

The Week That Was: 2016-08-27 (August 27, 2016)
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The Science and Environmental Policy Project

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Quote of the Week. *“I would rather have questions that can't be answered than answers that can't be questioned.”* – Richard Feynman, Physicist, Nobel laureate

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Number of the Week: Over 500,000 barrels per day

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THIS WEEK:

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

One More Step Towards the Sun: A team including Henrik Svensmark at the National Space Institute at the Technical University of Denmark (DTU Space) and Nir Shaviv of the Racah Institute of Physics at the Hebrew University of Jerusalem has found a strong statistical relationship between the sudden decline in observed galactic (high-energy) cosmic ray intensity following a coronal mass ejection with a decrease in the earth's cloud cover. The declines in observed cosmic ray intensity following a coronal mass ejection are called Forbush Decreases, which is generally accepted. What is new is the strong statistical relationship (>95%) between Forbush Decreases and a near simultaneous reduction in cloud cover.

The study covered a relatively short 25-year period using four datasets, three satellite based and one ground based. In the laboratory, it has been demonstrated that galactic cosmic rays generate electrically charged molecules – ions – in Earth's atmosphere. Ions have been shown to enhance the formation of aerosols, which can serve as seeds for the formation of the cloud drops that make up a cloud. The issue has been does it occur in the atmosphere? – which this study demonstrates.

Large Forbush Decreases can cause a reduction in atmospheric ions of up to about 20 to 30 percent over the course of a week, which is now closely correlated with declines in cloud cover. A future step is establishing if frequent coronal ejections, or the lack thereof, result in persistent changes in cloud cover, resulting in increasing or decreasing global temperatures. This may take a long time.

The position expressed in the reports of the Intergovernmental Panel on Climate Change (IPCC), and its supporters, is that the only solar influence is from small changes in solar irradiance over time. See links under Science: Is the Sun Rising? and Commentary: Is the Sun Rising?

Fewer Clouds? A study published in *Journal of Climate* asserted that based on 15 years of satellite observations, there may be fewer clouds forming in the tropics with the presumed carbon dioxide (CO₂) caused warming. The study also asserts that using the data available, the guessed at effect of doubling CO₂ of 1.5 and 4.5 degrees Celsius can be constrained to be likely above 2.3 degrees Celsius.

A problem arises because the cloud data is very noisy (jumbled) from year to year. Trying to extrapolate a clear signal from such data is extremely difficult, if not impossible. A much longer data record is needed before any conclusions are formed. Fewer clouds in the tropics may be due to solar influence rather than CO₂ caused “global warming” influence. See links under Defending the Orthodoxy.

UN IPCC Forecasting: Three researchers tested 22 global climate models against historic global surface temperatures over the period 1880 to 2010. The results are poor. The abstract states:

*“IPCC and others use in-sample correlations to confirm the ability of climate models to track the global surface temperature (GST) historically. However, a high correlation is a necessary but not sufficient condition for confirmation, because GST is nonstationary. In addition, the tracking errors must also be stationary. Cointegration tests using monthly hindcast data for GST generated by 22 climate change models over the period 1880–2010 are carried out for testing the hypothesis that these hindcasts track GST in the longer run. We show that, although GST and their hindcasts are highly correlated, they unanimously fail to be cointegrated. This means that all 22 models fail to track GST historically in the longer run, because their tracking errors are nonstationary. This juxtaposition of a high correlation and cointegration failure may be explained **in terms of the phenomenon of spurious correlation, which occurs when data such as GST embody time trends.**”* [Boldface added].

A spurious correlation occurs when there is not direct relationship between the variables, but a relationship is statistically calculated. It is a common problem with using noisy data.

Unfortunately, the IPCC, and others, use surface temperatures to evaluate the global climate models. The failure of the models to track the surface temperatures is not surprising. Historic data is very sparse, largely from western Europe and the US. The data is contaminated by significant changes in land use, particularly urbanization. And, as shown in the 2008 NIPCC report, since about 1970, there has been a marked decline in the stations used to establish surface temperatures, and dramatic decline in the number of 5 degree by 5 degree grid boxes covered. Around the year 2000 about 100 of the total of 2,592 possible grid boxes ($[180/5] \times [360/5]$) were covered – 4%. Complicating matters has been the trend, at least in the US, of using stations at airports. Both pavement and flying frequency create measurement problems.

When the Charney report was produced in 1979, there were no comprehensive, global temperature data. But starting in 1989, going back to December 1978, we have had comprehensive global satellite data of the atmosphere. As shown in the report by John Christy, the comprehensive satellite data show that, generally, the global climate models greatly overestimate warming of the atmosphere, where the greenhouse effect occurs. Both satellite and surface data are influenced by weather events such as the El Niño Southern Oscillation (ENSO). But, since the satellite data is “cleaner” it should be easier to separate natural and other human effects from CO₂ caused warming,

If the purpose of the models is to estimate the effect of CO₂, then surface data are poor proxy data at best. Atmospheric data is far superior. The kindest possible justification for the IPCC, and others, not to use satellite data is mental inertia. See links under Challenging the Orthodoxy – NIPCC, Challenging the Orthodoxy, and Models v. Observations.

Spencer’s Experiments: Roy Spencer has two posts showing the greenhouse effect. The first focuses on Desert Rock, Nevada, an arid area where weather balloon measurements have been made twice daily for many years and where a surface radiation measurement facility was installed in 1998. The facility gives the surface radiation budget data (every 3 minutes). Examining the nighttime readings for July 1998, Spencer finds that humidity variation clearly dominates the downwelling of infrared radiation [IR]. [This is not surprising for an arid area.] However, the

influence of temperature variations is poor, probably because temperature variations were small. But for his purposes, the downwelling is important. He states: “But, of course, it is the *net IR* (the sum of upwelling from the warmer surface plus the downwelling from the cooler sky) which must flow from higher to lower temperature, which it does.”

In the second post Spencer discusses a simple experiment, perhaps suitable for high school students, illustrating the greenhouse effect. Spencer refines his argument why a warming of the globe due to increased greenhouse gases does not violate the 2nd law of thermodynamics. Perhaps greenhouse gases can be called atmospheric insulation? A simple example can be seen with two identical glasses, not in direct sunlight, one with a Styrofoam holder, one without. In the summer, with both glasses containing a cold beverage, the one with the holder warms more slowly. In the winter, with both glasses containing a warm beverage, the one with the holder cools more slowly. Yet, the holder contributes no energy to the system. See links under Seeking a Common Ground.

