The Week That Was: 2021-01-16 (January 16, 2021) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Quote of the Week: "For a successful technology, reality must take precedence over public relations, for Nature cannot be fooled.". – Richard Feynman in the Challenger Report. [H/t Christopher Essex]

Number of the Week: – 12.8%

THIS WEEK:

By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

Conformity: Last week, TWTW discussed that David Legates at The Office of Science and Technology Policy (OSTP) requested and distributed nine information briefs on climate change from various scientists and scholars in North America. These briefs demonstrate that climate science has glaring deficiencies as a science when it is used to declare that carbon dioxide is causing dangerous global warming. These deficiencies are unacceptable to any student of the scientific method. Legates and Ryan Maue, an author of one of the briefs, were promptly removed from their positions by OSTP director and Trump's science advisor Kelvin Droegemeier. They returned to their positions at NOAA. Applying the scientific method to climate science is not permitted in Washington, regardless of political party. It is clear that conformity conquers all.

Other authors of the briefs, Roy Spencer and Willie Soon, have removed the links to the briefs from their web pages because they have the White House seal on them. We all know how dangerous independent thinking is to government. As of writing this (Jan 16), the links are available on the web site of Paul Homewood, in the UK. See links under Challenging the Orthodoxy.

Can Climate Models Predict? Probably the most difficult of the Legates Nine Briefing Papers is by Christopher Essex, Professor of Applied Mathematics, University of Western Ontario: "Can Computer Models Predict Climate?" This important question is more a philosophical (theoretical) one than a practical one. Based on observations of atmospheric temperature trends and the greenhouse effect in the atmosphere we know that there is no logical reason to assume that current global climate models can make reliable predictions of future temperatures. After briefly discussing problems with older models that have been addressed Essex states:

Climate computer models in the 1960's could not account for this non-greenhouse-like picture. However modern computer models are better than those old models, but the climate implications of an atmosphere that cools as well as warms has not been embraced. Will computer models be able to predict climate after it is? The meteorological program for climate has been underway for more than 40 years. How did it do?

Essex then argues that climate models do not violate Feynman's statement "If it doesn't agree with experiment, it's wrong" because climate models cannot capture all the features of the climate system. Thus, controlled experiments cannot be adequately done.

He discusses types of extremes that can be included in computer calculations, and one that cannot be – extreme in time.

"Integrations of classical physics on computers for climatological timescales are unique and unprecedented. Like other forms of extreme computation, there are consequences."

He then goes into three types of errors that arise from the use of computers: 1) rounding; 2) truncation; and 3) symmetry.

The third type of error tells us that the actual computer model equations that take us into the future will usually conserve different things than the original equations. The conservation laws from the original mathematics are broken and replaced with something artifactual.

In going through the problem of grid size which makes the climate problem far too big for computers, Essex states:

"We can proceed no further unless one compromises to improper computation. Important processes between the grid points must be treated, but with timesaving, empirically-based replacements for proper physics. These are the sub-grid-scale "parameterizations." All climate models are improper in this sense, employing mathematical cartoons instead of the advertised physics. The basis for any unalloyed faith in climate models is thus dispensed with."

Models can be "tuned" so that their results approximate actual observations.

But we cannot adjust for conditions we haven't encountered yet. That is a key property of real climate change: conditions that we haven't encountered yet. So, for climate change, empiricism fails. Only extrapolation remains, making the exercise **fundamentally not predictive**. [Boldface added]

Essex brings up the problem of nonlinear equations, which can produce absurd results. However, in the effort to stabilize the models the modelers may have produced another problem – overstabilization. Many modelers apparently believe long-term stabilization is a feature of the climate system. [Which it is not!]

"Thus, they contend that climate is a 'boundary value problem,' as startup conditions no longer matter in the long term. If true, an observer living on climate timescales would experience no variability—nothing analogous to weather. Every moment would be like the last. Change would strictly be a matter of external causes. However, there is no known way to deduce it from first principles, and long-term internal variability is evident." [To TWTW the claim that "initial conditions are the reason for divergence among models" is an evasion of the issue. Also, Fred Singer demonstrated that for many models, at least ten runs were needed to display its characteristics.]

An effort to bring "closure" to the problem of finding climate from first principles (directly from the fundamental equations) has led to the work of Lorenz on chaos, and other fields of physics such as fractals. Yet the problem of separating sensitivity of climate from changes in greenhouse gases from natural variability remains. Essex writes:

"Few know that climate models cope with this by something called 'ensemble averaging.' A single computation of the future can't address such sensitivity, so the alternative offered is to do the integration repeatedly with a collection (or ensemble) of slightly different initial values. The average over these is presented as the future. It seems technical, but in terms of the future it is something like the difference between, 'You will meet a tall handsome stranger,' and 'you may or may not meet an average person.' Forecasts like that are difficult to falsify

"The depth of difficulty of the scientific problem is obscured by the machinery inherited from the radiative-convective-model picture originating in the 60's, which is peculiarly imposed on modern models. We imagine in accordance with radiative-convective model thinking that an integral over a temperature field (temperature index) is proportional to an integral over the radiation field (changes in infrared [absorbing] gas amounts). The constant of proportionality is known as the 'climate sensitivity.' Much effort has gone into determining its 'correct' value in the context of climate models. But such a relationship implies that these integrals can be related to each other in a function, which can ignore the underlying meteorology. That is, it is a claim of closure, and tantamount to a definition of climate. There is no reason to support this claim in Nature. If this function does not exist, neither does climate sensitivity, and the models that conform to this picture are falsified." [Boldface added]

Essex discusses other approaches including bifurcation and "tipping points." Tipping points are an assertion of irreversible climate change. [If they apply there is no reason why earth comes out of stages such as ice ages, with ice caps on both poles, and hothouse periods with no ice caps. If the issue of "tipping points" implies they are irreversible, the concept become absurd. If tipping points are reversible, then conditions should be so stated.] Essex concludes:

"A physical definition for climate remains scientifically elusive because it represents a deep problem that neither elegant theories nor brute force computations have succeeded in getting a foothold on. Without that definition, the question posed by the title cannot be answered.

There are many paths yet to explore, but they are buried by the greenhouse mindset inherited from the models of the 1960s. It makes this deep problem seem trivial and it invites the vision of one temperature controlled solely by infrared active gases. That is the basis of climate sensitivity, which amounts to a dubious claim of closure for the climate problem. However, this function need not exist in Nature.

This questionable closure invites the vision of climate as a control problem. But it would be control over something that is not actually climate through a function that exists only in the radiative-convective models. This vision is itself unfalsifiable. [The model creates a belief that humans can control climate, which is false.] Following it ensures that we only fool ourselves, because as Feynman also said, 'Nature can't be fooled.'"

