The Week That Was: 2017-10-07 (October 7, 2017)
Brought to You by SEPP (www.SEPP.org)
The Science and Environmental Policy Project


Number of the Week: 87 Seconds

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

Which Science – Empirical? Modern empirical science is a great accomplishment of civilization and a gift to it. It is a process for evaluating many diverse ideas, weeding out those ideas that fail necessary tests, and modifying those ideas that need improvement. Sometimes the process may take one hundred years or more. Such is the case of Einstein mathematically speculating the existence of gravitational waves – ripples in space and time created by the motion of massive objects in the universe.

The testing was daunting, and for four decades the National Science Foundation (NSF) has been allocating funds supporting it. The Laser Interferometer Gravitational-wave Observatory (LIGO) is an elaborate experiment, costing some $1.1 billion and using some highly sensitive instrumentation, especially designed for the project. It involved the construction of twin buildings 4,000 m (13,000 feet) long and about 2400 miles apart. In September 2015, the equipment detected gravitational waves, substantiating indirect evidence first observed in 1974. The three scientists who led the development of LIGO were honored with the 2017 Nobel Prize in Physics. All involved and the NSF are to be praised for their diligence in funding this multi-decadal experiment, whose construction started in 1994. See links under Other Scientific News

Which Science – Institutional, Bureaucratic? Unfortunately, sometimes the leaders of scientific institutions become stuck on an idea the needs significant modification, but the leaders fail to do so. Such is the case of Eric Davidson, President of the American Geophysical Union (AGU), and Marcia K. McNutt, President of the National Academy of Sciences when they dismissed the proposed Red/Blue Team debate, “Red/Blue and Peer Review” in EOS, a publication of AGU. Previously, Ms. McNutt was editor-in-chief of Science magazine, the leading publication of the American Association for the Advancement of Science (AAAS).

The well written essay by Davidson and McNutt may be very convincing to many readers. It asserts a consensus that does not exist. Its history of greenhouse gas theory begins with Arrhenius in the 1890s, then jumps forward:

“Modern climate science started in the 1960s, when general circulation models under development were modified to incorporate the effects of CO2 and water vapor to understand their impact on climate [Forster, 2017]. Not long thereafter, scientists systematically considered what else might explain the new warming trends that started in the 1970s and that continue today.”

The essay mentions various hypotheses that have been tested and rejected and asserts:
“• theoretical calculations of the greenhouse effect based on well-known physics and chemistry

“• fingerprinting the detailed patterns of climate change caused by different human and natural influences, such as differences among regional patterns of land surface warming, ocean heat content, and sea ice extent that are consistent with an anthropogenic effect

“• growing confidence in globally distributed measurements of climate change and its impacts and greater skill in matching those observations to increasingly sophisticated computer models that include the various land, ocean, and atmospheric greenhouse gas sources, sinks, and feedbacks.”

The authors further assert

“The scientific community has gradually shifted, on the basis of evidence, from being predominantly skeptical in the 1970s that the human fingerprint on climate could be demonstrated to today being convinced that there are no other plausible explanations besides the cumulative effect of the last 150 years of burning fossil fuel for the recent extent of changing climate. Natural climatic variation is ongoing, but it cannot explain the current speed and amount of observed change. The science does not stand still; studies on how clouds may moderate the rate of climate change and how aerosols (particulate pollution) affect clouds and can offset some warming, for example, are still areas of active research in which hypotheses are being tested and challenged with characteristic scientific skepticism.”

The essay briefly illustrates the work of the UN Intergovernmental Panel on Climate Change (IPCC), which has been adopted by many US scientific communities. Essentially, the essay asserts that a Red/Blue Team Debate is unnecessary and concludes with:

Our peer-review and Academy report processes are not flashy or entertaining, but they are inclusive and tried and true and have helped build great institutions of science. They provide the evidence-based analysis of climate science and all other scientific disciplines that are so important for informing the public policy decisions that we rely upon to protect our security, health, safety, environmental integrity, and economic prosperity.

Overall, it is a powerful argument. But the skeptic may assert: show me your physical evidence that the principal cause of climate change is greenhouse gas emissions, particularly carbon dioxide, CO2. Models that have not been verified and validated are not physical evidence.

The omissions in the essay are especially telling. The rigor of peer-review process is highly doubtful. In the early 1990s, Science published the seminal work of Roy Spencer and John Christy showing how data collected by satellites can be used to estimate atmospheric temperatures around the globe, except for the polar regions. Subsequently, minor errors in calculations were found, which were promptly corrected. Greenhouse gas warming, from water vapor and CO2, occurs in the atmosphere, where there has been little warming.

By the mid-1990s it became obvious that the atmosphere was not warming as the climate modelers had projected – and that a doubling of CO2 would lead to an increase in global surface temperatures of 3 degrees C, plus or minus 50% – as speculated in the Charney Report published by NAS in 1979. The influence of CO2 on temperatures was less than speculated, even if
amplified by water vapor. Yet, under editor Donald Kennedy, *Science* chose to ignore all work questioning this erroneous projection, thus biasing climate science, as published in the US.

Rather than fully exploring possibilities that the total influence of CO2 may be far less than that speculated in the Charney Report, the IPCC has stuck with the estimate through Five Assessment Report, starting in 1990. Its reports are mired by using surface temperature data, rather than the far more comprehensive atmosphere data, which covers the actual greenhouse effect. Its science of understanding the influence of CO2 has not advanced in twenty-five years, and the science discussed in the essay has not advanced since the 1979 Charney report – thirty-seven years ago. It remains 3 degrees C, plus or minus 50%, and the so-called distinct human fingerprint is yet to be found. The differences between climate model forecasts and observations are increasing.

Ironically, *EOS*, was among the first to publish a survey of the fabled 97% consensus, based on highly questionable classifications made after the survey was taken. *Science* published a fawning review of “Merchants of Doubt”, which personally attacked Fredrick Seitz, the former President of NAS, and three other scientists, based on accusations with little evidence. When Fred Singer, the only one of the four surviving, wrote a rebuttal, *Science* refused to publish it, citing lack of space. Perhaps, Mr. Davidson and Ms. McNutt are unaware of the history of these publications. [The late Fredrick Seitz was Chairman of SEPP.]