Economic Waste: Writing for *Master Resource*, Robert Bradley posted conclusions for a 1999 essay that apply today. To summarize, politicians calling for more solar and wind generated electricity are putting the cart before the horse. They are not replacing the existing system with a more efficient system. Instead, they propose building a second system to supplement the existing, primary system, that does not need supplementation. The second system must be backed-up by the primary system. It is more expensive to build and maintain two systems than one efficient, reliable system. See link under Alternative, Green (“Clean”) Solar and Wind.

Problems in Germany: Writing in *Energy Matters*, Roger Andrews provides an analysis of Germany’s energy plan – Energiewende. His summary is worthy of quoting:

*“Germany is a country of contradictions, at least as far as energy is concerned. Germans are in favor of more renewable energy yet oppose building the overhead power lines that are needed to distribute it. They are in favor of deep emissions cuts but also in favor of shutting down Germany’s nuclear plants, which will make the problem of meeting emissions targets far more difficult and costly. The government continues to pursue a nuclear shutdown but is unwilling to shut down Germany’s lignite plants. As a result of these conflicting and counterproductive viewpoints and policies the Energiewende has effectively gone nowhere. Despite the expenditure of many billions of dollars it has failed to achieve any visible reduction in Germany’s emissions or to make a meaningful difference to Germany’s energy mix (renewables still supply only 14% of Germany’s total energy). **Its only demonstrable impact has been skyrocketing electricity bills.**”*
[Boldface added.]

Speculation: Myron Ebell of Competitive Enterprise Institute, (CEI), reported an article in the South China Morning Post that said that the US and China are ready to ratify the Paris Agreement. One can only speculate how the Administration plans to ratify the agreement without approval of the Senate. But given the disregard the Administration has demonstrated towards Congress and the Constitution, such speculation is fitting. See links under After Paris!

Driving Oil and Natural Gas Prices: It is becoming very clear that the drivers of lower oil and natural gas prices, today, are not OPEC and not “Big Oil”, but the independent producers, which are using hydraulic fracturing to unlock the wealth of oil and gas in dense shale. There are issues, such as the disposal of waste water from the wells. Often the water is briny, and needs to be properly handled. High pressure injection into wells is causing minor earthquakes. But the

problems can be solved. The earthquakes, usually less than a passing freight train, are not caused by the drilling and fracturing, although the EPA falsely claims it is.

These events prompt a question: what is the purpose behind politicians calling for shutting down hydraulic fracturing? Is it to assure high oil and gas prices, and big profits to OPEC and Big Oil? See Articles 3, 4 & 5 and links under Oil and Natural Gas – the Future or the Past?

Number of the Week: 500,000 barrels per day (b/d). In December 2015, the US government removed all restrictions on exporting crude oil. Even though exports to Canada were allowed, from 2000 to 2013 total exports rarely exceeded 100,000 b/d. From January to May of 2016, exports averaged 501,000 b/d. What is very interesting is that, other than Canada, the largest receiver of US oil exports is Curacao in oil rich Venezuela, with 54,000 b/d. See links under Oil and Natural Gas – the Future or the Past?

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NEWS YOU CAN USE:

Science: Is the Sun Rising?

Solar activity has a direct impact on Earth's cloud cover

By Morten Garly Andersen, Press Release, Technical University of Denmark, Aug 24, 2016 [H/t GWPF]

<http://www.dtu.dk/english/News/Nyhed?id=b759b038-66d3-4328-bbdc-0b0a82371446>

Link to paper: The response of clouds and aerosols to cosmic ray decreases,

By J. Svensmark, M. B. Enghoff, N. J. Shaviv, and H. Svensmark from Technical University of Denmark (DTU Space) and the Racah Institute of Physics at the Hebrew University of Jerusalem, Journal of Geophysical Research: Space Physics, Aug 19, 2016

<http://onlinelibrary.wiley.com/doi/10.1002/2016JA022689/abstract>

Commentary: Is the Sun Rising?

Bombshell: New study confirms 'solar activity has a direct impact on Earth's cloud cover' important to climate change

By Staff Writer, The Hockey Schtick, Aug 25, 2016

<http://hockeyschtick.blogspot.com/2016/08/bombshell-new-study-confirms-solar.html>

Scientists: Ocean Temps Vary 'Robustly' and 'Near-Synchronously' with Solar Activity

By Kenneth Richard, No Tricks Zone, Aug 22, 2016

<http://notrickszone.com/2016/08/22/scientists-ocean-temps-vary-robustly-and-near-synchronously-with-solar-activity/#sthash.sZZW1ZXi.dpbs>

Suppressing Scientific Inquiry – The Witch Hunt – Push-Back

Editorial: What's safe to say about climate change?

By Editors, The Bulletin, Central Oregon, Aug 25, 2016 [H/t WUWT]

<http://www.bendbulletin.com/opinion/4604489-151/editorial-whats-safe-to-say-about-climate-change>

Challenging the Orthodoxy -- NIPCC

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>

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>

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, ed., NIPCC, 2008

http://www.sepp.org/publications/nipcc_final.pdf

Challenging the Orthodoxy

Prepared Testimony to House Committee on Science, Space & Technology

By John Christy, UAH, Feb 2, 2016

<https://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-114-SY-WState-JChristy-20160202.pdf>

Global Warming-Pushing Media, Governments Refuted...Antarctic Peninsula Is In Fact Cooling, Study Finds

British Antarctic Survey: Antarctic Peninsula has been cooling since 1998

By Dr. Sebastian Lüning and Prof. Fritz Vahrenholt (German text translated/edited by P. Gosselin), No Tricks Zone, Aug 23, 2016

<http://notrickszone.com/2016/08/23/global-warming-pushing-media-governments-refuted-antarctic-peninsula-is-in-fact-cooling-study-finds/#sthash.jtp4HXtm.dpbs>

Uncovered: Incoherent, Conflicting IPCC 'Beliefs' on Climate Sensitivity

By Kenneth Richard, No Tricks Zone, Aug 25, 2016

<http://notrickszone.com/2016/08/25/uncovered-incoherent-conflicting-ipcc-beliefs-on-climate-sensitivity/#sthash.ldWsxJSY.dpbs>

Virtually indistinguishable – Comparing early 20th Century warming to late 20th Century warming

Guest essay by Andy May, WUWT, Aug 22, 2016

<https://wattsupwiththat.com/2016/08/22/virtually-indistinguishable-comparing-early-20th-century-warming-to-late-20th-century-warming/>

