U. S. Senate Minority Report:
More Than 700 International Scientists Dissent Over Man-Made Global Warming Claims
Scientists Continue to Debunk "Consensus" in 2008 & 2009

(Updates Previous Report: "More Than 650 International Scientists Dissent Over Man-Made Global Warming Claims")

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(Update of the 2007 Report: "Over 400 Prominent Scientists Disputed Man-Made Global Warming Claims in 2007")

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U.S. Senate Environment and Public Works Committee (Minority)

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INTRODUCTION:

Over 700 dissenting scientists (updates previous 650 report) from around the globe challenged man-made global warming claims made by the United Nations Intergovernmental Panel on Climate Change (IPCC) and former Vice President Al Gore. This new 2009 255-page U.S. Senate Minority Report -- updated from 2007's groundbreaking report of over 400 scientists who voiced skepticism about the so-called global warming "consensus" -- features the skeptical voices of over 700 prominent international scientists, including many current and former UN IPCC scientists, who have now turned against the UN IPCC. This updated report includes an additional 300 (and growing) scientists and climate researchers since the initial release in December 2007. The over 700 dissenting scientists are more than 13 times the number of UN scientists (52) who authored the media-hyped IPCC 2007 Summary for Policymakers.

The chorus of skeptical scientific voices grow louder in 2008 and 2009 as a steady stream of peer-reviewed studies, analyses, real world data and inconvenient developments challenged the UN's and former Vice President Al Gore's claims that the "science is settled" and there is a "consensus." On a range of issues, 2008 and 2009 proved to be challenging for the promoters of man-made climate fears. Promoters of anthropogenic warming fears endured the following: Global temperatures failing to warm; Peer-reviewed studies predicting a continued lack of warming; a failed attempt to revive the discredited "Hockey Stick"; inconvenient developments and studies regarding rising CO2; the Sun; Clouds; Antarctica; the Arctic; Greenland's ice; Mount Kilimanjaro; Causes of Hurricanes; Extreme Storms; Extinctions; Floods; Droughts; Ocean Acidification; Polar Bears; Extreme weather deaths; Frogs; lack of atmospheric dust; Malaria; the failure of oceans to warm and rise as predicted.

In addition, the following developments further secured 2008 and 2009 as the year the "consensus" collapsed. Russian scientists "rejected the very idea that carbon dioxide may be responsible for global warming". An American Physical Society editor conceded that a "considerable presence" of scientific skeptics exists. An International team of scientists countered the UN IPCC, declaring: "Nature, Not Human Activity, Rules the Climate". India Issued a report challenging global warming fears. International Scientists demanded the UN IPCC "be called to account and cease its deceptive practices," and a canvass of more than 51,000 Canadian scientists revealed 68% disagree that global warming science is "settled." A Japan Geoscience Union symposium survey in 2008 "showed 90 per cent of the participants do not believe the IPCC report."

This new report issued by the Senate Environment and Public Works Committee's office of the GOP Ranking Member is the latest evidence of the growing groundswell of scientific opposition challenging significant aspects of the claims of the UN IPCC and Al Gore. Scientific meetings are now being dominated by a growing number of skeptical scientists. The prestigious International Geological Congress, dubbed the geologists' equivalent of the Olympic Games, was held in Norway in August 2008 and prominently featured the voices of scientists skeptical of man-made global warming fears. [***See: Skeptical scientists overwhelm conference: '2/3 of presenters and question-askers were hostile to, even dismissive of, the UN IPCC' & see full reports here & here - Also see: UN IPCC's William Schlesinger admits in 2009 that only 20% of IPCC scientists deal with climate*** **]**

Even the mainstream media has begun to take notice of the expanding number of scientists serving as "consensus busters." A November 25, 2008, article in *Politico* noted that a "growing accumulation" of science is challenging warming fears, and added that the "science behind global warming may still be too shaky to warrant cap-and-trade legislation." Canada's *National Post* noted on October 20, 2008, that "the number of climate change skeptics is growing rapidly." *New York Times* environmental reporter Andrew Revkin noted on March 6, 2008, "As we all know, climate science is not a numbers game (there are heaps of signed statements by folks with advanced degrees on all sides of this issue)," Revkin wrote. (LINK) In 2007, *Washington Post* Staff Writer Juliet Eilperin conceded the obvious, writing that climate skeptics "appear to be expanding rather than shrinking."

Skeptical scientists are gaining recognition despite what many say is a bias against them in parts of the scientific community and are facing significant funding disadvantages. Dr. William M. Briggs, a climate statistician who serves on the American Meteorological Society's Probability and Statistics Committee, explained that his colleagues described "absolute horror stories of what happened to them when they tried getting papers published that explored non-'consensus' views." In a March 4, 2008, report Briggs described the behavior as "really outrageous and unethical … on the parts of some editors. I was shocked." (LINK) [***Note: An August 2007 report detailed how proponents of man-made global warming fears enjoy a monumental funding advantage over skeptical scientists. LINK A July 2007 Senate report details how skeptical scientists have faced threats and intimidation - LINK & LINK***]

Highlights of the Updated 2009 Senate Minority Report featuring over 700 international scientists dissenting from man-made climate fears:

"I am a skeptic…Global warming has become a new religion." - Nobel Prize Winner for Physics, Ivar Giaever.

"Since I am no longer affiliated with any organization nor receiving any funding, I can speak quite frankly….As a scientist I remain skeptical...The main basis of the claim that man's release of greenhouse gases is the cause of the warming is based almost entirely upon climate models. We all know the frailty of models concerning the air-surface system." - Atmospheric Scientist Dr. Joanne Simpson, the first woman in the world to

receive a PhD in meteorology, and formerly of NASA, who has authored more than 190 studies and has been called "among the most preeminent scientists of the last 100 years."

Warming fears are the "worst scientific scandal in the history…When people come to know what the truth is, they will feel deceived by science and scientists." - UN IPCC Japanese Scientist Dr. Kiminori Itoh, an award-winning PhD environmental physical chemist.

"The IPCC has actually become a closed circuit; it doesn't listen to others. It doesn't have open minds… I am really amazed that the Nobel Peace Prize has been given on scientifically incorrect conclusions by people who are not geologists." - Indian geologist Dr. Arun D. Ahluwalia at Punjab University and a board member of the UN-supported International Year of the Planet.

"So far, real measurements give no ground for concern about a catastrophic future warming." - Scientist Dr. Jarl R. Ahlbeck, a chemical engineer at Abo Akademi University in Finland, author of 200 scientific publications and former Greenpeace member.

"Anyone who claims that the debate is over and the conclusions are firm has a fundamentally unscientific approach to one of the most momentous issues of our time." - Solar physicist Dr. Pal Brekke, senior advisor to the Norwegian Space Centre in Oslo. Brekke has published more than 40 peer-reviewed scientific articles on the sun and solar interaction with the Earth.

"The models and forecasts of the UN IPCC "are incorrect because they only are based on mathematical models and presented results at scenarios that do not include, for example, solar activity." - Victor Manuel Velasco Herrera, a researcher at the Institute of Geophysics of the National Autonomous University of Mexico

"It is a blatant lie put forth in the media that makes it seem there is only a fringe of scientists who don't buy into anthropogenic global warming." - U.S Government Atmospheric Scientist Stanley B. Goldenberg of the Hurricane Research Division of NOAA.

"Even doubling or tripling the amount of carbon dioxide will virtually have little impact, as water vapour and water condensed on particles as clouds dominate the worldwide scene and always will." – . Geoffrey G. Duffy, a professor in the Department of Chemical and Materials Engineering of the University of Auckland, NZ.

"***After reading [UN IPCC chairman] Pachauri's asinine comment [comparing skeptics to] Flat Earthers, it's hard to remain quiet."*** - Climate statistician Dr. William M. Briggs, who specializes in the statistics of forecast evaluation, serves on the American Meteorological Society's Probability and Statistics Committee and is an Associate Editor of Monthly Weather Review.

"The Kyoto theorists have put the cart before the horse. It is global warming that triggers higher levels of carbon dioxide in the atmosphere, not the other way round…A large

number of critical documents submitted at the 1995 U.N. conference in Madrid vanished without a trace. As a result, the discussion was one-sided and heavily biased, and the U.N. declared global warming to be a scientific fact," Andrei Kapitsa, a Russian geographer and Antarctic ice core researcher.

"I am convinced that the current alarm over carbon dioxide is mistaken...Fears about man-made global warming are unwarranted and are not based on good science." - Award Winning Physicist Dr. Will Happer, Professor at the Department of Physics at Princeton University and Former Director of Energy Research at the Department of Energy, who has published over 200 scientific papers, and is a fellow of the American Physical Society, The American Association for the Advancement of Science, and the National Academy of Sciences.

"Nature's regulatory instrument is water vapor: more carbon dioxide leads to less moisture in the air, keeping the overall GHG content in accord with the necessary balance conditions." – Prominent Hungarian Physicist and environmental researcher Dr. Miklós Zágoni reversed his view of man-made warming and is now a skeptic. Zágoni was once Hungary's most outspoken supporter of the Kyoto Protocol.

"For how many years must the planet cool before we begin to understand that the planet is not warming? For how many years must cooling go on?" - Geologist Dr. David Gee the chairman of the science committee of the 2008 International Geological Congress who has authored 130 plus peer reviewed papers, and is currently at Uppsala University in Sweden.

"Gore prompted me to start delving into the science again and I quickly found myself solidly in the skeptic camp…Climate models can at best be useful for explaining climate changes after the fact." - Meteorologist Hajo Smit of Holland, who reversed his belief in man-made warming to become a skeptic, is a former member of the Dutch UN IPCC committee.

"The quantity of CO2 we produce is insignificant in terms of the natural circulation between air, water and soil... I am doing a detailed assessment of the UN IPCC reports and the Summaries for Policy Makers, identifying the way in which the Summaries have distorted the science." - South Afican Nuclear Physicist and Chemical Engineer Dr. Philip Lloyd, a UN IPCC co-coordinating lead author who has authored over 150 refereed publications.

"Many [scientists] are now searching for a way to back out quietly (from promoting warming fears), without having their professional careers ruined." - Atmospheric physicist James A. Peden, formerly of the Space Research and Coordination Center in Pittsburgh.

"All those urging action to curb global warming need to take off the blinkers and give some thought to what we should do if we are facing global cooling instead." - Geophysicist Dr. Phil Chapman, an astronautical engineer and former NASA astronaut, served as staff physicist at MIT (Massachusetts Institute of Technology)

"Creating an ideology pegged to carbon dioxide is a dangerous nonsense…The present alarm on climate change is an instrument of social control, a pretext for major businesses and political battle. It became an ideology, which is concerning." - Environmental Scientist Professor Delgado Domingos of Portugal, the founder of the Numerical Weather Forecast group, has more than 150 published articles.

"CO2 emissions make absolutely no difference one way or another….Every scientist knows this, but it doesn't pay to say so…Global warming, as a political vehicle, keeps Europeans in the driver's seat and developing nations walking barefoot." - Dr. Takeda Kunihiko, vice-chancellor of the Institute of Science and Technology Research at Chubu University in Japan.

"The [global warming] scaremongering has its justification in the fact that it is something that generates funds." - Award-winning Paleontologist Dr. Eduardo Tonni, of the Committee for Scientific Research in Buenos Aires and head of the Paleontology Department at the University of La Plata.

"Whatever the weather, it's not being caused by global warming. If anything, the climate may be starting into a cooling period." Atmospheric scientist Dr. Art V. Douglas, former Chair of the Atmospheric Sciences Department at Creighton University in Omaha, Nebraska, and is the author of numerous papers for peer-reviewed publications.

"But there is no falsifiable scientific basis whatever to assert this warming is caused by human-produced greenhouse gasses because current physical theory is too grossly inadequate to establish any cause at all." - Chemist Dr. Patrick Frank, who has authored more than 50 peer-reviewed articles.

"The 'global warming scare' is being used as a political tool to increase government control over American lives, incomes and decision making. It has no place in the Society's activities." - Award-Winning NASA Astronaut/Geologist and Moonwalker Jack Schmitt who flew on the Apollo 17 mission and formerly of the Norwegian Geological Survey and for the U.S. Geological Survey.

"Earth has cooled since 1998 in defiance of the predictions by the UN-IPCC….The global temperature for 2007 was the coldest in a decade and the coldest of the millennium…which is why 'global warming' is now called 'climate change.'" - Climatologist Dr. Richard Keen of the Department of Atmospheric and Oceanic Sciences at the University of Colorado.

"I have yet to see credible proof of carbon dioxide driving climate change, yet alone man-made CO2 driving it. The atmospheric hot-spot is missing and the ice core data refute this. When will we collectively awake from this deceptive delusion?" - Dr. G LeBlanc Smith, a retired Principal Research Scientist with Australia's CSIRO. (The full quotes of the scientists are later in this report)

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This Senate report is not a "list" of scientists, but a report that includes full biographies of each scientist and their quotes, papers and links for further reading. The scientists featured in the report express their views in their own words, complete with their intended subtleties and caveats. This Senate report features the names, biographies, academic/institutional affiliation, and quotes of literally hundreds of additional international scientists who publicly dissented from man-made climate fears. This report lists the scientists by name, country of residence, and academic/institutional affiliation. It also features their own words, biographies, and weblinks to their peer reviewed studies, scientific analyses and original source materials as gathered from directly from the scientists or from public statements, news outlets, and websites in 2007, 2008 and 2009.

The distinguished scientists featured in this new report are experts in diverse fields, including: climatology; geology; biology; glaciology; biogeography; meteorology; oceanography; economics; chemistry; mathematics; environmental sciences; astrophysics, engineering; physics and paleoclimatology. Some of those profiled have won Nobel Prizes for their outstanding contribution to their field of expertise and many shared a portion of the UN IPCC Nobel Peace Prize with Vice President Gore. Additionally, these scientists hail from prestigious institutions worldwide, including: Harvard University; NASA; National Oceanic and Atmospheric Administration (NOAA) and the National Center for Atmospheric Research (NCAR); Massachusetts Institute of Technology; the UN IPCC; the Danish National Space Center; U.S. Department of Energy; Princeton University; the Environmental Protection Agency; University of Pennsylvania; Hebrew University of Jerusalem; the International Arctic Research Centre; the Pasteur Institute in Paris; the Belgian Weather Institute; Royal Netherlands Meteorological Institute; the University of Helsinki; the National Academy of Sciences of the U.S., France, and Russia; the University of Pretoria; University of Notre Dame; Abo Akademi University in Finland; University of La Plata in Argentina; Stockholm University; Punjab University in India; University of Melbourne; Columbia University; the World Federation of Scientists; and the University of London.

Background: **Only 52 Scientists Participated in UN IPCC Summary**

The notion of "hundreds" or "thousands" of UN scientists agreeing to a scientific statement does not hold up to scrutiny. (See report debunking "consensus" LINK) Recent research by Australian climate data analyst John McLean revealed that the IPCC's peer-review process for the Summary for Policymakers leaves much to be desired. (LINK) (LINK) (LINK) & (LINK) (Note: The 52 scientists who participated in the 2007 IPCC Summary for Policymakers had to adhere to the wishes of the UN political leaders and delegates in a process described as more closely resembling a political party's convention platform battle, not a scientific process - LINK)

One former UN IPCC scientist bluntly told EPW how the UN IPCC Summary for Policymakers "distorted" the scientists work. "I have found examples of a Summary saying precisely the opposite of what the scientists said," explained South Afican Nuclear Physicist and Chemical Engineer Dr. Philip Lloyd, a UN IPCC co-coordinating lead author who has authored over 150 refereed publications. [***Also see:*** **Internal Report Says U.N. Climate Agency Rife With Bad Practices - Fox News – December 4, 2008**]

Proponents of man-made global warming like to note how the National Academy of Sciences (NAS) and the American Meteorological Society (AMS) have issued statements endorsing the so-called "consensus" view that man is driving global warming. But both the NAS and AMS never allowed member scientists to directly vote on these climate statements. Essentially, only two dozen or so members on the governing boards of these institutions produced the "consensus" statements. This report gives a voice to the rank-and-file scientists who were shut out of the process. (LINK) [***Also See: MIT Climate Scientist Exposes 'Corrupted Science' in Devastating Critique – November 29, 2008***]

One of the more recent attempts to imply there was an overwhelming scientific "consensus" in favor of man-made global warming fears came in December 2007 during the UN climate conference in Bali. A letter signed by only 215 scientists urged the UN to mandate deep cuts in carbon dioxide emissions by 2050. But absent from the letter were the signatures of these alleged "thousands" of scientists. (See AP article: - LINK) The more than 700 scientists expressing skepticism, comes after the UN IPCC chairman Rajendra Pachauri implied that there were only "about a dozen" skeptical scientists left in the world. (LINK) Former Vice President Gore has claimed that scientists skeptical of climate change are akin to "flat Earth society members" and similar in number to those who "believe the moon landing was actually staged in a movie lot in Arizona." (LINK) & (LINK)

Examples of "consensus" claims made by promoters of man-made climate fears:

Former Vice President Al Gore (November 5, 2007): "There are still people who believe that the Earth is flat." (LINK) Gore also compared global warming skeptics to people who "believe the moon landing was actually staged in a movie lot in Arizona." (June 20, 2006 - LINK)

CNN's Miles O'Brien (July 23, 2007): "The scientific debate is over," O'Brien said. "We're done." O'Brien also declared on CNN on February 9, 2006 that scientific skeptics of man-made catastrophic global warming "are bought and paid for by the fossil fuel industry, usually." (LINK)

On July 27, 2006, Associated Press reporter Seth Borenstein described a scientist as "one of the few remaining scientists skeptical of the global warming harm caused by industries that burn fossil fuels." (LINK)

Dr. Rajendra Pachauri, Chairman of the IPCC view on the number of skeptical scientists as quoted on Feb. 20, 2003: "About 300 years ago, a Flat Earth Society was founded by those who did not believe the world was round. That society still exists; it probably has about a dozen members." (LINK)

Agence France-Press (AFP Press) article (December 4, 2007): The article noted that a prominent skeptic "finds himself increasingly alone in his claim that climate change poses no imminent threat to the planet."

Andrew Dessler in the eco-publication Grist Magazine (November 21, 2007): "While some people claim there are lots of skeptical climate scientists out there, if you actually try to find one, you keep turning up the same two dozen or so (e.g., Singer, Lindzen, Michaels,

Christy, etc., etc.). These skeptics are endlessly recycled by the denial machine, so someone not paying close attention might think there are lots of them out there -- but that's not the case." (LINK)

***The Washington Post* asserted on May 23, 2006** that there were only "a handful of skeptics" of man-made climate fears. (LINK**)**

UN special climate envoy Dr. Gro Harlem Brundtland on May 10, 2007 declared the climate debate "over" and added "it's completely immoral, even, to question" the UN's scientific "consensus." (LINK)

The UN Framework Convention on Climate Change Executive Secretary Yvo de Boer said it was "criminally irresponsible" to ignore the urgency of global warming on November 12, 2007. (LINK)

ABC News Global Warming Reporter Bill Blakemore reported on August 30, 2006: "After extensive searches, ABC News has found no such [scientific] debate" on global warming. (LINK)

While the scientists contained in this report hold a diverse range of views, they generally rally around several key points. 1) The Earth is currently well within natural climate variability. 2) Almost all climate fear is generated by unproven computer model predictions. 3) An abundance of peer-reviewed studies continue to debunk rising CO2 fears and, 4) "Consensus" has been manufactured for political, not scientific purposes.

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Scientists Speak: More Than 700 International Scientists Dissent Over Man-Made Global Warming Claims

Original Release December 11, 2008. Update March 16, 2009 [Note: The 2007 Report is reprinted in full following the 2009 report]

This report is in the spirit of enlightenment philosopher Denis Diderot who reportedly said, "Skepticism is the first step towards truth."

[Disclaimer: The following scientists named in this report have expressed a range of views from skepticism to outright rejection of predictions of catastrophic man-made global warming. As in all science, there is no lock step single view.]

Nuclear Physicist and Chemical Engineer Dr. Philip Lloyd, a UN IPCC co-coordinating lead author on the Technical Report on Carbon Capture & Storage, was in charge of South Africa's Chamber of Mines' Metallurgy Laboratory and was a former professor at University of Witwatersrand where he established a course in environmental chemical engineering. Lloyd has served as President of the South African Institution of Chemical Engineers, the Federation of Societies of Professional Engineers, and the Associated Scientific and Technical Societies of Southern Africa. Lloyd, who has authored over 150 refereed publications, currently serves as an honorary research fellow with the Energy Research Centre at the University of Cape Town. Lloyd rejects man-made climate fears. "I have grave difficulties in finding any but the most circumstantial evidence for any human impact on the climate," Lloyd wrote to EPW on January 18, 2008. "The quantity of CO2 we produce is insignificant in terms of the natural circulation between air, water and soil. I have tried numerous tests for radiative effects, and all have failed. I have tried to develop an isotopic method for identifying stable C12 (from fossil fuels) and merely ended up understanding the difference between the major plant chemistries and their differing ability to use the different isotopes. I have studied the ice core record, in detail, and am concerned that those who claim to have a model of our climate future haven't a clue about the forces driving our climate past," Lloyd wrote. "I am particularly concerned that the rigor of science seems to have been sacrificed on an altar of fundraising. I am doing a detailed assessment of the IPCC reports and the Summaries for Policy Makers, identifying the way in which the Summaries have distorted the science. I have found examples of a Summary saying precisely the opposite of what the scientists said," he concluded. (LINK) (LINK)

Physics professor Dr. Frederick Wolf of Keene State College in New Hampshire has taught meteorology and climatology courses for the past 25 years and will be undertaking a sabbatical project on global warming. Wolf recently declared he was skeptical of man-made climate fears. "Several things have contributed to my skepticism about global warming being due to human causes. We all know that the atmosphere is a very complicated system. Also, after studying climate, I am aware that there are cycles of warm and cold periods of varying lengths which are still not completely understood," Wolf wrote EPW on January 10, 2008. "Also, many, many of the supporters (or believers) of

human induced warming have not read the IPCC report AND Al Gore is NOT a climate scientist!" Wolf added. He also rejected the claim that most scientists agree mankind is driving a "climate crisis." "I am impressed by the number of scientific colleagues who are naturally skeptical about the conclusion of human induced warming," Wolf added. (LINK)

Dr. Paul Berenson, an M.I.T-educated physicist, was the executive secretary of the Defense Science Board for the U.S. Department of Defense, the Scientific Advisor to NATO's Supreme Allied Commander Europe (SACEUR), and Scientific Advisor to the Commanding General of the U.S. Army Training and Doctrine Command. Berenson, who describes himself as a "scientific truth seeker," has published about a dozen peer-reviewed studies in the field of thermodynamics, power, fluid mechanics, and heat transfer. Berenson believes that man-made global warming fears have no objective scientific basis. **"**Earth is in the final stages of a typical 10,000 year plus interglacial when both atmospheric temperature and CO2 content tend to increase long term from natural causes, as they have after every ice age. The next major stage is the start of a new ice age which hopefully is more than a thousand years in the future," Berenson wrote in a February 2008 commentary. "Man has been putting increasingly large amounts of CO2 in the atmosphere since the beginning of the Industrial Age and rapidly increasing the last 60 years as shown in all the references. However, the amount of CO2 man has added to the atmosphere is less than 1 % of the CO2 that is there from natural causes," Berenson explained. "Current atmospheric temperatures and CO2 content are no higher than they have been at various times during the past million years. The so-called Climate Optimum 1000 to 1300 A.D. was 1-3 degrees C warmer than now, and apparently provided better living conditions for humans, animals, and vegetation. For example, Greenland was green and habitable by farmers. Water vapor (H2O) is the primary greenhouse gas, contributing roughly 80 % of the greenhouse effect. Without the warming effect of the greenhouse gases, the Earth would be roughly 10 degrees cooler, and probably uninhabitable by humans. It has been estimated that the warming effect of CO2 is roughly one thousandth that of water vapor," he added. "The analytical models used to predict higher atmospheric CO2 content and temperature have not been validated, and do not predict the measured values from the last 200 years; e.g., the cooling of roughly 1 degree C from about 1940 to 1975. Thus they are not valid and should not be used. They are not valid because they do not include major effects on the climate such as clouds, rain, electric currents, cosmic rays, sun spots, etc," Berenson concluded. (LINK) & (LINK)

David Packham is a former principle research scientist with Australia's CSIRO, a senior research fellow in a climate group at Monash University in Australia, and an officer in the Australian Bureau of Meteorology, as well as author of numerous scientific papers, who dissented in 2008. "I find that I am uncomfortable with the quality of the science being applied to the global warming question," Packham, who now consults in fire management, told EPW on May 3, 2008. "This lack of comfort comes from many directions: A lack of actual measurements for terrestrial radiation and the use of deemed values for particulate radiation absorption; The failure to consider the role of particulates from biomatter burning; The lack of critical thought and total acceptance of the global warming models as conclusive evidence; The lack of transparency and obscuration of the critical weaknesses in the GCMs," Packham explained. "Along with these discomforts goes an observation that research funding for environmental research in Australia, in my case mercury and wildfires, is almost impossible unless it is part of yet more greenhouse data

gathering. There is also an atmosphere of intimidation if one expresses dissenting views or evidence. It is as if one is doing one's colleagues a great disservice in dissenting and perhaps derailing the gravy train. The effect of the group think is creating a corporate data gathering mind set amongst our young researchers that I think is dangerous," he said. "As you can see there are many reasons that I would like to join my dissenting colleagues, some scientific and some social and political but all of them are sincerely held," he added. "The global warming monopoly is seriously bad for science," he concluded. (LINK)

Atmospheric Scientist Dr. Joanne Simpson, the first woman in the world to receive a PhD in meteorology, formerly of NASA, has authored more than 190 studies and has been called "among the most preeminent scientists of the last 100 years" by atmospheric scientist Dr. Roger Pielke, Sr. Simpson declared she was "skeptical" of catastrophic man-made warming in 2008. "Since I am no longer affiliated with any organization nor receiving any funding, I can speak quite frankly," Simpson wrote in a public letter on February 27, 2008. "The main basis of the claim that man's release of greenhouse gases is the cause of the warming is based almost entirely upon climate models. We all know the frailty of models concerning the air-surface system. We only need to watch the weather forecasts," Simpson explained. "But as a scientist I remain skeptical," she added. (LINK)

Meteorologist Thomas B. Gray is the former head of the Space Services branch at the National Oceanic and Atmospheric Administration (NOAA) and a researcher in NOAA's Space Environment Laboratory and Environmental Research Laboratories. Gray also served as an aviation meteorologist for the United States Air Force. Gray asserted that "climate change is a natural occurrence" and dissented from the view that mankind faces a "climate crisis" in 2007. "I was awarded my MS in meteorology from Florida State University and I became interested in paleoclimatology," Gray wrote to EPW on December 25, 2007. "Nothing that is occurring in weather or in climate research at this time can be shown to be abnormal in the light of our knowledge of climate variations over geologic time," Gray explained. "I am sure that the concept of a 'Global Temperature' is nonsense," he added. "The claims of those convinced that AGW (anthropogenic global warming) is real and dangerous are not supported by reliable data," Gray concluded.

Physical chemist Dr. Peter Stilbs, who chairs the climate seminar Department of Physical Chemistry at the Royal Institute of Technology (KTH) in Stockholm, has authored more than 165 scientific publications in refereed journals since 1970. Stilbs coordinated a meeting of international scientists and declared his skepticism about man-made climate fears. Stilbs wrote on December 21, 2006 that "by the final panel discussion stage of the conference, there appeared to be wide agreement" about several key points regarding man-made climate fears. Stilbs announced that the scientists concluded, "There is no strong evidence to prove significant human influence on climate on a global basis. The global cooling trend from 1940 to 1970 is inconsistent with models based on anthropogenic carbon dioxide emissions. Actual claims put forward are that an observed global temperature increase of about 0.3 degrees C since 1970 exceeds what could be expected from natural variation. However, recent temperature data do not indicate any continued global warming since 1998." Stilbs also noted, "There is no reliable evidence to support that the 20th century was the warmest in the last 1000 years. Previous claims based on the 'Mann hockey-stick curve' are by now totally discredited." Stilbs noted that the team of

international scientists concluded: "There is no doubt that the science behind 'the climate issue' is far from settled. As so many cosmic effects are omitted from climate models, there is no credibility for arguments such as 'there is no other explanation' [than anthropogenic generation of carbon dioxide]. This must be remembered when making future political decisions related to these matters." (LINK) Stilbs also was one of the signatories of the December 13, 2007 letter critical of the UN IPCC's climate view. "These [IPCC] Summaries are prepared by a relatively small core writing team with the final drafts approved line-by-line by government representatives. The great majority of IPCC contributors and reviewers, and the tens of thousands of other scientists who are qualified to comment on these matters, are not involved in the preparation of these documents. The summaries therefore cannot properly be represented as a consensus view among experts," the letter Stilbs signed explained. (LINK)

Geography professor Dr. Randy Cerveny of Arizona State University oversees the university's meteorology program and was named to a key post at the UN's World Meteorological Organization in 2007. Cerveny, who has written nearly 100 scientific papers and magazine articles, is in charge of developing a global weather archive for the UN. He was also a contributing author to the skeptical climate change book *Shattered Consensus: The True State of Global Warming,* edited by climatologist Dr. Patrick Michaels. Cerveny rejected catastrophic fears of man-made climate change in 2007. "I don't think [global warming] is going to be catastrophic," Cerveny said according to an October 7, 2007 article. "Hopefully, our grandkids are going to have a lot better weather information than we did, and they will be able to answer a lot of the questions we're just in the process of asking," Cerveny explained. (LINK) & (LINK)

Award-winning NASA Astronaut and Physicist Walter Cunningham of NASA's Apollo 7. was awarded the NASA Exceptional Distinguished Service Medal and Navy Astronaut Wings and is a member of the American Geophysical Union and fellow of the American Astronautical Society. (Bio Link) Cunningham, a long time skeptic, again rejected climate fears in 2008. "It doesn't help that NASA scientist James Hansen was one of the early alarmists claiming humans caused global warming. Hansen is a political activist who spreads fear even when NASA's own data contradict him," Cunningham wrote in an essay in the July/August 2008 issue of *Launch Magazine*. "NASA should be at the forefront in the collection of scientific evidence and debunking the current hysteria over human-caused, or Anthropogenic Global Warming (AGW). Unfortunately, it is becoming just another agency caught up in the politics of global warming, or worse, politicized science. Advocacy is replacing objective evaluation of data, while scientific data is being ignored in favor of emotions and politics," he explained. "I do see hopeful signs that some true believers are beginning to harbor doubts about AGW. Let's hope that NASA can focus the global warming discussion back on scientific evidence before we perpetrate an economic disaster on ourselves," he added. "The reality is that atmospheric CO2 has a minimal impact on greenhouse gases and world temperature. Water vapor is responsible for 95 percent of the greenhouse effect. CO2 contributes just 3.6 percent, with human activity responsible for only 3.2 percent of that. That is why some studies claim CO2 levels are largely irrelevant to global warming. Without the greenhouse effect to keep our world warm, the planet would have an average temperature of minus 18 degrees Celsius. Because we do have it, the temperature is a comfortable plus 15 degrees Celsius. Based on the seasonal and geographic distribution of any projected warming, a good case can be made

that a warmer average temperature would be even more beneficial for humans," he concluded. (LINK)

José Ramón Arévalo, Professor of Ecology at the University of La Laguna in Spain, dissented from climate fears in 2008. "Climate warming is more an ideology, that I have read is call "Climatism"... so, as an ideology is perfect to me, the problem is when administrators become members of this sect, and then they have to spend millions in demonstrating their ideology," Professor Arévalo wrote to EPW on December 7, 2008. Professor Arévalo held an event at the university in July 2008 that proclaimed man-made global warming "is not happening." Arévalo "refuted the usual claims that extreme weather conditions are already increasing, or that more forest fires were occurring," according to a July 2008 article. The article continued, identifying another skeptic: **"Professor of Geography at the Madrid Complutense University, Maria Eugenia Peréz,** spoke about the actual temperature measurements around the globe. Peréz recalled that most temperatures are recorded in urban areas where microclimates can be warmer, and the reduction of the number of stations at high latitudes since the collapse of the USSR, both of which could bias data upwards. She also commented on the reliability of some data, and its short period of collection (some stations only for 50 years), but then showed that the general trend in the last 10 years has been slight cooling. This was after a cool period of around 1940-1970, which was followed by the rapid rise in temperatures to the end of the nineties which caused scientists to start thinking that global warming was happening. Peréz warned against drawing conclusions about climate change from data sets of less than three sets of 30 years." (LINK)

Paul C. Knappenberger, a senior researcher with New Hope Environmental Services, has published numerous peer-reviewed studies related to climate change, including a 2006 study questioning the linkage between global warming and severe hurricanes. Knappenberger also serves as administrator for the skeptical climate change website www.WorldClimateReport.com. The website's stated goal is to "point out the weaknesses and outright fallacies in the science that is being touted as 'proof' of disastrous warming." The website also describes itself as the "definitive and unimpeachable source for what [the journal] *Nature* now calls the 'mainstream skeptic' point of view, which is that climate change is a largely overblown issue and that the best expectation is modest change over the next 100 years." (LINK)

Meteorologist Peter R. Leavitt, President of Weather Information, Inc., who served on the National Research Council's Board on Atmospheric Science and Climate until 2008, is a Certified Consulting Meteorologist, former chairman of the American Meteorological Society's (AMS) Board of Industrial Meteorology, and recipient of the AMS Award for Outstanding Contribution to the Advance of Applied Meteorology. Leavitt also dissented publicly from man-made climate fears in 2008. "Skepticism in regard to AGW (Anthropogenic Global Warming) does not mean that the opposite is true, only that there is insufficient hard evidence to conclude that AGW is a significant factor in climate if it is a factor at all. Progress in science is driven by skepticism. Dogmatism more often inhibits progress than fosters it," Leavitt wrote to EPW on December 8, 2008. "There are numerous reasons to support a skeptical viewpoint. Most of the proponents of AGW rely on computer models to make their case. Very little substantive work has been done in showing that the magnitude of the influence of CO_2 on climate change suggested by the

various models can be derived directly through the application of first principles. There is considerable evidence that there are grievous shortcomings in the quality of the data especially with regards to the accuracy and representativeness of the surface temperature record acquired from both inland and ocean areas and upon which the various models depend," Leavitt explained. "There is considerable evidence that calls into question not only the quality but the relevance of certain proxy data used to construct a detailed and Global paleo-climatic record. There is considerable evidence to call into question the competence and possibly the integrity of those engaged in the analysis of such data which includes the abuse and misuse of statistics, the failure to maintain or properly archive the raw data, and the reluctance to provide to outside investigators such basic items as the notes, methodology and algorithms used to reach the conclusions expressed in their published assertions," Leavitt wrote. "The peer review process as applied to AGW studies is deeply flawed. It lacks transparency and accountability," he added. "I have no problem recognizing that over the entire past Century temperatures have shown a net rise. There has also been a steady and generally indisputable rise in CO_2 since regular measurements began in 1958. But it is wrong to simply relate the warming segments of the 20th Century climate to this rise in CO_2 while ignoring the cooling periods by attributing those to Natural Variability," he added. (LINK)

U.S Army Chief Scientist Dr. Bruce West dissented from climate fears in 2008. West faulted the UN IPCC for having "concluded that the contribution of solar variability to global warming is negligible." West argued argues many global warming researchers have not adequate modeled the Sun's impact, according to a June 3, 2008 article. West believes the UN and others have "significantly over-estimated" the "anthropogenic contribution to global warming." West along with Nicola Scafetta of Duke University Physics Department published a March 2008 analysis showing the "could account for as much as 69% of the increase in Earth's average temperature." (LINK) (LINK)

Climatologist Dr. Robert Balling of Arizona State University, the former head of the university's Office of Climatology, has served as a climate consultant to the United Nations Environment Program, the World Climate Program, the World Meteorological Organization, and the United Nations Educational, Scientific and Cultural Organization. Balling, who has also served in the UN IPCC, would have preferred former Vice President Al Gore had won the presidency in 2000. He has authored several books on global warming, including *The Heated Debate* and *The Satanic Gases*. Balling expressed skepticism about man-made climate fears in 2007. "In my lifetime, this global-warming issue might fade away," Balling said in a November 11, 2007 interview with the *Arizona Republic* newspaper. Noting the pressure he feels as a skeptical scientist, Balling explained, "Somehow I've been branded this horrible person who belongs in the depths of hell." He added, "There's just no tolerance right now." The article explained, "Balling's research over the years has explored sun activity, pollution from volcanoes, the urban-heat-island effect and errors in past temperature models as possible causes of rising temperatures." (LINK)

Meteorologist Hajo Smit of Holland, a former member of the Dutch IPCC committee and a snow forecaster for Dutch winter sports, who holds a masters degree in environmental science and has presented his research on soil moisture's role in global climate models at National Center for Atmospheric Research (NCAR), reversed his

views of man-made global warming. "After the range of very warm years and 'advent' Al Gore, I became a reluctant climate change believer for about 6 months," Smit wrote EPW on April 11, 2008. Smit credited Gore with ultimately turning him into a skeptic. Gore "prompted me to start delving into the science again and I quickly found myself solidly in the skeptic camp," Smit wrote. In addition, Smit also critiqued the climate models that predict future catastrophe. "I am troubled by the practices I had seen at work in GCM (global climate models), the whole field seemed highly suspicious to me." "During my full year working at the Department of Atmospheric Sciences of the University of Illinois at Urbana-Champaign, I became suspicious about the way modeling science is done. Odd arbitrary parameterizations seemed the rule rather than the exception," Smit explained. The "practice of simplifying models so that accurate measurements can be used to calibrate them, seemed to be abandoned by GCM groups in favor of a childish delight in presenting colorful computer printouts of when and where which temperature changes will occur. Climate models can at best be useful for explaining climate changes after the fact," Smit wrote. "The vast amount of new research since my graduation points to clear cut solar-climate coupling and to a very strong natural variability of climate on all historical time scales. Currently I hardly believe anymore that there is any relevant relationship between human CO2-emissions and climate change," he added. (LINK) & (LINK) & (LINK)

Meteorologist Brad Sussman, a member of the American Meteorological Society (AMS) and Seal holder and past officer of the National Weather Association (NWA), is currently with WJW-TV in Cleveland, Ohio. Sussman, a meteorologist for over 21 years, proudly calls himself a "denouncer of the very-flawed man-made global warming theory." Sussman wrote to EPW on December 29, 2007 and explained that he "debunks [global warming] theory by using logic and humor." According to Sussman, "global warming has been happening on and off for millions of years. Millions of years when mankind wasn't driving around in SUVs and using coal for electric power!" "Believing that mankind is unequivocally responsible for global warming is the ultimate arrogance. Sorry to be humble, but we're not that special. When global warmers talk, listen to their words. The new catch phrase is: 'The debate is over.' The only people who say 'The debate is over' are people who are afraid to debate," Sussman wrote. "'The debate is over?' If we used that line of thinking, man would have never gone to the moon, the Wright Brothers would have never flown, and we'd still think the Sun rotated around the Earth," he concluded. (LINK)

Professor of Nuclear Chemistry Dr. Oliver K. Manuel of the University of Missouri-Rolla, has authored more than 100 scientific papers and published research in peer-reviewed literature, rejected rising CO2 fears in 2008. Manuel wrote to CCNET in February 2008 that there is an "irrational basis of the current scare over global warming." Manuel had previously rejected global warming predictions. "Compared to solar magnetic fields, however, the carbon dioxide production has as much influence on climate as a flea has on the weight of an elephant," he wrote to CCNET. Manuel co-authored a December 2007 paper slated for publication in Supernova Research. (LINK) (LINK)

Hydrologist and geologist Mike McConnell of the U.S. Forest Service is a professional Earth scientist who has studied atmospheric pollution, post-wildfire mitigation planning, and groundwater surface water modeling. In 2007, McConnell dissented from the view that mankind has created a climate crisis. "Climate change is a climate

system that we have no real control over," McConnell wrote on December 27, 2007. "Our understanding on the complexities of our climate system, the Earth itself and even the sun are still quite limited. Scaring people into submission is not the answer to get people to change their environmental ways," McConnell explained. He also dismissed claims that the human race was "the cause of our global warming." McConnell wrote, "There is no real basis for this. There is a growing body of scientific literatures outlining that this not to be the case." He concluded, "Now, if Earth was suffering under an accelerated greenhouse effect caused by human produced addition of CO2, the troposphere should heat up faster than the surface of the planet, but data collected from satellites and weather balloons do not support this fundamental presumption even though we are seeing higher CO2. We ought to see near lockstep temperature increments along with higher CO2 concentration over time, especially over the last several years. But we're not." (LINK) & (LINK)

Physicist F. James Cripwell, a former scientist with UK's Cavendish Laboratory in Cambridge who worked under the leading expert in infra red spectroscopy -- Sir Gordon Sutherland – and worked with the Operations Research for the Canadian Defense Research Board, recently dissented from man-made climate change fears. "It seems fair to believe that this new model (from the UK's Climate Research Unit) assumes that if CO2 concentrations in the atmosphere increase, temperatures will go up. Since some of us know this is wrong, it seems quite likely that the 2008 forecast will be as badly wrong as the 2007 one was. What will the media do then? Maybe if the Northwest Passage does not open up this summer, as seems quite likely, people may start to realize that AGW (Anthropogenic Global warming) is a myth," Cripwell wrote to CCNET on January 8, 2008. Cripwell continued, "Throughout the discussion of doubling the concentration of CO2, there is absolutely no reference to the concentrations of CO2 in the atmosphere over which the increased amount of radiative forcing is supposed to increase linearly when the concentration of CO2 doubles. Presumably if you halved the concentration of CO2, you would decrease the radiative forcing by some linear amount. If you go on halving the CO2 concentration, then as the concentration of CO2 approached zero, it would appear that the CO2 was rapidly cooling the earth!! Clearly any claim that the doubling of the CO2 concentration results in a linear increase in the level of radiative forcing can have no credibility unless the range of CO2 concentrations in the atmosphere, over which the relationship is claimed to exist, is clearly established from sound scientific principles." Cripwell concluded, "If there is no scientific basis for the claim that doubling the concentration of CO2 in the atmosphere increases the radiative forcing linearly, then any claim to put a numerical value on this increase has no basis in science." (LINK) In another interview in 2005, Cripwell said, "Whatever is causing warming, it is not an increase in levels of carbon dioxide. A more plausible theory is that it is water put into high altitudes by aircraft; this would have roughly the same time line," Cripwell said. (LINK)

Chemist and Biochemist Dr. Michael F. Farona, an emeritus professor of Chemistry at the University of Akron and the University of North Carolina at Greensboro, critiqued the news media for inadequate reporting about global warming and expressed climate skepticism. "Data, numbers, graphs, trends, etc., are generally missing in supposedly scientific reports on global warming. These articles are usually long on opinions and short on hard data. Phrases such as 'scientists agree that ...' scientists doubt that ...' do not belong in a scientific article. There are more data in Michael Crichton's novel *State of Fear* than in all the global warming articles combined that I have read,"

Farona wrote on January 3, 2008. “There have been at least four interglacial periods, where the glaciers have advanced and retreated. The last ice age ended about 10,000 years ago and, in the case of North America, left the Great Lakes in the glacier's retreat. The glaciers are still retreating, so there should not be any great surprise that the sea level is rising. The industrial revolution is about 150 years old, compared to 10,000 years of warming. Can human activities have really made a significant contribution to rising temperatures in that amount of time?” Farona asked. “We know that the east coast of the U.S. was flooded during the previous interglacial period, so sea level rising and coastal flooding are not unique to this interglacial period. Why now the draconian predictions of coastal flooding as if this has not happened before?” he continued. “What is the relationship between an increased level of carbon dioxide and temperature? Can it be predicted that an increase of so many parts per billion of carbon dioxide will cause an increase of so many degrees? I have not seen any answers to the questions posed above, leading me to adopt a somewhat skeptical view of blaming global warming on human activities. What puzzles me is the reluctance of climatologists to provide scientific data supporting their dire predictions of the near future if we don't change our ways,” Farona concluded. (LINK) & (LINK)

Climate statistician Dr. William M. Briggs, who specializes in the statistics of forecast evaluation, serves on the American Meteorological Society's Probability and Statistics Committee and is an Associate Editor of *Monthly Weather Review*. Briggs, a visiting Mathematics professor at Central Michigan University and a Biostatistician at New York Methodist Hospital, has a new paper coming out in the peer-reviewed *Journal of Climate* which finds that hurricanes have not increased in number or intensity in the North Atlantic. Briggs, who has authored numerous articles in meteorological and climatological journals, has also authored another study looking at tropical cyclones around the globe, and finds that they have not increased in number or intensity either. Briggs expressed skepticism about man-made global warming fears in 2007. "There is a lot of uncertainly among scientists about what's going on with the climate," Briggs wrote to EPW on December 28, 2007. "Most scientists just don't want the publicity one way or another. Generally, publicity is not good for one's academic career. Only, after reading [UN IPCC chairman] Pachauri's asinine comment [comparing scientists skeptical of man-made climate fears to] Flat Earthers, it's hard to remain quiet," Briggs explained. "It is well known that weather forecasts, out to, say, four to five days, have skill; that is, they can beat just guessing the average. Forecasts with lead times greater than this have decreasing to no skill," Briggs wrote. "The skill of climate forecasts---global climate models---upon which the vast majority of global warming science is based are not well investigated, but what is known is that these models do not do a good job at reproducing past, known climates, nor at predicting future climates. The error associated with climate predictions is also much larger than that usually ascribed to them; meaning, of course, that people are far too sure of themselves and their models," he added. Briggs also further explained the inadequacies of climate models. "Here is a simplified version of what happens. A modeler starts with the hypothesis that CO2 traps heat, describes an equation for this, finds a numerical-approximate solution for this equation, codes the approximation, and then runs the model twice, once at ‘pre-industrial’ levels of CO2, and once at twice that level, and, lo!, the modeler discovers that the later simulation gives a warmer atmosphere! He then publishes a paper which states something to the effect of, ‘Our new model shows that increasing CO2 warms the air,’” Briggs explained. “Well, it couldn't do anything *but* show that, since that is what it was programmed to show. But, somehow, the fact the model shows just

what it was programmed to show is used as evidence that the assumptions underlying the model were correct. Needless to say---but I will say it---this is backwards," he added. (LINK) & (LINK) & (LINK)

Geologist William F. McClenney, a California Licensed Professional Geologist and former Certified Environmental Auditor in Victoria, Australia, conducted extensive climate research and wrote a detailed analysis announcing that he had reversed his views about man-made global warming. McClenney now says he has done "the math and realized that you just can't get to global warming with CO2." "I believed [global warming theory]. It made sense. I could see it easily and clearly. And that was a long, long time ago. It seemed counterintuitive that anyone could or would not believe it. It was that seminal. Homo Sapiens would cause the earth to warm, we now call it the Greenhouse Gas theory, and it is now a law (at least in California)," explained. See: February 28, 2008, full statement here. (Note: McClenney joins other scientists who recently converted from believer to skeptic of man-made climate fears. (LINK)

Solar physicist Dr. Pal Brekke, a senior advisor to the Norwegian Space Centre in Oslo, has published more than 40 peer-reviewed scientific articles on the sun and solar interaction with the Earth and served as a referee for scientific journals. Brekke, who was the deputy project scientist for the entire international Solar and Heliospheric Observatory (SOHO) and has a new book about the sun titled *SolarMax*, rejected claims of a "consensus" on global warming. "It's possible that the sun plays an even more central role in global warming than we have suspected. Anyone who claims that the debate is over and the conclusions are firm has a fundamentally unscientific approach to one of the most momentous issues of our time," Brekke said on March 3, 2008. "We could find the temperature leveling off or actually falling in the course of a 50-year period," Brekke explained. "There is much evidence that the sun's high-activity cycle is levelling off or abating. If it is true that the sun's activity is of great significance in determining the earth's climate, this reduced solar activity could work in the opposite direction to climate change caused by humans," Brekke explained. The article continued, "The UN Intergovernmental Panel on Climate Change (IPPC) has determined that the earth's temperature has risen by about 0.7° C since 1901. According to Dr. Brekke, this time period coincides not only with an increase in human-caused greenhouse gas emissions, but also with a higher level of solar activity, which makes it complicated to separate the effects of these two phenomena." (LINK) (LINK) (LINK)

Biologist Dr. Matthew Cronin, a research professor at the School of Natural Resources and Agricultural Sciences at the University of Alaska Fairbanks, called predictions that future global warming would devastate polar bear populations "one extreme case hypothesis." "We don't know what the future ice conditions will be, as there is apparently considerable uncertainty in the sea ice models regarding the timing and extent of sea ice loss. Also, polar bear populations are generally healthy and have increased worldwide over the last few decades," Cronin said in March 2007. "Recent declines in sea ice and indications that polar bears in some areas may be negatively impacted are cause for concern, but in my opinion do not warrant designation of the species as threatened with extinction," Cronin said. "I believe that consideration of multiple hypotheses regarding the future of sea ice and polar bear populations would provide better science than reliance on

one extreme case hypothesis of loss of sea ice and associated drastic declines in polar bear populations," Cronin said. (LINK) & (LINK)

Senior Meteorologist Dr. Wolfgang P. Thuene was a former analyst and forecaster for the German Weather Service in the field of synoptic meteorology and also worked for the German Environmental Protection Agency. Thuene currently works in the Ministry of Environment and Forests of Rheinland-Pfalz. Thuene rejected the idea that mankind is driving global warming. "All temperature and weather observations indicate that the earth isn't like a greenhouse and that there is in reality no 'natural greenhouse effect' which could warm up the earth by its own emitted energy and cause by re-emission a 'global warming effect'. With or without atmosphere every body looses heat, gets inevitably colder. This natural fact, formulated by Sir Isaac Newton in his 'cooling law', led Sir James Dewar to the construction of the 'Dewar flask' to minimize heat losses from a vessel. But the most perfect thermos flask can't avoid that the hot coffee really gets cold. The hypothesis of a natural and a man-made 'greenhouse effect', like eugenics, belongs to the category 'scientific errors," Thuene wrote on February 24, 2007. "The infrared thermography is a smoking gun proof that the IPCC-hypothesis cannot be right. The atmosphere does not act like the glass of a greenhouse which primarily hinders the convection! The atmosphere has an open radiation window between 8 and 14 microns and is therefore transparent to infrared heat from the earth's surface. This window cannot be closed by the distinctive absorption lines of CO2 at 4.3 and 15 microns. Because the atmosphere is not directly heated by the Sun but indirectly by the surface the earth loses warmth also by conduction with the air and much more effectively by vertical convection of the air to a very great part by evaporation and transpiration. Nearly thirty percent of the solar energy is used for evaporation and distributed as latent energy through the atmosphere," Thuene wrote. "Summarizing we can say: Earth's surface gains heat from the Sun, is warmed up and loses heat by infrared radiation. While the input of heat by solar radiation is restricted to the daytime hours, the outgoing terrestrial radiation is a nonstop process during day and night and depends only on the body temperature and the emissivity. Therefore after sunset the earth continuous to radiate and therefore cools off. Because the air is in physical contact with the ground it also cools off, the vertical temperature profile changes, and we get a so called surface inversion which inhibits convection," Thuene explained. (LINK)

Chemist and Nuclear Engineer Robert DeFayette was formerly with NASA's Plum Brook Reactor in Ohio and the Nuclear Regulatory Commission (NRC) at its headquarters office near Washington, DC. DeFayette, who earned a masters degree in Physical Chemistry, also worked at the NRC's Regional Office near Chicago where he was a Director of the Enforcement staff. He also served as a consultant to the Department of Energy. DeFayette wrote a critique of former Vice President Al Gore's book, *An Inconvenient Truth,* in 2007. "I freely admit I am a skeptic," DeFayette told EPW on January 15, 2008. "I take umbrage in so-called 'experts' using data without checking their sources. My scientific background taught me to question things that do not appear to be right (e.g.-if it sounds too good to be true, it probably is). That is one reason I went to such detail in critiquing Gore's book. I also strongly object to the IPCC and its use of so-called 'experts,'" DeFayette explained. In his March 14, 2007 critique of Gore, DeFayette dismissed Gore's claim that "the survival of our civilization" is at stake. DeFayette wrote, "Nonsense! Civilization may one day cease to exist but it won't be from global warming

caused by CO2. I can think of many more promising scenarios such as disease, nuclear war; volcanic eruptions; ice ages; meteor impacts; solar heating." DeFayette asserted that Gore's book was "a political, not scientific, book. There is absolutely no discussion about the world's climate history, effects of the sun, other planets, precession, eccentricity, etc." DeFayette disputed Gore's notion of a "consensus." "Until a few months ago, scientists believed we had 9 planets, but now we have 8 because Pluto was demoted. In the 1600s scientists believed we lived in an earth-centered universe but Galileo disagreed and proved we lived in a sun-centered universe. At the time of Columbus, the scientific consensus was that the earth was flat but obviously that was wrong. In the late 18th century, 'Neptunists' were convinced that all of the rocks of the Earth's crust had been precipitated from water and Robert Jameson, a British geologist, characterized the supporting evidence as 'incontrovertible,'" DeFayette wrote. "In each of these cases there was 'scientific consensus' that eventually was rejected," he added.

