

**The Week That Was: 2010-11-27 (November 27, 2010)**  
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**The Science and Environmental Policy Project**

PLEASE NOTE: The complete TWTW, including the articles, can be downloaded in an easily printable form at the web site: <http://www.haapala.com/sepp/the-week-that-was.cfm>

**SEASONS GREETINGS**

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**SEASONS GREETINGS**

If you are seeking a somewhat unusual holiday gift, may we suggest the weather instrument store of Anthony Watts, creator of the blog *Watts Up With That* ([www.wattsupwiththat.com](http://www.wattsupwiththat.com)) and the invaluable physical examination of US weather stations maintained by NOAA, the bulk of which fail the most basic test for bias? Anthony's store offers a wide variety of instruments at reasonable prices:

<http://www.weathershop.com/>

**Quote of the Week:**

*"That a lie which is all a lie may be met and fought with outright, But a lie which is part a truth is a harder matter to fight. Tennyson – The Grandmother. [H/t John Brignell, Number Watch]*

**Number of the Week: 30**

**THIS WEEK:**

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

On Monday, the 16<sup>th</sup> Conference of Parties (COP) to the UN Climate Change Convention will meet in Cancun to produce yet another scheme to replace the Kyoto Protocol that will expire in 2012. It is expected that this meeting will be far more subdued than the 15<sup>th</sup> COP, last year in Copenhagen, when the expectations for a grand treaty were high. Of course, the treaty did not materialize and the COP ended poorly, which was fortunate for the world. Please see the referenced articles under "On to Cancun," particularly the one from the Scientific Alliance.

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The UN IPCC and others use tropical islands such as Tuvalu to alarm the world of the dire consequences of global warming and sea level rise if the world does not support its demands for controlling carbon dioxide. Repeatedly, we are told that the islands are fast disappearing and the inhabitants will become climate change refugees.

Emeritus Professor Cliff Ollier, a geologist and geomorphologist, provided SEPP with a copy of his latest paper discussing the fate of these islands. It appears that, contrary to propaganda photos, the cabinet ministers of these islands will not need scuba gear to conduct cabinet meetings in the foreseeable future. Please see Article # 1

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The US EPA continues its march to regulate the US economy. In regulating sulfur dioxide it is using computer models (which are easily manipulated) rather than measurements to determine the amount of sulfur dioxide in the atmosphere. [After all, NASA-GISS routinely uses models, not measurements, to determine the temperatures in the Arctic.] The EPA ignores basic facts such as sulfur dioxide emissions fell by more than 50% while electricity generation from fossil fuels increase by 70% from 1980 to 2008. This compels one to ask are low levels of sulfur dioxide a threat to human health? Please see Articles # 2 and # 3.

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Several weeks ago, TWTW carried an article from the *Wall Street Journal* on a White House memo that discussed a wind farm in Shepherds Flat, Oregon, using wind turbines built by GE. The article stated that the total subsidies the developers will receive is about \$1.2 Billion, which works out to be more than \$34 Million for each of the 35 permanent jobs the wind farm is expected to provide.

The article prompted a letter from a person with GE Energy Financial Services, who stated such projects need loan guarantee. [The letter did not challenge the monetary or job numbers.] This letter, in turn, prompted a second letter from an engineer who had worked at GE when it was first designing, developing, and marketing gas turbine power plants, which was a money loser for many years with no government subsidies or loan guarantees.

The letter exchange illustrates how a corporate culture can change when the company goes from creating products for a competitive market to manufacturing products for an artificial, government-created market. Not explicitly stated, but implied, is that the wind turbine industry would collapse if it were not for government mandates and guarantees. Please see Article # 5.

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Over the past several weeks, TWTW has been emphasizing that China is building its alternative energy manufacturing facilities mainly to serve Western markets, and it is rapidly expanding its electrical generating capability mainly from traditional sources such as nuclear, hydro and coal. Some commentators are realizing that China is transforming from a traditional exporter of coal to a major importer of coal. Under Energy Issues, please see the article “Coal Exports to China Surge ...” which has a link to a *New York Times* article on the subject.

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The 2008 NIPCC Report, *Nature, Not Human Activity, Rules the Climate*, [http://www.sepp.org/publications/NIPCC\\_final.pdf](http://www.sepp.org/publications/NIPCC_final.pdf), presented the strong correlation between solar activity and climate as seen by proxies from a stalagmite in a cave in Oman (p. 12). The values of carbon-14, a proxy for solar activity, correlated with oxygen-18, a proxy for temperature. The correlations have been confirmed by other proxy data. Changes in solar wind

and solar magnetism modulate galactic cosmic rays. The NIPCC Report suggests the mechanism whereby cosmic rays influence the earth's climate is likely to be a change in cloud cover as suggested by Svensmark and Friis Christensen.

An article published on November 24, in the journal *Atmospheric Chemistry and Physics*, "Cosmic rays linked to rapid mid-latitude cloud changes," suggests that small but statistically significant influence of galactic cosmic rays on the earth's atmosphere has been found. Please see the referenced article and links under Other Scientific Issues.

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THE NUMBER OF THE WEEK: is 30. That is the number of states in the US, as reported by the *Wall Street Journal*, that have adopted a Renewable Electricity Standard (RES). As discussed above and previously, under RES electricity providers have no incentive to produce at the lowest possible cost. In fact, under RES regulated utilities have every incentive to produce at the highest permitted cost. Regulated utilities provide electricity on a cost plus basis, the higher the capital costs the higher the profits. When utilities and their regulators work hand-in-glove for goals other than what is best to the consumer, the consumer suffers.

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**ARTICLES:**

For the numbered articles below please see: [www.haapala.com/sepp/the-week-that-was.cfm](http://www.haapala.com/sepp/the-week-that-was.cfm).

