

The Week That Was: 2018-09-15 (September 15, 2018)

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The Science and Environmental Policy Project

Quote of the Week: *“It doesn't matter how beautiful your theory is, it doesn't matter how smart you are. If it doesn't agree with experiment, it's wrong.”* — Richard P. Feynman

Number of the Week: \$5.20 and \$6.50 per million BTUs

THIS WEEK:

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

An Experiment – Testing the Core Hypothesis of Climate Models: The reports of the UN Intergovernmental Panel on Climate Change (IPCC) contain a morass of hypotheses, guesses, that are often untested. All too often the IPCC leadership dismisses challenges as meaningless or of little importance. For example, when the Fourth Assessment Report (AR4, 2007) declared that the glaciers of the Himalayan Mountains would melt by 2035, the government of India challenged this assertion. It was brushed aside.

Then the government of India hired geologist Vijay Kumar Raina, a glacial expert, who reported some glaciers are advancing, others are retreating, and nothing is out of the ordinary. According to reports, this glaring fault was also brushed aside:

“Jean-Pascal van Ypersele, vice-chair of the IPCC, added that the mistake did nothing to undermine the large body of evidence that showed the climate was warming and that human activity was largely to blame. He told BBC News: ‘I don't see how one mistake in a 3,000-page report can damage the credibility of the overall report.’” [The Guardian, Jan 20, 2010]

<https://www.theguardian.com/environment/2010/jan/20/ipcc-himalayan-glaciers-mistake>

Similarly, the IPCC uses multiple Global Climate Models (GCM) with countless assumptions and hypotheses. Criticizing any particular model, or hypothesis, produces the response of “So What?”

Ross McKittrick, Department of Economics and Finance, University of Guelph, and John Christy, Earth System Science Center, University of Alabama in Huntsville, have undertaken to identify a core hypothesis common to the climate models used by the IPCC and to test the hypothesis against the longest data set available that describes what is actually occurring. Along with Steve McIntyre, McKittrick found that the statistical techniques used by Mr. Mann, et al. in their “hockey-stick” produced such a shape from random noise. Along with Roy Spencer, Christy found a method for calculating temperature trends in the atmosphere from data collected by satellite, the most comprehensive almost global temperature trends existing.

In weeding through the countless hypotheses to identify one common, major testable hypothesis, McKittrick and Christy used four criteria (conditions): measurability, specificity, independence and uniqueness

The condition for measurability requires that a prediction must refer to a target that is well-measured over a longtime span.

The condition for specificity requires “*large, well-measured atmospheric regions where GCMs predict, more or less in unison, not only specific magnitudes of change, but also on a specific (and reasonably rapid) time scale.*”

The condition for independence requires that “*once a model has been tuned to match a target [data], its reproduction of the target is no longer a test of its validity. In the case of GCMs, this rules out using the global average surface temperature record for testing, since during development models are often adjusted to broadly match its evolution over time.*” This is a major problem with most GCM because they are tuned to surface data, not atmospheric data where the greenhouse gas effect occurs.

If one tunes a model to a particular set of data, then one cannot test the validity of the model with that set of data. This eliminates using surface temperature data to test the validity of most climate models.

The condition for uniqueness requires the elimination other factors, to the maximum extent possible. “*Ideally, then, we look for a prediction uniquely tied to the underlying causal mechanism of interest.*”

They found: “*Air temperature in the 200-300 hPa layer of the tropical troposphere meets all four test conditions, pretty much uniquely in the climate system as far as we are aware.*” The 1979 Charney report and all five IPCC reports indicate that any CO₂-caused warming will be amplified by an increase in water vapor, primarily over the tropics. [Using a standard altitude to pressure conversion table, the 200-300 hPa layer is approximately 30,000 feet (9100 m) to just under 40,000 feet (12,200 m) above sea level.

<https://www.sensorone.com/altitude-pressure-units-conversion/>]

This atmospheric layer has four advantages for testing the hypothesis:

“*First, homogenized measurements from more than one independent source are available over a 60-year span from 1958 to 2017. This is twice the length of the customary 30-year interval usually thought to be necessary for identifying a climatological phenomenon and more than enough compared to the response time scale in GCMs. The time span encompasses several major volcanoes and strong El Niño events, and the Pacific Climate Shift of the late 1970s, but is long enough to allow distinct identification of an underlying smooth trend, if one exists.*”

The Pacific Climate Shift may be connected to the Pacific Decadal Oscillation (PDO). This shift produced a warming in the late 1970s that stopped the alarm of global cooling and an oncoming ice age. At the time, the sudden increase in temperatures was not understood. The PDO has been traced back for centuries.

“*Second, as was noted in the 2007 Fourth IPCC Assessment report (Meehl et al. 2007, Ch. 10), GCMs unanimously project that warming will reach a global maximum in the tropics near the 200-300 hPa layer; due to the so-called negative lapse rate feedback (NAS 2003), and that the warming will occur rapidly in response to increased greenhouse forcing.*”

“*Third, by focusing on the 200-300 hPa layer we avoid contaminating the test by searching for a signal to which the models were already tuned. The surface temperature record is ruled out for this reason, but satellite-based lower-and mid-troposphere composites are also somewhat*

contaminated since they include the near-surface layer in their weighting functions. Radiosonde samples measure each layer of the atmosphere independently, not simply as a gradient against the surface.”

“Fourth, simulations in the IPCC AR4 Chapter 9 (Hegerl et al. 2007) indicate that, within the framework of mainstream GCMs, greenhouse forcing provides the only explanation for a strong warming trend in the target region. AR4 Figure 9.1 illustrates 20th century climatic reconstructions applying one-at-a-time individual forcings from observed solar, volcanic, GHG, stratospheric ozone and sulphate aerosol changes.”

Using three different 60-year sets of weather balloon records, they test the warming demonstrated in the models against observations. They find:

“The mean restricted trend (without a break term) is 0.325 +/- 0.132°C/decade in the models and 0.173 +/- 0.056°C/decade in the observations. With a break term included they are 0.389°C/decade (models) and 0.142 +/- 0.115°C/decade (observed). Figure 4 shows the individual trend magnitudes.” The break-term is the adjustment for the PCS. During the 60 years covered, the CO2 concentration at Mauna Loa went up 29%.