Defending the Orthodoxy

Fewer low clouds in the tropics

By: Fabio Bergamin, ETH Zurich, Aug 11, 2016

<https://www.ethz.ch/en/news-and-events/eth-news/news/2016/08/fewer-low-clouds-in-the-tropics.html>

Link to paper: Constraints on Climate Sensitivity from Space-Based Measurements of Low-Cloud Reflection

By Brient and Schneider, Journal of Climate, July 28, 2016
<http://journals.ametsoc.org/doi/10.1175/JCLI-D-15-0897.1>

Space, Climate Change, and the Real Meaning of Theory

By Piers Sellers, The New Yorker, Aug 17, 2016

<http://www.newyorker.com/tech/elements/space-climate-change-and-the-real-meaning-of-theory>
[SEPP Comment: An emotional appeal. Apparently, the former astronaut ignores satellite data, which many “climate change deniers” believe are the most comprehensive measurements of earth’s temperatures ever compiled and do not confirm that CO2 is the primary cause of climate change.]

Climate Change: Debating Myself

By Mark Ellis, Huff Post, Aug 22, 2016 [H/t Clyde Spencer]

http://www.huffingtonpost.com/entry/climate-change-me-v-mark_us_57aa8403e4b08c46f0e43e1c

[SEPP Comment: The author does not recognize that data is not necessarily evidence of cause.]

Just 90 companies are to blame for most climate change, this 'carbon accountant' says

By Douglas Starr, Since Mag, Aug 25, 2016

<http://www.sciencemag.org/news/2016/08/just-90-companies-are-blame-most-climate-change-carbon-accountant-says>

[SEPP Comment: The author is co-director of the Boston University Science Journalism Program – The report is largely devoid of meaningful information.]

Questioning the Orthodoxy

Is the Antarctic Ozone Hole Really Mending?

By S. Fred Singer, American Thinker, Aug 23, 2016

http://www.americanthinker.com/articles/2016/08/is_the_antarctic_ozone_hole_aoh_really_mending.html

Experts “surprised” to discover what skeptics have known for years: world has been warming for 200 years

By Jo Nova, Her Blog, Aug 25, 2016

<http://joannenova.com.au/2016/08/experts-surprised-to-discover-what-skeptics-have-known-for-years-world-has-been-warming-for-200-years/>

Beyond The Spin: Alaska Village’s Demise Is More Complicated Than Yelling ‘Global Warming

By Michael Bastasch, Daily Caller, Aug 21, 2016 [H/t Timothy Wise]

<http://dailycaller.com/2016/08/21/beyond-the-spin-alaska-villages-demise-is-more-complicated-than-yelling-global-warming/>

The North Atlantic: Ground Zero of Global Cooling

Guest essay by David Archibald, WUWT, Aug 21, 2016

<https://wattsupwiththat.com/2016/08/21/the-north-atlantic-ground-zero-of-global-cooling/>

Link to Norway Wheat Production by Year, 1960 to 2015

<http://www.indexmundi.com/agriculture/?country=no&commodity=wheat&graph=production>

[SEPP Comment: According to the link immediately above, grain production yields in Norway have been steady since 2012. Generally, wheat yields increased dramatically from 1982 to 2008,

then fell back until 2013, until leveling in 2014. This may reflect a choice by farmers of the grain types. Production growth rate has been averaging roughly 0% since 1978]

After Paris!

COP-21 & Developing Countries

By Paul Homewood, Not a Lot of People Know That, Aug 22, 2016

<https://notalotofpeopleknowthat.wordpress.com/2016/08/22/cop-21-developing-countries/>

“...under the terms of the text agreed last December at the UN’s COP-21 conference in Paris, so called “developing” countries are exempted from any obligation, moral or legal, to reduce their greenhouse gas (GHG) emissions. As such countries are responsible for over 65% of global emissions (1) and the quantity of GHGs they emit is most likely to increase (as, for example, they continue to build coal-fired power plants (2), it makes little sense for the UK – responsible for only about 1% of global emissions – to regard GHG reduction as an important factor in planning its future energy needs.”

South China Morning Post reports: China and US to ratify landmark Paris climate deal ahead of G20 summit, sources reveal

By Myron Ebell, Global Warming.org, Aug 26, 2016

<http://www.globalwarming.org/2016/08/26/china-and-us-to-ratify-paris-climate-treaty/>

China and US to ratify landmark Paris climate deal ahead of G20 summit, sources reveal

Move may tip momentum and bring accord into force at global level

By Li Jing, South China Post, Aug 25, 2016

<http://www.scmp.com/news/china/policies-politics/article/2008593/landmark-step-china-and-us-ratify-paris-climate-deal>

The Administration’s Plan – Independent Analysis

EPA Mileage Gap & Paris Climate Accord

By Donn Dears, Power For USA, Aug 23, 2016

<https://dddusmma.wordpress.com/2016/08/23/epa-mileage-gap-paris-climate-accord/>

[SEPP Comment: Is there a statistical relationship between the two gaps; miles per gallon demanded v. expected; and atmospheric warming projected by global climate models and actual measurements (humor)?]

What’s Wrong With the EPA Analysis Used to Justify New Fuel Standards for Trucks

By Nicolas Loris, The Daily Signal, Aug 18, 2016

[http://dailysignal.com/2016/08/18/whats-wrong-with-the-epa-analysis-used-to-justify-new-fuel-standards-for-](http://dailysignal.com/2016/08/18/whats-wrong-with-the-epa-analysis-used-to-justify-new-fuel-standards-for-trucks/?utm_source=TDS_Email&utm_medium=email&utm_campaign=CapitolBell&mkt_tok=e)

[trucks/?utm_source=TDS_Email&utm_medium=email&utm_campaign=CapitolBell&mkt_tok=e](http://dailysignal.com/2016/08/18/whats-wrong-with-the-epa-analysis-used-to-justify-new-fuel-standards-for-trucks/?utm_source=TDS_Email&utm_medium=email&utm_campaign=CapitolBell&mkt_tok=e)
[yJpIjoiTWpZeU5EwXlZVF15TkRRNSIsInQiOiJicU1IcGFUTEIzM0k3ZVFcL3dBuZn1eEhTZmN2SkM1M1ZpeUdpaDJUaHIIUk1NQndXMkVDYkVjwblZRYnhjbGZoSk9hbHhEWnNkSDVxUUdGdkg2amNpbGQxbGtlanp2a1hENlwwZHpxYjFnYXZFPSJ9](http://dailysignal.com/2016/08/18/whats-wrong-with-the-epa-analysis-used-to-justify-new-fuel-standards-for-trucks/?utm_source=TDS_Email&utm_medium=email&utm_campaign=CapitolBell&mkt_tok=e)

[SEPP Comment: What are the savings to truck drivers from lower oil prices from hydraulic fracturing?]