Award-winning Paleontologist Dr. Eduardo Tonni, the principal investigator for the Committee for Scientific Research of the province of Buenos Aires (CIC) and head of the Paleontology Department at the University of La Plata, dissented from the global warming "consensus" in 2007. "There is no denying a warming; the discussion is whether it was created by man or whether it is natural. There are effects of human action, but it is much more likely to be a natural product," Tonni said, according to a December 2, 2007 article in the Argentine publication Perfil.com. [translated] "Many of us think so (warming is natural), but of course, this is not politically correct. I know that I am saying this and I am without [industry] subsidies," Tonni said in the article titled "A Group of Argentine Scientists Skeptical of Climate Change." Tonni, who received the "Merit Award" in 2003 by the Argentina Paleontologist Association, also dismissed the linkage of natural disasters to man-made climate change. "There are countless historical records of disasters, but it is very difficult to estimate if the frequency is greater. Perhaps we are more informed. The El Niño event is known only from some 30 years ago," Tonni said. "The scaremongering has its justification in the fact that it is something that generates funds. If you say that global change is produced by natural effects, we would sit and see what happens. Thus, we have more things to do. I would say that, unfortunately, this is another product of the market," he added. (LINK) & (LINK) & (LINK) & (LINK)

Economist Dr. George Reisman, an Emeritus Professor at Pepperdine University and author of *Capitalism: A Treatise on Economics,* dismissed man-made climate fears and rejected calls for global warming inspired cap-and-trade regulations in 2007. "Global warming is not a threat. But environmentalism's response to it is," Reisman wrote on May 30, 2007. "In fact, if it comes, global warming, in the projected likely range, will bring major benefits to much of the world. Central Canada and large portions of Siberia will become similar in climate to New England today. So too, perhaps, will portions of Greenland. The disappearance of Arctic ice in summer time will shorten important shipping routes by thousands of miles. Growing seasons in the North Temperate Zone will be longer. Plant life in general will flourish because of the presence of more carbon dioxide in the atmosphere," Reisman wrote. "Even if global warming is a fact, the free citizens of an industrial civilization will have no great difficulty in coping with it—that is, of course, if their ability to use energy and to produce is not crippled by the environmental movement and by government controls otherwise inspired. The seeming difficulties of coping with global warming, or any other large-scale change, arise only when the problem is viewed

from the perspective of government central planners," he explained. "All of the rising clamor for energy caps is an invitation to the American people to put themselves in chains. It is an attempt to lure them along a path thousands of times more deadly than any military misadventure, and one from which escape might be impossible. Already, led by French President Jacques Chirac, forces are gathering to make non-compliance with emissions caps an international crime. According to an *Associated Press* report of February 5, 2007, 'Forty-Five nations joined France in calling for a new environmental body to slow global warming and protect the planet, a body that potentially could have policing powers to punish violators.' Given such developments, it is absolutely vital that the United States never enter into any international treaty in which it agrees to caps on greenhouse-gas emissions," he added. "In previous centuries it was common for religion to threaten those whose way of life was not to its satisfaction, with the prospect of hellfire and brimstone in the afterlife. Substitute for the afterlife, life on earth in centuries to come, and it is possible to see that environmentalism and the rest of the left are now doing essentially the same thing. They hate the American way of life because of its comfort and luxury. And to frighten people into abandoning it, they are threatening them with a global-warming version of hellfire and brimstone," he concluded. (LINK) & (LINK)

Victor Pochat, president of the Argentine Institute of Water Resources and a teacher of water resources planning at Universidad del Litoral, is a member of the South American Technical Advisory Committee of the Global Water Partnership. Pochat questioned man-made global warming fears and pointed out that many scientists disagree. "There are voices on the causes and reasons for the warming, but we hear from some more than others," Pochat said, according to a December 2, 2007 article in the Argentine publication Perfil.com. [Translated] Pochat believes "it is not clear that increases of a few degrees in average temperature of the planet is directly related to human activity but could be due to cyclical effects," according to the article. "Scientists that deserve credit for their background say global warming is a climatic variability associated to cycles of warming and cooling of the Earth," Pochat explained. The article was titled, "A Group of Argentine Scientists Skeptical of Climate Change." (LINK) & (LINK) & (LINK)

Geophysicist Robert Woock is a senior geophysicist at Stone Energy in Louisiana and past president of the Southwest Louisiana Geophysical Society. Woock, who earned a masters in geology, has published on hydrocarbon detection techniques in the publication of the American Association of Petroleum Geologists (AAPG). Woock recently declared himself skeptical of man-made climate fears. "I am a Geophysicist by education and practice with over thirty years in practice. Having studied the paleoclimate and environment for over thirty-five years I have come to some fundamental conclusions about our current conditions. The global warming debate is not over. I do not see any evidence in nature or data to suggest that we are in any anthropologic climate cycle," Woock told EPW on December 21, 2007. "We have certainly created local climes, hot cities and deforestation that affect certain areas, but these are reversible to a large degree. I also agree with the point that weather is not climate. It is difficult to accept, and probably impossible to prove that manipulation of second order effects such as CO2 content could have any climatic impact. Climate is driven by first order processes, *i.e.*; solar flux and planetary environments. All the rest, including CO2 content, is driven by the first order processes," Woock explained. "All the data used to 'support' the global warming theory

can better demonstrate this relationship. Put me down as a serious skeptic on anthropologic global warming," he concluded. (LINK)

Nobel Prize Winner for Physics in 1973, Ivar Giaever, a fellow of the American Physical Society, declared himself a dissenter in 2008. "I am a skeptic," Giaever announced in June 2008. "Global warming has become a new religion," Giaever added. "I am Norwegian, should I really worry about a little bit of warming? I am unfortunately becoming an old man. We have heard many similar warnings about the acid rain 30 years ago and the ozone hole 10 years ago or deforestation but the humanity is still around. The ozone hole width has peaked in 1993," he continued. "Moreover, global warming has become a new religion. We frequently hear about the number of scientists who support it. But the number is not important: only whether they are correct is important. We don't really know what the actual effect on the global temperature is. There are better ways to spend the money," he added. (LINK) (LINK) (LINK)

Climatologist Dr. Richard Keen, who is a lecturer in the Department of Atmospheric and Oceanic Sciences at the University of Colorado, a member of the American Meteorological Society, and has worked with the National Center for Atmospheric Research, dissented in 2008. Keen specializes in volcanic aerosols and climate change studies and wrote the book *Skywatch: The Western Weather Guide*. Keen's 2008 global warming PowerPoint asking "Inconvenient Questions" was featured on October 14, 2008, on former Colorado State climatologist Dr. Roger Pielke's Sr. website. (LINK) According to Keen, global warming ranges between a "minor inconvenience that's overblown" or "nothing – it doesn't exist" or "a good thing." "Earth has cooled since 1998," Keen noted, "in defiance of the predictions by the UN-IPCC." According to Keen, "The global temperature for 2007 was the coldest in a decade and the coldest of the millennium." After noting the recent cooling temps, Keen wrote "which is why 'global warming' is now called 'climate change.'" Keen also pointed out that the most Antarctic sea ice on record was recorded in 2007 and then he rhetorically asked: "Did you see [that fact] reported in the news?" "U.S. carbon emission growth rate has slowed to 0.2 % per year since 2000," Keen wrote. Keen concludes his PowerPoint by stating: "Enjoy the warm climate while it lasts, and please make enough CO2 to feed a tree." (LINK) & (LINK)

Finnish Scientist Dr. Jarl R. Ahlbeck is lecturer of environmental technology and a chemical engineer at Abo Akademi University in Finland and has authored 200 scientific publications and was former Greenpeace member. "The theory of how carbon dioxide influences the global mean temperature is complicated and unreliable… so far, real measurements give no ground for concern about a catastrophic future warming," Ahlbeck wrote in a October 8, 2008 paper titled "No Significant Global Warming Sine 1995." "It has been widely discussed if the satellite-derived global temperature measurements that show only little warming should be more reliable than the temperatures obtained on the ground that show more warming. But after 1995 both sources show about the same. A good reason to start a diagram from 1995 is that since that year no big (cooling) volcano eruptions have disturbed the temperature trend. Contrary to common belief, there has been no or little global warming since 1995 and this is shown by two completely independent datasets. The curves look very normal and it seems probable that the natural recovery from the little ice age has went on without any significant decelerations or accelerations caused by human activity. It is impossible to say what is going to happen in the future. But so far,

real measurements give no ground for concern about a catastrophic future warming," Ahlbeck explained. (LINK) (LINK) [Note: Many other scientists who are also progressive environmentalists believe climate fear promotion has "co-opted" the green movement. (LINK)]

Senior Chemist Glenn Speck of the Oklahoma City Isotek Environmental Lab, who has over 35 years of laboratory experience in the government and private sectors, testing air, water, fuel, and soil for pollutants and other chemicals, including CO2, dissented from man-made climate fears in 2007. **"**Although much of the liberal press and the liberal politicians endorse man-made global warming as a complete, irrefutable reality, there are a substantial number of us scientists that strongly disagree. There is little disagreement that some warming has likely occurred, but many of us think that most, if not all of that change is due to natural planetary processes," Speck wrote in a June 14, 2007 letter. "The public has been repeatedly misled that there is a scientific consensus on global warming. Totally false. Unfortunately, man-made climate change, or anthropogenic global warming as it's more commonly known, has become a political issue rather than a scientific one. Those who want you to accept that humans have caused climate change have a not-so-hidden agenda of imposing carbon taxes here in the United States that will cripple our economy and make us even more unable to compete with other nations," Speck explained. "Those of us who don't believe the anthropogenic global warming claims also have to live on this planet, and we want it environmentally in good condition for our children and grandchildren. We can and should be better stewards of our ecosystems," he added. (LINK)

Professor emeritus of aerospace engineering Vincent U. Muirhead, who researched and taught at the University of Kansas in the area of gas dynamics for 28 years, and also developed a laboratory model of a tornado, declared his climate change dissent in 2008. "The new green left (environmentalist) propaganda reminds me of the old red left (communist) propaganda. The dirty word is now carbon rather than capitalism. The game is simply to intrude and control everything. How much will the carbon tax be for each of us to breathe?" Muirhead wrote in the *Kansas City Star* on June 8, 2008. "I concur with Bill McAllister's letter, 'The climate-warming game,'" Muirhead wrote. "There are six equations that describe a gas dynamics problem: the equation of state, and five nonlinear differential equations expressing the conservation of mass, momentum and energy. Key to these for the atmosphere are: 1. the future flow of heat from the sun as a function of time and space and 2. the absorbent and reflective nature of the atmosphere as a function of time and space. We don't have a clue about these. For any computer model to produce answers, many extremely questionable assumptions must be made. As McAllister noted, 'Why can't the current scientific models accurately predict next week's weather?'" he asked. (LINK) & (LINK)

Prominent Hungarian Physicist and environmental researcher Dr. Miklós Zágoni reversed his view of man-made warming and is now a skeptic. Zágoni was once Hungary's most outspoken supporter of the Kyoto Protocol. After researching climate issues further he converted to a man-made global warming skeptic. After studying the theory developed by Hungarian Ferenc Miskolczi, an atmospheric physicist with 30 years of experience and a former researcher with NASA's Ames Research Center, Zágoni stopped calling global warming a crisis, and has instead focused on presenting the new

theory to other climatologists, the March 6, 2008, article in *Daily Tech* reported. Zágoni wrote to EPW on May 3, 2008, "The present-day greenhouse theory is incorrect in the sense that it is incomplete: it does not contain all the real energetic constraints and boundary conditions. As former NASA atmospheric scientist Ferenc Miskolczi has showed in a new analysis, the Earth maintains a balanced greenhouse effect with controlled surface temperature, which cannot be changed solely by changing the atmospheric longwave absorber concentration. It can be changed only if the incoming available energy changes. Anthropogenic greenhouse gas emission cannot generate global warming, neither in the past, nor in the future. The 1 degree Celsius temperature rise from the mid-1800s is mainly due to natural causes; its origin is somewhere in the ocean's heat exchange and/or in the change of solar constant and the planetary albedo. Further 3-6 degree global warming is physically more than unlikely: it is impossible. The new greenhouse equations of Dr. Miskolczi can be read at the official website of the Quarterly Journal of the HMS, Vol. 111. No.1., 2007 (LINK) "To put it in a language that IPCC will understand: Extra CO2 does not result extra 'radiative forcing' in the final account, as the energy constraint rules it back to its equilibrium value. Nature's regulatory instrument is water vapor: more carbon dioxide leads to less moisture in the air, keeping the overall GHG content in accord with the necessary balance conditions. So, contrary to the common wisdom, there is no positive H2O-temperature feedback on global scale: in Earth-type atmospheres uncontrolled runaway warming is not possible. This new theory seems to be only a little step forward in the two-hundred year old greenhouse science, but its consequences are revolutionary: actually it stops the possibility of man-made global warming."

Field Geologist Louis A.G. Hissink is the editor of *The Australian Institute of Geoscientists* Newsletter and is currently working on the ore-reserve feasibility study of the Koongie Park Base Metals project in Western Australia. Hissink, who earned a masters in geology, recently dissented from man-made climate fears. "The assumption that humanity, from its burning of hydrocarbons, is raising the surface temperature of the earth by affecting its greenhouse effect, is not supported by theory nor the physical evidence. No gas is capable of storing heat so the assumption a gas could is to misunderstand basic physics and the greenhouse effect," Hissink told EPW on January 21, 2008. "The global mean temperature derivations from the surface meteorological stations confuse the thermal state of the measuring instruments with unspecified volumes of air nor are those temperatures linked to any discrete physical object; in geostatistics this is known as a data set lacking sample support and no more a metric of the earth's thermal state as the mean calculated from the telephone numbers of the meteorological stations producing the temperature readings," Hissink explained. "Recent discoveries by NASA in the area of space exploration show that the earth is connected to the sun electromagnetically where tens of millions of amperes of electric current are routinely measured during polar aurora displays by satellites - this enormous source of energy, and thus heat, is completely ignored as a factor affecting the earth's thermal balance in global climate models. It is this electromagnetic connection that underpins the solar factor that modulates the earth's climate," Hissink added. (LINK) & (LINK)

Jerome J. Schmitt is a Yale University-educated engineer who studied fluid mechanics and gas dynamics, founded the Jet Process Corporation and invented the Jet Vapor Deposition (JVD) process for thin films and coatings. Schmitt, who served as Vice President for Research and Development at MicroCoating Technologies, holds five

patents and has authored 30 technical publications. Schmitt, currently president of NanoEngineering Corporation, questioned the validity of computer climate model predictions of man-made global warming. "While mankind cannot experiment on the global climate, these models can be used retroactively to see how well they 'model' the past. The UN's 2001 Climate Change report distorted the historical record by eliminating the Medieval Warm Period in the famous 'Hockey Stick Curve' which, by many accounts, unreasonably accentuated temperature rise in the 20th century. Such distortion of the historical data undercuts the credibility of the models themselves, since this is the only 'experimental data' available for testing the fidelity of the models to the actual climate," Schmitt wrote on February 28, 2007. Schmitt detailed the multitude of inputs that he believes makes climate models unreliable. "Let's list some of the factors that must be included (by no means an exhaustive list): Solar flux; Gravity; Pressure; Temperature; Density; Humidity; Earth's rotation; Surface temperature; Currents in the Ocean (e.g., Gulf Stream); Greenhouse gases; CO2 dissolved in the oceans; Polar ice caps; Infrared radiation; Cosmic rays (ionizing radiation); Earth's magnetic field; Evaporation; Precipitation; Cloud formation; Reflection from clouds; Reflection from snow; Volcanoes; Soot formation; Trace compounds; And many, many others. Even if mathematics could be developed to accurately model each of these factors, the combined model would be infinitely complex requiring some simplifications. Simplifications in turn amount to judgment calls by the modeler. Can we ignore the effects of trace compounds? Well, we were told that trace amounts of chlorofluoro compounds had profound effects on the ozone layer, necessitating the banning of their use in refrigerators and as aerosol spray propellants. Can we ignore cosmic rays? Well, they cause ions (electrically charged molecules) which affect the ozone layer and also catalyze formation of rain-drops and soot particles. As with all models, it is perilous to ignore factors in the absence of complete experimental data which might otherwise have significant effect," he wrote. "Unless we know how the greenhouse-limiting properties of precipitation systems change with warming, we don't know how much of our current warmth is due to mankind, and we can't estimate how much future warming there will be, either," he added. "In my view, we should adopt the private sector's practice of placing extremely limited reliance on numerical models for major investment decisions in the absence of confirming test data, that is, climate data which can be easily collected just by waiting," he concluded. (LINK)

Former IPCC author and El Niño expert Rosa Compagnucci, the author of two IPCC reports in 2001 (Working Group II – Latin America Chapter), is a researcher with the National Science and Technology Commission who has published peer-reviewed papers. **Compagnucci is also a professor in the Department of Atmosphere Sciences in the University of Buenos Aires.** Compagnucci refuted man-made climate claims in 2007. "Is global warming something unusual, say, the last two thousand years?" Compagnucci said, according to a December 2, 2007 article in the Argentine publication Perfil.com. [Translated] The article was titled, "A Group of Argentine Scientists Skeptical of Climate Change." Compagnucci believes humans have only contributed a few tenths of a degree to warming on Earth and that solar activity is a key driver of climate, according to the article. "There was a global warming in medieval times, during the years between 800 and 1300. And that made Greenland, now covered with ice, christened with a name [by the Vikings] that refers to land green: 'Greenland.'" (LINK) & (LINK) & (LINK) & (LINK)

Meteorologist Karl Bohnak of WLUC TV6 in Michigan holds the American Meteorological Society's Seal of Approval and authored the book *So Cold a Sky, Upper Michigan Weather Stories*. Bohnak also recently dissented from man-made global warming fears. "Water vapor accounts for about 95 percent of earth's natural 'greenhouse' effect. Carbon dioxide gets all the attention because that is what is released in the burning of fossil fuels. Yet it accounts for less than 4 percent of the total greenhouse effect. For the anthropogenic global warming argument to work, water vapor must increase along with CO2. CO2's contribution - natural and manmade - is just not enough to raise global temperatures as much as climate models predict," Bohnak wrote on January 28, 2008. "On the other hand, [Climatologist Roger] Pielke, Sr. coauthored a paper... In it, lower-tropospheric temperatures over North America had indeed increased between 1979 and 2006, but precipitable water vapor and total precipitable water content had not. This suggests that climate model assumptions of constant relative humidity in a warmer world may be all wet," Bohnak explained. (LINK) & (LINK) & (LINK)

Geologist Dr. David Gee, the chairman of the science committee of the 2008 International Geological Congress, has authored 130 plus peer reviewed papers and is currently a professor at the Department for Geosciences of Uppsala University in Sweden. Gee was awarded the European Geosciences Union award for his scientific leadership of EUROPROBE, a project of the International Lithosphere Program and the European Science Foundation. Gee has led geologic expeditions to such locales as Svalbard, Novaya Zemlya, Severnaya Zemlya, the Polar Urals and the Taimyr Peninsula. Gee, who chairs a Swedish Research Council committee, declared himself a dissenter of man-made global warming fears in 2008. "So my question is extremely simple, we know temperature goes up and down. We know there is tremendous amount of natural variations, but for how many years must the planet cool before we begin to understand that the planet is not warming? For how many years must cooling go on?" Gee asked to applause from the audience on August 8, 2008, during the prestigious Geological Congress in Oslo, Norway, dubbed the geologists' equivalent of the Olympic Games. Gee presented a temperature and carbon dioxide chart to the conference to illustrate the lack of linkage between global temperature and carbon dioxide levels. "How sure can we be [about carbon dioxide driving global temperatures]?" "You see the carbon dioxide curve going straight across that diagram from left to right, upwards," Gee continued. [Note: An online video of an August 8, 2008, conference climate change panel has been posted and is a must-see video for anyone desiring healthy scientific debate. See: HERE] "If we look at last ten years, this is the thing we have been quarrelling about. You see on left there in 1998, the temperature when we had the El Niño, and the very high peak in 1998 and then a general sinking and flattening and then two years of sharply decreasing temperatures. I don't think anyone quarrels about this; this is international data and well established graphs. You see the carbon dioxide curve going straight across that diagram from left to right, upwards," he added. (LINK) (LINK) (LINK)

Award-winning Geologist Leighton Steward, who has been a recognized environmentalist and conservationist for his work on preserving wetlands, twice chaired the Audubon Nature Institute and is currently the chairman of the Institute for the study of Earth and Man at SMU. He is a former member of the Advisory Board of the Lamon-Dougherty Earth Observatory at Columbia University and has received numerous environmental awards, including the EPA's award for

environmental excellence and the API's Gold Medal Award for his company's leadership in voluntary environmental practices. His new book just released in 2008 is titled *Fire, Ice and Paradise*. Steward reversed his global warming view and is now a skeptic. "Steward came to the issue of global warming as a 'believer'," an October 4, 2007 article reported. "'I was a prophetic global warmer,' Steward said. 'Gore won't debate this subject,' said Steward, but maybe he has come to understand it – 'maybe that's why he has cancelled the last six months of his tour,'" the article continued. "'We [on earth] are at one of the lowest points of CO2 levels today,' Steward said." The article explained that Steward believes "CO2's ability to trap heat declines rapidly, logarithmically, and reaches a point of significantly reduced future effect, said Steward, in explaining why correlations with CO2 don't hold. A far m ore consistent and significant correlation exists between the planet's temperature and the output of energy from the sun, said Steward. There have been a lot of sunspots this century, which are associated with higher energy levels from the sun. 45 million years ago the sun was 30 percent warmer." Steward is concerned about earth cooling. Historic cycles would suggest that another ice age is more likely in the near future. And, they can happen relatively quickly – within a hundred years. Human beings can withstand a warming of the planet more so than a cooling, said Steward. Many times more people die from cold than from heat, he said. In fact, Steward's not all that sure that slightly warmer climates would be all that bad. (LINK) [Note: Steward joins a growing number of scientists who have reconsidered their views because of new data observations, peer-reviewed studies and scientific analysis. See: Climate Momentum Shifting: Prominent Scientists Reverse Belief in Man-made Global Warming - Now Skeptics – May 15, 2007]

Geoffrey G. Duffy, a professor in the Department of Chemical and Materials Engineering of the University of Auckland, NZ, who received the New Zealand Science and Technology Silver Medal in 2003 from The Royal Society of New Zealand, has published 218 journal, peer-reviewed papers and conference papers. Duffy also declared himself skeptical of man-made global warming fears in 2008. "Even doubling or trebling (tripling) the amount of carbon dioxide will virtually have little impact, as water vapour and water condensed on particles as clouds dominate the worldwide scene and always will," Duffy said in a September 4, 2008, essay. "It is also interesting to note that NASA's Aqua satellite system has shown that the earth has been cooling since 1998. This corresponds with measurements from the Argos sub-ocean probes that the ocean is cooling. This is in stark contrast with the proposals from many 'climate alarmists'. The solar effect is huge and overwhelming and there must be time delays in absorbance and build up in energy received by earth and ocean masses. But the warmer the Earth gets, the faster it radiates heat out into space. This is a self-correcting, self-healing process," Duffy wrote. "So what are the key players in 'Climate Change'? The major driver is the sun. Warming depends on the sun. Cooling is due to the lack of sun's energy. Radiant energy enters the earth's atmosphere. Air (on a dry basis) consists mainly of nitrogen 78.08% and oxygen 20.94%. Of the 0.98% remaining, 95% of that (i.e. 0.934%), or almost all is the inert gas argon. Carbon dioxide CO2 is a trace. It is less than 400ppm (parts per million) or 0.04% of all the atmosphere (on a dry basis). Surprisingly, less than a fifth of that is man-made CO2 (0.008% of the total), and that is only since the beginning of the industrial era and the rapid increase in world population," Duffy concluded. (LINK) (LINK)

Dr. G LeBlanc Smith, a retired Principal Research Scientist with Australia's Commonwealth Scientific and Industrial Research Organization (CSIRO) who specializes in geosciences and sedimentology, rejected global warming fears in 2008. "I have yet to see credible proof of carbon dioxide driving climate change, yet alone man-made CO2 driving it. The atmospheric hot-spot is missing and the ice core data refute this. When will we collectively awake from this deceptive delusion?" Smith asked in an August 16, 2008, essay. "I contend that those professional scientists and advisors that are knowingly complicit in climate science fraud and all that is derived from it, will continue to be exposed by the science itself," Smith explained. "There is no atmospheric hot-spot from 'greenhouse CO2' despite over 20 years of serious looking for it. Occam's razor would point to the sun as the driver of climate change of significance. Human generated carbon dioxide is arguably around 3% of the total carbon dioxide budget, and in the light of the above, we are effectively irrelevant to the natural climate change continuum," he added. (LINK)

Research scientist William Hunt has worked for the National Oceanic and Atmospheric Administration and served as a wildlife biologist and a geologist. Hunt produced a 2007 audio series titled "Global Warming Exposed!" and is set to release a book titled *Global Warming Challenged-Science or Myth?* Hunt dissented in 2007. In 2007 Hunt dissented from the view that mankind is driving a climate crisis. "Scientists and activists alike have jumped on the [global warming] bandwagon. It's become a fad, a trend, a wave of enthusiasm and the scientists are going along with the fad to get research grants and the media limelight," Hunt wrote on January 22, 2007 in an article titled "The Nonsense of Global Warming." "The facts, such as we can observe and calculate them, do not support the idea of man-made global warming. Natural processes completely eclipse anything that man can accomplish- a minor rainstorm expends more energy than a large nuclear explosive releases and the lowest category of hurricane expends more energy than all of the nuclear weapons ever produced in a short time," Hunt wrote. "Most geologists and indeed, most scientists in the U.S., do not accept the idea that global warming resulting from human activities is a viable theory -because most have an appreciation for the kind of power inherent in natural systems. Conversely, most biologists do accept the idea of man-caused global warming and quote scientists in other fields, without understanding those other fields sufficiently to make a logical judgment as to whether the studies were reasonable in their methods and claims. They simply take it on faith that the scientists propounding global warming are correct in their methods and assumptions," Hunt explained. "The problem with computer [climate] modeling is that only a tiny percentage of the literally millions of variables involved can be written into a program. It's currently impossible for us to accurately model Earth's climate and we are not aware of all of the variables yet," he added. (LINK) & (LINK)

Hungarian scientist, Dr. Ferenc Miskolczi, an atmospheric physicist, resigned from his post working with NASA because he was disgusted with the agency's lack of scientific freedom. Miskolczi, who also presented his peer-reviewed findings at the Heartland global warming conference in March 2008, said he wanted to release his new research that showed "runaway greenhouse theories contradict energy balance equations," but he claims NASA refused to allow him. "Unfortunately, my working relationship with my NASA supervisors eroded to a level that I am not able to tolerate. My idea of the freedom of science cannot coexist with the recent NASA practice of handling

new climate change related scientific results," Miskolczi said according to a March 6, 2008 *Daily Tech* article. (LINK)

Professor of Ecological Studies, Dr. Terry Wimberley of Florida Gulf Coast University teaches courses on environmental health, risk assessment, and epidemiology. Wimberley, who is a professor in the Division of Marine Sciences and Ecological Sciences at the University, is the author of the forthcoming book *Nested Ecology*. Wimberley dissented from man-made climate fears in 2007. "At issue is how big of a problem is human produced CO2 emissions. Undoubtedly to some marginal degree - which scientists debate about - it is a problem, but is it the major cause of global warming? No," Wimberley wrote said on Nov. 1, 2007. "More important is the interaction of solar activity (solar winds) with penetrating cosmic rays into the earth's atmosphere. When cosmic ray activity is great a large volume of rays penetrate the earth's lower atmosphere and contribute to cloud formation and cool the earth. However, when there is a lot of solar activity, solar winds tend to blow away just enough of the cosmic rays to thwart cloud formation at the lower levels resulting in fewer clouds and global warming. This phenomenon can be documented over hundreds if not thousands of years - well before humans were able to affect atmosphere," Wimberley explained. "Scientists do not dispel the problem of global warming -- that is real -- but rather the CO2 theory of global warming, which unfortunately is not verified by geological and climate records going back thousands of years or by observed fact. The CO2 theory of climate change is based upon a computer simulation model and flawed data that has been widely criticized in scientific literature. The theory has acquired 'political legs' because there are interests who see benefit to be derived from their ideological positions by pursuing some of the policies that can be justified by aggressively responding to a global warming threat," he added. (LINK) & (LINK)

Geologist Dr. Francis T. Manns, who earned his Ph.D from the University of Toronto and currently runs Artesian Geological Research, expressed skepticism of a man-made "climate crisis." "As a stratigrapher/paleogeographer, I have been aware throughout my career of the wide variations in the climate of Earth as recorded in the rocks. Climate change is the norm for the planet," Manns wrote to EPW on January 20, 2008. "I am unaware of any CO2 research that demonstrates a temperature anomaly that corresponds to CO2 flux in the atmosphere. On the contrary, everything I read from the refereed side of science shows CO2 to trail warming, probably due to the property of gases of retrograde or inverse solubility in water," Manns explained. Manns also disputed the CO2 caused ocean acidification fears. "Ocean pH is not governed by physico-chemical rules. Marine organisms control their calcium carbonate properties organically behind membranes. Increased CO2, in any case, evolves from sea water because of inverse solubility. CO2 dissolves in cold water and bubbles out of warm water. That's why CO2 trails natural warming," Manns wrote on January 14, 2008 on the *New York Times* website. "Objective scientists realize that coral, foraminifera and shellfish have deep mechanism that have evolved over 100s of millions of years as CO2 has fluctuated far wider than we see in the atmosphere today. Google Ernst-Georg Beck for a synoptic paper on 180 years of CO2 measurements in the atmosphere, some by Nobel Prize-winning chemists. The UN IPCC has cooked the books. CO2 was as high as 400 ppm on 1940 before the recent cooling period," Manns wrote. (LINK)

Chemist and Chemical Engineer Dr. William L. Wells is an Adjunct Professor of Chemistry at Murray State University who has studied air pollution control technologies and spent over 16 years in SOx (Sulfur Oxides)and NOx (Nitrogen Oxides) scrubber technology development and clean coal research. Wells expressed skepticism about man-made climate change. "Scientific measurements confirm the CO2 concentration in the atmosphere is increasing. There is some evidence that the earth may be warming, but to what degree and its cause are not clear," Wells told EPW on January 23, 2008. "Beyond that there is little that can be said with certainty at this point. Correlation is not cause and effect," Wells explained. He further urged "being cautious and avoiding precipitous actions until more is certain in the scientific sense." Wells also dismissed U.S. efforts to reduce greenhouse gases. "Many in Congress promoting these measures for CO2 control mandates fail to appreciate that the atmosphere is global, hence emissions must be considered world-wide. One source indicates that China has plans to add 500 coal-fired plants in the next decade, while India is right behind with 200 plants on the drawing board. Restricting U.S. anthropogenic emissions, only a small part of the CO2 released into the environment, is a way of cutting off our economic noses to spite our faces," Wells wrote. "Without global reductions there is very little that the US can do to impact CO2 levels in the atmosphere, besides, of course, political posturing," he concluded.

Environmental Scientist Professor Delgado Domingos of Portugal, the founder and director of the Numerical Weather Forecast group, has more than 150 published articles in the research fields of Thermodynamics, Numerical Methods in Fluid Mechanics and Energy Transfer, Energy System Analysis, Energy and Environment Policy, and Meteorological Forecast. Domingos, an honorary member of the editorial boards of several international scientific journals, recently called CO2 related climate fears "dangerous nonsense." "There are measurable climate changes but there is also an enormous manipulation in reducing everything to CO2 and equivalents. The main gas producing the green house effect is water vapor. The present alarm on climate change is an instrument of social control, a pretext for major businesses and political battle. It became an ideology, which is concerning," Domingos said in an interview in Sabado Noticias [Saturday News] magazine on January 26, 2008. "There are three realities: one scientific – that shows the observed data – another of virtual reality – based on computer models – and another public. Between the three there are big contradictions," Domingos explained. "Everything made to reduce carbon dioxide emissions is positive, because it implies a reduction in energy consumption. But creating an ideology pegged to carbon dioxide is a dangerous nonsense," Domingos added. (LINK) & (LINK)

UN IPCC award-winning environmental physical chemist Dr. Kiminori Itoh of Yokohama National University, a contributor to the 2007 UN IPCC AR4 (fourth assessment report) as an expert reviewer, publicly rejected man-made climate fears in 2008, calling the promotion of such fears "the worst scientific scandal in the history." Itoh, who specializes in optical waveguide spectroscopy, is a former lecturer at the University of Tokyo and the author of the just released his new book *Lies and Traps in the Global Warming Affairs* (currently in Japanese only). "We have described many topics in this book, including inaccurate temperature measurements (e.g., A. Watt's work), 'observations' of climate sensitivity, many climate forcings such as colored-aerosol and vegetation (based on 2005 NRC report as Roger has so many times pointed out), and the effect of solar magnetic activity (including my own work)," Itoh wrote on June 17, 2008,

on the weblog of former Colorado State Climatologist Dr. Roger Pielke, Sr. Itoh's new book includes chapters calling man-made global warming fears "the worst scientific scandal in the history." "I also cited the opinions of Dr. Akasofu (Professor Emeritus, University of Alaska) in the last part of the book. He sincerely advises us, 'When people come to know what the truth is, they will feel deceived by science and scientists,' and says, 'IPCC should make appropriate comments before G8.' I sincerely think he is correct," Itoh wrote. Itoh concludes his book with six points: "1. The global temperature will not increase rapidly if at all. There is sufficient time to think about future energy and social systems. 2. The climate system is more robust than conventionally claimed. For instance, the Gulf Stream will not stop due to fresh water inflow. 3. There are many factors that cause the climate changes, particularly in regional and local scales. Considering only greenhouse gases is nonsense and harmful. 4. A comprehensive climate convention is necessary. The framework-protocol formulism is too old to apply to modern international issues. 5. Reconsider countermeasures for the climate changes. For instance, to reduce Asian Brown Cloud through financial and technical aid of developed countries is beneficial from many aspects, and can become a Win-Win policy. 6. The policy makers should be 'Four-ball jugglers.' Multiple viewpoints are inevitable to realize sustainable societies." (LINK)

Dr. Fred W. Decker, Professor of Meteorology at Oregon State University, signed the 2008 Oregon Petition dissenting from man-made climate fears. "There is no convincing scientific evidence that human release of carbon dioxide, methane, or other greenhouse gases is causing or will, in the foreseeable future, cause catastrophic heating of the Earth's atmosphere and disruption of the Earth's climate. Moreover, there is substantial scientific evidence that increases in atmospheric carbon dioxide produce many beneficial effects upon the natural plant and animal environments of the Earth," the petition that Decker signed states. Decker also challenged temperature data. "One day the *Gazette-Times* told of a minimum temperature about 15 degrees Fahrenheit, whereas the radio station at the Marys River bridge into Avery Park reported much colder, a 'minus' reading, which agreed with home thermometers of some readers. Inquiring about locations, I learned the 'official' minimum came from the shelter atop the steam-heated agricultural building on campus. Moreover, the professor moved the instruments to the greenhouses to the west in the summers when he worked there. What poor practice!" Decker wrote on June 22, 2008. "I appealed to the agricultural dean upon learning of the imminent retirement of the professor responsible. I suggested a site near the KOAC towers if possible. The compromise site at Hyslop got selected, and Wheeler Calhoun's data got quoted daily in the *Gazette-Times*," Decker wrote. (LINK) & (LINK) & (LINK) & (LINK)

Soil scientist and geologist Viv Forbes, the chairman of Australian based "The Carbon Sense Coalition," dissented from man-made climate fears. "There is no evidence that carbon dioxide in the atmosphere is driving surface temperature, and there is plenty of evidence to show that current levels of temperature and carbon dioxide are neither extreme nor of concern," Forbes wrote on July 1, 2007. "Even if the water vapor and carbon dioxide produced by man did cause some slight warming of the earth, is this a problem? Eons of geological history show that a warm, moist, carbon-rich atmosphere encourages all life on earth. These periods are referred to as 'Golden Ages'. The cold barren periods are those to be feared – they get called 'The Dark Ages'," Forbes explained. "It is unbelievable that many in politics and the media are whipping up public hysteria about 'global warming' when the best evidence suggests that for the 100 years ending in the year 2000, the century

of coal, steel, electricity, the internal combustion engine, jet planes, two world wars and a population explosion, the average surface temperature rose by only 0.6 deg, and there has been NO increase in temperature since 1998. In many areas, surface temperatures have been falling for decades," he continued. "The output of a complex computer simulation of the atmosphere is not 'evidence'. It is a fluttering flag of forecasts, hung on a slim flagpole of theory, resting on a leaky raft of assumptions, which is drifting without the rudder of evidence, in cross currents of ideology emotion and bias, on the wide deep and restless ocean of the unknown," Forbes added. (LINK)

Italian Air Force Meteorologist Guido Guidi, who managed weather stations that were part of the global climate monitoring system and runs the "Climate Monitor" website, dissented in 2008. "Despite the continued substantial margin of uncertainty in understanding the dynamics of climate -- including the weight of the anthropogenic factor -- the long wave of publications of the 4th Report of 'IPCC last year is having its effect. No matter how many scientists are not yet convinced of the responsibilities of humankind in climate change, no matter the distance between the reality of the observations and projections resulting from (computer) simulations, no matter the hundreds of thousands of pages written to rebut the arguments underlying this [man-made global warming] conviction," Guidi wrote on November 1, 2008. (LINK) "If the temperature does not increase again, I see it getting hard for those who support the theory of man-made global warming," Guidi wrote on September 24, 2008. (LINK)

A team of scientists signed a June 11, 2007, Cornwall Alliance "Open Letter" debunking man-made global warming fears. "Natural causes may account for a large part, perhaps the majority, of the global warming in both the last thirty and the last one hundred fifty years, which together constitute an episode in the natural rising and falling cycles of global average temperature. Human emissions of carbon dioxide and other greenhouse gases are probably a minor and possibly an insignificant contributor to its causes," the scientists declared. "Reducing carbon dioxide emissions would have at most an insignificant impact on the quantity and duration of global warming and would not significantly reduce alleged harmful effects. Government-mandated carbon dioxide emissions reductions not only would not significantly curtail global warming or reduce its harmful effects but also would cause greater harm than good to humanity–especially the poor–while offering virtually no benefit to the rest of the world's inhabitants," the open letter explained. Scientists signing the "Open Letter" included: **James F. Drake, Ph.D.** (Atmospheric Sciences), Project Engineer, The Aerospace Corporation, Papillon, NE; **Charles Clough, M.S.** (Atmospheric Science), Th.D., retired meteorologist, Bel Aire, MD; **Guillermo Gonzalez, Ph.D.,** Department of Physics and Astronomy, Iowa State University, Ames, IA; **Kent A. Chambers Ph.D**., Assistant Professor of Chemistry and Environmental Science, Hardin Simmons University, Abilene, TX; **Victor Goldschmidt,** Emeritus Professor of Mechanical Engineering, Purdue, University, West Lafayette, IN; **Gary O. Gray, Ph.D.,** Professor of Chemistry, Dean of the College of Science and Mathematics, Southwest Baptist University, Bolivar, MO; **Ronald C. Marks, Ph.D.,** Associate Professor of Chemistry, North Greenville University, Tigerville, South Carolina; **Michael R. Salazar, Ph.D.,** Assistant Professor of Chemistry, Union University , Jackson, TN; and **Daryl Sas, Ph.D.,** Professor of Biology, Geneva College, Beaver Falls, PA. (LINK)

Atmospheric scientist Dr. Art V. Douglas is an emeritus professor and former Chair of the Atmospheric Sciences Department at Creighton University in Omaha, Nebraska, and is the author of numerous papers for peer-reviewed publications such as *International Journal of Climatology* and *Geophysical Research Letters*. Douglas, a member of the American Meteorology Society, also was elected a member of the National Oceanic and Atmospheric Administration (NOAA) Office of Global Programs North American Monsoon Experiment Science Working Group. Douglas, who has served as a World Meteorological Organization (WMO) consultant, recently dissented from man-made climate fears. Douglas noted that the Arctic Ocean had an extensive refreeze between November 2007 and January 2008 and the winter in China and Siberia has been unusually brutal. "We've really never seen anything like this for many, many years," Douglas said, according to a February 8, 2008, article in the *Capital Press*. The article noted that Douglas rejected claims that current weather is a result of man-made global warming. "Whatever the weather," Douglas said, "it's not being caused by global warming. If anything, the climate may be starting into a cooling period." Douglas also pointed to the record cold and snow in the Southern Hemisphere last winter. "Within four or five months, it appears that a warming trend can go very rapidly in the other direction," Douglas said. The article continued: "Douglas said he believes the weather patterns the world is now experiencing are regional phenomena and not a global pattern. He also noted that the warmest year on record was 1998, but questioned why, if we're in a warming trend, it hasn't gotten any warmer than it was that year. Douglas said warming trends put more moisture in the atmosphere, resulting in more snow, which leads to cooling. Americans don't understand, he said, that what Europeans fear is that we may be heading into a period of global cooling, which could push ice lower than Europe has experienced in modern times, creating problems for ports there. After his speech, Douglas told a group of farmers who questioned him that alarm over global warming is analogous to alarm a few decades ago that the Great Salt Lake had shrunk so much that it could never recover. In only three years - in the 1980s - the lake was flooding farmland and endangering highways, industries and subdivisions, which prompted the state to build pumping stations to draw water into the desert to evaporate." (LINK) & (LINK) & (LINK)

Meteorologist and hurricane expert Boylan Point, past chairman of the American Meteorological Society's broadcast board, a retired U.S. Navy Flight meteorologist with Hurricane Hunters and currently a forecaster with WSBB in Florida, dissented from the view that man-made CO2 is driving a climate disaster. "A lot of folks have opinions in which they have nothing to back them up with. Mr. [Al] Gore I think may well fit into that category," Point said in an interview on WeatherBrains.com on February 19, 2008. "To lay the whole thing [global warming] at one doorstep [CO2] may be a bit of a mistake," Point explained. Point is a pioneer in the study of hurricanes, having logged thousands of hours flying through the storms taking critical measurements during his U.S. Navy career. (LINK) & (LINK)

Professor Dr. Don Aitkin of the University of Canberra is a former foundation Chairman of the Australian Research Council, a member of the Australian Science and Technology Council, and founder and past chairman of the Australian Mathematics Trust. Aitkin expressed his skepticism of a man-made climate crisis in an April 2008 speech. "Is the warming unprecedented? Probably not. There is abundant historical and proxy evidence for both hotter and cooler periods in human history. Is it our

fault? Again, maybe. The correlation of increasing warmth with increasing carbon dioxide concentrations is particularly weak; that with solar energy and with ocean movements is much stronger." Aitkin said. "Are we likely to see rising sea-levels? Not in our lifetimes or those of our grandchildren. It is not even clear that sea-levels have risen at all. As so often in this domain, there is conflicting evidence. The melting of polar or sea ice has no direct effect. How reliable are the computer models on which possible future climates are based? Not very. All will agree that the task of modeling climate is vast, because of the estimates that have to be made and the rubbery quality of much of the data," Aitkin explained. "Why is there such insistence that AGW has occurred and needs drastic solutions? This is a puzzle, but my short answer is that the IPCC has been built on the AGW proposition and of course keeps plugging it, whatever the data say. The IPCC has considerable clout. Most people shy off inspecting the evidence because it looks like science and must therefore be hard. The media have been captured by AGW (it makes for great stories), the environmental movement and the Greens love it, and business is reluctant to get involved," Aitkin added. (LINK) & (LINK)

Chief Meteorologist Topper Shutt of DC's Channel 9, and formerly of CNN, holds the American Meteorological Societies Seal of Approval. Shutt expressed skepticism of a man-made crisis. "CO2 is just one variable in a most complex global climate. I have stated for years that some of the effects of global warming might even be beneficial. We might see crops grown farther north and in areas of the world that previously could cultivate nothing," Shutt wrote on April 8, 2008. "Global warming is such a politically charged issue that we are losing our perspective on the issue and more importantly losing an open forum from which to discuss the issue. If we lose the right or comfort level to openly discuss and debate this issue we will not be able to tackle it efficiently and economically," Shutt wrote. "Should we instead put that money into schools, infrastructure and R & D? I am not trying to diminish global warming but I am, like [author of *Skeptical Environmentalist*] Bjorn Lomborg, attempting look at it from a different perspective. Some of the effects of global warming have been greatly exaggerated (when the ice cubes in your drink melt does you glass overflow?) and our money may be better spent exploring other avenues in addition to CO2 reduction," Shutt added. Shutt also wrote on April 4, 2008, "I try and remind our viewers that climate is always in a state of flux and yes, the world has warmed over the last 25 years but claiming that Katrina is a product of global warming is absurd. We have had much stronger hurricanes hit the United States in the past, the Labor Day or Keys hurricane of 1935 and Camille in 1969 to name just two. There is much more development now on our shores." (LINK) & (LINK)

Dr. Frederick Seitz, renowned physicist and former president of the National Academy of Sciences, the American Physical Society, and president emeritus of Rockefeller University, declared his man-made global warming skepticism once again in 2008, shortly before his death. Seitz wrote the foreword in February 2008 to a report titled "Nature, Not Human Activity, Rules the Climate" by a team of international skeptical scientists released in March 2008. The IPCC "is pre-programmed to produce reports to support the hypotheses of anthropogenic warming and the control of greenhouse gases, as envisioned in the Global Climate Treaty." Seitz wrote that the 1990 IPCC Summary "completely ignored satellite data, since they showed no warming. The 1995 IPCC report was notorious for the significant alterations made to the text *after* it was approved by the scientists — in order to convey the impression of a human influence. The 2001 IPCC report

claimed the twentieth century showed 'unusual warming' based on the now-discredited hockey stick graph. The latest IPCC report, published in 2007, completely devaluates the climate contributions from changes in solar activities, which are likely to dominate any human influence." "It is one thing to impose drastic measures and harsh economic penalties when an environmental problem is clear-cut and severe," Seitz wrote. "It is foolish to do so when the problem is largely hypothetical and not substantiated by observations. As NIPCC shows by offering an independent, non-governmental 'second opinion' on the 'global warming' issue, we do not currently have any convincing evidence or observations of significant climate change from other than natural causes," Seitz wrote. (LINK) & (LINK) (Note: Seitz died on March 2, 2008)

Astrophysicist Dr. Sallie Baliunas of the Harvard-Smithsonian Center for Astrophysics recently expressed skepticism of a man-made climate crisis. According to a February 12, 2008, article, Baliunas "suggested global warming is more directly related to solar variability than to increased levels of carbon dioxide in the atmosphere." "If you go back far enough you eliminate some of your variables," Baliunas said during a February 12, 2008, lecture titled "Warming Up to the Truth: The Real Story About Climate Change." "I've always been interested with the changes of the sun and how they impact the earth. I decided to look at a narrower time scale this time… Some people argue solar influence is large; some argue it is small. I'm somewhere in the middle," Baliunas said. Baliunas also noted that civilizations have historically looked for causes to climate changes. "In 16th and 17th century Europe, thousands were executed for what was called 'weather cooking,' where religious and political institutions blamed witches - mostly women - for poor growing periods or storms," she said during her presentation, according to the article. The article continued: "Baliunas said concerns for world energy poverty should be more significant than worrying about something 100 years from now." (LINK)

Economist Dr. Donald J. Boudreaux, the Chairman of the Department of Economics at George Mason University, recently announced his skepticism. "I am a global-warming skeptic - not of the science of climate change (for I have no expertise to judge it), but a skeptic of combating climate change with increased government power," Bourdreaux wrote on Feburary 17, 2008. "Al Gore, Robert Kennedy, Jr., and too many others dismiss the downside of curtailing capitalism in order to reduce emissions of greenhouse gases. They write and speak as if the material prosperity that capitalism brings is either not threatened by increased government power, or is of only small importance when compared to the threat of global warming," Boudreaux wrote. "Truly reasonable people are, and ought to be, skeptical of each of these dogmas," he concluded. (LINK)

Atmospheric physicist James A. Peden is formerly of the Space Research and Coordination Center in Pittsburgh and Extranuclear Laboratories in Blawnox, PA, where he studied ion-molecule reactions in the upper atmosphere. Peden, a founding member of the American Society for Mass Spectrometry, and a member of the American Institute of Aeronautics and Astronautics, has been published in the prestigious *Journal of Chemical Physics*. Peden was also a co-developer of the Modulated Beam Quadrupole Mass Spectrometer, which was declared one of the "100 Most Significant Technical Developments of the Year" and displayed at the Museum of Science and Industry in Chicago. Peden is also skeptical of a predicted "climate crisis." "Sorry folks, but we're not exactly buying into the Global Hysteria just

yet. We know a great deal about atmospheric physics, and from the onset, many of the claims were just plain fishy. The extreme haste with which seemingly the entire world immediately accepted the idea of Anthropogenic (man-made) Global Warming made us more than a little bit suspicious that no one had really taken a close look at the science," Peden wrote in February 2008. "We also knew that the catch-all activity today known as 'Climate Science' was in it's infancy, and that atmospheric modeling did not and still does not exist which can predict changes in the weather or climate more than about a day or two in advance," Peden wrote. "In reading "scientific articles," one must also be very alert to use of the word 'if.' This is the killer word - the Colt .45 of sloppy or even deliberately misleading science. 'If' the sea level rises 40 feet, then certainly most of Manhattan will be flooded. 'If' the moon falls on Kansas, then certainly wheat prices are going to soar out of site. Within a sentence or two, 'if' morphs into 'when' and soon everyone is convinced that the moon is absolutely going to fall on Kansas, it's just a matter of time, we're all doomed... unless we take immediate action to stop it. But neither of these are very likely to happen, as we shall soon see," Peden explained. "We understand that those who jumped on the Global warming? Bandwagon early on are now in a difficult position. Many are now searching for a way to back out quietly, without having their professional careers ruined," he added. (LINK)

Geophysicist Dr. Phil Chapman, an astronautical engineer and the first Australian to become a NASA astronaut, served as staff physicist at MIT (Massachusetts Institute of Technology), dissented from global warming fears, and warned of a coming ice age. "The first sunspot appeared in January this year and lasted only two days. A tiny spot appeared last Monday but vanished within 24 hours. Another little spot appeared this Monday. Pray that there will be many more, and soon," Chapman wrote in a April 23, 2008, article tilted "Sorry to ruin the fun, but an ice age cometh." "There is no doubt that the next little ice age would be much worse than the previous one and much more harmful than anything warming may do. There are many more people now and we have become dependent on a few temperate agricultural areas, especially in the U.S. and Canada. Global warming would increase agricultural output, but global cooling will decrease it. Millions will starve if we do nothing to prepare for it (such as planning changes in agriculture to compensate), and millions more will die from cold-related diseases," Chapman explained. "The bleak truth is that, under normal conditions, most of North America and Europe are buried under about 1.5km of ice. This bitterly frigid climate is interrupted occasionally by brief warm interglacials, typically lasting less than 10,000 years. The interglacial we have enjoyed throughout recorded human history, called the Holocene, began 11,000 years ago, so the ice is overdue," Chapman wrote. "All those urging action to curb global warming need to take off the blinkers and give some thought to what we should do if we are facing global cooling instead. It will be difficult for people to face the truth when their reputations, careers, government grants or hopes for social change depend on global warming, but the fate of civilization may be at stake," he added. (LINK)

Geologist Richard Mourdock, a licensed professional geologist and former field geologist who now serves as an environmental and energy consultant, dissented from man-made warming fears in 2008. "I'm scared to death about each of the three [U.S. presidential] candidates and their positions on global climate change," Mourdock, the Indiana State Treasurer, said according to an April 25, 2008, article in the Indiana Statesman. "Global caps in the last 15 years receded until last year on Mars, but what do

we have in common with Mars?" Mourdock asked. The article continued: "With a graduate degree in geology, Mourdock said his studies have convinced him that global warming is not happening." (LINK) & (LINK)

Chief Meteorologist Mike Thompson of Kansas City's Fox TV Channel 4 is a former U.S. Navy meteorologist who holds the American Meteorological Society (AMS) Seal of Approval and is a certified Broadcast Meteorologist. Thompson dissented from the view of a man-made climate crisis in 2008. "[Hurricane forecasting pioneer] Dr. William Gray is a very outspoken critic of the global warming proponents. As such, he has been attacked by the GW proponents, and funding for his research has dried up...he put $100,000 of his own cash into his research," Thompson wrote on April 14, 2008. "He puts his money where his mouth is, and he would not do that were he not concerned over the derailing of logic in climate science. This story has become all too common for those who dare speak up, and debunk Global Warming. Gray and other scientists with strong credentials in physics and climate science have been shouted down as climate heretics for disagreeing with the GW crowd," Thompson explained. "It is easier to silence scientific dissent by utilizing the politics of personal destruction, than to actually debate them on the merits of their arguments. That should tell you something about the global warming debate...there is none right now...it's either you believe, or you are to be discredited. It's a slow process, but it is scary, because if someone can control your energy sources, they can control you. We are already being told what light bulbs we can and cannot use...through legislation. We are being forced to fund research into alternative energies sources that are inefficient, and that cause the price of food, energy, and everything else to rise...through legislation....rather than allow free enterprise to allocate funds to those energy sources that will survive through good old American innovation!" Thompson added. "Even if you disagree with Dr. Gray, and others like him, you should fight against squelching the voices of those scientists who have spent a lifetime studying the climate, and have something very important to say. America is all about that sort of debate!" he concluded. (LINK) & (LINK)

Chemist Dr. Patrick Frank, who has authored more than 50 peer-reviewed articles, disputed man-made climate fears in 2008. "So the bottom line is this: When it comes to future climate, no one knows what they're talking about. No one. Not the IPCC nor its scientists, not the U.S. National Academy of Sciences, not the NRDC or National Geographic, not the U.S. Congressional House leadership, not me, not you, and certainly not Mr. Albert Gore," Frank wrote in the May issue of *Skeptic Magazine*. "But there is no falsifiable scientific basis whatever to assert this warming is caused by human-produced greenhouse gasses because current physical theory is too grossly inadequate to establish any cause at all. Nevertheless, those who advocate extreme policies to reduce carbon dioxide emissions inevitably base their case on GCM projections, which somehow become real predictions in publicity releases," Frank explained. "General Circulation Models are so terribly unreliable that there is no objectively falsifiable reason to suppose any of the current warming trend is due to human-produced CO2, or that this CO2 will detectably warm the climate at all. Therefore, even if extreme events do develop because of a warming climate, there is no scientifically valid reason to attribute the cause to human-produced CO2. In the chaos of Earth's climate, there may be no discernible cause for warming," Frank added. "Many excellent scientists have explained all this in powerful works written to defuse the CO2 panic, but the choir sings seductively and few righteous believers seem willing to entertain disproofs," Frank concluded. (LINK)

Retired meteorologist Harry A. Gordon, formerly of the National Weather Service, defended global warming skeptics and noted naturally occurring cycles dominate climate. "Meteorologist Mike Thompson (of Fox TV) is correct in his defense of global warning skeptics. A personal examination of a 100-year period of weather in Kansas City showed a continuous series of short-term warming and cooling periods. Studies from China covered more than a thousand years and confirmed this. No cycles have been discovered that would help in forecasting climate changes," Gordon wrote on April 28, 2008. Gordon also decried intimidation of scientists skeptical of warming as being based on "personal abuse instead of scientific proof." (LINK)

Chief Meteorologist Kevin Lemanowicz of Fox 25 TV in Massachusetts dissented from man-made climate fears in 2008. "I continue to say that we have obviously warmed, but we should not be setting policy based on an uncertain climate future," Lemanowicz wrote on April 14, 2008. "I am not convinced we have been the dominant force in our global warming, and I certainly don't trust climate models that are integrating thousands of variables thousands of time-steps into the future. There is chaos inherent in these models," Lemanowicz explained. "One of the cornerstones of the movie *An Inconvenient Truth* was the belief that global warming will cause more frequent and more ferocious hurricanes. This belief was shared by esteemed MIT scientist Dr. Kerry Emmanuel. Well, just like that, the tide has turned," Lemanowicz wrote, noting that Emmanuel was reconsidering his views on the global warming-hurricane link. In a May 1, 2008, report, Lemanowicz noted that "carbon dioxide is a good thing." He wrote: "Did you know that if the greenhouse effect didn't exist, life on this planet would be frozen? Further, I'm sure you remember from grade-school science that carbon dioxide is vital for life. Plants need it, and, in turn, give us oxygen. No CO2 means no plants, which means little oxygen for us. Certainly not enough to live on. Why, then, is CO2 called "pollution"? Is it really bad for us?" (LINK & (LINK) & (LINK)