Washington has spent tens of billions on climate science, which fails to describe ongoing changes in climate or properly separate human influence from natural variation. No wonder so many in Washington opposed the publication of these nine essays that dare discuss shortcomings in what is called climate science. See links under Challenging the Orthodoxy.

What to Call It? The current fad of climate alarmism is very disturbing. When the UN uses a teenager to scold us on a complex topic, there is something very, very wrong. The failure of Washington to address the shortcomings of climate science also indicates something is wrong. A

proper identification of this political movement is useful. Christopher Booker called it "groupthink."

In correspondence Richard Courtney of the UK writes:

"All the UK media are unashamedly climate alarmist.

"In some places, notably the USA, the political right pretend climate alarmism is a left-wing conspiracy, but the UK clearly demonstrates that is wrong.

"Now, every significant UK political party is climate alarmist.

"Climate alarmism is a bandwagon and not a conspiracy. A coincidence of interests is usually more powerful than a conspiracy. People of all political persuasions use climate alarmism as a tool to promote their aims."

Courtney attributes climate alarmism to Margaret Thatcher. But she did not come into office until after the 1979 US Charney report which exaggerated the influence of CO2 on temperatures by speculating, without evidence, that a mild increase in temperatures from CO2 would be greatly amplified by an increase in water vapor, which has not occurred. Political tribalism is not a sufficient explanation.

In the past, we have seen political bandwagons become destructive. One such example is America's commitment to a ground war in Southeast Asia without critical thinking (strategic planning) and the actions against those who questioned it. Neil Sheehan died on January 7. He was the reporter for the New York Times who obtained the classified *The Pentagon Papers* from Daniel Ellsberg and wrote a series of articles on the Department of Defense history of the Vietnam War which led to a US Supreme Court case. [Also, objecting to the way the war was conducted, he wrote: *A Bright Shining Lie: John Paul Vann and America in Vietnam*.]

Ordered by outgoing Secretary of Defense McNamara (under Kennedy and Johnson, Democrats), *The Pentagon Papers* revealed the lack of critical thinking by the Johnson administration in deploying hundreds of thousands of ground troops into Southeast Asia. [Previously, President Eisenhower, Republican, rejected a plea from the French to provide major military assistance in protecting their colony.] Why President Nixon, Republican, tried to suppress the publication of *The Pentagon Papers* is perplexing and cannot be explained by political tribalism.

Courtney may be right. Everyone wants to be seen on the bandwagon, no matter where it is going or why.

Collapsing Ocean Ecosystems: Those on the global warming bandwagon are claiming a collapse of ocean ecosystems caused by global warming from CO2 emissions. As discussed by Essex, above, climate modelers either do not understand, or fail to address, the theoretical limits of their models, yet those on the bandwagon make all sorts of "predictions" using them. Environmentalist Jim Steele discusses the good news that solid scientists are promoting lessons learned from mankind's overhunting and overfishing of marine species.

"Thanks to wise hunting regulations, Hawaii's endangered humpback whales grew from just 800 individuals in 1979 to 10,000 by 2005. Turtle nests in Florida increased from "62 in 1979 to

37,341 in 2015" as North and South Atlantic green turtle populations increased by 2,000% and 3,000% respectively."

Fish populations are recovering with better management prompting fisheries to re-open much sooner than expected.

"Critical photosynthesizing algae, diatoms, rapidly flourish when upwelling brings nutrient rich, high CO2 deep waters back to sunlit surfaces. Diatom blooms stimulate zooplankton abundance which feeds fast-growing bait fish, like anchovies and sardines, thus sustaining a food web from tuna to whales. And more good news, since the 1850s warming has spurred dramatic increases in upwelling and marine life.

"Michael Mann and Kevin Trenberth rule the roost within the Chicken Little school of science. They recently co-authored a 'scary' paper titled Record-Setting Ocean Warmth Continued in 2019. Using the energy metric Zetta (10²¹) Joules, an incomprehensible foreign language for the public, they estimated 2019 warmed by 25 Zetta Joules. That converts to a not so scary 0.016 °F (0.009 °C) increase. Five thousand years ago, marine organisms thrived in waters that were about 2.7°F to 3.6°F warmer than today. At their alleged 'record setting' warming pace, it would take four to six hundred years to reach those earlier temperatures."

Much needs to be done to understand climate change, both human and natural, and how humans can use natural resources without destroying them. But this will only be done with scientists honestly reporting the strengths and limits of their studies. The doomsday speakers on the climate bandwagon contribute nothing but fear. See links under Changing Seas.

Number of the Week: – 12.8%. Last week's TWTW carried the report of the Earth System Science Center, UAH, stating:

"2020 ended up as the 2nd warmest year with a departure from the 1981-2010 average of +0.49 °C (+0.88 °F) just behind 2016 with +0.53 °C (+0.95 °F) and just ahead of 1998 which had +0.48 °C (+0.86 °F). Considering the uncertainty of the measurements, these three years could be considered as tied for the warmest year of the 42-year record."

This week, headlines including those in the *Wall Street Journal* screamed: "2020 Ties for Hottest Year on Record, NASA Says."

Haapala objected to the article stating:

"You write: 'In a new climate study, the National Aeronautics and Space Administration ranked 2020 in a dead heat with 2016 as the warmest year **since official record-keeping began in 1880.**' [Boldface added] What percentage of the globe was covered in 1880? 2%, 3%?

"It is only since September 2002 that we have had comprehensive surface skin temperature trends with the Atmospheric Infrared Sounder, or AIRS. Only since 1978 have we had comprehensive coverage of the atmosphere giving data to estimate temperature trends.

"Before WWII, the global coverage was poor with best coverage for the US. However, the changes to the 1930s US temperatures (lowering) are highly questionable.

"Your readership deserves to be so informed."