The Administration’s Plan – Push-Back

How Climate Cultists in the Democratic Party Have Lost Touch with Reality and the Needs of the Less Wealthy

By Alan Carlin, Carlin Economics and Science, Aug 25, 2016

<http://www.carlineconomics.com/archives/2883>

Air Conditioning as Dangerous Climate Threat

By Donn Dears, Power For USA, Aug 26, 2016

<https://dddusmma.wordpress.com/2016/08/26/air-conditioning-as-dangerous-climate-threat/>

“Secretary of State, John Kerry said, ‘Air-conditioners and refrigerators pose as big a threat to life on the planet as the threat of terrorism.’”

John Kerry Targets Your Air Conditioner

By Larry Bell, Newsmax, Aug 22, 2016

<http://www.newsmax.com/LarryBell/air-conditioner-department-state/2016/08/22/id/744575/>

Problems in the Orthodoxy

Climate Experts At War Over Prediction Of Ice-Free Arctic

By Ben Webster, The Times, Via GWPF, Aug 25, 2016

<http://www.thegwpf.com/climate-experts-at-war-over-prediction-of-ice-free-arctic/>

Seeking a Common Ground

Observational Evidence of the “Greenhouse Effect” at Desert Rock, Nevada

By Roy Spencer, His Blog, Aug 23, 2016

<http://www.drroyspencer.com/2016/08/observational-evidence-of-the-greenhouse-effect-at-desert-rock-nevada/>

Simple Experimental Demonstration that Cool Objects Can Make Warm Objects Warmer Still

By Roy Spencer, His Blog, Aug 26, 2016

<http://www.drroyspencer.com/2016/08/simple-experimental-demonstration-that-cool-objects-can-make-warm-objects-warmer-still/>

Dan Sarewitz on Saving Science

By Judith Curry, Climate Etc. Aug 22, 2016

<https://judithcurry.com/2016/08/22/dan-sarewitz-on-saving-science/>

Now anyone can access NASA-funded research

By Ian Kar, Quartz, Aug 20, 2016 [H/t Clyde Spencer]

<http://qz.com/762786/now-anyone-can-access-nasa-funded-research/>

Web portal: NAS-Funded Research Results

<http://www.nasa.gov/open/researchaccess>

Review of Recent Scientific Articles by CO2 Science

The Interactive Effects of CO2 and Temperature on Wheat and Rice

Wang, J., Liu, X., Zhang, X., Smith, P., Li, L., Filley, T.R., Cheng, K., Shen, M., He, Y. and Pan, G. 2016. Size and variability of crop productivity both impacted by CO2 enrichment and warming - A case study of 4 year field experiment in a Chinese paddy. *Agriculture, Ecosystems and Environment* **221**: 40-49. Aug 25, 2016

<http://www.co2science.org/articles/V19/aug/a17.php>

Response of Wheat to Elevated CO2, an Aphid Herbivore and the Barley Yellow Dwarf Virus

Trébicki, P., Vandeger, R.K., Bosque-Pérez, N.A., Powell, K.S., Dader, B., Freeman, A.J., Yen, A.L., Fitzgerald, G.J. and Luck, J.E. 2016. Virus infection mediates the effects of elevated CO₂ on plants and vectors. *Scientific Reports* **6**: 22785, DOI: 10.1038/srep22785. Aug 15, 2016
<http://www.co2science.org/articles/V19/aug/a11.php>

Climate Change is a Relatively Insignificant Factor in Malaria Transmission and Outbreaks

Zhao, X., Smith, D.L. and Tatem, A.J. 2016. Exploring the spatiotemporal drivers of malaria elimination in Europe. *Malaria Journal* **15**: 122, DOI 10.1186/s12936-016-1175-z. Aug 22, 2016
<http://www.co2science.org/articles/V19/aug/a10.php>

“In considering Zhao et al.'s work, therefore, it would appear that socio-economic and land use factors are more than capable of compensating for unfavorable changes in climate that can lead to malaria transmission and outbreaks. And as long as countries continue to focus on improving these more important elimination factors, malaria trends will continue to remain little influenced by future climate change, model projections notwithstanding.”

Models v. Observations

Testing the historic tracking of climate models

By Michael Beenstock,, Yaniv Reingewertz, & Nathan Paldor, International Journal of Forecasting, Oct-Dec 2016

<http://www.sciencedirect.com/science/article/pii/S016920701630053X>

Measurement Issues -- Surface

Thorough, not thoroughly fabricated: The truth about global temperature data

How thermometer and satellite data is adjusted and why it must be done.

By Scott Johnson, Ars Technica, Jan 21, 2016 [H/t Climate Etc.]

<http://arstechnica.com/science/2016/01/thorough-not-thoroughly-fabricated-the-truth-about-global-temperature-data/>

[SEPP Comment: Carl Mears, of Remote Sensing Systems (RSS), defends the current practice. Others claim it is introducing biases in the surface data, yielding a warming trend that does not exist. These scientists were not quoted.]

Changing Seas

Great Reef Hysteria Exposed? Reef Tourism Operators Find Less Than 5% Of Coral Dead Due To ‘Extreme’ Bleaching

By Peter Michael, The Courier-Mail (AU), Via GWPF, Aug 24, 2016

<http://www.thegwpf.com/great-reef-hysteria-exposed/>

[SEPP Comment: Another El Niño, another wiping out of the Great Barrier Reef?]

Great Barrier Reef in near pristine condition: dive boat operators

By Paul Homewood, Not a Lot of People Know That, Aug 24, 2016

<https://notalotofpeopleknowthat.wordpress.com/2016/08/24/great-barrier-reef-in-near-pristine-condition-dive-boat-operators/>

Surface water shifting around the Earth

By Rebecca Morelle, BBC, News, Aug 25, 2016

<http://www.bbc.com/news/science-environment-37187100>

Changing Cryosphere – Land / Sea Ice

Increasing Antarctic snowfall may offset sea-level rise

By Anthony Watts, WUWT, Aug 25, 2016

<https://wattsupwiththat.com/2016/08/25/increasing-antarctic-snowfall-may-offset-sea-level-rise/>

Link to paper: Anthropogenic impact on Antarctic surface mass balance, currently masked by natural variability, to emerge by mid-century

By Michael Previdi and Lorenzo M Polvani, Environmental Research Letters, Aug 25, 2016

<http://iopscience.iop.org/article/10.1088/1748-9326/11/9/094001>

[SEPP Comment: In the view of these researchers, human caused global warming will eventually dominate over natural variations, but is not doing so now!]