Geologist Jonathan DuHamel, a registered geologist of Arizona with a masters degree, debunked global warming fears in 2008. “I am a geologist familiar with the scientific literature on climate change, but I have yet to see any proof or compelling evidence supporting the assertion that human carbon-dioxide emissions have produced measurable temperature change,” DuHamel told the Arizona *Daily Star* on April 24, 2008. “So where is your evidence? Put up or shut up. The current warm period is well within natural variations,” DuHamel explained. In 2007, DuHamel told the paper, “CO2 is a minor player in the total system, and human CO2 emissions are insignificant compared to total natural greenhouse gas emissions. Therefore, lowering human CO2 emissions will have no measurable effect on climate, and continued CO2 emissions will have little or no effect on future temperature.” He added: “The current warm period is just one of six recorded since the end of the last glacial epoch 12,000 years ago. There seems to be a 1,500-year (plus or minus 500 years) natural cycle of warming and cooling. Data suggest that each of the previous warm periods were up to 3 degrees Centigrade warmer than the current warm period, and that each succeeding warm period peaked at lower maximum temperatures. […] While controlling CO2 emissions from burning fossil fuels may have some beneficial effects on air quality, it will have no measurable effect on climate, but great detrimental effects on the economy and our standard of living.” (LINK) & (LINK)

Victor Manuel Velasco Herrera, a researcher at the Institute of Geophysics at the National Autonomous University of Mexico who specializes in image processing and prevention of natural disasters, not only rejected warming fears, but proclaimed a coming global cooling in 2008. Velasco Herrera "predicted that in about ten years the Earth will enter a 'little ice age' which will last from 60 to 80 years and may be caused by the decrease in solar activity," according to an August 16, 2008 article in Mexico's Milenio.com. "Velasco Herrera described as erroneous predictions of the Intergovernmental Panel on Climate Change (IPCC), pursuant to which the planet is experiencing a gradual increase in temperature, the so-called global warming. The models and forecasts of the IPCC 'is incorrect because only are based on mathematical models and presented results at scenarios that do not include, for example, solar activity," he said according to the article. The article continued, "The phenomenon of climate change, he added, should include other kinds of factors, both internal, such as volcanoes and the very human activity, and external, such as solar activity... In early July, Velasco Herrera said that satellite data indicate that this period of global cooling could even have al ready begun, since 2005." (LINK) (LINK)

Indian geologist Dr. Arun D. Ahluwalia of the Center of Advanced Study in Geology at Punjab University, a visiting scholar of the Geology Department at University of Cincinnati, a board member of the UN-supported International Year of the Planet and a fellow of the Geological Society of India, publicly ridiculed former Vice President Al Gore and the UN IPCC's coveted Nobel Peace Prize in 2008. "I am really amazed that the Nobel Peace Prize has been given on scientifically incorrect conclusions by people who are not geologists," **Ahluwalia, who has authored numerous scientific studies in the fields of geology and paleontology**, said during on August 8, 2008, during the Geological Congress in Oslo, Norway, dubbed the geologists' equivalent of the Olympic Games. Ahluwalia referred to the UN climate panel as the "elite IPCC." "The IPCC has actually become a closed circuit; it doesn't listen to others. It doesn't have open minds," he said. Ahluwalia also criticized the promoters of man-made global warming fears for "drawing out exaggerated conclusions" and took the UN to task for failing to allow dissenting voices. "When I put forward my points in the morning, some IPCC official got up to say that what I was [saying was] 'nonsense.' See, when we have that sort of attitude, that sort of dogma against a scientific observation that would not actually end up in very, very positive debate. We should maintain our sense of proportion, maintain our sense of objectivity, allow a discussion -- not have fixed mindset about global warming," he said to applause from the members. (LINK) (LINK) [Note: The International Geological Congress prominently featured the voices and views of scientists skeptical of man-made global warming fears. See Full report here: & See: Skeptical scientists overwhelm conference: '2/3 of presenters and question-askers were hostile to, even dismissive of, the UN IPCC']

Analytical chemist and mathematician Sherwood Thoele rejected the "consensus" view of man-made global warming in 2008. "I submit that there is no manmade global cooling/warming, that there is no study or research data that makes a good argument to that effect when carefully examined objectively and that the Earth has many different and wide-ranging cycles that man cannot control, no matter how much he would like to," Thoele wrote on May 19, 2008 in Virginia's Roanoke Times. "As an analytical chemist, I analyze all the parameters and data from studies: what prompted the study, who funded it, where it was conducted, measuring equipment accuracy and the atmospheric conditions or physical

status of that area during the study," Thoele wrote. "Because CO2 is slightly soluble in water and will come back to the Earth with precipitation, nature corrects for any excess, just as it does with other excess materials from volcanoes and forest fires. CO2 comes from burning or oxidizing organic material and minerals that contain carbon. Major sources are fermenting (rotting) vegetation like in swamps, compost piles, burning limestone to make lime, gasoline or other petroleum products, volcanoes and forest fires. Nature recycles all of what it considers excess very efficiently. CO2 absorbs some infrared radiation. Infrared absorbers accept the radiation from any direction. Since infrared radiation is one of many parts of visible light, the biggest source is the sun," Thoele explained. "Some say excess CO2 combined with the moisture in the atmosphere absorbs infrared radiation from the Earth to create a greenhouse effect by not letting it pass through it. But how then does the infrared radiation from the sun get through the CO2/moisture, and wouldn't it already have absorbed as much infrared radiation as it could handle from the sun? There is a limit to the amount of infrared radiation that moisture/CO2 can absorb. Warmth from sunlight means infrared radiation is getting through. The infrared radiation absorbed by the Earth will keep it warm for a while, but as clouds linger and the sun goes down, the warmth goes away quickly. So if there were a greenhouse effect from heat being blocked from leaving the Earth, then the temperature on cloudy days and at night shouldn't be so different than on a sunny day. Some claim a 1 degree Fahrenheit increase in the average temperature over the last 100 years, globally. Considering the many variables that cause temperature changes, including the accuracy of the thermometers, the average global temperature has been extremely stable in this short period of time relative to the age of the Earth," he added. (LINK) & (LINK)

Award-winning ecologist and evolutionary biologist Dr. Perry Ong is the director of the Institute of Biology at the University of the Philippines' College of Science. Ong, who was awarded the Outstanding Young Scientist award by the National Academy of Science and Technology in 2000 and is a former representative of Conservation International, cited former Vice President Al Gore's errors and called man-made climate fears "hyped up" in 2008. "Climate change has become a convenient excuse when there are other [environmental] issues that need to be addressed," Ong said, according to a May 18, 2008, article in the Philippine *Daily Inquirer*. "If we disproportionately blame ourselves for [climate change], our response will be different … we should look at the [bigger picture] and address other issues," Ong said during a lecture called "Anthropogenic Global Warming: Beyond the Hype, Doing the Right Thing for the Right Reason." The article continued: "Ong said GHGs spawned by humans contribute merely 33 percent to global warming compared to the 67 percent traced to natural causes, which include changes in solar radiation, volcanic eruptions and the shifting of the Earth's tilt and orbit." (LINK)

Meteorologist Mike Fairbourne of Minnesota's WCCO-TV, a veteran 40 year weather expert, said man-made global warming was based on "squishy science" in 2008. According to Fairbourne, though "there has been some warming of global temperatures in recent years ... there is still a pretty big question mark" about how much is to due mankind. "Do we need to be wise stewards [of the Earth]? Absolutely. Do we have to pin everything that happens on global warming? No, we need to have cooler heads," Fairbourne said according to a May 20, 2008 article in the Star Tribune. The article continued: "Fairbourne said he has talked 'to a number of meteorologists, who have similar opinions,' adding that he is concerned about 'the extremism that is attached to the global warming.' He noted that

in the 1970s 'we were screaming about global cooling. It makes me nervous when we pin a few warm years on squishy science.' As for the melting polar ice caps, Fairbourne said there are 'other things going on -- ocean currents, changes in salinity -- other things not related to carbon dioxide going into the atmosphere.' Asked why there has been so much momentum toward connecting human activity and global warming, Fairbourne said, 'They're doing it for a lot of reasons; some may be scientific, but most of them are political. We need to be calm and look at scientific evidence and evaluate it.'" (LINK) & (LINK)

Physicist Dr. Gerhard Lobert, Recipient of The Needle of Honor of German Aeronautics, announced he was skeptical of man-made climate fears in 2008. "As the glaciological and tree ring evidence shows, climate change is a natural phenomenon that has occurred many times in the past, both with the magnitude as well as with the time rate of temperature change that have occurred in the recent decades," Lobert wrote on March 4, 2008. "The following facts prove that the recent global warming is not man-made but is a natural phenomenon. 1. In the temperature trace of the past 10 000 years based on glaciological evidence, the recent decades have not displayed any anomalous behavior. In two-thirds of these 10,000 years, the mean temperature was even higher than today," Lobert wrote. "There is no direct connection between CO2 emission and climate warming. This is shown by the fact that these two physical quantities have displayed an entirely different temporal behavior in the past 150 years. Whereas the mean global temperature varied in a quasi-periodic manner, with a mean period of 70 years, the CO2 concentration has been increasing exponentially since the 1950's. The sea level has been rising and the glaciers have been shortening practically linearly from 1850 onwards," he added. "The hypothesis that the global warming of the past decades is man-made is based on the results of calculations with climate models in which the main influence on climate is not included. The most important climate driver (besides solar luminosity) comes from the interplay of solar activity, interplanetary magnetic field strength, cosmic radiation intensity, and cloud cover of the Earth atmosphere," he concluded. (LINK)

Chief Meteorologist Dave Dahl of Minnesota's ABC Channel 5 holds the American Meteorological Society's Seal of Approval and rejected fears of man-made global warming in 2008. "Many peer-reviewed scientific papers are now looking at the real possibility that the sun may play the main role in climate variation here on earth," Dahl wrote on May 2, 2008. "Recent studies show that the unusually 'quiet' sun may be one of the reasons for the unusually cold winter that was experienced across much of the Northern Hemisphere. An extremely low number of solar flares and sunspots may be linked to the current cooling trend globally," Dahl explained. A May 20, 2008 article in the Star Tribune noted: "Meteorologist, Dave Dahl, is of kindred global warming spirit with [skeptical meteorologist Mike] Fairbourne." (LINK) & (LINK) & (LINK) & (LINK)

Economist Colin Robinson is the founder of the Department of Economics at the University of Surrey in the UK and an emeritus professor of economics. Robinson is also a Fellow of the Royal Statistical Society who has authored 25 books and 160 journal papers with a focus on energy policy. Robinson recently dissented from the "consensus" on man-made global warming. "One does not have to be a 'climate change denier' to see that a degree of skepticism about the present consensus might be in order. In that sense, I think that the skeptics are right," Robinson wrote in April 2008. "Most likely, now – as in the past – many analysts have become carried away by the results of their

models, which purport to look into a far distant future, and have convinced themselves that they must embark on a crusade to enlighten others. Dissent must be discouraged and indeed, in a mild version of the Inquisition, the views of anyone who questions the conventional wisdom should be disregarded and, if possible, suppressed. In such a climate, we need skepticism even if it brings condemnation by the top echelons of the Royal Society," Robinson explained. "The scientific establishment regards anyone who questions the consensus about climate change and its effects in much the same way as heretics are regarded by religious movements. Indeed, in many ways, upholders of the consensus view are a religious movement," Robinson continued. "In an echo of earlier times, the climate change prophets have in recent years tried to silence counter views and suppress dissent. August members of the Royal Society, a body once noted for its cultivation of debate in science, are now leaders of the 'science is settled' camp: the only debate they consider to be legitimate is about choice among the different forms of the centralized action they believe is required to deal with the problems they foresee," he added. "Human myopia cannot be overcome simply by well-meaning attempts to build models that purport to peer decades and centuries ahead. Action taken now, in anticipation of supposed long run trends, may concentrate on the wrong issues and make matters worse rather than better," he concluded. (LINK) & (LINK)

Meteorologist Patrick Carroll, a retired Environment Canada meteorologist, publicly rejected global warming fears in 2008. "The IPCC theory of anthropogenic warming is a hoax that is rapidly falling into disfavour among atmospheric scientists," Carroll wrote on June 9, 2008 in Canada's The Hill Times. "Liberal Leader Stéphane Dion (of Canada) is a gullible fool in continuing to believe that CO2 emissions drive climate change. He is whistling past a political graveyard if he thinks that Canadians will accept billions more in taxes to reduce and sequester CO2 emissions when there is zero proof that such activities will have any measurable, let alone detectable, effect on global temperatures. In short, Dion has been a victim of the alarmist propaganda emanating from the IPCC and radical environmentalists such as David Suzuki," Carroll explained. "If Dion had advisers who were keeping up with the latest research and climate data, he would have been informed by now that the IPCC theory of anthropogenic warming is a hoax that is rapidly falling into disfavour among atmospheric scientists. Instead, he continues to blunder along listening to clueless alarmists like Mr. Suzuki," he added. (LINK)

Dr. Robert Smith, professor of chemistry at University of Nebraska at Omaha (UNO), recently spoke out against anthropogenic global warming fears, concluding from his studies that it does not present a threat to the future of mankind. Dr. Smith has been teaching at UNO since 1990 and is the author or co-author of 38 articles in scholarly journals. According to a UNO Gateway article from November 18, 2008, "Smith takes the position that carbon dioxide will not drastically impact the world, arguing that water is the leading green house gas and global warming is actually beneficial. 'All models appeal to water changing the temperature as the principle agent for increase in temperatures,' Smith said. 'I simply want to teach students how to think; and to think properly, they need all the information.' The amount of carbon dioxide in comparison to the amount of water that is affecting global warming is minimal, Smith says. Ice ages are eminent and the next one will happen in the next 2,000 years." [LINK; Bio: LINK]

Jon Loufman, a meteorologist for Cleveland's Channel 19 Action News, spoke out against anthropogenic climate change fears in 2008. "A past president of the Northeast Ohio chapter of the American Meteorological Society, Jon Loufman holds a masters degree in his field and was inducted into the Ohio Broadcasters Hall of Fame in 2002." In a December 2, 2008, article spotlighting Cleveland-area TV meteorologists, Loufman, who has taught meteorology courses at both Case Western Reserve University and Lakeland Community College, said, "Climate records also show that long before industrialization, the Vikings had settled in Greenland because it was warm enough . . . I think the jury is still out on this." [Article LINK and LINK]

John Lott, Jr., who has a Ph.D in economics, is a senior research scientist at the University of Maryland and has published over 90 articles in academic journals. In his March 3, 2008, article arguing against man-made climate change, "Global Warming: Is It Really a Crisis?", Lott said, "Are global temperatures rising? Surely, they were rising from the late 1970s to 1998, but 'there has been no net global warming since 1998.' Indeed, the more recent numbers show that there is now evidence of significant cooling [...] Mankind is responsible for just a fraction of one percent of the effect from greenhouse gases, and greenhouse gases are not responsible for most of what causes warming (e.g., the Sun)." [Article LINK; Bio LINK]

Meteorologist Al Lipson, a member of the National Weather Association and former lead forecaster at the Weather Channel and Accuweather, has 35 years of experience in operational meteorology and dissented in 2008. "I am a Global warming skeptic," Lipson wrote to EPW on March 8, 2008. "[Promoters of climate fear] want to make money. Billions of dollars are being funneled into research. Computers models are predicting what will happen if Global warming continues," Lipson wrote. "Yep I know all about models. I use them to forecast everyday. They are never wrong. That's why I have a perfect forecast 100 percent of the time. Can one of you geniuses come up with a model that will predict where the new coastline will be so I can buy some beachfront property at a cheap price?" he added with sarcasm. "I don't doubt that climate changes. In that, there is no dispute. However, I must join the ranks of many scientists who dispute that global warming is taking place at such a rate that it will have apocalyptic consequences the alarmist theorize. I feel mans' influence on climate is a micro influence Nature has a tendency to balance itself on a macro scale," he continued. "Extreme weather events happen. Quit spinning research to foster monetary and political agendas. That's dishonest science. No debating, that's dishonest science. Hopefully we are beginning to see political climate change to Global Warming. More and more scientists are having the courage to step forward with scientific evidence, as well as common sense arguments against it. The Global Warming crusaders will not debate the issues. Can they not back up their claims, or if they debated other scientists would their case just fall apart?" he concluded.

Dr. Peter Friedman, who is an assistant professor of mechanical engineering at University of Massachusetts- Dartmouth and a member of the American Geophysical Union, spoke out against the alleged "consensus" of global warming in 2008. "Several respected climate scientists have told me that there would be even more vocal skeptics if they were not afraid of losing funding, much of which is controlled by politically correct organizations," Friedman wrote on March 11, 2008. "The IPCC 'policy summaries,' written by a small group of their political operatives, frequently contradict the work of the

scientists that prepare the scientific assessments. Even worse, some of the wording in the science portions has been changed by policy makers after the scientists have approved the conclusions," Freidman explained. Freidman ridiculed the notion of a "consensus." "Having frequently attended related conferences including the American Geophysical Union, I have observed quite the opposite. There is consistently vigorous debate in these technical sessions," he concluded. (LINK)

University of Western Ontario physics professor Wayne Hocking, who heads the Atmospheric Dynamics Group and is co-editor of the 1990 book *The Earth's Middle Atmosphere*, dissented from anthropogenic climate change in 2008. Hocking says it is important to look to the poles – the Arctic and Antarctic poles – to find the truth about global warming and other atmospheric changes, but with all of the data he has collected on atmospheric changes over the last 15 years, Hocking is hesitant to claim he can make any predictions about global warming. "For this to be effective, we need to be there for 20, 30, 40 years, have a long-term data set and then we can start to make useful predictions," he says. He says researchers do not know enough about the atmospheric changes and how they influence each other to draw any conclusions about global warming. "We know there is so much complexity involved, we want to tread more cautiously," he says. "Maybe in 10 years time, it'll all start to freeze over, we just don't know." Hocking cautions against focusing solely on global warming, but rather to view it as one of many atmospheric changes that must be researched and understood. "I think it's too narrow of a view," he says. "You've got to consider everything together and see global warming as part of a larger picture rather than something in isolation." […] "I'm not against global warming, but I want people to realize it is only one of many dynamic events that occur in the atmosphere and we need to understand them all," he says. Hocking recently presented his polar research to a crowded room at the Physics and Astronomy Colloquium. [LINK and Bio here]

Charles Clough, an atmospheric scientist and Chief of the Atmospheric Effects Team with the Department of the Army at Aberdeen Proving Ground from 1982 until 2006, spoke out against man-made climate change on October 6, 2008. "Government officeholders at federal and state levels assume that current global warming is chiefly, if not entirely, due to mankind's growing carbon dioxide emissions, but they have not examined the science enough," Clough said. "It certainly does not follow logically that CO2 emissions drive a warming trend that began prior to widespread fossil fuel use and that has yet to reach the magnitude of the medieval warm period when Vikings colonized Greenland. Nor is a climate catastrophe implied by the presently observed rate of warming. Those conclusions are reached only if one accepts two intermediate steps: (1) that science has separated anthropogenic effects from natural climate oscillations; and (2) that the atmosphere-ocean system is metastable so CO2-induced warming will trigger a runaway process. Neither point has widespread support among those of us who have actually worked with atmospheric processes. Not only is the debate not over; it is expanding. Let's hope that as the fall semester gets underway , science teachers will motivate their students to study the anchor questions of points (1) and (2) rather than accept a document generated by a U.N. bureaucracy that provided no final comment by its scientific authors. Too many valuable resources are needed for justifiable environmental management to waste them on a speculation for which there is no scientific consensus. Such inverted pyramids are dangerous." (LINK)

Award-winning Meteorologist Brian Sussman, a member of the American Meteorological Society (AMS), former member of the AMS Education Advisory Committee, and formerly of KPIX-TV CBS in San Francisco, is the author of the forthcoming book *Global Whining: A Denier's Handbook.* "Mankind's burning of fossil fuels is allegedly warming the planet. This hypothesis couldn't stand the test of an eighth grade science fair. And if you dare poke holes in the hypothesis you're branded a 'denier,'" Sussman told EPW on January 3, 2008. "Well fine. I'd rather be called a 'denier' than try to push a scheme that would make Karl Marx green with envy," Sussman added.

Meteorologist Allen Barr, who holds a masters degree in Meteorologist, refuted climate fears in a talk to Montana lawmakers in 2008 According to a March 2, 2008, article, Barr said he didn't "think human behavior was behind global warming." (LINK)

Environmental scientist Dr. Kenneth P. Green of the American Enterprise Institute refuted man-made climate fears in 2008. "While I believe that Earth has experienced a mild, non-enhanced greenhouse warming which will continue in the foreseeable future, I think the chaotic nature of the climate system makes projections of the future climate no better than science fiction," Green wrote EPW on March 6, 2008. "I am intensely skeptical of the entire process of predictive climate modeling, from its ability to meaningfully predict the climate in the future, to its ability to tell us how much of activity A would result in climate change B. These models have so many parameters that can be arbitrarily 'tuned' as to make them little more than a tool for mathematizing the fantasy scenarios of the programmers who set up and run the programs," Green explained. (LINK)

Chemist and process engineer Ferdinand Engelbeen spoke out in 2008 against dire global warming predictions. "Why 'skeptical'? As I have some experience with models, be it in chemical processes, not climate, I know how difficult it is to even make a model of a simple process where most, if not all, physico-chemical parameters and equations are exactly known," Engelbeen wrote on his website in November 1, 2008. "To make a climate model, where a lot of parameters and reactions are not even known to any accuracy, for me seems a little bit overblown. And to speak of any predictive power of such models, which are hardly validated, is as scientific as looking into a crystal ball," he explained. "Kyoto in my opinion is a waste of money which will cost much without any benefit," he added. (LINK)

Frank Wachowski, a retired atmospheric scientist for the National Weather Service, rejected the notion of a consensus about global warming in 2008. "The jury is still out," Wachowski said, according to a March 19, 2008 article. "Obviously, it appears that the Arctic is getting warmer and causing problems for polar bears and other animals. But are we doing it? It has become a big political issue," Wachowski explained. "We don't have a long-enough period to study yet…everything goes through cycles," he concluded. (LINK)

U.S. Government Atmospheric Scientist Stanley B. Goldenberg of the Hurricane Research Division of NOAA (National Oceanic and Atmospheric Administration) in Miami strongly protested the notion that most scientists agree with man-made climate change theories in 2008. "It is a blatant lie put forth in the media that makes it seem there is only a fringe of scientists who don't buy into anthropogenic global warming," Goldenberg said on August 18, 2008. "Not all scientists agree that the warming we've seen is necessarily anthropogenic," Goldenberg added. "There are those who want to attribute any

perceived increase in natural disasters to anthropomorphic global warming. I predict that if we have an active hurricane season, someone will attribute it to AGW. They're not really looking at the science; they're looking at the disaster," he added. Goldenberg also praised the skeptical climate change conference in New York City in March 2008. "The fact is that this conference is evidence that there are numerous respected, established and in many cases world-renowned scientists who have done careful research in various areas of 'climate change' that sharply differ with the [UN] IPCC results," Goldenberg told the *New York Times*. (LINK) (LINK)

Mechanical Engineer Dan Pangburn, a licensed engineer with master in Mechanical Engineering and author of a climate research paper, dissented in 2008. "For most of earth's history carbon dioxide level has been several times higher than the present," Pangburn wrote in his paper on March 15, 2008. "The conclusion from all this is that carbon dioxide change does NOT cause significant climate change. Actions to control the amount of non-condensing greenhouse gases that are added to the atmosphere are based on the mistaken assumption that global warming was caused by human activity," he added. (LINK)

Physicist and engineer Dr. Jeffrey A. Glassman, a former Division Chief Scientist for Hughes Aircraft Company, is an expert modeler of microwave and millimeter wave propagation in the atmosphere solar radiation, thermal energy in avionics. Glassman has conducted several studies on CO2 and climate including a July 6, 2007, paper titled, "Solar Wind has Twice the Global Warming Effect of El Niño." Glassman is blunt, writing, "The consensus of climate mistakenly attributes solar wind warming to man-made carbon dioxide." Glassman has researched ice core data and concluded, "CO2 concentration is a response to the proxy temperature in the Vostok ice core data, not a cause. This does not contradict that CO2 is a greenhouse gas, but it does contradict the conjecture that the presence of a greenhouse gas has any destabilizing effect on global climate. Other forces overwhelm the conjecture of a runaway greenhouse effect. The concentration of CO2 is dynamic, controlled by the solubility pump. Global temperature is controlled first by the primary thermodynamic loop." Glassman concluded, "The Vostok data support an entirely new model. Atmospheric CO2 is absorbed by the oceans. Fires, volcanoes, and now man deposit CO2 into the atmosphere, but those effects are transient. What exists in steady state is CO2 perpetually pumped into the atmosphere by the oceans. Atmospheric CO2 is a dynamic stream, from the warm ocean and back into the cool ocean. Public policy represented by the Kyoto Accords and the efforts to reduce CO2 emissions should be scrapped as wasteful, unjustified, and futile." (LINK)

Chemical Engineer Bob Ashworth holds 16 U.S. patents on fuels and emission control techniques, has written 55 technical papers on fuel technologies, and is a member of the American Geophysical Union. Ashworth authored a 2008 technical analysis of global warming titled "No Evidence to Support Carbon Dioxide Causing Global Warming!" "Nature absorbs 98.5% of the CO2 that is emitted by nature and man. As CO2 increases in the atmosphere, nature's controlling mechanism causes plant growth to increase via photosynthesis; CO2 is absorbed, and oxygen is liberated," Ashworth wrote on December 9, 2008. "The lesson to the world here is, when it comes to science, never blindly accept an explanation from a politician or scientists who have turned political for their own private gain. Taxing carbon will have absolutely no beneficial effect on our

climate, will hurt the economies of the world, and will be harmful to the production of food because less carbon dioxide means reduced plant growth," Ashworth wrote. (LINK)

Chemical Engineer Ed Rademacher, who holds a masters degree and is a licensed Professional Engineer with an expertise in operating equipment that removes pollutants from the atmosphere, dissented in 2008. "Carbon dioxide is not a pollutant and, in fact, is a desired," Rademacher wrote to EPW on April 4, 2008. Rademacher has researched global warming claims. "I utilize my perspective as an engineer to evaluate the available data to determine the data's validity. I do the same for the various claims seen being issued by the participants in the ongoing climate debate," Rademacher wrote. "To date, global warming alarmists have not come close to providing any valid scientific data that proves humans are the sole source of changes in so-called global average temperatures. Quite simply, correlation between the carbon dioxide levels and the global average temperatures does not prove a causal relationship," he added. (LINK)

Physicist Dr. John Blethen runs the global warming skeptic website Heliogenic.blogspot.com. Blethen is blunt in his climate change views. "The Sun, not a harmless essential trace gas (CO2), drives climate change," Blethan declares on his website in 2008. Blethen highlights the dire predictions of global warmng and counters, "Someone should tell these people the globe has been cooling." (LINK) Blethen also endorsed the Manhattan Declaration on Climate Change, sponsored by the International Climate Science Coalition (ICSC) in 2008. The declaration reads in part: "There is no convincing evidence that CO2 emissions from modern industrial activity has in the past, is now, or will in the future cause catastrophic climate change."

Professional Geophysicist Norm Kalmanovitch of Canada spoke out against climate fears in 2008 by analyzing rising CO2 impacts. "There is zero warming possible from further increases in CO2," Kalmanovitch wrote in November 2008. "The temperature record shows that the global temperature has been increasing naturally at a rate of about 0.5°C/century since the Little Ice Age. The forcing parameter is based on the full measured 0.6°C/century without subtracting the natural warming of 0.5°C/century giving a forcing parameter that is 6 times larger than can be attributed to the measured increase in CO2," Kalmanovitch wrote. "Far less obvious, but the major fatal fl aw of the forcing parameter is that it is based on an observation of temperature and CO2 concentration without taking into account the actual physical properties of CO2 and its limited effect on thermal radiation as defined by quantum physics," he added. (LINK)

Scientists from 40 countries signed the Manhattan Declaration on Climate Change, sponsored by the International Climate Science Coalition (ICSC). The 2008 declaration states in part, "Global climate has always changed and always will, independent of the actions of humans, and carbon dioxide (CO2) is not a pollutant but rather a necessity for all life; the causes and extent of recently-observed climatic change are the subject of intense debates in the climate science community and that oft-repeated assertions of a supposed 'consensus' among climate experts are false." The declaration concludes, "There is no convincing evidence that CO2 emissions from modern industrial activity has in the past, is now, or will in the future cause catastrophic climate change." A sampling of scientists signing the declaration as of June 19, 2008, included: **Wayne Goodfellow,** PhD (Earth Science), Ocean Evolution, Paleoenvironments, Adjunct Professor, Senior Research

Scientist, University of Ottawa, Geological Survey of Canada; **John Brodie**, BASc., MASc. (Metallurgical), P.Eng., Director Environmental Affairs, British Columbia Railway Co., Surrey; **Atholl Sutherland Brown**, PhD (Geology, Princeton University), Regional geology, tectonics and mineral deposits; **Paul Copper,** BSc, MSc, PhD, DIC, FRSC, Professor Emeritus, Department of Earth Sciences, Laurentian University Sudbury, Ontario; **Les McDonald**, RP Bio; Senior Impact Assessment Biologist, BC Environmental Protection (retired), Consulting Aquatic Biologist; **John W. Bales**, BA, MA, PhD (Mathematics, Modeling), Professor, Tuskegee University, Waverly, Alabama, U.S.A.; **Gregory J. Balle**, B.E., MSc., PhD. (Joint Aerospace Engineering and Geophysical Fluid Dynamics), Pukekohe, New Zealand; **Romuald Bartnik**, PhD (Organic Chemistry), Professor Emeritus, University of Lodz, Lodz, Poland; **Colin Barton**, PhD, Earth Science, Principal research scientist (retd), Commonwealth Scientific and Industrial Research Organisation (CSIRO), Melbourne, Victoria, Australia; **Matthew Bastardi**, BSc (Meteorology, Texas A and M University), Florida, U.S.A.; **M.I. Bhat**, Professor (Tectonics, Department of Geology & Geophysics, University of Kashmir), Sprinagar, Jammu & Kashmir, India; **Frederick Bopp, PhD** (Geology), Environmental Consulting, Owner, Earth Quest, Downingtown, Pennsylvania. U.S.A.; **Bruce Borders**, PhD, Forest Biometrics, Professor, Warnell School of Forestry and Natural Resources, University of Georgia, Athens, Georgia, U.S.A.; **James Brooks**, BS, PhD, Geophysics, Adelaide, Australia; **Stephen Brown, PhD** (Environmental Science, State University of New York), Ground Penetrating Radar Glacier research, District Agriculture Agent Cooperative Extension Service, University of Alaska, Fairbanks Mat-Su District Office Palmer; Alaska Agriculture Extension Agent/Researcher, Alaska, U.S.A.; **James Buckee**, PhD (astrophysics), Calgary, Alberta, Canada; **James Clarke,** BS (Meteorology), TV-Meteorologist, WZVN-TV, Ft. Myers, Florida, U.S.A.; **Michael Clover**, PhD (experimental nuclear physics); Computer Simulation, Senior Scientist, Science Applications International Corp., San Diego, California, U.S.A.; **Martin Coniglio,** Meteorologist, KUSA-TV, Denver, Colorado, U.S.A.; **Claude Culross**, PhD (Organic Chemistry), retired, Baton Rouge, Louisiana, U.S.A.; **Michael Coffman**, PhD, (ecosysytems analysis and climate change), CEO of Sovereignty International, President of Environmental Perspectives, Inc., Bangor, Maine, U.S.A.; **Dalcio K. Dacol**, PhD (physics, University of California at Berkeley), physicist at the US Naval Research Laboratory, Washington, D.C., U.S.A.; **James DeMeo**, PhD (University of Kansas, Geography, Climate, Environmental Science), retired University Professor, now in Private Research, Ashland, Oregon, U.S.A.; **Per Engene, PhD**, Biologist, Valenvegen, Norway; **Donald W. Farley**, P.Eng, M.Eng. (Water Resources Engineering & Hydrology), Gatineau, Quebec, Canada; **Robert Jacomb Foster**, BE (Adelaide University), palaeoclimatologist and energy economist, Director Lavoisier Group; past Councillor Royal Society of Victoria and Victorian Institute of Marine Science, Melbourne, Australia; **Louis Fowler**, BS (Mathematics), MA (Physics), 33 years in environmental measurements (Ambient Air Quality Measurements), Austin, Texas, U.S.A.; **Peter Friedman,** PhD, Member, American Geophysical Union, Assistant professor of Mechanical Engineering, University of Massachusetts, Dartmouth, Massachusetts, U.S.A.; **Gordon Fulks**, PhD (Physics, University of Chicago), cosmic radiation, solar wind, electromagnetic and geophysical phenomena, Portland, Oregon, U.S.A.; **Maureen T. Gallagher**, PhD, (Geology, Micropaleontology), Consultant, Calgary, Alberta, Canada; **Rigoberto Garcia**, MC, Climate Change and Urban Sustainability, Doctorate Student, El Colegio de México, México City, DF, México; **David Gray**, PhD (EE Stanford U., Electromagnetic Wave

Transmission (in Atmosphere, and fiber)), Asst Professor of Engineering, Messiah College, Grantham, Pennsylvania, U.S.A.; **Charles Hammons**, PhD (Applied Mathematics), systems/software engineering, modeling & simulation, design, Consultant, Coyle, Oklahoma, U.S.A.; **D. Hebert,** PhD, Faculty for Chemistry and Physics, Institut fur Angewandte Physik, Freiberg, Germany; **Hug Hienz**, PhD, (Chemistry, University of Mainz, Germany), former Professor of Organic Chemistry and Analytical Chemistry, Germany; **Ted Hinds**, BS (Engineering Science), MS (Atmospheric Science), PhD (Physical Ecology, U. Washington, Seattle), Quantitative empirical analyses regarding climatological, meteorological, and ecological responses to environmental stresses, consultant for USA EPA research on global climate change program. Senior Research Scientist, retired, Pacific Northwest National Laboratory, Richland, Washington, U.S.A.; **Ole Humlum**, PhD, Physical Geography, Professor, University of Oslo, Oslo, Norway; **Steve Hynek**, BS (Meteorology), Air Quality Analyst, Dairyland Power Cooperative, La Crosse, Wisconsin, U.S.A.; **Terrell Johnson**, B.S. (Zoology), M.S. (Wildlife & Range Resources, Air & Water Quality), Principal Environmental Engineer, Green River, Wyoming, U.S.A.; **Bill Kappel**, BS (Physical Science-Geology), BS (Meteorology), Storm Analysis, Climatology, Operation Forecasting, Vice President/Senior Meteorologist for Applied Weather Associates, LLC, University of Colorado, Colorado Springs, U.S.A.; **Harald Kehl**, PD Dr. rer. nat., Ecosystem Analysis, Lecturer, Researcher, Berlin, Germany; **Olav M. Kvalheim**, Professor, Department of Chemistry, Univ. of Bergen, Bergen, Norway; **Rune B. Larsen**, PhD (Geology, Geochemistry), Associate Professor, Norwegian University of Science and Technology (NTNU), Trondheim, Norway; **Jay Lehr**, BEng (Princeton), PhD (environmental science and ground water hydrology), Science Director, The Heartland Institute, Chicago, Illinois, U.S.A.; **Edward Liebsch**, MS (Meteorology, Pennsylvania State University), BA (Earth Science & Chemistry, St. Cloud State University), Air Quality, Meteorology, Senior Air Quality Scientist, HDR, Inc., Minneapolis, Minnesota, U.S.A.; **Peter Link**, BS, MS, PhD (Geology, Climatology), Geol/Paleoclimatology, retired, Active in Geol-paleoclimatology, Tulsa University and Industry, Evergreen, Colorado, U.S.A.; **Endel Lippmaa**, Prof.Dr.habil (Physics, Chemistry), Chairman - Energy Council of the Estonian Academy of Science, Tallinn, Estonia**; Keith Lockitch**, PhD (Physics, University of Wisconsin, Milwaukee), Science and Environmental Policy, Resident Fellow, Ayn Rand Institute, Irvine, California, U.S.A.; **Björn Malmgren,** PhD, University Professor, Paleoclimate Science, retired, Lerum, Sweden; **Les McDonald**, RP Bio; Senior Impact Assessment Biologist, BC Environmental Protection (retired); Consulting Aquatic Biologist, Cranbrook, British Columbia, Canada; **Rob Meleon**, PhD, biochemist, CSO Pepscan, Lelystad, The Netherlands; **Amos Meyer**, Theoretical Physics, Applied Mathematics, Mathematical Modeling, Chief Scientist, Westport, Connecticut, U.S.A.; **Michael Monce**, PhD (Physics), Atomic/Molecular, Energy and Environment, Professor of Physics, Connecticut College, New London, Connecticut, U.S.A.; **Robert Neff**, M.S. (Meteorology, St Louis University), Weather Officer, USAF; Contractor support to NASA Meteorology Satellites, Retired, Camp Springs, Maryland, U.S.A.; **Peter Oliver**, BS, MS, PhD, FGA, Geology, Geochemistry, Paleomagnetism, Research Scientist, retired, Upper Hutt, New Zealand; **Curtis Osgood**, BS (Meteorology, Lyndon State College), Consulting Meteorologist, Forecaster/Consultant, Granby, Massachusetts, U.S.A.; **Donald Parkes**, PhD, BA (Hons), MA, retired Professor Human Ecology, Australia and Japan; **Daniel Joseph Pounder**, BS (Meteorology, University of Oklahoma), MS (Atmospheric Sciences, University of Illinois in Urbana-Champaign); Weather Forecasting, Meteorologist, WILL AM/FM/TV, the

public broadcasting station of the University of Illinois, Urbana, U.S.A.; **Patrick Powell**, BS (Meteorology/Physical Geography, Western Illinois University), AMS Board of Broadcast Meteorology, CBM, Chief Meteorologist, WLUK-TV, Green Bay, Wisconsin, U.S.A.; **George A. Reilly**, PhD (Geology), Winnipeg, Manitoba, Canada**; Henriques Renato**, PhD, Geology, Auxiliary Professor, University of Minho, Braga, Braga, Portugal; **Robert G. Roper**, PhD, Emeritus Professor of Atmospheric Sciences, Georgia Institute of Technology, Atlanta, Georgia, U.S.A; **Curt Rose**, BA, MA (University of Western Ontario), MA, PhD (Clark University), Professor Emeritus, Department of Environmental Studies and Geography, Bishop's University, Sherbrooke, Quebec, Canada; **Robert Roseman**, Meteorology & Climatology, TV Meteorologist, Denver, Colorado, U.S.A.; **Clive Schaupmeyer**, M.Sc., P.Ag. , Coaldale, Alberta, Canada; **Milos Setek**, Meteorologist/Statistician, Senior Scientist, Bureau of Meteorology, Melbourne, Australia; **John Shade**, BS (Physics), MS (Atmospheric Physics), MS (Applied Statistics), Industrial Statistics Consultant, GDP, Dunfermline, United Kingdom; **Vedat Shehu**, Prof. Dr. Eng., Geologist, Engineering Geology, Tectonics, Geoingineering, Sharon, Massachusetts, U.S.A. and Professor "Geoingineering Research Unit" in Tirana, Albania; **Richard F. Shepherd**, ARCS (Mathematics), PhD, DIC (high energy physics), FIMA (numerical analysis), FBCS (director of computing centre, retired), Pembroke, United Kingdom**; Douglas Southgate**, PhD, Professor of Agricultural, Environmental and Development Economics, Ohio State University, Columbus, Ohio, U.S.A.; **Arlin Super**, PhD (Meteorology), Weather Modification, retired Research Meteorologist, U.S. Bureau of Reclamation, Saint Cloud, Minnesota, U.S.A.; **Wojciech J. Szalecki**, PhD (Organic Chemistry), Senior Scientist, formerly University of Lodz, Poland, and University of Colorado, now in Eugene, Oregon, U.S.A.; **Malcolm Taylor**, Dip ES (Climatology and Hydrology specialization), Power Systems Analyst, Otago, New Zealand; **Göran Tullberg**, Civilingenjör i Kemi (equivalent to Masters of Chemical Engineering), currently teacher of Environmental Protection Engineering and Organic Chemistry at University in Växjö; Falsterbo, Sweden; **Roderick W. Van Koughnet**, BS (Geology), MS (Geology (Geophysics), Wright State University), Senior Geoscientist, L&M Petroleum, Wellington, New Zealand; **Gösta Walin**, Professor, oceanografi, Earth Science Center, Göteborg University, Göteborg, Sweden; **Neil Waterhouse**, PhD (Physics, Thermal, Electronic Properties of Materials, Precise Temperature Measurement), retired, National research Council, Bell Northern Research, Ottawa, Ontario, Canada; **Jack Wedel**, BS (Geography), Arctic Hydrology, retired, Environment Canada, Keewatin, Ontario, Canada; **James Weeg**, BS (Geology), MS (Environmental Science), Professional Geologist/hydrologist, Associate Professor, Environmental Geology, Advent Environmental Inc, Mt. Pleasant, South Carolina, U.S.A.; **Rich Weiss**, BSc (Meteorology, Valparaiso University), Meteorologist, Supervisor of Meteorology, Houston, Texas, U.S.A.; **Forese-Carlo Wezel**, Professor of Stratigraphy (global and Mediterranean geology, mass biotic extinctions and paleoclimatology), University of Urbino, Urbino, Italy; **Arnold Woodruff**, M.Sc. (Atmospheric Physics, U.C.W.Aberystwyth), B.Sc. (Physics, Durham), Terrestrial & Spaceborne Exploration Geophysics, Consultant Geophysicist, Woodruff Exploration & Production Ltd., Huntingdon, Cambridgeshire, U.K.; **Chris Yakymyshyn**, PhD, MS, BS (EE/Physics), Instrumentation, Vice President Technology, Field Metrics Inc., Seminole, Florida, U.S.A.; **Roger Young**, BS, MS, D.I.C. F.G.S., Geophysics, Geophysical Consultant, Bedford, Bedfordshire, England; **Josef Zboril**, MSc. (Chemistry), Board Member, Confederation of Industry, Prague, Czech Republic; **Stan Zlochen**, MS (Atmospheric Science), USAF (retired), Omaha, Nebraska, U.S.A. (LINK) (LINK)

Former chemistry professor Dr. Ron Smith, the Director of International Relations and Security Studies at the University of Waikato in New Zealand, whose research focuses on the interface between science and society, questioned man-made climate fears in 2008. "As is well-known, there is serious and persistent skepticism in regard to both the magnitude and the direction of climate change and the degree to which it may be said to be anthropogenic. This might be a largely 'academic' question were it not for the fact that measures of taxation and regulation are proposed that have the potential to cause significant harm to the economic well-being of New Zealand," Smith wrote on June 4, 2008. "The consequence of suppressing the deviant view may not be simply that we remain in ignorance. It may be that we embark on policies that are likely to be very damaging to us and only marginally advantageous (if at all) to the wider global community," Smith explained. There is a need for a substantial and wide-ranging debate and this must surely mean that at least one of the political parties contesting the up-coming election must offer an alternative to the prevailing un-wisdom on climate," Smith added. "Given that the world will very likely continue to increase its production of greenhouse gases (and in the light of the earlier-expressed doubts about the causation and extent of any climate change) there should surely be some thorough-going review of the facts before New Zealand, to its very considerable detriment, elects to fulfill what it sees as its Kyoto commitments," Smith wrote. "It may be that even if we satisfied ourselves that the scientific data pointed (with whatever degree of certainty) to undesirable change, caused by human activity, we still might conclude that we should not proceed with measures now proposed on the grounds of the damage that these will cause to New Zealand interests, both collective and individual," he concluded. (LINK) & (LINK)

Chemist Tom Kondis, a consultant with practical experience in absorption and emission spectroscopy, dissented in 2008. "To support their argument, advocates of man-made global warming have intermingled elements of greenhouse activity and infrared absorption to promote the image that carbon dioxide traps heat near earth's surface like molecular greenhouses insulating our atmosphere. Their imagery, however, is seriously flawed," Kondis wrote in a May 21, 2008, essay titled "Greenhouse Gas Facts and Fantasies." "The fictitious 'trapped heat' property, which they aggressively promote with a dishonest 'greenhouse gas' metaphor, is based on their misrepresentation of natural absorption and emission energy transfer processes and disregard of two fundamental laws of physics. Their promotional embellishments have also corrupted the meaning of 'greenhouse effect,' a term originally relating the loose confinement of warm nighttime air near ground level by cloud cover, to hot air trapped inside a greenhouse," Kondis explained. (LINK)

Dr. Klaus P. Heiss, formerly of Princeton University and Mathematica, and a space engineer who has worked with NASA, the US Atomic Energy Commission and the Office of Naval Research. Heiss received the NASA Public Service award for unique contributions to the US Space Program and is a member of the International Astronautics Academy. Heiss dissented from what he termed the "alleged climate catastrophe" in 2007. "The 20th Century increased the amount of carbon dioxide in the atmosphere continuously. Man-made CO 2 grew exponentially; however, global temperatures fell between 1940 and 1975, during the time span as the global industrial production almost exploded. Then [temperatures] rose strongly to 1990 and they have since stagnated, with the exception of El-Nino 1998 – at roughly the same level, although CO 2

emissions are still rising," Heiss wrote in a September 7, 2007 commentary titled "No Reason For Hysteria." "The entire atmospheric carbon dioxide, of which man-made CO 2 is only a fraction of, is not to blame for global warming," Heiss explained. "Carbon dioxide is not responsible for the warming of the global climate over the last 150 years. But what then? For more than 90 percent are changes in the Earth-Sun relationship to the climate fluctuations. One is the sun's activities themselves, such as the recently discovered 22-year-cycles occur and sunspots," Heiss continued. "Looking at the climate history of our planet, it is clear to see - and quite reassuring with regard to the possible consequences of global warming as predicted by the IPCC -- that we are now (more precisely, in the last two to three million years ago) in a very cold climate period. Any warming would give us only the best long-term climate of the last 560 million years back," he added. "Moreover, despite all the proposed measures and their enormous costs, most professional economic studies indicate that warmer times are generally better," he concluded. (translated) (LINK)

Economist Dr. Arnold Kling, **formerly of the Federal Reserve Board and Freddie Mac,** expressed man-made climate skepticism in 2007. "I am worried about climate change. In one respect, I may be more worried than other people. I am worried because I have very little confidence that we know what is causing it," Kling wrote in a December 21, 2007 commentary. "One of my fears is that we could reduce carbon emissions by some drastic amount, only to discover that--oops--it turns out that climate change is being caused by something else," Kling explained. "I am not a skeptic about the rise in average temperatures. Nor am I skeptical that the amount of carbon dioxide in the atmosphere has been increasing. However, I remain skeptical about the connection between the two," he wrote. (LINK)

Dr. R. W. Bradnock, former Head of Department of Geography at the School of Oriental and African Studies (SOAS) and currently a Senior Visiting Research Fellow at King's College London (KCL), has published field-based research on sea level and environmental change and dissented in 2008. "In my own narrow area of research, I know that many of the claims about the impact of 'global warming' in Bangladesh, for example, are completely unfounded. There is no evidence that flooding has increased at all in recent years. Drought and excessive rainfall are the nature of the monsoon system. Agricultural production, far from being decimated by worsening floods over the last twenty years, has nearly doubled," Bradnock wrote on June 9, 2008. "There remain many academics from a wide range of fields who question the evidence, and who believe that the catalogue of woes directly attributed to 'global warming' cannot be reduced simply to an increase in the proportion of carbon dioxide in the atmosphere from 280 parts per million by volume to c.384 ppmv - the increase that has taken place as a result of the intensive use of fossil fuels since the beginning of the industrial revolution," Bradnock added. (LINK) (LINK)

Chemical Engineer Dr. Thomas L. Gould, an award-winning engineer with the Society of Petroleum Engineers, dissented from climate fears in 2008. "Global warming is dominated by the sun, clouds, water vapor, and other factors before any influence is felt by CO2," Gould wrote EPW on June 10, 2008. "Even if you accept the alarmist view that the seas will rise and this is a 'Planetary Emergency', why do we think that we can solve this problem with climate control, costing $10's of Trillions? We need to change the debate, and not let the alarmists set the agenda," Gould wrote. "I have been doing a lot of personal research into the short comings of the Global Warming alarmist theories," he added. (LINK)

Dr. Jon Hartzler, a retired science professor from St. Cloud State University in Minnesota declared himself skeptical in 2008. "We are left with what we call correlations, like increasing carbon dioxide and increasing temperature. This is not proof, only suggestive in science," Hartzler wrote on June 30, 2008. "The Chinese laugh at the Kyoto Protocol and the 'civilized' world trying to fix 'global warming.' Our puny little effort (but very costly) when China refuses and puts their economy first makes us seem insignificant. It seems to me there are lots of reasons for an informed person to be skeptical of global warming and its 'solutions.' Also, no one seems to acknowledge the huge benefits to crop production of warmth and carbon dioxide." Hartzler also signed the 2008 Oregon Petition dissenting from man-made climate fears. "There is no convincing scientific evidence that human release of carbon dioxide, methane, or other greenhouse gases is causing or will, in the foreseeable future, cause catastrophic heating of the Earth's atmosphere and disruption of the Earth's climate. Moreover, there is substantial scientific evidence that increases in atmospheric carbon dioxide produce many beneficial effects upon the natural plant and animal environments of the Earth," states the petition that Hartzler signed. (LINK) (LINK) (LINK)

Aerospace Engineer and Physicist Dirck T. Hartmann, who worked on the Apollo Space Program for NASA, dissented from man-made climate fears in 2008. "High humidity is the reason nights are so balmy in the tropics. At 100 degrees F and 100% relative humidity, water vapor accounts for only 2% of the atmosphere. It has a greater effect than all other greenhouse gases combined but, since it cannot be regulated, is rarely mentioned as a greenhouse gas," Hartmann wrote on July 3, 2008. "Our mainstream media uses every opportunity to hype the hoax of man-made global warming by repeated reporting of data and events that appear to support it, and ignoring those that contradict it," Hartman explained. "Hopefully man made global warming will come to be recognized for the hoax it truly is," he added. (LINK)

Dr David Stockwell, an ecological modeler who has published research articles on climate change in international journals and authored a 2006 book about "niche modeling," questioned global warming theory in 2008. "The increase in temperature due to the greenhouse effect has a maximum. At this maximum, additional greenhouse gas absorbers do not increase the temperature, to the limits detectable in this setup," Stockwell wrote in an article titled "Home Science Experiment Disproves Global Warming Theory" on November 13, 2008. Stockwell has also criticized the UN IPCC. "Two claims made in the IPCC Chapter 3 Section 3.4 p40 of WG1 are obviously false," Stockwell wrote on June 23, 2008. "Use of dubious evidence and false claims to support a theory indicates the degree of confirmation bias operating in global warming," he added. "It would be recognized that the IPCC is just another review, and an unstructured and biased one at that. Its main in-scope goal is to find a human influence on climate, and the range of reasons for climate change are out-of-scope, creating a systematic bias against natural explanations for climate change. I think climate models are inadequately validated, confidence in the skill of models to forecast global warming is vastly exaggerated, and current skill is not enough to serve useful purposes," he added. (LINK) (LINK) (LINK) (LINK) (LINK)

Chemist and Engineer Daniel P. Johnson rejected global warming fears in 2008. "I have dealt with real world data for 30 years and honed what skills I possess into the ability to

look at data and derive the best understanding possible from it. I went into this adventure with the idea of seeing for myself whether the anthropogenic position was correct or the only credible explanation based on the available evidence. I still must admit to a strong relationship between atmospheric CO2 and global warming since 1970 but feel, based on the above, that it is only one potential contributor to global warming and that the changing geomagnetic field is another major player in what has occurred during this same period," Johnson wrote in May 2008. "I find this, overall, somewhat reassuring since, to me, it offers some hope with regard to the future unlike the gloom and doom prognostications being promulgated based on the increasing CO2 models," Johnson explained. (LINK)

Professor Dr. Geoffrey Kearsley, a geographer developing a program in environmental communication at the University of Otago and director of Wilderness Research Foundation, dissented from global warming fears in 2008. "It is said that we are now beyond the science and that the science of global warming has been finalized or determined and that all scientists agree. Skeptics and deniers are simply cynical pawns in the pockets of the big oil companies. This is unfortunate, to say the least. Science is rarely determined or finalized; science evolves and the huge complexity of climate science will certainly continue to evolve in the light of new facts, new experiences and new understandings," Kearsley wrote on July 17, 2008. "The longer trends tell us that by 2020, we will be experiencing an unusually low-energy sun. Apparently, these are exactly the conditions that preceded the Maunder Minimum and ushered in the Little Ice Age. The science goes on. Water vapor is the biggest greenhouse gas by a huge factor. The link between CO2 and temperature change is erratic; often, carbon follows heat rather than the uncritical popular perception that heat is induced by carbon. The oceans are a vast reservoir of dissolved CO2; as they warm, they release it and reabsorb it as they cool. Which causes what? There is much more yet to learn," Kearsley added. "There is an increasing body of science that says that the sun may have a greater role. If it does have, then global warming is likely to stop, as it appears to have done since 1998, and if the current sunspot cycle fails to ignite, then cooling, possibly rapid and severe cooling, may eventuate." (LINK)

Earth Scientist Greg Benson, who has 30 years of geologic study and 25 years of experience as a research specialist in geologic modeling, rejected climate fears in 2008. "The concentration of atmospheric carbon dioxide (black line) has changed greatly since fossilized life began on Earth nearly 600 million years ago. In fact, there is only 1/19 as much CO2 in the air today as there was 520 million years ago. That high CO2 was hardly the recipe for disaster," Benson wrote in a July 15, 2008, analysis. "Geologists and climatologists are certain that the Earth has gone through periods both warmer and colder than what we call 'normal' today. The planet has gone through these temperature fluctuations on a regular and generally predictable cycle, and there is overwhelming evidence that it has been doing this throughout geologic history," Benson explained. "Geologists and paleoclimatologists know that in the past the Earth's temperature has been substantially warmer than it is today, and that this warming has occurred under purely natural circumstances. Until we can say precisely how much of the current global warming and greenhouse gas increase is the result of this normal temperature cycle, we will not be able to measure how much human activity has added to this natural trend, nor will we be able to predict whether there will be any lasting negative effects," he added. (LINK)

Andrei Kapitsa, a Russian geographer and Antarctic ice core researcher, slammed the UN IPCC as "the biggest ever scientific fraud" in 2008. "The Kyoto theorists have put the cart before the horse. It is global warming that triggers higher levels of carbon dioxide in the atmosphere, not the other way round," Kapitsa said in a July 10, 2008, article on Hindu.com. "A large number of critical documents submitted at the 1995 U.N. conference in Madrid vanished without a trace," the Kapitsa says. "As a result, the discussion was one-sided and heavily biased, and the U.N. declared global warming to be a scientific fact," Kapitsa explained. "We found that the level of CO2 had fluctuated greatly over the period but at any given time increases in air temperature preceded higher concentrations of CO2." (LINK)

Dr. Robert A. Perkins, PE, is an associate professor of civil and environmental engineering at the University of Alaska Fairbanks. He is a registered civil engineer in California and Alaska and has worked in arctic and sub-arctic for over 30 years. He is a scientist as well as an engineer and specializes in risk analysis and presentation. Perkins dissented in 2008. "All the 'science' that you read about global warming is based on models, not observed facts. Here are some reasons to doubt the models: Akaike proved that the more parameters a model needs to fit the historical data, the less certain the model will predict the future," Perkins told EPW on December 10, 2008. "All the climate models are incredibly complex, hence 'over-parameterized.' The climate models, however, do not even fit the present data, at least in the Arctic," Perkins explained. "Finally, none of the published models that 'blame' human activity for the warming trend account for the known historical variations in global climate. The underlying physical drivers of those known historical variations are not known; hence they cannot be subtracted from the current climate prediction models," he added. (LINK)

