Climate Change – Quick Hits

More detail? climatechangeandmusic.com

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GSM – Grand Solar Minimum. The real "Climate Change" existential threat is right around the corner. Do the Research!

1. Fixing Climate Change is easy. Just reduce our emissions (primarily CO$_2$).

Where is the empirical CO$_2$/Temperature dataset (a basic Scientific Method Requirement) that shows CO$_2$ driving the Climate on any statistically significant historical time scale? That data does not exist.

2. Based on "computer models" our emissions (primarily CO$_2$) are leading to catastrophic global temperatures.

Again, where is the proof? The only place that catastrophic temperatures exist is in the IPCC computer models that they have self-acknowledged run too hot and are still using emission scenarios that are in their words implausible. CSS-30 – CMIP6 Computer Models and OPS-55 – The State of Climate Science

3. The Antarctic Ice Sheet (90% of global ice) is going to melt and flood all our vulnerable coastal areas.

A little hard to believe, given that temperatures have been statistically flat (at around -30 °C (or less) over the satellite period. CSS-13 – A Look At Homogenization and CSS-32 – UAH Temperature Analysis
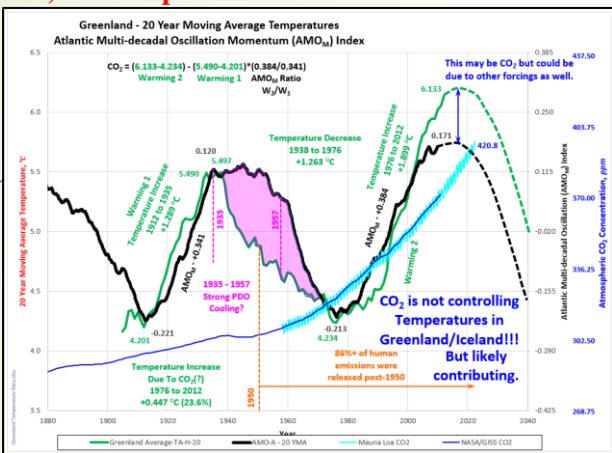
4. The Greenland Ice Sheet (10% of global ice) is going to melt and flood all our vulnerable coastal areas.

A little hard to believe, given that temperatures are rising at just 1.0 °C/century and are very strongly influenced by the Atlantic Multidecadal Oscillation (which is headed cooler and will drop temperatures (1.0 °C+) and temperature trends in Greenland). The tem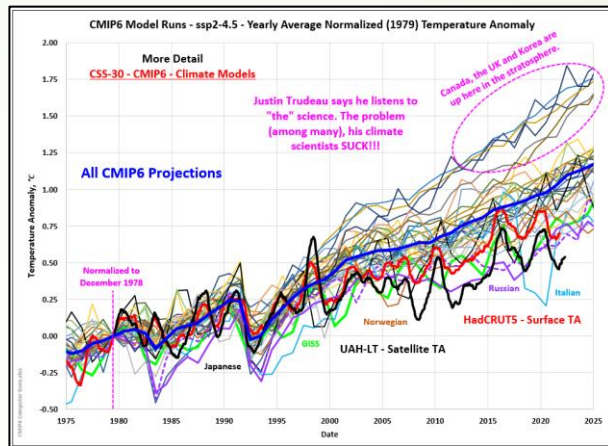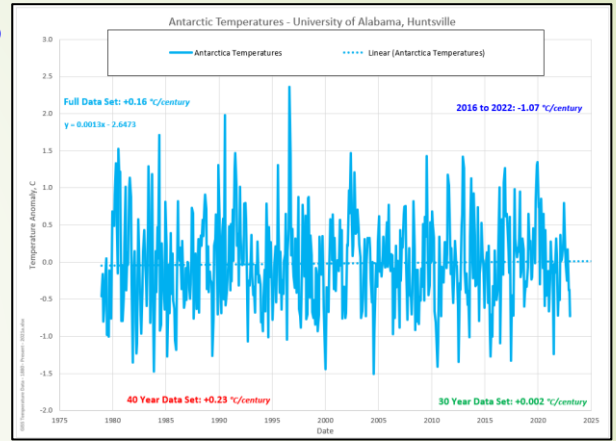peratures are and still will be cold there for a long time. CSS-23 – Greenland/Iceland Homogenization and CSS-26 – Greenland/Iceland – AMO/PDO/CO$_2$ Distribution. If you see more CO$_2$ influence than AMO$_M$, you just might be ideological and scientifically challenged.