A lengthening crack is threatening to cause an Antarctic ice shelf to collapse

By Andrew Freedman, Yahoo, Aug 22, 2016 [H/t Clyde Spencer]

<https://www.yahoo.com/news/lengthening-crack-threatening-cause-antarctic-190906805.html?nhp=1>

How old is mystery ice from the base of Greenland's ice sheet?

Some is almost a million years old, which is good news.

<http://arstechnica.com/science/2016/08/how-old-is-mystery-ice-from-the-base-of-greenlands-ice-sheet/>

Lowering Standards

Glaring Falsehoods By German ZDF Public Television Aimed At Attacking Climate Science Skepticism

German public television TV host/science journalist Harald Lesch (astrophysicist) attacks climate skepticism

By Carl-Otto Weiss, Physicist PhD, No Tricks Zone, Aug 26, 2016

<http://notrickszone.com/2016/08/26/glaring-falsehoods-by-german-zdf-public-television-to-attack-climate-science-skepticism/#sthash.0MFJ7L1a.dpbs>

NOAA's New Climate Explorer – NOAA Needs to Provide a Disclaimer for Their Climate Model Presentations

Guest Post by Bob Tisdale, WUWT, Aug 22, 2016

<https://wattsupwiththat.com/2016/08/22/noaas-new-climate-explorer-noaa-needs-to-provide-a-disclaimer-for-their-climate-model-presentations/>

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

Climate change is causing DRAGONS to change gender: Researchers find Australian reptiles are switching sex

By Mark Prigg, Daily Mail, July 1, 2016 [H/t Joe D'Aleo]

<http://www.dailymail.co.uk/sciencetech/article-3146447/Climate-change-causing-DRAGONS-change-gender-Researchers-Australian-reptiles-switching-sex.html>

“In the past, scientists have shown in the lab that hot temperatures can switch that natural chromosome-based gender.”

[SEPP Comment: Therefore, any switch must be due to climate change?]

Communicating Better to the Public – Make things up.

Claim: Extreme Global Warming caused mass extinction event 252 million years ago

By Anthony Watts, WUTW, Aug 24, 2016

<https://wattsupwiththat.com/2016/08/24/claim-extreme-global-warming-caused-mass-extinction-event-252-million-years-ago/>

[SEPP Comment: The earth is vastly different from what it was 252 million years ago. Suggesting that animal extinctions following massive volcanic eruptions is illustrative of slow climate change is absurd.]

Humans worst footprint on planet apart from algae, plants, asteroids, volcanoes

By Jo Nova, Her Blog, Aug 26, 2016

<http://joannenova.com.au/2016/08/humans-worst-footprint-on-planet-apart-from-algae-plants-asteroids-volcanoes/>

Funding Issues

Measuring bias in the U.S. federally-funded climate research

By David Wojick, Climate Etc. Aug 23, 2016

<https://judithcurry.com/2016/08/23/measuring-bias-in-the-u-s-federally-funded-climate-research/#more-22037>

EPA and other Regulators on the March

The Rogue EPA's Shocking Disregard For The Law

Editorial, IBD, Aug 23, 2016 [H/t Timothy Wise]

<http://www.investors.com/politics/editorials/the-rogue-epas-shocking-disregard-for-the-law/>

EPA: North Texas Earthquakes Likely Linked to Oil and Gas Drilling

By Jim Malewitz, Texas Tribune, Aug 22, 2016

<https://www.texastribune.org/2016/08/22/epa-north-takes-quakes-likely-linked-oil-and-gas-a/>

Link to report: Induced Earthquakes Raise Chances of Damaging Shaking in 2016

By Staff Writers, USGS, Mar 28, 2016]

https://www2.usgs.gov/blogs/features/usgs_top_story/induced-earthquakes-raise-chances-of-damaging-shaking-in-2016/

[SEPP Comment: EPA twists the language again. The report states wastewater injections wells, not oil and gas drilling is linked with earthquakes.]

Energy Issues – Non-US

An update on the Energiewende

By Roger Andrews, Energy Matters, Aug 22, 2016

<http://euanmearns.com/an-update-on-the-energiewende/#more-14988>

Exclusive: Venezuela's oil imports slump on payment woes, economic meltdown

By Marianna Parraga, Reuters, Aug 25, 2016

<http://www.reuters.com/article/us-venezuela-oil-imports-idUSKCN1102BL>

[Even with the greatest proven reserves in the world] “Venezuela has not been able to import all the crude and fuel it needs this year to cover shortfalls at oilfields and refineries as state-run PDVSA struggles to pay suppliers on time, according to trade sources and internal company data seen exclusively by Reuters.”

Scotland's North Sea Revenues Collapse By 97%

Official figures on Scotland's public finances show the stark impact of the slump in the oil and gas sector after prices tumbled.

By Staff Writers, Sky News, Aug 24, 2016 [H/t GWPF]

<http://news.sky.com/story/scotlands-north-sea-revenues-collapse-by-97-10549884>

Energy Issues -- US

Free Market Energy: Not ‘Notorious’ (Axelrod tweet rejoinder)

By Robert Bradley Jr, Master Resource, Aug 25, 2016

<https://www.masterresource.org/institute-for-energy-research-american-energy-alliance/free-market-energy-not-notorious-axelrod-tweet-rejoinder/>

[SEPP Comment: Perhaps to some, all non-profits behave as the Clinton Foundation.]

Recommendations to the Nation on Reducing U.S. Oil Dependence: 10 Years Later

By Leslie Hayward, The Fuse, Aug 19, 2016

<http://energyfuse.org/recommendations-nation-reducing-u-s-oil-dependence-10-years-later/>

[SEPP Comment: The report was written when many believed the US would become increasingly dependent on oil from OPEC countries, such as Venezuela.]

Why renewables alone cannot meet our energy needs

By Ryan Yonk and Arthur Wardle, The Hill, Aug 19, 2016

<http://thehill.com/blogs/pundits-blog/energy-environment/291963-why-renewables-alone-cannot-meet-our-energy-needs>

Oil and Natural Gas – the Future or the Past?