Chemist Dr. Claude Culross slammed warming fears in 2008. Culross declared there was a "complete dearth of experimental proof for man-made global warming" on July 23, 2008. "Fossils from our Holocene Era reveal a northern tree line approaching the Arctic Ocean. Surely it was warm enough then to preclude pack ice, and perhaps summer ice, from natural causes, and at only three-quarters of today's carbon-dioxide level," Culross wrote. "Climate that seems unusual, but falls within the natural envelope of past climate, is no proof of man-made global warming. Dire predictions of catastrophe from that bottomless pit of disasters du jour, the Intergovernmental Panel on Climate Change, are based solely on computer models that amount to poorly crafted mathematical opinions, not experimental proof," Culross explained. "There is no proof that man-made carbon dioxide causes additional warming, or that carbon-dioxide reduction would reduce warming. Problem mitigation and conservation are the right approach," he added. (LINK) & (LINK) Culross also signed the 2008 Manhattan Declaration which stated in part "that there is no convincing evidence that CO2 emissions from modern industrial activity has in the past, is now, or will in the future cause catastrophic climate change." (LINK)

Biochemist and molecular biologist Dr. Lynwood Yarbrough, who ran a research lab and served as a consultant for the National Institutes of Health, dissented in 2008. "Several years ago I began reading the literature on climate change that was appearing in *Science*, *Nature*, and other peer-reviewed journals. I did so because I was concerned at the alarmism I was seeing in the media regarding 'global warming' and the dire predictions of some in the scientific literature," Yarbrough wrote on July 23, 2008. "I consider myself a

scientific skeptic and want to be convinced by the data before I accept something as 'true' (see Freeman Dyson at edge.org on skepticism in science). As a biologist, I am aware of a number of cases in which science has been led in directions not based on hard evidence. Examples include Malthus and the Malthusian Theory, Lysenkoism in the old Soviet Union, and eugenics in the U.S. and elsewhere (see the excellent archive at Cold Spring Harbor for examples of such "science.") "Kyoto is a failure and a new approach is badly needed," he explained. (LINK) (LINK)

Chemical Engineer Ian McQueen disputed any potential global warming threat in 2008 during a presentation to the Canadian Nuclear Society. "Carbon dioxide is not the bogeyman - there are other causes that are much more likely to be causing climate change, to the extent that it has changed," McQueen said according to a July 24, 2008, article. The article reported, "Carbon dioxide does have a small warming effect, McQueen said, but 32 per cent of the first few molecules do the majority of the warming. The carbon dioxide content of the atmosphere, he said, is currently at 380 parts per million; if that were upped to 560 parts per million, Earth's temperature would only rise about 0.3 degrees." (LINK)

Dr. Art Raiche, former Chief Research Scientist with Australia's Commonwealth Scientific and Industrial Research Organization (CSIRO) who was awarded the Australian Society of Exploration Geophysicists (ASEG) Gold Medal in 2006, established the consortium for research in electromagnetic modeling and inversion. (Bio Link) "The suppression of scientific evidence that contradicts the causal link between human-generated CO2 and climate has been of great concern to ethical scientists both here in Australia and around the world," Raiche wrote on July 21, 2008, in the *Australian*. "The eco-hysteria that leads the Greens, as well as the left-leaning media, to attack any person who attempts to publish science that contradicts their beliefs is a gross example of the dangerous doctrine that the end justifies the means," Raiche wrote. Raiche has criticized CSIRO for its man-made global warming advocacy. "As an example, consider the Garnaut Report [on global warming], possibly the longest economic suicide note in Australia's history. It is based on the dire predictions of CSIRO's modeling programs," Raiche wrote according to a July 27, 2008, article in the *Herald Sun*. But CSIRO ignores these reservations and continues its role in hopes that they prove that organization's relevance by scaring the populace," Raiche explained. "It is my strong belief that CSIRO has passed its use-by date. The organization that bears the name of CSIRO has very little in common with the organization that I joined in 1971, one that produced so much of value for Australia during its first seven decades," he added. (LINK) & (LINK) & (LINK)

Mathematician Dr. Muriel Newman, a member of the Northland Conservation Board, declared "growing numbers of people [are] now questioning the whole basis" of man-made climate fears in 2008. "Around the world, as controversy over climate change continues to grow, it remains very clear that contrary to what the politicians tell us, not only is there is no consensus of scientific thought on this matter, but the science is certainly not settled. In fact, in a bizarre twist of fate, at a time when advocates of man-made global warming continue to push government policies to restrict energy use and the burning of fossil fuels in order to prevent 'catastrophic' warming, the world continues to cool," Newman wrote on July 27, 2008. "That is leading to increasing scepticism that the call to sacrifice living standards in order to "save the planet" is just political spin designed to persuade the public to accept green taxes. […] With growing numbers of people now

questioning the whole basis of the man-made global warming theory, there is increasing speculation that the defeat of the British Labour Party in the local body elections and more recently in the by-election in their former safe seat of Glasgow East is indicative of a change in the mood of the British public against the government's climate change agenda," Newman added. (LINK)

Japanese Scientist Dr. Takeda Kunihiko, vice-chancellor of the Institute of Science and Technology Research at Chubu University in Japan and former vice deputy president at the Shibaura Institute of Technology, dissented in 2008. "Global warming has nothing to do with how much CO2 is produced or what we do here on Earth. For millions of years, solar activity has been controlling temperatures on Earth and even now, the sun controls how high the mercury goes. CO2 emissions make absolutely no difference one way or another. Soon it will cool down anyhow, once again, regardless of what we do. Every scientist knows this, but it doesn't pay to say so. What makes a whole lot of economic and political sense is to blame global warming on humans and create laws that keep the status quo and prevent up-and-coming nations from developing. Global warming, as a political vehicle, keeps Europeans in the driver's seat and developing nations walking barefoot," Takeda said, according to a July 22, 2008 article. (LINK)

Astrophysicist Dr. Dennis Hollars dissented from man-made climate fears in 2008. "What I'd do with the IPCC report is to put it in the trash can because that's all it's worth," Hollars, who holds a doctorate in astrophysics from New Mexico State University, said. According to a November 20, 2008, article Hollars added that "carbon dioxide was an insignificant component of the earth's atmosphere and that, rather than being the purveyor of doom it is currently viewed as today, it is needed in order for plants to grow." "Mars' atmosphere is about 95 percent CO2 and has no global warming," Hollars stated. Hollars previously declared "man made global warming is basically flawed science at this point. We do not have sufficient temperature data to even decide if there is a planetary scale warming, let alone what the cause might be. In the '70s it was global cooling that was the scare - by many of the same people who are pushing warming now, using models that are not even close to reality." (LINK) (LINK)

Marcel Severijnen, former head of Environmental Monitoring Department of the Province of Limburg in the Netherlands, declared the global warming "debate should remain open" in 2008. "'Debate closed' is a deadly pitfall, unworthy to integer researchers. Any result of research, be it measurements or modeling should be open to confirmation or denial from other researchers. That is the only way to come closer to the real world," Severijnen wrote on August 6, 2008. "Policymakers might have declared the debate on climate change as closed, as even scientists joined them. Scientists should however strive to improve their understanding of the real world, maybe even stronger in cases where a seeming majority has decided to end the debate," Severijnen explained. "As most air pollution models use GCM-like modelling for predictive purposes, one can imagine the similarity in uncertainty between air pollution modelling and climate modelling. As far as I see, only little is done to confront climate model results with real world observations. Climate scientists could learn from their air pollution colleagues, and experience and accept the limits of their models," Severijnen added. (LINK)

Dr. Roger W. Cohen, an American Physical Society (APS) fellow who earned a doctorate in physics, worked in the electronics industry, and retired in 2003 from

ExxonMobil as manager of strategic planning, said he reversed his views of man-made climate change and is now a skeptic. "I retired four years ago, and at the time of my retirement I was well convinced, as were most technically trained people, that the IPCC's case for Anthropogenic Global Warming (AGW) is very tight. However, upon taking the time to get into the details of the science, I was appalled at how flimsy the case really is," Cohen wrote on August 6, 2008. "I was also appalled at the behavior of many of those who helped produce the IPCC reports and by many of those who promote it. In particular I am referring to the arrogance; the activities aimed at shutting down debate; the outright fabrications; the mindless defense of bogus science, and the politicization of the IPCC process and the science process itself. At this point there is little doubt that the IPCC position is seriously flawed in its central position that humanity is responsible for most of the observed warming of the last third of the 20th century, and in its projections for effects in the 21st century," Cohen explained. (LINK) Cohen is so confident of a lack of global warming that he "issued a public challenge Jan. 20 on *The Durango Herald* op-ed page, betting $5,000 that the globe's average temperature will be cooler in 2017 than it was in 2007." (LINK)

Meteorologist Tom McElmurry, certified as a meteorologist in 1954 by the United States Air Force, is a member of the American Meteorological Society a member of the Israel Geological Society and a former tornado forecaster in the Kansas City Severe Weather Service; he has also written scientific articles published by the USAF and the Bulletin of the American Meteorological Society. McElmurry rejected climate fears in 2008. "Governmental officials are currently casting trillions down huge rat hole to solve a problem which doesn't exist but say no to drill off shore for a real one. Its misapplied atmospheric science for profit," McElmurry wrote on August 7, 2008. "Packs of rats wait in that [rat] hole to reap trillions coming down it to fill advocates pockets. As a Meteorologist I find it scientifically Dishonest!" McElmurry explained. "I do believe that excess carbon dioxide emissions are not favorable to the earth's atmosphere, and that efforts should be made to reduce them, but the claims of the effects some are saying will come on the earth if we do not drastically reduce them, are fantastically blown out of believable proportion," McElmurry added. "The money we are about to spend on drastically reducing carbon dioxide will line the pockets of the environmentalists who have such expertise readily available at the right price. And some politicians are standing in line to fill their pockets with kick back money for large grants to the environmental experts, for the purpose of developing new ways to drastically reduce the emissions. In case you haven't noticed, it is an expanding profit-making industry, growing in proportion to the horror warnings by government officials and former vice-presidents," McElmurry explained. (LINK) (LINK)

Professor Larry Bell of the University of Houston has a forthcoming book, *Climate Hysteria,* which is dedicated to Al Gore because the former Vice President's "invention of facts made it necessary." "Many questions remain to be answered regarding the real significance of anthropogenic carbon dioxide as a climate forcing factor and related rising sea level consequences projected by the [UN] IPCC," Bell, who is internationally for his contributions to the design of space habitats and systems, including the International Space Station, wrote on June 18, 2008. "First, there is no incontrovertible evidence to support contentions that pre-industrial carbon dioxide levels were consistently lower than the 380 ppm recorded now. More than 90,000 published measurements carried

out between 1812 and 1961 indicate that atmospheric levels were actually rising before the Industrial Revolution. They reached about 440 ppm in 1820, dropped to about 390 ppm by 1855, and rose back to about 440 ppm by 1940," Bell explained. "Cause and effect relationships between atmospheric carbon dioxide concentrations from all sources and global temperatures are inconclusive. Although carbon dioxide levels have generally been observed to increase during warm periods and fall during colder ones, the temperature changes typically lead rather than follow carbon dioxide changes. For example, records indicate that carbon dioxide concentrations fall at the start of ice ages, when more of the gas is absorbed by colder oceans, and levels rise during glacial retreats when the processes reverse," Bell continued. "The National Oceanographic and Atmospheric Administration estimates that about 97 percent of that small amount originates from natural sources, and further, that all atmospheric carbon dioxide may account for less than 10 percent of total greenhouse influence. In comparison, water vapor, by far the primary greenhouse gas, may account for 70 percent or more of the very small total warming effect," he added. (LINK) (LINK)

Geologist Dr. W.J. "Bill" Collins, a professor at the School of Earth and Environmental Sciences at Australia's James Cook University, dissented in 2008. "As the climate change debate moves from the scientific to the political, it is important to stay with the facts. The bottom line is that humans cannot prevent global warming. Therefore, we should not be forced into emissions trading schemes, or any other scheme that sacrifices Australia's economic advantage and standard of living for the wrong reasons," Collins wrote on August 13, 2008. "Sure, let us try to lessen our environmental impact and develop a sustainable economy, but we should not be carried away by misconceptions about what is driving climate change. It's with the Earth itself," Collins explained. (LINK) (LINK)

Agricultural scientist John Williams, a researcher, author, and educator who is studying for a PhD at the University of Melbourne, dissented in 2008. Williams said that "there are 'strong and powerful counter-arguments' to the theories on global warming and carbon trading that are not being fully considered." "There is no proof that carbon dioxide is causing or precedes global warming," Williams wrote on August 15, 2008. "All indications are that the minor warming cycle finished in 2001 and that Arctic ice melting is related to cyclical orbit-tilt-axis changes in earth's angle to the sun," Williams added. (LINK)

Dr. Peter Dailey, director of Atmospheric Science at Boston based AIR Worldwide, a risk modeling and technology firm specializing in risks associated with natural and man-made catastrophes, weather and climate, rejected the notion that there is a "consensus" on global warming in 2008. "There is now a near consensus that global air temperatures are increasing, however, there is no consensus on how this has affected the temperature of the world's oceans, and in particular in the Atlantic Ocean, or how much of the recent warming trend is attributable to man's activities," Dailey said according to an August 18, 2008, article. In the article, Dailey noted that "recently published studies indicate that hurricane activity could decrease as a result of other competing factors. 'For example, simulations of tropical cyclone activity carried out at the GFDL using climate conditions projected for the 21st century indicate the potential for decreased hurricane activity under more pronounced global warming conditions, and cautions against a reliance on statistical extrapolations of recently elevated activity levels through the end of the

century,' he said." "For the layman, there is sometimes a tendency to regard every new 'discovery' or scientific finding from the latest published paper as an inviolate fact," Dailey said. "In reality, rarely is there ever a last and final word in studies of complex systems such as earth's environment. Rather, science is a dynamic process based on the scientific method in which researchers test hypotheses leading to new discoveries, but also reexamine earlier theories and try to improve, build upon, or extend them," he concluded. (LINK)

Indian Geologist Dr. Ritesh Arya, who specializes in hydrogeology and groundwater resources in the Himalayas, has authored several research papers and was invited by the Royal Geographical Society in 2005 to discuss climate change. Ayra, who has been the recipient of the Great Indian Achievers Award 2004 and the Bharat Excellence Award 2003, rejected man-made climate fears in 2008. "There is urgent need to put the phenomenon, which had not been triggered off suddenly, in the right perspective as today almost every human activity right from vehicular emissions to use of polythene is being linked to global warming which was a much larger event which started as soon as the Ice Age ended. The fact was that the 'biotic' agents (man and other living organisms) had a very small role compared to the 'abiotic' (geological, geomorphologic, climatologic, planetary and hydrological) events like earthquakes, volcanic eruptions, tsunamis, movement of glaciers and landslides," Arya told *The Tribune* on February 18, 2008. According to the article, Arya termed "the hype and panic over 'global warming' as 'unnecessary.'" "There is a hype of global warming created by western mass media and there is a need to redefine the whole concept," Arya also said on June 14, 2008. He also has been recognized by the Guinness World Records for his "achievement in finding groundwater in the Chushul area at an altitude of more than 14,000 ft." (LINK) (LINK) (LINK)

Meteorologist John Takeuchi did an interview with the Vacaville, CA *Reporter* and rejected claims that current climate is unusual in 2008. "The atmosphere has periodic warming and cooling cycles. The sun is the primary source of energy impacting the earth's surface. That energy heats the land and the seas, which then warm the air above them. Water vapor and other gases in the atmosphere also affect temperature," Takeuchi wrote on July 10, 2008. "Global warming proponents claim that human activity is increasing CO2 in the atmosphere - that's true - and that the increased CO2 is causing air temperature to rise. Studies, however, point elsewhere. When long-term plots of global temperature and CO2 content are overlaid, CO2 lags temperature. There must be another culprit," Takeuchi explained. "Oceans are the main repository for CO2. They release CO2 as their temperature rises - just like your beer. This strongly suggests that warming oceans - heated by the sun - are a major contributor to CO2 in the atmosphere," he added. "Politicians have come to see global warming as a way to raise revenue by rationing CO2 production with schemes such as the 'cap and trade' legislation now in Congress. The taxes assessed for producing CO2 could be huge. But global warming as proclaimed by Al Gore and Co., is a hoax," he added. (LINK)

Dr. Kevin Warwick is an award-winning Professor of Cybernetics at the University of Reading, England, where he carries out research in artificial intelligence, control, robotics and biomedical engineering. Warwick, whose research interests include robotics and Cybernetics in particular apart from areas like artificial intelligence, control, and biomedical engineering, has won many awards including The Future of

Health technology Award from MIT. Warwick also rejected global warming theory in 2008. "I am afraid that I do not hold with the theory of 'global warming' – there will always be climate change and from the point of view of someone in a wet-cum-cold England, things appear to be getting colder, not hotter," Warwick said according to a September 24, 2008, article. "Big thing here is – do we know what we are doing that is bringing about climate change? At present the answer to this is NO," Warwick explained. (LINK) (LINK)

Veteran Meteorologist Al Kaprielian of WZMY TV-50 in New Hampshire, who has been forecasting for 25 years, rejected the notion that the science is "settled" in 2008. When asked his views about global warming during a September 12, 2008, interview, Kaprielian replied, "We don't have enough data right now. We'll have to wait and see what future weather brings." (LINK)

Retired U.S. Navy Physicist and Chemist Dr. Theodore G. Pavlopoulos, who served in the Navy as a physicist for 37 years and is a member of the New York Academy of Sciences, rejected man-made global warming fears in 2008. "CO2 is a rather harmless green house gas," Pavlopoulos told EPW on September 25, 2008. "CO2 in air has been branded as the culprit for causing the green house effect, causing global warming. However, regularly omitted is another important green house gas also present in air and in much higher concentration. It is water vapor. In the air, it absorbs infrared radiation (heat) more strongly than CO2. The concentration of CO2 in the atmosphere is considerable lower than that of water vapor; it is just a few percent. Consequently, doubling the CO2 concentration would not significantly increase the combined absorption of the two green house gases of water vapor and CO2," Pavlopoulos explained. "Green activists don't acknowledge the critical role oceans play in influencing CO2 concentrations in our air. It has been estimated that our oceans contain as much as fifty times more dissolved CO2 than found in our atmosphere," he added.

Analytical Chemist Michael J. Myers, who specializes in spectroscopy and atmospheric sensing, declared his skepticism in 2008. "I am troubled by the lack of common sense regarding carbon dioxide emissions. Our greatest greenhouse gas is water. Atmospheric spectroscopy reveals why water has a 95 percent and CO2 a 3.6 percent contribution to the 'greenhouse effect.' Carbon dioxide emissions worldwide each year total 3.2 billion tons. That equals about 0.0168 percent of the atmosphere's CO2 concentration of about 19 trillion tons. This results in a 0.00064 percent increase in the absorption of the sun's radiation. This is an insignificantly small number. The yearly increase is many orders of magnitude smaller than the standard deviation errors for CO2 concentration measurement," Myers wrote in a September 25, 2008, essay titled "Numbers Don't Add Up for Global Warming." "'Scientific' computer simulations predict global warming based on increased greenhouse gas emissions over time. However, without water's contribution taken into account they omit the largest greenhouse gas from their equations. How can such egregious calculation errors be so blatantly ignored? This is why man-made global warming is 'junk' science," Myers added. (LINK)

Dr. John Nicol, Chairman of the Australia Climate Science Coalition and a former Senior Lecturer of Physics at James Cook University, dissented from climate change fears in 2008. "The claims so often made that there is a consensus among climate scientists

that global warming is the result of increased man- made emissions of CO2, has no basis in fact," Nicol wrote on September 10, 2008. "There is no evidence, neither empirical nor theoretical, that carbon dioxide emissions from industrial and other human activities can have any effect on global climate," Nicol explained. "The fundamental requirement of reproducible evidence has been lost in the process of promulgating the messages regarding the output from the experimental computer models providing suggestions of global warming for the IPCC reports. No two of these 23 models provide the same values of temperature – the results are not reproducible," Nicol added. "That human-caused global climate change is so small that it cannot yet be differentiated from natural changes has not been accepted. Rather our governments are being subjected to calls to provide policies based on unsubstantiated assertions of largely non-scientific executives of the IPCC, who ignore the uncertainties expressed in the main scientific reports of the International Panel. Evidence that no changes have been observed in Monsoonal activity, snow in the Himalayas, the rate of glacial retreat and the rise of sea level is conveniently ignored or presented as perceived evidence of 'change,'" he added. "The best scientific advice available at present is to 'Follow the Sun.' Adaptation to climate change will not be aided by imprudent restructuring of the world's energy economy in pursuit of the mitigation of an alleged 9 C dangerous human-caused warming that can neither be demonstrated nor measured," Nicol concluded. (LINK)

Veteran Meteorologist William R. Young denounced the cause of climate change in 2008. "**As a meteorologist with 37 years of practical experience and a master's degree in meteorology,** I can tell you that is one of the stupidest comments I have ever heard," Young wrote on October 4, 2008, after then Vice President nominee Senator Joe Biden blamed mankind for global warming. "We can all debate global warming and how much of an impact it has had and will have on our future weather, but not all change is the result of man. If he would question that, have him (Biden) give me a call," Young added. (LINK)

Physics professor Wayne Hocking heads the Atmospheric Dynamics Group at the University of Western Ontario, has an extensive list of scientific publications, co-edited of the 1990 book *The Earth's Middle Atmosphere,* and dissented in 2008. Scientists "do not know enough about the atmospheric changes" to "draw any conclusions about global warming," Hocking, who presented his polar research to the Physics and Astronomy Colloquium, said according to an October 9, 2008 article. The article reported, "Hocking is hesitant to claim he can make any predictions about global warming. 'For this to be effective, we need to be there for 20, 30, 40 years, have a long-term data set and then we can start to make useful predictions,'" Hocking said. "We know there is so much complexity involved, we want to tread more cautiously," he says. "Maybe in 10 years time, it'll all (the icecaps) start to freeze over, we just don't know," he explained. The article continued, "Hocking cautions against focusing solely on global warming, but rather to view it as one of many atmospheric changes that must be researched and understood. 'I think it's too narrow of a view,' he says. 'You've got to consider everything together and see global warming as part of a larger picture rather than something in isolation.'" "I'm not against global warming, but I want people to realize it is only one of many dynamic events that occur in the atmosphere and we need to understand them all," he says. (LINK) (LINK)

Chemist Dr. Kenneth Rundt, a bio-molecule researcher and formerly a research assistant and teacher at Abo Akademi University in Finland, declared his global

warming dissent in June 2008. “Let me state immediately before you read on that I count myself among the ‘skeptics’,” Rundt wrote in a scientific paper titled “Global Warming – Man-made or Natural?D on June 16, 2008. “I am only a humble scientist with a PhD degree in physical chemistry and an interest in the history of the globe we inhabit. I have no connection with any oil or energy-related business. I have nothing to gain from being a skeptic,” Rundt explained. “My personal belief is that natural forcings have more importance than anthropogenic forcings such as the CO2 level,” Rundt wrote. “It can also be reliably inferred from palaeoclimatological data that no uncontrolled, runaway greenhouse effect has occurred in the last half billion years when atmospheric CO2 concentration peaked at almost 20 times today’s value. Given the stability of the climate over this time period there is little danger that current CO2 levels will cause a runaway greenhouse effect. It is likely, therefore, that the IPCC’s current estimates of the magnitude of climate feedbacks have been substantially overestimated,” Rundt wrote. According to Rundt, even a doubling of CO2 levels from 317 ppm to 714 ppm “would increase absorption approximately 0.17%. This corresponds to an additional radiative forcing of 0.054 W/m2, substantially below IPCC‘s figure of 4 W/m2. An increase of this order would not result in a temperature increase of more than a tenth of a centigrade.” “The biggest problem for the pro-IPCC scientific community is that there are no means to experimentally determine the effect of an increasing CO2 level,” Rundt wrote. “IPCC’s spokesman Al Gore has often claimed that the ‘science is settled’, but there is a growing group of scientists critical against the claims of ‘settled science’ and overwhelming ‘consensus,’ he concluded. (LINK) (LINK)

Ecologist Dr. John R Etherington, formerly Reader in Ecology at the University of Wales, declared that CO2 has “close to zero correlation with temperature.” “Carbon dioxide, supposedly the major driver of man-made climatic warming, has inexorably and uniformly risen in concentration for every one of these years, with close to zero correlation with temperature. The previous three years 1998-2000 also show no temperature correlation with change, but 1998 was an atypically warm El Niño year,” Etherington wrote on October 18, 2008. “We are making some of the most expensive global decisions ever, on the basis of what atmospheric physicist James Peden has described as ‘computerized tinker toys with which one can construct any outcome he chooses,’” Etherington added. (LINK)

Meteorologist Justin Loew of Wisconsin’s WAOW-TV and Great Lakes Weather Service rejected climate fears in 2008. “Call me skeptical, but I think the headlines have shifted dramatically over the last year [to "climate change"] in response to the fact that the earth hasn't warmed one degree since 1998. In fact, the average global temperature has gone down slightly,” Loew wrote on October 27, 2008. “I do get skeptical of the motivation of some of the scientists and media outlets when they use ‘climate change’ instead of AGW. After all, the problem, as we are told, is human caused climate change, not ‘climate change’ in general. I guess on the most basic level ‘climate change’ will always force humans and life on this planet to adjust and cope, but that is not what has been in the headlines for nearly 20 years. The drill has been ‘global warming’ = ‘climate change’ = AGW = the end of the world,” Loew added. “I suppose it might start to sound silly saying ‘global warming’ when the globe hasn't warmed for 10 years. If the AGW theorists are confident in the global climate model predictions of environmental Armageddon, then

they should not be afraid to continue using the term 'global warming' or more accurately, AGW," he added. (LINK) (LINK)

Award-Winning NASA Astronaut/Geologist and Moonwalker Jack Schmitt who flew on the Apollo 17 mission and formerly of the Norwegian Geological Survey and for the U.S. Geological Survey, has received numerous awards in his career including the Space Center Superior Achievement Award and the NASA Distinguished Service Medal. Schmitt, a member of the Geological Society of America, American Geophysical Union, and American Association for the Advancement of Science, rejected man-made climate change concerns in 2008. "The 'global warming scare' is being used as a political tool to increase government control over American lives, incomes and decision making. It has no place in the Society's activities," Schmitt wrote on November 17, 2008. "As a geologist, I love Earth observations. But, it is ridiculous to tie this objective to a "consensus" that humans are causing global warming in when human experience, geologic data and history, and current cooling can argue otherwise. 'Consensus,' as many have said, merely represents the absence of definitive science," Schmitt explained. (LINK) (LINK)

Australian long-range weather forecaster Haydon Walker who runs World Weather dissented in 2008. "Until someone can show me further evidence, I am unconvinced," Walker said on November 2, 2008, about of man-made climate change concern. "I have [weather] charts from the year dot, back prior to the Industrial Revolution. "I am disgusted with what we are putting into the atmosphere but I believe the climate change debate is too politically driven," Walker explained. (LINK) (LINK) (LINK)

Professional Engineer William K. Graham, the Past Chair of the Lake Michigan States Section, who is a regional organization of the Air & Waste Management Association, a non-profit technical, scientific, and educational organization, dissented from global warming fears in 2008. "For a theory to be scientific, it must be testable and falsifiable. The theory of global warming is being tested and data proves it is coming up short," Graham wote in the group's October 2008 newsletter. "Predictive models overestimate climate sensitivity by excluding some effects of cloud cover. Corrected models forecast minor to negligible temperature change," Graham explained. "While the theory of man-induced global climate change may be a casualty here, the greater casualty is Science itself. The scientific community and media have taken the world for a costly ride. The environmental community may have said 'the sky is falling' once too often," he added. (LINK)

Research Hydrologist Charles Perry, of the U.S. Geological Survey, questioned rising CO2 concerns in 2008. Perry acknowledges a warming trend, but notes that current temps have not reached the level when Vikings farmed Greenland during the Medieval Warm Period. "Therefore, the magnitude o f the modern temperature increase being caused solely by an increase in carbon dioxide appears questionable," Perry said according to a November 15, 2008 article. According to the article, Perry's research has "connected events in world history with climate fluctuations—and has correlated those fluctuations with increases or decreases in the amount of total radiant energy reaching the earth." Perry's "projections show the current warm period may be ending and that the earth's climate may cool to conditions similar to the Little Ice Age between the years of 2400 and

2900 following a slight cooling between 2000 and 2l00. Between 2l00 and 2400, cooling picks up steam." (LINK)

Dr. William DiPuccio, a retired weather forecaster in the US Navy and former Meteorological Technician for the National Weather Service, dissented in 2008. "We should be cautious about placing our faith in climate models that vastly oversimplify the actual climate system. Supporting evidence for the IPCC's projections does not warrant the high level (90%-95%) of confidence exhibited by its authors. Much less should these projections be used, at this point, for making public policy decisions," DiPuccio wrote in a November 17, 2008 analysis. "Though the latest IPCC report (2007) concludes that global warming, due to increased CO2, is a virtual certainty, the authors themselves raise fundamental doubts about our scientific understanding of radiative forcing agents and climate change, both past and present," DiPuccio explained. "There are disagreements surrounding the residence time of CO2—i.e., how long it remains in the atmosphere before being absorbed. Does it continue to accumulate for centuries as some scientists contend, or is it absorbed more rapidly by 'sinks' such as vegetation (which thrive on increased CO2 levels) and oceans as suggested by some data?" he added. "The media will continue to hype this issue, focusing on the most sensational statements and events. Apocalyptic views, like those of Al Gore and James Hansen (NASA), have dominated the public discussion and classroom education," he added. (LINK)

Physicist and Neuroscientist Dr. Gregory Young is a, currently engaged in experimental biophysical research, dissented from global warming fears in 2008. "There is a huge problem with the idea that Carbon Dioxide, or CO2, is a globally polluting gas, much less one that causes climate change and global warming. Even though some data seemed to initially substantiate the AGW thesis, these ideas were later proven to be wrong," Young wrote on November 21, 2008. "Let me assure you that we're not in good humor, nor take it kindly to be slurred and ridiculed by taking the other side in this debate. And our numbers are still growing. Indeed, we're angry that the vast majority of American Scientists will not be heard by the media," Young added. Young also noted that former Vice President Al Gore's scientific mentor Roger Revelle had differing views on CO2 driving global warming. "Even Roger Revelle understood that there were greater variables at play than the trace gas of CO2. Before he died, Revelle gave interviews and wrote letters stating that CO2 and its greenhouse effect did not warrant extreme countermeasures. He told Omni Magazine, in March 1984, that "CO2 increase is predicted to temper weather extremes" -- not cause them. One cannot argue that CO2 was a causative factor -- especially since CO2 was apparently following temperature trend -- not moderating it. It seems none of his followers, Gore in particular, heeded his words," Young explained. (LINK)

Canadian Climatologist Cliff Harris of Long Range Weather service dissented from warming fears and predicted a coming global cooling. "In the past 10 years, especially the past couple of years, the Earth's climate has begun to cool, even though CO2 emissions have soared on a worldwide scale. How many years of declining temperatures will it take to finally break up Al Gore's 'global warming consensus'? Only time will tell-- probably when all the money runs out," Harris wrote on November 16, 2008. "These alternating natural climatic cycles defy the so-called 'climate consensus' that human-emitted carbon dioxide was responsible totally for the recent cycle of global warming that began in the late

1970s and peaked in 1998. Several Canadian environmental scientists agree that the new Jason satellite indicates at least a 23-year cycle of global cooling ahead. Count me in!" Harris wrote. "This oceanographic satellite shows a much larger than normal persistent Pacific Decadal Oscillation (PDO). Cooler PDO phases usually last 21 to 25 years, so we should be quite chilly as a planet until at least 2030, maybe longer. Remember, I have another cycle of intense global warming, as I mentioned at our March 2, 2007 climate seminar at the Coeur d'Alene Re sort, due by 2031 to 2038, when all of my major cycles 'collide in chaos,'" he added. (LINK) (LINK)

Consulting Chemist and Forensic Scientist Dr. Jim Sprott of Auckland, NZ dissented from the climate change "consensus" in 2008. "The projections of the IPCC are simplistic, superficial, and now proven wrong. The whole issue requires a fresh start, based on the mass of irrefutable data which has been assembled," Sprott wrote in an analysis on November 18, 2008. "The much-vaunted IPCC scenarios are patently wrong. The man-made climate change proposition fails. And with it fails the whole panjandrum of carbon trading," Sprott added. "The postulated connection between atmospheric temperature and atmospheric CO2 has broken down, and therefore the "greenhouse gas" proposition has failed. The disparity between the IPCC prediction and observed data continues to widen, and no amount of rhetoric can alter this," he added. (LINK)

Geologist Marc Hendrickx, a professional geologist working to assess geologic risks and currently obtaining his PhD rejected man-made global warming fears in 2008. "We're not scared anymore Mr. Gore!" declares Hendrickx's *new 2008 parody book A Climate Change Story For Little Skeptics*. "The contention that recent rises in global temperature as measured by satellites are due solely to increased concentrations of CO2 from anthropogenic sources is misplaced. Temperature rises due to CO2 emissions have already been accounted for and input of additional CO2 will not result in increased global temperatures on their own. This is due to the logarithmic relationship between CO2 and temperature. This relationship explains why carbon dioxide levels have been much higher during past geological eras and have not resulted in run away greenhouse conditions," Hendrickx wrote to EPW on November 21, 2008. "Computer models are often cited as providing evidence that warming is entirely caused by CO2, however computers models do not constitute evidence. Computer models have not been able to predict temperature changes over the last 20 years and even the IPCC admit that long term prediction of future climate states is not possible. Why would anyone rely on current computer models to predict climate 100 years into the future given their obvious limitations?" Hendrickx asked. "Arguments in favor of AGW based on the notion of 'consensus' are not valid. It only takes one fact to falsify a theory," he added. (LINK) (LINK)

Associate Professor of Chemistry R. John Muench of Heartland Community College in Illinois dissented in 2008. "Global warming alarmism is more religion than science. The believers have their messiah, Al Gore, who is not a scientist and has refused all monetary offers to debate the science," Muench wrote on November 27, 2008, in an article titled "Natural cycles cause global warming, cooling." "Current data does not support that any warming is occurring. Satellite data shows that temperatures have been steady for the last 10 years and nowhere near the projections cited by" proponents," Muench wrote. "After examining [Climatologist Dr. Roy] Spencer's work, I am convinced that observed climate

changes are mostly natural. Unlike the believers who refuse all debate, I would welcome any opportunity to present my evidence," he added. (LINK) (LINK)

Former Belgian Meteorologist and Astronomer Jean Meeus, who specializes in spherical and mathematical astronomy and has authored numerous studies and books, dissented from man-made global warming concerns. Meeus rejected the notion that skeptics of warming are dwindling. "My own impression, however, is that the number of those 'remaining' skeptics is increasing! Al Gore has exaggerated, and now comes the reaction," Meeus wrote in (LINK) (LINK)

Jack Dini, a materials engineer and section leader of fabrication processes at Lawrence Livermore National Labs, dissented in 2008. "Thirty years ago we were supposedly headed into a cooling cycle akin to the Little Ice Age [Click here to see an actual document from that time.] Now, it's an unprecedented heating cycle. If you ask me, that's an awfully quick time for a flip-flop on the weather," Dini wrote on April 1, 2008 in an article titled "No Consensus On Global Warming." "If the 14 billion year cosmic history were scaled to one day, then 100,000 years of human history would by 4 minutes and a 100 year life-span would be 0.2 seconds. So, in less than 0.1 second in cosmic time we've switched on climate change. Seems like we need a few more cosmic time seconds to gather more data," Dini wrote. (LINK)

Biologist Dr. Nasif Nahle, whose research focuses on earth sciences and who has published extensive research on solar influences and biology, is a patron for the American Association for the Advancement of Sciences and recognized by the Autonomous University of Aguascalientes in Mexico. Nahle challenged global warming theory in 2008. "We could fail if we think that the change of temperature was caused by the CO2 when the reality is that the Sun was what heated up the soil," Nahle concluded in a June 12, 2008, scientific analysis of climate change. "The carbon dioxide only interfered the energy emitted by the soil and absorbed a small amount of that radiation (0.0786 Joules), but the carbon dioxide did not cause any warming. Do never forget two important things: the first is that the carbon dioxide is not a source of heat, and the second is that the main source of warming for the Earth is the Sun," Nahle explained. "Planet Earth would not be warming if the Sun's energy output (Solar Irradiance) was not increasing. Favorably, our Sun is emitting more radiation now than it was 200 years ago, and so we should have no fear of a natural cycle that has occurred many times over in the lifetime of our Solar System," he added. (LINK) (LINK)

Dr. Keith Lockitch, who holds a PhD in Physics and is a researcher in science and environmental issues for the Ayn Rand Institute, rejected global warming concerns in 2008. "Despite the constant assertion that global-warming science is 'settled,'" Lockitch said, "it is far from certain that we face any sort of catastrophic global emergency," Lockitch wrote on February 21, 2008. "But in the name of 'saving the world' from unproven threats, such activists want to impose a draconian regimen of taxes, laws, regulations and controls that would affect the minutest details of our existence. Their solution to their projected 'environmental disaster' is to impose an actual economic disaster by restricting the energy that powers our civilization and subjecting its use to severe political control," Lockitch wrote. "Let us not allow panic over the exaggerated claims of

climate alarmists to deliver us into the hands of would-be carbon dictators," he added. (LINK)

Retired U.S. Navy Physicist and Engineer James A. Marusek dissented in 2008. Marusek conducted solar research and concluded in a 2008 analysis: "The sun is a major influence on climate change on Earth in that it provides solar irradiance that warms the planet and a far reaching magnetic field that shields Earth from the effects of galactic cosmic rays, which cools the planet…This paper looks at the relationship between the solar magnetic field (as expressed in 'AA Index') and ocean surface temperature over the period from 1880 A.D. to present and finds this relationship is best expressed by a natural logarithmic function." (LINK) Marusek rejected global warming theory as well. "The anthropological global warming (AGW) hypothesis would have us believe that global temperatures are rising as a result of increased carbon dioxide levels in Earth's atmosphere and that humans are the primary cause of this increase," he explained. "An opposing hypothesis - natural global warming (NGW) - believes the rise in recently observed atmospheric carbon dioxide levels is driven by natural global warming and by volcanic activity and that humans have little effect in altering Earth's climate," Marusek wrote. (LINK)

Climate researcher Willis Eschenbach, who has published climate studies in *Energy and Environment* journal and had comments published in the journal *Nature*, dissented from man-made climate fears in 2008. "I am definitely a critic of the IPCC, they are doing their job abysmally poorly. Rather than advance the cause of climate science, they impede it through their reliance on bad statistics, bad economics, and bad data," Eschenbach wrote to EPW on February 20, 2008. "As an example of the ridiculous state of climate science, the major discussion revolves around the global surface temperature. We have different major groups (HadCRUT, GISS, GHCN, NOAA) each keeping a 'global temperature record', and all of them are different," Eschenbach explained. "Even with a Freedom of Information Act request, I couldn't get HadCRUT3 to divulge their data ... that's not science. The most basic numbers in the field, and we don't know how they are calculated, and they are not shared," he added. (LINK) Eschenbach also refuted the attempted resurrection of the "Hockey Stick" temperature graph in 2008. (LINK)

Professional Engineer Allan M.R. MacRae of Alberta, Canada, authored a scientific analysis critical of man-made global warming in 2008. "The IPCC's position that increased CO2 is the primary cause of global warming is not supported by the temperature data," MacRae wrote on February 5, 2008. Variations in atmospheric CO2 concentration lag (occur after) variations in Earth's Surface Temperature by ~9 months. The IPCC states that increasing atmospheric CO2 is the primary cause of global warming - in effect, the IPCC states that the future is causing the past. The IPCC's core scientific conclusion is illogical and false," MacRae explained. (LINK)

Dr. Alex Storrs, an Associate Professor at the Department of Physics, Astronomy & Geosciences at Towson University, dissented in 2008. "I gave a talk at the event here (Towson Univ.) titled 'Science, Skepticism, and Global Warming', and am still walking upright. I pointed out how skepticism is central to the scientific enterprise and raised the question 'What if it's not CO2?'" Storrs wrote to CCNET newsletter on February 8, 2008. "[I] pointed out that by averaging the results of different climate models, rather than

investigating the strengths and weaknesses of each model and choosing (tentatively, of course) the best, the IPCC had deviated from the scientific process," Storrs wrote. He concluded by noting that it was a "mostly friendly discussion." "So not everything there was 'global warming indoctrination,'" he added. (LINK) (LINK)

Chief Meteorologist Bill Korbel of News 12 in Long Island is a retired weather officer for the U.S. Air Force and questioned the "consensus" on global warming in 2008. Korbel noted that there is "a lot of uncertainty" and that our climate system is "incredibly complex" and possesses "incredible ways of adjusting to change," according to an article in *Newsday*. "He also pointed out that we are 'still in a learning situation,' and that 'science has been full of some wrong predictions in the past,'" the article explained. (LINK) (LINK)

Meteorologist Tom Wysmuller, former weather forecaster at Amsterdam's Royal Dutch Weather Bureau whose "Polynomial Regression" algorithm is embedded in every high-end Texas Instruments calculator sold today, dissented from exclusive man-made global warming and runaway greenhouse fears and predicted a coming global cooling in 2008-09. Wysmuller said this during his two-hour presentation of current scientific research titled "The Colder Side of Global Warming©" on December 6, 2008. Wysmuller believes that carbon dioxide levels of today are distinct from temperature increases. "Carbon dioxide is increasing but is not even close to dragging temperatures up proportionately," Wysmuller said. "The warming trend that actually started 18,000 years ago continues unabated, and Carbon Management while addressing other problems, will have virtually ZERO impact on planetary warming. If tomorrow morning we stopped every car and truck, shut down every factory and power plant around the globe, we still wouldn't stop the remaining multi-year Arctic ice cap from melting within the next 15 or so years," he explained. "The largest contributor to the steady carbon dioxide increase in the atmosphere is its release from the warming oceans," he continued. The December 11, 2008 article explained his argument that the current spike in temperature is approaching levels that existed just prior to the most recent ice age. "What that means," he said, "is that we are nearing a period when temperatures will actually start to decrease and weather patterns dramatically change." Tom's research shows that increasing the area of open water in the Arctic will generate an abundance of "ocean effect" snow, similar to the lake effect snow that hits the upstate New York area. "The shores of the Arctic will accumulate massive amounts of ocean effect snow," Wysmuller said. "The accumulated snow falls earlier and melts later, increasing the Earth's "Albedo" or reflected light during daylight hours, so temperatures, and the planet as a whole, will cool." Over 100 stunning slides and videoclips vividly portrayed the underlying science of climate change he described. (LINK) (LINK) (LINK)

MIT Scientist Dr. Robert Rose, a professor of Materials Science and Engineering at MIT with approximately 50 years of experience teaching various scientific, linked warming and cooling cycles to the "orbit and the tilt and wobble of the axis of the Earth's spin." Rose also questioned climate model predictions on July 8, 2008, by stating, "Clearly, these are not 'facts.' They are computer models. They may be correct or at least lead us to the correct answer, but the earliest model appears to be incorrect," Rose wrote. "Cooler heads [are] needed in global warming debate," Rose wrote. "Global warming is occurring as it has many times in the past; and it will continue for some years before the cooling cycle begins and the glaciers take over, also as they have in the past. We are trying very

hard to develop computer simulations to predict the contribution our activities are making to the warming, and the going has been difficult. These models can't be tested experimentally (unless we can find another planet on which to conduct our experiments) and are tested mostly by fitting them to past behavior, pretty much the same approach as handicapping horse races. (LINK)

Climate researcher Dr. Craig Loehle, formerly of the Department of Energy Laboratories and currently with the National Council for Air and Stream Improvements, who has published more than 100 peer-reviewed scientific papers, attended the skeptical 2008 International Conference on Climate Change in New York City in March 2008. "The 2000-year [temperature] trend is not flat, so a warming period is not unprecedented," Loehle said during the skeptical conference in March 2008. "The 1500-year [temperature] cycle as proposed by [Atmospheric physicist Fred] Singer and [Dennis] Avery is consistent with Loehle climate reconstruction," Loehle explained. "The 1500-year cycle implies that recent warming is part of natural trend," he added. (LINK) (LINK) (LINK) Loehl published a November 2007 study in *Energy & Environment* that found the Medieval Warm Period to be "0.3C warmer than the 20th century." The study was titled "A 2000-year global temperature reconstruction based on non-treering proxies." (LINK) & (LINK)

German Meteorologist Dr. Gerd-Rainer Weber, a Consulting Meteorologist, attended the skeptical 2008 International Conference on Climate Change in New York City in March. "Most of the extremist views about climate change have little or no scientific basis. The rational basis for extremist views about global warming may be a desire to push for political action on global warming," Weber said during the conference. (LINK) Weber also endorsed the Manhattan Declaration on Climate Change, sponsored by the International Climate Science Coalition (ICSC) in 2008. The declaration reads in part, "There is no convincing evidence that CO2 emissions from modern industrial activity has in the past, is now, or will in the future cause catastrophic climate change."

[Updated: December 16, 2008]

Professor of Ecology and Evolutionary Biology Dr. W. M. Schaffer, Ph. D., of the University of Arizona - Tucson, past member of the American Association for the Advancement of Science, who has authored more than 80 scientific publications and authored the paper "Human Population and Carbon Dioxide," dissented in 2008. "My principal objections to the theory of anthropogenic warming are as follows: 1) I am mistrustful of 'all but the kitchen sink' models that, by virtue of their complexity, cannot be analyzed mathematically. When we place our trust in such models, what too often results is the replacement of a poorly understood physical (chemical, biological) system by a model that is similarly opaque," Schaffer told EPW on December 19, 2008. "2) I am troubled by the application of essentially linear thinking to what is arguably the 'mother of all nonlinear dynamical systems' - i.e., the climate. 3) I believe it likely that "natural climate cycles" are the fingerprints of chaotic behavior that is inherently unpredictable in the long-term. As reviewed in a forthcoming article (Schaffer, in prep), these cycles are "dense" on chaotic attractors and have the stability properties of saddles. Evolving chaotic trajectories successively shadow first one cycle, then another. The result is a sequence of qualitatively different behaviors - what climatologists call "regime shift" - independent of

extrinsic influences. Tsonis and his associates discuss this phenomenon in terms of network theory and 'synchronized chaos,' but these embellishments are not necessary. To be chaotic is to dance the dance of the saddles," Schaffer explained. "The recent lack of warming in the face of continued increases in CO2 suggests (a) that the effects of greenhouse gas forcing have been over-stated; (b) that the import of natural variability has been underestimated and (c) that concomitant rises of atmospheric CO2 and temperature in previous decades may be coincidental rather than causal," he added. "I fear that things could easily go the other way: that the climate could cool, perhaps significantly; that the consequences of a new Little Ice Age or worse would be catastrophic and that said consequences will be exacerbated if we meanwhile adopt warmist prescriptions. This possibility, plus the law of unintended consequences, leads me to view proposed global engineering 'solutions' as madness. 'First do no harm' should be the watchword of those who propose policy; the fate of Icarus, the example uppermost in their minds," he continued. "I believe that the enthusiasm of many of my colleagues for the 'consensus' view of climate change is partly motivated by considerations outside of science. If I am correct, the truth of the matter will inevitably become widely known and the consequences to science, severe. Think Lysenko and the demise of Soviet genetics," he concluded. (LINK) (LINK)(LINK)

CNN Meteorologist Chad Myers, an meteorologist for 22 years, certified by the American Meteorological Society, spoke out against anthropogenic climate claims in 2008. "You know, to think that we could affect weather all that much is pretty arrogant," Myers said during a December 18, 2008 appearance on CNN's "Lou Dobbs Tonight." "Mother Nature is so big, the world is so big, the oceans are so big – I think we're going to die from a lack of fresh water or we're going to die from ocean acidification before we die from global warming, for sure," Myers explained. "But this is like, you know you said – in your career – my career has been 22 years long. That's a good career in TV, but talking about climate – it's like having a car for three days and saying, 'This is a great car.' Well, yeah – it was for three days, but maybe in days five, six and seven it won't be so good. And that's what we're doing here," he added. "We have 100 years worth of data, not millions of years that the world's been around," Myers concluded. (LINK) (LINK)

Engineer and Physicist J.K. "Jim" August, formerly of the U.S. Navy nuclear power program, and former chair of professional standard committees in both the American Nuclear Society and the American Society of Mechanical Engineering, dissented from climate fears in 2008. "Gore's *An Inconvenient Truth* is not scientifically based," August wrote in a December 15, 2008 analysis titled "An Inconvenient Truth, or a Calculating Deception." "The book denies the legitimacy of science for review. The irony is, of course, the treatise that Mr. Gore uses to make his points, which could only have any value based on some scientific certainty basis, is not based on science nor the scientific method -- nor can scientists even use science to review it, or follow its logic," August explained. "Gore argues we're morally obliged to support his conclusions, precluding objective review with the same scientific methods that he claims to have supported his work. Presenting consequences as facts, he categorically rejects their testing with the same scientific method. Should we be surprised, then when Mr. Gore says that anyone who doubts this must be morally corrupt?" August added. "Fighting religion with reason, we scientists sadly can't contest. Mr. Gore even shared a Nobel Prize with the IPCC. So, isn't it ironic?