As McKittrick’s states in his post, this finding shows that *“models misrepresent a process fundamental to their usability for studying the climate impacts of greenhouse gases.”* That is, the models show warming trends that are significantly greater than the observed warming – about 2.7 times the observed trend for the data sets that include the PCS (PDO).

The warming bias in the models should be unacceptable for any prudent government agency, including the EPA which relies on the GCMs for its finding that CO2 endangers public health and welfare. Probably there is little that can be done about the UN IPCC. It is in a world of its own. But any US government agency that uses such models to establish policy should be viewed with great skepticism. See links under Challenging the Orthodoxy.

The Jason Model: Last week’s TWTW mentioned a 1979 report on global warming by JASON, a group of independent scientists who advise the government. TWTW had not been able to find the report. Reader Gary Pavcek promptly sent TWTW an April 1979 Technical Report JASON, “The Long-Term Impact of Atmospheric Carbon Dioxide on Climate.” It had been retrieved from Google records.

The report was prepared for the Department of Energy and stated that “neither the ocean-atmosphere nor the atmosphere-biosphere interfaces are well understood.” They are still not well understood, underlying the importance of the McKittrick-Christy test which pertains only to a layer of the atmosphere, which should not be greatly influenced by these interfaces nor by human land use change, such as urbanization.

The report states: *“The JASON climate model suffers from a number of fundamental weaknesses. The role of clouds in determining the albedo is not adequately taken into account nor are the asymmetries between the northern and southern hemisphere.”* Both these issues remain in GCMs today.

It discusses two models, one being a gray atmosphere model, meaning that greenhouse gases reduce the transparency of the atmosphere to outgoing infrared radiation. The paper states: *“The*

gray atmosphere model predicts an increase of average surface temperature of 2.8°K for a doubling of CO₂, a result about a degree less than the nine-band model. In the model the principal effect of increasing CO₂ is to enhance the absorption by weak CO₂ bands in the 8-12-micron region.”

TWTW could find no empirical justification for increasing the absorption ability of these weak CO₂ bands. Certainly, when the neighboring bands become saturated, there may be some spillover effect, there is no logical reason to assume that the absorption ability of CO₂ would greatly increase above what is indicated by laboratory experiments.

Unlike the models used in the Charney report, the Jason climate model did not assume an increase in water vapor and had the extreme warming occurring in the polar regions not the equatorial region. Since 1979, the atmosphere above the North Pole has been warming, but not the atmosphere above the South Pole.

The Department of Energy has a new climate model. A quick review of the web site revealed that the new model includes issues on the optical depth of aerosols. Optical depth is a term-of-art applying to the transparency of gases to radiant energy. However, a quick review did not reveal any further research on the change in optical depth of CO₂, which is assumed to change in the Jason Model. TWTW will search further. See links under Defending the Orthodoxy.

Will Happer Debate: Writing in WUWT, Andy May discussed a “Great Debate” series between Dr. David Karoly and Dr. William Happer. The debate was conducted in writing. Karoly is a “climate scientist who has been heavily involved in several IPCC reports and first described the famous ‘atmospheric fingerprint’ (cooling in the stratosphere and warming in the troposphere) that shows rising greenhouse gas concentrations have an impact on recent surface warming.” [This is different than the Santer “human fingerprint.”] Will Happer was discussed in last week’s TWTW.

The first part presented arguments regarding how unusual recent global warming is and how we know the recent observed increase in CO₂ is due to human activities. In the second part they presented their thoughts on the amount of warming caused by greenhouse gas emissions and the accuracy of the calculations. The third part, they address dangers of global warming, the calculation of the value of ECS (the equilibrium climate sensitivity to a doubling of CO₂), and the need to do something about climate change.

The fourth part is a summary prepared by Andy May. Unfortunately, Karoly dropped out, and responses to Happer’s comments were handled by Glenn Tamblyn, a blogger for the web site skeptical science, which accepts the IPCC view and became dogmatic. See links under Seeking a Common Ground.

AGs for Sale or Rent? CEI professional Chris Horner has uncovered a disturbing trend in the offices of some state attorneys general. Environmental groups are hiring attorneys to work in the offices of these state attorneys general under the disguise that they are “pro bono” volunteers. Depending on the laws of the state, this may or may not be legal. But it is doubtful that a state attorney general will press charges against his own office.

When his term of office expired, Virginia Governor Bob McDonnell was immediately arrested on federal corruption charges for receiving improper gifts and loans from a Virginia businessman. He

was tried and convicted. It took two years, but his conviction was unanimously vacated by the US Supreme Court. It found there was no crime – no quid pro quo – no evidence that an “official act” was made in exchange for favors. Simply setting up meetings was not sufficient. What McDonnell did may have been distasteful, but not criminal.

The actions of the AGs in accepting “volunteers” paid by third parties into their offices may be just distasteful. But if these volunteers are involved in “official acts” it may become criminal. Note: Ken Haapala knows attorney Chris Horner who was very persistent in uncovering fictitious EPA employees used to disguise messages from past EPA administrators. See links under Expanding the Orthodoxy.

End of Ice Ages and Other Solar Issues: Writing in Climate Etc., physicist Donald Rapp explores what may be a condition needed to end Ice Ages. The Milankovitch cycle is widely accepted for explaining the formation and ending of ice ages in the current Quaternary Period (starting about 2.5 million years ago). However, the theory does not explain why in only a few occasions does an increasing in solar intensity result in a termination of an Ice Age. In many occasions it does not. A sharp increase in “solar intensity might be necessary for a termination, but it is certainly not sufficient.”

Some researchers have advanced the concept that dust accumulation on the ice sheets in conjunction to the increase in solar intensity are important. Using basic calculus Rapp advances this position.

Writing in the Global Warming Policy Forum, David Whitehouse explores the relationship between the Maunder Minimum and the Little Ice Age. It is not straight forward and there may be a number of relationships that are not understood. The complexity of solar influence in the Northern Hemisphere may involve much more than what is generally discussed. See links under Science: Is the Sun Rising?