U.S. crude oil exports are increasing and reaching more destinations

By Mason Hamilton, EIA, Aug 16, 2016

<http://www.eia.gov/todayinenergy/detail.cfm?id=27532>

US Shale Oil Production Laid Bare

By Euan Mearns, Energy Matters, Aug 25, 2016

<http://euanmearns.com/us-shale-oil-production-laid-bare/#more-14676>

Link to Visualizing US shale oil production by Enno Peters:

<http://shaleprofile.com/>

[SEPP Comment: Technical, with unusual graphs.]

US Shale Hotspots Hit Near Record Output

By Gregory Meyer, Financial Times, Via GWPF, Aug 25, 2016

<http://www.thegwpf.com/us-shale-hotspots-hit-near-record-output/>

[SEPP Comment: Natural gas from shale.]

The Shale/Fracking Revolution: 1998 to 2011

By Staff Writers, All About Alpha, Aug 23, 2016

<http://www.allaboutalpha.com/blog/2016/08/23/the-shalefracking-revolution-1998-to-2011/>

[SEPP Comment: The article does not discuss the important sensors and control devices used in smart drilling.]

U.S. Shale Drillers Return To Oil Patch

By Erin Ailworth and Timothy Puko The Wall Street Journal, Via GWPF, Aug 22, 2016

<http://www.thegwpf.com/u-s-shale-drillers-return-to-oil-patch/>

Saudi Permian: A Race To The Bottom For Tight Oil

By Art Berman, Forbes, Aug 22, 2016

<http://www.forbes.com/sites/arthurberman/2016/08/22/saudi-permian-a-race-to-the-bottom-for-tight-oil/#372a80333bd2>

Gulf of Mexico still essential for energy

Deepwater basins may be less volatile to short-term fluctuations in crude oil prices.

By Daniel J. Graeber, UPI, Aug 18, 2016 [H/t Toshio Fujita]

<http://www.upi.com/Gulf-of-Mexico-still-essential-for-energy/4111471512270/>

Return of King Coal?

Warnings of rate hikes as Oregon becomes 1st state to kill coal

By Dan Springer, Fox News, Aug 24, 2016

<http://www.foxnews.com/politics/2016/08/24/warnings-rate-hikes-as-oregon-becomes-1st-state-to-kill-coal.html>

[SEPP Comment: According to the Oregon Department Energy, in 2012-2014, 34% of the state's electricity came from coal, second only to hydro, 43%. Will the state cut off imports of electricity from coal?]

http://www.oregon.gov/ENERGY/Pages/Oregons_Electric_Power_Mix.aspx

Nuclear Energy and Fears

Nuclear accident in New Mexico ranks among the costliest in U.S. history

By Ralph Vartabedian, LA Times, Aug 22, 2016

<http://www.latimes.com/nation/la-na-new-mexico-nuclear-dump-20160819-snap-story.html>

“The problem was traced to material — actual kitty litter — used to blot-up liquids in sealed drums. Lab officials had decided to substitute an organic material for a mineral one. But the new material caused a complex chemical reaction that blew the lid off a drum, sending mounds of white, radioactive foam into the air and contaminating 35% of the underground area.”

Russian fast reactor reaches full power

By Staff Writers, WNN, Aug 17, 2016

<http://www.world-nuclear-news.org/NN-Russian-fast-reactor-reaches-full-power-1708165.html>

Nuclear developers have big plans for pint-sized power plants in UK

By Susanna Twidale, Reuters, Aug 22, 2016

<http://www.reuters.com/article/us-britain-nuclear-smr-idUSKCN10X1FC>

Alternative, Green (“Clean”) Solar and Wind

‘The Increasing Sustainability of Conventional Energy’ (1999 conclusions for today)

By Robert Bradley Jr. Master Resource, Aug 23, 2016

<https://www.masterresource.org/energy-sustainability/increasing-sustainability-conventional-energy/>

How Much Do The Climate Crusaders Plan To Increase Your Cost Of Electricity?

By Francis Menton, The Manhattan Contrarian, Aug 22, 2016

http://icecap.us/index.php/go/new-and-cool/how_much_do_the_climate_crusaders_plan_to_increase_your_cost_of_electricity/

There's a good reason GE picked Rhode Island for America's first offshore wind farm

By Rebecca Harrington, Business Insider, Aug 23, 2016 [H/t Clyde Spencer]

<https://www.yahoo.com/news/theres-good-reason-ge-picked-211500857.html>

[SEPP Comment: Rhode Island does not depend on coal-fired power plants and is politically very green. Also, not mentioned is that Rhode Island does not have natural gas and has very high

electricity prices. Only Alaska and Hawaii have higher prices than the average of New England states. Average for all sectors for New England is about 60% more than the average for the country – 15.86 v. 10.06 cents per Kilowatt-hour]

https://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_6_a

Energy & Environmental Newsletter: August 22, 2016

By John Droz, Jr., Master Resource, Aug 22, 2016

<https://www.masterresource.org/alliance-for-wise-energy-decisions/energy-environmental-newsletter-august-22-2016/>

Wind turbines: The money and the myths

By Nicole Hayden, Port Huron Times Herald, Via Detroit Free Press, Aug 20, 2016

<http://www.freep.com/story/news/local/michigan/2016/08/20/michigan-wind-turbines-money-and-myths/89041958/>

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

Biofuels increase, rather than decrease, heat-trapping carbon dioxide emissions

By Staff Writers, Science Daily, Aug 25, 2016

<https://www.sciencedaily.com/releases/2016/08/160825084633.htm>

Link to paper: Carbon balance effects of U.S. biofuel production and use

By John M. DeCicco, Danielle Yuqiao Liu, Joonghyeok Heo, Rashmi Krishnan, Angelika Kurthen, Louise Wang, Climate Change, Aug 25, 2016

<http://link.springer.com/article/10.1007%2Fs10584-016-1764-4>

[SEPP Comment: Confirming Rep Peter Walsh’s (D. VT) observation that the US Renewable Fuel Standard is a well-intentioned flop.]

Alternative, Green (“Clean”) Vehicles

Investors Confront Tesla's Energy Fantasy

By Robert Bradley, Forbes, Aug 24, 2016

<http://www.forbes.com/sites/robertbradley/2016/08/24/investors-confront-teslas-energy-fantasy/#5cc4d14b1da2>

California Dreaming

California approves ambitious plan to cut greenhouse gases

By Reid Wilson, The Hill, Aug 25, 2016

<http://thehill.com/policy/energy-environment/293304-california-approves-ambitious-plan-to-cut-greenhouse-gases>

[SEPP Comment: State hoping to cash in from CO2 emissions and not considering economic consequences of companies leaving.]

