@25.8071379,-80.2129736,12



"Miami Beach, connected by bridges to mainland Miami, is a resort city on a barrier island between Biscayne Bay and the Atlantic." Remember Virginia Key's and Key Biscayne's location (yellow arrow)

http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8723170

Mean Sea Level Trend 8723170 Miami Beach, Florida



Miami Beach tide gage, in use 1930s to 1980s, shows, like all tide gages, no acceleration of sea level rise with increasing use of fossil fuels after the post-WW2 economic boom.

http://www.sealevel.info/MSL_graph.php?id=key+west

Sealevel.info



A nearby tide gage with a continuous record over 100 years long and an accompanying carbon dioxide record shows that the rate of sea level rise has not changed in the century -plus time domain.

The data show that atmospheric <CO2> doesn't affect the rate of sea level rise in Florida

What have we learned today?



mean sea level (MSL) trend at San Francisco, CA, USA is +1.50 mm/year with a 95% confidence interval of ±0.13 mm/year, based on monthly mean s I data from 1854/7 to 2023/10. That is equivalent to a change of 0.49 feet in 100 years. (R-scuared = 0.589)

What have we learned today?

NCA5 opines that the National Academies of Science, Engineering and Medicine is a reliable source of information on climate change, increasing intensity of storms, and accelerated rates of sea level rise. Looking at published data, much from the US Government itself, shows none of this is true.

There are claims present temperatures are the highest in 125,000 years, but reliable proxy data from the Ice Cores show Today's temperatures are not higher than 1000, 2000, and 8000 years ago. And, 125,000 years ago, we know it was so warm that Hippos wandered in the Rhine and Thames River basins.

NCA5 claims current temperatures are rising faster than any time in thousands of years "because of greenhouse gases," blaming our use of hydrocarbon fuels. Don Easterbrook shows from analyzing the Greenland Ice Core Data that previous centuries had rates of temperature increases of 14F in 40 years, and that 20th and 21st century increases in temperatures are extraordinarily small, "if you look at the data."

NCA5 claims that storms are stronger and storm damage is higher today than anytime in the past. Ryan Maue and Anthony Watts, using the US Government's own data, show Hurricanes and strongest Tornadoes' strengths are decreasing, and the reason for increasing dollar amounts of storm damage is the wealth of people living in and building structures in storm-vulnerable areas, for hurricanes, near Atlantic and Gulf beaches.

NCA5 claims <CO2> increases are driving accelerating rates of Sea Level Rise. US Tide gages show no increases in the rate of sea level rise since measurements started in the 1850s. Sea Levels were meters higher than today in the historic past, with less <CO2> NCA is ignorant of measurements and historic facts.