John Christy - ICSF Presentation (January 21st, 2021) - Introduction



CSS-6a

John Christy

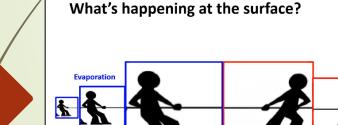
ICSF - Intro

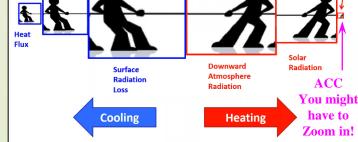
Online Lecture begins at 7.00 pm Dublin Time Johnsty Thursday 21 January 2021

New presentation by John Christy: models for AR6 still fail to reproduce trends in tropical troposphere - Clintel

Testing Climate Claims 2021 Update

John R. Christy Professor, Atmospheric and Earth Sciences Director, Earth System Science Center The University of Alabama in Huntsville





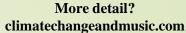
This Climate Short Story (CSS-6) puts forward the highlights from John Christy's (JC) January 21st, 2021 presentation to the ICSF. I have added my own comments and links to my posts that deal with his subject matter. JC's presentation is generally laid out in easily understood language. All the graphics are screenshots from JC's presentation.

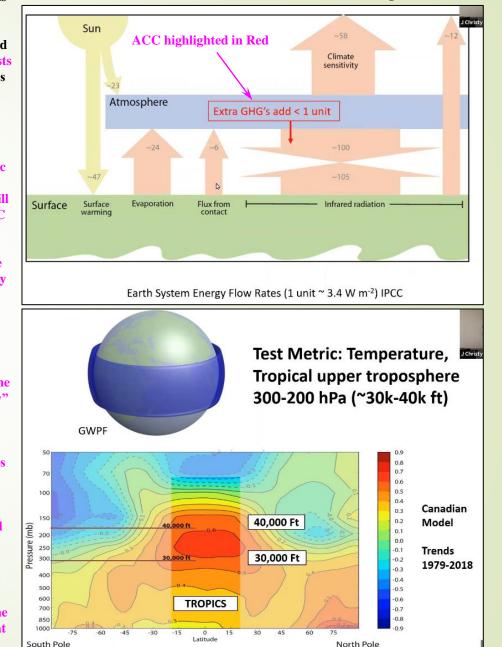
The graphic to the right is a schematic showing the general energy flows around the planet. The magnitudes will vary for a lot of reasons. The point JC makes here is the magnitude of the Anthropogenic CO₂ Contribution (ACC) is less than 1 unit. Most of the energy inputs and outputs will vary by more than 1 unit. Realistically, separating out the ACC is at best extremely difficult, if not virtually impossible.

The graphic to the right is the temperature profile expected across the planet if the "Greenhouse Gas Theory" is correct. A tropical hotspot should have developed in the Upper Troposphere (based on the IPCC computer models (Canada's version is shown here)). So, if you have not succumbed to the "Catastrophic Anthropogenic Global Warming" (CAGW) alarmist narrative, you will already know that the Hot Spot has "NOT" developed! Yet these are the models that our omnipotent political leaders rely on for Policy Decisions.

The graphic above is a schematic showing the competing energy flows affecting the surface temperature. Like the Energy Flow Schematic, this schematic graphically shows the relative magnitude of the ACC contribution. What the schematic doesn't show is the breakdown of the solar radiation component (i.e.: the IPCC models use only Total Solar Irradiance (TSI) and ignore the many other, more important solar forcings).