If anything, this essay demonstrates the desperate need for a frank, open debate on the empirical science of climate change and what work is needed to reach prudent policy conclusions on the use of fossil fuels. The omissions in the essay are what is important for our understanding; assertions of a false consensus are meaningless. See links under Defending the Orthodoxy.

**************

TWTW Bias: Please note that TWTW recognizes an inherent bias in its reports. Generally, TWTW does not have the space or time to report science that support vague claims that CO2 emissions will cause significant warming sometime in the future. Instead, it focuses on major issues regarding the need to control of CO2 emissions, as claimed by some, particularly the lack of physical evidence. As one who critiqued “state-of-the-art” energy models in the 1970s, used by the US government to declare the earth would soon run out of oil, this author is very skeptical of accepting long-term projections from models that have not been thoroughly tested.

**************

CLOUD at CERN: Dennis Avery, co-author with Fred Singer of “Unstoppable Global Warming”, discussing the need for the EPA to review its finding that greenhouse gases, mainly CO2, endanger public health and welfare. In addition to other “omissions” in forming the “consensus” global warming, Avery states:

“Last year CERN (the multi-billion-dollar Centre for European Nuclear Research) told CERN Courier subscribers that all the climate models must be re-done. CERN reported that its CLOUD experiment had used its huge particle accelerator and a giant cloud chamber to demonstrate that the sun and cosmic rays are the real ‘mystery factors’ in earth’s climate. The research supports the contention that CO2 is only a bit player.”

The article in the CERN Courier reveals the thinking of those experimenters on the importance of understanding the role of clouds on climate:

“‘This is a huge step for atmospheric science,’ says lead-author Ken Carslaw of the University of Leeds, UK. ‘It’s vital that we build climate models on experimental measurements and sound
understanding, otherwise we cannot rely on them to predict the future. Eventually, when these
processes get implemented in climate models, we will have much more confidence in aerosol
effects on climate. Already, results from CLOUD suggest that estimates of high climate sensitivity
may have to be revised downwards.”

Very simply, the science advocated by the IPCC, NAS, AGU, etc. does not have an adequate
understanding of the role of atmospheric clouds to draw any conclusions, much less the
conclusions these organizations have made. See links under Challenging the Orthodoxy.

***************

Objections from the Orthodoxy? Nature Communications published a paper on a possible alternative source of energy from natural evaporation. Perhaps unknowingly, the paper questions the standard explanation for energy flow from the surface to space (OLR, Outgoing Long-Wave Radiation) in the Kiehl-Trenberth model, that is generally accepted by the orthodoxy.

The opening line of the abstract states: “About 50% of the solar energy absorbed at the Earth’s surface drives evaporation, …” If this is correct, then the standard Kiehl-Trenberth diagram of the Earth’s Global Energy Budget and the coefficients used by the National Center for Atmospheric Research (NCAR), and others, have issues. The diagram shows far less than 50% of solar energy at the surface going to evaporation. If so, there is not a consensus even in the Orthodoxy.

Writing about the response by the orthodoxy to the Millar et al. paper asserting that emission budgets which may be consistent with limiting warming to 1.5C, as discussed in the September 23 TWTW, David Whitehouse of GWPF sums up a major problem among those advocating control of CO2.

“The Nature Geoscience affair has mixed science and politics into an unsatisfactory cocktail. There is nothing wrong in writing papers on climate change that ask questions, that annoy advocates and alarmists. There is something demeaning for science when scientists try to ‘clarify’ a message that they made clear in the first place. There is something antiscientific about suppressing debate.”

See links under Defending the Orthodoxy and Questioning the Orthodoxy.

***************

Flexibility Not Instability: The devastation caused by the Hurricane Maria that hit Puerto Rico was complicated by the failure of the local representatives of the Federal Emergency Management Agency (FEMA) to have enough fuel on-hand to run the diesel generators to provide electricity to critically needed hospitals and other medical facilities. Almost all the island lost electrical power, and with-it communications. Drinking water was in short supply, and sanitary sewer almost nonexistent. Almost immediately, the finger pointing began, as if major hurricanes can be stopped.

Based on reports, the ports full of relief supplies, but the problem is to distribute the cargo to those who need it – trucks and fuel.

Add to this, that about 50% of the economy is based on manufacturing, especially pharmaceuticals and electronics. The island’s economy requires stable, reliable electricity. Unfortunately, after years of mismanagement, the government-owned electricity utility, a monopoly, is in bankruptcy, and the territory government has a large debt burden.
Mark Mills argues against the faddish demand that green electricity is the key to rebuilding the electricity infrastructure.

“But Puerto Rico didn’t go dark because of how it produces electricity. The power plants survived. The wires distributing power got destroyed.

“A greener grid would do nothing to minimize suffering after the next hurricane.”

The folly of building solar generation was demonstrated by TWTW reader Dick Hose who provided photos of the marine library of the Marine Science Institute (MSI) in Port Aransas, Texas, where Harvey made landfall. The two-story main building is concrete, built by the Corps of Engineers in the early 1940s, with initial additions designed to withstand hurricanes – these facilities are near the shore of the Gulf of Mexico. Later additions included solar panels on the roof.

After Harvey, the University of Texas library system sent a response team, which discovered some wet flooring, but the books were dry, with no apparent mold. The photos show the skeletal remains of the mounting brackets for the solar panels. The panels are part of the storm debris.

It is highly doubtful that low density, unreliable solar power is suitable for hardening an electrical grid, where high winds can be expected. See Article # 2 and links under Challenging the Orthodoxy and Changing Weather.

***************

**Number of the Week: 87 seconds.** According to the final report of the Australian Energy Market Operator (AEMO), it took 87 seconds for the electrical system of South Australia to go black, with 850,000 customers losing power. The gas turbines producing electricity continued to operate. The claim by some that Australia’s gas exports contributed to the problem is “green smoke.”

Perhaps, the Black System prompted the Trump administration to request the US Federal Energy Regulatory Commission (FERC) to consider new rules to pay more to power plants that are resilient – producing reliable and stable electricity with a dependable fuel supply. See Article #3 and links under Change in US Administrations and Energy Issues – Australia.