Hurricane Florence: Upon reaching the East Coast at the Carolinas, Hurricane Florence stalled, and its winds abated. This is very fortunate in terms of destruction from high wind, but unfortunate in terms of flooding. Such storms show we still need a better capability in predicting severe storms, and their intensity. Of course, the storm was accompanied with the usual babble that it was an example of CO2-caused global warming.

As a side note, Anthony Watts posted an amusing video clip of a reporter struggling against the storm, as two people in the background strolled by. See links under Changing Weather and Below the Bottom Line.

Number of the Week: \$5.20 and \$6. 50 per million BTU. TWTW has seen numerous estimates of the cost of shipping liquified natural gas (LNG) from the Gulf Coast to Europe and Asia. Based on assumptions made in preparing the Natural Gas Market Model for the Annual Energy Outlook, 2018, the US energy Information Administration estimates the cost of shipping from Sabine Pass, Louisiana to Europe is \$5.20 per million BTUs and to Asia \$6.50 per million BTU.

These costs include a Liquefaction and Pipe fee of \$3.36, Transportation cost to Europe of \$1.20, Transportation cost to Asia of \$2.48 Regasification cost of \$0.11 and a Fuel surcharge of 15% of Liquefaction and Pipe fee. The costs do not include the cost of the natural gas.

The costs of shipping from Cove Point, MD are slightly higher, even to Europe. Additional facilities are coming on-stream, which the EIA included in its additional estimates. The natural gas boom is for real, and companies are scrambling to build natural gas shipping facilities. The first few that complete in construction and commitments will probably profit handsomely, the rest, less so.

<https://www.eia.gov/outlooks/aeo/assumptions/pdf/natgas.pdf>

NEWS YOU CAN USE:

Science: Is the Sun Rising?

Beyond Milankovitch

By Donald Rapp, Climate Etc. Sep 8, 2018

<https://judithcurry.com/2018/09/08/beyond-milankovitch/#more-24328>

“So, what we had was not, as one might tend to perhaps assume, unusual Ice Ages that interfered with natural periods of relative warmth. Instead, we had persistent Ice Ages that were intermittently terminated when the X-factor(s) arose, as an exception to the rule, rather than as a state of normalcy. The terminations were the exceptions.”

Climate and the Subtle Sun

By David Whitehouse, GWPF, Sep 13, 2018

<https://www.thegwpc.com/climate-and-the-subtle-sun/>

Link to one paper: The Maunder minimum and the Little Ice Age: an update from recent reconstructions and climate simulations

By Mathew Owens, et al, Journal of Space Weather, Space Climate, Dec 4, 2017

<https://www.swsc-journal.org/articles/swsc/abs/2017/01/swsc170014/swsc170014.html>

Link to second paper: Winds of winter: How solar wind driven particle precipitation can affect northern winters

By Maliniemi, et al., EGU, April 20, 2018

<http://adsabs.harvard.edu/abs/2018EGUGA..20.5970M>

Better Data for Modeling the Sun’s Influence on Climate

Several international initiatives are working to stitch together data describing solar forcing of Earth’s climate. Their objective is to improve understanding of climate response to solar variability.

By T. Dudok de Wit, B. Funke, M. Haberreiter, and K. Matthe, EOS, kSep 4, 2018 [H/t WUWT]

<https://eos.org/project-updates/better-data-for-modeling-the-suns-influence-on-climate>

Censorship

Academic Activists Send a Published Paper Down the Memory Hole

By Theodore P. Hill Quillette, Sep 7, 2018 [H/t GWPF]

<https://quillette.com/2018/09/07/academic-activists-send-a-published-paper-down-the-memory-hole/>

“At a faculty meeting the week before, the Department Head had explained that sometimes values such as academic freedom and free speech come into conflict with other values to which Penn State was committed.”

[SEPP Comment: Apparently, attempting to “discover a logical reason that could help explain how gender differences in variability might naturally arise in the same species” is now banned by National Science Foundation funding.]

Forbidden facts and scientific papers that are erased: Thou shalt not discuss intelligence

By Jo Nova, Her Blog, Sep 12, 2018

<http://joannenova.com.au/2018/09/forbidden-facts-and-papers-that-are-erased-thou-shalt-not-discuss-intelligence/>

BBC Freezes Out Climate Sceptics

By Ben Webster, The Times, Via GWPF, Sep 8, 2018

<https://www.thegwpf.com/bbc-freezes-out-climate-sceptics/>

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, 2013

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

Summary: <http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf>

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, 2014

<http://www.nipccreport.org/reports/ccr2b/pdf/Full-Report.pdf>

Summary: <https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.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, 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

Challenging the Orthodoxy

Testing a Core Hypothesis in Climate Models

By Ross McKittrick, His Blog, Sep 13, 2018

<https://www.rossmckittrick.com/>

Link to paper: A Test of the Tropical 200-300 hPa Warming Rate in Climate Models

By Ross McKittrick and John Christy, Earth and Space Science, July 6, 2018 [Preprint]

<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018EA000401>

Link to Accepted Article: A Test of the Tropical 200-300 hPa Warming Rate in Climate Models

By Ross McKittrick and John Christy, Earth and Space Science, July 6, 2018 [Preprint]

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2018EA000401>

Empirical Evidence Shows Temperature Increases Before CO2 Increase in ALL Records

Guest Opinion: Dr. Tim Ball, WUWT, Sep 9, 2018

<https://wattsupwiththat.com/2018/09/09/empirical-evidence-shows-temperature-increases-before-co2-increase-in-all-records/>

Link to paper: The Probable Cause of Climate Fluctuations

By Svante Arrhenius, 1906, Translated by Friends of Science, 2014

<https://www.friendsofscience.org/assets/documents/Arrhenius%201906,%20final.pdf>

My new Kindle book: Global Warming Skepticism for Busy People

By Roy Spencer, His Blog, Sep 12, 2018

<http://www.drroyspencer.com/2018/09/my-new-kindle-book-global-warming-skepticism-for-busy-people/>

Climate is Not the Only Limit to Agriculture

Guest Opinion: Dr. Tim Ball, WUWT, Sep 2, 2018

<https://wattsupwiththat.com/2018/09/02/climate-is-not-the-only-limit-to-agriculture/>