Environmental Industry

Climate-change activists call for tax policies to discourage childbirth

By Valerie Richardson, Washington Times, Aug 19, 2016

<http://www.washingtontimes.com/news/2016/aug/19/climate-change-activists-tax-discourage-childbirth/>

Your Damn Children Are Killing the Planet

By Doug Domenech, Real Clear Energy, Aug 25, 2016

http://www.realclearenergy.org/articles/2016/08/25/your_damn_children_are_killing_the_planet_109234.html

[SEPP Comment: Following the leadership of Paul Ehrlich and the President's Science Advisor?]

Other Scientific News

Why No One Believed Einstein

By Matthew Willis, JSTOR, Daily, Aug 19, 2016 [H/t Timothy Wise]

<http://daily.jstor.org/why-no-one-believed-einstein/>

[SEPP Comment: Even though acceptance of his theories did not require destruction of major industries that served the public well.]

Earth sized planet found orbiting our sun's nearest neighboring star, Proxima Centauri

By Anthony Watts, WUWT, Aug 24, 2016

<https://wattsupwiththat.com/2016/08/24/earth-sized-planet-found-orbiting-our-suns-nearest-neighboring-star-proxima-centauri/>

Study explains mysterious 'eclipse wind'

By Brooks Hays, Reading, England (UPI) Aug 23, 2016

http://www.spacedaily.com/reports/Study_explains_mysterious_eclipse_wind_999.html

Other News that May Be of Interest

Astronomy shown to be set in standing stone

By Staff Writers, Adelaide, Australia (SPX), Aug 22, 2016

http://www.spacedaily.com/reports/Astronomy_shown_to_be_set_in_standing_stone_999.html

Link to paper: Origins of Standing Stone Astronomy in Britain: New quantitative techniques for the study of archaeoastronomy

By Gail Higginbottom, and Roger Clay, Oct 2016

<http://www.sciencedirect.com/science/article/pii/S2352409X16301808>

[SEPP Comment: Explaining 5000-year-old megaliths, on Orkney Island, Scotland.]

Obama creates world's largest ocean reserve off Hawaiian coast

By Timothy Cama, The Hill, Aug 26, 2016

<http://thehill.com/policy/energy-environment/293412-obama-to-create-worlds-largest-ocean-reserve-off-hawaiian-coast>

Obama creates new national monument in Maine

By Timothy Cama, The Hill, Aug 24, 2016

<http://thehill.com/policy/energy-environment/292473-obama-creates-new-land-protections-in-maine>

The Death of the Bering Strait Theory

By Alex Ewen, Indian Country, Aug 12, 2016 [H/t Climate Etc.]

<http://indiancountrytodaymedianetwork.com/2016/08/12/death-bering-strait-theory-165452>

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BELOW THE BOTTOM LINE:

Worse than we thought: Antarctic vulnerability to climate change

By Anthony Watts, WUWT, Aug 22, 2016

<https://wattsupwiththat.com/2016/08/22/worse-than-we-thought-antarctic-vulnerability-to-climate-change/>

[SEPP Comment: Post includes Aug 21, 2016 sea ice extent and 1981-2010 median.]

A case for procrastination

By Staff Writers, Climate Change Predictions.org, Aug 21, 2016

<http://climatechangepredictions.org/uncategorized/6689>

Global warming could release radioactive waste stored in an abandoned Cold War-era U.S. military camp deep under Greenland's ice caps if a thaw continues to spread in coming decades, scientists said on Friday.

Camp Century was built in northwest Greenland in 1959 as part of U.S. research into the feasibility of nuclear missile launch sites in the Arctic, the University of Zurich said in a statement. Staff left gallons of fuel and an unknown amount of low-level radioactive coolant there when the base shut down in 1967 on the assumption it would be entombed forever, according to the university.

It is all currently about 35 metres (114.83 ft) down. But the part of the ice sheet covering the camp could start to melt by the end of the century on current trends, the scientists added.

The study said it would be extremely costly to try to remove any waste now. It recommended waiting "until the ice sheet has melted down to almost expose the wastes before beginning site remediation." [Boldface added]

From: [The Globe and Mail, 5 Aug 2016](#)

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ARTICLES:

1. Is the Antarctic Ozone Hole Really Mending?

By S. Fred Singer, American Thinker, Aug 23, 2016

http://www.americanthinker.com/articles/2016/08/is_the_antarctic_ozone_hole_aoh_really_mending.html

SUMMARY from Fred Singer: After witnessing many past missteps and premature wrong guesses about ozone, I may be excused for believing that the current excitement about the "healing" of the AOH could turn out to be just another failed prediction.

2. The Climate Prosecutors Can't Dodge Congress Forever

The state officials who subpoenaed Exxon face questions from the House—and they have to answer.

By Elizabeth Price Foley, WSJ, Aug 21, 2016

<http://www.wsj.com/articles/the-climate-prosecutors-cant-dodge-congress-forever-1471818648>

SUMMARY: The Constitutional law professor at Florida International University College of Law writes:

'For a sense of how far the left will go to enforce climate-change orthodoxy, read the recently released "Common Interest Agreement" signed this spring by 17 Democratic state attorneys general. The officials pledged to investigate and take legal action against those committing climate wrongthink. Beginning late last year, the attorneys general of Massachusetts, New York and the U.S. Virgin Islands, all signatories to the agreement, issued broad-ranging subpoenas against Exxon Mobil and conservative think tanks. They sought documents and communications related to research and advocacy on climate change.

“Concerned that these investigations were designed to chill First Amendment rights, the House Committee on Science, Space and Technology issued its own subpoenas. In mid-July the committee, led by Rep. Lamar Smith (R., Texas), asked the attorneys general to produce their communications with environmental groups and the Obama administration about their investigations.

“They have indignantly refused to comply. New York Attorney General Eric Schneiderman claimed, in a July 13 letter to Mr. Smith, that the committee was “courting constitutional conflict” by failing to show “a due respect for federalism.” Massachusetts Attorney General Maura Healey, in a similar letter dated July 26, asserted that the subpoenas are “unconstitutional” because they are “an affront to states’ rights.”