The response was:

"Thank you for your note. As you may appreciate, the article concerned the formal public announcements of 2020's annual global land and sea surface temperatures calculated by NASA and NOAA. It's important for our readers to have timely information about expert assessments of temperature trends and climate change so that they can make their own well-informed judgements. In this instance, the article cited 4 independent assessments by 3 different governments. The historical issues with the various data sets used by NASA and NOAA that you mention are well-documented publicly, well-debated and, as you note, constantly improved as techniques and new sensors become available. In any historical empirical endeavor, you have to use the data you have, as I'm sure you appreciate." [Boldface added]

Interpret this as you wish. UAH measurements show 1998 temperatures were comparable to those of 2016 and 2020. In 1998 the annual average of measurements of CO2 at the observatory in Mauna Loa were 367 parts per million (ppm). In 2020 the preliminary annual measurements were 414 ppm, an increase of 47 ppm or 12.8%. If CO2 is the control knob of earth's temperatures, as the director of NASA-GISS has claimed, it is a very sloppy control knob. See Article # 1 and https://www.esrl.noaa.gov/gmd/webdata/ccgg/trends/co2/co2 annmean mlo.txt

NEWS YOU CAN USE:

Censorship

The big 'cancel'

By Judith Curry, Climate Etc. Jan 12, 2021

https://judithcurry.com/2021/01/12/the-big-cancel/#more-26879

"Who is the greater threat to freedom and democracy? So who is the greater threat – the clowns who stormed the Capitol, or the technocratic elites and other corporations who are using the Trump situation as an opportunity to consolidate their cultural and political power?"

Power Supply Fiasco: Green Energy Blackout Hits Germany! Fossil Fuels To The Rescue By P Gosselin, No Tricks Zone, Jan 9, 2021

https://notrickszone.com/2021/01/09/power-supply-fiasco-green-energy-blackout-hits-germany-fossil-fuels-to-the-rescue/

"First, many of you surely have heard of a widespread purge of followers and account suspensions happening at Twitter, most notably that of the U.S. President, Donald Trump and Sidney Powell.

"NoTricksZone lost 300 followers since January 6. Tony Heller's account has lost 3000 in just a matter of hours."

The Big Tech Suppression: Is There A Potential Legal Remedy?

By Francis Menton, Manhattan Contrarian, Jan 14, 2021

https://www.manhattancontrarian.com/blog/2021-1-14-the-big-tech-suppression-is-there-a-potential-legal-remedy

[SEPP Comment: Arguing that censorship of political speech by the big tech media companies may be a civil rights issue.]

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2013

https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf

Summary: https://www.heartland.org/_template-assets/documents/CCR/CCR-II/Summary-for-Policymakers.pdf

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2014

http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/ *Summary*: https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf

Climate Change Reconsidered II: Fossil Fuels

By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, April 2019

http://store.heartland.org/shop/ccr-ii-fossil-fuels/

Download with no charge:

http://climatechangereconsidered.org/wp-content/uploads/2019/01/Climate-Change-

Reconsidered-II-Fossil-Fuels-FULL-Volume-with-covers.pdf

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

By Craig D. Idso, Robert M. Carter, and S. Fred Singer, Nongovernmental International Panel on Climate Change (NIPCC), Nov 23, 2015

http://climatechangereconsidered.org/

Download with no charge:

https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

http://www.sepp.org/publications/nipcc final.pdf

Global Sea-Level Rise: An Evaluation of the Data

By Craig D. Idso, David Legates, and S. Fred Singer, Heartland Policy Brief, May 20, 2019 https://www.heartland.org/ template-assets/documents/publications/SeaLevelRiseCCRII.pdf

Challenging the Orthodoxy

At the White House, the Purge of Skeptics Has Started

By Roy Spencer, His Blog, Jan 12th, 2021

https://www.drroyspencer.com/2021/01/at-the-white-house-the-purge-of-skeptics-has-started/

White House Climate Change Information Briefs

By Paul Homewood, Not a Lot of People Know That, Jan 13, 2021

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2021/01/13/white-house-climate-change-information-briefs/}$

Alarmist Claim Rebuttals Updated

By Staff, ICECAP, Jan 14, 2021

http://icecap.us/index.php/go/political-climate/alarmist claim rebuttals updated/

"We should note a 1 degree F change since 1979 is in the noise compared to a normal 30F range in an average day, seasonal variations of 50F from coldest to warmest month..."

Dr Happer Explains Effects of CO2

By Donn Dears, Power For USA, Jan 12, 2021

https://ddears.com/2021/01/12/dr-happer-explains-effects-of-co2/

2020, climate statistics and all that

By David Whitehouse, GWPF, Jan 15, 2021

https://www.thegwpf.com/2020-climate-statistics-and-all-that/

This Tuesday, Jan. 19: My Friends of Science Society Livestream Talk: 'Why There Is No Climate Emergency'

By Roy Spencer, His Blog, Jan 15, 2021

http://www.drroyspencer.com/2021/01/this-tuesday-jan-19-my-friends-of-science-society-livestream-talk-why-there-is-no-climate-emergency/

As hot as two decimal places

By John Robson, Climate Discussion Nexus, Jan 13, 2021

https://climatediscussionnexus.com/2021/01/13/as-hot-as-two-decimal-places/

Hundreds of Pacific Islands are getting bigger despite global warming

By Marian Faa, ABC Net.Au, Jan 8, 2021 [H/t Paul Homewood]

https://www.abc.net.au/news/2021-01-08/why-are-hundreds-of-pacific-islands-getting-bigger/13038430?mc_cid=24866edf09&mc_eid=4961da7cb1

Roger Pielke Jr Trashes Latest Junk Science On US Floods

By Paul Homewood, Not a Lot of People Know That, Jan 13, 2021

https://notalotofpeopleknowthat.wordpress.com/2021/01/13/roger-pielke-jr-trashes-latest-junk-science-on-us-floods/

Defending the Orthodoxy

'Star Wars without Darth Vader' – why the UN climate science story names no villains By Joe Lo, Climate Home News, Jan 12, 2021

'Star Wars without Darth Vader' - why the UN climate science story names no villains (climatechangenews.com)

"The next set of three IPCC assessment reports was originally due to be published in 2021, but work was delayed by the coronavirus pandemic. Governments and experts will have from 18 January to 14 March to read and comment on the draft for WG3. Dates for a final government review have yet to be set."

Human-induced climate change caused the northwestern Pacific warming record in August 2020

[&]quot;Coral reef sediment was responsible for the increase in land size

[&]quot;Waves sweep up the sediment and deposit it on islands

[&]quot;However, some islands are becoming smaller due to coastal erosion (10% of total)"

A once-in-1000-year warming event has been already altered to occur once per 15 years because of past human activities

By Staff, National Institute for Environmental Studies, (Japan) Jan 14, 2021 [H/t Bernie Kepshire] https://www.sciencedaily.com/releases/2021/01/210114085420.htm

Link to paper: The Northwestern Pacific Warming Record in August 2020 Occurred Under Anthropogenic Forcing

By Michiya Hayashi, et al. Geophysical Research Letters, Dec 11, 2020 https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2020GL090956

Analysis: The climate papers most featured in the media in 2020

By Robert McSweeney, Carbon Brief, Jan 13, 2021

Analysis: The climate papers most featured in the media in 2020 | Carbon Brief

"Journals most frequently appearing in the Top 25 climate papers:" 1) Nature; 2) Nature Climate Change 3, 4 & 5 tied) PNAS; Communications Earth & Environment; Science.