U.S. Major Landfalling Hurricanes Down 50% Since the 1930s

By Roy Spencer, His Blog, Sep 14, 2018

<http://www.drroyspencer.com/2018/09/u-s-major-landfalling-hurricanes-down-50-since-the-1930s/>

Dr. Roy Spencer's appearance on Fox News (and mine)

By Anthony Watts, WUWT, Sep 15, 2018

<https://wattsupwiththat.com/2018/09/15/dr-roy-spencers-appearance-on-fox-news-and-mine/>
(Video)

Defending the Orthodoxy

The Long-Term Impact of Atmospheric Carbon Dioxide on Climate

By G. MacDonald, et al. Jason, SRI International, Technical Report JSR-78—07, Apr 1979

For Department of Energy, Contract EY-76-C-03-0115, P.A. 136

<https://fas.org/irp/agency/dod/jason/co2.pdf>

The Energy Exascale Earth System Model (E3SM)

By Staff Writers, DOE, Accessed September 15, 2018

<https://e3sm.org/about/>

Climate Change Drives Bigger, Wetter Storms — Storms Like Florence

By Rebecca Hersher, NPR, Sep 11, 2018

<https://www.npr.org/2018/09/11/646313648/climate-change-drives-bigger-wetter-storms-storms-like-florence>

“Slow-moving storms like Harvey are getting more common. A study published earlier this year by Kossin found that tropical cyclones around the world have slowed down 10 percent in the past 70 years.”

Global Warming's Paper Trail

By Benjamin Franta, Project Syndicate, Sep 12, 2018

<https://www.project-syndicate.org/commentary/secret-energy-industry-research-on-global-warming-by-benjamin-franta-2018-09>

[SEPP Comment: Wonder if the author ever read the Pentagon Papers which he uses as a similarity with the “oil company secret science” of the 1980s. The Pentagon Papers show the incompetence of Kennedy-Johnson administration and the pentagon “Wizz Kids” under McNamara. The “secret science” is a summary of IPCC’s speculation without hard evidence which is failing drastically.]

Questioning the Orthodoxy

Four Letter Word: Subsidence

By Donn Dears, Power For USA, Sep 14, 2018

<http://ddears.com/2018/09/14/four-letter-word-subsidence/>

[SEPP Comment: Places that should consider desalination to replace groundwater extraction.]

Inconvenient!...Real Observed Data Demolish Alarmist Claims Of Strengthening, More Frequent Hurricanes

By P Gosselin, No Tricks Zone, Sep 14, 2018

<http://notrickszone.com/2018/09/14/inconvenient-real-observed-data-demolish-alarmist-claims-of-strengthening-more-frequent-hurricanes/>

Some Things You Can Safely Bet Against

By Francis Menton, Manhattan Contrarian, Sep 11, 2018

<https://www.manhattancontrarian.com/blog/2018-9-11-some-things-you-can-safely-bet-against>

After Paris!

Wealthy countries accused of trying to keep their money to themselves

By Jo Nova, Her Blog, Sep 12, 2018

<http://joannenova.com.au/2018/09/weathy-countries-accused-of-trying-to-keep-their-money-to-themselves/>

Global protests as key UN climate talks in Bangkok stumble

Delegates have been meeting in Bangkok since Tuesday, but have made little progress

By Staff Writers, South China Morning Post, Sep 8, 2018

<https://www.scmp.com/news/asia/southeast-asia/article/2163354/global-protests-key-un-climate-talks-bangkok-stumble>

Paris Agreement on the Verge of Collapse due to Funding Disagreements

By Staff writers, Latin American Herald Tribune, Sep 11, 2018 [H/t GWPF]

<http://www.laht.com/article.asp?ArticleId=2464783&CategoryId=13936>

Bangkok Climate Talks End in Stalemate

By Graham Lloyd, The Australian, Sep 10, 2018

<https://www.thegwpf.com/bangkok-climate-talks-end-in-stalemate/>

Japan, The Climate Laggard

By Paul Homewood, Not a Lot of People Know That, Sep 14, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/09/14/japan-the-climate-laggard/>

Change in US Administrations

FERC speeding up reviews on LNG projects

By James Osborne, Houston Chronicle, Sep 4, 2018

<https://www.chron.com/business/energy/article/FERC-speeding-up-reviews-on-LNG-projects-13203821.php>

US to fall short of Paris climate targets by one-third: report

By Avery Anapol, The Hill, Sep 12, 2018

<http://thehill.com/policy/energy-environment/406335-us-to-fall-short-of-paris-climate-targets-by-one-third-report>

Seeking a Common Ground

The Great Debate Part D – Summary

By Andy May, WUWT, Sep 3, 2018

<https://wattsupwiththat.com/2018/09/03/the-great-debate-part-d-summary/>

[SEPP Comment: With Links to Parts A, B & C]

The Alabama Climate Report

Brought to you by the Office of the Alabama Climatologist, August 2018

<https://www.nsstc.uah.edu/alclimatereport/>

[SEPP Comment: Debunking a heated story in NYT.]

Review of Recent Scientific Articles by CO2 Science

The Buffering of Coastal Marine Ecosystems from Ocean Acidification

Bracken, M.E.S., Silbiger, N.J., Bernatchez, G. and Sorte, C.J.B. 2018. Primary producers may ameliorate impacts of daytime CO2 addition in a coastal marine ecosystem. *PeerJ* 6: e4739, DOI 10.7717/peerj.4739. Sep 14, 2018

<http://www.co2science.org/articles/V21/sep/a8.php>

Natural Variability Dominates Recent Climate Change

Babich, V.V., Darin, A.V., Smolyaninova, L.G. and Kalugin, I.A. 2017. Natural periodic processes and climate variability in the Northern Hemisphere. *Doklady Earth Sciences* 477: 1470-1472. Sep 13, 2018

<http://www.co2science.org/articles/V21/sep/a7.php>

“In commenting on their findings, Babich et al. say that the ~1000 and 200 year periodicities ‘are most clearly manifested and are global,’ adding that previous authors have linked these oscillations to changes in solar insolation. Consequently, in light of these several findings, the researchers conclude that ‘there is every reason to believe that the revealed quasi-periodic components in the climate variability of the extratropical zone of the Northern Hemisphere are natural, conditioned by natural cyclical phenomena and can serve as a basis for long-term predictive climatic constructions,’ which does not leave a lot of room for human-induced climate change in explaining past, current or future climate.”