Extra CO2



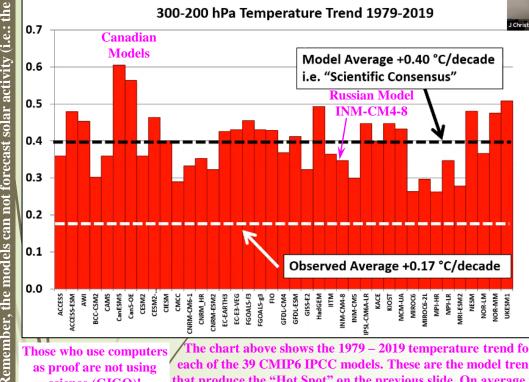


Remember, the models can not forecast solar activity (i.e.: the GSM)

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CSS-6b John Christy - ICSF Presentation (January 21st, 2021) – Computer Models

39 IPCC Climate Model Simulations CMIP6 300-200 hPa Temperature Trend 1979-2019



Fhose who use computers as proof are not using science (GIGO)!

GSM)

John Christy ICSF Computers

They even have the audacity to increase their **CMIP6** historical trend from +0.40 °C/decade to a forecast of +0.50°C/decade>

The chart above shows the 1979 – 2019 temperature trend for each of the 39 CMIP6 IPCC models. These are the model trends that produce the "Hot Spot" on the previous slide. On average the models are increasing temperatures at +0.44 °C/decade rate. The observed temperature increase is only +0.16 °C/decade. The models are running on average 2.75 times higher than the actual data. As per John Christy, "The HYPOTHESIS FAILED (Rejected)". I am so PROUD of our Canadian Modeling contingent for their obvious scientific prowess. They are definitely leading the charge (3.63 times actual) to push the false CAGW narrative for our UN "cheer-leader-in-chief".

CMIP6 has enhanced Solar Forcing capabilities (high energy particle and cosmic ray forcings) built in. But not surprisingly, the IPCC programmers have decided to keep the new solar forcings set to zero to maintain their still unvalidated computer model narrative. In Beta testing, the Modern Temperature Record (MTR, 1850 – Present) could be modelled without CO₂ contribution (i.e.: the new solar forcings can account for the MTR changes).

Temperatures According to Climate Models | Science Matters (wordpress.com) 2018 Update: Best Climate Model INMCM5 | Science Matters (wordpress.com)

John Christy's look at the computer models is always interesting. His first look was done a few years ago based on the Coupled Model Intercomparison Project (CMIP5) computer protocol. He has recently updated that analysis with the newer CMIP6 protocol.

The graphic to the right shows several of the IPCC CMIP5 Computer Model runs plotted against an average of 3 weather balloon temperature data sets (the Bold Green Line). The only model that even comes close to matching the actual temperature measurements is the Russian one (INM-CM4, the Purple Line). That

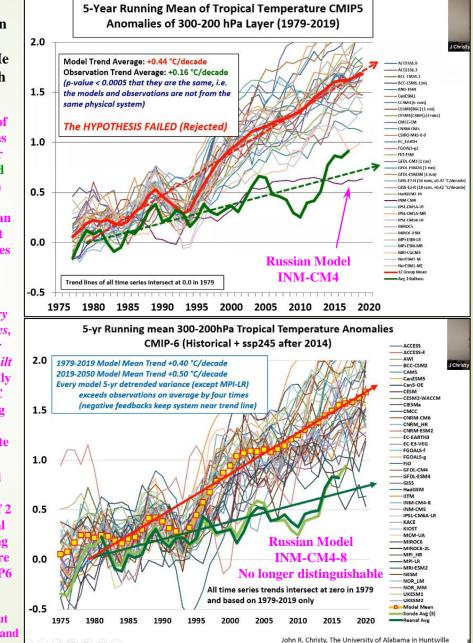
brings up a couple of questions. Why does the Russian Model predict the actual temperatures reasonably close? From Science Matters, "the model that most closely reproduces the temperature history has high inertia from ocean heat capacities, low forcing from CO₂ and less water for feedback. Why aren't the other models built like this one?". Science Matters essentially asked my second question. These IPCC climate "scientists" are literally wasting billions of dollars on their own

idiotological (not a typo) views on climate change.