The only truth that's inconvenient here is that Mr. Gore's successfully sold his message as if it were science!" he added. (LINK)

Biologist and Neuropharmacologist Dr. Doug Pettibone, who has authored 120 scientific publications and holds ten patents and is a past member of the American Association for the Advancement of Science, dissented in 2008. "There is currently no satisfactory answer to the central question: 'What is the actual proof that humans are causing catastrophic global warming?' All of the climate computer models in the world do not provide the proof," Pettibone wrote to EPW on December 11, 2008. "It boils down to a matter of faith that the 30-year positive correlation between man-made CO2 and global temperature provides the proof. But correlations are not proof of cause-and-effect. Blaming global warming on human activity is terribly premature and any legislation designed to curtail CO2 will likely be misguided, costly and ineffective based on the available evidence. Since there has not been any significant increase in global temperatures in the last decade, it is not even clear where temperatures are going to go from here," Pettibone explained. (LINK)

Award Winning Physicist Dr. Will Happer, Professor at the Department of Physics at Princeton University and Former Director of Energy Research at the Department of Energy from 1990 to 1993, who has published over 200 scientific papers, and is a fellow of the American Physical Society, The American Association for the Advancement of Science, and the National Academy of Sciences, dissented from warming fears and requested to be added to Senate dissenting scientist report in 2008. "I had the privilege of being fired by Al Gore, since I refused to go along with his alarmism. I did not need the job that badly," Happer told EPW on December 16, 2008. Happer, **who was awarded the Alexander von Humboldt Award, the Broida Prize and the 1999 Davisson-Germer Prize of the American Physical Society,** says he was fired by Gore in 1993 for not going along with Gore's environmental agenda. "I was told that science was not going to intrude on policy," Happer said in 1993. In 2008, Happer publicly dissented from man-made warming fears. "I have spent a long research career studying physics that is closely related to the greenhouse effect, for example, absorption and emission of visible and infrared radiation, and fluid flow. Based on my experience, I am convinced that the current alarm over carbon dioxide is mistaken," Happer explained. "Mistakes are common in science and they can take a long time to correct, sometimes many generations. It is important that misguided political decisions do not block science's capacity for self correction, especially in this instance when incorrect science is being used to threaten our liberties and wellbeing," Happer added. "Fears about man-made global warming are unwarranted and are not based on good science. The earth's climate is changing now, as it always has. There is no evidence that the changes differ in any qualitative way from those of the past. We are currently in a warming cycle that began in the early 1800's, at the end of the little ice age. Much of the current warming occurred before the levels of carbon dioxide in the atmosphere were significantly increased by the burning of fossil fuels. No one knows how long the current warming will continue, and in fact, there has been no warming for the past ten years," he continued. "Carbon dioxide is a natural constituent of the atmosphere, and calling it a 'pollutant' is inaccurate. Humans exhale air containing 4 to 5 per cent carbon dioxide or 40,000 to 50,000 parts per million. Plants grow better with more carbon dioxide. The current levels of carbon dioxide in the atmosphere are about 380 parts per million, exceptionally low by the standards of geological history. Over the past 500 million

years since the Cambrian, when fossils of multicellular life first became abundant, the levels of carbon dioxide in the atmosphere have been much higher than current levels, about 3 times higher on average. Life on earth flourished with these higher levels of carbon dioxide," he added. "Computer models used to generate frightening scenarios from increasing levels of carbon dioxide have scant credibility. There is little debate that the direct effects of doubling carbon dioxide concentrations would be very small, perhaps 1 to 2 C of warming. To generate alarming scenarios, computer modelers must invent positive feedback mechanisms that increase the greenhouse effect of water vapor, which is responsible for over 90 percent of greenhouse warming. Observations indicate that the feedback is very small and may actually be negative. Changes in atmospheric water vapor and cloud cover may diminish, not increase, the small direct effects of carbon dioxide," he concluded. (LINK) (LINK) (LINK) [***Updated: December 22, 2008***]

Award-winning Retired Senior NASA Atmospheric Scientist Dr. John S. Theon, the former supervisor of James Hansen, NASA's vocal man-made global warming fears promoter, has now publicly declared himself a skeptic and declared that Hansen "embarrassed NASA" with his alarming climate claims and said Hansen was "was never muzzled." Theon was the former Chief of the Climate Processes Research Program at NASA Headquarters and former Chief of the Atmospheric Dynamics & Radiation Branch. Theon also co-authored the book *Advances in Remote Sensing Retrieval Methods*. Theon was elected a fellow of the American Meteorological Society, given the NASA Exceptional Performance Award twice, elected an Associate Fellow of the American Institute for Aeronautics and Astronautics, and awarded the AIAA's Losey Medal for contributions to airborne remote sensing. He was also awarded the Radio Wave Award by the Minister of Posts and Telecommunications of Japan for contributions to the Tropical Rainfall Measuring Mission -- a joint NASA-Japanese Space Agency satellite. Theon has authored or coauthored more than 50 NASA Reports, journal articles, monographs, chapters in books, and edited two books in the scientific literature. "I appreciate the opportunity to add my name to those who disagree that global warming is man-made," Theon wrote to the Minority Office at the Environment and Public Works Committee on January 15, 2009. "I was, in effect, Hansen's supervisor because I had to justify his funding, allocate his resources, and evaluate his results. I did not have the authority to give him his annual performance evaluation," Theon explained. *[Note: Here are the results of a Google Scholar search on Theon.]* "Hansen was never muzzled even though he violated NASA's official agency position on climate forecasting (i.e., we did not know enough to forecast climate change or mankind's effect on it). Hansen thus embarrassed NASA by coming out with his claims of global warming in 1988 in his testimony before Congress," Theon wrote. Theon declared "climate models are useless." "My own belief concerning anthropogenic climate change is that the models do not realistically simulate the climate system because there are many very important sub-grid scale processes that the models either replicate poorly or completely omit," Theon explained. "Furthermore, some scientists have manipulated the observed data to justify their model results. In doing so, they neither explain what they have modified in the observations, nor explain how they did it. They have resisted making their work transparent so that it can be replicated independently by other scientists. This is clearly contrary to how science should be done. Thus there is no rational justification for using climate model forecasts to determine public policy," he added. "As Chief of several of NASA Headquarters' programs (1982-

94), an SES position, I was responsible for all weather and climate research in the entire agency, including the research work by James Hansen, Roy Spencer, Joanne Simpson, and several hundred other scientists at NASA field centers, in academia, and in the private sector who worked on climate research," Theon wrote of his career. "This required a thorough understanding of the state of the science. I have kept up with climate science since retiring by reading books and journal articles," Theon added. (LINK) (LINK) [*Update:* ***NASA warming scientist 'suffering from a bad case of megalomania' -- former supervisor Theon says - March 11, 2009 – Business & Media Institute*** & ***NASA Warming Scientist Under Fire -- From Former Supervisor...'Jim Hansen should be fired' - March 11, 2009 – Business & Media Institute***]

Award-winning Japanese Physicist Dr. Kanya Kusano, program director of the Japan Agency for Marine-Earth Science and Technology, publicly dissented in 2009. Kusano's research "focuses on the immaturity of simulation work cited in support of the theory of anthropogenic climate change." Kusano, who was awarded the Nishinomiya Yukawa Memorial Prize and the Inoue Research Award for Young Scientists, compared climate models to "ancient astrology." According to a February 25, 2009, article in the *UK Register*, "Using undiplomatic language, Kusano compares [climate models] to ancient astrology. After listing many faults, and the IPCC's own conclusion that natural causes of climate are poorly understood, Kusano concludes: '[The IPCC's] conclusion that from now on atmospheric temperatures are likely to show a continuous, monotonous increase, should be perceived as an unprovable hypothesis.'" "I believe the anthropogenic (man-made) effect for climate change is still only one of the hypotheses to explain the variability of climate," Kanya Kusano told *The Weekend Australian* on March 14, 2009. "It could take 10 to 20 years' more research to prove or disprove the theory of anthropogenic climate change," said Dr Kusano, a research group leader with the Japan Agency for Marine-Earth Science's Earth Simulator project. According to a January 2009 article in *Daily Tech*, Kusano "believes that cosmic rays, which are modulated by cycles in the strength of the sun's magnetic fields, may potentially have large-scale impacts on the earth's climate." (LINK) (LINK) (LINK) (LINK) (LINK) (LINK)

Retired Award Winning NASA Atmospheric Scientist Dr. William W. Vaughan, recipient of the NASA Exceptional Service Medal, is a former Division Chief of NASA's Marshall Space Flight Center and authored more than 100 refereed journal articles, monographs, and papers, and currently is a research professor at the University of Alabama in Huntsville. Vaughan, who is a member of the American Association for Advancement of Science (AAAS), the American Geophysical Union (AGU), and the American Meteorological Society (AMS), declared his dissent from man-made climate fears in 2009. "The cause of these global changes is fundamentally due to the Sun and its effect on the Earth as it moves about in its orbit. Not from man-made activities," Vaughan told Environment and Public Works Committee on February 6, 2009. "I believe that natural causes and associated global environment trends may well have beneficial effects for humanity and wildlife and governmental actions to significantly modify them will be ineffective if implemented and a waste of resources," Vaughan explained. "I accept that there are local and, perhaps, regional man-made effects on the environment like 'heat islands' and 'pollutants that accumulate in a valley,' for example, where effective efforts can be made to modify detrimental local environmental effects. However, these man-made local effects are on a scale significantly smaller than what is

occurring under the envelope of global climate effects caused by nature," Vaughan explained. "Also, I believe any governmental efforts to control global warming caused by nature will be essentially ineffective. Adapting to changes in the climate caused by natural effects will be far more productive. Something life on the Earth has been doing for thousands of years and will continue to do so for thousands of more years I suspect. The civilizations and associated productivity we have today is the product of the natural climate changes that have occurred on the Earth in the past," he concluded. (LINK)

Chemist Max S. Strozier, who spent 26 years specializing in chemical laboratory analysis, served as a U.S. Department of Defense aerospace chemist and is a former lecturer at San Jose State University and the University of Texas. Strozier, who holds a masters degree, co-authored journal publications, and is past treasurer and member of the American Chemical Society, dissented in 2009. "If global warming or climate change were real, substantiated science, why didn't Al Gore win one of the Nobel science prizes? If this was real science, the prize would have been won in the Physics category, Atmospheric Physics to be specific. It would not have been a Nobel Peace Prize, the awarding of which is highly subjective and political," Strozier wrote on December 22, 2008, to the minority staff of the Environment and Public Works Committee. "Scientists across the globe are catching on -- global warming is not real science. There is a sucker born every minute who believes in it, and Al Gore is playing the role of P.T. Barnum. The taxpayers and the voters are the ones being played as the suckers," Strozier wrote. (LINK)

Engineer Alan Cheetham has 30 years' experience including extensive scientific training, data analysis, modeling and statistics and runs the skeptical website "Global Warming Science." "My knowledge and training enables me to scientifically evaluate the data and the scientific studies. When I began to look into the science behind the global warming issue, I started to realize that the scientific debate is not over (the political debate may be over, but it shouldn't be) -- because the science doesn't match the fearful scenarios portrayed by the media," Cheetham explains on his website in 2009. "Unfortunately, the media do not provide a balanced portrayal of the issue -- the media are in the business of selling fear, and if global warming is not the end of the world, there is no story," Cheetham wrote. "The IPCC was set up in 1988 with the stated purpose of assessing 'the scientific, technical and socioeconomic information relevant for the understanding of the risk of human-induced climate change' -- i.e. the human cause was built-in before the science was investigated. According to the IPCC, the climate change until 1970 can be explained by the theoretical computer climate models based on natural climate forcings; after 1970 the models can only explain the warming based on anthropogenic CO2. But there are two problems: 1: the data - adjustments and urban heat influence; 2: the models. This web site documents the science providing ample evidence that supports the rejection of the CO2 hypothesis," Cheetham explained. "The IPCC was set up as a political process. The political purpose of the IPCC can be summed up as the former Canadian Environment Minister Christine Stewart put it in referring to the IPCC: 'No matter if the science is all phony, there are collateral environmental benefits…. climate change [provides] the greatest chance to bring about justice and equality in the world.' [*Calgary Herald*, December 14, 1998]. However, I am in the minority that thinks science is relevant and that the political process should not subvert science in this manner," he continued. (LINK) (LINK)

Materials and Research Physicist Dr. Charles R. Anderson is a former Department of Navy research physicist who has published more than 25 scientific papers and specializes in spectroscopy, microscopy, thermal analysis, mass spectroscopy, and surface chemistry. Anderson, who currently serves as president and principal scientist at Anderson Materials Evaluation, Inc., dissented in 2009. "My evaluation is that man's effect upon the global climate is still small compared to the natural forces at work and that they are incapable of causing anything on the scale of a catastrophe. But, man can cause a catastrophe to his lifestyle and to his lifespan," Anderson wrote on March 14, 2009. "Any warming that is caused by man is probably the cause of more good than bad. The higher CO2 concentrations in the air are certainly good for plant growth, which is good for both man and other animals," Anderson wrote. "I am a materials physicist by training, who has long functioned as a materials scientist with broad interests across many scientific and technological fields," he explained. "Observe which side resorts to the most vociferous name-calling and you are likely to have identified the side with the weaker argument and they know it. Of course, just because a man has written many peer-reviewed papers and is in a science department at a university does not mean that he is doing good science," Anderson wrote. "I was also concerned that so much of the justification for man's role was based on complex computer models, which nonetheless did not take into account many major natural effects and which had a well-established history of being modified to produce ever-decreasing rates of temperature increases. The more I studied the issue, the more problems I found with the claims that man had suddenly become so powerful that he was dominating the natural climate forces," Anderson wrote. "Most of the scientists working on global climate issues were either working for universities or for government agencies, and these institutions have become so highly politicized, predominantly toward the left, that it is common to find scientific reasoning weaknesses whenever there is a political consequence to the scientific outcome," he added. "I have developed computer models myself for the study of materials properties. When developing and using models is very important to keep a clear physical picture of the aspect of reality you are modeling. It is easy to mess up your boundary conditions, which is a known problem with many of the climate models; it is easy to fall into divergent conditions such as the claims of catastrophic positive warming feedback are likely to be; and it is easy to overlook some factors of importance in a complex problem, which the global climate most certainly is," he added. (LINK) (LINK) (LINK) (LINK)

UN IPCC Scientist Dr. Steven M. Japar, a PhD atmospheric chemist who worked on the Nobel Award-winning Intergovernmental Panel on Climate Change's (IPCC) Second (1995) and Third (2001) Assessment Reports, also was part of the scientific team who drafted a UN special report on the Ozone Layer in 2005. Japar, who has authored 83 peer-reviewed publications in the areas of climate change, atmospheric chemistry, air pollutions and vehicle emissions, is a research associate editor for a publication of the American Chemical Society and on the screening committee of the California Air Resources Board. **Japar, a former chemistry lecturer at the University of Michigan,** publicly dissented from man-made climate fears in 2009. "My skepticism about anthropogenic global warming is based entirely on the Scientific Method. We know that the planet has been warming since the end of the Little Ice Age about 300 years ago, but it is only for the last 40-50 years that one could reasonably hypothesize a significant human impact on what has been termed 'global warming,'" Japar told the Senate Environment and Public Works Committee on January 7, 2009. "First let me say that I

agree that there can be a human impact on warming on a local scale -- note the urban heat island effect. However, such local impacts do not contribute to a large-scale, man-made global warming," Japar explained. "The man-made global warming hypothesis is based on only a few observations: (1) Surface temperatures have increased (~0.5 deg. C) for 40 years; and, (2) global climate models project a significant additional increase over the next 100 or more years. Essentially all additional arguments are based on these two points and, therefore, add little to the basic arguments," Japar continued. "The basis of the Scientific Method is that hypotheses be subject to challenge, and if the challenge cannot be disproved the hypothesis fails. The first part of the global warming hypothesis is that the recent global temperature increase is real and mostly man-made. Is the magnitude of the temperature increase certain? There are questions that must be answered. Among them are: Are the current measurements accurate? Much recent information suggests that they are not -- unverified adjustments to 70 years of 'raw' US and global temperature data; the 'retirement' of more than 50% of the global temperature measurement sites in the last 25 years. Are there other possibilities to explain the (unverified) temperature increase of the last 40 years? Yes! Current warming is consistent with the 300 year trend," Japar added. "Changes in solar activity could explain much of it (not solid yet). Then there is the climate model-predicted mid-troposphere 'hot' zone that is supposed to exist over the tropics. Temperature measurements show that the hot zone is non-existent. This is more than sufficient to invalidate global climate models and projections made with them!" he concluded.

Award-winning Japanese Geologist Dr. Shigenori Maruyama, a professor at the Tokyo Institute of Technology's Department of Earth and Planetary Sciences who has authored more than 125 scientific publications, was decorated with the Medal of Honor with Purple Ribbon for a major contribution in the field of geology, specializes in the geological evidence of prehistoric climate change and declared his skepticism of man-made climate fears in 2009. "Our nation must pay huge amounts of money to buy carbon discharge rights," Maruyama said in a March 14, 2009, article in the *Australian*. "This is not reasonable, but meaningless if global cooling will come soon -- scientists will lose trust," Maruyama explained. The article continued, "Dr Maruyama said yesterday there was widespread skepticism among his colleagues about the UN IPCC's fourth and latest assessment report that most of the observed global temperature increase since the mid-20th century 'is very likely due to the observed increase in anthropogenic greenhouse gas concentrations.' **When this question was raised at a Japan Geoscience Union symposium last year, he said, 'the result showed 90 per cent of the participants do not believe the IPCC report.'"** The article noted Dr. Maruyama "thinks the large influences on global climate over time may be global cosmic rays and solar activity" and "believes the earth has moved into a cooling period, and while Japan is spending hundreds of millions of dollars on carbon credits to hedge against global warming, the country's greatest looming problem is energy shortage, particularly oil." "Dr. Maruyama said he was uncomfortable, given the scientific uncertainty of man-made climate-change theory, that Japan had taken a leading position in the crusade for global greenhouse emission targets. Dr. Maruyama said many scientists were doubtful about man-made climate-change theory, but did not want to risk their funding from the government or bad publicity from the mass media, which he said was leading society in the wrong direction," the article concluded. (LINK) (LINK) (LINK)

Biologist and Biochemist Dr. John Reinhard, a member of the American Chemical Society who has published 76 papers and is currently a scientist in the pharmaceutical industry, dissented from man-made warming fears in 2009. "First, global warming is a theory. Nothing more. It lacks objective data that would normally be needed to advance a theory," Reinhard wrote to the Environment and Public Works Committee on January 5, 2009. "Moreover, the existing data show no correlation between mean temperatures and carbon dioxide emissions. Rather, the data suggest that we are dealing with climate cycles that cannot be predicted accurately with any of the existing models," Reinhard explained. "Adoption of carbon 'cap & trade' schemes will have a very clear and negative effect on the economies of developed nations. We can't afford to let junk science tank our economy. Please feel free to add me to your [dissenting scientist] list," Reinhard concluded.

Environmental Scientist and Physicist Louis H. Fowler, who worked with the Texas Air Control Board (now Texas Commission on Environmental Quality) studying ozone issues and specialized in the development and application of models for evaluating impacts of hazardous chemical releases and pollution dispersion modeling using various EPA models, declared his climate skepticism. "I have a masters in physics and over 33 years' working in the fields of environmental science, monitoring air quality and overseeing modeling analyses from permit models to hazardous release impact models. Were I to submit such fraudulent types of reports to my clients or to the federal or state regulatory agencies I would be kicked out of my company. Too bad folks like [NASA's] James Hansen can continue lying at taxpayers' expense in efforts that will line his and Al Gore's pockets. Follow the money!" Fowler told the Environment and Public Works Committee on December 10, 2009. "I am one of the 32,000+ signers of [skeptical declaration] the Oregon Petition. Please keep fighting this zealous, destructive, anti-capitalist garbage. There are more than 650 skeptics...some just won't speak out for fear of retribution," Fowler explained. (LINK)

Award-winning Aerospace and Mechanical Engineer Dr. Gregory W. Moore, who has authored or co-authored more than 75 publications, book chapters, and reports, and authored the 2001 Version of the NASA Space Science Technology Plan which included a comprehensive approach to studying the Sun-Earth connection aspect of space-based research and was honored by the U.S. Department of Commerce for its International Scientist Recognition. Moore also received a special recommendation of the U.S. Senate for his work related to protection of the environment. Moore, formerly a university professor, scientist of the U.S. Government lab, managing editor of an international scientific journal, member of the New York Academy of Sciences, and senior member of the American Institute of Aeronautics and Astronautics, rejected the notion that there is a consensus on man-made climate claims in 2009. "There is definitely no sufficient data which would create a basis for making any kind of conclusions either way," Moore wrote to the Senate Environment and Public Works Committee on January 10, 2009. "There is no sufficient data in existence anywhere which would allow for making any kind of definite statements on the effect of natural mechanisms on the global warming phenomenon," Moore explained. "The data which is used to date for making the conclusions and predictions on global warming are so rough and primitive, compared to what's needed, and so unreliable that they are not even worth mentioning by respectful scientists," Moore added.

Retired U.S. Air Force (USAF) Meteorologist William "Bill" Lyons, formerly of the USAF's Global Weather Central at Strategic Air Command (SAC) Headquarters where he served at "the leading edge of designing and implementing computer techniques for global weather modeling in support of SAC operations." Lyons publicly declared his skepticism in 2009. "I decry the creation of the fear mentality which many seem to use to prevent rational study and encourage irrational actions. I am pleased to be considered a 'denier' in this cause if this puts me in the class with those who defied prevailing 'scientific consensus' that the earth was flat and that the earth was the not the center of the universe," Lyons told the Senate Environment and Public Works Committee Minority office on March 5, 2009. "My experience, and that of those around me, taught me to be cautious of any predictive model which could not be verified. Other activities ongoing at the time made it clear to me how monumental is the energy in our climate system, and taught me to be cautious of the value of human efforts to control the weather," Lyons explained. "Global warming and cooling are realities that have occurred in cycles which began when our atmosphere was formed. The forces involved in weather systems are difficult to comprehend, and the sources of the factors which influence warming/cooling cycles remain subject to legitimate scientific debate. I suspect influence from the varying radiation of the sun as the major factor. I rely on the scientific evidence that the variation in warming/cooling can be statistically correlated with changes in CO2 levels, but the correlation is not predictive of CO2 causality in that the change in CO2 typically lags the change in temperature by several hundred years. My personal experience in building statistical forecasting models taught me that correlation is not always a predictive relationship," Lyons concluded.

Earth Scientist Dr. Javier Cuadros of the UK Natural History Museum who specializes in Clay Mineralogy and has published more than 30 scientific papers, rejected man-made climate fears in 2009. "Curiously, it is a feature of man-made global warming that every fact confirms it: rising temperatures or decreasing temperatures, drought or torrential rain, tornadoes and hurricanes or changes in the habits of migratory birds. No matter what the weather, some model of global warming offers a watertight explanation," Cuadros wrote on March 3, 2009. "For a scientist like me, this sounds fishy. I imagine that there are a good number of models, each with different assumptions and results, but we are never given a general view of these models, what data they use, how their results compare and where and when their predictions apply. The impression is that science popularisers cherry-pick whichever happens to provide the results that match the news of the day. One very useful tool in this respect has been the conceptual change from global warming to the more adaptable one of climate change," Cuadros wrote. "Global warming has become a powerful political tool," Cuadros explained. "I do not find the supposed scientific consensus among my colleagues. My field is earth sciences, related to certain aspects of climate change in the geological scale. Approximately 70 per cent of fellow researchers with whom I have discussed the matter think that we do not have sufficient information to be sure about the issue and that the pretended consensus is politically manufactured. The other 30 per cent do believe there is sufficient evidence in favor of the man-made global warming interpretation. My conversations have sampled scientists from Scotland to Gibraltar and from San Francisco to Moscow," he continued. "[Former Vice President Al] Gore simply made a film and toured the world for a short time while cashing in heavily on a popular theory. This shows that the environmental lobby has become so successful and powerful that they are fearless and ready to take their battle to

the most unconvincing extremes. This panorama is a distressing one for science. The case for man-made global warming has been made waving the banner of science," he concluded. (LINK) (LINK) (LINK)

Award-winning Princeton University Physicist Dr. Robert H. Austin, who heads "The Robert H. Austin Research Group in Biophysics" and has published 170 scientific papers, was elected a member of the U.S. National Academy of Sciences and is a fellow Fellow of the American Physical Society, the American Association for the Advancement of Science and is the current Chair of the U.S. Liaison Committee of the International Union of Pure and Applied Physics. Austin, who won the 2005 Edgar Lilienfeld Prize of the American Physical Society, rejected man-made climate claims in 2009. "I was taught that any discipline with the word 'science' as part of its title is to be avoided, such as Political Science. Unfortunately, Climate Science has become Political Science," Austin told the Senate Environment and Public Works Committee on March 2, 2009. "We understand very little still about climate changes on Earth, which have been over the eons dramatic and sometimes rapid, and mankind had nothing to do with these changes. If you cannot predict the past, you cannot predict the future. It is tragic that some perhaps well-meaning but politically motivated scientists who should know better have whipped up a global frenzy about a phenomena which is statistically questionable at best, and I deeply regret that scientific societies such as the National Academy of Sciences and the American Physical Society have not played leadership roles in giving voice to questions about the depth of our knowledge of climate change and man's ability to change climate," Austin explained. "Of course I am an environmentalist and I would like to see us develop alternate energy sources and conserve energy thoughtfully. I believe that biotechnology will lead the way towards a true greener future which is less polluting and more sustainable," he added. (LINK) (LINK)

Environmental Engineer James A. Haigh, PE, a Certified Plant Engineer and Licensed Professional Engineer of 36 years who has assisted in the design of Class III nuclear valves for nuclear power plants, designed Energy Conservation Process such as cogeneration, pressurized condensate return and authored numerous environmental engineering and pollution studies. Haigh, a life long environmentalist, dissented from climate fears in 2009. Haigh presented a paper January 26, 2009, on how the current "Media Induced State of Fear from alleged Human Induced Global Warming" adversely affects Environmental Compliance and can result in "disastrous and ineffective long term energy planning." Haigh told Environment and Public Works Committee on February 4, 2009, that based on his research of available data he had "reached the conclusion that man-made climate fears were 'obviously incorrect' records of the surface of the sun heating up correlate with the rise in the earth's temperature far more consistently than the rise of CO2 in the atmosphere. In fact there are 30 year periods where CO2 rises almost linearly while global surface temperatures fell considerably (1940-1970)" Haigh wrote. "CO2 control is appears to be an effective way to limit the global competitiveness of the US and method to reduce our standard of living at the expense of (countries like) communist china that have little or no environmental compliance law in comparison to the US," he continued. "My greatest concern is that national policy decisions should not be made in a media-induced 'State of Fear.' Concentrating on CO2 as the sole source of immediate and dire global climate change diverts the focus from the true concern, environmental compliance. The public has been mislead into thinking that "being green" is synonymous with saving the environment when in fact 'green alternative fuels' such as

corn ethanol (which doesn't reduce fossil fuel demand) actually makes significant contributions to already dangerous ground water pollution and surface run off that has created a 200 mile dead zone at the mouth of the Mississippi River where nothing lives," Haigh wrote. "That is only one example of how making decisions in a Media Induced State of Fear have immediate and dire effect on the environment. Licensed professional engineers such as me practicing in the environmental field tend to view such things as Human Induced Global Warming theory on how it actually and immediately affects our global competitiveness and distracts us from making sound long term, environmentally sound energy policy," Haigh wrote.

Meteorologist Tony Pann of WUSA 9 in Washington, DC, holds the American Meteorological Seal of Approval and dissented from man-made climate fears. "I am on the 'other side of the fence' when it comes to global warming...and I'm not alone by any means," Pann wrote on July 22, 2008, in the *Washington Post*. "I am all for the environmental movement...there are a million reasons to clean up the air and find alternative fuels. This whole thing has really moved away from science anyhow and taken on a moral or religious overtone," Pann explained. "The argument for me now is this: Can we get people to act on the environment without scaring the 'you know what' out of them? I hope so." Pann also explained, "I believe the earth naturally goes through warming and cooling cycles. It could very well be that it's colder in five years. We just don't know. Anyone remember the *Time* magazine cover stories back in the 1970s about us going into a 'mini ice age?'" (LINK) (LINK) (LINK)

Certified Consulting Meteorologist Mike Smith, the CEO of WeatherData Services of Wichita Kansas, dissented in 2009. "My personal conclusion: The science is definitely not settled," Smith wrote in a January 16, 2009, article titled "Global Warming Doom, Gloom Haven't Occurred." "I don't know what 2009's or 2029's weather might bring, nor does anyone else. The sciences of meteorology and climatology still have a lot of learning to do," Smith explained. "The fact is that the solar-land-ocean-atmosphere system is incredibly complex, and meteorologists have no consistent skill at forecasting its behavior a year into the future, let alone decades hence," he added. "The 2001 forecasts by the Intergovernmental Panel on Climate Change (cited by Al Gore) have failed to capture the recent cooling, as the above graph indicates, suggesting that the carbon dioxide-atmosphere connection is more complex than some initially believed. A small but growing number of scientists are becoming concerned about global cooling due to the current, unusually low solar activity and other geophysical factors," Smith added. (LINK)

Geology Professor Uberto Crescenti of the University G. d'Annunzio in Italy is the past president of the Society of Italian Geologists and dissented in 2009. "I am very glad to sign the U.S. Senate's report of scientists against the theory of man-made global warming," Crescenti wrote to the Senate Environment and Public Works Committee on January 15, 2009. "I think that climatic changes have natural causes according to geological data (my Conference, XCI Congress of Society of Italiana di Fisica, Catania 2005). I am very glad to sign the [Senate's] AGW-650 report," Crescenti added. (LINK)

Physicist Jerome Hudson who studies focused on aperture synthesis and optics, dissented from man-made climate fears in 2009. "I am not convinced that CO2 is any threat to the environment, nor am I convinced of any catastrophic warming. You can classify me as a 'skeptic,'" Hudson wrote to Environment and Public Works Committee on January 10,

2009. “I don't believe our government should spend vast sums of money in a fruitless attempt to counter a non-problem. I don't oppose further research on the topic - there is certainly enough of a case for that, so long as the funding is fairly distributed to scientists on both sides of the issue,” Hudson added.

Professor Luigi Mariani, PhD, of the Agro-Meteorological Research Group, Dept. of Crop Science at the University of Milan, who has authored or co-authored more than 50 peer-reviewed studies and other scientific reports, refuted man-made fears and ridiculed former Vice President Al Gore's climate claims in 2009. "The sheer number of contradictions in Gore’s charts vs. words makes that all too evident. The graph showing CO2 concentrations over the last 650,000 years alongside temperatures clearly indicates increased CO2 is an effect of warming and not a cause," Dr. Mariani said on January 23, 2009, after a public screening of Al Gore’s *An Inconvenient Truth*. "Temperatures in Switzerland definitely increase but only from 1989: why would the greenhouse effect of CO2 show up only from that date, one wonders? Is there something else perhaps, underneath Gore’s neat explanations? I am really impressed by Gore’s light-mindedness in navigating among contradictory data. If he delivered the same ideas around the world in hundreds of speeches, how on Earth can it be possible that not even one person in the attendance has ever made Gore confront his own contradictions? Had he spent at least part of his precious time reading scientific literature or at least opening himself to a frank and open discussion with anybody aware of the complexities of climate science, I am sure he would have presented things in a different way," Mariani explained. "Also note how many times Gore pushes on the ethics button, whilst anybody with a different mind on these topic is basically of lowly morals (a 'skeptic,' a well-paid mouthpiece for Big Oil, etc)," he added. "Gore at one point says that we must get rid of 'evil' greenhouse gases. Everybody must be made aware of the fact that CO2 is not a poison, rather a major foundation for life itself. Without CO2, there would be no photosynthesis and we would not have much if anything to eat. Vascular plants appeared during the Devonian era, with CO2 levels 20 to 30 times higher than current ones, and yet temperatures were not much different than today’s (Hetherington et al. 2005). And if there was no man at the time to call as a 'cancer' on the planet, could anybody please explain on what grounds Devonian air was the way it was?" Mariani asked. "Gore argues that to allow CO2 to increase is deeply immoral. It would be interesting to ask for an opinion on such a claim by a plant of wheat or a vine," he added. Gore's film "offers no science-based evaluation of what issues are really at stake: it is in fact its exact opposite, more likely part of a neo-Apocalyptic mindset that distorts the scale of importance of our issues and is capable of contributing little or nothing to the solution of actual problems currently facing humanity. Granting the 2007 Nobel Peace Prize together to a politician (Al Gore) and a supposedly scientific organization (the IPCC) has simply reinforced the idea that the IPCC itself and AGW in general are heavily constrained by politics," he concluded. (LINK) (LINK) LINK)

Environmental Chemist Jim Nibeck, who also worked in the biomedical research industry, wrote a 2008 paper on climate titled “Doubt About Anthropogenic Global Warming.” “My personal skepticism regarding anthropogenic global warming is based on the premise that man-made CO2 is a significant portion of environmental CO2 and that man-made CO2 is the prime cause of global warming,” Nibeck wrote in an analysis emailed to EPW on December 13, 2008. “Water vapor constitutes Earth's most significant greenhouse gas, accounting for about 95% of Earth's greenhouse gases. Interestingly, many

"facts and figures" regarding global warming completely ignore the powerful effects of water vapor in the greenhouse system, carelessly (perhaps, deliberately) overstating human impacts as much as 20-fold," Nibeck wrote.

Quantitative economist Kenneth A. Haapala, the past president of the prestigious Philosophical Society of Washington, the oldest scientific society in Washington (founded 1871), has reviewed hundreds of reports based on quantitative techniques. Haapala declared his dissent in 2009. **Haapala presented the finding of a report he co-authored titled "Nature, Not Human Activity, Rules the Climate"** at a January 9, 2009, meeting of the Philosophical Society of Washington. Haapala "directly challenged the conclusions of the IPCC Summary that human emissions of carbon dioxide are causing dangerous and unprecedented warming. In brief, the report finds the recent warming is neither unusual nor unprecedented and most likely predominately caused by natural forces. The report asserts that the quantitative models used by the IPCC to make predictions are unreliable and biased in greatly overestimating the influence of carbon dioxide emissions on warming. The report demonstrates that the IPCC report obscures how little we know of the natural forces that cause climate change," the website of the Philosophical Society of Washington explained. "Starting with a brief overview of our knowledge of climate change, Haapala will highlight key failures in the IPCC report. Particularly, the speaker will critique the IPCC's use of quantitative procedures and techniques of presentation. The talk will conclude with alternative theories, suggestions of what went wrong, and what needs to be studied," the website concluded. (LINK)

Geologist Dr. Seymour Merrin, a Fellow of the Geological Society of America and a research scientist, declared "climate change is nature at work" in 2009. "The basic theory states that, as human-produced CO2 increases, Earth temperatures increase. Simple prediction, simple to test. The predominance of 'hottest' years should be in the last 20 years, but that is not true. In fact, the last 10 years have been relatively flat — with 2007 and 2008 having declining temperatures. No correlation at all — actually, a disproval of that particular theory," Merrin wrote on February 29, 2009. "There are simple facts in such abundance that the media never reports. When the media lambastes a great (skeptical) scientist and brave patriot, Jack Schmitt, a geologist, astronaut and former senator for apostasy, you know that it isn't science they're talking about, but agendas. Schmitt knows more about the Earth and its environment than all the staff at The New Mexican put together. Listen to a proven scientist," Merrin wrote. "There is little doubt that the Earth's climate is changing, as it always has. A multitude of specific evidence leaves no doubt that 10,000 years ago, glaciers covered a large part of the polar regions down to the latitude of New York City in the north. Concrete evidence shows that since then, the temperature has been significantly warmer (sub-tropical plants in Alaska) and colder during the Little Ice Age from the 15th century through the middle of the 19th. It was warmer in the 14th century than it is now," he added. (LINK)

Professional Geologist Earl F. Titcomb Jr. who has co-authored analyses of geological and seismological hazards, rejected climate fears in 2009. "It is amazing to me, as a professional geologist, how many otherwise intelligent people have, as some may say, 'drunk the Al Gore Kool-Aid' concerning global climate change," Titcomb wrote on March 13, 2009. "One of the more recent changes (geologically speaking) was the Pleistocene age glacial and interglacial period. This era was one of repeated climate changes causing rises and falls of the sea level, as glaciers advanced and retreated. Our Coastal Plain in Georgia

was formed as the result of these movements," Titcomb wrote. "This occurred over thousands of years before the present and there were no human beings around at the time to blame for these changes: i.e., there were no coal-fired plants nor gas guzzling cars to blame, etc. It makes one wonder how all these climate changes occurred with no one or no fossil fuel power plants, etc., to blame! Could it possibly be that our planet is now and has always been in a natural constant state of change?" Titcomb wrote. "Why must we now take 'bold action,' including burdensome and costly regulations, to stop these questionable impacts of human activity?" he concluded. (LINK) (LINK) (LINK)

Surface Chemist Dr. Mark Rose, Head of Environmental Quality at Qatar Petroleum who has generated two patents and developed the largest Purified Wet Acid Plant in the world, dissented in 2009. "This human-centered view of changes in the earth's environment, said Dr Rose, is challenged by many scientists, who argue that climate is, and always will be, controlled by the sun. Man's puny efforts at changing the climate is a mere sideshow compared with the unimaginably vast changes in the sun's solar output. Water vapour, not carbon dioxide, is the major driving force in climate change," an article in the *Gulf Times* reported on January 9, 2009. The article continued, "Almost any natural disaster nowadays is unhesitatingly blamed on global warming resulting from man's indifference to his environment. Anyone who thinks otherwise, says Dr Rose, is urged to keep quiet and he/she will meet with considerable reluctance on the part of reputable scientific journals to publish alternative theories." The article concluded, "If it is true, does it mean that we can all stop worrying about polluting the earth's atmosphere? Of course not, said Dr Rose, pollution is increasingly harmful to the health of all living creatures, not just humans. But blaming it for global warming is another matter altogether." (LINK) (LINK)

Physicist Dr. Paul Drallos, who worked as a Post Doc at Sandia National Labs in Albuquerque and at the University of Toledo, formed Plasma Dynamics Corporation, a small research company that specializes in plasma display technology and computer simulation. Drallos also publicly declared his skepticism of man-made warming fears. "We must conclude that there is no logical basis on which to believe that theory of human-caused global warming," Drallos wrote in a July 9, 2008, paper titled "Is global warming caused by human activity?" "There is good correlation between temperature and solar variations. There is historical evidence of natural climate cycles. There is historical evidence that changes in temperature cause changes in atmospheric CO2. There is scientific basis for each of these observations," Drallos wrote. "On the other hand, we have the anthropogenic greenhouse gas explanation. The physical evidence for greenhouse gas warming is absent. The correlation between CO2 and temperature is absent. The historical evidence is not consistent with CO2 acting as a driver of temperature. Temperature trends during the most recent decade have displayed the exact opposite behavior than predicted by the greenhouse theory. In light of these observations, by what logic can we justify choosing a new theory which has no supporting physical evidence, no positive correlation with observations, inconsistency with historical evidence and currently predicts the opposite of what we now observe?" Drallos wrote. "Furthermore, by what logic do we choose such a theory over an established theory that has physical evidence and positive correlation with observations, is consistent with the historical record and currently predicts what we now observe? (We are currently witnessing a decrease in solar activity and a corresponding decrease in global temperature, as expected.)" he concluded. (LINK) (LINK) (LINK)

Atmospheric Scientist Robert L. Scotto, who has more than 30 years air quality consulting experience, served as zone-wide QA Manager on a $300 million EPA Superfund contract and is co-founder of Minnich and Scotto, Inc., a full-service air quality consulting firm. He also is a past member of the American Meteorological Society (AMS). Scotto, a meteorologist who has authored or co-authored numerous technical publications and reports, joined the international scientists dissenting from man-made warming claims in 2008. "Proponents of AGW (anthropogenic global warming) analyses of recent surface temperature records which are suspect at best, as they clearly contradict much more reliable satellite data," Scotto told EPW on December 22, 2008. According to satellite data, "the Earth has been cooling since 1998," Scotto wrote. "This discrepancy is due principally to the spatially unrepresentative nature of the surface records, owing first to the fact that rural stations are increasingly being replaced by urban stations and, second, to the frequent failure of these new urban stations to meet basic siting criteria," Scotto explained. "Based on the laws of physics, the effect on temperature of man's contribution to atmospheric CO2 levels is minuscule and indiscernible from the natural variability caused in large part by changes in solar energy output. Acknowledgment of this true science is critical to implementation of much-needed practical measures for increasing domestic energy and world food supplies," he added. (LINK) (LINK)

Atmospheric Scientist Timothy R. Minnich, who has more than 30 years experience in the design and management of a wide range of air quality investigations for industry and government, specializes in the application of optical remote sensing (ORS) to a wide range of air-related issues. Minnich has worked with EPA as a Superfund contractor, is co-founder of Minnich and Scotto, Inc., a full-service air quality consulting firm. Minnich holds a masters degree in meteorology and taught courses at Rutgers University and University of Michigan. He is a past member of the American Meteorological Society, specializes in issues like acid rain and ozone, and has authored or co-authored numerous technical publications and reports. "I choose to take President-elect Obama at his word when, upon his appointment of John Holdren as director of the White House Office of Science and Technology Policy, he promised to '[protect] free and open inquiry . . . ensuring that facts and evidence are never twisted or obscured by politics or ideology,'" Minnich told EPW on December 22, 2008. Clearly the best means to fulfill on this commitment is to appoint to the Council of Advisors on Science and Technology, over which Dr. Holdren will preside, several of the more than 650 distinguished and renowned scientists who have openly questioned the "consensus" on AGW in Senator Inhofe's 2008 U.S. Senate Minority Report," Minnich explained. "The late Michael Crichton said it well: 'Historically, the claim of consensus has been the first refuge of scoundrels; it is a way to avoid debate by claiming that the matter is already settled. . . . Let's be clear: the work of science has nothing whatever to do with consensus [which] is the business of politics. . . . What is relevant is reproducible results. The greatest scientists in history are great precisely because they broke with the consensus,'" Minnich added. (LINK) (LINK)

Certified consulting meteorologist Anthony J. Sadar, co-author of *Environmental Risk Communication: Principles and Practices for Industry,* dissented from man-made climate fears in 2009. "Everyone has been conditioned to believe that an extremely complex climate system is largely controlled by a single simple gas - carbon dioxide - even though

the biggest single climate regulator on Earth is most likely water," Sadar wrote on February 23, 2009. "The global atmospheric temperature is substantially controlled by water in all its forms, as invisible vapor in air, as liquid in oceans and clouds, and as solid ice crystals, snow cover, and glaciers," Sadar explained. "Many in the environmental profession have come to an epiphany like the one the late Michael Crichton had - that contemporary environmentalism, with its authoritative, unchallengeable proclamations and rigid tenets, is analogous to organized religion. This environmental religion is headed by politicians (or former politicians) as the high priests and an established political cathedral (read Intergovernmental Panel on Climate Change). Besides, could other uncontrollable factors like variation in incoming solar radiation and cosmic rays, as some atmospheric scientists have proposed, have a dominant influence over climate? So, before we all surrender to a calamitous climate change scenario, let's put it into perspective with the very real present-day calamities of mass starvation, disease, ethnic cleansing, potential economic collapses, and the like. With these exceptionally serious challenges at hand and based on the enormous complexity of the Earth-climate system and the relative paucity of knowledge scientists have about the systems operation, we sincerely hope to encourage a return to humility in environmental research and activism and education about our biosphere. We hope politicians and scientists once again embrace the basics of science including the idea that all 'theories' consist of assumptions and limitations - and this goes double for 'forecasts'!" Sadar added. "How have we come to universally accept this new religion based on dubious prophecy that condemns so many poor souls to a living hell and will greatly limit the salvation offered by free economies? That's where the missionaries come in. These missionaries, a k a 'teachers' and 'professors,' have gone out into the fields of the education system to disseminate the depressing gospel that the Earth is forever in big trouble. Thus, with sustained indoctrination from grade school through graduate school, proselytes have been harvested. No wonder today's scientists, let alone society, so quickly succumb to any doomed-Earth theory. Our scientific community has been primed to accept that a forecast of calamity for our atmosphere is as good as a reality," he concluded. (LINK) (LINK)

Terry Jackson of the Institute of Physics in London, the founder of the Energy Group, and a physics teacher at Belfast Institute Further and Higher Education for 30 years, dissented from global warming claims in 2009. "There is ample scientific proof that CO2 pollution levels follow temperature rises and not the other way round," Jackson, a member of the Women's Engineering Society, wrote on February 12, 2009. "The earth has been much warmer in the past than it is today. CO2 concentrations have been much higher from 1885 to 1961 than they are today," Jackson wrote. "While CO2 may be the most important greenhouse gas, it is water naturally present in the atmosphere which contributes 95% of the greenhouse effect," she explained. "The earth has been cooling for the last 10 years yet CO2 levels have still been increasing. How come, if man is supposed to be responsible for climate change?" she added. (LINK) (LINK)

Chemical Process Control Engineer Dr. Pierre R Latour, who holds a PhD in Chemical Engineering and has published more than 70 publications and managed NASA's Apollo Docking Simulator development, wrote an analysis of climate change in *Hydrocarbon Processing Magazine* in 2009. "I can prove mathematically the system is unmeasurable, unobservable and uncontrollable," Latour wrote on February 4, 2009. "Climate alarmists promote the scientifically discredited UN IPCC for political reasons,

ignoring the valid contradictory science and offering no convincing technical argument either to confirm the UN IPCC or to support their own extravagant, alarmist theories. Any neutral and reliable scientist, by contrast, will try to explain, in as balanced a way as possible, what conclusions can be drawn from the information available, taking into account all the uncertainties and question marks they come with," Latour wrote in February 2009 in *Hydrocarbon Processing Magazine*. "It is unfortunate that climate alarmists so frequently use specious arguments that skillfully exploit the public's lack of background knowledge to support their unworthy cause," Latour wrote. "Water vapor and clouds are a powerful link between weather and climate, but historic data for modeling is absent. Water vapor is the dominant greenhouse gas, the inconvenient truth often neglected by AGW alarmists," he added. "I accept the sea is acidifying in some places, harming coral reefs. I never claimed otherwise. My research indicates carbonic acid may be involved, but the coral reaction rate has increased because of the solar driven increase in water temperature during 1978–1998, as well as the increased carbonic acid concentration due to higher CO2 partial pressure at the sea surface, little of which is caused by fossil fuel combustion anyway," he added. (LINK)

Mathematical Physicist Dr. Frank Tipler, professor at Tulane University who has authored 58 peer-reviewed publications and five books, dissented from man-made climate fears. "It is obvious that anthropogenic global warming is not science at all, because a scientific theory makes non-obvious predictions which are then compared with observations that the average person can check for himself," Tipler wrote on December 22, 2008. "As we both know from our own observations, AGW theory has spectacularly failed to do this. The theory has predicted steadily increasing global temperatures, and this has been refuted by experience. Now the global warmers claim that the Earth will enter a cooling period. In other words, whether the ice caps melt, or expand --- whatever happens --- the AGW theorists claim it confirms their theory. A perfect example of a pseudo-science like astrology," Tipler continued. "If a guy agrees with AGW (Anthropogenic Global Warming), then he can get a government contract. If he is a skeptic, then no contract. There is a professor at Tulane, with a Ph.D in paleoclimatology, who is as skeptical as I am about AGW, but he'd never be considered for tenure at Tulane because of his professional opinion. No government contracts, no tenure," Tipler added. (LINK) (LINK) (LINK) (LINK)

Professor Dr. Caleb Stewart Rossiter, an adjunct professor at the School of International Service at American University and a long-time teacher of statistical modeling, rejected the certainty of man-made warming claims in 2009. "It is noteworthy that all paleo-climatologists agree that at the high and low end of the recurring 100,000 year cycles in which global mean temperature moves as much as 20 degrees, it is temperature that changes direction first, followed in a few hundred years by carbon dioxide concentration. These cycles of temperature are perfectly correlated with the oscillation of the earth's orbit around the sun from a circle to a 5 percent ellipse, although no convincing mechanism has been identified for how the change in the orbit could significantly change the solar power that gets to earth," Rossiter wrote in an essay titled "Global Warming Far from Fact" on February 16, 2009. "The lack of understanding of a powerful physical mechanism that has generated a 20-degree rise in temperature over the past 20,000 years makes it difficult to accept the IPCC's claim - on the third step - that the lack of other identifiable mechanisms for the much more modest rise in temperature in the past 150

years means that the sole culprit is human production of heat-trapping gases. For me there is not enough proof to justify what I fear will be the outcome of the post-Kyoto emissions negotiations: the developed countries will stampede developing countries into reducing the carbon output they need to keep economies growing and life expectancy increasing," Rossiter added. "The IPCC reports that for millions of years the concentration in the atmosphere of the primary heat-trapping gas, carbon dioxide, has moved in close correlation with global mean temperature. It also estimates that since 1860 this concentration has increased from 280 to 380 parts per million as global mean temperature has risen by one degree. Fine so far. However, since we have only one earth to experiment on, which is not much of a sample size for testing climate hypotheses, the IPCC must use computer models to address the second and third steps - timing and alternative hypotheses. Here things get sticky. The models cited by the IPCC are still primarily statistical curve - fitting exercises rather than mathematical reenactments of the effects of the laws of physics on the interaction of molecules in the hurly-burly of a global system," Rossiter explained. Rossiter also wrote a 2006 essay titled "Convenient Fibs about an Underlying Truth: Al Gore's Tortured Brief on Climate Change's Causes, Effects, and Solutions" (LINK) (LINK) (LINK)

Meteorologist Scott Sumner of North Carolina dissented from climate fears in 2009. "An increase in carbon dioxide (CO2) is not going to change the fact that EVERYTHING in weather and climate is cyclical. Nature is always trying to balance 'herself' with the current trend having been for less cold and snow during winter seasons and hotter and drier summers, but snow lovers do not fret," Sumner wrote in the DC Weather Examiner on February 15, 2009. "We need to look to the stars, well actually just one star, the Sun, in order to delve deeper into its possible correlation with global warming. The interest in the sun is in its sunspots and their on-average 11 year cycle. According to detailed observations that have dated back to the late 19th century by the Royal Greenwich Observatory, records of sunspot activity have carefully been examined with regards to the size, position and number of sunspots. The findings over time can be summed up simply this way, the cyclical changes that the sun undergoes appear to correlate well with temperatures on earth," Sumner explained. "The current cycle appears to be the longest in at least a century and may project to quieter subsequent cycle and cooling temperatures ahead. Just something to think about when you hear talk about how our winters are barren of snow and cold and how hotter our summers have been," he concluded. (LINK) (LINK)

Physicist Gary M. Hoover, a consultant with research and operational experience in atmospheric energy absorption, nuclear reactor operations and exploration geophysics, dissented in 2009. "Temperature proxy measurements going back hundreds of thousands of years through many ice ages and warm periods indicate atmospheric carbon dioxide concentration to be a result of temperature change and not a cause," Hoover wrote on wrote on February 13, 2009, in *Tulsa World*. "Alarmist climate predictions receive enthusiastic coverage from the media and Hollywood since the sensationalism catches the eye of viewers. Thousands of researchers depend upon the government's belief in warming to continue nearly $6 billion a year in climate change science and technology programs," Hoover explained. "In the name of scientific integrity and the effective use of our resources we should demand examination of the scientific bases and motives of climate change alarms and make sure that our support for energy programs is in the best interests of

ourselves, our descendents and the world in general. A mixture of pseudoscience, emotion and politics is very dangerous," he added. (LINK)

Chemist Dr. Nicholas Drapela of the faculty of Oregon State University Chemistry Department expressed his outrage at NASA warming scientist James Hansen and referred to him as "an apocalyptic prophet." "My dear colleague Professor Hansen, I believe, has finally gone off the deep end. When you have dedicated the bulk of your career to a cause, and it turns out the cause has been proven false, most people cannot bring themselves to admit the truth," Drapela wrote on June 24, 2008. Drapela wrote that Hansen's recent claims "contain neither reason nor truth when compared to the volumes of daily literature being published in scientific journals today on climate change. It is not difficult to refute the words of Professor Hansen. On the contrary, one feels it is almost unfair." "The global warming 'time bomb,' the 'present, dangerous situation,' 'the perfect storm,' 'global cataclysm,' 'disastrous climate changes that spiral dynamically out of humanity's control.' These are the words of an apocalyptic prophet, not a rational scientist," Drapela added. Drapela also chided the UN. "The International Panel on Climate Change is a body of the United Nations. It is not a scientific body; it is a political body," he wrote. Drapela also noted that he is "not a Republican; owns no stocks in oil companies (or any other companies); loves the outdoors and the environment; loves polar bears and clean air and water." (LINK) (LINK) (LINK) (LINK)

Geologist Allan Shepard, former Chief Geologist for Amoco International and member of the Association of Engineers, Geologists and Geophysicists of Alberta, dissented in 2009. "I conclude that there has been both slight warming and cooling over the past hundred years or more largely driven by the sun and its interaction with clouds, winds, ocean currents etc. CO2's contribution to any warming is negligible," Shepard wrote to the Environment and Public Works Committee on February 12, 2009. "It took only a few months of research to find that I was skeptical for the reason that the IPCC was in my estimation a politicized monopolistic scientific body," Shepard wrote.

Dr. Jim Buckee, who holds a PhD in Astrophysics from Oxford University, lectured about climate change at the University of Aberdeen and was the former chief executive of the oil and gas firm Talisman. Buckee dissented in 2009 and predicted the Earth is entering a 20 year cooling period. "I think [climate skepticism] is the dominant view in professional science circles. I know lots of people in universities and so on and quite often they have to retire before they can say what they want because it's so frowned upon." Buckee said according to a February 11, 2009, article. "Any dissension is like a heresy. People are stamped on so they can't be heard. That has religious overtones." The article continued, "In the lecture, Dr. Jim Buckee will put forward the idea that solar activity is responsible for changes to the climate. He will say the climate of the past few hundred years is a continuation of a normal process of gradual warming since the ice age 10,000 years ago. During that time, he argues, there have been constant fluctuations. He believes those fluctuations are caused by varying solar activity. When the sun is strong, it deflects cosmic rays from within and outside our galaxy. When the sun is weak, the rays enter the Earth's atmosphere and cause low cloud, which has a cooling effect. He believes that, after a period of warming, the Earth is now entering a period of cooling that will last until 2030 or beyond. It is just one of the many theories put forward by sceptics, who argue that humans are not responsible for climate change." (LINK)

Professor Dr. Doug L. Hoffman, mathematician, computer programmer, and engineer, worked on environmental models and conducted research in molecular dynamics simulations and continues to teach at Hendrix College and the University of Central Arkansas. Hoffman co-authored the 2009 book, *The Resilient Earth*, described as "bringing a dose of skeptical reality to climate science and the global warming debate." Hoffman chastised the climate science community in 2009. "Once again we have misleading climate change pronouncements being based on data errors, data errors detected by non-UN, non-IPCC, non-peer-reviewed external observers. Sometimes it is the scientists themselves who discover the errors, as with the non-disappearing ice sheets of Greenland," Hoffman wrote on February 19, 2009. "More often than not, it is outside observers uncovering the errors, casting doubt on the trustworthiness of all science. This is exactly what happens when you base your arguments on 'consensus science' and not scientific fact. What is happening to the Arctic ice this year? So far, the sea ice extent is tracking ahead of 2005, 2006, 2007, and 2008, so the predictions of an ice-free north pole might be a bit premature," Hoffman explained. (LINK) (LINK) (LINK) (LINK)

Engineer Allen Simmons worked 12 years with NASA's top climate scientists and wrote computer systems software for the world's first weather satellites, TIROS (Television and Infra-Red Observation Satellite) 1-9. Simmons also led a team of engineers and scientists to develop computer systems for the NIMBUS series of polar orbiting satellites which were designed to collect meteorological, atmospheric, geological, oceanographic, and other environmental data. Simmons also aided in the development of the first mapping images of Mars. Simmons dissented from global warming claims in 2009 and co-authored the book *The Resilient Earth*, described as "bringing a dose of skeptical reality to climate science and the global warming debate." "When you read *The Resilient Earth*, you will learn if the IPCC passes or fails the three pillars of science. As our research and writing progressed, our knowledge of the interrelated makeup of Earth's environment grew. We learned our understanding is far from complete when we realized how complex Earth's climate is. Throughout our efforts, our goal was to convey an unbiased and undistorted view of the science behind Earth's changing climate. We hope our passion for both science and protecting the natural world are evident in our words," Simmons said according to a February 6, 2009, article. "We are challenging computer models which predict Earth's temperature 100 years in the future. So the main purpose of the book was to uncover the who, how, and why these long-range predictions of Earth's temperature were being made. During our research, we discovered a thing missing - hard science and how little of it made it into debate. Further surprise came from the lack of knowledge among the general public and, believe it or not, among some scientists actually involved in climatology. We discovered global warming is a topic much discussed but little understood. We called it 'Global Confusion,'" Simmons explained. "The questions are scientific, but the UN answers are political. The global warming debate is hardly about science. It has become a cause célèbre, championed by activists, politicians and celebrities. To deny their belief that humans are the cause of global warming, is to invoke their wrath," he added.
(LINK) (LINK) (LINK)

Ohio's NBC 4 chief meteorologist Jym Ganahl who was the youngest person to be granted the American Metrological (AMS) Seal of Approval, dissented from man-made climate fears in 2009. "Just wait 5 or 10 years, and it will be very obvious. They'll have

egg on their faces," Ganahl said of the promoters of global warming fears according to a February 5, 2009, article. "It is remarkable how many people are being led like sheep in the wrong direction," Ganahl explained. "Sunspots—and not carbon emissions—are to blame for the slow warming of the globe," Ganahl said. "It has nothing to do with us. When there are sunspots, like freckles on the sun—dark spots—these are like turning on a furnace and the earth warms. When there are no sunspots, it is like the furnace is in standby and the earth cools. I have always thought we should celebrate and be thankful we live in a time when it is warmer, not curse it," Ganahl said. "It allows us to grow food and feed the population—and the warming is slow and we can adapt to it. Cold, on the other hand, is to blame for a whole host of worldly disasters, including death of the Aztecs, the Vikings, and who knew?— the bubonic plague," Ganahl said. "Instead of screaming global warming, we should be preaching global cooling," he added. The article noted that "with a new president who apparently buys into the whole carbon emission demonizing scam, Ganahl said, 'It's very scary,' and admittedly 'very difficult' to fight the mob mentality. 'Carbon dioxide is what we, as people, exhale. Enough said. Unless you eliminate people, you have it. It's food for the plants and trees,' he said." "Just tell [the promoters of global warming] to wait five or ten years, and I'll have history to back me up," he concluded. In a follow-up February 19, 2009, article, Ganahl explained how he was under siege for expressing skepticism. "I started to fear for my personal safety," Ganahl said. "I worried that someone was going to ambush me while I'm walking the dog at midnight," he added. But the tide turned and he received "hundreds of emails" supporting him. "This thing has gone worldwide," he said. "I've had mail from 12 countries, 20 states, and some unidentified," he added. Ganahl also received a call of support from American Meteorologist Society President Thomas Karl. "In my whole career, I've never got a call from him," he said. (LINK) (LINK) (LINK)

Professional Geologist Gary Walker, a member of the Canadian Society of Petroleum Geologists, declared his dissent from climate fears. "I have done extensive research regarding the global warming debate and have come to the conclusion that while global warming is real (the earth has been warming since the end of the last ice age), the amount of this warming that has taken place in the last 150 years that has been caused by anthropogenic CO2 is very much uncertain," Walker wrote to Environment and Public Works Committee on January 27, 2009. "Climate models are in large part based on assumptions not facts. In my opinion MUCH more research has to be done and more climate data has to be collected before we can even attempt to quantify the effects of anthropogenic CO2 on our climate system. I would estimate more than 95% of the petroleum geologists and geophysicists in Alberta (there are probably over 4000) are somewhat skeptical when it comes to the claims being made about global warming. Our views come as a result not just from our education but also our occupation where we see the effects of constant climate change via the rock record," Walker explained. "Personally I feel the media has done a bad job with respect to reporting the global warming issue. Most stories focus on the most pessimistic climate forecasts imagined. Many of the stories quote scientists who feel strongly man is causing global warming," Walker concluded.

Geologist Dr. A. Neil Hutton, former District Geologist for Northwest Territories and the Arctic Islands and former Assistant Chief Geologist for the Western Canadian Basin, wrote a January 2009 analysis skeptical of man-made global warming. "On the whole, the media have done a remarkably poor job in reporting on global warming.