This view is utterly wrong. Federalism is a critical component of the constitutional architecture. The federal government exercises only limited and enumerated powers, and the states, under the Tenth Amendment, possess all other powers “not delegated to the United States.” But when the federal government acts within its delegated powers, it is entitled to supremacy over the states.

*“The Supreme Court has long recognized Congress’s power to investigate any matter within its legislative or oversight competence. With that comes a corresponding power to enforce its inquiries. The justices wrote in *Barenblatt v. U.S.* (1959) that the scope of Congress’s power of inquiry “is as penetrating and far-reaching as the potential power to enact and appropriate under the Constitution.”*

*“Similarly, in *McGrain v. Daugherty* (1927), the court held that “the power of inquiry—with the process to enforce it—is an essential and appropriate auxiliary to the legislative function.” That’s why lawmakers passed a law to make contempt of a congressional subpoena a crime, punishing anyone who willfully refuses to answer “any question pertinent to the question under inquiry.”*

“The subpoenas to state attorneys general regarding their climate crusade easily fall within Congress’s legislative and oversight competence. The House Science Committee has jurisdiction over matters relating to scientific research. Its rules authorize the chairman to issue subpoenas on behalf of the committee.

“Further, Congress has ample authority to investigate and sanction violations of First Amendment rights that are committed by state officials. For instance, the Ku Klux Klan Act of 1871 includes a provision—lawyers often call it simply “section 1983,” referring to its place in Title 42 of the U.S. Code—authorizing monetary damages against state officials who infringe a constitutional right.

“Congress’s broad investigatory power clearly extends to state officials. In February, the House Oversight Committee compelled Darnell Earley, the emergency manager of Flint, Mich., to testify on the contamination of that city’s drinking water. Mr. Earley initially refused to appear, but he quickly acceded to its subpoena after the committee’s chairman, Rep. Jason Chaffetz (R., Utah), threatened to call the U.S. Marshals to “hunt him down.”

“Under the Supremacy Clause of the Constitution, privileges grounded in state law—such as the attorney-client privilege or work-product privilege—are not binding on the federal government. The letter to Rep. Smith from the Massachusetts attorney general, for example, argued that the committee’s subpoena seeks documents that are “either attorney-client privileged” or “protected

from disclosure as attorney work product.” Congress is obligated to honor neither of those state-law privileges.

“When Congress subpoenas the White House or agencies in the executive branch, there is a delicate balancing of competing constitutional interests. This is because the executive often refuses to comply by invoking a presidential privilege grounded in Article II of the Constitution.

“But there is no such difficult constitutional balancing required here. When Congress subpoenas state attorneys general in the rightful exercise of its legislative and investigative power, all assertions of state authority give way because of the Supremacy Clause. No state official—whether judicial, legislative or executive—may resist a legitimate federal command.

“Throughout the Obama administration, congressional powers have been increasingly usurped by the executive. The White House has unilaterally rewritten statutes, ignored congressional subpoenas and arrogated to itself the power of the purse. These actions have too often received the blessing of congressional Democrats, who have allowed partisanship to override their fidelity to the Constitution and their institutional self-interest.

“To begin restoring Congress’s constitutional authority, the House of Representatives should push back against these state attorneys general and vigorously litigate to enforce the Science Committee’s subpoenas.”

3. Largest Oil Companies’ Debts Hit Record High

Exxon, Shell, BP and Chevron have combined debts of \$184 billion amid two-year slump
By Selina Williams and Bradley Olson, WSJ, Aug 24, 2016

<http://www.wsj.com/articles/largest-oil-companies-debts-hit-record-high-1472031002>

SUMMARY: The reporters state that the doubling of debt by the major oil companies since 2014 puts them in a very uncomfortable position: they cannot continue to pay generous dividends to shareholders with oil trading between \$50 to \$60 per barrel. Further, they are not spending enough to boost production and cannot easily raise money by sale of assets. The next year should be interesting.

4. Oil at \$50 Tests Shale-Band Theory

Oil prices at about \$50 a barrel test the influence of the ‘shale band’ on U.S. production
By Neanda Salvaterra, WSJ, Aug 23, 2016

<http://www.wsj.com/articles/oil-at-50-tests-shale-band-theory-1471951749>

“The return of oil prices to about \$50 a barrel presents a test for an idea that gained currency early after the market’s long swoon began two years ago: the “shale band.”

“The term was coined back in May of 2015 by Olivier Jakob, managing director of Petromatrix, a consultancy based in Switzerland. Mr. Jakob said U.S. oil production trends would be determined by two price points—\$45 a barrel, below which oil produced from shale formations would drop off, and \$65 a barrel, above which there would be “massive [shale] production coming online.”

“In between was the shale band, a range where shale supply would be basically steady, according to Mr. Jakob’s theory.

“But it hasn’t quite worked out that way, with shale producers keeping the taps on at lower prices than many thought possible. Mr. Jakob said he has revised his shale band projections down to between \$40 and \$60.

“I think the principle has not changed and I think we saw evidence through the rig count that U.S. oil is quite sensitive,’ he said.”

What happens in the near future remains to be seen.

5. U.S. LNG for China Arrives Via Panama Canal

New locks in recently expanded canal ease access to Asian market for U.S. exporters

By Jenny W. Hsu, WSJ, Aug 24, 2016

<http://www.wsj.com/articles/u-s-lng-for-china-arrives-via-panama-canal-1472044735>

SUMMARY: Whether it is symbolic or an indicator of a long-term trend remains to be seen. The report states:

“The first shipment of liquefied natural gas [LNG] from the U.S. to China arrived this week, thanks to the recently expanded Panama Canal’s easing access to the robust Asian market for U.S. gas exporters.

“The shipment was chartered by Royal Dutch Shell PLC, the company confirmed to The Wall Street Journal. The cargo, from the Sabine Pass export facility in the U.S. Gulf of Mexico, was delivered to the Yantian Port on Monday in southern China and was purchased by China National Offshore Oil Corp. as part of a long-term contract, according to S&P Global Platts, an energy and commodities information provider.

“The new locks can reduce the travel time from the U.S. to North Asia for ships that couldn’t fit in the old locks by about one third—to 20 days—and cut transportation costs by about 30 cents to \$1 per million British thermal units, said research consultancy Energy Aspects,

“This shipment could be the start of many more U.S. gas cargoes coming to Asia, especially now [that] more Chinese smaller independent gas companies are keen on buying foreign gas on a spot basis,’ said Peter Lee, an Asian energy analyst at BMI Research.”

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