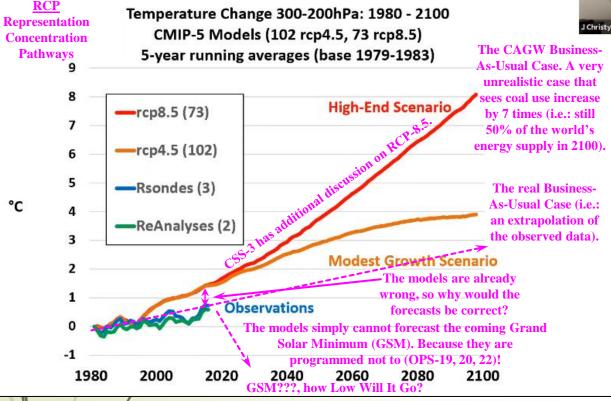
The IPCC CMIP6 Computer Model runs are plotted here against the Reanalysis Average and an average of 2 **Radiosonde Data Sets. The individual** model runs are very erratic suggesting that the built-in negative feedbacks are not properly proportioned. And CMIP6 is now less accurate than CMIP5?

For more info on modelling, check out OPS-8, 19, 20, 22, 38 and my OL Addendum.

More detail? @-RID-2021 climatechangeandmusic.com



CSS-6c John Christy - ICSF Presentation (January 21st, 2021) – Forecasts, CO₂ Climate Sensitivity How Billionaires Tom Steyer and Michael Bloomberg Corrupted Climate Science (forbes.com)



John Christy discusses CO₂'s Equilibrium Climate Sensitivity (ECS) while displaying the chart to the right. The models are divided into two groups ("low" ECS (averaging ~2.7 °C) and high ECS (averaging ~4.5 °C)). In the real world, the observed data gives much more subdued CO₂ ECS estimates. For the Lower Troposphere, the CO₂ ECS estimate works out to 1.7 °C. The Middle Troposphere, has a slightly lower CO₂ ECS estimate at 1.4 °C. A broader empirical look at CO₂ ECS estimates gives a range of 1.0 to 2.3 °C (compared to the model range of 1.8 to 5.6 °C). So, as JC says on the chart to the right, the "models are too sensitive to greenhouse gases". Think back to the Russian Model which used a low CO₂

ECS at the low end of the range and actually modelled something close to reality. The CO₂ ECS is nowhere close to settled science (especially if you include the IPCC "science"). Given that CO₂ ECS is probably one of the most important parameters in CO₂ influence on the climate, it is not a big step to declare that "Climate Change" is not settled. There are many other climate disciplines that are just as unsettled. I go into a deeper discussion on the CO₂ climate sensitivity in my CSS-3 (CO₂ -Sensitivity) Post. Historical data suggests the CO₂ ECS is closer to the bottom of the range (1.0 °C). Based on some scientists the CO₂ adsorption band is becoming very saturated and the CO₂ ECS will drop

quickly and approach 0 °C. The last two CO₂ scenarios discussed will never be dangerous.

More detail? climatechangeandmusic.com

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The qualifications of these so-called "climate scientists" really needs to be questioned. I have done a lot of computer modelling in my career and if I had submitted history matches that look like this, I would not have had a career. Sadly, as anyone who looks at all the available empirical data knows, computer modelling is not the only area where Catastrophic Anthropogenic Global Warming (CAGW) scientists (or more appropriately alarmists) are lacking in scientific ability. The RCP-8.5 case is used routinely by the CAGW alarmists. Apart from coal use increasing by seven times, the world population grows to

12 billion but the UN population estimate only reaches a maximum of 10 billion around 2070 and declines from there. RCP-8.5 also assumes there will be minimal technological advances and methane

(CH₄) will increase 3 ppbv/year to 21 ppbv/year. Just for the record, the RCP-2.6 case has a population of 3 million less people than the RCP-8.5 case. How do you suppose they (the globalists), propose to make that happen? The CAGW alarmist Fear Porn is not based on science. The narrative

is put forward to push the UN's One World, unelected, unaccountable, corrupt, totalitarian Government. If the CAGW narrative was scientific, they would be able to put forward an empirical CO₂/Temperature data set that shows CO₂ driving the climate on any statistically significant historical time scale. They cannot, because that data set does not exist. Still waiting!!!!