**NEWS YOU CAN USE:**

**Commentary: Is the Sun Rising?**

**Solar Activity Plays Key Role In North American Blizzard Frequency, Study Finds**

More Blizzards in North America During Solar Weak Phases
By Dr. Sebastian Lüning and Prof. Fritz Vahrenholt (German text translated/edited by P Gosselin), No Tricks Zone, Sep 30, 2017

**To Understand Future Solar Activity, One Has to Know the Past**

Short-term funding strategies present serious problems for programs like solar activity studies, where observations and analysis span decades or longer.
By Alexei A. Pevtsov and Frédéric Clette, EOS, Sep 29, 2017
https://eos.org/opinions/to-understand-future-solar-activity-one-has-to-know-the-past
Suppressing Scientific Inquiry
Climate skeptic: ‘Big Brother watched me’
Canada wouldn’t prosecute us over our views on climate change, would it?
By Tom Harris, WUWT, Sep 26, 2017

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
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
http://climatechangereconsidered.org/
Download with no charge

Nature, Not Human Activity, Rules the Climate
S. Fred Singer, Editor, NIPCC, 2008

Challenging the Orthodoxy
The EPA CO2 endangerment finding endangers the USA
President Trump must reverse EPA’s climate change “Endangerment Finding”
Guest opinion by Dennis T. Avery, WUWT, Oct 3, 2017
https://wattsupwiththat.com/2017/10/03/the-epa-co2-endangerment-finding-endangers-the-usa/
Link to CERN article: CLOUD experiment sharpens climate predictions
By Staff Writer, CERN Courier, Nov 11, 2016
http://cerncourier.com/cws/article/cern/66876

Enough is Enough! Stop hyping Harvey and Irma!
By Neil Frank, former Director National Hurricane Center, WUWT, Sep 25, 2017
“The lowest central pressure recorded in Irma was 914 millibars. The lowest pressure ever recorded in an Atlantic hurricane was 882 mb while Wilma was in the northwest Caribbean Sea in 2005. The lowest pressure for a land falling hurricane was 892 mb when the 1935 hurricane crossed the Florida Keys.”
“If President Trump were to reverse his decision and once again have the U.S. participate in the Paris Accord, we would immediately owe the U.N. $2.5 billion against our pledge. Just maybe it would be better to take that money and help the 150,000 whose homes were flooded in SE Texas during Harvey.”
[SEPP Comment: Includes a section on changing methods to measure hurricane strength.]
Frequently Asked Questions 9.1*: A Critique
Guest Post by Clyde Spencer, WUWT, Sep 27, 2017
“It has been shown for at least one model that the tuning process does not necessarily lead to a single, unique set of parameters for a given model, but that different combinations of parameters can yield equally plausible models (Mauritsen et al., 2012).”
[SEPP Comment: Singer tested this and showed that a minimum of ten runs is desirable.]

Climate scientist rebuts Hollywood hurricane hype: ‘This is what weather looks like’
Roy Spencer’s e-book ‘Inevitable Disaster’ refutes link between global warming, hurricanes
By Valerie Richardson, The Washington Times, Sep 21, 2017
http://www.washingtontimes.com/news/2017/sep/21/climate-scientist-rebuts-hollywood-hurricane-hype/?mkt_tok=eyJpIjoiWXpjME4yVmlOakJqWVRVNSlslnQIojQSilhyZjZmVkpXRk85Z1IoZFJuNzFtaZjYV2HUfNfsbikzQkJrQjOwWf2aRBZTJqVmZiaDJtaVlUcm1wU0pjZH.ZmWjVNdkgxZxocja3UHFNXC9aeUlwM2szVxminLA4SUpcL29EcGM1Y3pqSTF1MU5DU3NJMWxPMEVPdWtHZnJ5In0%3D

Chief Science Adviser [NZ] Attacks Scientists’ Political ‘Arrogance’ and Academic ‘Over-hype’
Editorial Times Higher Education, Via GWPF, Oct 1, 2017
https://www.thegwpf.com/chief-science-adviser-attacks-scientists-political-arrogance-and-academic-over-hype/

Is climate change controversy good for science?
Guest essay by Craig Idso, WUWT, Oct 4, 2017
https://wattsupwiththat.com/2017/10/04/is-climate-change-controversy-good-for-science/

New Study: Climate Science Controversy Is Good for Science
By Staff Writers, GWPF, Oct 5, 2017
https://www.thegwpf.com/new-study-climate-controversy-is-good-for-science-in-general/
Link to paper: Is climate change controversy good for science? IPCC and contrarian reports in the light of bibliometrics
By Jankó, Vancsó & Móricz, Science Metrics, June 22, 2017
https://link.springer.com/article/10.1007/s11192-017-2440-9
“Contrary to expectations, controversy is beneficial to the science of climate change as it fosters the review process on both sides of the debate.”

Defending the Orthodoxy
Red/Blue and Peer Review
By Eric Davidson (email: president@agu.org), President, AGU; also at Appalachian Laboratory, University of Maryland Center for Environmental Science, Frostburg; and Marcia K. McNutt (email: naspresident@nas.edu), President, National Academy of Sciences, Washington, D. C., EOS, October 2017

Climate change deniers, science always wins in the end
Opinion by Arturo Casadevall and Ferric Fang, The Hill, Oct 2, 2017
Earth's Global Energy Budget
By Kevin E. Trenberth, John T. Fasullo, and Jeffrey Kiehl, NCAR, AMS, Mar 1, 2009
http://journals.ametsoc.org/doi/abs/10.1175/2008BAMS2634.1

Potential for natural evaporation as a reliable renewable energy resource
By Ahmet Hamdi Cavusoglu, Xi Chen, Pierre Gentine & Ozgur Sahin, Nature Communications, Sep 26, 2017
https://www.nature.com/articles/s41467-017-00581-w

Disrupting Climate Change
By Jules Kortenhorst, Project Syndicate, Oct 5, 2017

[SEPP Comment: From “The World’s Opinion Page”, according to whom? And how would the proposals stop warming and cooling that has occurred for hundreds of millions of years?]}

These Hurricanes Prove That Climate Adaptation Is Not Enough
Trump only wants to address the effects of global warming, not the cause.
By Emily Atkin, New Republic, Sep 22, 2017 [H/t Timothy Wise]

