# CLIMATE CHANGE Human Caused (Anthropogenic) Or Political ?

Hank Fallek Gulf Breeze, FL September 2023

## There Is Nothing New Under The Sun... Ecclesiastes 1-9





NEXT GREAT DEL OGE FORECAST BY SCIENCE

New York Times (1851-Current file); May 15, 1932; ProQuest Historical Newspapers The New York Times (1851 - 2003 pg. XX4

#### NEXT GREAT DELUGE FORECAST BY SCIENCE

Melting Polar Ice Caps to Raise the Level of Seas and Flood the Continents

TX7 E still speak of "the Ice the sea level will rise fifty feet.

Age" as if it belonged to Professor Mei Heading from 1932 New York Times article.

Over 1,600 Scientists Sign 'No Climate Emergency' Declaration



By Naveen Athrappully

August 29, 2023 | Science & Tech | -> 589 | -> 3

2023

THE EPOCH TIMES

SPECIAL REPORT

Meteorologists, Scientists Explain Why There Is 'No Climate Emergency'

Flawed modeling and overblown rhetoric drowning out scientific reality for the sake of money and power, climate experts say

#### What Does The Bible Say?



#### God Created The Earth

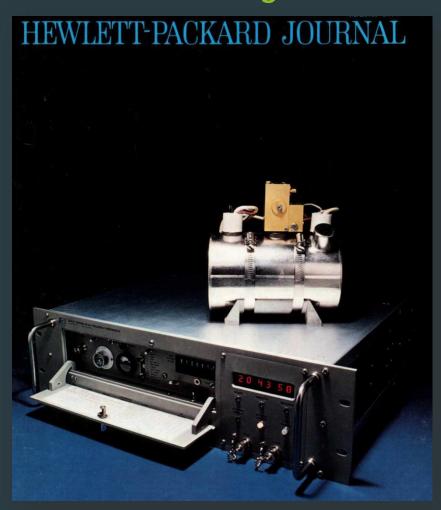
(Gen 1:1) In the beginning God created the heavens and the earth.

(Gen 1:31) God saw all that He had made, and behold, it was very good. ....

#### God's Covenant With Man

(Gen 8:22) "While the earth remains, Seedtime and harvest, And cold and heat, And summer and winter, And day and night Shall not cease."

## My History..... An Electrical Engineer



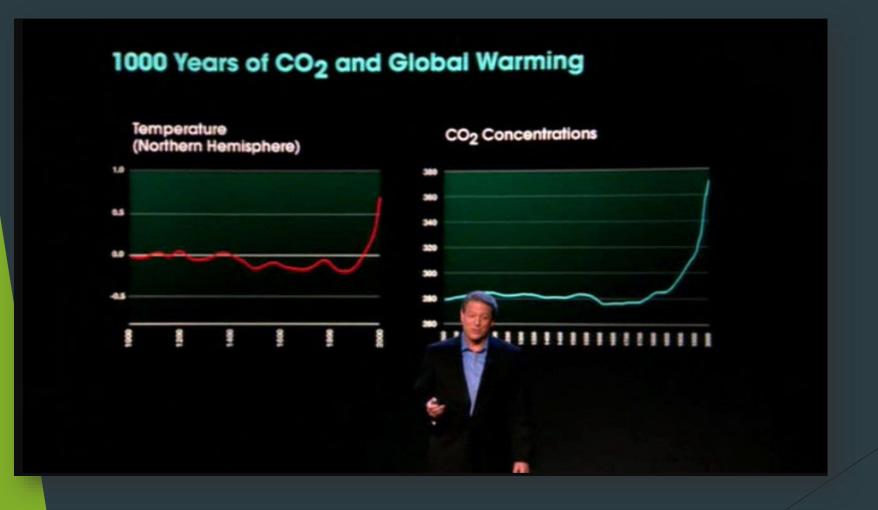
There are nearly 2,200 interagency Remote Automatic Weather Stations (RAWS) strategically located throughout the United States.



1968 - 1972

1972 - 2017

# \$\$\$\$ The Inconvenient Truth \$\$\$ "Climate-Change Apocalypse"



#### Remember These Bold 2006 Predictions?

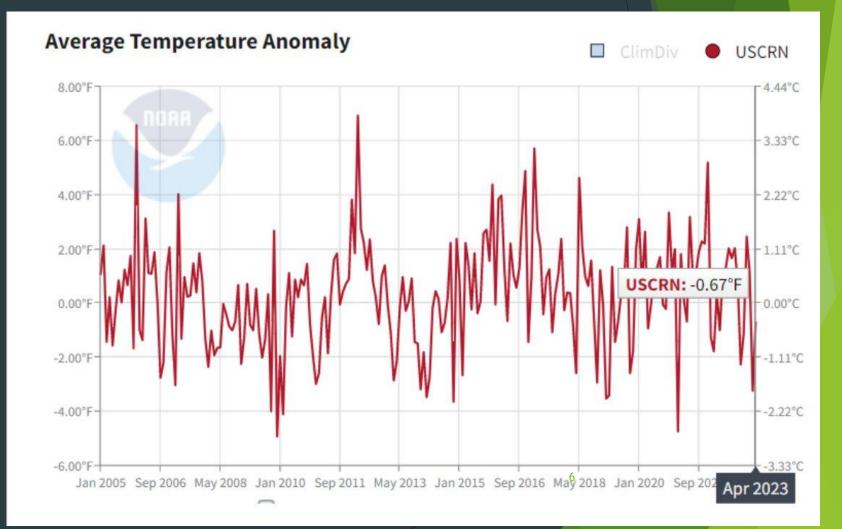
- Temperatures will be extreme
- There will be no more Artic Ice
- Polar Bears will be extinct
- Manhattan will be under water

#### **TODAY**

2023 WEF Summit we have boiling oceans and climate bombs

## So.... What Actually Happened?

US Surface Temperature: April 2023 | -0.67°F (-0.37°C) US Climate Reference Network (data updated 12th to 17th of the month)



# Well Did We Forget?.... What are the facts today?

Arctic Ice has not disappeared

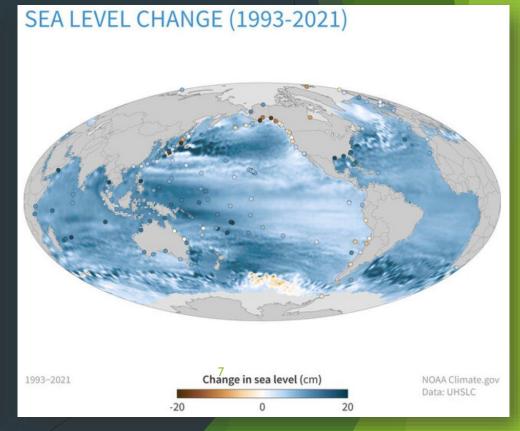
Sea Ice Extent, 04 Mar 2023

median ice edge 1981-2010

There are more Polar Bears then ever



Manhattan is not under water



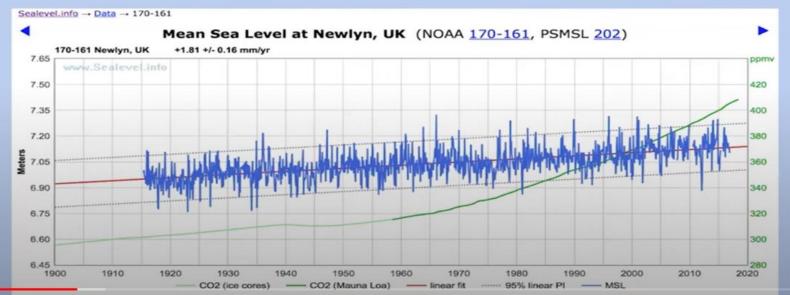
## There Is No Significant Rise In Sea Levels