Historically Warmer Climates Supported More Settlements in Northeast China

Jia, D., Li, Y. and Fang, X. 2018. Complexity of factors influencing the spatiotemporal distribution of archaeological settlements in northeast China over the past millennium.

Quaternary Research 89: 413-424. Sep 10, 2018

<http://www.co2science.org/articles/V21/sep/a5.php>

Transgenerational Acclimation of the Manila Clam to Ocean Acidification

Zhao, L., Yang, F., Milano, S., Han, T., Walliser, E.O. and Schöne, B.R. 2018. Transgenerational acclimation to seawater acidification in the Manila clam *Ruditapes philippinarum*: Preferential uptake of metabolic carbon. *Science of the Total Environment* 627: 95-103. Sep 7, 2018

<http://www.co2science.org/articles/V21/sep/a4.php>

Measurement Issues -- Surface

Heat Analysis of NOAA Data Suggests the US Is Not Seeing Increased Warming

Guest essay by Leland Park, WUWT, Sep 13, 2018

<https://wattsupwiththat.com/2018/09/13/heat-analysis-of-noaa-data-suggests-the-us-is-not-seeing-increased-warming/>

Changing Weather

Hurricane Florence: Nature's Business as Usual, Not Climate Change

By Roy Spencer, His Blog, Sep 10, 2018

<http://www.drroyspencer.com/2018/09/hurricane-florence-natures-business-as-usual-not-climate-change/>

Hurricane Florence is not climate change or global warming. It's just the weather

By Roy Spencer, USA Today, Sep 14, 2018

<https://www.usatoday.com/story/opinion/2018/09/14/hurricane-florence-climate-change-global-warming-weather-greenhouse-flood-column/1289272002/>

The 36 Costliest U.S. Hurricanes Have Not Increased in Intensity Over Time

By Roy Spencer, His Blog, Sep 12, 2018

<http://www.drroyspencer.com/2018/09/the-30-costliest-u-s-hurricanes-have-not-increased-in-intensity-over-time/>

The Hurricane Last Time

By Patrick Michaels and Ryan Maue, CATO, Sep 11, 2018

<https://www.cato.org/blog/hurricane-last-time>

Get Ready For Insane Climate Ambulance Chasing Headlines: Global Warming Causing “Unprecedented Hurricane” Florence!

By P. Gosselin, No Tricks Zone, Sep 8, 2018

<http://notrickszone.com/2018/09/08/get-ready-for-insane-climate-ambulance-chasing-headlines-global-warming-causing-unprecedented-hurricane-florence/>

New Science Says Hurricane Frequencies Are Declining, Yet U.S. Media Blame ‘Climate Deniers’ For Florence

By Kenneth Richard, No Tricks Zone, Sep 13, 2018

<http://notrickszone.com/2018/09/13/new-science-says-hurricanes-are-declining-yet-washington-post-blames-climate-deniers-for-florence/>

The Great Colonial Hurricane Of 1635

By Stephen B, Cranberry County, Aug 25, 2018 [H/t Climate Etc.]

<http://cranberrycounty.blogspot.com/2018/08/the-great-colonial-hurricane-of-1635.html?m=1>

Hottest Summer Ever?

By Paul Homewood, Not a Lot of People Know That, Sep 9, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/09/09/hottest-summer-ever/>

Summer Rainfall Stats

By Paul Homewood, Not a Lot of People Know That, Sep 10, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/09/10/summer-rainfall-stats/>

“It seems that, as far as British weather is concerned, the old saying is still true – there’s nothing new under the sun!”

Scandinavian Heatwave–The Real Facts

By Paul Homewood, Not a Lot of People Know That, Sep 13, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/09/13/scandinavian-heatwave-the-real-facts/>

Changing Climate

10 New Reconstructions Show Today's Temperatures Still Among The Coldest Of The Last 10,000 Years

By Kenneth Richards, No Tricks Zone, Sep 10, 2018

<http://notrickszone.com/2018/09/10/10-new-reconstructions-show-todays-temperatures-still-among-the-coldest-of-the-last-10000-years/>

Changing Seas

N. Atlantic Cooling in 2018

By Ron Clutz, Science Matters, Sep 12, 2018

<https://rclutz.wordpress.com/2018/09/11/n-atlantic-cooling-in-2018/>

Changing Cryosphere – Land / Sea Ice

Arctic Sea Ice Ignores Alarmists Dire Predictions

By Paul Homewood, Not a Lot of People Know That, Sep 11, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/09/11/arctic-sea-ice-ignores-alarmists-dire-predictions/>

Icebreaker encounters most difficult ice conditions in 15 years

By Av Kathrin Stephen, High North News, Aug 22, 2018 [H/t GWPF]

<http://www.highnorthnews.com/icebreaker-encounters-most-difficult-ice-conditions-in-15-years/>

Antarctic iceberg A-68 is on the move after year-long standstill

By Brook Hays, UPI, Sep 5, 2018 [H/t Toshio Fujita]

http://www.spacedaily.com/reports/Antarctic_iceberg_A-68_is_on_the_move_after_year-long_standstill_999.html

[SEPP Comment: Not mentioned is that Larsen C is just inside of the Antarctic Circle, since it is floating, the ice berg's melting will not add to sea level rise. Also, strongly doubt the statement:

*“As of last July, A-68 was the **sixth largest ice berg of all time, ,,,**” [Boldface added]]*

Changing Earth

Antarctica is rising in response to change that started with end of last ice age

By Anthony Watts, WUWT, Sep 10, 2018

<https://wattsupwiththat.com/2018/09/10/antarctica-is-rising-in-response-to-change-that-started-with-end-of-last-ice-age/>

Link to paper: Observed rapid bedrock uplift in Amundsen Sea Embayment promotes ice-sheet stability

By Valentina R. Barletta, et al. Science, June 22, 2018

<http://science.sciencemag.org/content/360/6395/1335>

Agriculture Issues & Fear of Famine

Climate extremes 'key driver' behind rising global hunger: UN

By Isabel Malsang and Serene Assir, AFP News, Sep 11, 2018

<https://sg.news.yahoo.com/climate-extremes-key-driver-behind-rising-global-hunger-090159001.html>

Link to report: The State of Food Security and Nutrition in the World 2018: Building climate resilience for food security and nutrition [EN/AR/RU]

By Staff Writers, UN Food and Agriculture Organization of the United Nations, 2018

https://reliefweb.int/sites/reliefweb.int/files/resources/English_The_State_of_Food_Security_and_Nutrition_in_the_World_2018_-_Full_Report.pdf

[SEPP Comment: More UN misrepresentation, grain yields are growing..]