Typically, the reports have been a simple regurgitation of the spin produced by the Intergovernmental Panel on Climate Change (IPCC)," Hutton wrote. "In an extraordinary move last spring the IPCC released the 21-page SPM for the Fourth Assessment Report (2007) more than three months ahead of the 1,600-page scientific report. This was to ensure that the scientific report was consistent with the SPM. In other words the science was not to conflict with the politics!" Hutton explained. "The general public and the media, apparently, are quite unaware of these contradictions and are much taken up with the emotional aspects of the reports of melting arctic ice, glaciers, and the snows of Kilimanjaro, as well as many other weather catastrophes appearing in the press," he added. In the long term, the failure to challenge the so-called consensus will be detrimental to scientists and our future ability to legitimately influence public policy," he added. "Most of the statements from the SPM are unproven assumptions and a review of the literature on the basis of a truly multidisciplinary approach involving physics, geology, history, and archaeology leads to much different conclusions," he concluded. (LINK) (LINK)

Chemist Dr. Grant Miles, author of numerous scientific publications who was elected to a Fellowship of the Royal Institute of Chemistry, was a member of UK Atomic Energy Authority Chemical Separation Plant Committee. Miles, who was recognized for his scientific contributions by direct election to Fellowship of the UK's Royal Institute of Chemistry, chastised the UN IPCC for its global warming claims. "There is no credible evidence of the current exceptional global warming trumpeted by the IPCC and there can be no such thing as an average world temperature," Miles wrote in November 2008. "The IPCC is no longer behaving as an investigative scientific organization or pretending to be one. It is now showing its true colors in its use of fantasy and propaganda to advance its environmental socialist agenda. Environmentalism has become a quasi-religion," Miles wrote. "It is not becoming clear to scientists that in identifying the complete falsity of the IPCC's pronouncements they are seeing the work of an organization that used pseudo-science to promote an ideology. Their leaders betrayed the trust of the world community. They have no interest in the genuine investigation of the complex factors involved in long-term climate change. The IPCC should be abolished and climate research left to existing reputable research organizations," he wrote. (LINK)

Geologist Dr. Lloyd C. Furer, a past Associate Scientist and Visiting Professor at Indiana University and who served as a meteorologist for the U.S. Air Force, has authored more than 35 publications and declared his skepticism in 2009. "I have been told that there is a list of about 650 scientists who have doubts the human-produced CO2 has little or nothing do with the current global warming. You can certainly list me as a skeptic," Furer wrote to wrote to Environment & Public Works Committee on February 3, 2009, requesting to be added to the dissenting scientist report. "I've been exposed to climate change in the geologic record many times in the past 40 years and I have a strong interest in climate change possibly as a result of starting my science career in the USAF Air Weather Service during the Korean War," Furer explained. "The past two winters here in Wisconsin (Ft. Atkinson) leads me to believe that we have entered a cycle of global cooling!" he added. (LINK)

Physicist and environmental activist John Droz, Jr., who holds a graduate degree in physics from Syracuse University, wrote an analysis of global warming in January 2009. "As a physicist and environmental activist, I applaud your efforts to educate the public

about the Global Warming issue," Droz wrote to Environment & Public Works Committee on January 28, 2009. "The negative consequences of going down this scientifically unresolved path are almost unfathomable," Droz added. "'Global Warming' is still a scientifically unresolved matter," he explained. "What concerns me most is that our national energy policies are being driven by the assumption that this hypothesis is true. There is considerable scientific evidence that contradicts the assumptions and conclusions of this theory. Unfortunately, the main proponents of the Global Warming Theory have not been able to provide scientific explanations for these contradictions. This seriously undermines the validity of their position. Worse, when contradicting scientific evidence is presented, the presenters are often characterized as 'non-believers,' 'deniers,' or worse," Droz wrote. "There are other theories that have been put forth by very qualified scientists, and these alternative explanations are supported by significant scientific data. These other theories also have their weak points, but the fact is that they do explain some facets of the Climate Change situation better than the Global Warming Theory does," he concluded. (LINK)

Award-winning atmospheric scientist Dr. George T. Wolff, former member of the EPA's Science Advisory Board, served on a committee of the National Oceanic and Atmospheric Administration (NOAA) and was a former adjunct professor in the Department of Atmospheric and Oceanic Sciences, University of Michigan. Wolf, who has authored more than 90 peer-reviewed studies in the fields of ozone, sulfates and aerosols, was the Principal Research Scientist and Manager for Atmospheric Modeling and Assessment and Climate Change Programs for General Motors Research Laboratories. Wolff received the Frank A. Chambers Award by the Air and Waste Management Association for outstanding technical achievement to the science of air pollution. He is also a member of the American Meteorological Society, the American Geophysical Union, and the American Association for the Advancement of Science. "As an atmospheric scientist for over thirty years, engaged in studying and seeking solutions to environmental problems, I am appalled at the state of discord in the field of climate science," Wolf told the Environment and Public Works Committee on January 23, 2009. "For too many in the field, critical thinking, the basis for all scientific inquiry, is not only absent, it is disdained. The basis for the crisis-level global warming concerns are climate models (and their predictions) that are not validated and poorly reproduce the observed hydrological cycle. In addition, the surface temperature networks are contaminated by urban and other land-use influences," Wolf explained. "These facts alone should be reason for skepticism. However, many additional reasons exist. There is no observational evidence that the addition of anthropogenic greenhouse gas emissions have caused any temperature perturbations in the atmosphere. Historical accounts and paleoclimatological evidence tell us that it has been significantly warmer and significantly colder in the past. Moreover, in the past, temperature changes preceded changes in CO2 concentrations, which imply that temperature drives atmospheric CO2 concentrations, not visa versa," he added. "Furthermore, statistical relationships between solar activity proxies and climate hint at a controlling relationship with the sun even though observed solar variability alone is insufficient to explain all of the variation in temperature. It is unconscionable that solar and other natural phenomena, such as the oceanic oscillations, are not included in the dialogue as we pursue explanations for the recent warm temperatures and a more recent apparent cooling trend," he concluded. (LINK)

Chemist Dr. Mark L. Campbell, a professor of chemistry at the U.S. Naval Academy in Annapolis, MD, who has published numerous studies in the *Journal of the American Chemical Society* on topics such as methane, dissented form man-made climate fears in 2009 and slammed the media for "journalistic malpractice" for promoting fear and attempting to discredit scientists skeptical. "According to the [*Baltimore Sun*] editorial 'A New Year's resolution' (Jan. 2, 2009), tens of thousands of scientists like me are 'flat-earth types.' I guess my doctorate in chemical physics from Johns Hopkins doesn't give me nearly the qualifications to analyze the science associated with the global climate as an editor with an agenda," Campbell wrote on January 13, 2009. "If we are going to stoop to name-calling, an appropriate name for people with the view *The Baltimore Sun* endorses could be 'Chicken Littles.' But instead of claiming that the sky is falling, they claim the sky is burning. The editorial claims that there is a consensus among scientists that man-made carbon dioxide is causing global climate change; however, consensus in science is an oxymoron. From Galileo to Einstein, one scientist with proof is more convincing than thousands of other scientists who believe something to be true," Campbell explained. "And I don't even grant that there is a consensus among scientists; it's just that the press only promotes the global warming alarmists and ignores or minimizes those of us who are skeptical. To many of us, there is no convincing evidence that carbon dioxide produced by humans has any influence on the Earth's climate. Arguing that our country should decrease its use of fossil fuels is a laudable goal, but the reason to do so should be to reduce our reliance on energy from foreign sources, not to reduce the danger from some imaginary boogeyman," he added. "The sky is not burning, and to claim that it is amounts to journalistic malpractice," Campbell concluded. (LINK) (LINK) (LINK) (LINK) (LINK) (LINK)

Miroslav Kutilek, Emeritus Professor of Soil Science and Soil Physics at Czech Technical University in Prague who specialized in paleoclimatology of soil, received the "Mendel's award in Biological Sciences" from the Academy of Sciences in Prague and is an Honorary Member International Union of Soil Science.. Kutilek dissented from man-made climate claims and cited the views in "Rationally on Global Warming" to describe his view of man-made claimte fears. "The Earth climate change is influenced by eight factors: (1) Milanković cycles, (2) Solar activity, (3) Continental drift, (4) Greenhouse gases, (5) Thermohaline circulation, (6) Aerosols, volcanoes and asteroids, (7) Vegetation cover, (8) Earth magnetic field," Kutilek wrote to the minority staff of the Environment and Public Works Committee on December 25, 2008. "Except of continental drift acting on geologic scale all remaining seven factors may contribute to the recent change of climate. The climate oscillations in Holocene were not caused by the change of CO_2 concentration in the atmosphere and the warm periods were typical by higher temperature than the recent average. The rate of temperature rise was in several well documented instances higher than in the last two decades. Assumption on dominant role of greenhouse gases in recent global warming is therefore false. Catastrophic scenarios on the influence of global warming upon the further existence of homo sapiens are not scientifically based since the climate change contributed first to the hominization of ape and later on to the development of historical civilizations," Kutilek wrote.

Coastal Engineer Cyril Galvin wrote an analysis for the American Geophysical Union (AGU) titled "Human Impacts on Climate" in which he dissented from the global warming position statement of the AGU. "My opinion on the subject derives from more

than 50 years as an AGU member with long and broad interest," Galvin wrote in the November 2008 AGU publication. "The prevailing assumption in the press, in legislative considerations, and in climate science is that global warming causes seal level rise, which causes beach erosion," Galvin explained. "Nowhere on the sandy ocean shores of the world is there a beach whose erosion ahs been documented to be caused by sea level rise," Galvin wrote. "The above sample of facts and outside opinions, as well as my observation of the scientific process, suggest that global warming is not the settled question described in the AGU December 2007 position statement," Galvin wrote. "Since 1964, I have attended at least 30 AGU annual meetings and have contributed at least 40 posters and talks before at least 10 AGU sections," Galvin wrote.

Nuclear Chemist Gary L. Troyer has worked as an analytical chemist and was a Fellow Scientist at the Westinghouse Hanford Company and has authored numerous papers related to measurements of radionuclides and laboratory applications. Troyer, who teaches part time at Kenya Methodist University in Meru, Kenya, dissented from man-made climate fears in 2009. "Scientists have long known that umbrellas do not cause rain. Similarly, there is significant historical evidence that warming causes increases in atmospheric carbon dioxide," Troyer wrote to the minority staff of the Environment and Public Works Committee on January 28, 2009. "The linking of the admittedly measurable 3% increase by man on this concentration of the last 50 years is however, not necessarily correlated with temperature variation," Troyer continued. "Predicative climate models have been shown to be highly un-useful," he added. "As we gather more definitive data about climate response, we are seeing these models adjusted dramatically downward showing that man's 'carbon footprint' is likely quite irrelevant," Troyer wrote. (LINK)

Climatologist and Paloeclimate researcher Dr. Diane Douglas, who has authored or edited over 200 technical reports, specialized in the reconstruction of a variety of proxy data, has conducted climate change investigations for the Department of Energy, and conducted research for the Arizona State Office of Climatology to investigate the Little Ice Age. For her doctoral work and several subsequent investigations, Douglas investigated global climate change using tree rings to reconstruct past climates. However, because tree-rings can only be used to reconstruct relatively recent climate change (past 2,000 to 7,000 years), and this period is not long enough to understand the physical dynamics driving global warming of the past 150 years, Douglas called on her background in paleo-environmental reconstructions to investigate conditions at the end of the last interglacial (130,000 to 115,000 years ago) to lay the framework for understanding current global warming. Douglas, a former lecturer in geography at San Diego State University, dissented from man-made climate fears in 2009. Douglas was planning on releasing a major new paper she authored that will be presented at a UNESCO conference in Ghent, Belgium on March 20, 2009. (***Paper Abstract available here: http://www.enamecenter.org/en/collo_douglas***) "I would be happy to be added to the Senate report of dissenting scientists," Douglas told the Environment and Public Works Committee on March 10, 2009. "The recent 'panic' to control GHG (greenhouse gas) emissions and billions of dollars being dedicated for the task has me deeply concerned that US and other countries are spending precious global funds to stop global warming, when it is primarily being driven by natural forcing mechanisms," Douglass explained. "For my paper, I reviewed all of the IPCC technical reports and summary reports, and over 150

academic papers on this issue. I also reviewed and analyzed NOAA data for the ice cores and CDIAC data on global CO2 emissions," she wrote. The UN IPCC "did not adequately consider natural forcing mechanisms (per my paper). The technical reports were prepared by top climate scientists, whom I respect--if they were given the time and money to pursue the research I recommend at the end of my paper, I'm sure their findings would be different," Douglas wrote. "I would hope that if Gore and Obama's advisors heard my argument (which has never been presented before in this level of detail) that they would see the rationale behind my comments, and shift their views. But they may not," she explained. "My background in Quaternary sciences and then climatology gave me the depth of understanding of natural forcing mechanisms to always think that the global warming that has occured since the and of the Little Ice Age is being driven by natural forcing mechanisms. However, I also have no doubt that people are affecting climate, but anthropogenic forcing is a layer on top of much larger natural forcing mechanisms. By ignoring the role of natural mechanisms (beyond celestial mechanics and volcanism) we are endangering the lives and livelihoods of billions of people, and spending limited financial resources to stop global warming when it can not be stopped," Douglas wrote. (LINK) (LINK) (LINK) [***Updated: March 16, 2009***]

# #

End of 2008/2009 report.

# # #

Complete Reprint of 2007 report:

U. S. Senate Report
Over 400 Prominent Scientists Disputed Man-Made Global Warming Claims in 2007

Scientists Debunk "Consensus"
U.S. Senate Environment and Public Works Committee
Minority Staff Report (Inhofe)
www.epw.senate.gov/minority

Released: December 20, 2007

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U.S. Senate Environment and Public Works Committee
Report available at: http://epw.senate.gov/public/index.cfm?FuseAction=Minority.Se

U.S. Senate Report: Over 400 Prominent Scientists Disputed Man-Made Global Warming Claims in 2007

INTRODUCTION:

Over 400 prominent scientists from more than two dozen countries recently voiced significant objections to major aspects of the so-called "consensus" on man-made global warming. These scientists, many of whom are current and former participants in the UN IPCC (Intergovernmental Panel on Climate Change), criticized the climate claims made by the UN IPCC and former Vice President Al Gore.

The new report issued by the Senate Environment and Public Works Committee's office of the GOP Ranking Member details the views of the scientists, the overwhelming majority of whom spoke out in 2007.

Even some in the establishment media now appear to be taking notice of the growing number of skeptical scientists. In October, the Washington Post Staff Writer Juliet Eilperin conceded the obvious, writing that climate skeptics "appear to be expanding rather than shrinking." Many scientists from around the world have dubbed 2007 as the year man-made global warming fears "bite the dust." (LINK) In addition, many scientists who are also progressive environmentalists believe climate fear promotion has "co-opted" the green movement. (LINK)

This blockbuster Senate report lists the scientists by name, country of residence, and academic/institutional affiliation. It also features their own words, biographies, and weblinks to their peer reviewed studies and original source materials as gathered from public statements, various news outlets, and websites in 2007. This new "consensus busters" report is poised to redefine the debate.

Many of the scientists featured in this report consistently stated that numerous colleagues shared their views, but they will not speak out publicly for fear of retribution. Atmospheric scientist Dr. Nathan Paldor, Professor of Dynamical Meteorology and Physical Oceanography at the Hebrew University of Jerusalem, author of almost 70 peer-reviewed studies, explains how many of his fellow scientists have been intimidated.

"Many of my colleagues with whom I spoke share these views and report on their inability to publish their skepticism in the scientific or public media," Paldor wrote. ***[Note: See also July 2007 Senate report detailing how skeptical scientists have faced threats and intimidation - LINK]***

Scientists from Around the World Dissent

This new report details how teams of international scientists are dissenting from the UN IPCC's view of climate science. In such nations as Germany, Brazil, the Netherlands, Russia, Argentina, New Zealand and France, nations, scientists banded together in 2007 to oppose climate alarmism. In addition, over 100 prominent international scientists sent an open letter in December 2007 to the UN stating attempts to control climate were "futile." (LINK)

Paleoclimatologist Dr. Tim Patterson, professor in the department of Earth Sciences at Carleton University in Ottawa, recently converted from a believer in man-made climate change to a skeptic. Patterson noted that the notion of a "consensus" of scientists aligned with the UN IPCC or former Vice President Al Gore is false. "I was at the Geological Society of America meeting in Philadelphia in the fall and I would say that people with my opinion were probably in the majority."

This new committee report, a first of its kind, comes after the UN IPCC chairman Rajendra Pachauri implied that there were only “about a dozen" skeptical scientists left in the world. (LINK) Former Vice President Gore has claimed that scientists skeptical of climate change are akin to "flat Earth society members" and similar in number to those who "believe the moon landing was actually staged in a movie lot in Arizona." (LINK) & (LINK)

The distinguished scientists featured in this new report are experts in diverse fields, including: climatology; geology; biology; glaciology; biogeography; meteorology; oceanography; economics; chemistry; mathematics; environmental sciences; engineering; physics and paleoclimatology. Some of those profiled have won Nobel Prizes for their outstanding contribution to their field of expertise and many shared a portion of the UN IPCC Nobel Peace Prize with Vice President Gore.

Additionally, these scientists hail from prestigious institutions worldwide, including: Harvard University; NASA; National Oceanic and Atmospheric Administration (NOAA) and the National Center for Atmospheric Research (NCAR); Massachusetts Institute of Technology; the UN IPCC; the Danish National Space Center; U.S. Department of Energy; Princeton University; the Environmental Protection Agency; University of Pennsylvania; Hebrew University of Jerusalem; the International Arctic Research Centre; the Pasteur Institute in Paris; the Belgian Weather Institute; Royal Netherlands Meteorological Institute; the University of Helsinki; the National Academy of Sciences of the U.S., France, and Russia; the University of Pretoria; University of Notre Dame; Stockholm University; University of Melbourne; Columbia University; the World Federation of Scientists; and the University of London.

The voices of many of these hundreds of scientists serve as a direct challenge to the often media-hyped "consensus" that the debate is "settled."

A May 2007 Senate report detailed scientists who had recently converted from believers in man-made global warming to skepticism. [*See May 15, 2007 report: Climate Momentum*

Shifting: Prominent Scientists Reverse Belief in Man-made Global Warming - Now Skeptics: Growing Number of Scientists Convert to Skeptics After Reviewing New Research – (LINK) - In addition, an August 2007 report detailed how proponents of man-made global warming fears enjoy a monumental funding advantage over skeptical scientists. LINK)]

The report counters the claims made by the promoters of man-made global warming fears that the number of skeptical scientists is dwindling.

Examples of "consensus" claims made by promoters of man-made climate fears:

Former Vice President Al Gore (November 5, 2007): "There are still people who believe that the Earth is flat." (LINK) Gore also compared global warming skeptics to people who "believe the moon landing was actually staged in a movie lot in Arizona." (June 20, 2006 - LINK)

CNN's Miles O'Brien (July 23, 2007): "The scientific debate is over," O'Brien said. "We're done." O'Brien also declared on CNN on February 9, 2006 that scientific skeptics of man-made catastrophic global warming "are bought and paid for by the fossil fuel industry, usually." (LINK)

On July 27, 2006, Associated Press reporter Seth Borenstein described a scientist as "one of the few remaining scientists skeptical of the global warming harm caused by industries that burn fossil fuels." (LINK)

Dr. Rajendra Pachauri, Chairman of the IPCC view on the number of skeptical scientists as quoted on Feb. 20, 2003: "About 300 years ago, a Flat Earth Society was founded by those who did not believe the world was round. That society still exists; it probably has about a dozen members." (LINK)

Agence France-Press (AFP Press) article (December 4, 2007): The article noted that a prominent skeptic "finds himself increasingly alone in his claim that climate change poses no imminent threat to the planet."

Andrew Dessler in the eco-publication Grist Magazine (November 21, 2007): "While some people claim there are lots of skeptical climate scientists out there, if you actually try to find one, you keep turning up the same two dozen or so (e.g., Singer, Lindzen, Michaels, Christy, etc., etc.). These skeptics are endlessly recycled by the denial machine, so someone not paying close attention might think there are lots of them out there -- but that's not the case." (LINK)

The Washington Post asserted on May 23, 2006 that there were only "a handful of skeptics" of man-made climate fears. (LINK**)**

UN special climate envoy Dr. Gro Harlem Brundtland on May 10, 2007 declared the climate debate "over" and added “it's completely immoral, even, to question” the UN’s scientific “consensus." (LINK)

The UN Framework Convention on Climate Change Executive Secretary Yvo de Boer said it was "criminally irresponsible" to ignore the urgency of global warming on November 12, 2007. (LINK)

ABC News Global Warming Reporter Bill Blakemore reported on August 30, 2006: "After extensive searches, ABC News has found no such [scientific] debate" on global warming. (LINK)

Brief highlights of the report featuring over 400 international scientists:

Israel: **Dr. Nathan Paldor, Professor of Dynamical Meteorology and Physical Oceanography at the Hebrew University of Jerusalem has authored almost 70 peer-reviewed studies and won several awards**. "First, temperature changes, as well as rates of temperature changes (both increase and decrease) of magnitudes similar to that reported by IPCC to have occurred since the Industrial revolution (about 0.8C in 150 years or even 0.4C in the last 35 years) have occurred in Earth's climatic history. There's nothing special about the recent rise!"

Russia: **Russian scientist Dr. Oleg Sorochtin of the Institute of Oceanology at the Russian Academy of Sciences has authored more than 300 studies, nine books, and a 2006 paper titled "The Evolution and the Prediction of Global Climate Changes on Earth."** "Even if the concentration of 'greenhouse gases' double man would not perceive the temperature impact," Sorochtin wrote. (Note: Name also sometimes translated to spell Sorokhtin)

Spain: Anton Uriarte, a professor of Physical Geography at the University of the Basque Country in Spain and author of a book on the paleoclimate, rejected man-made climate fears in 2007. "There's no need to be worried. It's very interesting to study [climate change], but there's no need to be worried," Uriate wrote.

Netherlands: Atmospheric scientist Dr. Hendrik Tennekes, a scientific pioneer in the development of numerical weather prediction and former director of research at The Netherlands' Royal National Meteorological Institute, and an internationally recognized expert in atmospheric boundary layer processes, "I find the Doomsday picture Al Gore is painting - a six-meter sea level rise, fifteen times the IPCC number - entirely without merit," Tennekes wrote. "I protest vigorously the idea that the climate reacts like a home heating system to a changed setting of the thermostat: just turn the dial, and the desired temperature will soon be reached."

Brazil: Chief Meteorologist Eugenio Hackbart of the MetSul Meteorologia Weather Center in Sao Leopoldo - Rio Grande do Sul, Brazil declared himself a skeptic. "The media is promoting an unprecedented hyping related to global warming. The media and many scientists are ignoring very important facts that point to a natural variation in the climate system as the cause of the recent global warming," Hackbart wrote on May 30, 2007.

France: Climatologist Dr. Marcel Leroux, former professor at Université Jean Moulin and director of the Laboratory of Climatology, Risks, and Environment in Lyon, is a climate skeptic. Leroux wrote a 2005 book titled *Global Warming - Myth or Reality? - The Erring Ways of Climatology*. "Day after day, the same mantra - that 'the Earth is warming up' - is churned out in all its forms. As 'the ice melts' and 'sea level rises,' the Apocalypse looms ever nearer! Without realizing it, or perhaps without wishing to, the average citizen in bamboozled, lobotomized, lulled into mindless acceptance. ... Non-believers in the greenhouse scenario are in the position of those long ago who doubted the existence of God ... fortunately for them, the Inquisition is no longer with us!"

Norway: Geologist/Geochemist Dr. Tom V. Segalstad, a professor and head of the Geological Museum at the University of Oslo and formerly an expert reviewer with the UN IPCC: "It is a search for a mythical CO2 sink to explain an immeasurable CO2 lifetime to fit a hypothetical CO2 computer model that purports to show that an impossible amount of fossil fuel burning is heating the atmosphere. It is all a fiction."

Finland: Dr. Boris Winterhalter, retired Senior Marine Researcher of the Geological Survey of Finland and former professor of marine geology at University of Helsinki, criticized the media for what he considered its alarming climate coverage. "The effect of solar winds on cosmic radiation has just recently been established and, furthermore, there seems to be a good correlation between cloudiness and variations in the intensity of cosmic radiation. Here we have a mechanism which is a far better explanation to variations in global climate than the attempts by IPCC to blame it all on anthropogenic input of greenhouse gases," Winterhalter said.

Germany: Paleoclimate expert Augusto Mangini of the University of Heidelberg in Germany, criticized the UN IPCC summary. "I consider the part of the IPCC report, which I can really judge as an expert, i.e. the reconstruction of the paleoclimate, wrong," Mangini noted in an April 5, 2007 article. He added: "The earth will not die."

Canada: **IPCC 2007 Expert Reviewer Madhav Khandekar, a Ph.D meteorologist, a scientist with the Natural Resources Stewardship Project who has over 45 years experience in climatology, meteorology and oceanography, and who has published nearly 100 papers, reports, book reviews and a book on Ocean Wave Analysis and Modeling:** "To my dismay, IPCC authors ignored all my comments and suggestions for major changes in the FOD (First Order Draft) and sent me the SOD (Second Order Draft) with essentially the same text as the FOD. None of the authors of the chapter bothered to directly communicate with me (or with other expert reviewers with whom I communicate on a regular basis) on many issues that were raised in my review. This is not an acceptable scientific review process."

Czech Republic: Czech-born U.S. climatologist Dr. George Kukla, a research scientist with the Lamont-Doherty Earth Observatory at Columbia University, expressed climate skepticism in 2007. "The only thing to worry about is the damage that can be done by worrying. Why are some scientists worried? Perhaps because they feel that to stop worrying may mean to stop being paid," Kukla told Gelf Magazine on April 24, 2007.

India: One of India's leading geologists, B.P. Radhakrishna, President of the Geological Society of India, expressed climate skepticism in 2007. "We appear to be overplaying this global warming issue as global warming is nothing new. It has happened in the past, not once but several times, giving rise to glacial-interglacial cycles."

USA: Climatologist Robert Durrenberger, past president of the American Association of State Climatologists, and one of the climatologists who gathered at Woods Hole to review the National Climate Program Plan in July, 1979: "Al Gore brought me back to the battle and prompted me to do renewed research in the field of climatology. And because of all the misinformation that Gore and his army have been spreading about climate change I have decided that 'real' climatologists should try to help the public understand the nature of the problem."

Italy: Internationally renowned scientist Dr. Antonio Zichichi, president of the World Federation of Scientists and a retired Professor of Advanced Physics at the University of Bologna in Italy, who has published over 800 scientific papers: "Significant new peer-reviewed research has cast even more doubt on the hypothesis of dangerous human-caused global warming."

New Zealand: IPCC reviewer and climate researcher and scientist Dr. Vincent Gray, an expert reviewer on every single draft of the IPCC reports going back to 1990 and author of The Greenhouse Delusion: A Critique of "Climate Change 2001: "The [IPCC] 'Summary for Policymakers' might get a few readers, but the main purpose of the report is to provide a spurious scientific backup for the absurd claims of the worldwide environmentalist lobby that it has been established scientifically that increases in carbon dioxide are harmful to the climate. It just does not matter that this ain't so."

South Africa: Dr. Kelvin Kemm, formerly a scientist at South Africa's Atomic Energy Corporation who holds degrees in nuclear physics and mathematics: "The global-warming mania continues with more and more hype and less and less thinking. With religious zeal, people look for issues or events to blame on global warming."

Poland: Physicist Dr. Zbigniew Jaworowski, Chairman of the Central Laboratory for the United Nations Scientific Committee on the Effects of Radiological Protection in Warsaw: "We thus find ourselves in the situation that the entire theory of man-made global warming-with its repercussions in science, and its important consequences for politics and the global economy-is based on ice core studies that provided a false picture of the atmospheric CO2 levels."

Australia: Prize-wining Geologist Dr. Ian Plimer, **a professor of Earth and Environmental Sciences at the University of Adelaide in Australia**: "There is new work emerging even in the last few weeks that shows we can have a very close correlation between the temperatures of the Earth and supernova and solar radiation."

Britain: Dr. Richard Courtney, a UN IPCC expert reviewer and a UK-based climate and atmospheric science consultant: "To date, no convincing evidence for AGW (anthropogenic global warming) has been discovered. And recent global climate behavior is not consistent with AGW model predictions."

China: Chinese Scientists Say C02 Impact on Warming May Be 'Excessively Exaggerated' - Scientists Lin Zhen-Shan's and Sun Xian's 2007 study published in the peer-reviewed journal Meteorology and Atmospheric Physics: "Although the CO2 greenhouse effect on global climate change is unsuspicious, it could have been excessively exaggerated." Their study asserted that "it is high time to reconsider the trend of global climate change."

Denmark: Space physicist Dr. Eigil Friis-Christensen is the director of the Danish National Space Centre, a member of the space research advisory committee of the Swedish National Space Board, a member of a NASA working group, and a member of the European Space Agency who has authored or co-authored around 100 peer-reviewed papers and chairs the Institute of Space Physics: "The sun is the source of the energy that causes the motion of the atmosphere and thereby controls weather and climate. Any change in the energy from the sun received at the Earth's surface will therefore affect climate."

Sweden: Geologist Dr. Wibjorn Karlen, professor emeritus of the Department of Physical Geography and Quaternary Geology at Stockholm University, critiqued the *Associated Press* for hyping promoting climate fears in 2007. "Another of these hysterical views of our climate. Newspapers should think about the damage they are doing to many persons, particularly young kids, by spreading the exaggerated views of a human impact on climate."

USA: Dr. David Wojick is a UN IPCC expert reviewer, who earned his PhD in Philosophy of Science and co-founded the Department of Engineering and Public Policy at Carnegie-Mellon University: "In point of fact, the hypothesis that solar variability and not human activity is warming the oceans goes a long way to explain the puzzling idea that the Earth's surface may be warming while the atmosphere is not. The GHG (greenhouse gas) hypothesis does not do this." Wojick added: "The public is not well served by this constant drumbeat of false alarms fed by computer models manipulated by advocates."

# # #

Background: Only 52 Scientists Participated in UN IPCC Summary

The over 400 skeptical scientists featured in this new report outnumber by nearly eight time the number of scientists who participated in the 2007 UN IPCC Summary for Policymakers. The notion of "hundreds" or "thousands" of UN scientists agreeing to a scientific statement does not hold up to scrutiny. (See report debunking "consensus" LINK) Recent research by Australian climate data analyst John McLean revealed that the IPCC's peer-review process for the Summary for Policymakers leaves much to be desired. (LINK) & (LINK) (Note: The 52 scientists who participated in the 2007 IPCC Summary for Policymakers had to adhere to the wishes of the UN political leaders and delegates in a process described as more closely resembling a political party's convention platform battle, not a scientific process - LINK)

Proponents of man-made global warming like to note how the National Academy of Sciences (NAS) and the American Meteorological Society (AMS) have issued statements endorsing the so-called "consensus" view that man is driving global warming. But both the NAS and AMS never allowed member scientists to directly vote on these climate statements. Essentially, only two dozen or so members on the governing boards of these institutions produced the "consensus" statements. This report gives a voice to the rank-and-file scientists who were shut out of the process. (LINK)

The most recent attempt to imply there was an overwhelming scientific "consensus" in favor of man-made global warming fears came in December 2007 during the UN climate conference in Bali. A letter signed by only 215 scientists urged the UN to mandate deep cuts in carbon dioxide emissions by 2050. But absent from the letter were the signatures of these alleged "thousands" of scientists. (See AP article: - LINK)

UN IPCC chairman Rajendra Pachauri urged the world at the December 2007 UN climate conference in Bali, Indonesia to "Please listen to the voice of science."
The science has continued to grow loud and clear in 2007. In addition to the growing number of scientists expressing skepticism, an abundance of recent peer-reviewed studies have cast considerable doubt about man-made global warming fears. A November 3, 2007 peer-reviewed study found that "solar changes significantly alter climate." (LINK) A December 2007 peer-reviewed study recalculated and halved the global average surface temperature trend between 1980 - 2002. (LINK) Another new study found the Medieval Warm Period "0.3C warmer than 20th century" (LINK)

A peer-reviewed study by a team of scientists found that "warming is naturally caused and shows no human influence." (LINK) - Another November 2007 peer-reviewed study in the journal Physical Geography found "Long-term climate change is driven by solar insolation changes." (LINK) These recent studies were in addition to the abundance of peer-reviewed studies earlier in 2007. - See "New Peer-Reviewed Scientific Studies Chill Global Warming Fears" (LINK)
With this new report of profiling 400 skeptical scientists, the world can finally hear the voices of the "silent majority" of scientists.

# #

FULL SENATE REPORT: U.S. Senate Report: Over 400 Prominent Scientists Disputed Man-Made Global Warming Claims in 2007

December 20, 2007

This report is in the spirit of enlightenment philosopher Denis Diderot who reportedly said, "Skepticism is the first step towards truth."

[***Disclaimer: The following scientists named in this report have expressed a range of views from skepticism to outright rejection of predictions of catastrophic man-made global warming. As in all science, there is no lock step single view.]***

Atmospheric scientist Dr. Nathan Paldor, Professor of Dynamical Meteorology and Physical Oceanography at the Hebrew University of Jerusalem has authored almost 70 peer-reviewed studies and won several awards. "First, temperature changes, as well as rates of temperature changes (both increase and decrease) of magnitudes similar to that reported by IPCC to have occurred since the Industrial revolution (about 0.8C in 150 years or even 0.4C in the last 35 years) have occurred in Earth's climatic history. There's nothing special about the recent rise!" Paldor told EPW on December 4, 2007. "Second, our ability to make realizable (or even sensible) future forecasts are greatly exaggerated relied upon by the IPCC. This is true both for the numerical modeling efforts (the same models that yield abysmal 3-day forecasts are greatly simplified and run for 100 years!)," Paldor explained. "Third, the rise in atmospheric CO2 is much smaller (by about 50%) than that expected from the anthropogenic activity (burning of fossil fuels such as oil, coal and natural gas), which implies that the missing amount of CO2 is (most probably) absorbed by the ocean. The oceanic response to increasing CO2 concentration in the atmosphere might be much slower than that of the atmosphere (and is presently very poorly understood). It is quite possible that after an ‘adjustment time' the ocean (which contains far more CO2 than the atmosphere) will simply increase its biological activity and absorb the CO2 from the atmosphere (i.e. the atmospheric CO2 concentration will decrease)," he added. "Fourth, the inventory of fossil fuels is fairly limited and in one generation we will run out of oil. Coal and natural gas might take 100-200 years but with no oil their consumption will increase so they probably won't last as long. The real alternative that presently available to humanity is nuclear power (that can easily produce electricity for domestic and industrial usage and for transportation when our vehicles are reverted to run on electricity). The technology for this exists today and can replace our dependence on fossil fuel in a decade! This has to be made known to the general public who is unaware of the alternative for taking action to lower the anthropogenic spewing of CO2. This transformation to nuclear energy will probably rake place when oil reserves dwindle regardless of the CO2 situation," he wrote. Paldor also noted the pressure for scientists to bow to the UN IPCC view of climate change. "Many of my colleagues with whom I spoke share these views and report on their inability to publish their skepticism in the scientific or public media," he concluded. (LINK)

Dr. Denis G. Rancourt, Professor of Physics and an Environmental Science researcher at the University of Ottawa, believes the global warming campaigns do a disservice to the environmental movement. "Promoting the global warming myth trains

people to accept unverified, remote, and abstract dangers in the place of true problems that they can discover for themselves by becoming directly engaged in their workplace and by doing their own research and observations. It trains people to think lifestyle choices (in relation to CO2 emission) rather than to think activism in the sense of exerting an influence to change societal structures," Rancourt wrote in a February 27, 2007 blog post. Rancourt believes that global warming "will not become humankind's greatest threat until the sun has its next hiccup in a billion years or more (in the very unlikely scenario that we are still around,)" and noted that even if C02 emissions were a grave threat, "government action and political will cannot measurably or significantly ameliorate global climate in the present world." Rancourt believes environmentalists have been duped into promoting global warming as a crisis. "I argue that by far the most destructive force on the planet is power-driven financiers and profit-driven corporations and their cartels backed by military might; and that the global warming myth is a red herring that contributes to hiding this truth. In my opinion, activists who, using any justification, feed the global warming myth have effectively been co-opted, or at best neutralized," Rancourt wrote. Rancourt also questioned the whole concept of a global average temperature, noting, "Averaging problems aside, many tenuous approximations must be made in order to arrive at any of the reported final global average temperature curves." He further explained: "This means that determining an average of a quantity (Earth surface temperature) that is everywhere different and continuously changing with time at every point, using measurements at discrete times and places (weather stations), is virtually impossible; in that the resulting number is highly sensitive to the chosen extrapolation method(s) needed to calculate (or rather approximate) the average." "The estimates are uncertain and can change the calculated global warming by as much as 0.5 C, thereby removing the originally reported effect entirely," he added. Finally, Rancourt asserted that in a warm world, life prospers. "There is no known case of a sustained warming alone having negatively impacted an entire population," he said, adding, "As a general rule, all life on Earth does better when it's hotter: Compare ecological diversity and biotic density (or biomass) at the poles and at the equator." Rancourt added, "Global warming is strictly an imaginary problem of the First World middle class." (LINK)

Czech-born U.S. climatologist Dr. George Kukla, a research scientist with the Lamont-Doherty Earth Observatory at Columbia University expressed climate skepticism in 2007. "The only thing to worry about is the damage that can be done by worrying. Why are some scientists worried? Perhaps because they feel that to stop worrying may mean to stop being paid," Kukla told Gelf Magazine on April 24, 2007. "What I think is this: Man is responsible for a PART of global warming. MOST of it is still natural," Kukla explained. (LINK) Kukla "said that the accelerating warming of the Earth is not caused by man but by the regularities of the planets' circulation around the Sun," according to a June 4, 2007 article in the *Prague Monitor*. "The changes in the Earth's circulation around the Sun are now extremely slow. Moreover, they are partially being compensated by the human impact on the climate. I think we will know more in about 50 years," Kukla said. Kukla is viewed as a pioneer in the study of solar forcing of climate changes. (LINK) & (LINK)

One of India's leading geologists, B.P. Radhakrishna, President of the Geological Society of India, expressed climate skepticism in 2007. "There is some evidence to show that our planet Earth is becoming warmer and that human action is probably partly responsible, especially in the matter of greenhouse gas emissions. What is in doubt,

however, is whether the steps that are proposed to be taken to reduce carbon emission will really bring down the carbon dioxide level in the atmosphere and whether such attempts, even carried out on a global scale, will produce the desired effect," Radhakrishna wrote in an August 23, 2007 essay. "We appear to be overplaying this global warming issue as global warming is nothing new. It has happened in the past, not once but several times, giving rise to glacial-interglacial cycles. We appear to be now only in the middle of an interglacial cycle showing a trend toward warming as warming and cooling are global and have occurred on such a scale when humans had not appeared on the planet. If we read geology correctly, the earth we live on is not dead but is dynamic and is continuously changing. The causes of these changes are cosmogenic and nothing we are able to do is likely to halt or reverse such processes," he explained. "Warming of the climate, melting of glaciers, rise in sea levels and other marked changes in climate - these do not pose immediate threats and there is besides, no way of controlling such changes even if we want to. Exercises at mitigation of these likely disasters are, however, possible and mankind, in all likelihood, will gradually adjust itself to the changed conditions. This has happened before; men and animals have moved to greener pastures and adapted themselves to the changed situations," he added. (LINK)

Climatologist Dr. John Maunder, past president of the Commission for Climatology who has spent over 50 years in the "weather business" all around the globe, and who has written four books on weather and climate, says "the science of climate change will probably never be fully understood." "It is not always true that the climate we have now (wherever we live) is the best one ... some people (and animals and crops) may prefer it to be wetter, drier, colder, or warmer," Maunder wrote on his website updated on November 27, 2007. "Climatic variations and climatic changes from WHATEVER cause (i.e. human induced or natural) clearly create risks, but also provide real opportunities. (For example, the 2007 IPCC report - see below - shows that from 1900 to 2005, significantly increased precipitation has been observed in eastern parts of North and South America, northern Europe, and northern and central Asia)," he explained. (LINK) Maunder also was one of the signatories of a December 13, 2007 open letter critical of the UN IPCC process. “Leading scientists, including some senior IPCC representatives, acknowledge that today's computer models cannot predict climate. Consistent with this, and despite computer projections of temperature rises, there has been no net global warming since 1998,” the letter Maunder signed stated. “That the current temperature plateau follows a late 20th-century period of warming is consistent with the continuation today of natural multi-decadal or millennial climate cycling,” the letter added. (LINK)

Glaciologist Nikolai Osokin of the Institute of Geography and member of the Russian Academy of Sciences dismissed alarmist climate fears of all of the world's ice melting in a March 27, 2007 article. "The planet may rest assured," Osokin wrote. "This hypothetical catastrophe could not take place anytime within the next thousand years," he explained. "Today, scientists say that the melting of the permafrost has stalled, which has been proved by data obtained by meteorological stations along Russia's Arctic coast," Olokin added. "The (recent) period of warming was tangible, but now it may be drawing to a close. Most natural processes on the earth are cyclical, having a shorter or longer rhythm. Yet no matter how these sinusoids look, a temperature rise is inevitably followed by a decline, and vice versa." (LINK)

Atmospheric Physicist Dr. Garth W. Paltridge, an Emeritus Professor from University of Tasmania, is another prominent skeptic. Paltridge who was a Chief Research Scientist with the CSIRO Division of Atmospheric Research before taking up positions in 1990 as Director of the Institute of Antarctic and Southern Ocean Studies at the University of Tasmania and as CEO of the Antarctic Cooperative Research Center. Paltridge questioned the motives of scientists hyping climate fears. "They have been so successful with their message of greenhouse doom that, should one of them prove tomorrow that it is nonsense, the discovery would have to be suppressed for the sake of the overall reputation of science," Paltridge wrote in an April 6, 2007 op-ed entitled "Global Warming - Not Really a Done Deal?" Paltridge is best known internationally for his work on atmospheric radiation and on the theoretical basis of climate change. He is a fellow of the Australian Academy of Science. Paltridge also worked with the National Climate Program Office. "Even as it is, the barriers to public dissemination of results that might cast doubt on one aspect or another of accepted greenhouse wisdom are extraordinarily high. Climate scientists rush in overwhelming numbers to repel infection by ideas not supportive of the basic thesis that global warming is perhaps the greatest of the threats to mankind and that it is caused by human folly - the burning of fossil fuels to support our way of life," Paltridge explained. "In a way, their situation is very similar to that of the software engineers who sold the concept of the Y2K bug a decade ago. The 'reputation stakes' have become so high that it is absolutely necessary for some form of international action (any action, whether sensible or not) to be forced upon mankind. Then, should disaster not in fact befall, the avoidance of doom can be attributed to that action rather than to the probability that the prospects for disaster were massively oversold," he added. "Pity the politicians who (we presume) are trying their best to make an informed decision on the matter. Of course politicians realize that those clamoring for their attention on any particular issue usually have other un-stated agendas. But they may not recognize that scientists too are human and are as subject as the rest of us to the seductions of well-funded campaigns. One of the more frightening statements about global warming to be heard now from the corridors of power is that 'the scientists have spoken'. Well maybe they have - some of them anyway - but the implication of god-like infallibility is a bit hard to take," he concluded.

Climate Scientist Dr. Ben Herman, past director of the Institute of Atmospheric Physics and former Head of the Department of Atmospheric Sciences at the University of Arizona is a member of both the Institute for the Study of Planet Earth's Executive Committee and the Committee on Global Change. Herman questioned how the UN IPCC could express 90% confidence that humans have warmed the planet. "That conclusion was really surprising to me, it having come from a world wide group of supposedly outstanding climate experts," Herman wrote in an April 6, 2007 article in Climate Science. Herman, who is currently studying several satellite based remote sensing projects to monitor ozone, temperature, water vapor, and aerosols from space, noted that the climate models are not cooperating with predictions of a man-made climate catastrophe. "Now, the models also predict that the mid tropospheric warming should exceed that observed at the ground, but satellite data contradicts this," Herman wrote. (LINK)

Prof. Francis Massen of the Physics Laboratory in Luxemburg and the leader of a meteorological station examined the UN IPCC's Summary for Policymakers (SPM). "The

SPM conceals that the methane concentration in the atmosphere has been stable for seven years (and nobody knows exactly why); not one climatic model foresaw this," Massen wrote in a February 2007 article entitled "IPCC 4AR SPM: Gloom and Doom." (translated) Massen noted there is an "unrestrained contest among media, environmental groups and politicians" to paint as dire a picture as possible of future climate conditions following the UN summary. Massen called some of the climate reporting "absolute rubbish." "It seems that in the climatic area a new faith fight has broken out, which has all characteristics of historical Religion," he added. (LINK)

Chief Meteorologist Eugenio Hackbart of the MetSul Meteorologia Weather Center in Sao Leopoldo - Rio Grande do Sul - Brazil declared himself a skeptic. "The media is promoting an unprecedented hyping related to global warming. The media and many scientists are ignoring very important facts that point to a natural variation in the climate system as the cause of the recent global warming," Hackbart wrote on May 30, 2007. "I believe we have the duty to inform people about the true facts of global warming. It is interesting that is this global warming era of hysteria we just lived a very cold week with snow in the higher elevation of Southern Brazil and that the next week could be even colder with low temperatures not seen in this part of the globe during the month of May in the last 20 to 30 years. It is not only South Africa that is freezing. South America is under a sequence of cold blasts not seen since the very cold climatic winter of 2000 (La Niña)," Hackbart concluded. In a June 5, 2007 article, Hackbart noted that the "historical cold events in Southern Brazil (in 1957, 1965, 1975, 1984, 1996 and 2006) have another aspect in common. They all took place around the 11-year sun cycle solar minimum." (LINK) & (LINK)

Ocean researcher Dr. John T. Everett, a former National Oceanic and Atmospheric Administration (NOAA) senior manager and UN IPCC lead author and reviewer, who led work on five impact analyses for the IPCC including Fisheries, Polar Regions, Oceans and Coastal Zones. Everett, who is also project manager for the UN Atlas of the Oceans, received an award while at NOAA for "accomplishments in assessing the impacts of climate change on global oceans and fisheries." Everett, who publishes the website http://www.climatechangefacts.info/index.htm also expressed skepticism about climate fears in 2007. "It is time for a reality check," Everett testified to Natural Resources Committee in the U.S. Congress on April 17, 2007. "Warming is not a big deal and is not a bad thing," Everett emphasized. "The oceans and coastal zones have been far warmer and colder than is projected in the present scenarios of climate change," Everett said. "In the oceans, major climate warming and cooling is a fact of life, whether it is over a few years as in an El Niño or over decades as in the Pacific Decadal Oscillation or the North Atlantic Oscillation. Currents, temperatures, salinity, and biology changes rapidly to the new state in months or a couple years. These changes far exceed those expected with global warming and occur much faster. The one degree F. rise since about 1860, indeed since the year 1000, has brought the global average temperature from 56.5 to 57.5 degrees. This is at the level of noise in this rapidly changing system," Everett explained. "I would much rather have the present warm climate, and even further warming, than the next ice age that will bring temperatures much colder than even today. The NOAA PaleoClimate Program shows us that when the dinosaurs roamed the earth, the earth was much warmer, the CO2 levels were 2 to 4 times higher, and coral reefs were much more expansive. The earth was so productive then that we are still using the oil, coal, and gas it generated," he added. "More

of the warming, if it comes, will be during winters and at night and toward the poles. For most life in the oceans, warming means faster growth, reduced energy requirements to stay warm, lower winter mortalities, and wider ranges of distribution," he explained. "No one knows whether the Earth is going to keep warming, or since reaching a peak in 1998, we are at the start of a cooling cycle that will last several decades or more," Everett concluded. **Everett also worked for the National Marine Fisheries Service as Division Chief for Fisheries Development in the 1970s and he noted that the concern then was about how predicted global cooling would impact the oceans.** (LINK) & (LINK)

Physicist Dr. Syun-Ichi Akasofu, the former director of both University of Alaska Fairbanks' Geophysical Institute and International Arctic Research Center who has twice been named in "1000 Most Cited Scientists," released a scientific study of the Arctic on March 2007 that concluded the recent warming was likely "natural" and not manmade. (LINK) Akasofu, an award winning scientist who has published more than 550 professional journal articles and authored or co-authored 10 books, also recently blasted the UN IPCC process. "I think the initial motivation by the IPCC (established in 1988) was good; it was an attempt to promote this particular scientific field," Akasofu said in an April 1, 2007 interview. "But so many [scientists] jumped in, and the media is looking for a disaster story, and the whole thing got out of control," Akasofu added. The article continued: "Akasofu said there is no data showing that 'most' of the present warming is due to the man-made greenhouse effect, as the members of the Intergovernmental Panel on Climate Change wrote in February. "If you look back far enough, we have a bunch of data that show that warming has gone on from the 1600s with an almost linear increase to the present," Akasofu said. The article concluded: "Akasofu said scientists who support the man-made greenhouse gas theory disregard information from centuries ago when exploring the issue of global warming. Satellite images of sea ice in the Arctic Ocean have been available in the satellite era only since the 1960s and 1970s. 'Young researchers are interested in satellite data, which became available after 1975,' he said. 'All the papers since (the advent of satellites) show warming. That's what I call 'instant climatology.' I'm trying to tell young scientists, 'You can't study climatology unless you look at a much longer time period.'" (LINK)

Physicist Dr. Gerhard Gerlich, of the Institute of Mathematical Physics at the Technical University Carolo-Wilhelmina in Braunschweig in Germany, and Dr. Ralf D. Tscheuschner co-authored a July 7, 2007 paper titled "Falsification of the Atmospheric CO2 Greenhouse Effects Within the Frame of Physics." The abstract of the paper reads in part, "(a) there are no common physical laws between the warming phenomenon in glass houses and the fictitious atmospheric greenhouse effects; (b) there are no calculations to determine an average surface temperature of a planet; (c) the frequently mentioned difference of 33 C is a meaningless number calculated wrongly; (d) the formulas of cavity radiation are used inappropriately; (e) the assumption of a radiative balance is unphysical; (f) thermal conductivity and friction must not be set to zero, the atmospheric greenhouse conjecture is falsified." Gerlich and Tscheuschner's study concluded, "The horror visions of a risen sea level, melting pole caps and developing deserts in North America and in Europe are fictitious consequences of fictitious physical mechanisms, as they cannot be seen even in the climate model computations. The emergence of hurricanes and tornados cannot be predicted by climate models, because all of these deviations are ruled out. The main strategy of modern CO2-greenhouse gas defenders seems to hide

themselves behind more and more pseudo explanations, which are not part of the academic education or even of the physics training." (LINK) & (LINK)

Geologist/Geochemist Dr. Tom V. Segalstad, a professor and head of the Geological Museum at the University of Oslo and formerly an expert reviewer with the UN IPCC, expressed skepticism of climate fears in 2007. A July 7, 2007 article in Canada's *Financial Post* read, "In the real world, as measurable by science, CO2 in the atmosphere and in the ocean reach a stable balance when the oceans contain 50 times as much CO2 as the atmosphere. 'The IPCC postulates an atmospheric doubling of CO2, meaning that the oceans would need to receive 50 times more CO2 to obtain chemical equilibrium,' explains Prof. Segalstad. 'This total of 51 times the present amount of carbon in atmospheric CO2 exceeds the known reserves of fossil carbon-- it represents more carbon than exists in all the coal, gas, and oil that we can exploit anywhere in the world.'" The article continued, "Also in the real world, Prof. Segalstad's isotope mass balance calculations -- a standard technique in science -- show that if CO2 in the atmosphere had a lifetime of 50 to 200 years, as claimed by IPCC scientists, the atmosphere would necessarily have half of its current CO2 mass. Because this is a nonsensical outcome, the IPCC model postulates that half of the CO2 must be hiding somewhere, in 'a missing sink.' Many studies have sought this missing sink -- a Holy Grail of climate science research-- without success. 'It is a search for a mythical CO2 sink to explain an immeasurable CO2 lifetime to fit a hypothetical CO2 computer model that purports to show that an impossible amount of fossil fuel burning is heating the atmosphere,' Prof. Segalstad concludes. 'It is all a fiction.'" (LINK)

Geologist Dr. David Kear, the former director of geological survey at the Department of Science and Industrial Research in New Zealand, called predictions of rising sea level as a result of man-made global warming "science fiction," and said the basic rules of science are being ignored. "When youngsters are encouraged to take part in a school science fair the first thing they are told to do is check the results, then re-check them, something NIWA [National Institute of Water and Atmospheric Research] appear to have forgotten to do," Kear said in a April 13, 2007 article. "In looking at the next 50 years, why have they not studied the past 50 years and applied their findings to the predictions? One would think this was a must," Kear explained. The article continued, "First global warming predictions made in 1987 estimated an annual rise in sea levels of 35mm. That scared the world but since then, the figure has continued to be reduced by 'experts.'" Kear concluded, "Personal beliefs on climate change and rising sea levels should be delayed until just one of the many predictions made since 1985 on the basis of carbon additions to the atmosphere comes true." (LINK)

Solar Physicist and Climatologist Douglas V. Hoyt, who coauthored the book *The Role of the Sun in Climate Change* and has worked at both the National Oceanic and Atmospheric Administration (NOAA) and the National Center for Atmospheric Research (NCAR), has developed a scorecard to evaluate how accurate climate models have been. Hoyt wrote, "Starting in 1997, we created a scorecard to see how climate model predictions were matching observations. The picture is not pretty with most of the predictions being wrong in magnitude and often in sign." (LINK) A March 1, 2007 blog post in the *National Review* explained how the scoring system works. "[Hoyt] gives each prediction a 'yes-no-undetermined score.' So if the major models' prediction is confirmed,

the score at the beginning would be 1-0-0. So how do the models score when compared with the evidence? The final score is 1-27-4. That's one confirmed prediction, 27 disconfirmed, and 4 undetermined," the blog noted. Hoyt has extensively researched the sun-climate connection and has published nearly 100 scientific papers in such areas as the greenhouse effect, aerosols, cloud cover, radiative transfer, and sunspot structure. (LINK) To see Hoyt's climate model scorecard, go here: (LINK)

Dr. Boris Winterhalter, retired Senior Marine Researcher of the Geological Survey of Finland and former professor of marine geology at University of Helsinki, criticized the media for what he considered its alarming climate coverage. "It is with great regret that I find media apt to grab any prophesy for catastrophes by 'reputed scientists' without hesitation," Winterhalter wrote on his website. Winterhalter, one of the 60 signatories in a 2006 letter urging withdrawal of Kyoto to Canadian Prime Minister Stephen Harper, also wrote, "The effect of solar winds on cosmic radiation has just recently been established and, furthermore, there seems to be a good correlation between cloudiness and variations in the intensity of cosmic radiation. Here we have a mechanism which is a far better explanation to variations in global climate than the attempts by IPCC to blame it all on anthropogenic input of greenhouse gases." "To state that sea level rises or falls due to global change is completely out of proportion. There are far too many factors affecting this planet from the inside and the outside to warrant the idea that man is capable of influencing these natural processes," he added. (LINK)