## Massive 44% CO<sub>2</sub> Increase Since 1880

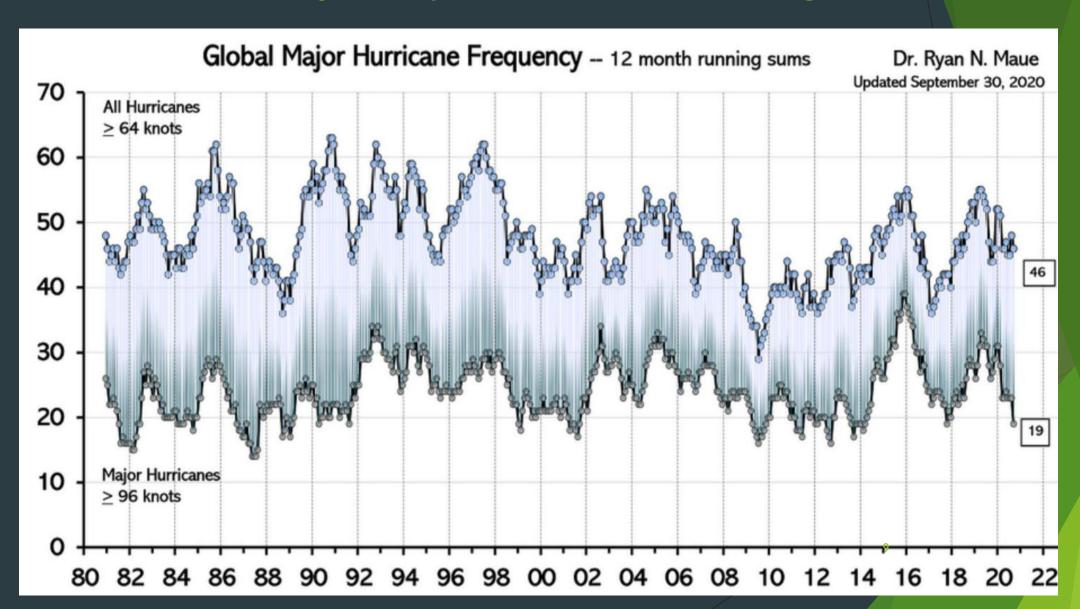


ODN Newlyn, GB with CGPS!!! Tectonic Subsidence = 0.7mm/yr. Sea-Level Rise? 1.8mm/yr. Net rise? 1.1mm/yr.

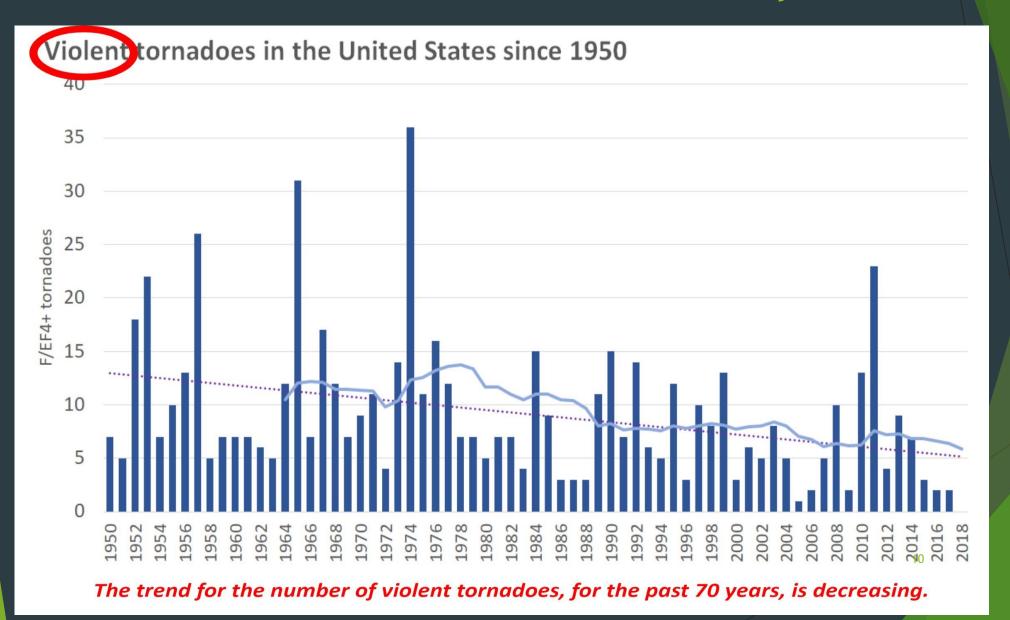




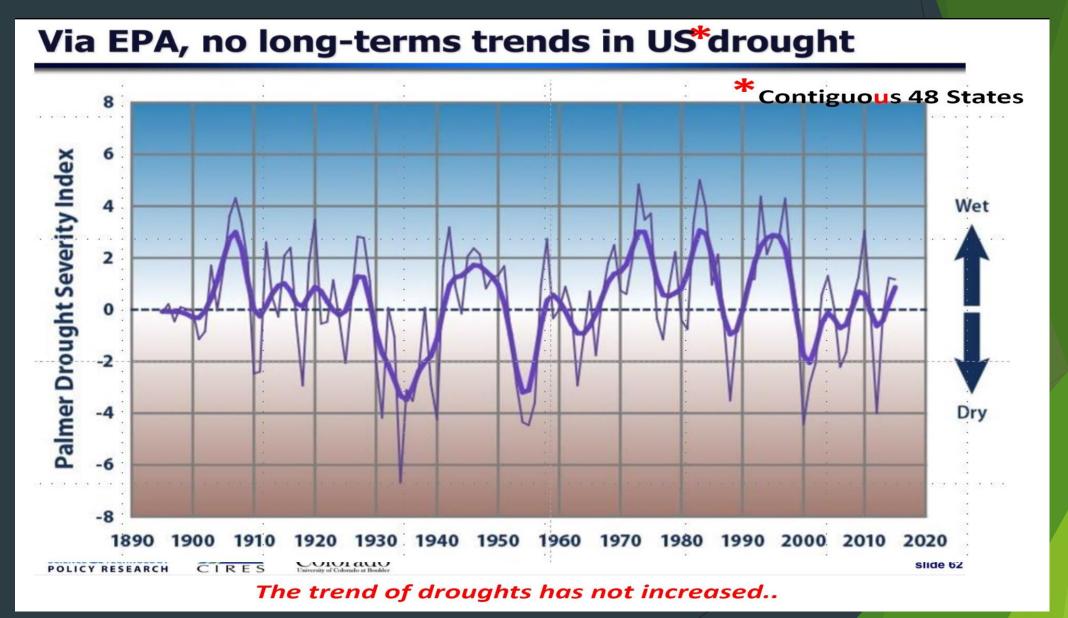
## Hurricane Frequency Is Not Increasing



#### There Is No Increase in Tornado Activity



### There Is No Increase In US Droughts



# Is There A Climate Emergency ?? Who Says There IS ?

World Economic Forum (WEF) Spreads Climate Misinformation and Refuses Open Scientific Debate with CLINTEL

BY RHODA WILSON ON OCTOBER 26, 2022

A Message from CLINTEL: There is No Climate Emergency

BY RHODA WILSON ON OCTOBER 27, 2022

 Over 1,600 Scientists Sign Declaration – "There is No Climate Emergency."