Ocean acidification is transforming California mussel shells

Press Release by University of California - San Diego, Jan 11, 2021 [H/t Bernie Kepshire] https://phys.org/news/2021-01-ocean-acidification-california-mussel-shells.html

Link to paper: Shell mineralogy of a foundational marine species, Mytilus californianus, over half a century in a changing ocean

By Elizabeth M. Bullard, PNAS, Jan 19, 2021

https://www.pnas.org/content/118/3/e2004769118

"crabs did not seem to be affected by changes in ocean acidity."??

Questioning the Orthodoxy

A new Pause?

By Christopher Monckton of Brenchley, WUWT, Jan 14, 2021 https://wattsupwiththat.com/2021/01/14/a-new-pause/

Scientists sav (3)

By John Robson, Climate Discussion Nexus, Jan 13, 2021

https://climatediscussionnexus.com/2021/01/13/scientists-say-3/

Link to announcement: Global Warming and Hurricanes

An Overview of Current Research Results

By Staff, GFDL - Geophysical Fluid Dynamics Laboratory, NOAA, Sep 23, 2020

https://www.gfdl.noaa.gov/global-warming-and-hurricanes/

Siberian Heatwave? The Summer Of 1917 Was Hotter!

By Paul Homewood, Not a Lot of People Know That, Jan 13, 2021

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2021/01/13/siberian-heatwave-the-summer-of-1917-was-hotter/}$

What Global Warming? 148 New (2020) Scientific Papers Affirm Recent Non-Warming, A Degrees-Warmer Past

By Kenneth Richard, No Tricks Zone, Jan 14, 2021

 $\frac{https://notrickszone.com/2021/01/14/what-global-warming-148-new-2020-scientific-papers-affirm-recent-non-warming-a-degrees-warmer-past/$

Link to one study: Combining Modern and Paleoceanographic Perspectives on Ocean Heat Uptake

By Geoffrey Gebbie, Department of Physical Oceanography, Woods Hole Oceanographic Institution, Annual Review of Marine Science, Jan 2021

https://www.annualreviews.org/doi/abs/10.1146/annurev-marine-010419-010844?journalCode=marine

Change in US Administrations

Biden's Damaging Climate Plans

By Ron Clutz, Science Matters, Jan 16, 2021

https://rclutz.wordpress.com/2021/01/16/bidens-damaging-climate-plans/

[SEPP Comment: Reality Check graph shows the effectiveness of UN climate policy achievements.]

John Kerry pressures Britain on COP26 climate summit

By Staff, The Sunday Times, Jan 10, 2021

https://www.thegwpf.com/john-kerry-pressures-britain-on-cop26-climate-summit/

Joe Biden's climate-change plans will burn billions, won't bring change we actually need

By Bjorn Lomborg, New York Post, Jan 15, 2021

https://nypost.com/2021/01/15/joe-bidens-climate-change-plans-will-burn-billions/

Trump's Actions Should Slow Biden's Radical Climate Agenda

By H. Sterling Burnett, American Thinker, Jan 14, 2021

Trump's Actions Should Slow Biden's Radical Climate Agenda - American Thinker

Problems in the Orthodoxy

African nations planning 1250 new coal and gas power plants, new study reveals

By Staff, GWPF & Power Engineering International, Jan 13, 2021

https://www.thegwpf.com/african-nations-planning-1250-new-coal-and-gas-power-plants-new-study-reveals/

Link to report: Fossil fuels to dominate Africa's energy mix this decade – report

By Staff, Power Engineering International, Jan 13, 2021

https://www.powerengineeringint.com/world-regions/africa/fossil-fuels-to-dominate-africas-energy-mix-this-decade-report/

Bristol Energy & Robin Hood Energy Go Tits Up!

By Paul Homewood, Not a Lot of People Know That, Jan 14, 2021

https://notalotofpeopleknowthat.wordpress.com/2021/01/14/bristol-energy-robin-hood-energy-gotits-up/

"We keep being told how cheap renewable energy is. Funny how Bristol and Nottingham City Councils lost a fortune trying to flog it!"

Seeking a Common Ground

New Study: Sea Level Rise Rates The Same Since 1958 As They Were For All Of 1900-2018 By Kenneth Richard, No Tricks Zone, Jan 11, 2021

 $\underline{\text{https://notrickszone.com/2021/01/11/new-study-sea-level-rise-rates-the-same-since-1958-as-they-were-for-all-of-1900-2018/}$

Links to papers: A Consistent Sea-Level Reconstruction and Its Budget on Basin and Global Scales over 1958–2014

By Thomas Frederikse, et al., Journal of Climate, Feb 1, 2018

https://journals.ametsoc.org/view/journals/clim/31/3/jcli-d-17-0502.1.xml

The causes of sea-level rise since 1900

By Thomas Frederikse, et al. Nature, Aug 19, 2020

https://www.nature.com/articles/s41586-020-2591-3

Review of Recent Scientific Articles by CO2 Science

The Impact of Ocean Acidification on the Behavioral Lateralization of Fish

Roche, D.G., Amcoff, M., Morgan, R., Sundin, J., Andreassen, A.H., Finnøen, M.H., Lawrence, M.J., Henderson, E., Norin, T., Speers-Roesch, B., Brown, C., Clark, T.D., Bshary, R., Leung, B., Jutfelt, F. and Binning, S.A. 2020. Behavioural lateralization in a detour test is not repeatable in fishes. *Animal Behaviour* 167: 55-64. Jan 15, 2021

http://www.co2science.org/articles/V24/jan/a6.php

"In light of all the above, Roche et al. conclude 'the detour test as it has traditionally been implemented does not provide accurate, precise or repeatable estimates of behavioral lateralization in fishes.' Consequently, they add, 'drawing inferences from nonrepeatable measurements (or studies) not only obfuscates our understanding of a species' evolutionary ecology but also risks misleading policy and conservation efforts.' Thus, the findings presented in all previous studies examining the relationship between ocean acidification and the behavioral lateralization of fishes using the detour test must be rejected until a more rigorous assessment is made."