Particle Physicist Jasper Kirkby, a research scientist at CERN, the European Organization for Nuclear Research, believes his research will reveal that the sun and cosmic rays are a "part of the climate-change cocktail." Kirkby runs a CLOUD (Cosmics Leaving Outdoor Droplets) project that examines how the sun and cosmic rays impact clouds and subsequently the climate. In a February 23, 2007 Canadian National *Post* article, CERN asserted, "Clouds exert a strong influence on the Earth's energy balance, and changes of only a few per cent have an important effect on the climate." According to the *National Post* article, "Dr. Kirkby has assembled a dream team of atmospheric physicists, solar physicists, and cosmic ray and particle physicists from 18 institutes around the world, including the California Institute of Technology and Germany's Max-Planck Institutes, with preliminary data expected to arrive this coming summer. The world of particle physics is awaiting these results with much anticipation because they promise to unlock mysteries that can tell us much about climate change, as well as other phenomena." Kirkby once said his research into the sun and cosmic rays "will probably account for somewhere between a half and the whole of the increase in the Earth's temperature that we have seen in the last century." (LINK)

Solar physicists Galina Mashnich and Vladimir Bashkirtsev, of the Institute of Solar-Terrestrial Physics of the Siberian Division of the Russian Academy of Sciences, believe the climate is driven by the sun and predict global cooling will soon occur. The two scientists are so convinced that global temperatures will cool within the next decade they have placed a $10,000 wager with a UK scientist to prove their certainty. The criteria for the $10,000 bet will be to "compare global temperatures between 1998 and 2003 with those between 2012 and 2017. The loser will pay up in 2018," according to an April 16, 2007 article in *Live Science*. (LINK) Bashkirtsev and Mashnich have questioned the view that the "anthropogenic impact" is driving Earth's climate. "None of the investigations dealing

with the anthropogenic impact on climate convincingly argues for such an impact," the two scientists noted in 2003. Bashkirtsev and Mashnich believe the evidence of solar impacts on the climate "leave little room for the anthropogenic impact on the Earth's climate." They believe that "solar variations naturally explain global cooling observed in 1950-1970, which cannot be understood from the standpoint of the greenhouse effect, since CO2 was intensely released into the atmosphere in this period." (LINK)

Physics Professor Emeritus Dr. Howard Hayden of the University of Connecticut and author of *The Solar Fraud: Why Solar Energy Won't Run the World*, debunked fears of a man-made climate disaster during a presentation in April. "You think SUVs are the cause of glaciers shrinking? I don't think so," Hayden, who retired after 32 years as a professor, said, according to an April 25, 2007 article in *Maine Today*. "Don't believe what you hear out of Hollywood and Washington, D.C.," Hayden said. According to the article, Hayden argued that "climate history proves that Gore has the relationship between carbon dioxide concentration and global warming backwards. A higher concentration of carbon dioxide in the atmosphere, he said, does not cause the Earth to be warmer. Instead," he said, "a warmer Earth causes the higher carbon dioxide levels." Hayden explained, "The sun heats up the Earth and the oceans warm up and atmospheric carbon dioxide rises." According to the article, Hayden "said humans' contribution to global carbon dioxide levels is virtually negligible." Hayden is also the editor of a monthly newsletter called "The Energy Advocate." (LINK)

Internationally renowned scientist Dr. Antonio Zichichi, president of the World Federation of Scientists and a retired Professor of Advanced Physics at the University of Bologna in Italy, who has published over 800 scientific papers, questioned man-made global warming fears. According to an April 27, 2007 article at Zenit.org, Zichichi "pointed out that human activity has less than 10% impact on the environment." The article noted that Zichichi "showed that the mathematical models used by the [UN's] IPCC do not correspond to the criteria of the scientific method. He said the IPCC used ‘the method of 'forcing' to arrive at their conclusions that human activity produces meteorological variations.'" Zichichi said that based upon actual scientific fact "it is not possible to exclude the idea that climate changes can be due to natural causes," and he added that it is plausible that "man is not to blame." According to the article, "He also reminded those present that 500,000 years ago the Earth lost the North and South Poles four times. The poles disappeared and reformed four times, he said. Zichichi said that in the end he is not convinced that global warming is caused by the increase of emissions of ‘greenhouse gases' produced through human activity. Climate changes, he said, depend in a significant way on the fluctuation of cosmic rays." Zichichi also signed a December 2007 open letter to the United Nations stating in part "Significant new peer-reviewed research has cast even more doubt on the hypothesis of dangerous human-caused global warming." (LINK) & (LINK) & bio: (LINK)

Renowned Astronomer Sir Patrick Moore, a fellow of the UK's Royal Astronomical Society, host of the BBC's Sky at Night program since 1957 and author of over 60 books on astronomy called global warming concern ‘rubbish' in an interview with *The Sun* in 2005. "I think it's a lot of rubbish! From 1645-1715 the sun was inactive and we had

a 'Little Ice Age,'" Moore said. "Then the sun went back to normal and the world warmed up," he concluded. Moore most recently co-authored two books published in 2006: *50 Years in Space: What We Thought Then What We Know Now;* and *Bang! The Complete History of the Universe*. (LINK)

Atmospheric scientist Dr. James P. Koermer, a Professor of Meteorology and the director of the Meteorological Institute at Plymouth State University dismissed man-made global warming fears. "Global warming hysteria is based to a large extent on the unproven predictions of climate models. These numerical models are based on many simplified approximations of very complicated physical processes and phenomena," Koermer wrote to EPW on December 3, 2007. "My biggest concern is their [computer models'] lack of ability to adequately handle water vapor and clouds, which are much more important as climate factors than anthropogenic contributors. Until we can realistically simulate types of clouds, their optical thicknesses, and their altitudes, which we have a difficult time doing for short-term weather forecasts, I can't have much faith in climate models," Koermer wrote. "Another major reason that I remain skeptical is based on what I know about past climate changes that occurred before man walked on earth. I am more amazed with how relatively stable climate has been over the past 15,000 or so years, versus the large changes that frequently appeared to take place prior to that time. I also can't ignore some of the recent evidence presented by some very well respected astrophysicists on solar variability. Most meteorologists including me have always been taught to treat the sun's output as a constant--now I am not so sure and I am intrigued by their preliminary findings relating to climate," he concluded. (LINK)

Renowned agricultural scientist Dr. Norman Borlaug, known as the father of the "Green Revolution" for saving over a billion people from starvation by utilizing pioneering high yield farming techniques, is one of only five people in history who has been awarded a Nobel Peace Prize, the Presidential Medal of Freedom ,and the Congressional Gold Medal. Borlaug also declared himself skeptical of man-made climate fears in 2007. "I do believe we are in a period where, no question, the temperatures are going up. But is this a part of another one of those (natural) cycles that have brought on glaciers and caused melting of glaciers?" Borlaug asked, according to a September 21, 2007 article in *Saint Paul Pioneer Press*. The article reported that Borlaug is "not sure, and he doesn't think the science is, either." Borlaug added, "How much would we have to cut back to take the increasing carbon dioxide and methane production to a level so that it's not a driving force?" We don't even know how much." (LINK)

Astronomer Dr. Jeff Zweerink of the University of California at Los Angeles (UCLA) studies gamma rays, black holes, and neutron stars and has declared himself a skeptic of man-made climate fears. "Many natural phenomena significantly affect the global climate. Atmospheric conditions are impacted by tectonic activity, erosion, and changes in Earth's biomass, for example," Zweerink wrote on December 18, 2006. "While politicians and activists focus on the effects of fossil fuel burning the breeding and domestication of cows and cultivation of rice, for example, actually does more harm than driving too many SUV's," Zweerink added. (LINK)

Computer modeler Dr. Donald DuBois, has spent most of his career modeling computer networks for NASA's International Space Station, GE Space Systems, the

Air Force, and the Navy. DuBois is very skeptical of climate computer models predicting doom. "I know something about how misleading models can be, and the fact that their underlying assumptions can completely predetermine the results of the model. If the major climate models that are having a major impact on public policy were documented and put in the public domain, other qualified professionals around the world would be interested in looking into the validity of these models," DuBois wrote to EPW on May 17, 2007. "Right now, climate science is a black box that is highly questionable with unstated assumptions and model inputs. It is especially urgent that these models come out in the open considering how much climate change legislation could cost the United States and the world economies. Ross McKitrick's difficulty in getting the information from [Michael] Mann on his famous 'hockey stick' [temperature] curve is a case in point which should be a scandal not worth repeating. The cost of documenting the models and making them available would be a trifle; the cost of not doing so could be astronomical," DuBois wrote. "I headed up a project to model computer networks (to see how they will perform before they are built) for NASA's International Space Station (including the ground stations around the globe). If I had suggested a $250 million network for the ISS and said that I was basing this recommendation on my modeling but the models were not available for inspection, I would have been laughed out of the auditorium in Houston."

Anton Uriarte, a professor of Physical Geography at the University of the Basque Country in Spain and author of a book on the paleoclimate, rejected man-made climate fears. "It's just a political thing, and the lies about global warming are contributing to the proliferation of nuclear energy," Uriarte said according to a September 2007 article in the Spanish newspaper *El Correo*. "There's no need to be worried. It's very interesting to study [climate change], but there's no need to be worried," Uriarte wrote. "Far from provoking the so-called greenhouse effect, [CO2] stabilizes the climate." Uriarte noted that "the Earth is not becoming desertified, it's greener all the time." Uriarte says natural factors dominate the climate system. "The Earth being spherical, the tropics always receive more heat than the poles and the imbalance has to be continually rectified. They change places because of the tilt of the earth's axis. And, moreover, the planet isn't smooth, but rough, which produces perturbations in the interchange of air masses. We know the history of the climate very well and it has changed continuously," he wrote. "It's evident that the Earth is a human planet, and that being so, it's quite normal that we influence the atmosphere. It's something else altogether to say that things will get worse. I believe that a little more heat will be very good for us. The epochs of vegetational exuberance coincided with those of more heat," he explained. "In warm periods, when there are more greenhouse gases in the atmosphere - more CO2 and water vapour - climate variability is less. In these periods greenhouse gases, which act as a blanket, cushion the differences between the tropics and the poles. There is less interchange of air masses, less storms. We're talking about a climate which is much less variable," he added. (Translation) (LINK)

Professor David F. Noble of Canada's York University authored the book *America by Design: Science, Technology and the Rise of Corporate Capitalism* and co-founded a group designed to make scientific and technological research relevant to the needs of working people. Noble, a former curator at the Smithsonian Institution in Washington and a former professor at MIT, is a committed environmentalist and a man-made global warming skeptic. Noble now believes that the movement has "hyped the global climate issue into an obsession." Noble wrote a May 8, 2007 essay entitled "The

Corporate Climate Coup" which details how global warming has "hijacked" the environmental left and created a "corporate climate campaign" which has "diverted attention from the radical challenges of the global justice movement." Noble wrote, "Don't breathe. There's a total war on against CO2 emissions, and you are releasing CO2 with every breath. The multi-media campaign against global warming now saturating our senses, which insists that an increasing CO2 component of greenhouse gases is the enemy, takes no prisoners: you are either with us or you are with the 'deniers.' No one can question the new orthodoxy or dare risk the sin of emission. If Bill Clinton were running for president today he would swear he didn't exhale." Noble added, "How did scientific speculation so swiftly erupt into ubiquitous intimations of apocalypse?" (LINK)

Award-winning quaternary geologist Dr. Olafur Ingolfsson, a professor from the University of Iceland who has conducted extensive expeditions and field research in the both the Arctic and Antarctic, chilled fears that the iconic polar bear is threatened by global warming. Ingolfsson was awarded the prestigious "Antarctic Service Medal of the United States" by the National Science Foundation. "We have this specimen that confirms the polar bear was a morphologically distinct species at least 100,000 years ago, and this basically means that the polar bear has already survived one interglacial period," Ingolfsson said according to a December 10, 2007 article in the BBC. The article explained, "And what's interesting about that is that the Eeemian - the last interglacial - was much warmer than the Holocene (the present)." Ingolfsson continued, "This is telling us that despite the on-going warming in the Arctic today, maybe we don't have to be quite so worried about the polar bear. That would be very encouraging." Ingolfsson is optimistic about the polar bears future because of his research about the Earth's history. "The polar bear is basically a brown bear that decided some time ago that it would be easier to feed on seals on the ice. So long as there are seals, there are going to be polar bears. I think the threat to the polar bears is much more to do with pollution, the build up of heavy metals in the Arctic. This is just how I interpret it. But this is science - when you have little data, you have lots of freedom," he concluded. (LINK**)**

Over 100 Prominent International Scientists Warn UN Against 'Futile' Climate Control Efforts in a December 13, 2007 open letter. "Attempts to prevent global climate change from occurring are ultimately futile, and constitute a tragic misallocation of resources that would be better spent on humanity's real and pressing problems," the letter signed by the scientists read. (LINK) **The scientists, many of whom are current and former UN IPCC (Intergovernmental Panel on Climate Change)** scientists, sent an open letter to the UN Secretary-General questioning the scientific basis for climate fears and the UN's so-called "solutions." "It is not possible to stop climate change, a natural phenomenon that has affected humanity through the ages. Geological, archaeological, oral and written histories all attest to the dramatic challenges posed to past societies from unanticipated changes in temperature, precipitation, winds and other climatic variables," the scientists wrote. "In stark contrast to the often repeated assertion that the science of climate change is 'settled,' significant new peer-reviewed research has cast even more doubt on the hypothesis of dangerous human-caused global warming," the open letter added. [***EPW Note: Several other recent peer-reviewed studies have cast considerable doubt about man-made global warming fears. For most recent sampling see: New Peer-Reviewed Study finds 'Solar changes significantly alter climate' (11-3-07) (LINK) & "New Peer-Reviewed Study Halves the Global Average Surface Temperature Trend 1980***

- 2002" (LINK) & New Study finds Medieval Warm Period '0.3C Warmer than 20th Century' (LINK) - New Peer-Reviewed Study Finds: "Warming is naturally caused and shows no human influence." (LINK) - A November* peer-reviewed study in the journal Physical Geography found "L**ong-term climate change is driven by solar insolation changes" LINK) ***For a more comprehensive sampling of peer-reviewed studies earlier in 2007 see "New Peer-Reviewed Scientific Studies Chill Global Warming Fears" (LINK) - For a detailed analysis of how "consensus" has been promoted, see: Debunking The So-Called "Consensus" On Global Warming - LINK -] The scientists' letter continued: "The United Nations Intergovernmental Panel on Climate Change (IPCC) has issued increasingly alarming conclusions about the climatic influences of human-produced carbon dioxide (CO2), a non-polluting gas that is essential to plant photosynthesis. While we understand the evidence that has led them to view CO2 emissions as harmful, the IPCC's conclusions are quite inadequate as justification for implementing policies that will markedly diminish future prosperity. In particular, it is not established that it is possible to significantly alter global climate through cuts in human greenhouse gas emissions." "The IPCC Summaries for Policy Makers are the most widely read IPCC reports amongst politicians and non-scientists and are the basis for most climate change policy formulation. Yet these Summaries are prepared by a relatively small core writing team with the final drafts approved line-by-line by government representatives. The great majority of IPCC contributors and reviewers, and the tens of thousands of other scientists who are qualified to comment on these matters, are not involved in the preparation of these documents. The summaries therefore cannot properly be represented as a consensus view among experts," the letter added. **[EPW Note: Only 52 scientists participated in the UN IPCC Summary for Policymakers in April 2007, according to the Associated Press. - LINK - An analysis by Australian climate researcher John Mclean in 2007 found the UN IPCC peer-review process to be "an illusion." LINK** & **LINK]** The letter was signed by renowned scientists such as Dr. Antonio Zichichi, president of the World Federation of Scientists; Dr. Reid Bryson, dubbed one of the "Fathers of Meteorology"; Atmospheric pioneer Dr. Hendrik Tennekes, formerly of the Royal Netherlands Meteorological Institute; Award winning physicist Dr. Syun-Ichi Akasofu of the International Arctic Research Center, who has twice named one of the "1000 Most Cited Scientists"; Award winning MIT atmospheric scientist Dr. Richard Lindzen; UN IPCC scientist Dr. Vincent Gray of New Zealand; French climatologist Dr. Marcel Leroux of the University Jean Moulin; World authority on sea level Dr. Nils-Axel Morner of Stockholm University; Physicist Dr. Freeman Dyson of Princeton University; Physicist Dr. Zbigniew Jaworowski, chairman of the Scientific Council of Central Laboratory for Radiological Protection in Poland; Paleoclimatologist Dr. Robert M. Carter of Australia; Former UN IPCC reviewer Geologist/Geochemist Dr. Tom V. Segalstad, head of the Geological Museum in Norway; and Dr. Edward J. Wegman, of the U.S. National Academy of Sciences. Other scientists (not already included in this report) who signed the letter include: **Don Aitkin, PhD**, Professor, social scientist, retired Vice-Chancellor and President, University of Canberra, Australia; **Geoff L. Austin**, **PhD**, FNZIP, FRSNZ, Professor, Dept. of Physics, University of Auckland, New Zealand; **Chris C. Borel, PhD**, remote sensing scientist, U.S.; **Dan Carruthers,** M.Sc., wildlife biology consultant specializing in animal ecology in Arctic and Subarctic regions, Alberta, Canada; **Hans Erren, Doctorandus,** geophysicist and climate specialist, Sittard, The Netherlands; **William Evans, PhD**, Editor, American Midland Naturalist; Dept. of Biological Sciences, University of Notre Dame, U.S.; **R. W. Gauldie, PhD**, Research Professor, Hawai'i Institute of Geophysics and Planetology,

School of Ocean Earth Sciences and Technology, University of Hawai'i at Manoa; **Albrecht Glatzle, PhD**, sc.agr., Agro-Biologist and Gerente ejecutivo, INTTAS, Paraguay; **Fred Goldberg, PhD**, Adj Professor, Royal Institute of Technology, Mechanical Engineering, Stockholm, Sweden; **Louis Hissink** M.Sc. M.A.I.G., Editor AIG News and Consulting Geologist, Perth, Western Australia; **Andrei Illarionov, PhD**, Senior Fellow, Center for Global Liberty and Prosperity, U.S.; founder and director of the Institute of Economic Analysis, Russia; **Jon Jenkins, PhD**, MD, computer modelling - virology, Sydney, NSW, Australia; **Olavi Kärner, Ph.D**., Research Associate, Dept. of Atmospheric Physics, Institute of Astrophysics and Atmospheric Physics, Toravere, Estonia; **Jan J.H. Kop,** M.Sc. Ceng FICE (Civil Engineer Fellow of the Institution of Civil Engineers), Emeritus Professor of Public Health Engineering, Technical University Delft, The Netherlands; **Professor R.W.J. Kouffeld**, Emeritus Professor, Energy Conversion, Delft University of Technology, The Netherlands; **Salomon Kroonenberg, PhD**, Professor, Dept. of Geotechnology, Delft University of Technology, The Netherlands; **The Rt. Hon. Lord Lawson of Blaby**, economist; Chairman of the Central Europe Trust; former Chancellor of the Exchequer, U.K.; **Douglas Leahey, PhD**, meteorologist and air-quality consultant, Calgary, Canada; **William Lindqvist, PhD**, consulting geologist and company director, Tiburon, California, U.S.; **A.J. Tom van Loon, PhD**, Professor of Geology (Quaternary Geology), Adam Mickiewicz University, Poznan, Poland; former President of the European Association of Science Editors; **Horst Malberg, PhD,** Professor for Meteorology and Climatology, Institut für Meteorologie, Berlin, Germany; **Alister McFarquhar, PhD,** international economist, Downing College, Cambridge, U.K.; **Frank Milne, PhD**, Professor, Dept. of Economics, Queen's University, Canada; **Asmunn Moene, PhD**, former head of the Forecasting Centre, Meteorological Institute, Norway; **Alan Moran, PhD**, Energy Economist, Director of the IPA's Deregulation Unit, Australia; **John Nicol, PhD**, physicist, James Cook University, Australia; **Mr. David Nowell**, M.Sc., Fellow of the Royal Meteorological Society, former chairman of the NATO Meteorological Group, Ottawa, Canada; **Brian Pratt, PhD**, Professor of Geology, Sedimentology, University of Saskatchewan, Canada; **Harry N.A. Priem,** PhD, Emeritus Professor of Planetary Geology and Isotope Geophysics, Utrecht University; former director of the Netherlands Institute for Isotope Geosciences; **Colonel F.P.M. Rombouts**, Branch Chief - Safety, Quality and Environment, Royal Netherlands Air Force; **R.G. Roper, PhD**, Professor Emeritus of Atmospheric Sciences, School of Earth and Atmospheric Sciences, Georgia Institute of Technology, U.S.; **Arthur Rorsch, PhD,** Emeritus Professor, Molecular Genetics, Leiden University, The Netherlands; **Rob Scagel**, M.Sc., forest microclimate specialist, principal consultant, Pacific Phytometric Consultants, B.C., Canada; **Gary D. Sharp, PhD**, Center for Climate/Ocean Resources Study, Salinas, CA, U.S.; **L. Graham Smith, PhD,** Associate Professor, Dept. of Geography, University of Western Ontario, Canada; **Peter Stilbs**, TeknD, Professor of Physical Chemistry, Research Leader, School of Chemical Science and Engineering, KTH (Royal Institute of Technology), Stockholm, Sweden; **Len Walker, PhD**, power engineering, Pict Energy, Melbourne, Australia; **Stephan Wilksch, PhD**, Professor for Innovation and Technology Management, Production Management and Logistics, University of Technology and Economics Berlin, Germany; and **Raphael Wust, PhD**, Lecturer, Marine Geology/Sedimentology, James Cook University, Australia. Also, "Other professional persons knowledgeable about climate change who expressed support for the open letter to the UN Secretary General" included meteorological researcher and spotter for the National Weather Service **Allan Cortese;** Water resources engineer **Don Farley**; **Dr. David A.**

Gray of Messiah College, a former researcher in electromagnetic waves in the atmosphere; **Barrie Jackson**, associate professor of Chemical Engineering at Queen's University, Kingston, Ontario, Canada; **Raymond J. Jones, PhD**, FATSE, OAM. retired, Agronomist, Townsville, Australia; **J.A.L. Robertson**, M.A. (Cantab.), F.R.S.C., nuclear-energy consultant, Deep River, ON, Canada; **J.T.Rogers, PhD**, FCAE, nuclear engineer; energy analyst, Ottawa, Canada; **John K. Sutherland, PhD** in Geology (Manchester University), New Brunswick, Canada; **Noor van Andel, PhD** Energy Physics, Burgemeester Stroinkstraat, The Netherlands; **Arthur M. Patterson,** P.Eng, Geological Engineer. Extensive experience in the Canadian Arctic; **Agronomist Pat Palmer** of New Zealand; and **Alois Haas** emeritus Prof. PhD, nuclear chemistry; **Michael Limburg**, Engineer, deputy press-speaker of Europäisches Institut für Klima & Energie (EIKE - European Institute for Climate & Energy), Grob Glienicke, Germany; **Dietrich von Saldern**, PhD., Diplom Ingenieur, Assessor des Bergfachs, Mining Engineer, Germany; **Tom Harris,** B. Eng., M. Eng. (thermofluids), Executive Director, Natural Resources Stewardship Project, Ottawa, Canada. (LINK) & (LINK) **(See attachment one for full text of letter and complete list of signatories at end of this report.)**

Dutch Geologist Dr. Chris Schoneveld, a retired exploration geophysicist, has become an outspoken skeptic regarding the human influence on climate over the past four years. "If global warming is just a consequence of natural climatic fluctuations similar to well-documented, geologically caused climate changes, wouldn't we rather adapt to a warming world than to spend trillions of dollars on a futile exercise to contain carbon dioxide emissions?" Schoneveld wrote in the October 1, 2007 *International Herald Tribune*. "As long as the causes of the many climate changes throughout the Earth's history are not well understood, one cannot unequivocally separate natural causes from possibly man-made ones. The so-called scientific consensus discourages healthy debate between believers in global warming and skeptics. There has never been a UN-organized conference on climate change where skeptics were invited for the sake of balance to present their case," he explained. (LINK) Schoneveld also critiqued the UN IPCC process on February 3, 2007. "Who are the geologists that the IPCC is relying on? Is the IPCC at all concerned about the frequency and recurrence of ice ages? Who are the astronomers that advise the IPCC on other cause of possible climate change (sun spots or earth's elliptical orbit, tilt and wobble of its axis) so as to ascertain that we are not just experiencing a normal trend related to interglacial warming or variation in solar radiation?" he asked. (LINK)

Atmospheric scientist Dr. Hendrik Tennekes, a scientific pioneer in the development of numerical weather prediction and former director of research at The Netherlands' Royal National Meteorological Institute, and an internationally recognized expert in atmospheric boundary layer processes, took climate modelers to task for their projections of future planetary doom in a February 28, 2007 post on Climate Science. "I am of the opinion that most scientists engaged in the design, development, and tuning of climate models are in fact software engineers. They are unlicensed, hence unqualified to sell their products to society. In all regular engineering professions, there exists a licensing authority. If such an authority existed in climate research, I contend, the vast majority of climate modelers would vainly attempt certification. Also, they would be unable to obtain insurance against professional liability," Tennekes said. (LINK) Tennekes also unleashed on the promoters of climate fears in a January 31, 2007 article. "I worry about the arrogance of scientists who claim they can help solve the climate problem, provided their

research receives massive increases in funding", he wrote. "I am angry about the Climate Doomsday hype that politicians and scientists engage in. I am angry at Al Gore, I am angry at the Bulletin of Atomic Scientists for resetting its Doomsday clock, I am angry at Lord Martin Rees for using the full weight of the Royal Society in support of the Doomsday hype, I am angry at Paul Crutzen for his speculations about yet another technological fix, I am angry at the staff of IPCC for their preoccupation with carbon dioxide emissions, and I am angry at Jim Hansen for his efforts to sell a Greenland Ice Sheet Meltdown Catastrophe," he explained. (LINK) Tennekes has also blasted Gore and the UN in the Dutch De Volskrant newspaper on March 28, 2007. "I find the Doomsday picture Al Gore is painting - a six-meter sea level rise, fifteen times the IPCC number - entirely without merit," Tennekes wrote. "I protest vigorously the idea that the climate reacts like a home heating system to a changed setting of the thermostat: just turn the dial, and the desired temperature will soon be reached. We cannot run the climate as we wish," Tennekes said. "Whatever the IPCC staff thinks, it is not at all inconceivable that decreasing solar activity will lead to some cooling ten years from now," he concluded. (LINK)

Chemical engineer Thomas Ring has authored several scientific papers for *Oil and Gas Journal* and is a member of the American Institute of Chemical Engineers. Ring, who has a degree from Case Western Reserve University and is licensed in the state of California, declared "we should not fear global warming" in 2007. "Warming of the Earth has never been catastrophic; in fact, humankind has always fared better in warmer than cooler periods, with less hardship and illness and improved agriculture," Ring wrote on November 28, 2007. Ring called for "solid, objective and unbiased research, rather than fear-mongering based on a nonscientific 'consensus.'" "What's responsible for prior periods of warmth in 600 BC, 1000 and 1912 to 1943, all when there was no or little man-made CO2? It's most likely the sun, whose radiation varies to the fourth power of its temperature," he wrote. "Atmospheric water vapor is, however, 0.9 percent, 25 times as much as CO2. Water vapor is a 'radiator' that is three times more powerful than CO2, but its larger effect has been ignored in the global warming debate," he concluded. (LINK)

Harvard-educated Physicist Arthur E. Lemay, a renowned computer systems specialist, declared his climate skepticism in 2007. "Recent studies show that there are far better explanations for the earth's warming before 1998. The variations in the sun's radiant energy and production of cosmic rays are far more persuasive than the greenhouse gas theory," Lemay wrote on December 5, 2007 in the *Jakarta Post* during the UN Climate Conference in Bali. "The solar theory explains it, the greenhouse gas theory does not. In science, when observations do not support a theory, it is the theory which needs to be discarded. So, all this blather about reducing CO2, the Kyoto Protocol and the Bali conference are all a waste of money," Lemay explained. "Of course, the global warming alarmists cannot tolerate the solar theory because we cannot do anything about it, and no government wants to spend billions of dollars for nothing," he wrote. "It's time for Indonesia and other developing countries to demand an explanation as to why CO2 reduction is being mandated when it is not the problem," he concluded. (LINK) & (LINK)

Geophysicist Dr. Claude Allegre, a top Geophysicist and French Socialist who has authored more than 100 scientific articles, written 11 books, and received numerous scientific awards including the Goldschmidt Medal from the Geochemical Society of the United States, converted from climate alarmist to skeptic in 2006. Allegre, who was one of

the first scientists to sound global warming fears 20 years ago, now says the cause of climate change is "unknown" and accused the "prophets of doom of global warming" of being motivated by money, noting that "the ecology of helpless protesting has become a very lucrative business for some people!" "Glaciers' chronicles or historical archives point to the fact that climate is a capricious phenomena. This fact is confirmed by mathematical meteorological theories. So, let us be cautious," Allegre explained in a September 21, 2006 article in the French newspaper *L'EXPRESS*. The *National Post* in Canada also profiled Allegre on March 2, 2007, noting, "Allegre has the highest environmental credentials. The author of early environmental books, he fought successful battles to protect the ozone layer from CFCs and public health from lead pollution." Allegre now calls fears of a climate disaster "simplistic and obscuring the true dangers" and mocks "the greenhouse-gas fanatics whose proclamations consist in denouncing man's role on the climate without doing anything about it except organizing conferences and preparing protocols that become dead letters." Allegre, a member of both the French and U.S. Academy of Sciences, had previously expressed concern about man-made global warming. "By burning fossil fuels, man enhanced the concentration of carbon dioxide in the atmosphere which has raised the global mean temperature by half a degree in the last century," Allegre wrote 20 years ago. In addition, Allegre was one of 1500 scientists who signed a November 18, 1992 letter titled "World Scientists' Warning to Humanity" in which the scientists warned that global warming's "potential risks are very great." Allegre mocked former Vice President Al Gore's Nobel Prize in 2007, calling it "a political gimmick." Allegre said on October 14, 2007, "The amount of nonsense in Al Gore's film! It's all politics; it's designed to intervene in American politics. It's scandalous." (LINK)

Astrophysicist Dr. Howard Greyber, a Fellow Royal Astronomical Society and member of the International Astronomical Union, called warming fears "unwarranted hysteria" and chastised a newspaper columnist's views on global warming. "When [columnist] Thomas Friedman touts carbon dioxide as the cause of global warming in his column, I respond as a physicist that he cannot comprehend that it is still not proven that carbon dioxide emissions actually are causing global warming. Correlation does not prove Causation," Greyber wrote on September 20, 2007 in the *International Herald Tribune*. "The Earth's climate changes all the time. Did carbon dioxide emissions cause the Medieval Warm Period, when Vikings raised crops on Greenland's coast? What caused the cold climate from 1700 to 1850? In 1975, articles were published predicting we were entering a New Ice Age. Reputable scientists oppose this unwarranted alarmist hysteria," he noted. "Understanding climate change is an extremely difficult scientific problem. Giant computers generating climate models cannot be trusted so far. As any computer person knows, garbage in means garbage out. If research suggests subtle variations in our Sun's radiation reaching Earth are causing global climate change, what would Friedman recommend?" Greyber concluded. (LINK)

Astrophysicist Dr. Nir Shaviv, one of Israel's top, young, award-winning scientists of the Hebrew University of Jerusalem, recanted his belief that man-made emissions were driving climate change. "Like many others, I was personally sure that CO2 is the bad culprit in the story of global warming. But after carefully digging into the evidence, I realized that things are far more complicated than the story sold to us by many climate scientists or the stories regurgitated by the media. In fact, there is much more than meets the eye," Shaviv said in a February 2, 2007 Canadian *National Post* article. According to

Shaviv, the CO2 temperature link is only "incriminating circumstantial evidence." "Solar activity can explain a large part of the 20th-century global warming" and "it is unlikely that [the solar climate link] does not exist," Shaviv noted, pointing to the impact cosmic- rays have on the atmosphere. According to the *National Post*, Shaviv believes that even a doubling of CO2 in the atmosphere by 2100 "will not dramatically increase the global temperature." "Even if we halved the CO2 output, and the CO2 increase by 2100 would be, say, a 50% increase relative to today instead of a doubled amount, the expected reduction in the rise of global temperature would be less than 0.5C. This is not significant," Shaviv explained. Shaviv also wrote on August 18, 2006 that a colleague of his believed that "CO2 should have a large effect on climate" so "he set out to reconstruct the phanerozoic temperature. He wanted to find the CO2 signature in the data, but since there was none, he slowly had to change his views." Shaviv believes there will be more scientists converting to man-made global warming skepticism as they discover the dearth of evidence. "I think this is common to many of the scientists who think like us (that is, that CO2 is a secondary climate driver). Each one of us was working in his or her own niche. While working there, each one of us realized that things just don't add up to support the AGW (Anthropogenic Global Warming) picture. So many had to change their views," he wrote.

Research physicist Dr. John W. Brosnahan develops remote-sensing instruments for atmospheric science for such clients as NOAA and NASA and has published numerous peer-reviewed research, as well as developed imaging Doppler interferometry for sensing winds, waves, and structure in the atmosphere. "Of course I believe in global warming, and in global cooling -- all part of the natural climate changes that the Earth has experienced for billions of years, caused primarily by the cyclical variations in solar output," Brosnahan wrote to EPW on December 10, 2007. "I have not seen any sort of definitive, scientific link to man-made carbon dioxide as the root cause of the current global warming, only incomplete computer models that suggest that this might be the case," Brosnahan explained. "Even though these computer climate models do not properly handle a number of important factors, including the role of precipitation as a temperature regulator, they are being (mis-)used to force a political agenda upon the U.S. While there are any number of reasons to reduce carbon dioxide generation, to base any major fiscal policy on the role of carbon dioxide in climate change would be inappropriate and imprudent at best and potentially disastrous economic folly at the worst," he concluded.

Mathematician & Engineer Dr. David Evans, who did carbon accounting for the Australian Government and is head of the group "Science Speak," recently detailed his conversion to a skeptic. "I devoted six years to carbon accounting, building models for the Australian government to estimate carbon emissions from land use change and forestry. When I started that job in 1999 the evidence that carbon emissions caused global warming seemed pretty conclusive, but since then new evidence has weakened the case that carbon emissions are the main cause. I am now skeptical," Evans wrote in an April 30, 2007 blog. "But after 2000 the evidence for carbon emissions gradually got weaker -- better temperature data for the last century, more detailed ice core data, then laboratory evidence that cosmic rays precipitate low clouds," Evans wrote. "As Lord Keynes famously said, ‘When the facts change, I change my mind. What do you do, sir?'" he added. Evans noted how he benefited from climate fears as a scientist. "And the political realm in turn fed money back into the scientific community. By the late 1990s, lots of jobs depended on the

idea that carbon emissions caused global warming. Many of them were bureaucratic, but there were a lot of science jobs created too. I was on that gravy train, making a high wage in a science job that would not have existed if we didn't believe carbon emissions caused global warming. And so were lots of people around me; and there were international conferences full of such people. And we had political support, the ear of government, big budgets, and we felt fairly important and useful (well, I did anyway). It was great. We were working to save the planet! But starting in about 2000, the last three of the four pieces of evidence outlined above fell away or reversed," Evans wrote. "The pre-2000 ice core data was the central evidence for believing that atmospheric carbon caused temperature increases. The new ice core data shows that past warmings were *not* initially caused by rises in atmospheric carbon, and says nothing about the strength of any amplification. This piece of evidence casts reasonable doubt that atmospheric carbon had any role in past warmings, while still allowing the possibility that it had a supporting role," he added. "Unfortunately politics and science have become even more entangled. The science of global warming has become a partisan political issue, so positions become more entrenched. Politicians and the public prefer simple and less-nuanced messages. At the moment the political climate strongly supports carbon emissions as the cause of global warming, to the point of sometimes rubbishing or silencing critics," he concluded. (Evans bio link)

Yury Zaitsev, an analyst with Russia's Institute of Space Studies, rejected man-made global warming fears in 2007. "Paleoclimate research shows that the chillier periods of the Earth's history have always given way to warmer times, and vice versa. But it is not quite clear what causes this change," Zaitsev wrote on September 28, 2007 in the Russian publication *RIA Novosti*. "**Yury Leonov, director of the Institute of Geology at the Russian Academy of Sciences**, thinks that the human impact on nature is so small that it can be dismissed as a statistical mistake," Zaitsev explained. "Until quite recently, experts primarily attributed global warming to greenhouse gas emissions, with carbon dioxide singled out as the chief culprit. But it transpires that water vapor is just as bad," he wrote. "Sun-related phenomena have fairly regular and predictable consequences on the Earth. Of course, they exert influence on humans and other species and, to some extent, on the environment, altering atmospheric pressure and temperature. But they are not likely to contribute much to climate change. This is a global process and is the result of global causes. For the time being, we are far from understanding them fully," he added. (LINK)

Climate researcher Dr. Tad Murty, former Senior Research Scientist for Fisheries and Oceans in Canada and former director of Australia's National Tidal Facility and professor of earth sciences, Flinders University, reversed himself from believer in man-made climate change to a skeptic. "I started with a firm belief about global warming, until I started working on it myself," Murty explained on August 17, 2006. "I switched to the other side in the early 1990s when Fisheries and Oceans Canada asked me to prepare a position paper and I started to look into the problem seriously," Murty explained. Murty was one of the 60 scientists who wrote an April 6, 2006 letter urging withdrawal of Kyoto to Canadian Prime Minister Stephen Harper which stated in part, "If, back in the mid-1990s, we knew what we know today about climate, Kyoto would almost certainly not exist, because we would have concluded it was not necessary."

French climatologist Dr. Marcel Leroux, former professor at University of Jean Moulin and former director of the Laboratory of Climatology, Risks, and Environment (CNRS) in Lyon, is a climate skeptic. Leroux wrote a 2005 book titled *Global Warming - Myth or Reality? - The Erring Ways of Climatology*. "Hardly a week goes by without some new scoop ... filling our screens and the pages of our newspapers," Leroux wrote in his book. The media promotes the view that "global warming caused by the greenhouse effect is our fault, just like everything else, and the message/slogan/misinformation becomes even more simplistic, ever cruder! It could not be simpler: if the rain falls or draught strikes; if the wind blows a gale or there is none at all; whether it's heat or hard frost; it's all because of the greenhouse effect, and we are to blame. An easy argument, but stupid!" he explained. "The Fourth Report of the IPCC might just as well decree the suppression of all climatology textbooks, and replace them in our schools with press *communiqués*. ... Day after day, the same mantra - that 'the Earth is warming up' - is churned out in all its forms. As 'the ice melts' and 'sea level rises,' the Apocalypse looms ever nearer! Without realizing it, or perhaps without wishing to, the average citizen in bamboozled, lobotomized, lulled into mindless acceptance. ... Non-believers in the greenhouse scenario are in the position of those long ago who doubted the existence of God ... fortunately for them, the Inquisition is no longer with us!" he wrote. "The possible causes, then, of climate change are: well-established orbital parameters on the paleoclimatic scale, ... solar activity, ...; volcanism ...; and far at the rear, the greenhouse effect, and in particular that caused by water vapor, the extent of its influence being unknown. These factors are working together all the time, and it seems difficult to unravel the relative importance of their respective influences upon climatic evolution. Equally, it is tendentious to highlight the anthropogenic factor, which is, clearly, the least credible among all those previously mentioned," he added. (LINK) (Leroux died in August 2008)

Climate scientist Dr. Chris de Freitas of the University of Auckland, N.Z., also converted from a believer in man-made global warming to a skeptic. "At first I accepted that increases in human-caused additions of carbon dioxide and methane in the atmosphere would trigger changes in water vapor, etc. and lead to dangerous 'global warming,' but with time and with the results of research, I formed the view that, although it makes for a good story, it is unlikely that the man-made changes are drivers of significant climate variation," de Freitas wrote on August 17, 2006. "I accept there may be small changes. But I see the risk of anything serious to be minute," he added. "One could reasonably argue that lack of evidence is not a good reason for complacency. But I believe the billions of dollars committed to GW research and lobbying for GW and for Kyoto treaties etc could be better spent on uncontroversial and very real environmental problems (such as air pollution, poor sanitation, provision of clean water and improved health services) that we know affect tens of millions of people," de Freitas concluded. De Freitas was one of the 60 scientists who wrote an April 6, 2006 letter urging withdrawal of Kyoto to Canadian Prime Minister Stephen Harper which stated in part, "Significant [scientific] advances have been made since the [Kyoto] protocol was created, many of which are taking us away from a concern about increasing greenhouse gases." (LINK)

Atmospheric scientist Dr. Gerhard Kramm of the Geophysical Institute at the University of Alaska Fairbanks expressed climate skepticism in 2007. "The IPCC would never be awarded by the Nobel Prize in Physics because most of the statements of the

IPCC can be assessed as physical misunderstanding and physical misinterpretations," Kramm wrote in a letter to the *Associated Press* on October 21, 2007. "There is no scientific certainty, even though the *Associated Press* distributes this message always every day," Kramm wrote in his letter, criticizing the news outlet. "The change in the radiative forcing components since the beginning of the industrial era is so small (2 W/m^2, according to the IPCC 2007) that we have no pyrgeometers (radiometers to measure the infrared radiometer emitted by the earth and the atmosphere) which are able to provide any empirical evidence of such a small change because their degrees of accuracy are too less," he wrote. "By far, most of [the IPCC] members can be considered, indeed, as members of a Church of Global Warming. They are not qualified enough to understand the physics behind the greenhouse effect and to prove the accuracy of global climate models (see, for instance, the poor publication record of Dr. [RK] Pachauri, the current Chairman of the IPCC). However, in science it would be highly awkward to vote which results are correct and which are wrong," he added. "A decrease of the anthropogenic CO2 emission to the values below of those of 1990 would not decrease the atmospheric CO2 concentration. This concentration would increase further, however the increase would be lowering. As illustrated in Slide 38, it might be that the atmospheric CO2 concentration tends to an equilibrium concentration of somewhat higher than 500 ppmv. Here, equilibrium means that the increase of natural and anthropogenic CO2 emission is equaled by the uptake of CO2 by vegetation and ocean," he concluded. (LINK) & (LINK)

Geologist Georgia D. Brown, an instructor of Geology & Oceanography at College of Lake County in Illinois, who co-authored a 1993 peer-reviewed study on the CO2 content in the magma from Kilauea Volcano in Hawaii in the prestigious journal *American Mineralogist,* rejected climate fears and supported the notion of a coming global cool down. "I talk to my students about this topic every semester, not just when we are covering glacial geology, but at different points throughout the term. I want them to know that they shouldn't take every alarmist claim at face value," Brown wrote on December 13, 2006. "Fear is a means of controlling a population, and since the cold war has ended, the government needed new fuel for its control fire," Brown wrote. Brown, who said she "spent quite a bit of time doing research in climatology, and what triggers the ice age cycle" explained that "it is a slight increase in temperature, and the resulting increase in precipitation, that triggers ice sheet growth.....And have you read about the 30% decrease in the North Atlantic Current? What happens to Greenland, Iceland, The British Isles, and Europe as a result? It gets damn cold!" (LINK)

Physicist Dr. Laurence I. Gould, Professor of Physics at the University of Hartford and former Chair of the New England Section of the American Physical Society, has authored peer-reviewed research articles and given numerous talks nationally and internationally. Gould, who has made an intensive study of climate change, challenged climate fears in 2007. "There is (I have found) a huge problem in getting to learn of both sides of the AGW debate. But this ‘debate' needs to be aired, regardless of what is being presented to scientists and to the public as the ‘truth' about AGW," Gould wrote in a September 20, 2007 editorial titled "Global Warming from a Critical Perspective." "Although I have seen many articles arguing for the reality and danger of anthropogenic greenhouse warming (AGW), I have rarely seen one that presents scientific arguments against the AGW claims," Gould wrote. "The implication [by many in the media] seems to be that anyone who has a contrary argument is not ‘respectable' - yet there are many

leading climatologists (such as Richard Lindzen of MIT) who have very good arguments disagreeing," Gould wrote. (LINK) & (LINK) & (LINK)

Russian scientist Alexander G. Egorov, a researcher with the Arctic and Antarctic Research Institute in Saint Petersburg, called global warming a temporary inconvenience tied to the natural fluctuation of the sun. According to an October 18, 2007 translated article in *Russian Science News*, Egorov believes warming is "not more than a natural variation." The article explained that Egorov believes "long-term temperature rising to be just an episode of global history, a consequence of natural fluctuations, which depend on changes in solar activity and surface air pressure. The scientist has analyzed data of monthly average values of surface air pressure between November and April 1923-2005 in cellular mesh points, located northwards from 40th parallel of the northern hemisphere." The article concluded, "If pressure over Atlantic drops, then speed of warm water transfer grows, like in 1920-1940s, when warming was detected in the Arctic. During the 22nd solar cycle, which started in 1986, the pressure over vast territories of the northern hemisphere, including Canada, Greenland, the Arctic Ocean, Eastern Europe, Eastern and Western Siberia, dropped significantly. This stage of natural fluctuations concurs with current climate state, which is usually called the global warming. However, in the next solar cycle the pressure over the Northern Atlantic may change, causing the end of global warming." (LINK)

One of the "Fathers of Meteorology," Dr. Reid Bryson, the founding chairman of the Department of Meteorology at University of Wisconsin (now the Department of Oceanic and Atmospheric Sciences, was pivotal in promoting the coming ice age scare of the 1970s (See *Time Magazine*'s 1974 article "Another Ice Age" citing Bryson: & see *Newsweek*'s 1975 article "The Cooling World" citing Bryson) has now converted into a leading global warming skeptic. On February 8, 2007 Bryson dismissed what he terms "sky is falling" man-made global warming fears. Bryson was on the United Nations Global 500 Roll of Honor and was identified by the British Institute of Geographers as the most frequently cited climatologist in the world. "Before there were enough people to make any difference at all, two million years ago, nobody was changing the climate, yet the climate was changing, okay?" Bryson told the May 2007 issue of *Energy Cooperative News*. "All this argument is the temperature going up or not, it's absurd. Of course it's going up. It has gone up since the early 1800s, before the Industrial Revolution, because we're coming out of the Little Ice Age, not because we're putting more carbon dioxide into the air," Bryson said. "You can go outside and spit and have the same effect as doubling carbon dioxide," he added. "We cannot say what part of that warming was due to mankind's addition of 'greenhouse gases' until we consider the other possible factors, such as aerosols. The aerosol content of the atmosphere was measured during the past century, but to my knowledge this data was never used. We can say that the question of anthropogenic modification of the climate is an important question -- too important to ignore. However, it has now become a media free-for-all and a political issue more than a scientific problem," Bryson explained in 2005. Bryson also signed the December 13, 2007 open letter to the UN dissenting on man-made climate fears. (LINK) (Bryson died in June 2008 (LINK) (LINK)

UN IPCC reviewer, global warming author, and economist Dr. Hans H.J. Labohm, a lecturer at the Netherlands Defense Academy, started out as a man-made global warming believer but he later switched his view after conducting climate research.

Labohm wrote on August 19, 2006, "I started as an anthropogenic global warming believer, then I read the [UN's IPCC] Summary for Policymakers and the research of prominent skeptics." "After that, I changed my mind," Labohm explained. **Labohm co-authored the 2004 book *Man-Made Global Warming: Unraveling a Dogma* with Eindhoven University of Technology emeritus professor of chemical engineer Dick Thoenes who was the former chairman of the Royal Netherlands Chemical Society.** Labohm was one of the 60 scientists who wrote an April 6, 2006 letter urging withdrawal of Kyoto to Canadian Prime Minister Stephen Harper which stated in part, "'Climate change is real' is a meaningless phrase used repeatedly by activists to convince the public that a climate catastrophe is looming and humanity is the cause. Neither of these fears is justified. Global climate changes all the time due to natural causes and the human impact still remains impossible to distinguish from this natural 'noise.'"

Paleoclimatologist Tim Patterson, professor in the department of Earth Sciences at Carleton University in Ottawa converted from believer in CO2's driving the climate change to a skeptic. "I taught my students that CO2 was the prime driver of climate change," Patterson wrote on April 30, 2007. Patterson said his "conversion" happened following his research on "the nature of paleo-commercial fish populations in the NE Pacific." "[My conversion from believer to climate skeptic] came about approximately 5-6 years ago when results began to come in from a major NSERC (Natural Sciences and Engineering Research Council of Canada) Strategic Project Grant where I was PI (principle investigator)," Patterson explained. "Over the course of about a year, I switched allegiances," he wrote. "As the proxy results began to come in, we were astounded to find that paleoclimatic and paleoproductivity records were full of cycles that corresponded to various sun-spot cycles. About that time, [geochemist] Jan Veizer and others began to publish reasonable hypotheses as to how solar signals could be amplified and control climate," Patterson noted. Patterson says his conversion "probably cost me a lot of grant money. However, as a scientist I go where the science takes me and not where activists want me to go." Patterson now asserts that more and more scientists are converting to climate skeptics. "When I go to a scientific meeting, there's lots of opinion out there, there's lots of discussion [about climate change]. I was at the Geological Society of America meeting in Philadelphia in the fall and I would say that people with my opinion were probably in the majority," Patterson told the *Winnipeg Sun* on February 13, 2007. Patterson, who believes the sun is responsible for the recent warming of the Earth, ridiculed the environmentalists and the media for not reporting the truth. "But if you listen to [Canadian environmental activist David] Suzuki and the media, it's like a tiger chasing its tail. They try to outdo each other and all the while proclaiming that the debate is over but it isn't -- come out to a scientific meeting sometime," Patterson said. In a separate interview on April 26, 2007 with a Canadian newspaper, Patterson explained that the scientific proof favors skeptics. "I think the proof in the pudding, based on what [media and governments] are saying, [is] we're about three quarters of the way [to disaster] with the doubling of CO2 in the atmosphere," he said. "The world should be heating up like crazy by now, and it's not. The temperatures match very closely with the solar cycles." (LINK)

Physicist Dr. Zbigniew Jaworowski, Chairman of the Central Laboratory for the United Nations Scientific Committee on the Effects of Radiological Protection in Warsaw, took a scientific journey from a believer of man-made climate change in the form of global cooling in the 1970s all the way to converting to a skeptic of current predictions

of catastrophic man-made global warming. "At the beginning of the 1970s I believed in man-made climate cooling, and therefore I started a study on the effects of industrial pollution on the global atmosphere, using glaciers as a history book on this pollution," Dr. Jaworowski, wrote on August 17, 2006. "With the advent of man-made warming political correctness in the beginning of 1980s, I already had a lot of experience with polar and high altitude ice, and I have serious problems in accepting the reliability of ice core CO2 studies," Jaworowski added. Jaworowski, who has published many papers on climate with a focus on CO2 measurements in ice cores, also dismissed the UN IPCC summary and questioned what the actual level of CO2 was in the atmosphere in a March 16, 2007 report in *EIR Science* entitled "CO2: The Greatest Scientific Scandal of Our Time." "We thus find ourselves in the situation that the entire theory of man-made global warming-with its repercussions in science, and its important consequences for politics and the global economy-is based on ice core studies that provided a false picture of the atmospheric CO2 levels," Jaworowski wrote. "For the past three decades, these well-known direct CO2 measurements, recently compiled and analyzed by Ernst-Georg Beck (Beck 2006a, Beck 2006b, Beck 2007), were completely ignored by climatologists-and not because they were wrong. Indeed, these measurements were made by several Nobel Prize winners, using the techniques that are standard textbook procedures in chemistry, biochemistry, botany, hygiene, medicine, nutrition, and ecology. The only reason for rejection was that these measurements did not fit the hypothesis of anthropogenic climatic warming. I regard this as perhaps the greatest scientific scandal of our time," Jaworowski wrote. "The hypothesis, in vogue in the 1970s, stating that emissions of industrial dust will soon induce the new Ice Age, seems now to be a conceited anthropocentric exaggeration, bringing into discredit the science of that time. The same fate awaits the present," he added. Jaworowski believes that cosmic rays and solar activity are major drivers of the Earth's climate. Jaworowski was one of the 60 scientists who wrote an April 6, 2006 letter urging withdrawal of Kyoto to Canadian Prime Minister Stephen Harper which stated in part, "It may be many years yet before we properly understand the Earth's climate system. Nevertheless, significant advances have been made since the protocol was created, many of which are taking us away from a concern about increasing greenhouse gases."

A group of German scientists of "several scientific disciplines" formed a new group in 2007 to declare themselves climate change skeptics. The group of scientists issued a proclamation on September 15, 2007 titled "The Climate Manifest of Heiligenroth." The group, which included prominent scientist Ernst-George Beck who authored a groundbreaking February 2007 paper, entitled "180 Years of Atmospheric C02 Analysis by Chemical Methods," (LINK) publicly issued six basic points of skepticism about man-made global warming. They stated that their "motivation was to initiate processes against daily campaigns of media and politics concerning climate." Their six points are: 1) "There is not proven influence on climate by man made emission of CO2; 2) Scenarios on future climate change derived from computer models are speculative and contradicted by climate history; 3) There has been climate change in all times of Earth history with alternating cold and warm phases; 4) The trace gas CO2 dos not pollute the atmosphere, CO2 is an essential resource for plant growth and therefore a precondition for life on Earth; 5) We are committing ourselves to an effective preservation of our environment and support arrangements to prevent unnecessary stress on eco systems; and 6) We strongly warn against taking action using imminent climate catastrophe as a vehicle which will not be beneficial for our environment and will cause economic damage." The declaration was

signed by the following scientists: **Biologist Ernst-Georg Beck; Engineer and energy expert Paul Bossert**; **Biologist Branford Helgo; Hydro biologist Edgar Gardeners**; **Agricultural scientist Dr. Rainer Six; Engineer Heinze Thieme**. **Physics Professor Hubert Becker; Rikard Bergsten Master of Science in Physics and Computer Engineering; Professor of physics Dr. Ludecke Horst-Joachim**; **Peter Martin, Professor of Engineering**; **Engineer Martin Bock; Chemical and environmental engineer Donald Clauson; Physicist Dr. Theo Eichten**; **Biochemist Flick Hendrikje; Agricultural scientist Dr. Glatzle Albrecht; Chemist Dr. Hauck Guenther; Professor of environmental and climate physics Dr. Detlef Hebert; Astrophysicist Dr Peter Heller; Chemist Dr. Albert Krause; Forestry scientist Dr. Christoph Leinb: Chemist Dr. Hans Penner; Mathematician Dr. Paul Matthews; Chemist Dr. Wuntke Knut; Meteorologist Klaus-pulse Eckart.** Others who signed the declaration included: Dr. Herbert Backhaus; Dieter Ber; Gunter Ederer; Ferdinand Furst zu Hohenlohe-Bartenstein; Dieter Kramer; Uwe Tempel; Brigitte Bossert; Nikolaus Lentz; Werner Vermess Eisenkopf; Wilfried Heck; Heinz Hofman; Rainer Hoffman; and Werner Eisenkopf. **(LINK)**

Paleoclimatologist Dr. Ian D. Clark, professor of the Department of Earth Sciences at University of Ottawa, who has been involved with the International Atomic Energy Agency and co-authored the book *Environmental Isotopes in Hydrogeology*, which won the *Choice Magazine* "Outstanding Textbook" award in 1998, reversed his views on man-made climate change after further examining the evidence. "I used to agree with these dramatic warnings of climate disaster. I taught my students that most of the increase in temperature of the past century was due to human contribution of CO2. The association seemed so clear and simple. Increases of greenhouse gases were driving us towards a climate catastrophe," Clark said in a 2005 documentary *Climate Catastrophe Cancelled: What You're Not Being Told About the Science of Climate Change*. "However, a few years ago, I decided to look more closely at the science and it astonished me. In fact there is no evidence of humans being the cause. There is, however, overwhelming evidence of natural causes such as changes in the output of the sun. This has completely reversed my views on the Kyoto protocol," Clark explained. "Actually, many other leading climate researchers also have serious concerns about the science underlying the [Kyoto] Protocol," he added.