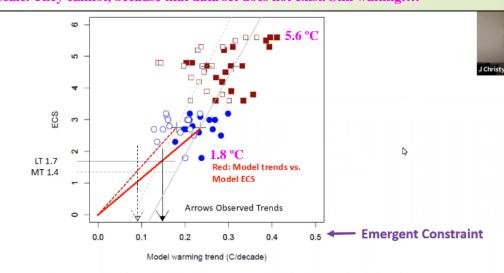


Figure 4. Model ECS values plotted against model warming trends. Red squares: high ECS group Blue circles: low ECS group. Open shape: MT trend, closed shape: LT trend, Inverted triangle mean observed LT trend (solid), mean observed MT trend (open)

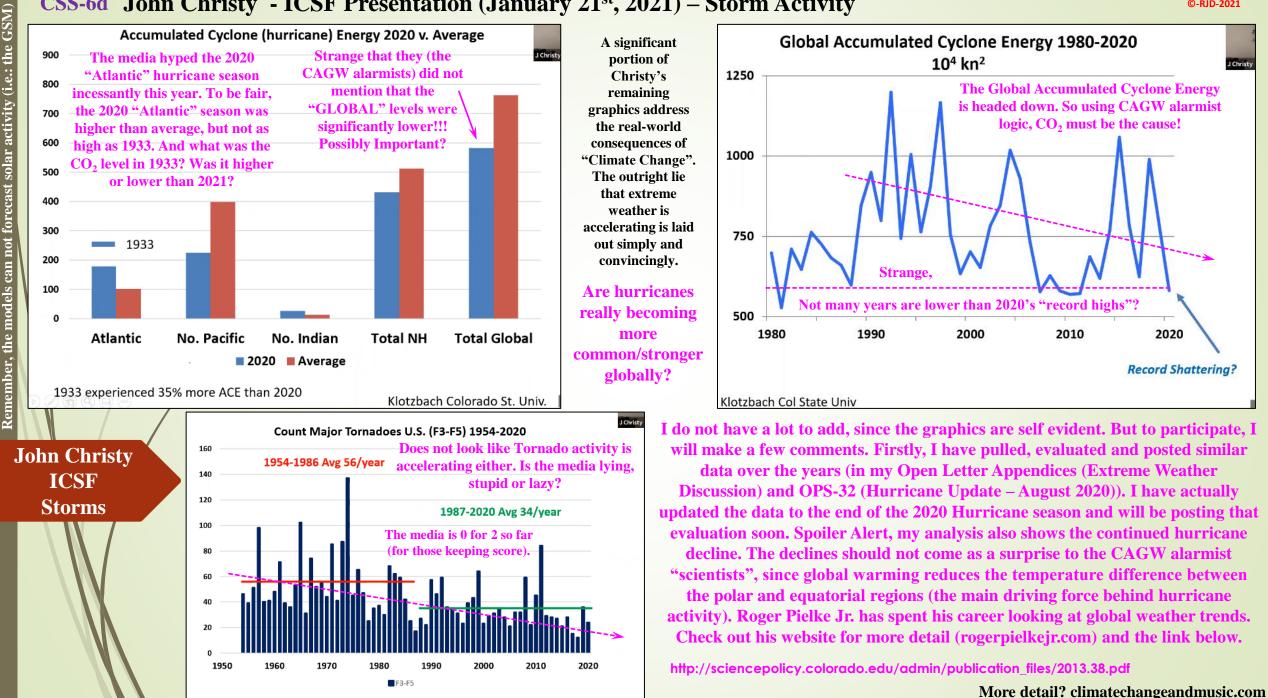
This plot shows the relationship between global atmospheric trends (Emergent Constraint) and ECS from the models. The actual global trends (dashed arrows for mid-troposphere, solid for lower troposphere) suggest the ECS is around 1.4 to 1.7 °C – below the range of the CMIP-6 models. This implies models are too sensitive to greenhouse gases.