Lowering Standards

BBC's Country File & Fracking

By Paul Homewood, Not a Lot of People Know That, Sep 10, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/09/10/bbcs-country-file-fracking/>

The BBC Referee Gets It Wrong

By Staff Writer, GWPF, Sep 8, 2018

<https://www.thegwpf.com/bbc-climate-change-guidelines-get-it-wrong/>

Communicating Better to the Public – Exaggerate, or be Vague?

Here's another big concern about climate change: It's ruining childhoods

By Gina McCarthy and Kelsey Wirth, Sacramento Bee, Sep 11, 2018

<https://www.sacbee.com/opinion/op-ed/soapbox/article218164260.html>

“We don't want our kids and grandkids to grow up without school recess. We don't want their participation in sports such as soccer or baseball limited. We want to share memories of summers camping and winters sledding with our sons and daughters.”

[SEPP Comment: Winter sledding in Sacramento, CA? The SEPP April Fools Award winner shows her skills.]

Communicating Better to the Public – Make things up.

UN chief: World has less than 2 years to avoid 'runaway climate change'

By Aris Folley, The Hill, Sep 12, 2018

<http://thehill.com/policy/energy-environment/406291-un-chief-the-world-has-less-than-2-years-to-avoid-runaway-climate>

Trash Science Exposed: Journal Findings Refute Potsdam Institute's Alarmist Gulf Stream Collapse Claims

Gulf Stream is doing fine: Potsdam Institute horror story suffers bitter setback

By Dr. Sebastian Lüning and Prof. Fritz Vahrenholt, (German text translated/edited by P Gosselin), No Tricks Zone, Sep 12, 2018

<http://notrickszone.com/2018/09/12/trash-science-exposed-journal-findings-refute-potsdam-institutes-alarmist-gulf-stream-collapse-claims/>

These Are the Ten Most Polluted Cities in the World—Really?

By E Calvin Beisner, Cornwall Alliance, Aug 23, 2018

<https://cornwallalliance.org/2018/08/these-are-the-ten-most-polluted-cities-in-the-world-really/>

Expanding the Orthodoxy

Law Enforcement for Rent

How Special Interests Fund Climate Policy through State Attorneys General

By Cristopher Horner, CEI, Aug 28, 2018
<https://cei.org/AGclimatescheme>

Questioning European Green

‘Die Welt’ Commentary: “Europe Can’t Bail Out The German Power Supply”...Calls Strategy “A Dangerous Miscalculation”

Germany has seriously overestimated how much its neighboring countries are able to help out in the event wind and solar energy fail to deliver, thus putting it’s power supply at risk.

By P Gosselin, No Tricks Zone, Sep 11, 2018

<http://notrickszone.com/2018/09/11/die-welt-commentary-europe-cant-bail-out-german-power-supply-calls-strategy-a-dangerous-miscalculation/>

EU climate law could cause ‘catastrophic’ deforestation

By Paul Homewood, Not a Lot of People Know That, Sep 13, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/09/13/eu-climate-law-could-cause-catastrophic-deforestation/>

Major energy boss admits profits slumped after company’s wind turbines stopped turning during the summer heatwave

By Staff Writer, Daily Mail, UK, Sep 12, 2018 [H/t GWPF]

<https://www.dailymail.co.uk/news/article-6161737/Major-energy-boss-admits-profits-slumped-wind-turbines-stopped-turning-summer-heatwave.html>

Funding Issues

New York City to invest \$4 billion of pensions funds in climate-change projects: report

By Avery Anapol, The Hill, Sep 13, 2018

<http://thehill.com/policy/energy-environment/406461-new-york-city-to-invest-4-billion-of-pension-fund-to-combat-climate>

[SEPP Comment: Who is responsible if the projects fail?]

The Political Games Continue

Google is unbiased, impartial and just happens to be run entirely by Democrat voters

By Jo Nova, Her Blog, Sep 14, 2018

<http://joannenova.com.au/2018/09/google-is-unbiased-impartial-and-just-happens-to-be-run-entirely-by-hila/>

Litigation Issues

Exxon appeals Massachusetts climate case to Supreme Court

By Timothy Cama, The Hill, Sep 10, 2018

<http://thehill.com/policy/energy-environment/405917-exxon-appeals-massachusetts-climate-case-to-supreme-court>

Energy Issues – Non-US

What is energy security, and how has it changed?

By Samantha Hepburn, The Conversation, Via Phys.org, Sep 13, 2018

<https://phys.org/news/2018-09-energy.html>

[SEPP Comment: The International Energy Agency (IEA) began with the Arab Oil Embargo and plans for strategic stockpiles of oil.]

Energy Issues – Australia

Scott Morrison reveals his hand as Pro-Renewables RET man — forced thanks to Turnbull

By Jo Nova, He Blog, Sep 14, 2018

<http://joannenova.com.au/2018/09/scott-morrison-reveals-his-hand-as-pro-renewables-ret-man-forced-thanks-to-turnbull/>

Energy Issues -- US

Electric Power Grid Security: It's Time

By Jon Stanford , Cisco, Electric Power and Light, Sep 12, 2018

<https://www.elp.com/Electric-Light-Power-Newsletter/articles/2018/09/electric-power-grid-security-it-s-time.html>

[SEPP Comment: Addressing cybersecurity.]