CO2 Fertilization Effects on Global Leaf Area Index

Wang, M., Chen, J.M. and Wang, S. 2020. Reconstructing the seasonality and trend in global leaf area index during 2001-2017 for prognostic modeling. *Journal of Geophysical Research: Biogeosciences* 125, e2020JG005698. Jan 13, 2021 http://www.co2science.org/articles/V24/jan/a5.php

Cold-related Mortality Dwarfs Heat-related Mortality in Portugal

Rodrigues, M., Santana, P. and Rocha, A. 2020. Modelling climate change impacts on attributable-related deaths and demographic changes in the largest metropolitan area in Portugal: A time-series analysis. *Environmental Research* 190: 109998, doi.org/10.1016/j.envres.2020.109998. Jan 11, 2021 http://www.co2science.org/articles/V24/jan/a4.php

Measurement Issues -- Surface

May/Middleton: Rebuttal to Geological Society of London Scientific Statement on Climate Change

By David Middleton and Andy May, WUWT, Jan 13, 2021

https://wattsupwiththat.com/2021/01/13/may-middleton-rebuttal-to-geological-society-of-london-scientific-statement-on-climate-change/

GWPF global temperature competition: We have a winner

By Staff, GWPF, Jan 15, 2021

https://www.thegwpf.com/gwpf-global-temperature-competition-we-have-a-winner/

The GWPF 2021 Temperature Prediction Competition

By Staff, GWPF, Jan 15, 2021

https://www.thegwpf.com/the-gwpf-2021-temperature-prediction-competition/

Changing Weather

Climate Change Is Not to Blame for Rising Natural Disaster Costs

By H. Sterling Burnett, The Heartland Institute, Jan 14, 2021

 $\underline{https://www.heartland.org/news-opinion/news/climate-change-is-not-to-blame-for-rising-natural-disaster-costs}$

Oh no, no snow

By John Robson, Climate Discussion Nexus, Jan 13, 2021 https://climatediscussionnexus.com/2021/01/13/oh-no-no-snow/

Changing Climate

Arctic Temps Show Little Change Over Past 90 Years, In Sync With Oceanic Surface Temperature Cycles

By P Gosselin, Klimaschau video, Via No Tricks Zone, Jan 13, 2021

https://notrickszone.com/2021/01/13/arctic-temps-show-little-change-over-past-90-years-in-syncwith-oceanic-surface-temperature-cycles/

Otzi the sauna man

By John Robson, Climate Discussion Nexus, Jan 13, 2021 https://climatediscussionnexus.com/2021/01/13/otzi-the-sauna-man/

The Medieval cold inferno

By John Robson, Climate Discussion Nexus, Jan 13, 2021 https://climatediscussionnexus.com/2021/01/13/the-medieval-cold-inferno/

Will warming bring a change in the winds? Dust from the deep sea provides a clue

Westerlies moved poleward in the past, as they are doing now

News Release, NSF, Jan 12, 2021

https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=301919&WT.mc_id=USNSF_1

Link to article: Poleward and weakened westerlies during Pliocene warmth

By Jordan T. Abell, Nature, Jan 6, 2021

https://www.nature.com/articles/s41586-020-03062-1

"If the Pliocene is predictive of future warming, we posit that continued poleward movement and weakening of the present-day westerlies in both hemispheres can be expected."

[SEPP Comment: The Pliocene Epoch ended about 2.6 million years ago when the current ice age began with periods of glaciation interrupted by brief warm periods.]

Changing Seas

Betting Against Collapsing Ocean Ecosystems

By Jim Steele, Landscapes and Cycles, Jan 13, 2021

http://landscapesandcycles.net/betting-against-collapsing-ocean-ecosystems.html

Link to a key study: Marine Primary Production in Relation to Climate Variability and Change By Francisco P. Chavez, Monique Messie, and J. Timothy Pennington Monterey Bay Aquarium Research Institute, Oct 27, 2010

https://hahana.soest.hawaii.edu/cmoreserver/summercourse/2011/documents/cullen_06-29-11/Chavez et al 2011 Ann Rev.pdf

Changing resilience of oceans to climate change

News Release, University of Exeter, Jan 15, 2021 [H/t Bernie Kepshire]

https://www.sciencedaily.com/releases/2021/01/210115091351.htm

Link to paper: Upper limits on the extent of seafloor anoxia during the PETM from uranium isotopes

By Matthew O. Clarkson, et al. Nature Communications, Jan 15, 2021

https://www.nature.com/articles/s41467-020-20486-5

"Oxygen levels in the ancient oceans were surprisingly resilient to climate change, new research suggests."

New analysis highlights importance of groundwater discharge into oceans

A global assessment of the impact of groundwater on ocean chemistry is important for understanding the weathering of rocks and its effects on climate

News Release, UC Santa Cruz, Jan 8, 2021 [H/t WUWT]

https://news.ucsc.edu/2021/01/groundwater-discharge.html

Link to paper: Groundwater discharge impacts marine isotope budgets of Li, Mg, Ca, Sr, and Ba By Kimberley K. Mayfield, et al. Nature Communications, Jan 8, 2021

https://www.nature.com/articles/s41467-020-20248-3

Changing Cryosphere – Land / Sea Ice

Greenland melting likely increased by bacteria in sediment

News Release by Rutgers University, Jan 14, 2021 [H/t Bernie Kepshire]

https://phys.org/news/2021-01-greenland-bacteria-sediment.html

Link to paper: The Presence and Widespread Distribution of Dark Sediment in Greenland Ice Sheet Supraglacial Streams Implies Substantial Impact of Microbial Communities on Sediment Deposition and Albedo

By Sasha Z. Leidman, et al. Geophysical Research Letters, Dec 6, 2020 https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2020GL088444

The CO2 Kink: Firn to Ice Transition

By Renee Hannon, WUWT, Jan 15, 2021

https://wattsupwiththat.com/2021/01/15/the-co2-kink-firn-to-ice-transition/

Changing Earth

Geoscientists develop new approach to understanding massive volcanic eruptions

First-of-its kind tool to understand past eruptions and improve future hazard estimates News Release, NSF, Jan 12, 2021

 $\underline{https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=301916\&WT.mc_id=USNSF_1}$

The radius of the umbrella cloud helps characterize large explosive volcanic eruptions By Robert Constantinescu, et al. Communications Earth & Environment, Jan 4, 2021 https://www.nature.com/articles/s43247-020-00078-3

Agriculture Issues & Fear of Famine

EU Approves Climate Friendly Mealworms

By Eric Worrall, WUWT, Jan 14, 2021

https://wattsupwiththat.com/2021/01/14/eu-approves-climate-friendly-mealworms/

Communicating Better to the Public – Use Yellow (Green) Journalism?

"Arctic Not Freezing"

By Tony Heller, His Blog, Jan 13, 2021

https://realclimatescience.com/2021/01/arctic-not-freezing/

Communicating Better to the Public - Make things up.