BY PATRICIA HARRITY ON SEPTEMBER 13, 2023

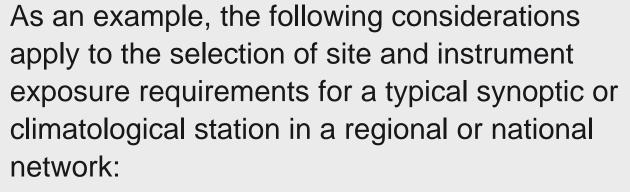


# What Is The Real Basis For So Called "Climate Change"?

- ► Measurement Errors
- Bad Science
- Political Agendas
- Money/Corruption (follow the money)

# There Are Standards For Climate Temperature Measurement

Guide to Meteorological Instruments and Methods of Observation



- (a)Outdoor instruments should be installed on a level piece of ground, preferably no smaller than 25 m x 25 m (as in Figure 1.1) The ground should be covered with short grass....
- (c) The site should be well away from trees, buildings, walls or other obstructions.....



## The World Meteorological Standard

#### I.1–4 PART I. MEASUREMENT OF METEOROLOGICAL VARIABLES

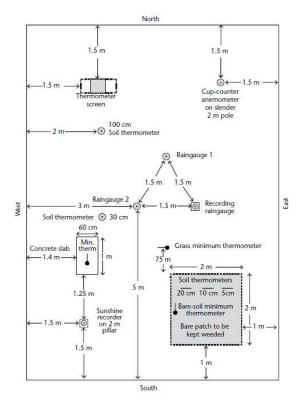
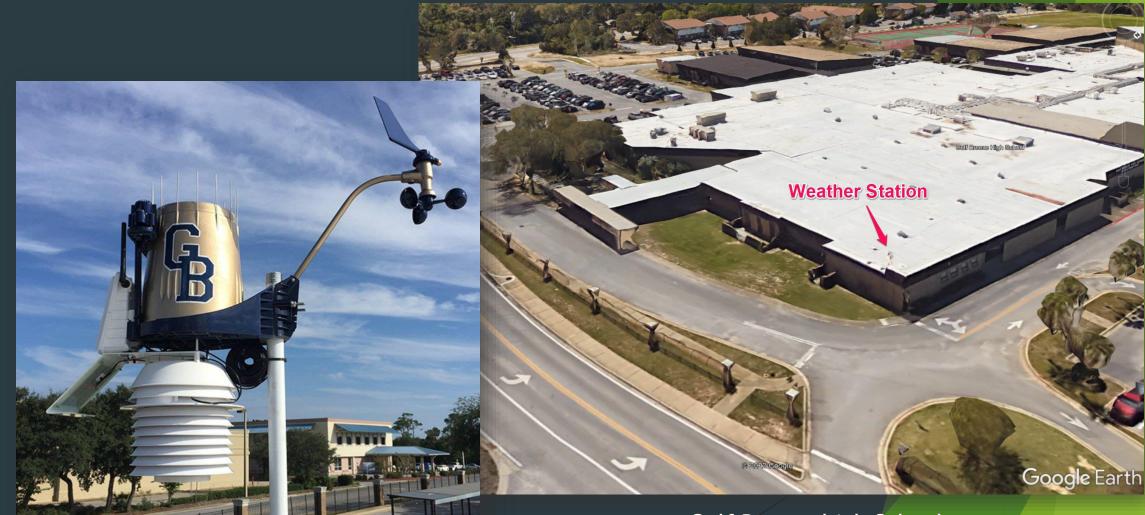


Figure 1.1. Layout of an observing station in the northern hemisphere showing minimum distances between installations



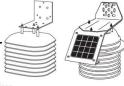
### Look In Our Back Yard



## Instrument Error and Siting Problem

#### **Radiation Shields**

Passive and Fan Aspirated



6838

Davis radiation shields help maximize accuracy of sensor readings.

The passive Raidation Shield (product number 7714) protects temperature sensors from solar radiation and radiated or reflected heat sources.

The 24-Hour Fan Aspirated Radiation Shield includes a solar- and battery-powered, motor-driven fan that draws a constat airflow through the sensor chamber. At night, when the effects of radiation are less, the fan runs on battery. This provides more accurate temperature readings than passive shielding alone.

#### General

Operating Temperature	-40° to +150° F (-40° to +65° C)
Housing Material	UV-resistant PVC plastic

#### Passive Radiation Shield (7714)

Dimensions (with bracket)	5.25" H X 8.75" L X 7.75" W (133 mm x 222 mm x 197 mm)	
Moight (with brooket)	2 E (1 6 kg)	

#### 24-Hour Fan Aspirated Radiation Shield (6838)

-riour ran Aspirateu Radiation Siliela (0030	)
Dimensions	16" H X 11" L X 10.25" W (406 mm x 280 mm x 260 mm)
Weight ((with bracket)	6.6 (3 kg)
Aspiration Rate	
Intake flow rate, full sun	190 feet/min (0.96 m/s)
Intake flow rate, battery only	80 feet/min (0.4 m/s)
Sensor chamber flow rate, full sun	500 feet/min (2.5 m/s)
Sensor chamber fulow rate, battery only	180 feet/min (0.9 m/s)
Radiation Induced Temperature Error	0.5°F (0.3C°) At solar noon, insolation = 1040 W/m2
Battery Charge/Operating Temperature	32° to 113 °F (0° to +45C
Fan Primary Power	Solar panelFan
Fan Secondary Power	1 or 2 1.2 Vilt NiMH C-cells

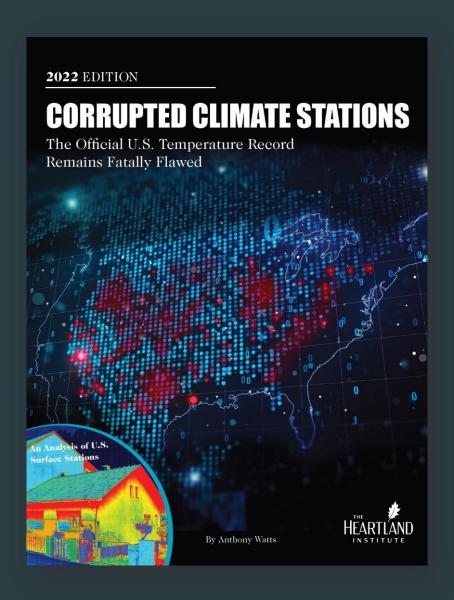
#### **Package Dimensions**

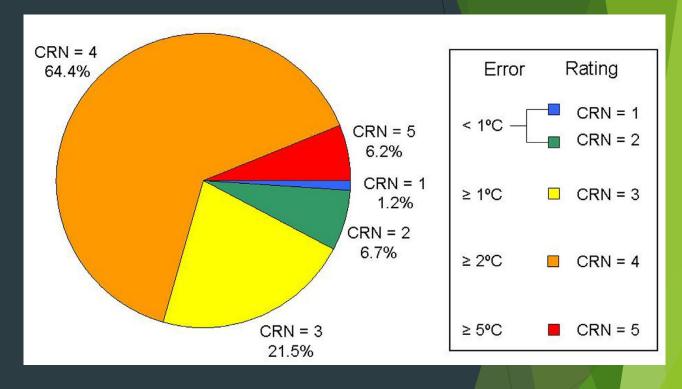
Product #	Package Dimensions (Length x Width x Height)	Package Weight	UPC Codes
7714	5.25" x 8.75" x 7.75" (133 mm x 222 mm x 197 mm)	3.5 (1.6 kg)	011698771400
6838	16"x 11" x 10.25" (406 mm x 280 mm x 260 mm)	6.9 lbs. (3.1 kg)	011698013654



Visible and infrared photos of GHCN station located at the FBO office at Punta Gorda Airport, FL. The station is surrounded by heat sinks. Source: Anthony Watts.