John Christy

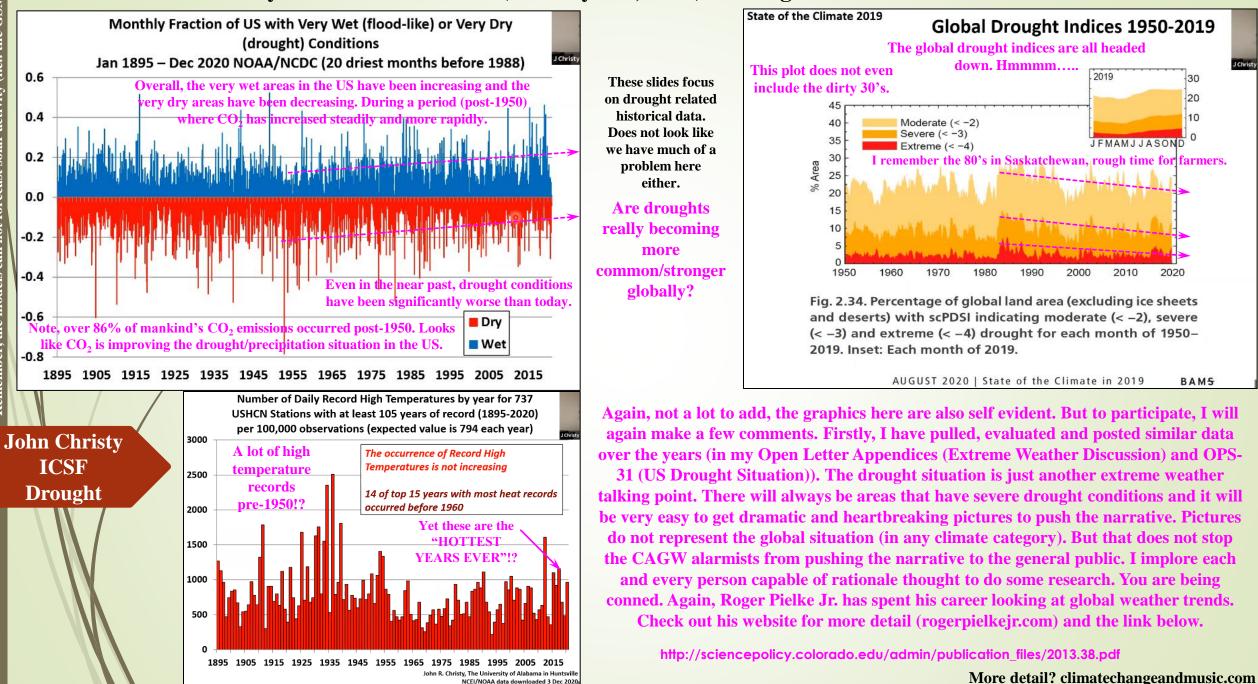
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Forecasts, CCS