**1. Tuvalu – the touchstone of global warming and rising sea level**

By Cliff Ollier, On Line opinion, AU e-journal, Nov 26, 2010

<http://www.onlineopinion.com.au/view.asp?article=11282>

**2 EPA hungry for more power**

By Lana Spivak, American Council on Science and Health, Nov 23, 2010

ACSH Morning Dispatch [morning@acsh.org]

**3. The EPA Permitorium**

The agency's regulatory onslaught has stopped new power generation

Editorial, WSJ, Nov 22, 2010

[http://online.wsj.com/article/SB10001424052748704658204575610924168519824.html?mod=ITP\\_opinion\\_2](http://online.wsj.com/article/SB10001424052748704658204575610924168519824.html?mod=ITP_opinion_2)

**4. Wake up, Washington. Energy independence is close at hand**

Editorial, Washington Examiner, Nov 21, 2010

<http://washingtonexaminer.com/editorials/2010/11/examiner-editorial-wake-washington-energy-independence-close-hand>

**5. GE Didn't Always Want a Subsidy**

Letter By Louis Fougere, WSJ, Nov 26, 2010

[http://online.wsj.com/article/SB10001424052748704648604575621161410551930.html?mod=WSJ\\_Opinion\\_MIDDLEThirdBucket](http://online.wsj.com/article/SB10001424052748704648604575621161410551930.html?mod=WSJ_Opinion_MIDDLEThirdBucket)

**6. Arctic Air: The Bold Missions of the 109<sup>th</sup> Airlift Wing**

By Kenneth Haapala, Arctic Air Website, WCNY-TV (PBS), Nov 8, 2010

[http://www.wcny.org/arcticair/wp-content/uploads/2010/10/Ken\\_H.pdf](http://www.wcny.org/arcticair/wp-content/uploads/2010/10/Ken_H.pdf)

(May have to be loaded directly)

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## NEWS YOU CAN USE:

### *Challenging the Orthodoxy*

#### **‘Cool it’ with all the research dollars**

Solution to climate change is planning, not spending

By Robert Carter and Paul Driessen, Washington Times, Nov 22, 2010

<http://www.washingtontimes.com/news/2010/nov/22/cool-it-with-all-the-research-dollars/>

[SEPP Comment: A counter to Lomborg’s special pleas for money for technological fixes.]

#### **Global Warming Skeptics Ascend in Congress**

Cap-and-trade may be just the first casualty of the science-doubters in the House and Senate

By Jim Snyder and Kim Chipman, Bloomberg Week, Nov 24, 2010

[http://www.businessweek.com/magazine/content/10\\_49/b4206033143446.htm](http://www.businessweek.com/magazine/content/10_49/b4206033143446.htm)

[SEPP Comment: Those who question the validity of IPCC projections are labeled as science doubters.]

#### **Climate Change Idiocy and The Economist**

By Alan Caruba, Warning Signs, Nov 25, 2010

<http://factsnotfantasy.blogspot.com/>

#### **Climate change no longer scary in Europe**

It’s not the climate, but the tide of opinion that’s changing in Europe and around the globe

By Dr. Hans Labohm, Canada Free Press, Nov 22, 2010 [H/t Francois Guillaumat]

<http://www.canadafreepress.com/index.php/article/30241>

#### **Another Top International Scientist Jumps off Global Warming ‘Titanic’**

By John O’Sullivan, Canada Free Press, Nov 22, 2010 [H/t ICECAP]

<http://www.canadafreepress.com/index.php/article/30275>

#### **Head of IPCC surprised people didn’t like bogus climate data**

By Hank Campell, Science 2.0, Nov 22, 2010

[http://www.science20.com/cool-links/head\\_ipcc\\_surprised\\_people\\_didnt\\_bogus\\_climate\\_data](http://www.science20.com/cool-links/head_ipcc_surprised_people_didnt_bogus_climate_data)

### *Defending the Orthodoxy*

#### **Next climate warming report will be dramatically worse: UN**

AFP, Independent, UK, Nov 24, 2010

<http://www.independent.co.uk/environment/next-climate-warming-report-will-be-dramatically-worse-un-2142191.html>

[SEPP Comment: The headline is amusing. Will it be worse in more dire projections or worse in quality of product, or both?]

#### **Now we are not even allowed to doubt?**

By Joanne Nova, Joannenova.com, Nov 27, 2010

<http://joannenova.com.au/2010/11/now-we-are-not-even-allowed-to-doubt/#more-11893>

[SEPP Comment: Anyone who does not embrace the claims humans are causing unprecedented and dangerous global warming is now labeled a doubt monger.]

#### **A Yale Forum Two-Part Special Feature**

Scientists and Journalists on ‘Lessons Learned’

By Bud Ward, Climate Change & The Media, Nov 18, 2010 [H/t Marc Morano, Climate Depot]

<http://www.yaleclimatemediaforum.org/2010/11/scientists-and-journalists-on-lessons-learned/>

### **The Costs of a Climate of Fear**

When scientists are attacked professionally and personally, independent science and the public suffer.  
By Michael Halpern, Academe Online, Nov-Dec, 2010 [H/t Sanford Aranoff]

<http://www.aaup.org/AAUP/pubsres/academe/2010/ND/feat/halp.htm>

*[SEPP Comment: A one-sided article from one more institution; doubt mongers are not professionally and personally attacked.]*

### **Opening up climate science can cut off the skeptics**

Equipping the public with the tools and knowledge to understand complex issues like global warming can help them avoid the rhetorical tricks of climate ‘skeptics.’

By Andrew Holding, Guardian, UK, Nov 25, 2010 [H/t Bishop Hill]

[http://www.guardian.co.uk/science/the-lay-scientist/2010/nov/25/1?CMP=tw\\_t\\_gu](http://www.guardian.co.uk/science/the-lay-scientist/2010/nov/25/1?CMP=tw_t_gu)

### **NOAA’s New Facebook**

<http://www.facebook.com/usnoaagov>

*["NOAA understands and predicts changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and conserves and manages our coastal and marine resources." Need anything more be said?]*

### **Uncomfortable Climate**

By Elizabeth Kolbert, The New Yorker, Nov 22, 2010 [H/t Roger Cohen]

[http://www.newyorker.com/talk/comment/2010/11/22/101122taco\\_talk\\_kolbert](http://www.newyorker.com/talk/comment/2010/11/22/101122taco_talk_kolbert)

### **Pielke Jr. on Trenberth’s Book Review**

Posted by Anthony Watts, WUWT, Nov 27, 2010

<http://wattsupwiththat.com/>

*[SEPP Comment: Another factually challenged book review published in Science Magazine.]*

### **Climate-change agency winds down as federal funding ends**

By Mike De Souza, Vancouver Sun, Nov 24, 2010 [H/t GWPF]

<http://www.vancouversun.com/technology/Climate+change+agency+winds+down+federal+funding+ends/3879622/story.html>

### **Front-Line City in Virginia Tackles Rise in Sea**

By Leslie Kaufman, NYT, Nov 25, 2010

[http://www.nytimes.com/2010/11/26/science/earth/26norfolk.html?\\_r=1&nl=todaysheadlines&emc=a2](http://www.nytimes.com/2010/11/26/science/earth/26norfolk.html?_r=1&nl=todaysheadlines&emc=a2)