#### Garbage In Garbage Out

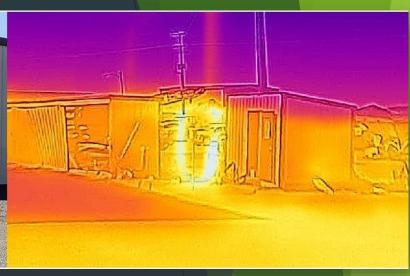




Approximately 90 percent of the USHCN stations failed to meet the NWS's own siting requirements, which stipulate that stations must be 30 meters (100 feet) or more away from an artificial or radiating / reflecting heat source. A rating system based on official NOAA documents was employed to assess each station. See Figure 3.







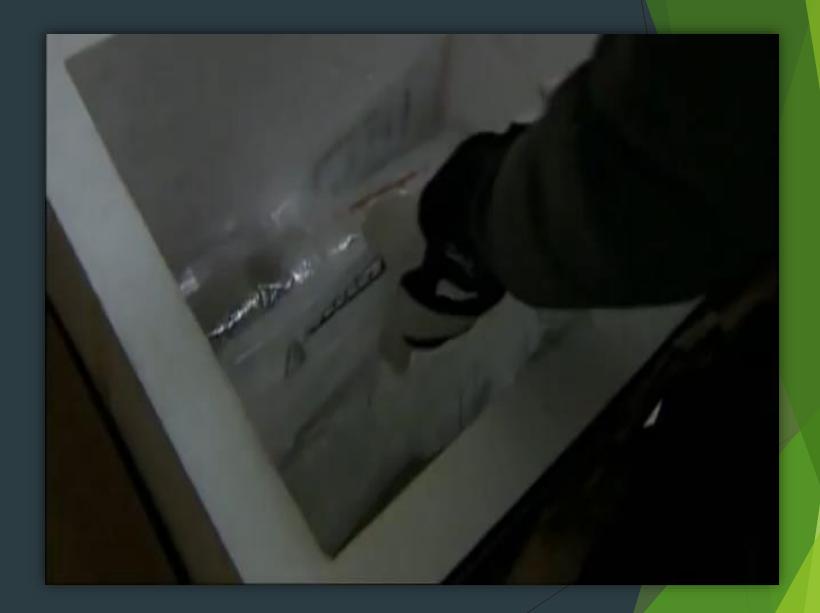


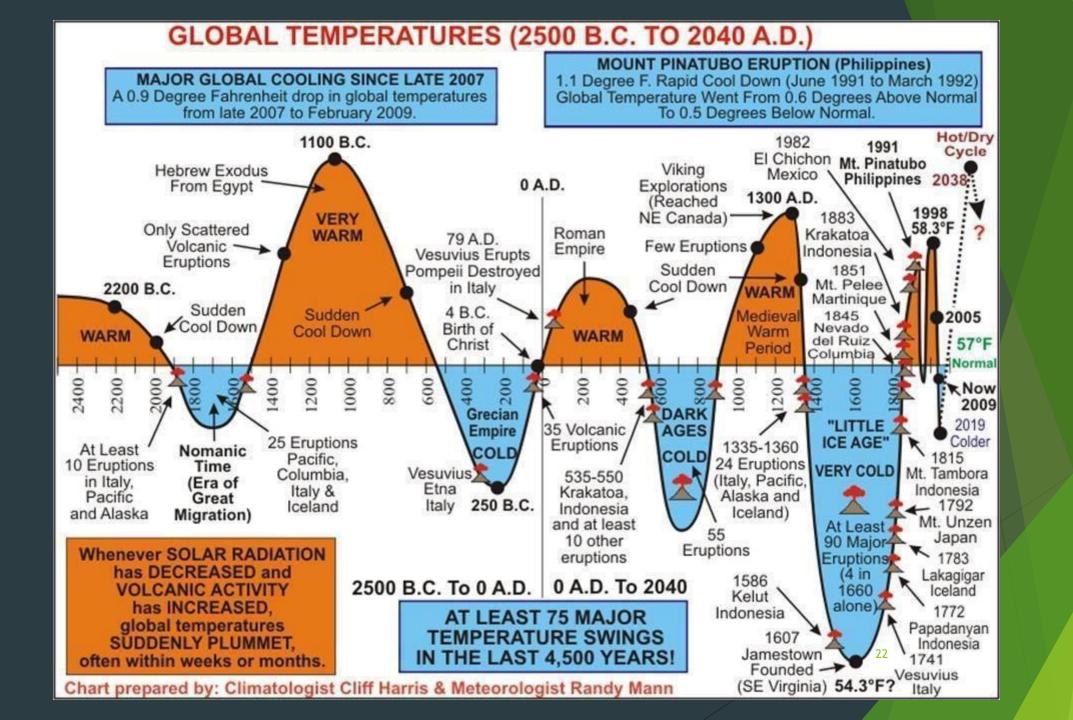


### What Is The Basis For "Climate Change"?

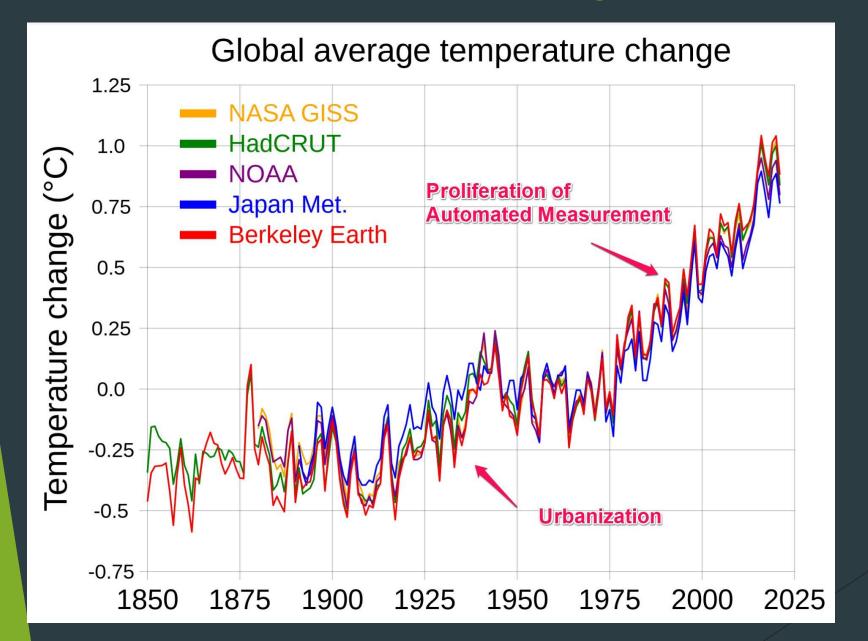
- Measurement Errors
- ► <u>Bad Science</u>
- Political Agendas
- Money (follow the money)

What Is
The "Real
Baseline"
For
Climate
Change?



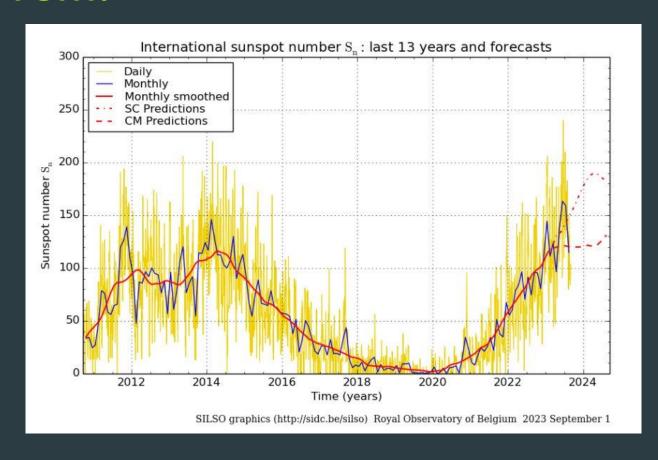


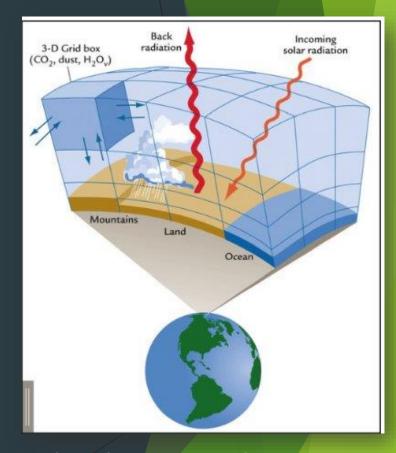
### What Are We Measuring and How?