CSS-6d John Christy - ICSF Presentation (January 21st, 2021) – Storm Activity



John Christy - ICSF Presentation (January 21st, 2021) – Drought



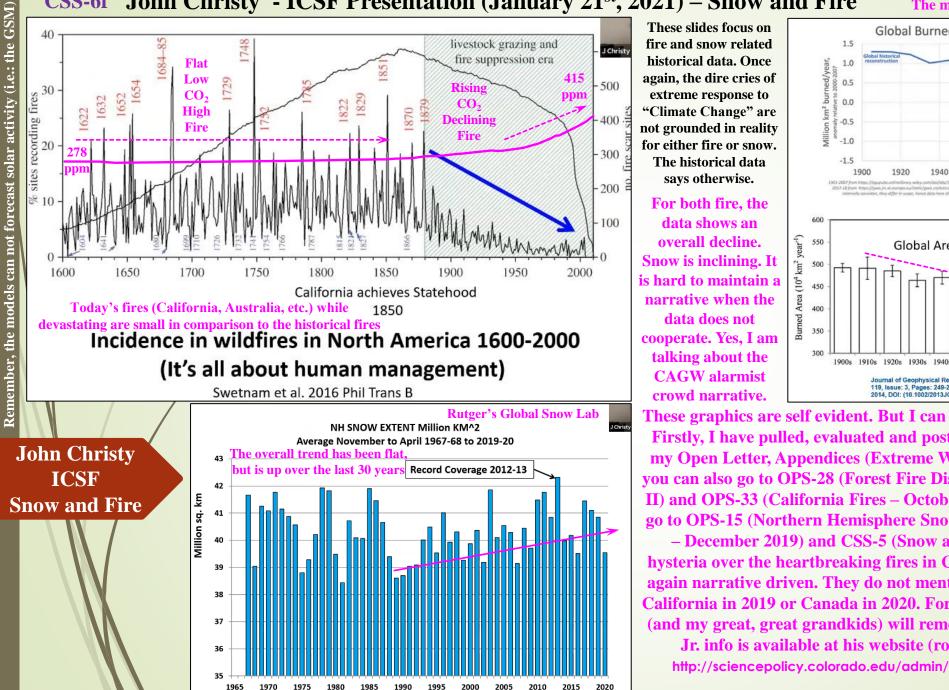
NCEI/NOAA data downloaded 3 Dec 2020

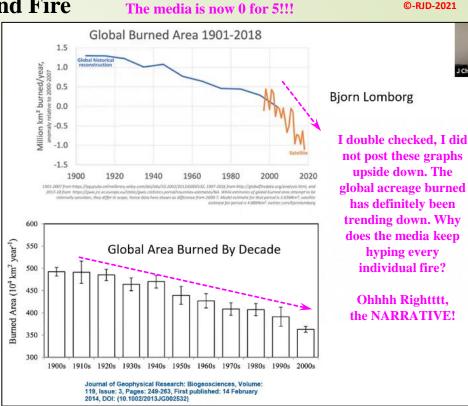
The media is 0 for 3 now!!!

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CSS-6e

CSS-6f John Christy - ICSF Presentation (January 21st, 2021) – Snow and Fire





These graphics are self evident. But I can contribute some additional data/analysis. Firstly, I have pulled, evaluated and posted similar data over the years (again, in my Open Letter, Appendices (Extreme Weather Discussion)). For fire discussions you can also go to OPS-28 (Forest Fire Discussion), OPS-29 (Forest Fire Discussion II) and OPS-33 (California Fires – October 2020)). For additional snow discussion go to OPS-15 (Northern Hemisphere Snow), OPS-24 (Northern Hemisphere Snow

- December 2019) and CSS-5 (Snow and Ice - September 2020). The media hysteria over the heartbreaking fires in California and Australia during 2020 was again narrative driven. They do not mention the extremely low acreage burned in California in 2019 or Canada in 2020. For the snow, I am pretty sure my grandkids (and my great, great grandkids) will remember what snow is. Again, Roger Pielke