Paying the Price for Renewables (Georgetown, TX power surplus generates cost deficits)

By Lisa Linowes, Master Resource, Sep 12, 2018

<https://www.masterresource.org/wind-power-costs/price-surge-georgetown-tx/>

Washington's Control of Energy

Committee votes to let states receive more money from offshore drilling

By Timothy Cama, The Hill, Sep 13, 2018

<http://thehill.com/policy/energy-environment/406530-committee-votes-to-increase-states-money-from-offshore-drilling>

The U.S. Synthetic Fuels Corporation: 1981–86 (yes, federal agencies can be abolished)

By Robert Bradley Jr. Master Resource, Sep 13, 2018

<https://www.masterresource.org/u-s-synthetic-fuels-corporation/synthetic-fuels-corporation-closes/>

Oil and Natural Gas – the Future or the Past?

10 Incredible Facts About American LNG Exports

The United States will be a net energy exporter no later than 2022. Liquefied natural gas, or LNG, will play a crucial role.

By Maxx Chatsko, The Motley Fool, Sep 9, 2018

<https://www.fool.com/investing/2018/09/09/10-incredible-facts-about-american-lng-exports.aspx>

Link to EIA article: U.S. liquefied natural gas exports quadrupled in 2017

By Victoria Zaretskaya, EIA, March 27, 2018

<https://www.eia.gov/todayinenergy/detail.php?id=35512>

Natural Gas Market Module

By Staff Writers, EIA, April 2018

<https://www.eia.gov/outlooks/aeo/assumptions/pdf/natgas.pdf>

The Town Where Fracking Has Been Going On Since The 1970s [UK]

By Paul Homewood, Not a Lot of People Know That, Sep 11, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/09/11/the-town-where-fracking-has-been-going-on-since-the-970s/>

[SEPP Comment: Probably, the current wells are vertical, not long horizontal wells. Major objections to fracking do not take into consideration multiple horizontal wells can come from one drilling pad.]

Return of King Coal?

UK coal plant surges back into the money for winter

By Henry Evans, ICIS, Sep 7, 2018

<https://www.icis.com/resources/news/2018/09/07/10257996/uk-coal-plant-surges-back-into-the-money-for-winter/>

[SEPP Comment: A guess for the coming winter.]

Nuclear Energy and Fears

Who Killed the Small Modular Nuclear Programme?

By Staff Writers, GWPF, Sep 10, 2018

<https://www.thegwpf.com/who-killed-the-small-modular-nuclear-programme/>

Link to briefing paper: Small Modular Nuclear: Crushed at Birth

By Andy Dawson, GWPF, 2018

<https://www.thegwpf.org/content/uploads/2018/09/Dawson-1.pdf>

Why The Cancer Death Of A Fukushima Worker Was Likely Not Due To Fukushima

By James Conca, Forbes, Sep 6, 2018 [H/t Toshio Fujita]

<https://www.forbes.com/sites/jamesconca/2018/09/06/no-the-cancer-death-was-probably-not-from-fukushima/#4a857c0321b5>

Alternative, Green (“Clean”) Solar and Wind

America’s First Wind Turbine Generated Electricity In 1888

By Jake Richardson, Clean Technica, June 22, 2014

<https://cleantechnica.com/2014/06/22/americas-first-wind-turbine-generated-electricity-1888/>

Energy & Environmental Newsletter: September 10, 2018

By John Droz Jr. Master Resource, Sep 10, 2018

<https://www.masterresource.org/alliance-for-wise-energy-decisions/energy-environmental-newsletter-9-10-18/>

California Dreaming

Assembly Bill 100 and a 100% renewable California

By Roger Andrews, Energy Matters, Sep 11, 2018

<http://euanmearns.com/assembly-bill-100-and-a-100-renewable-california/#more-22509>

“The fact that the bill was passed at all indicates that California legislators, as well as being unable to tell the difference between megawatts and megawatt-hours, are also unable to tell the difference between electricity and energy.”

California to launch its own climate satellite in response to Trump

By Tal Axelrod, The Hill, Sep 15, 2018

<http://thehill.com/policy/energy-environment/406827-california-governor-pledges-to-launch-climate-satellite-to-replace>

“The satellite would track and detect the sources of pollution to better understand the causes of climate change.”

Other Scientific News

NASA launching Advanced Laser to measure Earth's changing ice

Press Release, NASA, Aug 22, 2018

<https://www.nasa.gov/press-release/nasa-launching-advanced-laser-to-measure-earth-s-changing-ice>

Going up! Japan to test mini 'space elevator'

By Staff Writers, AFP, Sept 4, 2018

http://www.spacedaily.com/reports/Going_up_Japan_to_test_mini_space_elevator_999.html

Other News that May Be of Interest

Did Thomas Kuhn Kill Truth?

A debate on the nature of truth turns into a squabble over whether the father of the “paradigm shift” threw an ashtray at Errol Morris’s head.

By David Kordahl, The New Atlantis, Spring 2018 [H/t GWPF]

<https://www.thenewatlantis.com/publications/did-thomas-kuhn-kill-truth>

[SEPP Comment: Long post.)

Georgia rancher wins legal battle in bald eagle attacks

By George Mathis, The Atlanta Journal-Constitution, Sep 7, 2018 [H/t Bill Balgord]

<https://www.ajc.com/blog/news-to-me/georgia-rancher-wins-compensation-bald-eagle-attacks/mMotH8bCF2Xptra86hJ9CP/>

[SEPP Comment: A chicken rancher whose customers like “free-range” birds found that other birds like them as well. Therefore, the government must compensate him?]

BELOW THE BOTTOM LINE:

Hilarious! @weatherchannel reporter fakes intensity of #HurricaneFlorence wind – gets caught

By Anthony Watts, WUWT, Sep 14, 2018

<https://wattsupwiththat.com/2018/09/14/hilarious-weatherchannel-reporter-fakes-intensity-of-hurricaneflorence-wind-gets-caught/>

[SEPP Comment: Update # 2 shows it all!]