Questioning the Orthodoxy
Climate Alarmism Is a Typical Scientific Scam but with Much More Serious Consequences
By Alan Carlin, Carlin Economics and Science, Oct 5, 2017
http://www.carlineconomics.com/archives/3909

Chief Science Adviser [NZ] Attacks Scientists’ Political ‘Arrogance’ and Academic ‘Over-hype’
Editorial Times Higher Education, Via GWPF, Oct 1, 2017
https://www.thegwpf.com/chief-science-adviser-attacks-scientists-political-arrogance-and-academic-over-hype/

It’s worse than They thought: warming is slower than predicted
By Christopher Monckton of Brenchley, WUWT, Sep 26, 2017

Climate Scientists Shoot the Messenger
By David Whitehouse, GWPF, Sep 25, 2017
https://www.thegwpf.com/climate-scientists-shoot-the-messenger/

Reasons Why Climate Alarmism and the Fear it is Meant to Generate is Unjustified
By Justin Haskin and H. Sterling Burnett, Townhall, Oct 3, 2017
https://townhall.com/columnists/justinhaskins/2017/10/03/reasons-why-climate-alarmism-and-the-fear-it-is-meant-to-generate-is-unjustified-n2389772
Breaking: Pacific walrus is not threatened with extinction says US Fish & Wildlife
By Susan Crockford, Polar Bear Science, Oct 4, 2017

After Paris!
Trump to Argue Obama’s Clean Power Plan Violates U.S. Law
By Jennifer Dlouhy, Bloomberg, Oct 6, 2017
https://www.bloomberg.com/news/articles/2017-10-05/trump-is-said-to-argue-obama-s-clean-power-plan-violates-law

Can We Stop Pretending China Actually Cares About Global Warming?
By Michael Bastasch, Daily Caller, Sep 27, 2017

Change in US Administrations
Judges Forcing Trump To Reverse Climate “Endangerment Finding”
By Dennis Avery, Townhall, Sep 29, 2017
Link to CERN article: CLOUD experiment sharpens climate predictions
By Staff Writers, CERN, Nov 11, 2016
http://cerncourier.com/cws/article/cern/66876

A Blow For Climate Sanity: Trump Gets Rid Of Obama's 'Clean Power Plan'
Editorial, IBD, Oct 6, 2017

Trump Has a Plan to Save Coal and Hobble Clean Energy
By Joe Ryan, Bloomberg, Oct 3, 2017
[SEPP Comment: Eliminating special tax breaks and mandates will hobble “sustainable” energy?]

Perry: ‘There is no free market in the energy industry’
By Timothy Cama, The Hill, Oct 6, 2017

One Relatively Unknown Federal Agency Will Play A Big Role In Trump’s ‘Energy Dominance’ Agenda
By Michael Bastasch, Daily Caller, Sep 23, 2017 [H/t WUWT]

Seeking a Common Ground
Making Technological Miracles
By Mark P. Mills, The New Atlantis, Spring, 2017
http://www.thenewatlantis.com/publications/making-technological-miracles

Matt Ridley: Climate Change’s Rational Optimist
By Julie Kelley, National Review, Sep 28, 2017

Quote of the Week: The cost of daring to write about climate
By Anthony Watts, WUWT, Sep 26, 2017

Review of Recent Scientific Articles by CO2 Science
A CO2-Induced Global Stimulation of Terrestrial Carbon Uptake and Water Use Efficiency
http://www.co2science.org/articles/V20/oct/a1.php

“And so it is that the increase in terrestrial carbon uptake over the past three decades benefited from the ongoing rise in atmospheric CO2. What is more, this increase has not come at a cost of enhanced global terrestrial water use. Instead, rising atmospheric CO2 has improved the global carbon uptake per unit of water use, which finding holds extremely important ramifications for the future survival of both plant and animal species.
“Atmospheric CO2, it truly is the elixir of life!”

Climate Warming Improves the Breeding Productivity of a European Bird
http://www.co2science.org/articles/V20/sep/a17.php

Impacts of Ocean Acidification on a Marine Food Web
http://www.co2science.org/articles/V20/sep/a15.php

“With respect to the implications of their work, Taucher et al. write that ‘since copepods serve as a major food source for a variety of commercially important fish species, such CO2-driven trophic cascades could have important implications for ecosystem structure and fish stock dynamics in temperate and arctic regions.’ And based upon the results of their study, we would add that all indications are that those implications are of a highly positive nature.”

Models v. Observations
Are Climate Models Overstating Warming?
By Ross McKitrick, Climate Etc. Sep 26, 2017
https://judithcurry.com/2017/09/26/are-climate-models-overstating-warming/#more-23412
Climate models overheat
Guest essay by Michel de Rougemont, WUWT, Sep 30, 2017
https://wattsupwiththat.com/2017/09/30/climate-models-overheat/

Model Issues
When Less Is More: Opening the Door to Simpler Climate Models
Earth system models are resource intensive and complex. To cut through this complexity, the Community Earth System Model project will now be embracing a hierarchy of simpler climate models.
https://eos.org/opinions/when-less-is-more-opening-the-door-to-simpler-climate-models#.Wc5fTUic9AQ.twitter
[SEPP Comment: Working towards a model that can be validated?]