Earth to reach temperature tipping point in next 20 to 30 years, new study finds

New Release by Northern Arizona University, Jan 13, 2021 [H/t Bernie Kepshire]

https://phys.org/news/2021-01-earth-temperature-years.html

Link to article: How close are we to the temperature tipping point of the terrestrial biosphere?

By Katharyn A. Duffy, et al. AAAS Science Advances, Jan 3, 2021

https://advances.sciencemag.org/content/7/3/eaay1052

[SEPP Comment: Thanks to twenty-five years of political censorship, AAAS Science Advances in retrograde (moving backwards).]

Global population hit by extreme drought set to double

By Marlowe Hood, Paris (AFP), Jan 12, 2021

https://www.terradaily.com/reports/Global_population_hit_by_extreme_drought_set_to_double_9 99.html

New Video: The Arctic Clown Show Continues

By Tony Heller, His Blog, Jan 14, 2021

https://realclimatescience.com/2021/01/new-video-he-arctic-clown-show-continues/

Video, Siberia burning then, and now; and a 1927 report

Nares Strait Ice Arches

By Paul Homewood, Not a Lot of People Know That, Jan 12, 2021

https://notalotofpeopleknowthat.wordpress.com/2021/01/12/nares-strait-ice-arches/

Record Atlantic Hurricane Season?

By Paul Homewood, Not a Lot of People Know That, Jan 15, 2021

https://notalotofpeopleknowthat.wordpress.com/2021/01/15/record-atlantic-hurricane-season/

Communicating Better to the Public – Do a Poll?

MITCHELL: Do 97% of the world's scientists believe that man has caused global warming? By Guy Mitchell, North State Journal, Jan 14, 2021 (North Carolina) [H/t William Readdy]

MITCHELL: Do 97% of the world's scientists believe that man has caused global warming? — The North State Journal (nsjonline.com)

Communicating Better to the Public – Use Propaganda

Climate alarmism has become a growth industry and the pandemic is making things worse, fueling fears of human extinction

By Frank Furedi, RT, Jan 13, 2021 [H/t Bernie Kepshire]

https://www.rt.com/op-ed/512392-climate-alarmism-industry-pandemic/

Communicating Better to the Public – Use Propaganda on Children

If this is victory

By John Robson, Climate Discussion Nexus, Jan 13, 2021

https://climatediscussionnexus.com/2021/01/13/if-this-is-victory/

Communicating Better to the Public – Use Children for Propaganda

Climate change could have a 'profound' negative impact on child malnourishment

By Ayesha Tandon, Carbon Brief, Jan 14, 2021

Climate change could have a 'profound' negative impact on child malnourishment | Carbon Brief Link to paper: Climate impacts associated with reduced diet diversity in children across nineteen countries

By Meredith T Niles, et al. Environmental Research Letters, Jan 14, 2021

<u>Climate impacts associated with reduced diet diversity in children across nineteen countries -</u> IOPscience

Expanding the Orthodoxy

Two-thirds of Earth's land is on pace to lose water as the climate warms

By Yadu Pokhrel, The Conversation, Via Phys.org, Jan 12, 2021 [H/t Bernie Kepshire] https://phys.org/news/2021-01-two-thirds-earth-pace-climate.html

Link to paper: Global terrestrial water storage and drought severity under climate change By Yadu Pokhrel, Nature Climae Change, Jan 11, 2021 https://www.nature.com/articles/s41558-020-00972-w

Questioning European Green

Dominic Lawson: The rush to 'Net Zero' will most harm those Boris Johnson pledged to prioritise

By Dominic Lawson, The Sunday Times, Jan 10, 2021

https://www.thegwpf.com/dominic-lawson-the-rush-to-net-zero-will-most-harm-those-boris-johnson-pledged-to-prioritise/

Questioning Green Elsewhere

EU's Carbon Border Taxes and Joe Biden's Clean Energy plans: A double threat for developing countries

By Vijay Raj, India, Via GWPF, Jan 14, 2021

https://www.thegwpf.com/eus-carbon-border-taxes-and-joe-bidens-clean-energy-plans-a-double-threat-for-developing-countries/

"Speaking at an event this week, India's Home Minister Amit Shah said, 'the coal sector will be the largest contributor to India's ambition of being a \$5 trillion economy.' He added that State run and private firms will invest around Rs 4 trillion in India's coal sector."

Study: Africa's Green Energy Transition "Unlikely"

By Eric Worrall, WUWT, Jan 12, 2021

https://wattsupwiththat.com/2021/01/12/study-africas-green-energy-transition-unlikely/

Non-Green Jobs

Will the Next Labor Secretary Support Job-Killing Climate Measures?

By Ben Lieberman, CEI, Jan 11, 2021

Will the Next Labor Secretary Support Job-Killing Climate Measures? - Competitive Enterprise Institute (cei.org)

Will the green economy trigger the next crash?

By Bill Blain, CAPX, Jan 14, 2021

https://capx.co/will-the-green-economy-trigger-the-next-crash/

Funding Issues

Deutsche Bank: EU Green Deal can only succeed with "a certain degree of eco-dictatorship" By Staff, GWPF & Deutsche Bank Research, Jan 10, 2021

https://www.thegwpf.com/deutsche-bank-eu-green-deal-can-only-succeed-with-a-certain-degree-of-eco-dictatorship/

Link to analysis: What We Must Do to Rebuild

By Staff, Deutsche Bank Research, November 2020

https://www.dbresearch.com/PROD/RPS EN-

PROD/PROD00000000513730/Konzept %23_19%3A_What_we_must_do_to_rebuild.PDF?u_ndefined&realload=g42tTKiMMpQdb~M0UEtpO2MgoOug~rL3ayK3qP9ES6RM1lSBYTN3Gq_CVcmdHbIScXYRuyqC9DbnXgcjWnrJDOw==

See pp 70-73 of the analysis

Climate Risk and Financial Stability

The spurious case for regulators greening the financial system.

By Rupert Darwall, Real Clear Energy, Jan 11, 2021

https://www.realclearenergy.org/articles/2021/01/11/climate_risk_and_financial_stability_656109.

End discrimination in bank lending

Containing access to capital for politically unpopular businesses distorts markets and disenfranchises voters.