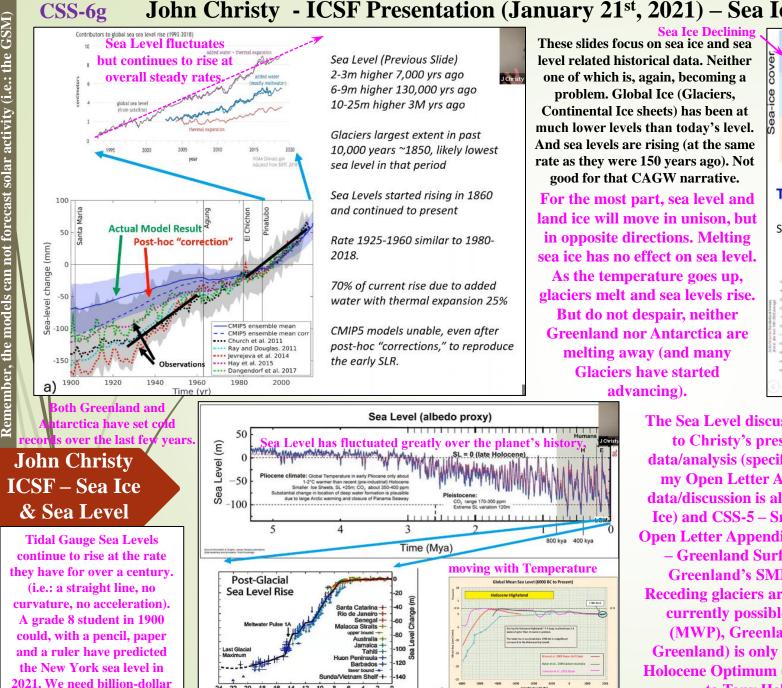
Jr. info is available at his website (rogerpielkejr.com) and the link below. http://sciencepolicy.colorado.edu/admin/publication files/2013.38.pdf

More detail? climatechangeandmusic.com

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John Christy - ICSF Presentation (January 21st, 2021) – Sea Ice and Sea Level

Another bad at bat for the media, 0 for 7!!!

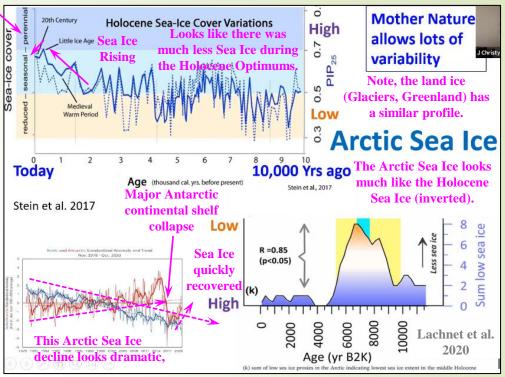


24 22 20

computers?

16 14 12

10



but would not be noticeable on the Arctic Sea Ice chart above

The Sea Level discussion is more complicated and I would recommend that the reader go to Christy's presentation for more detail. Again, I can contribute some additional data/analysis (specifically addressing Land Ice). Sea Level data/discussion is available in my Open Letter Appendices (Sea Level Thoughts) and OPS-23 - Sea Levels). Sea Ice data/discussion is also available in my Open Letter Appendices (Disappearing Arctic Sea Ice) and CSS-5 – Snow and Ice. The Land Ice data/discussion can be found again in my **Open Letter Appendices (Disappearing Arctic Sea Ice and Antarctic Ice Situation), OPS-25** - Greenland Surface Mass Balance and CSS-5 - Snow and Ice. Land Ice highlights, Greenland's SMB and Antarctic ice volumes have been steadily rising for decades. Receding glaciers are revealing old growth forest and human habitation where that is not currently possible (i.e.: Greenland (the Vikings) during the Medieval Warm Period (MWP), Greenland's Hans Tausen Ice Cap (the largest ice cap at the North end of Greenland) is only 3500 – 4000 years old and the low continental glacier volumes of the Holocene Optimum (Hans Tausen did not exist at that time). For those that like videos, go to Tony Heller's recent video (Latest Fake Greenland Study - NewTube).

More detail? climatechangeandmusic.com

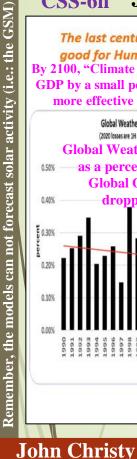
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John Christy - ICSF Presentation (January 21st, 2021) – Economics CSS-6h Final Tally, the media (and CAGW alarmists) just went 0 for 9!!!