New Study: Global Warming Standstill Confirmed, Climate Models Wrong
Link to paper: Natural climate variability, part 2: Interpretation of the post 2000 temperature standstill
By Nicola Scafetta, Aberto Mirandola, Antonio Bianchin, International Journal of Heat and Technology, September 2017

Storms Expose Just How Huge Model Uncertainty Can Be…Even With 6-Hour Forecasts!
By P Gosselin, No Tricks Zone, Oct 6, 2017
http://notrickszone.com/2017/10/06/storms-expose-just-how-huge-model-uncertainty-can-be-even-with-6-hour-forecasts/#sthash.BTPumcdw.dpbo

Measurement Issues -- Surface
Analysis says NOAA global temperature data ‘doesn’t constitute a “smoking gun” for global warming’
By Anthony Watts, WUWT, Oct 1, 2017

Cooler Global Temperatures Ahead: Indications are that La Niña is returning
By Anthony Watts, WUWT, Oct 4, 2017
https://wattsupwiththat.com/2017/10/04/cooler-global-temperatures-ahead-indications-are-that-la-nina-is-returning/

Measurement Issues -- Atmosphere
UAH Global Temperature Update for September 2017: +0.54 deg. C
By Roy Spencer, His Blog, Oct 2, 2017
Changing Weather
Judith Curry & David Whitehouse: What Can Science Tell Us About Harvey & Irma?
Video, GWPF, Sep 28, 2017

Houston Chronicle: Preaching Climate Alarmism Post Harvey
https://www.masterresource.org/houston-chronicle/houston-chronicle-harvey-alarmism/

Recovering from Harvey
By Travis Willmann, University of Texas Libraries, Sep 29, 2017 [H/t Dick Hoese]
http://blogs.lib.utexas.edu/texlibris/

Draining the PC Flood-Policy Swamp
By Wayne Lusvardi, Master Resource, Oct 3, 2017
“There were 946,571 housing units in Houston as of 2015, thus 39 percent have flood insurance but only 14.9% are in mapped floodplains.”
[SEPP Comment: The discussion between floods and inundations brings up the difference between basin states and plains states.]

Hurricane damage threatens Arecibo Observatory’s future
By Daniel Clery, Science, Sep 26, 2017 [H/t Toshio Fujita]
[SEPP Comment: Many key functions were superseded elsewhere.]

New Paper Finds No Evidence Of Long Term Flood Trends
By Paul Homewood, Not a Lot of People Know That, Oct 5, 2017
Link to paper: Climate-driven variability in the occurrence of major floods across North America and Europe

Changing Climate
Iron Seeding of the Pacific Ocean May Have Played a Role in Global Climate Change
By Charles the Moderator, WUWT, Sep 27, 2017
Link to paper: Millennial-scale iron fertilization of the eastern equatorial Pacific over the past 100,000 years
Changing Climate – Cultures & Civilizations
The world’s first and only “climate refugees” – Ancient Africans
By Anthony Watts, WUWT, Oct 5, 2017
https://wattsupwiththat.com/2017/10/05/the-worlds-first-and-only-climate-refugees-ancient-africans/
Link to paper: A climatic context for the out-of-Africa migration
By Tierney, deMenocal, & Zander, Geology, October 2017
https://pubs.geoscienceworld.org/geology/article/516677/a-climatic-context-for-the-out-of-africa-migration

Changing Seas
Great Barrier Reef starts to recover after severe coral bleaching, survey of sites between Cairns and Townsville shows
By David Chen, ABC News & Daily Telegraph, Sep 29, 2017
[SEPP Comment: Reproducing after being declared “beyond repair.”]

Great Barrier Reef: 2016 Coral Cover Loss and Local Sea Level Fall
Guest post by David Middleton, WUWT, Oct 2, 2017
[SEPP Comment: Critique of another vague “scientific” report. Unstated – when did the instrument record for the area considered begin?]

‘Catastrophic’ sea level rise in the past may have drowned corals in Hawaii
By Anthony Watts, WUWT, Sep 28, 2017
[SEPP Comment: Also, a 120-meter (400 foot) sea level rise since the last major ice age may have killed corals. Particularly, if they no longer receive sunlight.]

Changing Cryosphere – Land / Sea Ice
The First Solid Evidence of Eruptions Under Antarctic Ice
By Ross Pomeroy, Real Clear Science, Sep 14, 2017 [H/t Timothy Wise]
Link to paper: The first physical evidence of subglacial volcanism under the West Antarctic Ice Sheet
https://www.nature.com/articles/s41598-017-11515-3
[SEPP Comment: No appreciable warming of the atmosphere above the Antarctic, thus any surface warming is unlikely related to CO2. An increase in volcanism from melting ice?]

Giant hole in ice reappears in Antarctica after 40 years
By Anthony Watts, WUWT, Oct 2, 2017
Study: Sunlight and the right microbes convert Arctic carbon into carbon dioxide
By Anthony Watts, WUWT, Oct 5, 2017
https://wattsupwiththat.com/2017/10/05/study-sunlight-and-the-right-microbes-convert-arctic-carbon-into-carbon-dioxide/
Photochemical alteration of organic carbon draining permafrost soils shifts microbial metabolic pathways and stimulates respiration
https://www.nature.com/articles/s41467-017-00759-2
[SEPP Comment: What happened during the last interglacial?]

Acidic Waters
Coral Reefs, Temperature and Ocean pH
By Andy May, WUWT, Oct 4, 2017

Agriculture Issues & Fear of Famine
UN Admits It Can’t Link Global Warming To The Spike In World Hunger, Then Does It Anyway
By Michael Bastasch, Daily Caller, Sep 22, 2017 [H/t WUWT]
Link to report: How close are we to #ZeroHunger?
The State of Food Security and Nutrition in the World, 2017
By Staff Writers, Food and Agriculture Organization of the United Nations, 2017

Un-Science or Non-Science?
Numerical simulations to quantify the diurnal contrast in local climate trend induced by desert urbanization
By Samy Kamal, Huei-Ping Huang, & Soe W. Myint, Environmental Systems and Decisions, Sep 30, 2017
“In this manner, this study focuses on the particular aspect of the effect of land-use changes on local climate. Within this scope, the results reveal a pattern of the climatic effect of desert urbanization with nighttime warming and weaker, but significant daytime cooling. This effect is confined to the urban area and is not sensitive to the size of the city or the detailed land cover types in the surrounding areas.”
[SEPP Comment: Findings are consistent with the empirical findings by John Christy, et al. for the San Joaquin Valley of California.]

Claim: Climate Change Will Make Roads Rougher
Guest essay by Eric Worrall, WUWT, Sep 29, 2017
[SEPP Comment: Temperatures rise very slowly in the desert with the summer sun?]