*[SEPP Comment: Apparently the journalist does not realize that Norfolk is built on soft ground. The measured sea level rise, which is greater than what is found elsewhere, is an indication of subsidence rather than rising seas.]*

### **NASA Study Finds Earth’s Lakes are Warming**

Press Release, NASA, Nov 23, 2010 [H/t Toshio Fujita]

<http://www.nasa.gov/topics/earth/features/earthb20101123.html>

### ***Seeking a Common Ground***

#### **Global Warming: Fact or Fiction?**

By Gary Baise, Farm Futures, Nov 23, 2010

<http://www.farmfutures.com/blogs.aspx?fcb=23>

### ***On to Cancun***

#### **From Copenhagen to Cancun**

The Scientific Alliance, Nov 26, 2010

<http://www.scientific-alliance.org/>

#### **The Climate Cash Cow**

Editorial, IBD, Nov 19, 2010

<http://www.investors.com/NewsAndAnalysis/Article/554439/201011191859/The-Climate-Cash-Cow.aspx>

*[SEPP Comment: Forget saving the planet, get the cash.]*

#### **World May Record Warmest Year as U.K. Meteorological Office Adjusts Data**

By Alex Morales, Bloomberg, Nov 26, 2010

<http://www.icecap.us/>

*[SEPP Comment: The ICECAP comments put the article in perspective.]*

### ***BP Oil Spill and Aftermath***

#### **Science and the Drilling Ban**

An inspector general's report shows science played little role in the moratorium

Editorial, WSJ, Nov 20, 2010

[http://online.wsj.com/article/SB10001424052748704312504575618852339002996.html?mod=ITP\\_opinion\\_2](http://online.wsj.com/article/SB10001424052748704312504575618852339002996.html?mod=ITP_opinion_2)

#### **Salazar galls lawmakers from Gulf states**

Talks end with little action to renew drilling

By Kara Rowland, Washington Times, Nov 22, 2010

<http://www.washingtontimes.com/news/2010/nov/22/salazar-galls-lawmakers-from-gulf-states/>

### ***Energy Issues***

#### **Coal Exports to China Surge (Carbon Leakage with Vengeance – No Escape from Law of Unintended Consequences)**

By Marlo Lewis, Global Warming.org, Nov 22, 2010

<http://www.globalwarming.org/2010/11/22/carbon-leakage-with-a-vengeance-no-escape-from-law-of-unintended-consequences/print/>

#### **America Gets Gored**

Editorial, IBD, Nov 22, 2010

<http://www.investors.com/NewsAndAnalysis/Article/554576/201011221858/America-Gets-Gored.htm>

#### **Methane Hydrates: The Next Energy Revolution**

By Takeo Kumajai, GWPF, Nov 24, 2010 [H/t Tom Sheahen]

<http://thegwgf.org/energy-news/1909-methane-hydrates-the-next-energy-revolution-.html>

#### **A Shale-Gas Bonanza**

Obama's State Department is pitching the new hydrofracking technology worldwide, and Halliburton is delighted.

By Coral Davenport, National Journal, Nov 18, 2010 [H/t GWPF]

<http://www2.nationaljournal.com/member/magazine/a-shale-gas-bonanza-20101118>

#### **Chinese Companies Dominate Solar Manufacturing Spending In 2010**

By Staff Writers, Solar Daily, Nov 19, 2010 [H/t Toshio Fujita]  
[http://www.solardaily.com/reports/Chinese\\_Companies\\_Dominate\\_Solar\\_Manufacturing\\_Spending\\_In\\_2010\\_999.html](http://www.solardaily.com/reports/Chinese_Companies_Dominate_Solar_Manufacturing_Spending_In_2010_999.html)

### **Clean energy funding slumps**

By Kiran Stacy, Financial Times, Nov 15, 2010  
<http://www.ft.com/cms/s/0/4d20d1ba-f7d7-11df-b770-00144feab49a.html#axzz16JqTYarN>

### **How to Get Private Financing for Green Projects**

U.N. climate negotiations are bogged down. But as climate change experts gather in Cancun to replace the Kyoto Protocol, there are alternatives

By Michael Liebreich, Bloomberg Businessweek, Nov 24, 2010  
[http://www.businessweek.com/technology/content/nov2010/tc20101123\\_604549.htm?chan=technology\\_special+report+---+focus+on+climate+change\\_special+report+---+focus+on+climate+change](http://www.businessweek.com/technology/content/nov2010/tc20101123_604549.htm?chan=technology_special+report+---+focus+on+climate+change_special+report+---+focus+on+climate+change)  
[SEPP Comment: Rather than have the UN soak the Western taxpayers for \$100 Billion per year, have the national governments do it and give the money to banks and others to invest in alternative energy projects.]

### ***Subsidies and Mandates Forever***

#### **Energy Industry Strikes Out on Its Own**

By Rebecca Smith, WSJ, Nov 22, 2010  
[http://online.wsj.com/article/SB10001424052748703559504575631010457589470.html?mod=ITP\\_pageone\\_1](http://online.wsj.com/article/SB10001424052748703559504575631010457589470.html?mod=ITP_pageone_1)

### ***California Dreaming***

#### **Proposed Regulation Prohibiting False Statements**

CA EPA – California Air Resources Board, Nov 24, 2010 [H/t Anthony Watts WUWT]  
<http://www.arb.ca.gov/html/falsestatements/falsestatements.htm>

[SEPP Comment: Would the prohibition against false statements also apply to CARB and its economic studies?]

### ***Review of Recent Scientific Articles by NIPCC***

***For a full list of articles see [www.NIPCCreport.org](http://www.NIPCCreport.org)***

#### **Yearly Sea-Ice Breakup in Western Hudson Bay**

Reference: Scott, J.B.T. and Marshall, G.J. 2010. A step-change in the date of sea-ice breakup in western Hudson Bay. *Arctic* **63**: 155-164.

<http://www.nipccreport.org/articles/2010/nov/24nov2010a6.html>

#### **Holocene Climatic Change in the North American Plains**

Reference: Nordt, L., von Fischer, J., Tieszen, L. and Tubbs, J. 2008. Coherent changes in relative C<sub>4</sub> plant productivity and climate during the late Quaternary in the North American Great Plains. *Quaternary Science Reviews* **27**: 1600-1611.