Just a Teaser!

2

CMIP6 Model Runs - ssp2-4.5 - Yearly Average Normalized (1979) Temperature Anomaly

More Detail
CSS-30 - CMIP6 - Climate Models

Justin Trudeau says he listens to "the" science. The problem (among many), his climate scientists SUCK!!!

Canada, the UK and Korea are up here in the stratosphere.

All CMIP6 Projections

Normalized to December 1978

Russian
Italian
Norwegian
HadCRUT5 - Surface TA
GISS
Japanese
UAH-LT - Satellite TA

3

Antarctic Temperatures - University of Alabama, Huntsville

— Antarctica Temperatures   ···· Linear (Antarctica Temperatures)

Full Data Set: +0.16 °C/century
y = 0.0013x - 2.6473

2016 to 2022: -1.07 °C/century

40 Year Data Set: +0.23 °C/century   30 Year Data Set: +0.002 °C/century

4

Greenland - 20 Year Moving Average Temperatures
Atlantic Multi-decadal Oscillation Momentum (AMO$_M$) Index

CO$_2$ = (6.133-4.234) - (5.490-4.201)*(0.384/0.341)
Warming 2   Warming 1   AMO$_M$ Ratio
W$_2$/W$_1$

This may be CO$_2$ but could be due to other forcings as well.

Temperature Decrease 1938 to 1976 +1.263 °C

Temperature Increase 1976 to 2012 +1.899 °C

1935 - 1957 Strong PDO Cooling?

CO$_2$ is not controlling Temperatures in Greenland/Iceland!!! But likely contributing.

Temperature Increase Due To CO$_2$(?) 1976 to 2012 +0.447 °C (23.6%)

86%+ of human emissions were released post-1950

— Greenland Average-TA-H-20   — AMO-A - 20 YMA   — Mauna Loa CO2   — NASA/GISS CO2
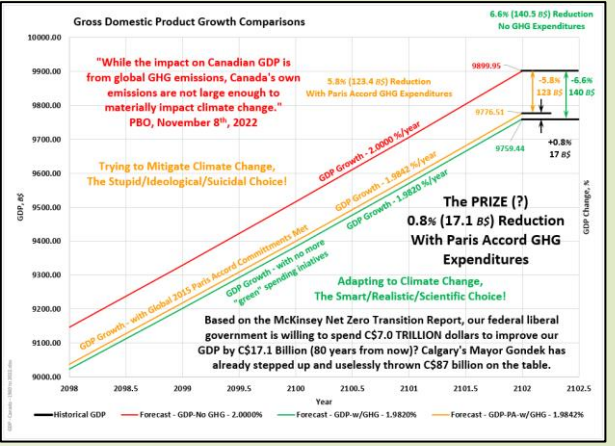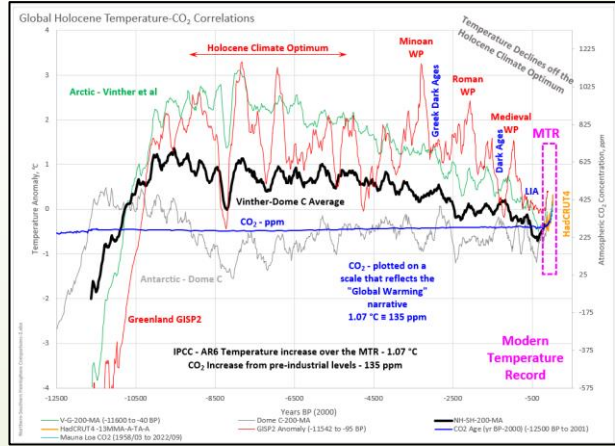
Climate Change Quick Hits

These are just a few of the data plots/discussion that show the folly of the CAGW alarmist narrative. These plots are small (and will be annoying to some). But larger plots and additional discussion are available in the Climate Short Stories (CSS) referenced here and will be discussed in more detail in a near future post (with additional perspective).