- Initial "bias" or starting point?
- Global Cooling 19501975
- Addition of Automated Stations 1975 - present
- Addition of Satellite Imagery i.e. tropical storms (what you could not see you now can see)

## Where Does The Earths Energy Come From?





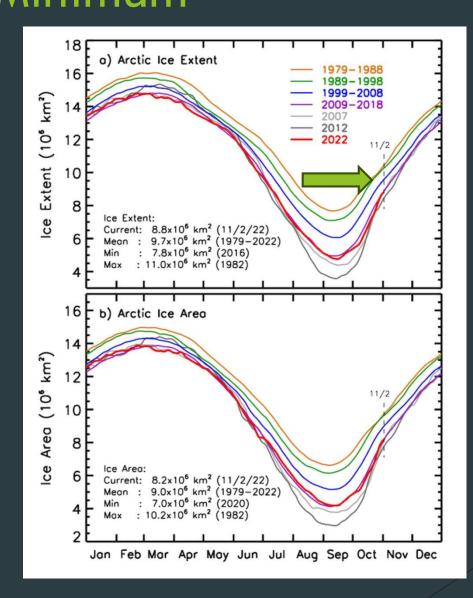
Fact - Most of Earth's Energy (total solar irradiance" (TSI) is received at the equatorial regions, today our models still do not understand the transfer of energy from the tropical to higher latitudes ie "El Nino Southern Oscillation" ENSO

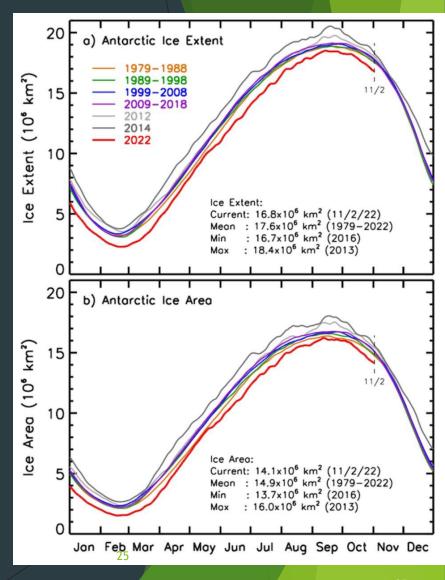
Documenting Earth Changes During The Next Grand Solar Minimum

THE TOP CLIMATE SCIENTIST WHO EXPOSED NOAA AS FRAUDS

NOVEMBER 4, 2022 CAP ALLON

The National Oceanic and Atmospheric Administration (NOAA) 'correct' data they don't like, and 'fail to archive the evidence' — they are frauds in the eyes of many.



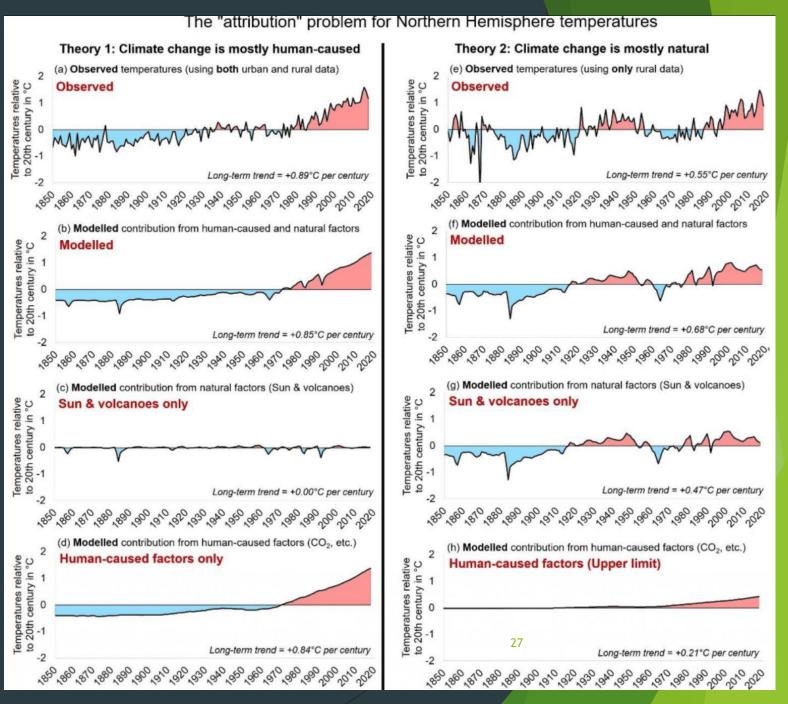






23 Experts in the Fields of Solar Physics and Climate Science Contradict the IPCC — The Science is

By John Gideon Hartnett October 18, 2022



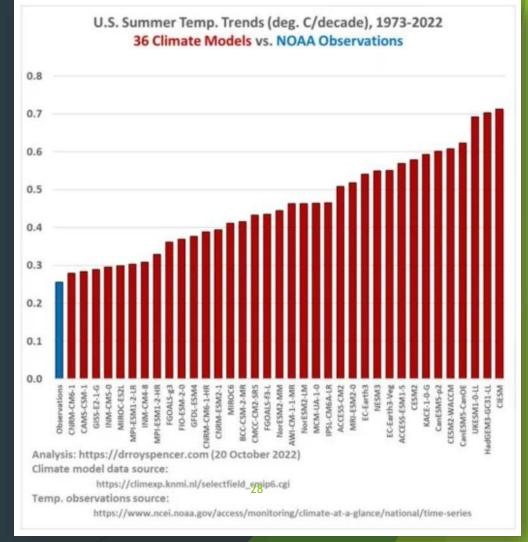
If The Best Weather Model Is Not Accurate Past a Few Days - Do You Trust Climate Models That

Predict Warming Years From Now?