J Christ

deaths a

30-year moving



0.50%

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Economics

Thank You

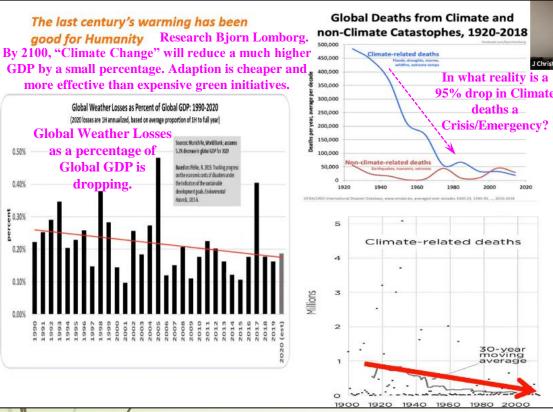
John Christy

for your

valuable

contributions

science!!!



In the chart to the right, Christy is arguing the effectiveness of carbon regulations. Completely wiping out the US emissions would have only a marginal, unmeasurable temperature reduction at the turn of the century. That is a significant problem given the Trillions that the 2015 Paris Accord commitments will cost the US for no appreciable gains. The new administration will actually be putting an end to the consistent reductions the USA has achieved over the last few decades, with the executive orders banning fracing, stopping Keystone XL (and potentially other pipeline projects) and reversing energy self sufficiency. Without a healthy energy industry and pipelines to Canada, the US energy needs will have to be met with tankers, trucks and rail cars (significantly more emission intensive). The hydrocarbon demand that is being driven overseas by the new regulatory environment (in both Canada and the US) will cause more CO₂ emissions (not less). The North American emission, environmental and societal standards are much to real climate higher than most other hydrocarbon producing regimes. Do you really think oil tankers are emission free? Ironic, since pipelines are!

These slides shift to the general societal and economic ramifications of "Climate Change". The CAGW alarmist narrative constantly harps on the devastating effects of the "Climate Change Emergency/Crisis/Disruption/Latest Scary Descriptor". Strange that none of their supposed signs (as laid out in this CSS post) are actually cooperating with their unscientific narrative. I could add in Polar Bears or more of the long list of failed "Climate Change" catastrophic predictions. Somehow, we are always only 10 or so years away from the Point of No Return (Disaster is always just around the corner). Every CAGW alarmist should/must have a Government issued "The End is Nigh" sandwich board handy. While the losses due to climate/weather is increasing, losses as a percentage of the Global GDP has been decreasing. That is not an emergency. The losses are increasing because the growing population is moving into more vulnerable areas (flood plains, forests, coastal areas, etc.). And replacement costs are also rising with inflation. So, when a climate event happens, the same events that happened centuries ago, more development is in the target path and the costs (i.e.: losses) are going to be higher.

These topics are addressed in my Open Letter Appendices (Other Thoughts), OPS-17 (Paris Accord 2015), OPPS-8 (Canadian Deficits - November Update) and OPPS-9 (Common Sense).

Will CO2 regulations "save" the planet? ©-RJD-2021

Escalating the Paris Accord to the Green New Deal, a

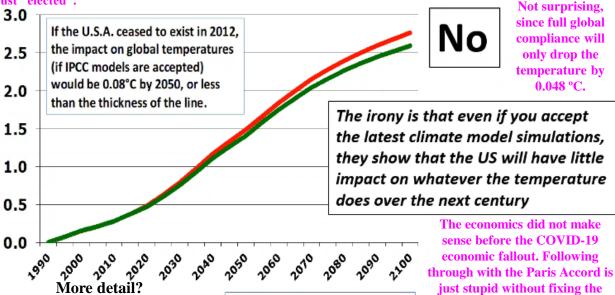
°C

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Red – Temperature IPCC A1B Emissions
   Brain Dead
 Move!!! But the
                 Green – U.S. stops all emissions 2012
guy/puppet to do it
was just "elected".
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The same general analysis can be applied to Canada. If we meet our 2015 Paris Accord commitments. we will drop the temperature in 2100 by a whopping 0.00096 °C (using IPCC science).

financial mess we are already in.

J Christ



Data from SPPI, Paul Knappenberger climatechangeandmusic.com