<http://www.nipccreport.org/articles/2010/nov/24nov2010a3.html>

#### **Effect of Elevated CO<sub>2</sub> on Calcification by *Oculina aruscula* Corals**

Reference: Ries, J.B., Cohen, A.L. and McCorkle, D.C. 2010. A nonlinear calcification response to CO<sub>2</sub>-induced ocean acidification by the coral *Oculina arbuscula*. *Coral Reefs* **29**: 661-674.

<http://www.nipccreport.org/articles/2010/nov/23nov2010a7.html>

#### **The Medieval Warm Period on the Antarctic Peninsula**

Reference: Hall, B.L., Koffman, T. and Denton, G.H. 2010. Reduced ice extent on the western Antarctic Peninsula at 700-970 cal. yr B.P. *Geology* **38**: 635-638.  
<http://www.nipccreport.org/articles/2010/nov/24nov2010a2.html>

### ***Other Scientific Issues***

#### **Cosmic rays linked to rapid mid-latitude cloud changes**

By Laken, Kniveton, and Frogeye, Atmospheric Chemistry and Physics, 10, 10941-10948, 2010, (Issue 22) [H/t Anthony Watts, WUWT]

<http://www.atmos-chem-phys.net/10/10941/2010/acp-10-10941-2010.html>

For an informative summary see the post by Anthony Watts:

<http://wattsupwiththat.com/2010/11/25/something-to-be-thankful-for-at-last-cosmic-rays-linked-to-rapid-mid-latitude-cloud-changes/#more-28279>

### ***Other Issues that May Be Of Interest***

#### **U.S. Carbon Trading Goes Up in Smoke**

Buying and selling carbon permits in the emerging market designed to control global-warming pollution is no longer a career prospect in the U.S., though California is moving ahead with its own program.

By Robin Farad, Bloomberg Businessweek, Nov 24, 2010, [H/t Marc Morano, Climate Depot]

[http://www.businessweek.com/technology/content/nov2010/tc20101123\\_671505.htm?campaign\\_id=yahoo](http://www.businessweek.com/technology/content/nov2010/tc20101123_671505.htm?campaign_id=yahoo)

#### **Retrained for green jobs, but still waiting on work**

By Michael Fletcher, Washington Post, Nov 22, 2010 [H/t Dike Forbes]

<http://www.washingtonpost.com/wp-dyn/content/article/2010/11/22/AR2010112207583.html>

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### **BELOW THE BOTTOM LINE:**

#### **Study could mean greater anticipated global warming**

Press Release, University of Hawaii, Nov 22, 2010 [H/t Toshio Fujita]

[http://www.eurekalert.org/pub\\_releases/2010-11/uoha-scml12210.php](http://www.eurekalert.org/pub_releases/2010-11/uoha-scml12210.php)

*[SEPP Comment: the models are deficient in representing clouds, therefore they may underestimate future warming?]*

#### **BMW's Comment On Ethanol**

By Roger Pielke Sr., Pielke Research Group, Nov 26, 2010

<http://pielkeclimatesci.wordpress.com/>

*[SEPP Comment: A BMW ad for a product to improve your car's performance if you must use gasoline with ethanol.]*

#### **Climate change, development bring pigs to city**

By Kang Chan-su and Kim Hee-jin, Korea Joongang Daily, Nov 22, 2010, [H/t Marc Morano, Climate Depot]

<http://joongangdaily.joins.com/article/view.asp?aid=2928688>

#### **Could Climate Change Ruin Thanksgiving Dinner?**

Warmer temperatures could affect just about everything you'll see on the dinner table

By Jennifer Viegas, Discovery News, Nov 24, 2010 [H/t Marc Morano, Climate Depot]

<http://news.discovery.com/earth/thanksgiving-climate-change.html>

#### **How to avoid a £100 million cost over-run on your next offshore wind project**

By Andrew Williams, Wind Energy Update, Nov 22, 2010

<http://social.windenergyupdate.com/industry-insight/how-avoid-%C2%A3100-million-cost-over-run-your-next-offshore-wind-project>

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**ARTICLES:**

**1. Tuvalu – the touchstone of global warming and rising sea level**

By Cliff Ollier, On Line opinion, AU e-journal, Nov 26, 2010

<http://www.onlineopinion.com.au/view.asp?article=11282>

**Introduction**

I taught an introductory course in Geology at the University of the South Pacific in 1977. Each of the countries that participated in USP was invited to send 2 students. They had varying interests, and it was amusing to watch how they woke up when we were teaching geology relating to their own job. Some were interested in gold mining, others in highways and landslides, some in coastal erosion, and others in active volcanoes. It was rather a surprise when the sole student from Tuvalu approached me one day and said "Sir, this is all wasted on me. My island is just made of sand." Any news from Tuvalu always struck a chord from that moment.

Since then, of course, Tuvalu has become "hot news" as the favourite island to be doomed by sea level rise driven by global warming, allegedly caused in turn by anthropogenic carbon dioxide. If you look up Tuvalu on the internet you are inundated with articles about its impending fate. Tuvalu has become the touchstone for alarm about global warming and rising sea level.

**The geological background**

There may have been good reason to think that Tuvalu was doomed anyway. Charles Darwin, who was a geologist before he became a biologist, gave us the Darwin theory of coral islands which has been largely substantiated since his time. The idea is this: When a new volcano erupts above sea level in the tropical ocean, corals eventually colonise the shore. They can grow upwards and outwards (away from the volcanic island) but they can't grow above sea level. The coral first forms a fringing reef, in contact with the island. As it grows outwards a lagoon forms between the island and the living reef, which is then a barrier reef. If the original volcano sinks beneath the waves a ring of coral betrays its location as an atoll.

But besides the slow sinking of the volcanic base there are variations of sea level due to many causes such as tectonics (Earth movements) and climate change. If sea level rises the coral has to grow up to the higher sea level. Many reefs have managed this to a remarkable extent. Drilling on the coral islands Bikini and Eniwetok shows about 1500m thickness of limestone and therefore of subsidence. Coral cannot start growing on a deep basement, because it needs sunlight and normally grows down to only 50 m.

If the island is sinking slowly (or relative sea level rising slowly) the growth of coral can keep up with it. In the right circumstances some corals can grow over 2 cm in a year, but growth rate depends on many factors.

Sometimes the relative subsidence is too great for the coral to keep pace. Hundreds of flat-topped sea mountains called guyots, some capped by coral, lie at various depths below sea level. They indicate places where relative sea level rise was too fast for coral growth to keep pace.