By Benjamin Zycher, AEI, Jan 7, 2021

End discrimination in bank lending | American Enterprise Institute - AEI

Litigation Issues

Corrupted climate litigation industry comes to SCOTUS

Supreme Court will decide whether government donors, ideologues and the trial bar should prevail

By Chris Horner, Washington Times, Jan 2, 2021

Corrupted climate litigation industry comes to SCOTUS - Washington Times

Groups accuse France of climate inaction, take case to court

By Associated Press, Via Washington Post, Jan 14, 2021

https://www.washingtonpost.com/world/europe/ngos-accuse-france-of-climate-inaction-bring-case-to-court/2021/01/14/058a3afa-5675-11eb-acc5-92d2819a1ccb_story.html

Supreme Court ruling could doom climate lawsuits

By Staff, E & E News, Via GWPF, Jan 15, 2021

https://www.thegwpf.com/supreme-court-ruling-could-doom-climate-lawsuits/

Utah is suing a California city over its coal ban

Attorney general argues local law violates Constitution and could cost Utah jobs.

By Brian Maffly The Salt Lake Tribune, Jan 11, 2021

https://www.sltrib.com/news/environment/2021/01/11/utah-is-suing-california/

Subsidies and Mandates Forever

Coronavirus/Omnibus Law Contains Major Climate and Energy Provisions

By H. Sterling Burnett, Heartland Daily News, Jan 14, 2021

Coronavirus/Omnibus Law Contains Major Climate and Energy Provisions - Heartland Daily News

EPA and other Regulators on the March

EPA Finalizes Pollutant-Specific Significant Contribution Finding for Greenhouse Gas Emissions from New, Modified, and Reconstructed Electric Utility Generating Units

News Release, EPA, Jan 12, 2021 [H/t Cooler Heads]

EPA Finalizes Pollutant-Specific Significant Contribution Finding for Greenhouse Gas Emissions from New, Modified, and Reconstructed Electric Utility Generating Units | U.S. EPA News Releases | US EPA

Energy Issues – Non-US

Does China Pose a Threat to Global Rare Earth Supply Chains?

By Staff, China Power, Accessed Jan 14, 2021 [H/t GWPF] https://chinapower.csis.org/china-rare-earths/

Wot? No Gas?

By Paul Homewood, Not a Lot of People Know That, Jan 10, 2021 https://notalotofpeopleknowthat.wordpress.com/2021/01/10/wot-no-gas/

Energy Issues -- US

Buying a House Without Plumbing

By Donn Ears, Power For USA, Jan 15, 2021

https://ddears.com/2021/01/15/buying-a-house-without-plumbing/

Coronavirus causes largest US greenhouse gas emissions drop since second war two: report

By Valerie Volcovici, Reuters, Jan 12, 2021

Coronavirus causes largest U.S. greenhouse gas emissions drop since World War Two: report | Reuters

First lockdown's effect on air pollution was overstated, our study reveals

By Charles Rotter, WUWT, Jan 13, 2021

 $\frac{https://wattsupwiththat.com/2021/01/13/first-lockdowns-effect-on-air-pollution-was-overstated-our-study-reveals/}{}$

See link immediately above.

Oil and Natural Gas – the Future or the Past?

The World's Next Giant Oil Discovery Could Be Here

Editor. Oil Price.com, Jan 11, 2021

https://finance.yahoo.com/news/world-next-giant-oil-discovery-000000980.html

COVID P&D: The Visible Hand of Oil and Gas

By Robert Bradley Jr. Master Resource, Jan 14, 2021

https://www.masterresource.org/covid-energy/covid-oil-gas/

Return of King Coal?

India Sees \$55 Billion Investment in Clean Coal Over Next Decade

By Paul Homewood, Not a Lot of People Know That, Jan 14, 2021

https://notalotofpeopleknowthat.wordpress.com/2021/01/14/india-sees-55-billion-investment-in-clean-coal-over-next-decade/

[&]quot;according to a report released Tuesday by the Rhodium Group."

Nuclear Energy and Fears

UK's Net Zero agenda in trouble as Hitachi pulls plug on nuclear power plant

By Staff, The Sunday Times, Via GWPF, Jan 11, 2012

https://www.thegwpf.com/uks-net-zero-agenda-in-trouble-as-hitachi-pulls-plug-on-nuclear-power-plant/

Alternative, Green ("Clean") Solar and Wind

The energy answer is not blowin' in the wind-Dominic Lawson

By Paul Homewood, Not a Lot of People Know That, Jan 11, 2021

https://notalotofpeopleknowthat.wordpress.com/2021/01/11/the-energy-answer-is-not-blowin-in-the-wind-dominic-lawson/

Europe's Near Electricity Black Friday Was Triggered In France Due To "Polar Cold Wave"

By P Gosselin, No Tricks Zone, Jan 12, 2021

https://notrickszone.com/2021/01/12/europes-near-electricity-black-friday-was-triggered-in-france-due-to-polar-cold-wave/

Alternative, Green ("Clean") Energy -- Other

'Carbon-neutrality is a fairy tale': how the race for renewables is burning Europe's forests

Wood pellets are sold as a clean alternative to coal. But is the subsidised bioenergy boom accelerating the climate crisis?

By Hazel Sheffield, The Guardian, Jan 14, 2021 [H/t Bernie Kepshire]

https://www.theguardian.com/world/2021/jan/14/carbon-neutrality-is-a-fairy-tale-how-the-race-for-renewables-is-burning-europes-forests

How To Handle 40 GW Offshore Wind (Or Not!)-Drax

By Paul Homewood, Not a Lot of People Know That, Jan 9, 2021

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2021/01/09/how-to-handle-40-gw-offshore-wind-or-not-drax/}$

Link to report: Drax Electric Insights

By Iain Staffell, et al. Imperial College London, July to September 2020

https://reports.electricinsights.co.uk/wp-content/uploads/2020/11/201126 Drax 20Q3 005-1.pdf

Alternative, Green ("Clean") Energy -- Storage

Total Grabs U.S. Solar and Storage, Joins Bid for Offshore Wind

By Darrell Proctor, Power Mag, Jan 14, 2021

https://www.powermag.com/total-grabs-u-s-solar-and-storage-joins-bid-for-offshore-wind/

Vistra Energizes Massive 1.2-GWh Battery System at California Gas Plant

By Sonal Patel, Power Mag, Jan 14, 2021

https://www.powermag.com/vistra-energizes-massive-1-2-gwh-battery-system-at-california-gas-plant/?oly enc id=7809H6412578J0B

Carbon Schemes

An innovative coal project

Editorial, Pittsburgh Post-Gazette, Jan 12, 2021

https://www.post-gazette.com/opinion/editorials/2021/01/12/An-innovative-coal-project-Pittsburgh-Consol-Energy/stories/202011260125

NET Power CEO Announces Four New Zero-Emission Gas Plants Underway

By Jeff McMahon, Forbes, Jan 8, 2021

https://www.forbes.com/sites/jeffmcmahon/2021/01/08/net-power-ceo-announces-four-new-zero-emission-gas-plants-underway/?sh=18b27077175b

"NET Power is a software company that licenses its technology instead of building plants itself.