Wow, I’m worth 30,000 pounds! [£]

By Staff Writers, Climate Change Predictions.org, Sep 14, 2018

<http://climatechangepredictions.org/uncategorized/3810>

“A lower birth rate would help cut greenhouse gas emissions, a report released today claims. Each Briton uses nearly 750 tonnes of CO₂ in a lifetime, equivalent to 620 return flights between London and New York, the Optimum Population Trust warns.

“Based on a cost of 42.50 pounds per tonne of CO₂, the report estimates that the price for the climate of each new person over their lifetime is roughly 30,000 pounds. The bill for the extra 10 million people projected for the UK by 2074 would reach more than 300 billion pounds.

“The report, called A Population-Based Climate Strategy, says: ‘The most effective personal climate change strategy is limiting the number of children one has. The most effective national and global climate change strategy is limiting the size of the population.’ The Telegraph (UK), 7 May 2007”

A holiday used to be just a holiday

By Staff Writers, Climate Change Predictions.org, Sep 13, 2018

<http://climatechangepredictions.org/uncategorized/3828>

“The man who inspired a generation of backpackers to see the world has claimed that travelling is environmentally destructive. Mark Ellingham, the founder the Rough Guide series of books, is urging holidaymakers to cut down on foreign flights.

“He wants to stop the trend for ‘binge flying’ and is calling for green taxes on overseas plane trips. He added: ‘Balancing all the positives and negatives, I’m not convinced there is such a thing as a ‘responsible’ or ‘ethical’ holiday.’ The Telegraph (UK), 7 May 2007”

ARTICLES:

1. The Price Californians Will Pay

Jerry Brown signs the statewide ban on fossil-fuel power by 2045.

Editorial, WSJ, Sep 12, 2018

<https://www.wsj.com/articles/californias-carbon-exorcism-1536707391>

The Editorial States:

“Gov. Jerry Brown on Monday signed a bill requiring that 100% of California’s electricity be generated by renewables like wind and solar by 2045. The price of his green virtue won’t be cheap.

“‘California is committed to doing whatever is necessary to meet the existential threat of climate change,’ the Governor declared. ‘California has been doing stuff that the rest of the world is hoping to get to one day.’

It shows a graph based on EIA numbers that residential costs of electricity in 2018 are about 50% greater in California than the US average, about 30% greater than in New Jersey.

That ‘stuff’ is costing Californians dearly. See the nearby chart tracking residential electricity rates since 2011. Plunging natural gas prices—the wholesale price has fallen 28% since 2011—due to the shale drilling boom have curbed electricity rate increases in most states.

But California has moved most aggressively against fossil fuels, and what do you know? Its electric prices have risen the most in the country outside of New England, which suffers from a natural gas shortage due to inadequate pipeline capacity.

Since 2011 California’s electricity rates have surged 30% compared to an 8% increase nationwide and 15% in Washington. Rates in some states like Florida (-3%) and New Jersey (-2%) have fallen modestly. Seven years ago California’s electricity rates were 27% higher than the national average. Today, they are 53% higher.

California’s 100% mandate will require utilities to pay even more for new renewable generation, battery storage and transmission. The state will need about 200 times more energy storage than it currently has to compensate for gas-fired plants. Green cross-subsidies also drive up retail electricity prices. For instance, utilities pay rebates to homeowners with solar panels in addition to compensating them at the retail rate for surplus energy they remit to the grid.

Liberals say Californians won’t pay more for electricity because efficiency mandates will reduce consumption. But low-energy appliances are more expensive and can, well, backfire. Customers

have complained that tankless water heaters in larger homes require additional equipment to expedite hot-water delivery that can end up driving up energy costs.

Gov. Brown has also directed the California Air Resources Board to develop a plan to achieve 'carbon neutrality' by 2045 so that the state emits as much carbon dioxide as it removes. This would literally require everyone to drive electric cars and farmers to develop technologies to capture cow flatulence—long after Mr. Brown has stopped exhaling CO2 himself.

2. More Hurricane Arguments

Crack news organizations deployed narratives ahead of the storm.

By James Freeman, WSJ, Sep 14, 2018

<https://www.wsj.com/articles/more-hurricane-arguments-1536961099?mod=djemMER>

Summary: The co- author of “Borrowed Time” writes:

“Hurricane Florence continues to pour historic volumes of water upon the Carolinas, causing several deaths, leaving hundreds of thousands of people without power, flooding vast areas of the region, and sending many residents in search of food and shelter.

“Meanwhile American news consumers are finding no shortage of pundits eager to define the disaster as the result of allegedly insufficient government regulation. This analysis represents a high level of preparedness. In the days and hours before Florence made landfall, many media outlets deployed anti-market narratives in the coverage areas where editors believed they could be most useful.

“The Washington Post editorial board wrote on Tuesday:

“President Trump issued several warnings on his Twitter feed Monday, counseling those in Florence’s projected path to prepare and listen to local officials. That was good advice.

“Yet when it comes to extreme weather, Mr. Trump is complicit. He plays down humans’ role in increasing the risks, and he continues to dismantle efforts to address those risks. It is hard to attribute any single weather event to climate change. But there is no reasonable doubt that humans are priming the Earth’s systems to produce disasters.

“Yet there is much more than reasonable doubt on the question of whether the President or any of his predecessors is ‘complicit’ when it comes to extreme weather. Last month University of Colorado environmental studies Professor Roger Pielke Jr. wrote in the Journal:

“‘Since 1990, the global population has increased by more than 2.2 billion, and the global economy has more than doubled in size. This means more lives and wealth are at risk with each successive disaster.

“‘Despite this increased exposure, disasters are claiming fewer lives. Data tracked by Our World in Data shows that from 2007-17, an average of 7,000 people each year were killed by natural disasters. In the decade 50 years earlier, the annual figure was more than 37,000. Seven thousand is still far too many, but the reduction represents enormous progress.

“The material cost of disasters also has decreased when considered as a proportion of the global economy... The decrease in disaster damage isn't a surprise, because as the world population and economy have grown, the incidence of the most damaging extreme events has hardly changed. The Intergovernmental Panel on Climate Change reported in 2014 that there has been no increase in hurricanes, floods, droughts or tornadoes within the past 30 years.’

After asking how appropriate Pielke's comments are for North Carolina, the author then goes into a discussion centering on how frequently should building codes be updated.