Sea level and coral islands in the last twenty years

What about the present day situation? The alarmist view that Tuvalu is drowning has been forced upon us for twenty years, but the island is still there. What about the changes in sea level?

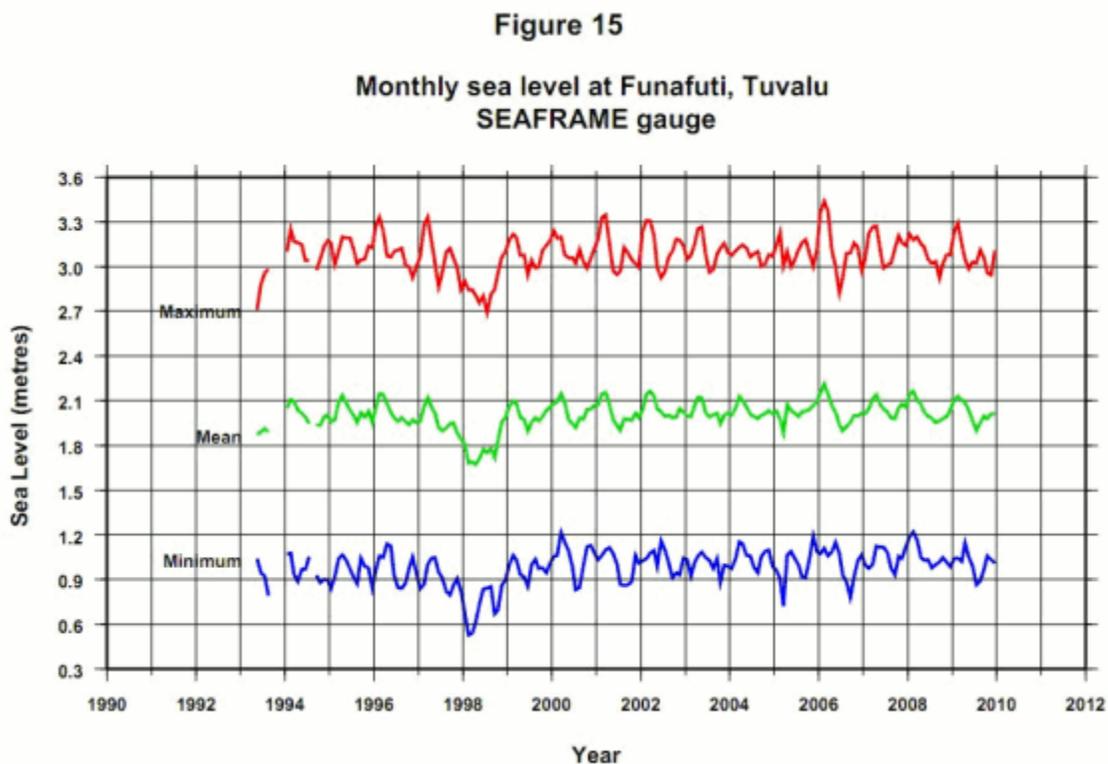
Rather than accept my interpretation, look at the data for yourself. First take a regional view. For a number of well-studied islands it can be located at:

<http://www.bom.gov.au/pacificsealevel/picreports.shtml>

The Tuvalu data is provided at:

<http://www.bom.gov.au/ntc/IDO60033/IDO60033.2009.pdf>

The results are shown graphically in their Figure 15 and reproduced here.



These island data have never been published in a "peer reviewed" journal. They are only available on the Australian Bureau of Meteorology website in a series of Monthly Reports, as in the examples given above. Some measure of the reliability and responsibility may be gauged from the disclaimer at the start of the document:

***Disclaimer***

*The views expressed in this publication are those of the authors and not necessarily those of the Australian Agency for International Development (AusAID).*

But the names of the authors are not provided.

As you can see, apart from a low in the early records, which seem to be associated with a tropical cyclone, there seems to be no great change in sea level since the early 1990s.

### **Explaining it away**

Vincent Gray explained in his newsletter, NZCLIMATE AND ENVIRO TRUTH NO 181 13th August 2008, that something had to be done to maintain rising sea level alarm, and it was done by in a paper by John R Hunter at <http://staff.acecrc.org.au/~johunter/tuvalu.pdf>

Hunter first applies a linear regression to the chart for Tuvalu. He gets  $-1.0 \pm 13.7$  mm/yr so Tuvalu is actually rising! The inaccuracy is entirely due to the ENSO (El Niño-Southern Oscillation) effect at the beginning. He then tries to incorporate old measurements made with inferior equipment and attempts to correct for positioning errors. He gets a "cautious" estimate for Tuvalu of  $0.8 \pm 1.9$  mm/yr. He then tries to remove ENSO to his own satisfaction, and now his "less cautious" estimate is  $1.2 \pm 0.8$  mm/yr.

Does this show the island is raising? Just look at the inaccuracy. The commonsense interpretation of the sea level graphs is surely that Tuvalu, and 11 other Pacific Islands, are not sinking over the time span concerned. The sea level is virtually constant.

Similar manipulation of sea level data is described in Church and others (2006), who consider the tropical Pacific and Indian Ocean islands. Their best estimate for sea level rise at Tuvalu is  $2 \pm 1$  mm/yr from 1950-2001. They wrote "The analysis clearly indicates that sea-level in this region is rising." Does this square with simple observation of the data in Figure 15? They further comment: "We expect that the continued and increasing rate of sea-level rise and any resulting increase in the frequency or intensity of extreme-sea-level events will cause serious problems for the inhabitants of some of these islands during the 21st century." The data in Figure 15 simply do not support this excessive alarmism.

### **Models and ground truth**

Before getting on to the next part of the story I shall digress on to the topic of "models' versus "ground truth'. The past twenty years might be seen as the time of the models. Computers abounded, and it was all too easy to make a mathematical model, pump in some numbers, and see what the model predicted. It became evident very early that the models depended on the data that was fed in, and we all know the phrase "Garbage in, Garbage out". But the models themselves do not get the scrutiny they should. Models are invariably simplifications of the natural world, and it is all too easy to leave out vital factors.

"Ground Truth' is what emerges when the actual situation in a place at the present time, regardless of theories or models. It is a factual base that may help to distinguish between different models that predict different outcomes - just what did happen, and what can we see today.

In the case of Tuvalu's alleged drowning, we are usually presented with a simple model of a static island and a rising sea level. As Webb and Knetch expressed it: "Typically, these studies treat islands as static landforms". "However, such approaches have not incorporated a full appreciation of the contemporary morphodynamics of landforms nor considered the style and magnitude of changes that may be expected in the future. Reef islands are dynamic landforms that are able to reorganise their sediment reservoir in response to changing boundary conditions (wind, waves and sea-level)".