"While its natural gas plants are proliferating, the company is focusing on transforming its LaPorte, Texas demonstration plant to run on renewable syngas."

California Dreaming

Impacts of climate change on our water and energy systems: it's complicated

A team of researchers from Berkeley Lab, UC Berkeley, and UC Santa Barbara propose a framework for evaluating climate change adaptations, provide a case study of California News Release, DOE/Lawrence Berkeley National Laboratory, Jan 11, 2021 [H/t WUWT] https://www.eurekalert.org/pub releases/2021-01/dbnl-ioc010821.php

Link to paper: Evaluating cross-sectoral impacts of climate change and adaptations on the energy-water nexus: a framework and California case study

By Julia K Szinai, et al. Environmental Research Letters, Dec 16, 2020 https://iopscience.iop.org/article/10.1088/1748-9326/abc378

Oh Mann!

RS Interview: Climate Scientist Michael Mann

Michael Mann talks with Jeff Goodell about his forthcoming book, "The New Climate War," what he's learned from the pandemic, and the future of climate politics

By Jeff Goodell, Rolling Stone, Jan 8, 2021

https://www.rollingstone.com/politics/politics-features/michael-mann-the-new-climate-war-book-1110937/

"If there's ever a Hall of Fame for climate scientists, Michael Mann will be among the first to be inducted."

Other Scientific News

Leaf fossils show severe end-Cretaceous plant extinction in Patagonia

Surprising species-level extinction millions of years ago may have reached as high as 92% Research News, NSF, Jan 11, 2021

https://www.nsf.gov/discoveries/disc summ.jsp?cntn id=301908&WT.mc id=USNSF 1

Link to paper: Cretaceous—Paleogene plant extinction and recovery in Patagonia

By Elena Stiles, et al. Paleobiology, Oct 8, 2020

https://www.cambridge.org/core/journals/paleobiology/article/cretaceouspaleogene-plant-extinction-and-recovery-in-patagonia/94645848E3BE16AC818320248C725734

Other News that May Be of Interest

Bio-Britain is leading the world in the science of Covid

By Matt Ridley, Rational Optimist, Jan 10, 2021

http://www.rationaloptimist.com/blog/britain-leading-the-world-in-covid-science/

The Eukaryotic Nucleus May Derive from a Giant Virus

By John Tillman, WUWT, Jan 15, 2021

https://wattsupwiththat.com/2021/01/15/the-eukarvotic-nucleus-may-derive-from-a-giant-virus/

BELOW THE BOTTOM LINE

How To Generate Electricity From Air!

By Paul Homewood, Not a Lot of People Know That, Jan 11, 2021 https://notalotofpeopleknowthat.wordpress.com/2021/01/11/how-to-generate-electricity-from-air/

As Snow Blankets Europe, EnBW Power Company Builds Giant Solar Panel Farm In Germany

By P Gosselin, No Tricks Zone, Jan 15, 2021

https://notrickszone.com/2021/01/15/as-snow-blankets-europe-enbw-power-company-builds-giant-solar-panel-farm-in-germany/

"Concerning where all the power will come from during windless, cloudy periods in the dead of winter, no details are given."

Top scientists warn of 'ghastly future of mass extinction' and climate disruption

Sobering new report says world is failing to grasp the extent of threats posed by biodiversity loss and the climate crisis

By Phoebe Weston, The Guardian, Jan 13, 2021

https://www.theguardian.com/environment/2021/jan/13/top-scientists-warn-of-ghastly-future-of-mass-extinction-and-climate-disruption-aoe

"Environmental deterioration is infinitely more threatening to civilisation than Trumpism or Covid-19," [Paul] Ehrlich told the Guardian.

U.N. Predicts Disaster if Global Warming Not Checked

By Peter James Spielmann, AP, June 29, **1989** [H/t Jonathon Moseley] https://apnews.com/article/bd45c372caf118ec99964ea547880cd0

ARTICLES

1. 2020 Ties for Hottest Year on Record, NASA Says

Despite cooling ocean currents and a drop in greenhouse gas emissions, global temperatures last year were a dead heat with those recorded in 2016

By Robert Lee Hotz, WSJ, Jan 14, 2021

https://www.wsj.com/articles/2020-ties-for-hottest-year-on-record-nasa-says-11610640022?mod=hp_lead_pos11

TWTW Summary: The article begins:

"Rising temperatures last year capped the world's warmest decade in modern times, federal climate scientists said Thursday.

"In a new climate study, the National Aeronautics and Space Administration ranked 2020 in a dead heat with 2016 as the warmest year since official record-keeping began in 1880. The record-tying warmth came despite a cooling La Niña Pacific Ocean current, which tamped down global temperatures slightly in December.

"In a separate assessment released at the same time, the National Oceanic and Atmospheric Administration, which relies on slightly different temperature records and methods, calculated that the globally averaged temperature last year was the second highest to date—just 0.04 degrees Fahrenheit shy of tying the record set in 2016."

As explained in This Week, above, there is no possible way that NOAA and NASA can have records of precision of just 0.04 F dating to 1880.

2. Biden's First Fracking Test

Will he allow a proposed port for LNG to go through as planned? Editorial, WSJ, Jan 10, 2021 https://www.wsj.com/articles/bidens-first-fracking-test-11610319182?mod=hp opin pos 2

TWTW Summary: The article starts:

"Joe Biden promised at the end of the election campaign that he wouldn't ban fracking for oil and natural gas. He'd merely forbid new oil and gas permits on federal land and waters. Pennsylvania voters who have benefited from a fracking boom may soon find out whether he meant it.

"Progressives are calling on the Biden Administration to kill plans long underway for a port on the New Jersey side of the Delaware River in Gibbstown. The project is designed to allow natural gas extracted from the Marcellus Shale to be liquified and then transported by train to the port where it will be exported, mostly to the Caribbean.

"Groups such as the Delaware Riverkeeper Network oppose the plans because they oppose all fossil fuels and any effort to make them more economical. So far they haven't had much traction. The Army Corps of Engineers has approved the port, and in December the Delaware River Basin Commission gave its okay. Opponents now hope to get the Federal Energy Regulatory Commission to block it."

The article then speculates on other possibilities to block the port to export US natural gas, once considered a resource about to be exhausted in the US by about the year 2000.