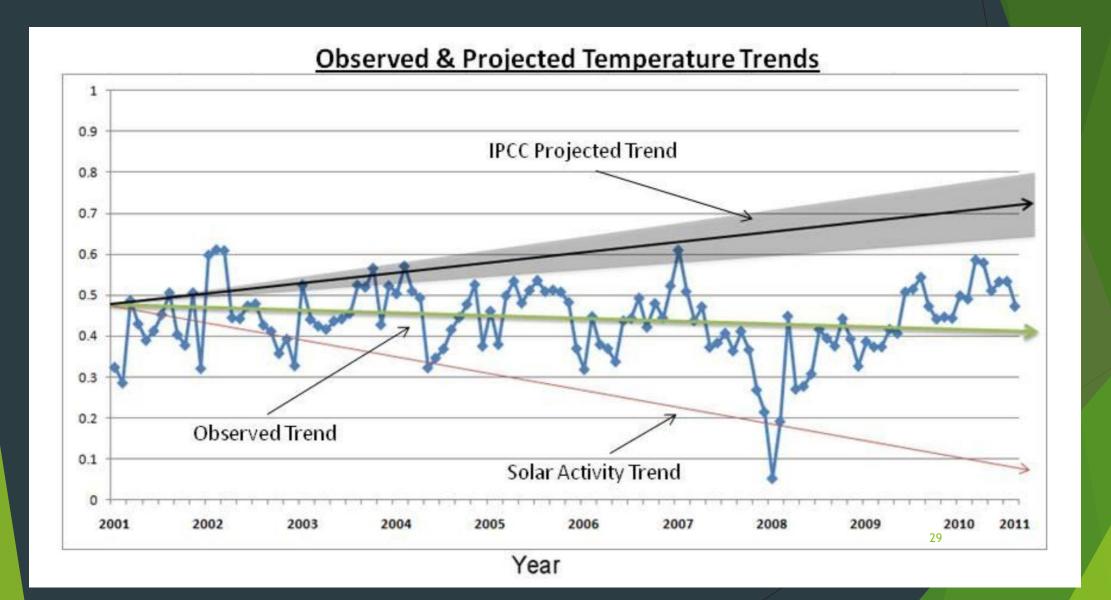


Scientist Discovers 100% of Global Warming Models Over-Predict Global Warming

November 6, 2022, 1:20pm by Jim Hoft



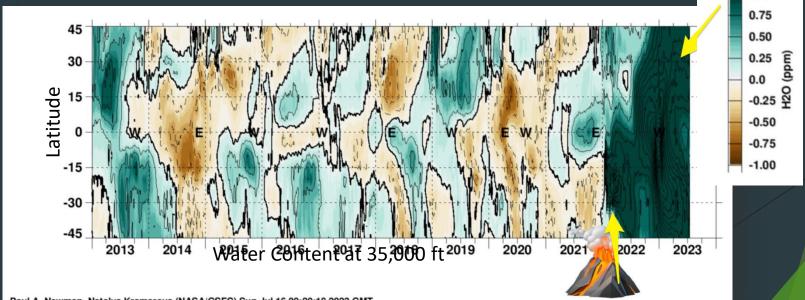
#### Climate Models Do Not Reflect Science



# Hunga Tonga volcano eruption (Jan 2022) raises 'imminent' risk of temporary 1.5C breach

- ► The Tonga eruption was unusual because instead it released a large amount of water vapor into the stratosphere a powerful greenhouse gas with little Sulphur dioxide emissions.
- ► It expelled a total of 146m tones of water, raising the water vapor content of the stratosphere by 10–15%. This raised the total atmospheric water content by 30% (ESA and NASA)

The impact of the eruption on global temperatures is temporary, and will fade over five to 10 years



1.00

#### Where Do The "Greenhouse" Gases Come From

#### Greenhouse Gases

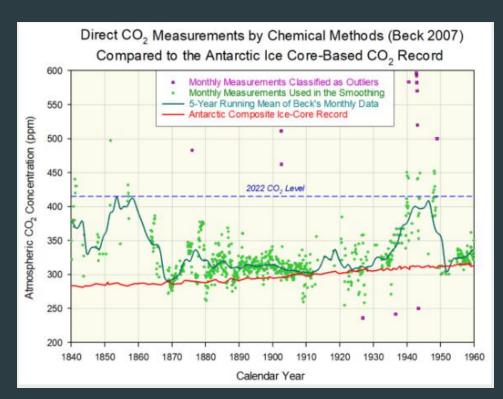
(Dr. Wallace Becker, Columbia Univ.)

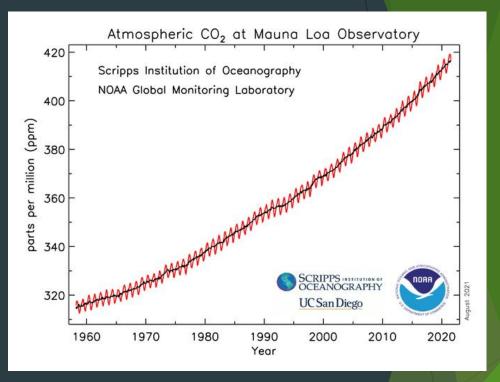
Atmosphere Components	% of Greenhouse Effect	% Natural	% Man-made
Water vapor	95.000 %	94.999%	0.001 %
Carbon Dioxide (CO2)	3.618 %	3.502 %	0.117 %
Methane (CH4)	0.360 %	0.294 %	0.066 %
Nitrous Oxide (N2O)	0.950 %	0.903 %	0.047 %
Misc. gases (CFC's, etc.)	0.072 %	0.025 %	0.047 %
Total	100.000 %	99.72 %	0.28 %
4.3% of 3.618% = 0.15%			

Human produced CO2 is 0.117% of the atmosphere (approximately one tenth of one percent), an insignificant amount.

Man made CO2 accounts for 0.117% of the Greenhouse gases. Methane (cow farts) account for 0.066% of the greenhouse gasses. SO ??? Why are we eliminating fossil fuels and killing farm animals?? \$\$\$\$\$\$\$

#### Data That Does Not Pass The Test "FABRICATED?"

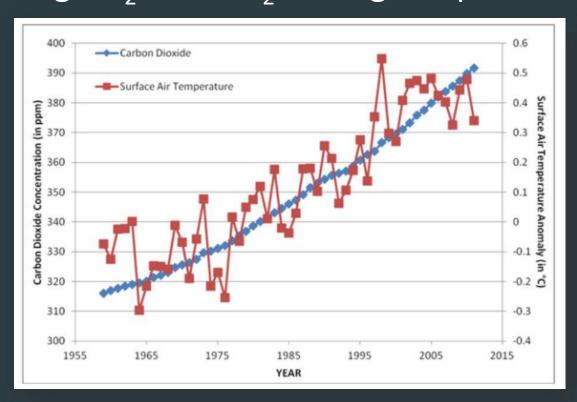




Note that the chemical measurements have large positive excursions in the 1850s and the 1940s and that the Antarctic ice core curve doesn't reflect these anomalies. The following curve is the NOAA CO2 measurements from Mauna Loa. Note the smooth increase over 60 years from 1959. Two things: one, real environmental systems don't behave that way, and two this continuous increase requires a long residence time of CO2 in the atmosphere which is assumed but not true as shown by many papers. The residence time is on the order of 5-10 years. Compare this smooth graph to the one above. Which one would you believe? The wiggles are supposed to be seasonal changes. This whole narrative is probably fabricated! (Dr. Nikolov)

## "CO<sub>2</sub>" Are We Putting The Cart Before The Horse?

Science has shown that Temperature leads  $CO_2$ . So the question becomes "is temperature driving  $CO_2$  or is  $CO_2$  driving temperature"?



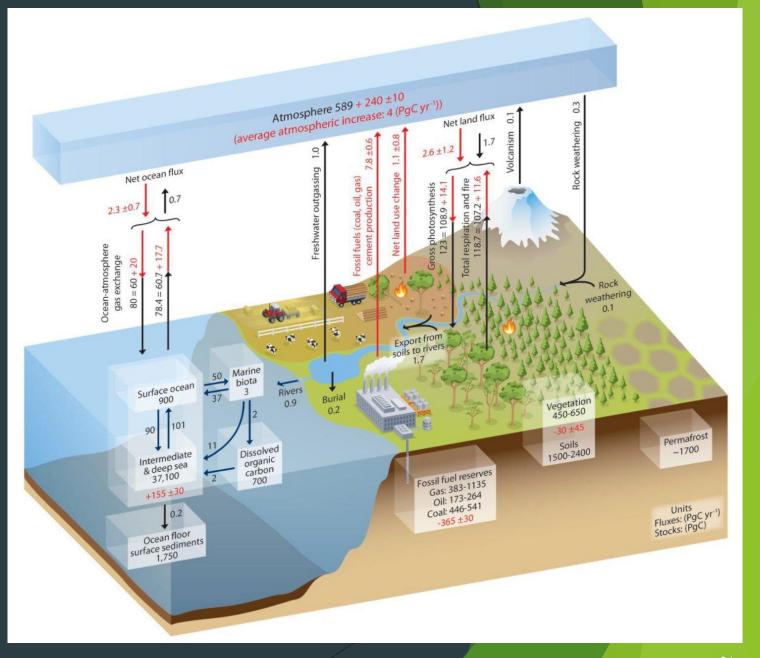
Major constituents of air, by mole fraction <sup>[8]</sup>				
	Dry air			
Gas Mole fr		Mole fra	action <sup>(A)</sup>	
Name	Formula	in ppm <sup>(B)</sup>	in %	
Nitrogen	N <sub>2</sub>	780,840	78.084	
Oxygen	02	209,460	20.946	
Argon	Ar	9,340	0.9340	
Carbon dioxide (April 2022) (C)[13]	CO <sub>2</sub>	417	0.0417	
Neon	Ne	18.18	0.001818	
Helium	He	5.24	0.000524	
Methane	CH <sub>4</sub>	1.87	0.000187	
Krypton	Kr	1.14	0.000114	
If air is not dry:				
Water vapor <sup>(D)</sup>	H <sub>2</sub> O	0-30,000 <sup>(D)</sup>	0-3% <sup>(E)</sup>	