In simple language we have to include coral growth, erosion, transport and deposition of sediment and many other aspects of coral island evolution. The very fact that we have so many coral islands in the world, despite a rise in sea level of over 100 m since the last ice age, shows that coral islands are resilient - they don't drown easily.

The actual growth of islands in the past twenty years

Webb and Kench studied the changes in plan of 27 atoll islands located in the central Pacific.

They found that the total change in area of reef islands (aggregated for all islands in the study) is an increase in land area of 63 hectares representing 7% of the total land area of all islands studied. The majority of islands appear to have either remained stable or increased in area (86%).

Forty three percent of islands have remained relatively stable ( $< \pm 3\%$  change) over the period of analysis. A further 43% of islands (12 in total) have increased in area by more than 3%.

The remaining 15% of islands underwent net reduction in island area of more than 3%.

Of the islands that show a net increase in island area six have increased by more than 10% of their original area. Three of these islands were in Funafuti; Funamanu increased by 28.2%, Falefatu 13.3% and Paava Island by 10%. The Funafuti islands exhibited differing physical adjustments over the 19 years of analysis. Six of the islands have undergone little change in area ( $< \pm 3\%$ ). Seven islands have increased in area by more than 3%. Maximum increases have occurred on Funamanu (28.2%), Falefatu (13.3%) and Paava (10.1%). In contrast, four islands decreased in area by more than 3%.

## Conclusion

In summary Webb and Kench found island area has remained largely stable or increased over the timeframe of their study, and one of the largest increases was the 28.3% on one of the islands of Tuvalu. This destroys the argument that the islands are drowning.

Vincent Gray, an IPCC reviewer from the start, has written SOUTH PACIFIC SEA LEVEL: A REASSESSMENT, which can be seen here: [http://scienceandpublicpolicy.org/south\\_pacific.html](http://scienceandpublicpolicy.org/south_pacific.html)

For Tuvalu he comments that "If the depression of the 1998 cyclone is ignored there was no change in sea level at Tuvalu between 1994 and 2008; 14 years. The claim of a trend of + 6.0 mm/yr is without any justification".

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Emeritus Professor Cliff Ollier is a geologist and geomorphologist. He is the author of ten books and over 300 scientific papers. He has worked in many universities including ANU and the University of the South Pacific, and has lectured at over 100 different universities.

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## 2 EPA hungry for more power

By Lana Spivak, American Council on Science and Health, Nov 23, 2010  
ACSH Morning Dispatch [morning@acsh.org]

The scale of the U.S. Environmental Protection Agency's (EPA) current assault on industry is unprecedented. That's the view of an [editorial](#) in yesterday's *The Wall Street Journal*.

Under the leadership of Lisa Jackson, the EPA is stiffening regulations for pollutants by using ambiguous (and easily manipulated) computer models instead of empirical data. For instance, the EPA recently tightened air quality standards for sulfur dioxide. When it published its final ruling in June, the agency included a “preamble” — mentioning for the first time that measurements were being supplanted by modeling — that was added after the formal period of public comment ended in December. Whether this is lawful is a matter of dispute.

The EPA also neglected to take into consideration that sulfur dioxide emissions have decreased by 56 percent between 1980 and 2008, even as there was a 70 percent increase in fossil fuel-based electric generation. That means the EPA’s new sulfur dioxide regulations will only produce a net benefit of \$12 million nationwide in 2020.

The EPA’s regulatory strictures will negatively affect many industries. In particular, the electric industry will now have to choose between facing major capital expenditures to meet new EPA standards or shutting down and building replacement power plants. Whichever option they decide upon, the American people will be the ones footing the bill through higher service rates. These are, in effect, tax hikes.

Drawing a parallel between the EPA and the FDA, ACSH’s Dr. Gilbert Ross believes both agencies are acting in a counterproductive manner by tightening their regulatory structures, but unlike the FDA, the “EPA is squelching business and increasing costs to consumers with absolutely no benefit to public health.”

ACSH’s Dr. Elizabeth Whelan says she at least understands the role and importance of the FDA, but is still confused about what the EPA wishes to accomplish. “They represent themselves as a public health agency, but they exclusively focus on keeping the environment pristine through projects such as dredging PCBs out of the Hudson River, even though this will ultimately cause more harm to the public.”

Ms. Jackson waves off such criticism, dismissing it as an opposition to “common-sense efforts to reduce harmful pollution.”

Dr. Ross mused that “perhaps their real goal is to protect the environment from humans.” He still can’t get over the fact that the EPA now favors computer modeling in lieu of data collection to come up with estimates of ambient air quality. “I call this the ‘Garbage In, Garbage Out’ approach — the EPA relies on assumptions to fudge data so that the results are guaranteed to come out in accordance with their own predetermined policy agendas.”

Dr. Ross predicted such regulatory assaults last year in an [op-ed](#) in Forbes.com.

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### **3. The EPA Permitorium**

The agency’s regulatory onslaught has stopped new power generation

Editorial, WSJ, Nov 22, 2010

[http://online.wsj.com/article/SB10001424052748704658204575610924168519824.html?mod=ITP\\_opinion\\_2](http://online.wsj.com/article/SB10001424052748704658204575610924168519824.html?mod=ITP_opinion_2)

President Obama is now retrenching after his midterm rebuke, and one of the main ways he'll try to press his agenda is through the alphabet soup of the federal regulators. So a special oversight priority for the new Congress ought to be the Environmental Protection Agency, which has turned a regulatory firehose on U.S. business and the power industry in particular.

The scale of the EPA's current assault is unprecedented, yet it has received almost no public scrutiny. Since Mr. Obama took office, the agency has proposed or finalized 29 major regulations and 172 major policy rules. This surge already outpaces the Clinton Administration's entire first term—when the EPA had just been handed broad new powers under the 1990 revamp of air pollution laws.

Another measure of the EPA's aggressiveness are the six major traditional pollutants that the agency polices, such as ozone or sulfur dioxide. No Administration has ever updated more than two of these rules in a single term, and each individual rule has tended to run through a 15-year cycle on average since the Clean Air Act passed in 1970. Under administrator Lisa Jackson, the EPA is stiffening the regulations for all six at the same time.