Lowering Standards
Corrupt Climate Science Discredits NASA
By Larry Bell, Newsmax, Oct 2, 2017
Scientific American Sokalized
By Howard “Cork” Hayden, WUWT, Aug 27, 2017
https://wattsupwiththat.com/2017/08/27/scientific-american-sokalized/

Communicating Better to the Public – Make things up.
Harvard's bogus ExxonMobil study
By Tim Benson, American Thinker Oct 4, 2017 [H/t John Dunn]
http://www.americanthinker.com/blog/2017/10/harvards_bogus_exxonmobil_study.html

Communicating Better to the Public – Do a Poll?
Eye-roller Poll: Americans willing to pay big bucks to combat climate change
By Anthony Watts, WUWT, Oct 3, 2017
https://wattsupwiththat.com/2017/10/03.eye-roller-poll-americans-willing-to-pay-big-bucks-to- combat-climate-change/
“Most Americans want the government to combat climate change, some willing to pay a high amount.”
[SEPP Comment: Most Americans want the government to find a cure for cancer...heart disease...obesity, etc.]

Expanding the Orthodoxy
More than 100 schools sign on to teach health risks of climate change
A growing movement in higher education responds to a shortage of health professionals and researchers trained in climate change and health
Press Release by Columbia University, EurekAlert, AAAS, Sep 26, 2017
https://www.eurekalert.org/pub_releases/2017-09/cums-mt1092617.php

Questioning European Green
Does fracking have a future in Europe?
By Martin Livermore, The Scientific Alliance, Oct 6, 2017
http://scientific-alliance.org/scientific-alliance-newsletter/does-fracking-have-future-europe
[SEPP Comment: Have the anti-fossil fuel greens won?]

UK’s green bank abandons Britain: Promise to back UK ditched in rush to privatise firm
By Rachel Millard, Daily Mail, Sep 25, 2017

Litigation Issues
The ridiculous #ExxonKnew Investigation Takes Another Hit (two actually)
By Anthony Watts, WUWT, Oct 4, 2017
https://wattsupwiththat.com/2017/10/04/the-ridiculous-exxonknew-investigation-takes-another-hit/

Subsidies and Mandates Forever
In windy Denmark, clouds clearing for solar power
By Stine Jacobsen, Teis Jensen, Reuters, Sep 27, 2017
The winner of the wind-power game won’t be the consumer
By Rupert Darwall, CapX, Sep 26, 2017 [H/t GWPF]
https://capx.co/the-winner-of-the-wind-power-game-wont-be-the-consumer/

ExxonMobil Dethroned As Top Energy Company
By Nick Cunningham, Oil Price.com, Oct 1, 2017

Greens, the baseload deniers, want $2.2b for bandaid batteries to keep junk renewables alive
By Jo Nova, Her Blog, Oct 6, 2017

“Aadam Bandt is out today with the big new plan, apparently confused about what “load” means:
“We don’t have a baseload problem, we have a peak load problem,” Mr Bandt said.
“We can count on the Greens to pour confusion on any problem:
“We need flexible generation and energy storage to manage the transition, not more coal.’
The Greens are now asking for another $2.2billion to pay for the battery bandaid to fix a problem they and the leeching renewables industry created.
Washington’s Control of Energy
Erase fracking regulations, industry tells Trump
A circuit court ruled a challenge on federal over-reach was "unripe," because the White House signaled it would rescind the rule anyway.
By Daniel J. Graeber, UPI, Sep 26, 2017
https://www.upi.com/Erase-fracking-regulations-industry-tells-Trump/4331506422643/

Now it’s a War on Pipelines
By Paul Driessen, Townhall, Sep 23, 2017 [H/t Timothy Wise]
https://townhall.com/columnists/pauldriessen/2017/09/23/now-its-a-war-on-pipelines-n2385323

The Jones Act Is An Unnatural Disaster
By Nita Ghei, IBD, Oct 5, 2017
http://www.investors.com/politics/commentary/the-jones-act-is-an-unnatural-disaster/

Oil and Natural Gas – the Future or the Past?
Natural Gas Supply and Usage
By Donn Dears, Power For USA, Oct 3, 2017
http://powerforusa.com/2017/10/03/natural-gas-supply-and-usage/

New Report Shows U.S. Carbon Emissions Continued to Decline in 2016 – Thanks to Shale
By Nicole Jacobs, Energy in Depth, Sep 29, 2017 [H/t GWPF]

Roller Coaster - Latest E&P Profits Shrink After Strong Q1, But Industry Remains Solidly Profitable
By Nick Caccione, RBN Energy, Sep 26, 2017
https://rbnenergy.com/roller-coaster-latest-eandp-profits-shrink-after-strong-q1-but-industry-remains-solidly-profitable
"The 43 U.S. exploration and production companies (E&Ps) we’ve been tracking racked up $160 billion in losses in 2015-16…"

Nuclear Energy and Fears
Valuing nuclear power in the USA
By Staff Writers, WNN, Sep 21, 2017
[SEPP Comment: Does the nuclear industry recognize that many of the groups going after fossil fuels already dismissed nuclear with exaggerations, safety claims, and similar efforts to scare the public?]

Addressing uncertainties in decommissioning cost estimates
Historical experience of estimating decommissioning costs has not been particularly satisfactory. In response to this, the process of decommissioning cost estimation is evolving, writes Simon Carroll.
By Staff Writers, WNN, Oct 3, 2017
**Alternative, Green (“Clean”) Solar and Wind**

**Forget This Spin Too: Solare PV Is Not On the Brink of Being Subsidy Free**
By John Constable, GWPF, Sep 26, 2017

**Misleading Costs for Wind and Solar?**
By Donn Dears, Power For USA, Sep 26, 2017

**UK offshore wind capacity factors – a semi-statistical analysis**
By Roger Andrews, Energy Matters, Oct 6, 2017

[SEPP Comment: Exploring what is required to get North Sea wind to a capacity above 40%.

**UK offshore cost claims challenged**
Think tank GWPF complains to Advertising Standards over poster campaign
By Staff Writers, RENews, No Date

Link to Press Release of Complaint; GWPF Lodges ASA [Advertising Standards Authority] Complaint Over False Claims in Offshore Wind Campaign
By Staff Writers, GWPF, Oct 6, 2017

The GWPF “disputes the campaign’s claim that the price paid for electricity from offshore wind farms has fallen by 50% over the last five years.”