## THERE IS A NATURAL BALANCE

**Hermann Harde** 

The uptake of  $CO_2$  by natural sinks scales proportional with the  $CO_2$  concentration

The anthropogenic contribution to the actual  $CO_2$  concentration is found to be 4.3%, its fraction to the  $CO_2$  increase over the Industrial Era is 15% and the average residence time 4 years. The short atmospheric  $CO_2$  lifetime of 4 years means that  $CO_2$  quickly is being taken out of the atmospheric reservoir, and that approximately 135 giga-tonnes (about 18%) of the atmospheric  $CO_2$  pool is exchanged each year. This large and fast natural  $CO_2$  cycling flux is far more than the approximately 6 giga-tons of carbon in the anthropogenic fossil fuel  $CO_2$  now contributed annually to the atmosphere, creating so much political turmoil (Segalstad, 1992; 1996).

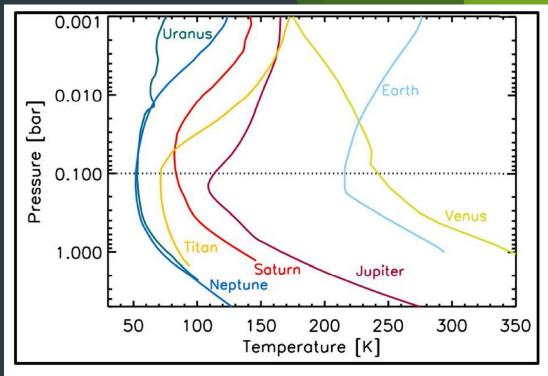


## Simple Gas Law Confirms CO<sub>2</sub> is not the cause of Global Warming

**Robert Ian Holmes** 

```
The ideal gas law is; PV = nRT
Convert to molar mass; PV = m/M.RT
Convert to density; PM/RT = m/V = \rho
Drop the volume term; \rho = P/(R.T/M)
Find for temperature; T = p/(Rx \rho/M)
```

The molar mass version of the ideal gas law Can be written as:  $T = PM/R\rho$ 



A thermal gradient appears in all planetary atmospheres >10kPa [1].

Table 2. Comparison of	of calculated and	l actual average	'surface'	'temperatures.
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Planetary body	Calculated temperature Kelvin	Actual temperature Kelvin	Error
Venus	739.7	740	0.04%
Earth	288.14	288	0.00%
South Pole of Earth	224	224.5	0.20%
Mars (low pressure)	180 to 234 averages 207	210	1.40%
Jupiter	167	165	1.20%
Saturn	132.8	134	0.89%
Titan	93.6	94	0.42%
Uranus	76.6	76	0.79%
Neptune	68.5 to 72.8 averages 70.7	72	1.90%

### What Is The Basis For "Climate Change"?

- Measurement Errors
- ► Bad Science
- ► Political Agendas
- Money (follow the money)

# Who Is Driving The Train?

- Klaus Schwab, Founder & Executive Chairman of the <u>World</u> <u>Economic Forum:</u> Climate Change is "Arguably Humanity's Most Existential Challenge"
- "Radical environmentalists have misled people about the green greenhouse gas, carbon dioxide. The indoctrination of school curricula, the ignorance of the public, and the well-crafted lies of the radical environmentalists have wrongly demonized CO2."

  Vijay Jayaraj



U.S., Canada, Australia and many other nations controlled by "green" globalists all claim to be "warming" at a faster rate than everyone else 10/28/2022 / By Ethan Huff

# Klaus Schwab's daughter wants governments to use COVID policies for climate change

- Nicole Schwab, the daughter of World Economic Forum founder Klaus Schwab and current WEF Co-Director of the Platform to Accelerate Nature-Based Solutions, wants governments to take advantage of COVID infrastructure and policies to fight climate change. (1)
- Daughter of Klaus Schwab Admits Covid Tyranny Was a Precursor to Coming Climate Lockdowns (2)
- Climate 'Lockdown' Idea About Control, Not Lowering Emissions (3)

- (1) HAF May 1, 2022
- (2) https://rumble.com/v32qao8-daughter-of-klaus-schwab-admits-covid-tyranny-was-a-precursor-to-coming-cli.html
- (3) **Marisa Herman** | Friday, 28 July 2023 07:13 AM EDT (Newsmax)



# Create a Problem and Use It for a Political Agenda

- ✓ You never let a serious crisis go to waste. And what I mean by that it's an opportunity to do things you think you could not do before. Rahm Emanuel
- ✓ Governor Newsom Announces California Will Phase Out Gasoline-Powered Cars & Drastically Reduce Demand for Fossil Fuel in California's Fight Against Climate Change
- ✓ Nine Democrats (AOC) inside and outside the administration told our Zack Colman that Biden's Climate Policy Office, headed by former EPA administrator Gina McCarthy, is letting political considerations get in the way of reducing emissions.
- What is the political agenda?
  One World Government and Global Control
- Who is the real beneficiary of climate policies?
  The "elites" who meet at Davos Switzerland (WEF)
  "you will own nothing and be happy" So... who is going to own

#### One World Control



# 2022 United Nations Climate Change Conference

The 2022 United Nations Climate Change Conference, more commonly referred to as Conference of the Parties of the UNFCCC, or COP27, is being held as the 27th United Nations Climate Change conference, and occurs from 6 November until 18 November 2022 in Sharm El Sheikh, Egypt. It will take place under the presidency of Egyptian Minister of Foreign Affairs Sameh Shoukry, with more than 90 heads of state and representatives of 190 countries expected to attend. The conference has been held annually since the first UN climate agreement in 1992. It is used by governments to agree on policies to limit global temperature rises and adapt to impacts





## What Is The Basis For "Climate Change"?

- Measurement Errors
- Bad Science
- Political Agendas
- ► Money (follow the money)

# Climate Science Isn't Settled, It Was Bought! Where Does The Money Go?

- Whether it's the Paris climate accords, Green New Deal or the recently-passed Inflation Reduction Act, these political schemes to remake the economy often end up enriching the climate industrial complex and empowering unelected, unaccountable bureaucracies. *Michael Bastasch* on November 13, 2022
- Starting in 2026, the Inflation Reduction Act introduces a fee on methane emissions. According to the <u>Congressional Budget Office's (CBO) analysis</u>, this <u>would raise \$6.35 billion</u>
- ▶ Biden's climate agenda benefits <u>communist</u> <u>CHINA</u>, not the Americans Biden supposedly represents, Friday, November 18, 2022, by: Ethan Huff
- MIT emeritus professor Richard Lindzen recently called the current climate narrative "absurd," contending it's driven by the trillions of dollars diverted to green projects, grant-dependent academics and agenda-driven journalists.