The hyperactive Ms. Jackson is also stretching legal limits to satisfy the White House's climate-change goals, now that Senate Democrats have killed cap and trade. The EPA's "endangerment finding" on carbon is most controversial, but other parts of her regulatory ambush may be more destructive by forcing mass retirements of the coal plants that provide half of America's electricity.

A case study in the Jackson method is the EPA's recent tightening of air-quality standards for sulfur dioxide. The draft SO<sub>2</sub> rule was released for the formal period of public comment last December. Yet the final rule published in June suddenly included a "preamble" that rewrote 40-odd years of settled EPA policy.

The EPA has heretofore measured the concentration of pollutants in the ambient air by, well, measuring the concentration of pollutants in the ambient air. The preamble throws out this sampling and ultraviolet testing and substitutes computer estimations of what air quality might be. The EPA favors modelling because it can plug in the data and assumptions of its choosing, like how often a power plant is running at maximum capacity. Gaming the models will allow the agency to punish states and target individual plants, even if actual measurements show that SO<sub>2</sub> is under the new EPA standard.

The EPA is within its legal discretion to reinterpret clean-air laws—but not without any prior warning, and the preamble surprise violates years of case law about federal rule-making. Worse, the agency hasn't gotten around to detailing how the models should be built or how the analysis must be conducted. Without any ground rules for approval, the permits required for any major energy or construction projects can't be issued.

The uncertainty created by the SO<sub>2</sub> rule and similar rule-makings has resulted in a near-total freeze on EPA permits, imposing a de facto project moratorium that will last for the next 18 months at minimum. North Dakota, Texas, Louisiana, South Dakota and Nevada are already suing the EPA because of the restrictions they now face on their "ability to permit new sources or expand existing sources," and many more states are expected to join them.

The same goes for the EPA plan to require "maximum achievable control technology" on a plant-by-plant basis to nearly every coal- or oil-fired utility in the country to limit pollutants like mercury. The EPA started writing that rule while the data that will supposedly inform its decision were still being collected. Then there's the upcoming "boiler rule," which the EPA's lowball estimate says will impose \$9.5 billion in new capital costs on manufacturers, paper mills, hospitals and the like. There are so many others.

The electric industry in particular is being forced to choose between continuing to operate and facing major capital expenditures to meet the increasingly strict burden, or else shutting down and building replacements that use more expensive sources like natural gas. Either way, the costs will be passed through to business and consumers as higher rates, which is the same as a tax increase. The general consensus is that as much as a third of the U.S. coal-fired fleet will be retired by 2016, costing north of

\$100 billion—a consensus that includes an important federal advisory agency, as we wrote last month in "The Unseen Carbon Agenda."

Ms. Jackson responded to that editorial in a letter that waved off any criticism of her industrial policy as merely opposition to "common-sense efforts to reduce harmful pollution." And it's true that some of these costs might be justified if they resulted in real environmental improvements like less acid rain.

Yet return to sulfur dioxide: SO<sub>2</sub> emissions fell by 56% between 1980 and 2008, despite a 70% increase in fossil fuel-based electric generation over the same period. With current levels so low, the EPA's own 168-page analysis estimates that the direct benefits of the new SO<sub>2</sub> regulations will amount to all of \$12 million nationwide in 2020. Liquidating the EPA budget would yield better returns.

At least 56 Senators in next year's Congress are on record supporting bills that would freeze the EPA's carbon regulation for a time or strip the agency of its self-delegated powers. But the EPA is still pursuing the same agenda through other means, harming business expansion, job creation and economic growth. A key task for the next Congress will be to start pushing back.

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#### **4. Wake up, Washington. Energy independence is close at hand**

Editorial, Washington Examiner, Nov 21, 2010

<http://washingtonexaminer.com/editorials/2010/11/examiner-editorial-wake-washington-energy-independence-close-hand>

Washington's political class often seems impervious to changing facts. Case in point is the nation's current and probable future access to essential energy resources, especially fossil fuels like oil, natural gas and coal. This trio of carbon-based fuels accounts for the vast majority of the nation's electrical and other forms of power, and will continue to do so through at least 2030, according to the U.S. Department of Energy. The United States is the world's largest consumer of energy, but is also the world's most productive economy, so demand here for energy resources is going to continue to grow for the foreseeable future.

According to the conventional wisdom, supplies will soon peak and then the nation will experience severe declines in the supply of oil and natural gas. Thus, the U.S. should invest billions in the development of renewable energy resources and use the power of government to create artificial consumer demand for them by imposing mandates for their use. Energy costs "will necessarily skyrocket," to use President Obama's memorable words, but that's the price the nation must pay in order to achieve energy independence and protect the environment.

When the price of a barrel of oil hit \$147 per barrel in July 2008 and Americans were paying as much as \$4 per gallon for gas, that scenario seemed reasonable. But it turns out that in the years since, the energy market has experienced profound changes that negate the conventional view. As the New York Times recently reported, "Just as it seemed that the world was running on fumes, giant oil fields were discovered off the coasts of Brazil and Africa, and Canadian oil sands projects expanded so fast, they now provide North America with more oil than Saudi Arabia. In addition, the United States has increased domestic oil production for the first time in a generation."

The significant news wasn't restricted to oil. The Times also noted that "another wave of natural gas drilling has taken off in shale rock fields across the United States, and more shale gas drilling is just beginning in Europe and Asia. Add to that an increase in liquefied natural gas export terminals around the world that connected gas, which once had to be flared off, to the world market, and gas prices have plummeted." The result, according to the Times, is that energy experts now predict decades of residential and commercial power at reasonable prices."

In other words, the nation can look forward to abundant oil and natural gas supplies at affordable prices for decades to come. As Institute for Energy Research President Thomas J. Pyle puts it, "We can improve our economy, create jobs, and increase our supply of affordable, reliable energy in one fell swoop if the government allows businesses to look for and produce American energy." Consumers should ask how much longer Washington will continue policies meant to restrict access to these resources.

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## **5. GE Didn't Always Want a Subsidy**

Letter By Louis Fougere, WSJ, Nov 26, 2010

[http://online.wsj.com/article/SB10001424052748704648604575621161410551930.html?mod=WSJ\\_Opinion\\_MIDDLEThirdBucket](http://online.wsj.com/article/SB10001424052748704648604575621161410551930.html?mod=WSJ_Opinion_MIDDLEThirdBucket)

I was disgusted by the Nov. 16 [letter from Andy Katell](#) of GE Energy Financial Services in which he states that GE has "assumed considerable risk" in the Shepherds Flat renewable energy project that justifies GE seeking and accepting a Department of Energy loan guarantee "because the debt markets were thin and high priced because of the financial-market meltdown."