Link to study: Offshore Wind Strike Prices: Behind the headlines
By Hughes, Aris, and Constable, GWPF, 2017

However, statistical analysis of the data available, covering 86 offshore wind farms, suggests that the capital cost of offshore wind (£/MW installed) is not in fact falling, since the extra costs of necessarily moving into deeper water are offsetting a real but modest rate of technological progress. The successful projects in the second round are almost certainly not viable at the low CfD prices offered, and these bids therefore must have other explanations. We infer that developers see the CfD as a low-cost, no-penalty option for future development, and that, because the contract is easily broken once the windfarm has been built, they regard the price as a minimum not a ceiling. Should the market price rise above the contracted price, because of rising fossil fuel costs or a carbon tax, they would cancel the CfD contract and take the higher price that would become available. On the other hand, if there is no significant probability of that elevated market price, these sites are very unlikely to be built. Contrary to media exaggerations, the low CfD prices are commercial speculation, not the dawn of a new age for offshore wind and renewables.

**Alternative, Green (“Clean”) Energy -- Other**

**London Seeks Ban of Renewable Energy Blamed for Air Pollution,**
By Ben Webster, The Times, Via GWPF, Sep 9, 2017
[https://www.thegwpf.com/london-seeks-ban-of-renewable-energy-blamed-for-air-pollution/](https://www.thegwpf.com/london-seeks-ban-of-renewable-energy-blamed-for-air-pollution/)
“Sadiq Khan, the mayor of London, is seeking powers to prohibit all burning of wood in parts of the capital with poor air quality. He also wants tighter curbs on wood-burning stoves, with only low-emission versions allowed to stay on sale.”

[SEPP Comment: But isn’t it greener than gas?]

**Carbon Schemes**

**After spending €587 million, EU has zero CO2 storage plants**

By Peter Teffer, EU Observer, Oct 6, 2017 [H/t GWPF]

[https://euobserver.com/investigations/139257](https://euobserver.com/investigations/139257)

Link to an earlier report: The Bottomless Pit: The Economics of Carbon Capture and Storage, By Gordon Hughes, GWPF, 2017


**US Energy Secretary announces funding for carbon capture technology projects**

By Harleign Hobbs, World Coal, Sep 29, 2017


[SEPP Comment: Washington can waste money regardless of what party is in the White House.]

**California Dreaming**

**California’s Latest Bad Idea — Outlaw Gas-Powered Cars**

Editorial, IBD, Oct 5, 2017


[SEPP Comment: For California politicians, symbolism is more important than realism.]

**Health, Energy, and Climate**

**Is Air Pollution Killing Millions? Not In The United States Of America**

By Alex Berezow, ACSH, Oct 2, 2017


[SEPP Comment: Although agree with the general thrust of the article, disagree with the assumption that PM2.5 is a major pollutant.]

**Oh Mann!**

Academic freedom lecturer takes on claims of climate change deniers

By Safiya Merchant, The University Record, University of Michigan, Oct 4, 2017 [H/t Climate Etc.]

[https://record.umich.edu/articles/academic-freedom-lecturer-takes-claims-climate-change-deniers#WdVHb2KagHQ.twitter](https://record.umich.edu/articles/academic-freedom-lecturer-takes-claims-climate-change-deniers#WdVHb2KagHQ.twitter)

[SEPP Comment: Mann at his best?]

**Other Scientific News**

NSF-funded LIGO pioneers named 2017 Nobel Prize in Physics laureates

NSF congratulates physicists Rainer Weiss, Kip Thorne and Barry Barish


New evidence that Siberian volcanic eruptions caused extinction 250 million yrs ago
By Staff Writers, Phys.org, Oct 2, 2017

The stilling: global wind speeds slowing since 1960
By Joe Dodgshun, Horizon, EU, Oct 5, 2017

Other News that May Be of Interest
Nature: “‘One-size-fits-all’ threshold for P values under fire.” Good. Shoot Them All Down
By Matt Briggs, His Blog, Oct 4, 2017
http://wmbriggs.com/post/22805/
“Probability is epistemic. It is a epistemological measure, not necessarily quantitative, between a set of premises (or assumptions, measurements, etc.) and a proposition of interest. That, and nothing more. (This is no different than what logic is, of course.)”
[SEPP Comment: Asserting that in science the focus should be on probabilities, observables values, not on other estimates.]

Montesquieu’s “Sweet Commerce” and Cobden’s “God’s Diplomacy”
Empirical evidence that free markets make people nicer
By Matt Ridley, Rational Optimist, Oct 6, 2017
http://www.rationaloptimist.com/blog/free-markets-and-free-trade/

The Monty Hall Problem: There Is No Correct Answer
By Roy Spencer, His Blog, Oct 1, 2017
http://www.drroyspencer.com/2017/10/the-monty-hall-problem-there-is-no-correct-answer/

BELOW THE BOTTOM LINE:

Trout drought!
By Staff Writers, Climate Change Predictions.org, Oct 3, 2017
http://climatechangepredictions.org/uncategorized/9162
“Global warming is the single greatest threat to the survival of trout in America’s interior west. “If nothing is done to reduce human-produced greenhouse gas emissions — the primary culprit behind global warming — trout habitat throughout the Rocky Mountain region could be reduced by 50 percent or more by the end of the century, bringing fewer opportunities for anglers to enjoy sportfishing and resulting in serious economic consequences for those who depend on the fishing, recreation and tourism industry for their livelihoods.
“This July 2008 issue paper by the Natural Resources Defense Council and Montana Trout Unlimited makes clear that we must act now at the national, regional and local levels to reduce our emissions of global warming pollution and adopt other policies that appropriately value healthy rivers, lakes and streams.”
Natural Resources Defense Council, 18 Jul 2008

ARTICLES:
1. First, They Came for the Biologists
The postmodernist left on campus is intolerant not only of opposing views, but of science itself.
By Heather Heying, WSJ, Oct 20, 2017
https://www.wsj.com/articles/first-they-came-for-the-biologists-1506984033

After a comment on profession football, the author continues:
The revolution on college campuses, which seeks to eradicate individuals and ideas that are considered unsavory, constitutes a hostile takeover by fringe elements on the extreme left. Last spring at the Evergreen State College, where I was a professor for 15 years, the revolution was televised—proudly and intentionally—by the radicals. Opinions not fitting with the currently accepted dogma—that all white people are racist, that questioning policy changes aimed at achieving “equity” is itself an act of white supremacy—would not be tolerated, and those who disagreed were shouted down, hunted, assaulted, even battered. Similar eruptions have happened all over the country.