5. CO$_2$ is the primary climate driver and natural forcings can be/are being essentially ignored (at least in the models which are self-admittedly running too hot).

When temperatures and CO$_2$ concentrations are scaled to reflect the CAGW alarmist narrative (i.e.: 1.07 °C ≡ 135 ppm), CO$_2$ is obviously not the primary climate driver. Temperatures fluctuate significantly despite the virtually flat CO$_2$ concentration over the Holocene Interglacial Warm Period. The forcings active pre-MTR (Modern Temperature Record, 1850 to 2023), were active throughout the MTR and will be active in the future. Cold, not heat is the danger!

6. The Catastrophic Global temperatures (now and in the future) wrought by rising CO$_2$ concentrations will devastate our economies and society. OPPS-22 – PBO – GDP/Climate Change, OPPS-23 - Trudeau

Not according to Canada's Parliamentary Budget Office (PBO). Doing nothing will mean that our GDP growth will drop by 6.6% 80 years from now (instead of growing 378.0%, we will only grow 371.4% (assuming a base 2.0 %/year GDP growth). With Paris commitments, we improve to a 5.8% reduction (a miniscule C$17 billion). Is a C$17 billion saving worth a C$7.0 TRILLION expenditure that we cannot afford and is not scientifically justified??

5

Global Holocene Temperature-CO$_2$ Correlations

Holocene Climate Optimum
Minoan WP
Greek Dark Ages
Roman WP
Medieval WP
Dark Ages
MTR
LIA

Arctic - Vinther et al

Temperature Declines off the Holocene Climate Optimum

Vinther-Dome C Average

CO$_2$ - ppm

Antarctic - Dome C

Greenland GISP2

CO$_2$ - plotted on a scale that reflects the "Global Warming" narrative
1.07 °C ≡ 135 ppm

Modern Temperature Record

IPCC - AR6 Temperature increase over the MTR - 1.07 °C
CO$_2$ Increase from pre-industrial levels - 135 ppm

— V-G-200-MA (-11600 to -40 BP)   — Dome C-200-MA   — NH-SH-200-MA
— HadCRUT4 -13MMMA-A-TA-A   — GISP2 Anomaly (-11542 to -95 BP)   — CO2 Age (yr BP-2000) (-12500 BP to 2001)
— Mauna Loa CO2 (1958/03 to 2022/09)

6

Gross Domestic Product Growth Comparisons

6.6% (140.5 B$) Reduction No GHG Expenditures

"While the impact on Canadian GDP is from global GHG emissions, Canada's own emissions are not large enough to materially impact climate change." PBO, November 8th, 2022

5.8% (123.4 B$) Reduction With Paris Accord GHG Expenditures

-5.8%   -6.6%
123 B$ 140 B$

+0.8%
17 B$

Trying to Mitigate Climate Change, The Stupid/Ideological/Suicidal Choice!

GDP Growth - 2.0000 %/year
GDP Growth - 1.9842 %/year
GDP Growth - 1.9820 %/year

The PRIZE (?)
0.8% (17.1 B$) Reduction With Paris Accord GHG Expenditures

Adapting to Climate Change, The Smart/Realistic/Scientific Choice!

Based on the McKinsey Net Zero Transition Report, our federal liberal government is willing to spend C$7.0 TRILLION dollars to improve our GDP by C$17.1 Billion (80 years from now)? Calgary's Mayor Gondek has already stepped up and uselessly thrown C$87 billion on the table.

— Historical GDP   — Forecast - GDP-No GHG - 2.0000%   — Forecast - GDP-w/GHG - 1.9820%   — Forecast - GDP-PA-w/GHG - 1.9842%