I was an engineer at GE during the first 15 years (1950s-1960s) when GE was designing, developing and marketing gas turbine power plants. During that time, the operation was a financial loser that required courage and conviction from management to continue. The efforts paid off, and today the gas turbine operation at GE is robust and profitable.

To my knowledge, none of this success was due to any government loan guarantees. It was a result of old-fashioned effort and risk-taking that is the hallmark of capitalism.

Something has happened to that great company. It has a huge financial operation (GE Capital) that brags about the financial support that it "gives" to start-up companies. Where is GE Capital in the Shepherds Flat project? Why should the taxpayers assume the risk?

Louis F. Fougere  
*President Fern Engineering (retired)*  
*Cataumet, Mass.*

## **We Have Skin in the Game in Our Green Energy Projects**

Letter By Andy Katell, GE, WSJ, Nov 16, 2010

<http://online.wsj.com/article/SB10001424052748703848204575608970590268734.html>

Your Nov. 11 editorial, "[Wind Jammers at the White House](#)," like the memo it reports, omits crucial points to inform a constructive debate about the federal renewable energy incentive program.

GE has "skin in the game." It invested hundreds of millions of dollars of its own money in this large project, alongside Caithness Energy, the project's developer. What the Department of Energy has provided GE, Caithness Energy and others involved in renewable energy, is a partial guarantee for loans to be provided by banks and bondholders. This loan guarantee program is helping to fund large multiyear projects—critical in an uncertain renewable energy and financing market—and it is helping to ensure sufficient liquidity to enable these projects to proceed and create jobs.

Our Shepherds Flat project, already under construction in Oregon, provides "upside" to taxpayers not only through those jobs but through tax revenue for local, state and federal jurisdictions during construction and operation. Such projects also provide environmental benefits, avoiding greenhouse-gas emissions and fossil-fuel depletion. They help national security by reducing our dependence on imported fuel and boost the U.S.'s competitive position.

In addition to their investments, GE and Caithness Energy have assumed considerable risk in the project, and we sought the DOE loan guarantee because the debt markets were thin and high-priced because of the financial-market meltdown. The DOE loan guarantee program ensured access to long-term, reasonably priced financing. We are pleased to have signed the loan guarantee commitment on Nov. 1 and are proceeding with the project.

Andy Katell  
GE Energy Financial Services  
Stamford, Conn

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## **6. Arctic Air: The Bold Missions of the 109<sup>th</sup> Airlift Wing**

By Kenneth Haapala, Arctic Air Website, WCNY-TV (PBS), Nov 8, 2010

[http://www.wcny.org/arcticair/wp-content/uploads/2010/10/Ken\\_H.pdf](http://www.wcny.org/arcticair/wp-content/uploads/2010/10/Ken_H.pdf)

(May have to be loaded directly)

To understand the earth's climate, we must understand the earth's history. By supporting missions to understand the earth's climate history, the 109th Airlift Wing is providing an invaluable service to humanity. The Wing's men and women fly scientists to the earth's two places of extreme, permanent cold, the Greenland ice sheet and Antarctica, so that the scientists can collect better data to understand climate change.

Geologists note that for about 2 million years the dominant climate has been one of Ice Ages interrupted by brief, warm periods. During the Ice Ages, tremendous ice sheets, some over a mile thick, covered much of North America and major parts of Europe and Asia. Since there is little land mass in the southern portion of Southern Hemisphere, the glaciers were not as dominant there as in the Northern Hemisphere. When the glaciers of the last Ice Age began to melt about 18,000 years ago, sea levels rose about 400 feet and they are still rising today, though very slowly. Part of this geological record is derived from the ice sheets of Greenland and Antarctica.

By using hollow tubes or hollow drills to penetrate deep into the ice, a core (center) can be carefully extracted. These core sections are carefully preserved under cold conditions. Some are examined on site then transported to laboratories where they are further examined. These cores yield estimates over time of changes in temperatures and concentrations of greenhouse gases such as carbon dioxide. Other types of methods, such as sea sediments cores, can give estimates of temperatures, but the ice cores are unique in giving detailed estimates of the chemistry of the atmosphere including greenhouse gases as well as temperatures.

Among the exciting revelations of this chronology is that temperatures seem to have exhibited a rough cyclical pattern for over 400,000 years – long Ice Ages, usually about 90,000 years, followed by brief, warm periods of about 10,000 years. Some of these warm periods were far warmer than today.

Both temperatures and carbon dioxide concentrations tend to follow similar cyclical patterns; but, contrary to a popular myth, temperatures change in one direction first, followed by at least 6 to 8 centuries later by carbon dioxide concentrations. Clearly, changes in carbon dioxide concentrations did not cause the changes in temperature. For example, temperatures dropped for hundreds of years while carbon dioxide concentrations still rose. This is not to say the carbon dioxide does not influence temperatures, as most likely it does, but other natural influences are the principal driving force of changes in temperatures. Also, it appears that changing temperatures influence carbon dioxide concentrations – as the globe warms the oceans they give up more carbon dioxide. Warm water cannot hold as much gas as cold water.

Research has also shown that during the 10,000 years since the end of the last Ice Age, called the Holocene, the variations in temperatures in both Greenland and the Antarctic matched fairly closely. However, during the transition period from the last Ice Age to the Holocene the temperatures changed very rapidly in Greenland, both warming and cooling, while increasing more evenly in Antarctica.

The Greenland ice cores, in particular, show a cyclical pattern to temperature changes over the past 10,000 years. There have been a number of periods warmer than today followed by a cold period. The last warm period was the Mediaeval Warm Period about 1,000 years ago that was followed by the Little Ice Age. These temperature changes appear to be unrelated to carbon dioxide concentrations.

From this work we can conclude climate change is normal, natural, and cyclical. Changing concentrations of carbon dioxide may enhance climate change but such changing concentrations are not the primary driver.

In his studies, climate change pioneer H.H. Lamb concluded that warm periods are generally beneficial for mankind and cold periods harmful. For example, the Little Ice Age was marked by periods of famine, diseases scarcely known today, and death. The cold wiped out food crops as well as changed many climate patterns. Lamb urged for the systematic study of climate change so that the humanity can be better prepared for the next cold period. Through the bold, dedicated efforts of the men and women of the 109th Airlift Wing, scientists are advancing the knowledge of climate change so that we may be better prepared for the next cold period that is sure to come.

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