#### Soooo......What Can We Do?

- "Educate, don't Indoctrinate" Correct the education systems in our schools - there is no Global Warming/Climate Change
- ► Tell the truth to others
- Call out false data and corrupt officials
- Do not comply

# Take Away -What Is The Basis For "Climate Change"?

- Measurement Errors
- Bad Science
- Political Agendas
- Money (follow the money)

# What Does The Bible Say?



### Here is real Global Warming!

(2Pe 3:10) But the day of the Lord will come like a thief, in which the heavens will pass away with a roar and the elements will be destroyed with intense heat, and the earth and its works will be burned up.

# QUESTIONS?

#### References

- Guide to Instruments and Methods of Observation (WMO-No. 8)
- Corrupted Climate Stations, By Anthony Watts, August 4, 2022
- De-Urbanization of Surface Temperatures with the Landsat-Based "Built-Up" Dataset November 2nd, 2022 by Roy W. Spencer, Ph. D.
- NASA /NSDIC National Snow and Ice Center, 8 November 2022
- ▶ The Myth That the Polar Bear Population Is Declining , Jon Miltimore September 9, 2019
- Climate Change: Global Sea Level By Rebecca Lindsey Reviewed By Rick Lumpkin, Greg Johnson, Phillip Thompson, And William Sweet Published April 19, 2022
- ▶ 'Global Warming' Data Exaggerated 50% Over Last 50 Years, New Evidence Shows, Frank Bergman, November 5, 20222
- ▶ Carbon Dioxide and Air Temperature: Who Leads and Who Follows? by David Legates December 10, 2012
- https://www.drroyspencer.com/2022/11/de-urbanization-of-surface-temperatures-with-the-landsat-based-built-up-dataset/
- https://electroverse.co/category/extreme-weather/
- Scrutinizing the Carbon Cycle and CO<sub>2</sub> Residence Time in the Atmosphere Hermann Harde Helmut-Schmidt-University Hamburg,
   Experimental Physics and Materials Science Holstenhofweg 85, 22043 Hamburg, Germany
- Robert Ian Holmes. Thermal Enhancement on Planetary Bodies and the Relevance of the Molar Mass Version of the Ideal Gas Law to the Null Hypothesis of Climate Change. Earth Sciences. Vol. 7, No. 3, 2018, pp. 107-123. doi: 10.11648/j.earth.20180703.13

#### What Is Happening To Our Food Supplies?

- 1. 1/11/21 A fire that destroyed **75,000-square-foot processing plant** in Fayetteville
- 2. 4/30/21 A fire ignited inside the Smithfield Foods pork processing plant in Monmouth, IL
- 3. 7/25/21 Three-alarm fire at **Kellogg plant in Memphis**, 170 emergency personnel responded to the call
- 4. 7/30/21 Firefighters on Friday battled a large fire at <a href="Tyson's River Valley Ingredients">Tyson's River Valley Ingredients</a> plant in Hanceville, Alabama
- 5. 8/23/21 Fire crews were called to the Patak Meat Production company on Ewing Road in Austell
- 6. 9/13/21 A fire at the <u>JBS beef plant</u> in Grand Island, Neb., on Sunday night forced a halt to slaughter and fabrication lines
- 7. 10/13/21 A five-alarm fire ripped through the Darigold butter production plant in Caldwell, ID
- 8. 11/15/21 A woman is in custody following a fire at the Garrard County Food Pantry
- 9. 11/29/21 A fire broke out around 5:30 p.m. at the <a href="Maid-Rite Steak Company meat processing">Maid-Rite Steak Company meat processing</a> plant
- 10. 12/13/21 West Side food processing plant in San Antonio left with smoke damage after a fire
- 11. 1/7/22 Damage to a poultry processing plant on Hamilton's Mountain following an overnight fire
- 12. 1/13/22 Firefighters worked for 12 hours to put a fire out at the <a href="Cargill-Nutrena plant">Cargill-Nutrena plant</a> in Lecompte, LA
- 13. 1/31/22 a fertilizer plant with 600 tons of ammonium nitrate inside caught on fire on <a href="#">Cherry Street in Winston-Salem</a>
- 14. 2/3/22 A massive fire swept through Wisconsin River Meats in Mauston
- 15. 2/3/22 At least 130 cows were killed in a fire at Percy Farm in Stowe
- 16. 2/15/22 Bonanza Meat Company goes up in flames in El Paso, Texas
- 17. 2/15/22 Nearly a week after the fire destroyed most of the Shearer's Foods plant in Hermiston
- 18. 2/16/22 A fire had broken at US largest soybean processing and biodiesel plant in

# America Signs Global Climate Agreement to Crack Down on Farming

https://slaynews.com/news/america-signs-global-climate-agreement-crack-down-farming/

- Democrat President Joe Biden's administration has signed a global agreement with 12 other nations to crack down on farming to "save the planet" from "climate change." The agreement, led by the United States, has been signed by several major cattle and food-producing states including Australia, Germany, Argentina, Brazil, Chile, and Spain. The nations signed onto a commitment to place farmers under new restrictions to reduce emissions of methane gas.
- ▶ According to the World Bank, the UN, the Biden admin, the World Economic Forum (WEF), and their allies, modern food production is destroying the planet by causing "global warming."
- In order to save the planet from emissions that come from farming, global governments are being urged to replace meat in the public's food supply with insects

# It Is Happening Now

- The Irish government is reportedly looking at plans to cull around 200,000 dairy cows to meet its climate targets. It's madness
- Along roads and bridges in the Netherlands, people are hanging the Dutch flag upside down. It is a sign of solidarity with the Dutch farming sector, which will also be upturned by a radical 30% reduction in livestock numbers, a move being made to meet environmental targets.

#### **BUT**

Researchers at UC Davis warn there are major environmental downsides to lab-grown meat. According to their "cradle-to-gate life cycle" analysis, the lab-grown meat industry produces up to 25 times more CO2 than traditional animal husbandry, which nullifies the core ideological foundation upon which the industry is built!

## Get The Little Guy

With Pandemic Panic Theater Collapsing, Corporate Media Is Avoiding the Amish Like the Plague WHY?? Amish Communities Thrived Amidst Covid, Challenging Mainstream Measures

#### **UNTIL**

► Lancaster Amish Organic Farmer Must Pay \$250,000, Faces Possible Jail Time For Food Violations

# Peer-Reviewed Study: 'The Higher the Number of Vaccines Previously Received, the Higher the Risk of Contracting COVID-19'

▶ "The risk of COVID-19 ... varied by the number of COVID-19 vaccine doses previously received. The higher the number of vaccines previously received, the higher the risk of contracting COVID-19."

Effectiveness of the Coronavirus Disease 2019 (COVID-19) Bivalent Vaccine

<u>View ORCID Profile</u>Nabin K. Shrestha, Patrick C. Burke, Amy S. Nowacki, James
F. Simon, Amanda Hagen, StevenM. Gordon**doi:**https://doi.org/10.1101/2022.12.17.22283625

#### What Is The End Game?

- Official CDC Policy Updated May 23, 2023
- Everyone aged 6 years and older should get 1 updated Pfizer-BioNTech or Moderna COVID-19 vaccine to be up to date.
- People aged 65 years and older may get a 2nd dose of updated Pfizer-BioNTech or Moderna COVID-19 vaccine.
- <u>People who are moderately or severely immunocompromised</u> may get additional doses of updated Pfizer-BioNTech or Moderna COVID-19 vaccine.
- <u>Children aged 6 months–5 years</u> may need multiple doses of COVID-19 vaccine to be <u>up to date</u>, including at least 1 dose of updated Pfizer-BioNTech or Moderna COVID-19 vaccine, depending on the number of doses they've previously received and their age.
- COVID-19 vaccine recommendations will be updated as needed.