What may not be obvious from outside academia is that this revolution is an attack on Enlightenment values: reason, inquiry and dissent. Extremists on the left are going after science. Why? Because science seeks truth, and truth isn’t always convenient.

The left has long pointed to deniers of climate change and evolution to demonstrate that over here, science is a core value. But increasingly, that’s patently not true.

The battle on our campuses—and ever more, in K-12 schools, in cubicles and in meetings, and on the streets—is being framed as a battle for equity, but that’s a false front. True, there are real grievances. Gaps between populations exist, for historical and modern reasons that are neither honorable nor acceptable, and they must be addressed. But what is going on at institutions across the country is—yes—a culture war between science and postmodernism. The extreme left has embraced a facile fiction.

Postmodernism, and specifically its offspring, critical race theory, have abandoned rigor and replaced it with “lived experience” as the primary source of knowledge. Little credence is given to the idea of objective reality. Science has long understood that observation can never be perfectly objective, but it also provides the ultimate tool kit with which to distinguish signal from noise—and from bias. Scientists generate complete lists of alternative hypotheses, with testable predictions, and we try to falsify our own cherished ideas.

Science is imperfect: It is slow and methodical, and it makes errors. But it does work. We have microchips, airplanes and streetlights to show for it.

In a meeting with administrators at Evergreen last May, protesters called, on camera, for college president George Bridges to target STEM faculty in particular for “antibias” training, on the theory that scientists are particularly prone to racism. That’s obvious to them because scientists persist in using terms like “genetic” and “phenotype” when discussing humans. Mr. Bridges offers: “[What] we are working towards is, bring ’em in, train ’em, and if they don’t get it, sanction them.”

Despite the benevolent-sounding label, the equity movement is a highly virulent social pathogen, an autoimmune disease of the academy. Diversity offices, the very places that were supposed to address bigotry and harassment, have been weaponized and repurposed to catch and cull all who disagree. And the attack on STEM is no accident. Once scientists are silenced, narratives can be fully unhooked from any expectation that they be put to the test of evidence. Last month, Evergreen made it clear that they wanted two of its scientists gone—my husband, Bret Weinstein, and me, despite our stellar reputations with the students they claimed to be protecting. First, they came for the biologists . . .
Science has sometimes been used to rationalize both atrocity and inaction in its face. But conflating science with its abuse has become a favorite trope of extremists on the left. It’s a cheap rhetorical trick, and not, dare I say, very logical.

Science creates space for the free exchange of ideas, for discovery, for progress. What has postmodernism done for you lately?

2. Rebuild Strong, Not Green, in Puerto Rico
Sell the bankrupt power authority and harden the grid.
By Mark P. Mills, WSJ, Oct 5, 2017

“Hurricane Maria devastated Puerto Rico’s electric grid, destroying half the island’s long-distance transmission lines and compromising most local distribution capacity. Virtually all cell towers went dark. Restoring service under these conditions would be a daunting challenge under any circumstances. But Puerto Rico Electric Power Authority filed for bankruptcy last July.

“Environmentalists are already lobbying for Prepa to build a greener grid, one less dependent on ‘old’ fuels like oil. But Puerto Rico didn’t go dark because of how it produces electricity. The power plants survived. The wires distributing power got destroyed.

“A greener grid would do nothing to minimize suffering after the next hurricane. What Puerto Rico and others need is a harder grid so that far fewer people are blasted back to the 19th century when disaster strikes and service can be restored faster after a blackout.

“Engineers can do it. Previous calamitous outages have pointed to solutions: stronger poles and wires; waterproofed substations with sturdier, higher walls; pre-emptive tree removal near wires; and, for essential parts of the system, buried wires. New classes of materials for radically stronger poles and wires are emerging, as is software that can model extreme events and radically improve system designs. Other ideas: low-power sensors that can operate in blackouts by scavenging power from nature and gather critical information for repair and recovery, and swarms of drones for rapid damage assessment.

“All this would cost far less than going green. And while the two paths are not mutually exclusive—hybrid solar-diesel emergency generators, for example—federal and state governments have spent hundreds of billions of dollars pushing for “smart” and green grids instead of resilient and restorable ones.

“Now is the time to build an extreme grid in Puerto Rico. Given the scale of the disaster, federal funding is essential, but will ignite predictable political squabbles. There is a way of approaching the problem that could benefit both Puerto Ricans and people living on exposed grids everywhere—that is, practically everyone.”

The author continues, advocating auctioning the utility to private organizations, with the promise matching funds.

Mr. Mills is a senior fellow at the Manhattan Institute and faculty fellow at Northwestern University’s McCormick School of Engineering.
3. Energy Department Urges Pricing Shift That Could Bolster Coal, Nuclear
Proposal could pay some plants for their costs and a ‘fair return on equity,’ even though they sell into competitive markets
By Timothy Puko, WSJ, Sep 29, 2017

According to the article: The Trump administration is urging independent energy regulators to change how electricity is priced, proposing new rules that would bolster revenue for coal-fired and nuclear power plants.

The Energy Department is mandating that the Federal Energy Regulatory Commission consider new rules that would effectively raise power prices to pay more to plants considered more resilient. The department suggests nuclear and coal-fired plants as potential recipients, and charges FERC with tweaking electricity markets so they give more of a reward to plants that have at least three months of fuel on site and can run uninterrupted through extreme weather, disasters or other emergencies.

Nuclear and coal-burning technologies are probably the only ones able to meet the requirements, experts said. Under the proposal, eligible plants would get paid enough to cover their costs and a “fair return on equity” whenever they run, even though they sell into competitive markets.

FERC, which regulates wholesale power markets, is under no obligation to make these changes, only to consider them. FERC officials are reviewing the proposal, a spokeswoman said. Any changes made would likely be implemented by the grid operators that run deregulated power markets under FERC’s oversight.

The article continues with discussion of what may occur over the next two months when possible new rules are being considered.