Prominent scientist Professor Dr. Nils-Axel Morner, a leading world authority on sea levels and coastal erosion who headed the Department of Paleogeophysics & Geodynamics at Stockholm University, declared in 2007 "the rapid rise in sea levels predicted by computer models simply cannot happen." Morner called a September 23, 2007 *AP* article predicting dire sea level rise "propaganda." "The *AP* article must be regarded as an untenable horror scenario not based in observational facts," Morner wrote to EPW. "Sea level will not rise by 1 m in 100 years. This is not even possible. Storm surges are in no way intensified at a sea level rise. Sea level was not at all rising 'a third of a meter in the last century': only some 10 cm from 1850 to 1940," he wrote. Morner previously noted on August 6, 2007, "When we were coming out of the last ice age, huge ice sheets were melting rapidly and the sea level rose at an average of one meter per century. If the Greenland ice sheet stated to melt at the same rate - which is unlikely - sea level would rise by less than 100 mm - 4 inches per century." Morner, who was president of the INQUA Commission on Sea Level Changes and Coastal Evolution from 1999 to 2003, has

published a new booklet entitled "The Greatest Lie Ever Told," to refute claims of catastrophic sea level rise. (LINK) & (LINK)

Environmental geochemist Dr. Jan Veizer, professor emeritus of University of Ottawa, converted from believer to skeptic after conducting scientific studies of climate history. "I simply accepted the [global warming] theory as given," Veizer wrote on April 30, 2007 about predictions that increasing CO2 in the atmosphere was leading to a climate catastrophe. "The final conversion came when I realized that the solar/cosmic ray connection gave far more consistent picture with climate, over many time scales, than did the CO2 scenario," Veizer wrote. "It was the results of my work on past records, on geological time scales, that led me to realize the discrepancies with empirical observations. Trying to understand the background issues of modeling led to realization of the assumptions and uncertainties involved," Veizer explained. "The past record strongly favors the solar/cosmic alternative as the principal climate driver," he added. Veizer acknowledged the Earth has been warming and he believes in the scientific value of climate modeling. "The major point where I diverge from the IPCC scenario is my belief that it underestimates the role of natural variability by proclaiming CO2 to be the only reasonable source of additional energy in the planetary balance. Such additional energy is needed to drive the climate. The point is that most of the temperature, in both nature and models, arises from the greenhouse of water vapor (model language 'positive water vapor feedback')," Veizer wrote. "Thus to get more temperature, more water vapor is needed. This is achieved by speeding up the water cycle by inputting more energy into the system," he continued. "Note that it is not CO2 that is in the models but its presumed energy equivalent (model language 'prescribed CO2'). Yet, the models (and climate) would generate a more or less similar outcome regardless where this additional energy is coming from. This is why the solar/cosmic connection is so strongly opposed, because it can influence the global energy budget which, in turn, diminishes the need for an energy input from the CO2 greenhouse," he wrote.

German scientist Ernst-Georg Beck, a biologist, authored a February 2007 paper entitled 180 Years of Atmospheric C02 Analysis by Chemical Methods that found levels of atmospheric CO2 levels were not measured correctly possibly due to the fact that they measurements did not fit with hypothesis of man-made global warming. The abstract to the paper published in Energy and Environment reads in part, ""More than 90,000 accurate chemical analyses of CO2 in air since 1812 are summarized. The historic chemical data reveal that changes in CO2 track changes in temperature, and therefore climate in contrast to the simple, monotonically increasing CO2 trend depicted in the post-1990 literature on climate-change. Since 1812, the CO2 concentration in northern hemispheric air has fluctuated exhibiting three high level maxima around 1825, 1857 and 1942 the latter showing more than 400 ppm." The paper concluded: "Most authors and sources have summarized the historical CO2 determinations by chemical methods incorrectly and promulgated the unjustifiable view that historical methods of analysis were unreliable and produced poor quality results." (LINK)

Internationally known forecasting pioneer Dr. Scott Armstrong of the Wharton School at the Ivy League University of Pennsylvania and his colleague, forecasting expert Dr. Kesten Green of Monash University in Australia challenged Gore to a $10,000 bet in June 2007 over the accuracy of climate computer models predictions.

"Claims that the Earth will get warmer have no more credence than saying that it will get colder." According to Armstrong, the author of *Long-Range Forecasting*, the most frequently cited book on forecasting methods, "Of 89 principles [of forecasting], the [UN] IPCC violated 72." Armstrong and Green also critiqued the *Associated Press* for hyping climate fears in 2007. "Dire consequences have been predicted to arise from warming of the Earth in coming decades of the 21st century. Enormous sea level rise is one of the more dramatic forecasts. According to the *AP*'s Borenstein, such sea-level forecasts were experts' judgments on what will happen," Armstrong and Green wrote to EPW on September 23, 2007. "As shown in our analysis, experts' forecasts have no validity in situations characterized by high complexity, high uncertainty, and poor feedback. To date we are unaware of any forecasts of sea levels that adhere to proper [scientific] forecasting methodology and our quick search on Google Scholar came up short," Armstrong and Green explained. "Media outlets should be clear when they are reporting on scientific work and when they are reporting on the opinions held by some scientists. Without scientific support for their forecasting methods, the concerns of scientists should not be used as a basis for public policy," they concluded. (LINK) & (LINK) **Armstrong and Green also co-authored a November 29, 2007 paper with Harvard astrophysicist Dr. Willie Soon** which found that polar bear extinction predictions violate "scientific forecasting procedures." The study analyzed the methodology behind key polar bear population predictions and found that one of the two key reports in support of listing the bears had "extrapolated nearly 100 years into the future on the basis of only five years data - and data for these years were of doubtful validity." Both key reports violated critical evidence-based principles of forecasting, rendering their forecasts invalid, according to the report. The study concluded that "experts' predictions, unaided by evidence-based forecasting procedures, should play no role in this decision [to list polar bear as endangered]. Without scientific forecasts of a substantial decline of the polar bear population *and* of net benefits from feasible policies arising from listing polar bears, a decision to list polar bears as threatened or endangered would be irresponsible." (LINK)

UK Professor Emeritus of Biogeography Philip Stott of the University of London ridiculed the notion of a scientific "consensus" on catastrophic man-made global warming. "In the early 20th century, 95% of scientists believed in eugenics. Science does not progress by consensus, it progresses by falsification and by what we call paradigm shifts," Stott said on March 14, 2007 during a live debate with other scientists in New York City. "And can I remind everybody that IPCC that we keep talking about, very honestly admits that we know very little about 80% of the factors behind climate change. Well let's use an engineer; I don't think I'd want to cross Brooklyn Bridge if it were built by an engineer who only understood 80% of the forces on that bridge," Stott said. He noted how ridiculous political leaders act when it comes to global warming." Angela Merkel, the German chancellor, [and] my own good Prime Minister (UK's Tony Blair), for whom I voted -- let me emphasize -- arguing in public two weeks ago as to who in 'Annie get the gun style' could produce the best temperature. 'I could do two degrees C said Angela [Merkel].' 'No, I could only do three [degrees] said Tony [Blair].' Stand back a minute, those are politicians telling you that they can control climate to a degree Celsius," Stott said. (LINK)

Swedish Geologist Dr. Wibjorn Karlen, professor emeritus of the Department of Physical Geography and Quaternary Geology at Stockholm University, critiqued the *Associated Press* for hyping climate fears. "Another of these hysterical views of our

climate," Karlen wrote to EPW regarding the September 22, 2007 *AP* article predicting dire sea level rise. "Newspapers should think about the damage they are doing to many persons, particularly young kids, by spreading the exaggerated views of a human impact on climate," Karlen explained. "I have used the NASA temperature data for a study of several major areas. As far as I can see the IPCC "Global Temperature" is wrong. Temperature is fluctuating but it is still most places cooler than in the 1930s and 1940s," Karlen wrote. "The latest estimates of sea level rise are 1.31 mm/year. With this water level increase it will take about 800 years before the water level has increased by 1 m if not conditions change before that (very likely). Society will look very different at that time," he added. (LINK)

Ecologist Dr. Patrick Moore, a Greenpeace founding member who left the environmental organization because he believed it had become too radical, rejected climate alarmism and lamented the efforts to silence climate skeptics. "It appears to be the policy of the [UK] Royal Society to stifle dissent and silence anyone who may have doubts about the connection between global warming and human activity. That kind or repression seems more suited to the Inquisition than to a modern, respected scientific body," Moore, the chief scientist for Greenspirit, wrote in a September 21, 2006 letter to the Royal Society accusing it of attempting to silence skeptics. "I am sure the Royal Society is aware of the difference between a hypothesis and a theory. It is clear the contention that human-induced CO2 emissions and rising CO2 levels in the global atmosphere are the cause of the present global warming trend is a hypothesis that has not yet been elevated to the level of a proven theory. Causation has not been demonstrated in any conclusive way," Moore wrote. (LINK)

Geologist Morten Hald, an Arctic expert at the University of Tromso in Norway, questioned the reliability of computer models predicting a melting Arctic. "The main problem is that these models are often based on relatively new climate data. The thermometer has only been in existence for 150 years and information on temperature which is 150 years old does not capture the large natural changes," Hald, who is participating with a Norwegian national team in Arctic climate research, said in a May 18, 2007 article. (LINK) The article continued, "Professor Hald believes the models which are utilized to make prognoses about the future climate changes consider paleoclimate only to a minor degree." "Studies of warm periods in the past, like during the Stone Ages can provide valuable knowledge to understand and tackle the warmer climate in the future," Hald explained. Hald has also expressed uncertainty about how to evaluate various climate forcing factors and predict future climate after a study of patterns and variability of past climate in the Norwegian Region. “The instrumental record of climate variability is too short and spatially incomplete to reveal the full range of seasonal to millennial-scale climate variability, or to provide empirical examples of how the climate system responds to large changes in climate forcing. This recent record is also a complex reflection of both natural and anthropogenic forcing (e.g., trace gases and aerosols). Various proxy sources, on the other hand, provide the much wider range of realizations needed to describe and understand the full range of natural climate system behavior,” according to Hald. “The reconstructions clearly show that climate in the Norwegian Region has been both significantly warmer and cooler that it is today during the Holocene. Both rapid (decadal) changes, as well as more gradual (century-millennial) changes have been observed during the past,” he added. (LINK)

Paavo Siitam, a retired professor of chemistry, agronomy, biology, and physics, and a researcher in soils and microbiology, critiqued the *Associated Press* for hyping climate fears in 2007. "Despite some doom and gloom predictions, excluding waves washing onto shores by relatively rarely occurring tsunamis and storm-surges, low-lying areas on the face of our planet have NOT yet been submerged by rising oceans... so probably low-lying areas along shorelines of Canada and the USA will be SAFE into foreseeable and even distant futures," Siitam wrote to EPW on September 22, 2007 regarding an *AP* article predicting dire sea level rise. "By the way, I'd be happy to buy prized oceanfront properties at bargain prices, anywhere in the world, when unwarranted, panic selling begins. The dire predictions will not come true this century," he added. (LINK)

Meteorologist Grant Dade of Texas TV's KLTV, a member of both the American Meteorological Society and the National Weather Association, dismissed man-made climate fears in 2007. "I think it is about time we see the other side of the Global Warming debate come out," Dade said on November 8, 2007. "Is the Earth warming? Yes, I think it is. But is man causing that? No. It's a simple climate cycle our climate goes through over thousands of years." Dade critiqued the media for hyping climate fears while ignoring inconvenient facts. "Did you hear about the Arctic ice melting? But you didn't hear in Antarctica last winter was the most ice ever recorded," Dade said. "You don't hear that," he added. (LINK) & Click to watch video: (LINK)

Dr. Art Robinson of the Oregon Institute of Science and Medicine declared his climate skepticism in 2007. "Long-term temperature data suggest that the current - entirely natural and not man made - temperature rise of about 0.5 degrees C per century could continue for another 200 years. Therefore, the best data available leads to an extrapolated value of about 1 foot of rise during the next two centuries," Robinson wrote to EPW on September 23, 2007. "There is no scientific basis upon which to guess that the rise will be less or will be more than this value. Such a long extrapolation over two centuries is likely to be significantly in error - but it is the only extrapolation that can be made with current data. There may be no sea level rise at all. No one knows," he added. (LINK)

Canadian Geologist Albert F. Jacobs, co-founder of the group Friends of Science, critiqued the *Associated Press* for hyping climate fears in 2007. "Basic to the IPCC case for sea level rise and for the alarmists' hype is the hypothesis that increasing levels of carbon dioxide will cause increasing amounts of global warming. It should be stressed that this assumption of truth is no more than a hypothesis, which is increasingly being attacked and on which any meaningful discussion has been thwarted by the IPCC's political masters," Jacobs wrote to EPW on September 23, 2007. "As far as CO2 is concerned, basic physics has always been clear about the limitations of higher concentrations of gas to absorb equivalent amounts of heat radiation. 'Doubling of CO2' does none of the things the IPCC's computer says it does. And that's all separate from the fact that water vapour is a much greater 'greenhouse' driver than carbon dioxide in any case," Jacobs added. (LINK)

Meteorologist Chuck F. Wiese, the president of the Portland Oregon based Weatherwise, Inc., lambasted "fancy computer models that can be manipulated" and "are absolutely incorrect and fraudulent." Wiese called computer model predictions of climate doom a "bunch of baloney." "The physics of this is in support of anyone who is a skeptic. As I have said, C02 is of secondary importance; anything that we did to reduce C02

emissions is going to make no change in my opinion that you could really measure in the climate response at all, because other things are going on that just overpower the small contribution you get from C02, it does not make a dog's bit of difference," Wiese said in a January 18, 2007 radio interview. (LINK)

American Enterprise Institute's (AEI) Joel Schwartz, who holds a master's degree in planetary science from the California Institute of Technology, touted a significant 2007 peer-reviewed study as "overturning the UN IPCC 'consensus' in one fell swoop." "New research from Stephen Schwartz of Brookhaven National Lab concludes that the Earth's climate is only about one-third as sensitive to carbon dioxide as the IPCC (Intergovernmental Panel on Climate Change) assumes," wrote AEI's Schwartz in an August 17, 2007 blog post. (LINK) The study's "result is 63% lower than the IPCC's estimate of 3 degrees C for a doubling of CO2 (2.0-4.5 degrees C, 2SD range). Right now we're about 41% above the estimated pre-industrial CO2 level of 270 ppm. At the current rate of increase of about 0.55% per year, CO2 will double around 2070. Based on Schwartz's results, we should expect about a 0.6 degrees C additional increase in temperature between now and 2070 due to this additional CO2. That doesn't seem particularly alarming," AEI's Schwartz explained. "In other words, there's hardly any additional warming 'in the pipeline' from previous greenhouse gas emissions. This is in contrast to the IPCC, which predicts that the Earth's average temperature will rise an additional 0.6 degrees C during the 21st Century even if greenhouse gas concentrations stopped increasing," he added. "Along with dozens of other studies in the scientific literature, [this] new study belies Al Gore's claim that there is no legitimate scholarly alternative to climate catastrophism. Indeed, if Schwartz's results are correct, that alone would be enough to overturn in one fell swoop the IPCC's scientific 'consensus', the environmentalists' climate hysteria, and the political pretext for the energy-restriction policies that have become so popular with the world's environmental regulators, elected officials, and corporations. The question is, will anyone in the mainstream media notice?" AEI's Schwartz concluded.

Chemist Dr. Franco Battaglia, a professor of Environmental Chemistry at the University of Modena in Italy and co-author of a book critical of the modern environmental movement titled *Green Outside, Red Inside: Deception of Environmentalists.* The book was co-authored with **Dr. Renato Angelo Ricci, emeritus professor of physics at the University of Padua and honorary president of the Italian Society of Physics.** Battaglia dismissed man-made global warming fears as "trivial." Battaglia mocked that notion that we live in "a world where the colorless, odorless, taste, harmless CO2, food plants and therefore our food was at the same rank of radioactive waste." "A world where a trivial global warming is currently less than what [Viking] Erik the Red faced when he colonized Greenland" during the Medieval Warm Period," Battaglia wrote on September 2, 2007 in the Italian newspaper Il Giornale. "Our energy needs put CO2 into the atmosphere (at least until we decide to produce at 100% over nuclear), he explained. Battaglia also referred to the Kyoto Protocol as "stupid." (translated) (LINK)

*** Climate scientist Luc Debontridder of the Belgium Weather Institute's Royal Meteorological Institute (RMI) co-authored a study in August 2007 which dismissed a decisive role of CO2 in global** warming. The press release about the study read, "CO2 is not the big bogeyman of climate change and global warming. This is the conclusion of a

comprehensive scientific study done by the Royal Meteorological Institute, which will be published this summer. The study does not state that CO2 plays no role in warming the earth." "But it can never play the decisive role that is currently attributed to it," Luc Debontridder said according to the August 2007 release. "Not CO2, but water vapor is the most important greenhouse gas. It is responsible for at least 75 % of the greenhouse effect. This is a simple scientific fact, but Al Gore's movie has hyped CO2 so much that nobody seems to take note of it," Debontridder explained. "Every change in weather conditions is blamed on CO2. But the warm winters of the last few years (in Belgium) are simply due to the 'North-Atlantic Oscillation'. And this has absolutely nothing to do with CO2," he added. (LINK) [***Note: Though Debontridder dampened climate fears with such quotes as "There's no need either to needlessly frighten the public. Bruges will not be on the coastline by 2050," he reportedly claims he was not translated correctly in media reports from 2007 and his climate views were incorrectly reported. (LINK)***]

Australian climate data analyst John McLean authored a September 2007 study which found the UN IPCC peer-review process is "an illusion." A September 2007 analysis of the IPCC (Intergovernmental Panel on Climate Change) scientific review process entitled "Peer Review? What Peer Review?" revealed very few scientists are actively involved in the UN's peer-review process. According to McLean's analysis, "The IPCC would have us believe that its reports are diligently reviewed by many hundreds of scientists and that these reviewers endorse the contents of the report. Analyses of reviewer comments show a very different and disturbing story." The paper continued, "In [the IPCC's] Chapter 9, the key science chapter, the IPCC concludes that 'it is very highly likely that greenhouse gas forcing has been the dominant cause of the observed global warming over the last 50 years.' The IPCC leads us to believe that this statement is very much supported by the majority of reviewers. The reality is that there is surprisingly little explicit support for this key notion. Among the 23 independent reviewers just 4 explicitly endorsed the chapter with its hypothesis, and one other endorsed only a specific section. Moreover, only 62 of the IPCC's 308 reviewers commented on this chapter at all." The analysis concluded, "The IPCC reports appear to be largely based on a consensus of scientific papers, but those papers are the product of research for which the funding is strongly influenced by previous IPCC reports. This makes the claim of a human influence self-perpetuating and for a corruption of the normal scientific process." (LINK) [12-24-2007 - Clarified description of McLean]

Canadian climatologist Dr. Timothy Ball, formerly of the University of Winnipeg, who earned his PhD from the University of London, called fears of man-made global warming "the greatest deception in the history of science" in a February 5, 2007 op-ed in Canada Free Press. "Believe it or not, Global Warming is not due to human contribution of Carbon Dioxide (CO2). This, in fact, is the greatest deception in the history of science. We are wasting time, energy and trillions of dollars while creating unnecessary fear and consternation over an issue with no scientific justification," Ball wrote. "The world has warmed since 1680, the nadir of a cool period called the Little Ice Age (LIA) that has generally continued to the present. These climate changes are well within natural variability and explained quite easily by changes in the sun. But there is nothing unusual going on," Ball explained. "As [MIT's Richard] Lindzen said many years ago, 'the consensus was reached before the research had even begun.' Now, any scientist who dares to question the prevailing wisdom is marginalized and called a skeptic, when in fact they are simply being

good scientists. This has reached frightening levels with these scientists now being called climate change denier with all the holocaust connotations of that word. The normal scientific method is effectively being thwarted," Ball concluded. Ball also explained that one of the reasons climate models are failing is because they overestimate the warming effect of CO2 in the atmosphere. Ball described how CO2's warming impact diminishes. "Even if CO2 concentration doubles or triples, the effect on temperature would be minimal. The relationship between temperature and CO2 is like painting a window black to block sunlight. The first coat blocks most of the light. Second and third coats reduce very little more. Current CO2 levels are like the first coat of black paint," Ball explained in a June 6, 2007 article in Canada Free Press. (LINK)

Climate data analyst Stephen McIntyre of ClimateAudit.org, one of the individuals responsible for debunking the infamous "Hockey Stick" temperature graph, exposed a NASA temperature data error in 2007 which led to 1934 -- not the previously hyped 1998 -- being declared the hottest in U.S. history since records began. Revised NASA temperature data now reveals four of the top ten hottest years in the U.S. were in the 1930's while only three of the hottest years occurred in the last decade. [Note: 80% of man-made CO2 emissions occurred after 1940. (LINK)] "NASA has yet to own up fully to its historic error in misinterpreting US surface temperatures to conform to the Global Warming hypothesis, as discovered by Stephen McIntyre at ClimateAudit.org," reported an August 17, 2007 article in American Thinker. (LINK) McIntyre has also harshly critiqued the UN IPCC process. "So the purpose of the three-month delay between the publication of the (IPCC) Summary for Policy-Makers and the release of the actual WG1 (Working Group 1 report) is to enable them to make any 'necessary' adjustments to the technical report to match the policy summary. Unbelievable. Can you imagine what securities commissions would say if business promoters issued a big promotion and then the promoters made the 'necessary' adjustments to the qualifying reports and financial statements so that they matched the promotion. Words fail me," McIntyre explained January 2007. (LINK)

A Panel of Broadcast Meteorologists Rejected Man-Made Global Warming Fears in 2007 - Claimed 95% of TV Meteorologists Skeptical. "You tell me you're going to predict climate change based on 100 years of data for a rock that's 6 billion years old?" **Meteorologist Mark Johnson** said. Johnson dismissed the 2007 UN IPCC summary for policymakers, "Consensus does not mean fact. ... Don't drink the Kool-Aid." **Meteorologist Mark Nolan** said, "I'm not sure which is more arrogant - to say we caused [global warming] or that we can fix it." Johnson and Nolan were joined on the panel by fellow **Ohio meteorologists Dan Webster, Dick Goddard, and John Loufman** in dismissing fears of global warming, according to Crain's Cleveland publication on February 13, 2007. "Mr. Webster observed that in his dealings with meteorologists nationwide, 'about 95%' share his skepticism about global warming," the paper reported. Goddard noted that scientists have flip-flopped on climate issues before. "I have a file an inch thick from 30 years ago that says the planet was cooling," Goddard explained. Webster jokingly referenced former Vice President Gore. "Where's Al Gore now? You can bet he's not in New York, where they've got nearly 12 feet of snow right now," Webster joked to the crowd of several hundred.

Polar expert Ivan Frolov, the head of Russia's Science and Research Institute of Arctic and Antarctic Regions, said atmospheric temperature would have to much higher to make continental glaciers melt. "Many hundred years or 20-30 degree temperature rise would have made glaciers melt," Frolov said in a December 14, 2006 Russian news article. (LINK) Frolov noted that currently Greenland's and Antarctic glaciers have the tendency to grow. The article explained, "Frolov says cooling and warming periods are common for our planet - temperature fluctuations amounted to 10-12 degrees. However, such fluctuations haven't caused glaciers to melt. Thus, we shouldn't be afraid they melt today."

Atmospheric scientist Dr. William R. Cotton of the Department of Atmospheric Science at Colorado State University, an internationally respected expert in the aerosol effects on weather and climate, called claims that man-made global warming was causing any recent abnormal weather an "abuse of limited scientific knowledge." Cotton, who has been extensively cited in the peer reviewed literature, rejected global warming alarmism on October 17, 2006 in Climate Science. "Climate variability has been with Earth for eons. Greenhouse warming is only one factor affecting climate change. There are many other factors some associated with human activity, many not, and not all processes associated with climate variability have been quantitatively identified," Cotton said. "Therefore I am skeptical about claims of forecasts of what the climate will be like in say, 5, 10 years or more. I also view claims that a few years of abnormal weather (like intense hurricane landfalls, severe storms and floods, and droughts) to be caused by human activity as abuse of limited scientific knowledge." (LINK)

Bernie Rayno, Senior Meteorologist with AccuWeather, said in February 2007, "Our climate has been changing since the dawn of time. There is not enough evidence to link global warming to greenhouse gases." "We as humans thought we were causing a cooling cycle," Rayno said, referring to the fears of a coming ice age in the 1970s. "It's interesting to watch the media flip back and forth on this," he added.

VK Raina, India's leading Glaciologist, questioned the assertion that global warming was melting glaciers in India. "Claims of global warming causing glacial melt in the Himalayas are based on wrong assumptions," Raina told the Hindustan Times on February 11, 2007. The paper continued, "Raina told the Hindustan Times that out of 9,575 glaciers in India, till date, research has been conducted only on about 50. Nearly 200 years data has shown that nothing abnormal has occurred in any of these glaciers. It is simple. The issue of glacial retreat is being sensationalized by a few individuals, the septuagenarian Raina claimed. Throwing a gauntlet to the alarmist, he said the issue should be debated threadbare before drawing a conclusion." (LINK)

IPCC 2007 Expert Reviewer Madhav Khandekar, a Ph.D meteorologist, a scientist with the Natural Resources Stewardship Project who has over 45 years experience in climatology, meteorology and oceanography, and who has published nearly 100 papers, reports, book reviews and a book on Ocean Wave Analysis and Modeling, slammed the UN IPCC process. "To my dismay, IPCC authors ignored all my comments and suggestions for major changes in the FOD (First Order Draft) and sent me the SOD (Second Order Draft) with essentially the same text as the FOD. None of the authors of the chapter bothered to directly communicate with me (or with other expert reviewers with whom I communicate on a regular basis) on many issues that were raised in my review.

This is not an acceptable scientific review process," Khandekar wrote in a May 28, 2007 letter to the editor of Canada's The Hill Times. "...Adherents of the IPCC science like to insist that the debate over climate change science is over and it is now time for action. I urge [those IPCC supporters] to browse through recent issues of major international journals in climate and related science. Hardly a week goes by without a significant paper being published questioning the science," Khandekar added. "The science of climate change is continuously evolving. The IPCC and its authors have closed their minds and eyes to this evolving science which points to solar variability as the prime driver of earth's climate and not the human-added greenhouse gases," he concluded. (LINK) Khandekar also further critiqued the UN's IPCC process in a February 13, 2007 interview in the Winnipeg Sun. "I think the IPCC science is a bit too simplistic," he explained. "IPCC scientists did not thoroughly analyze why the Earth's surface temperature -- land and ocean combined -- has increased only modestly in the past 30 years," Khandekar said. "We have not fully explored why the climate changes from one state to another. It is too premature to say," he concluded. (LINK) Khandekar also wrote an August 6, 2007 commentary explaining that the Southern Hemisphere is cooling. "In the Southern Hemisphere, the land-area mean temperature has slowly but surely declined in the last few years. The city of Buenos Aires in Argentina received several centimeters of snowfall in early July, and the last time it snowed in Buenos Aires was in 1918! Most of Australia experienced one of its coldest months of June this year. Several other locations in the Southern Hemisphere have experienced lower temperatures in the last few years. Further, the sea surface temperatures over world oceans are slowly declining since mid-1998, according to a recent world-wide analysis of ocean surface temperatures," Dr. Khandekar explained. (LINK)

Award winning Chief Meteorologist James Spann of Alabama ABC TV affiliate declared that he does "not know of a single TV meteorologist who buys into the man-made global warming hype." "I have been in operational meteorology since 1978, and I know dozens and dozens of broadcast meteorologists all over the country," Spann, who holds the highest level of certification from the American Meteorological Society, wrote in a January 18, 2007 blog post. "I do not know of a single TV meteorologist who buys into the man-made global warming hype. I know there must be a few out there, but I can't find them," Spann added. "Billions of dollars of grant money is flowing into the pockets of those on the man-made global warming bandwagon. No man-made global warming, the money dries up. This is big money, make no mistake about it. Always follow the money trail and it tells a story... Nothing wrong with making money at all, but when money becomes the motivation for a scientific conclusion, then we have a problem. For many, global warming is a big cash grab," Spann said. "[The climate] will always change, and the warming in the last 10 years is not much difference than the warming we saw in the 1930s and other decades. And, lets not forget we are at the end of the ice age in which ice covered most of North America and Northern Europe," he noted.

Dr. Habibullo Abdussamatov, head of Space Research for the Pulkovo Observatory in Russia, pointed to global warming on Mars and the melting ice cap on the red planet as more evidence that the sun was a key driver of climate change. "Mars has global warming, but without a greenhouse and without the participation of Martians," Abdussamatov said in an interview on January 26, 2007 with Canada's National Post. "These parallel global warmings -- observed simultaneously on Mars and on Earth -- can only be a straight-line consequence of the effect of the one same factor: a long-time change in solar irradiance,"

Abdussamatov explained. "It is no secret that increased solar irradiance warms Earth's oceans, which then triggers the emission of large amounts of carbon dioxide into the atmosphere. So the common view that man's industrial activity is a deciding factor in global warming has emerged from a misinterpretation of cause and effect relations," Abdussamatov added. A predicted decline in solar irradiance is going to lead to global cooling by 2015 and "will inevitably lead to a deep freeze around 2055-60," according to Abdussamatov. Abdussamatov was also featured in a February 28, 2007 article in National Geographic titled "Mars Melt Hints at Solar, Not Human, Cause for Warming, Scientist Says," where he reiterated his scientific findings that "man-made greenhouse warming has made a small contribution to the warming seen on Earth in recent years, but it cannot compete with the increase in solar irradiance."

French physicist Dr. Serge Galam, director of research at the National Center of Scientific Research (CNRS) and member of a laboratory of Ecole Polytechnique, expressed man-made global warming skepticism in 2007. "The human cause of global warming is the subject of a consensus of scientists and experts, but not a diagnosis indisputable," Galam wrote in a February 7, 2007 article in *Le Monde* titled "No Scientific Certainty on Climate." "The world, our planet, is showing signs of changing its undeniable natural cycles, which also shape the course of all life forms currently on the Earth. These changes are clearly visible, but remain limited for the time being," Galam explained. He also compared man-made climate fears to ancient pagan fears of nature. "Throughout the history, our ancestors were persuaded that the forces of nature obeyed the gods, and that these was the mistakes which involved their ires, which appeared then by natural disordered states. During very a long time, one believed to be able to stop them by human and animal sacrifices. Science taught us that that was not founded, and here that this old antiquated belief re-appears with a found vitality, and who in more is pressed on the scientists in the name of science," he explained. (translated) (LINK)

James Woudhuysen, a professor of Forecasting and Innovation at De Montfort University in Britain, critiqued the environmental movement from a liberal perspective. "Science seems to have become the Great Dictator, and no dissent can be allowed. We refer to this as the New Scientism. We call it new to distinguish it from the old sort - the sort that, ironically enough, was organised by US imperialism in the Cold War," Woudhuysen wrote on February 5, 2007. "As with the original Cold War scientism, the New Scientism perverts objective science towards questionable political ends," he wrote. "Ironically, greens now rehabilitate the Cold War scientism of RAND, which they affect to hate so much, so as to legitimise not the Cold War, but today's war on personal behaviour - the war to colonise people's minds, make them internalise green mores, and make them spend all their time buying (and repairing) windmills, sorting their rubbish, and turning off their consumer electronics equipment. Instead of rationing access to fallout shelters, David Miliband wants a nationwide scheme to ration carbon," he added. Woudhuysen also mocked the UN IPCC's claims of "consensus." "Some have used the IPCC summary to assert that the debate on climate change is over. In part, this stems from the proclamations of the IPCC itself and its supporters. For example, Achim Steiner said that 2 February, the day the summary was published, would be ‘remembered as the day the question mark was removed'. Anyone interested in genuine scientific inquiry, not to mention political debate, should always be concerned when question marks are removed," Woudhuysen wrote. "The heart of the problem with today's supposed consensus on climate science is not so much a

false claim to knowledge of how climate works, as an assertion that such knowledge can tell us how to live our lives. In this sense, the real consensus on climate change today is more political than scientific. It is a consensus that privileges emotional fears of loss, and which is based on apocalyptic thinking and doubt about humanity's achievements and capabilities," he added. (LINK)

Geologist Peter Sciaky who has served as a chief geologist for companies and written scientific reports, declared himself a skeptic of man-made climate change in 2007. "Among all my liberal and leftist friends (and I am certainly one of those), I know not a one who does not accept that global warming is an event caused by mankind. I do not know one geologist who believes that global warming is not taking place. I do not know a single geologist who believes that it is a man-made phenomenon," Sciaky wrote in a June 9, 2007 article at CounterPunch.org. "A geologist has a much longer perspective. There are several salient points about our earth that the greenhouse theorists overlook (or are not aware). The first of these is that the planet has never been this cool," Sciaky wrote. "There is abundant fossil evidence to support this--from plants of the monocot order (such as palm trees) in the rocks of Cretaceous Age in Greenland and warm water fossil in sedimentary rocks of the far north. This is hardly the first warming period in the earth's history. The present global warming is hardly unique. It is arriving pretty much 'on schedule.' One thing, for sure, is that the environmental community has always spurned any input from geologists (many of whom are employed by the petroleum industry)," Sciaky wrote. "There are hundreds of reasons--political, pragmatic and economic, health and environmental--for cleaning up our environment, for conservation of energy, for developing alternate fuels, cleaning up our nuclear program, etc. Global warming is not one of them," he concluded. (LINK)

Marine Biologist Daniel Botkin, President of the Center for the Study of the Environment and Professor Emeritus in the department of Ecology, Evolution, and Marine Biology at the University of California, authored the book *Discordant Harmonies: A New Ecology for the Twenty-First Century*. Botkin also dampened global warming fears in 2007. "Global warming doesn't matter except to the extent that it will affect life -- ours and that of all living things on Earth. And contrary to the latest news, the evidence that global warming will have serious effects on life is thin. Most evidence suggests the contrary," Botkin wrote in an October 17, 2007 op-ed in the *Wall Street Journal*. "Case in point: This year's United Nations report on climate change and other documents say that 20%-30% of plant and animal species will be threatened with extinction in this century due to global warming -- a truly terrifying thought. Yet, during the past 2.5 million years, a period that scientists now know experienced climatic changes as rapid and as warm as modern climatological models suggest will happen to us, almost none of the millions of species on Earth went extinct," Botkin explained. "We're also warned that tropical diseases are going to spread, and that we can expect malaria and encephalitis epidemics. But scientific papers by Prof. Sarah Randolph of Oxford University show that temperature changes do not correlate well with changes in the distribution or frequency of these diseases; warming has not broadened their distribution and is highly unlikely to do so in the future, global warming or not," he wrote. "I'm not a naysayer. I'm a scientist who believes in the scientific method and in what facts tell us. I have worked for 40 years to try to improve our environment and improve human life as well. I believe we can do this only from a basis in reality, and that is not what I see happening now. Instead, like fashions that took hold in the past and are eloquently analyzed in the classic 19th century book

Extraordinary Popular Delusions and the Madness of Crowds, the popular imagination today appears to have been captured by beliefs that have little scientific basis," he added. (LINK)

Nigel Calder, former editor of *New Scientist* and co-author with Physicist Henrik Svensmark of a new 2007 book entitled *The Chilling Stars: A New Theory of Climate Change,* expressed his view that the UN rejects science it sees as "politically incorrect," and accused the UN of denying that "climate history and related archeology give solid support to the solar hypothesis." Calder wrote in a February 11, 2007 op-ed in the UK Times, "Twenty years ago, climate research became politicized in favor of one particular hypothesis, which redefined the subject as the study of the effect of greenhouse gases. As a result, the rebellious spirits essential for innovative and trustworthy science are greeted with impediments to their research careers." Calder concluded, "Humility in face of Nature's marvels seems more appropriate than arrogant assertions that we can forecast and even control a climate ruled by the sun and the stars."

Ivy League Geologist Dr. Robert Giegengack, the chair of Department of Earth and Environmental Science at the University of Pennsylvania, believes Gore's understanding of climate science is so poor that he told his undergrad students at University of Pennsylvania in February 2007, "Every single one of you knows more about [global warming] than Al Gore." According to the February 2007 edition of Philadelphia Magazine, the Ivy League professor Giegengack voted for Gore for president in 2000 and would probably vote for him again if given the opportunity. But Giegengack's support of Gore faded when he examined the science presented in Gore's film: "The glossy production [An Inconvenient Truth] is replete with inaccuracies and misrepresentations, and appeals to public fear as shamelessly as any other political statement that hopes to unite the public behind a particular ideology." Giegengack, who holds both a master's degree and a doctorate in geology, explained that the Earth has been warming for about 20,000 years, and humans have only been collecting data for about 200 years. "For most of Earth's history, the globe has been warmer than it has been for the last 200 years. It has only rarely been cooler," Giegengack said, noting that the colder periods included ice piled up two miles thick on what is now North America. According to the magazine, "Giegengack tells his students they might want to consider that ‘natural' climatic temperature cycles control carbon dioxide levels, not the other way around. That's the crux of his argument with Gore's view of global warming - he says carbon dioxide doesn't control global temperature, and certainly not in a direct, linear way." "Sea level is rising," Giegengack said. The article continued: "But, he explains, it's been rising ever since warming set in 18,000 years ago. The rate of rise has been pretty slow - only about 400 feet so far. And recently - meaning in the thousands of years - the rate has slowed even more. The Earth's global ocean level is only going up 1.8 millimeters per year. That's less than the thickness of one nickel. For the catastrophe of flooded cities and millions of refugees that Gore envisions, sea levels would have to rise about 20 feet." Giegengack explains: "At the present rate of sea-level rise it's going to take 3,500 years to get up there [to Gore's predicted rise of 20 feet]. So if for some reason this warming process that melts ice is cutting loose and accelerating, sea level doesn't know it. And sea level, we think, is the best indicator of global warming." Finally, Giegengack concludes by rejecting the notion that we need to "save" the Earth. "There's all this stuff about saving the planet. The Earth is fine. The Earth was fine before we got here, and it'll be fine long after we're gone." **Giegengack's University of Pennsylvania**

colleague, Geologist Dr. Ed Doheny (formerly of Drexel University) also critiqued former Vice President Al Gore's climate science presentation. "[Gore's] got his independent and dependent variables all mixed up," Doheny said according to an October 18, 2007 article in The Daily Pennsylvanian. Doheny also mocked Gore by stating, "I didn't know they gave the Nobel Prize for acting." (LINK)

AccuWeather Chief Meteorologist Joe Bastardi questioned whether mankind was driving recent warming or whether it was "the pulsing of the sun" in an April 10, 2007 blog titled, "Does the Sun Have the Smoking Gun?" "People are concerned that 50 years from now it will be warm beyond a point of no return. My concern is almost opposite, that it's cold and getting colder," Bastardi, who specializes in long-range forecasts, wrote. "You see, the warmer it gets, the tougher it is to get warmer. There will always be a certain set point in a system and unless the amounts of water and land changes, it will try to get back to that set point. The oscillations of water temperatures can distort feedback from the Earth as I believe we are seeing now, and the dance between the tropics and non tropical areas as far as the weather goes is something that one can see in the [19]30s through the [19]50s, but at least to me disappears in the [19]60s through the [19]80s, or when the Pacific is in its warmer cycle, the Atlantic cooler," Bastardi wrote. He rejected the idea that the C02 climate connection was the only acceptable view in the climate change debate. "One has to understand that the force feeding of any idea with so many variables in a system is counter to methods long established to prove or disprove theories," Bastardi explained.

Environmental scientist Dr. David W. Schnare, a senior enforcement counsel at the U.S. Environmental Protection Agency who has managed EPA's Office of Ground-Water and Drinking Water Economic, Legislative and Policy Analysis Branch, proclaimed his man-made climate skepticism in 2007. "When it comes to global warming, I'm a skeptic because the conclusions about the cause of the apparent warming stand on the shoulders of incredibly uncertain data and models," Schnare wrote on August 10, 2007. "I 'm a Ph.D. environmental scientist. As a scientist, from time-to-time I must also be a skeptic. It's in the nature of the job," he wrote. "The fundamental data set on which the international community has based its models has been challenged and the keepers of the data have had to downward adjust their numbers, the first of several downward adjustments, apparently," Schnare explained. "As a policy matter, one has to be less willing to take extreme actions when data are highly uncertain. So, for this reason alone, I'm also skeptical about governmental responses," he added. (LINK)

Environmental Economist and global warming co-author Dennis Avery's 2006 book, *Unstoppable Global Warming: Every 1500 Years,* details the solar-climate link using hundreds of studies from peer reviewed literature and "shows the earth's temperatures following variations in solar intensity through centuries of sunspot records, and finds cycles of sun-linked isotopes in ice and tree rings." "Past climate warmings haven't correlated with CO2 changes. The Antarctic ice cores show that after the last four Ice Ages, the temperatures warmed 800 years before the CO2 levels increased in the atmosphere. The warming produced more CO2 in the atmosphere, not the other way around," said co-author Avery in an April 6, 2007 op-ed. (LINK) Avery also noted that "70% of the warming we have had since 1850 occurred before 1940 and 80% of the human emitted C02 occurred after 1940, which tells me that the warming before 1940 was by natural cycle. The warming since 1940 -- 2/10 of a degree Celsius -- I will give Al Gore 1/10 [of a degree

Celsius], that is all I can give him (for a human contribution to warming) and I don't think that's enough to frighten my school children," Avery said in an April 28, 2007 CBS Chicago TV special "The Truth About Global Warming." (LINK) Avery also explained in an April 25, 2007 op-ed, "We've had no warming at all since 1998." "Remember, too, that each added unit of CO2 has less impact on the climate. The first 40 parts per million (ppm) of human-emitted CO2 added to the atmosphere in the 1940s had as much climate impact as the next 360 ppm," he added. (LINK)

Aeronautical engineer Eduardo Ferreyra, president and founder of the Argentinean Foundation for a Scientific Ecology, questioned man-made climate fears in 2007. "Wasn't warming supposed to be 'global'? As our records shows, Argentina has been cooling since 10 years ago, and the central part of the country since 1987. As Hadley Center's recently published data shows, the Southern Hemisphere temperatures have been decreasing for the last seven years," Ferreyra wrote in the *New York Times* blog Dot Earth on December 18, 2007. "2007 has seen media temperatures steadily 2º to 4ºC lower than normal average, and our present summer shows a December with a decreasing trend," Ferreyra explained. "Cold Antarctic Polar Fronts have increased in intensity and frequency. Late frosts as the November 14th, 2007 one caused a 50-80% loss in wheat, corn, and barley crops in the humid Pampas. Similar abnormal cold weather was observed in the rest of South America, South Africa, New Zealand and big areas in Australia. So, where is global warming? Or these are just natural variations (when it is cooling) but when there is a slight increase in temperature then it is human induced "global warming"? Ferreyra wrote. (LINK) & (LINK)

Climatologist Brian Fuchs of the National Drought Mitigation Center at the University of Nebraska-Lincoln said in February 2007 that it was "up in the air" how long the current warming trend would continue. Fuchs also replied "probably not" when asked if human emissions are solely to blame for global warming. (LINK)

Meteorologist Robert Cohen, a member of the American Meteorological Society who also has a Masters in physical oceanography, called the UN IPCC process "scientific socialism" on March 5, 2007 and declared that the "idea of a consensus in the meteorological community is false." "Research has also shown that slight changes in energy from the sun can significantly affect the earth, particularly in terms of clouds, which are a weak link in the global warming models. The level and amount of cloud can determine whether temperatures will warm as the cloud layer limits heat dissipation to space or whether temperatures will cool as the sun's incoming energy is reflected back to space before reaching the Earth's surface," he wrote. "I do not agree with all of the IPCC conclusions and know through peer discussions that the idea of a consensus in the meteorological community is false," Cohen said. He added: "Is it worth destroying our economy and lifestyle based on an unproven theory which does not correlate with historical observations?" (LINK) "Much of the 'proof' of agw (anthropogenic global warming) is based on models that can not recreate the historical record. There is a wealth of observations that disprove these models, but that is ignored in the media," he wrote on August 13, 2007.

Dr. Paul Reiter, a malaria expert formerly of the Centers for Disease Control and Prevention and professor of entomology and tropical disease with the Pasteur Institute in Paris, participated in the UN IPCC process and now calls the concept of

consensus on global warming a "sham." Professor Reiter, an expert in malaria, had to threaten legal action to have his name removed from the IPCC. "That is how they make it seem that all the top scientists are agreed," he said on March 5, 2007. "It's not true." Reiter has written more than 30 papers in peer-reviewed journals. (LINK) Reiter also wrote on January 11, 2007: "For years, the public has been fed a lusty diet of climate doom and gloom, cooked and served by alarmists who use the language of science to push their agenda. Now, every politician of every stripe must embrace the 'climate consensus' or be branded a callous skeptic. For twelve years, my colleagues and I have protested against the unsubstantiated claims that climate change is causing the disease [of malaria] to spread. We have failed miserably to alter the situation. Recently, the Associated Press quoted an entomologist who claimed there is an unprecedented outbreak of malaria in Karatina, Kenya, at 1,868 meters (6,130 feet). The heart-rending article began: 'The soft cries of children broke the morning stillness, as parents brought them into the hillside hospital, one by one ... drained by a disease once unknown in the high country of Kenya.' But there is nothing new about malaria in Karatina. Between World War I and the 1950s, there were ten disastrous epidemics in the region, and they extended much higher into these hills," Reiter wrote. "We have done the studies and challenged the alarmists - but they continue to ignore the facts, and perpetuate the lies," he concluded. (LINK)

Lord Christopher Monckton, the Viscount Monckton of Brenchley, **a climate researcher,** found 31 errors and exaggerations in the UN IPCC 4th assessment summary in February 2007. The IPCC quietly made the corrections without public admission of guilt, according to Lord Christopher Monckton. "The UN has still not corrected or apologized for the 'hockey-stick,' by which it falsely abolished the Mediaeval Warm Period, when temperatures were 2 or 3C warmer than today, and disaster failed to ensue. But it has been forced to correct several schoolboy howlers - though it has not had the honesty to announce publicly and clearly that it has done so," Monckton said in March 2007. Monckton echoed UK Lord Nigel Lawson's call that the IPCC be disbanded. "It is too politicized and too incompetent to serve any useful purpose," Monckton said. (LINK)

Soil scientist Don Barron presented his research in Minnesota on March 13, 2007 that details his view that global warming is natural and not driven by anthropogenic emissions. Barron cited numerous scientific studies and concluded by asking, "Global warming or Gospel by Gore? You decide." (LINK)

Former Colorado State Climatologist Dr. Roger Pielke, Sr., presently senior scientist at the University of Colorado in Boulder, chastised the news media for promoting the idea that the UN IPCC Summary for Policymakers is written by the scientists. "The media is in error when it states that, 'The Intergovernmental Panel on Climate Change -made up of thousands of scientists from around the world - reported earlier this month they are more certain than ever that humans are heating earth's atmosphere through the burning of fossil fuels...,'" Pielke, Sr. wrote on March 9, 2007. "Are there really 'thousands of scientists' who wrote this report? Hardly. The IPCC is actually led and written by just a few dozen scientists," Pielke Sr. added. (LINK) Pielke, Sr. believes land use changes play a key role in impacting temperatures and believes the IPCC fails to recognize this factor. "In terms of climate change and variability on the regional and local scale, the IPCC Reports, the CCSP Report on surface and tropospheric temperature trends, and the U.S. National Assessment have overstated the role of the radiative effect of the anthropogenic increase of CO2

relative to the role of the diversity of other human climate forcing on global warming, and more generally, on climate variability and change," Pielke, Sr.'s blog states on the "Main Conclusions" page. (LINK) In a May 10, 2007 blog post, Pielke wrote that the UN was "disingenuous" with many of their claims. "Since about 2002 there has been NO statistically significant global average warming in the lower and middle troposphere and since about 1995 there has been NO statistically significant cooling in the stratosphere. The IPCC SPM conclusion that 'warming of the climate system is unequivocal' is wrong as it ignores the lack of such warming in recent years by these other metrics of climate system heat changes," Pielke explained. "Perhaps global warming will begin again. However, the neglect to include the recent lack of tropospheric warming and stratospheric cooling (both of which are predicted to continue quasi-linearly for the coming decades by the multi-decadal global climate models, except for major volcanic eruptions) results in a seriously biased report by the IPCC. It has been disappointing that the media so far has chosen to parrot the statements in the IPCC SPMs rather than do investigative reporting on these issues," he concluded. (LINK)

Meteorologist Bill Steffen of Grand Rapids, Michigan noted that C02 is not the only factor to consider in climate change. "There are at least several causes of recent 'global warming'. Carbon Dioxide (CO2) gets most of the attention, but there are other factors. A minor effect is the lack of a substantial volcano in recent years. The last volcano to pump a lot of dirt into the upper atmosphere was Mt. Pinatubo in the Philippines in 1991," Steffen wrote in a January 28, 2007 blog post. (LINK) Steffen also noted in a November 11, 2008 article, "The dataset used by James Hansen at NASA (and Al Gore) shows more warming in recent years. Looking at this graph…you certainly might have been alarmed about warming global temperatures from 1988-1998…but look what's happened since 1998. In the last few years, world temperatures have trended downward, coincident with the solar sunspot minimum. This has political and financial implications. With certain politicians factoring in 'substantial' increases in your electric bill and your heating bill to fight global warming, would the ensuing hardship to lower and middle income families really warrant that action, considering the direction global temperatures seem to be headed." (LINK)

Mathematician David Orrell dismissed long-term climate models as unreliable. "The track record of any kind of long-distance prediction is really bad, but everyone's still really interested in it. It's sort of a way of picturing the future. But we can't make long-term predictions of the economy, and we can't make long-term predictions of the climate," Orrell said in an April 3, 2007 article in Canada's *National Post*. The *National Post* article explained Orrell's views: "And so scientists use theoretical concepts like 'flux adjustments' to make the models agree with reality. When models about the future climate are in agreement, 'it says more about the self-regulating group psychology of the modeling community than it does about global warming and the economy.'" (LINK)

Biochemistry researcher Dr. Thomas Lavin, who is a physician who holds patents regarding physical, chemical, and biological sciences and has conducted peer-reviewed research and experiments, expressed climate skepticism in 2007. "I first published a peer reviewed paper in 1981, and have been looking at data for 30 years," Lavin wrote to EPW on December 13, 2007. "I am somebody who has designed experiments and looked at data. And if you simply freeze Al Gore's movie when he introduces the CO2 and temperature relationship through geologic time, and look at the

graph, the temperature goes up before the CO2 in every one of the six or seven elevations recorded geologically. And this time gap is on the order of a few hundred years," Lavin explained. "Add this to the NASA temperature revision [making 1934 the hottest year in the U.S.] and then add that many of the climate models which predict doom use the old, unrevised NASA data, and you have total garbage in/ garbage out," he wrote. "Before we start regulating who gets to build a factory, and who gets to fly on a private jet, or drive to work, I think the data has to be real and convincing," he added. "This episode in history I think will go down as marking the reverse of Galileo and Copernicus, the end of the Age of Reason, and it's frightening," Lavin concluded.

Australian engineer Dr. Peter Harris authored an August 20, 2007 paper entitled "Probability of Sudden Global Cooling." The study Harris authored found that "the data...clearly shows the nominal 100KY cycle for glaciation and the interglacial phases and it shows that we have reached the end of the typical interglacial cycle and are due for a sudden cooling climate change. Based on this analysis we can say that there is a probability of 94% of imminent global cooling and the beginning of the coming ice age." He added, "By observation of a number of natural internal processes we can find further support for the coming change and I have referred before to the confirmed slowdown of the Gulf Stream, the effect of major endothermic polar ice melt and forecast reduction in solar activity after 70 years of extreme activity not seen for 8000 years before. The Stratosphere is cooling and ice is building on the South Pole. Climate is becoming unstable. Most of these major natural processes that we are witnessing now are interdependent and occur at the end of each interglacial period, ultimately causing sudden long term cooling." (LINK)

French scientist Vincent Courtillot is the director of the Institute de Physique du Globe de Paris, a member of the Academy of Sciences, a geomagnetism scientist, and president of the Geomagnetism and Paleomagnetism Section of the American Geophysical Union. Courtillot is also a climate skeptic. Courtillot joined his fellow colleagues at the French Academy of Sciences in a scientific debate. Courtillot explained in an October 15, 2007 article in *Le Figaro* that "it is important that [climate skeptics] can express themselves." Courtillot represented the skeptical arguments along with geophysicist **Louis Le Mouël of the Institute de Physique du Globe de Paris. Claude Allègre, prominent climate skeptic, French Socialist, and award winning geophysicist also supported the skeptics' team.** The article, titled "Climate: Polemic Between Academics" in *Le Figaro* reported, "Louis Le Mouël represented the path of 'skeptics,' highlighting the role of variations in activity of the sun, volcanism, cosmic rays or magnetism, rather than changes in CO2 of human origin, to explain variations in temperature." (LINK)

Frederic Fluteau, a geomagnetism scientist with the Institute de Physique du Globe de Paris, co-authored a paper published on January 30, 2007 in the *Earth and Planetary Science Letters.* The paper, co-authored with geomagnetism scientist Yves Gallet and scientist Agnes Genevey of the Centre de Research at the Restauration des Musées, found, "Much of the observed increase in global surface temperature over the past 150 years occurred prior to the 1940s and after the 1980s. The main causes invoked are solar variability, changes in atmospheric greenhouse gas content or sulfur due to natural or anthropogenic action, or internal variability of the coupled ocean-atmosphere system." The paper also found that "a proposed mechanism involves variations in the geometry of the

geomagnetic field (f.i. tilt of the dipole to lower latitudes), resulting in enhanced cosmic-ray induced nucleation of clouds. No forcing factor, be it changes in CO2 concentration in the atmosphere or changes in cosmic ray flux modulated by solar activity and geomagnetism, or possibly other factors, can at present be neglected or shown to be the overwhelming single driver of climate change in past centuries." Le Mouël also served as one of the co-authors. (LINK)

Meteorologist Jesse Ferrell of AccuWeather praised the new skeptical UK documentary *The Great Global Warming Swindle* in an April 2, 2007 blog post. "I will say that this movie has blown the entire [climate] debate open again, or should," Ferrell wrote. "Many people have made up their minds without seeing or hearing all the evidence. If you've seen Al Gore's An Inconvenient Truth then you should take the time to watch The Great Global Warming Swindle," he added. (LINK)

The New Zealand Climate Science Coalition released seven "pillars of wisdom" to counter the UN IPCC climate report. As detailed in the Dominion Post on April 5, 2007, the coalition of prominent scientific skeptics includes: **Dr. Vincent Gray, an expert reviewer for the IPCC and most recently a visiting scholar at the Beijing Climate Centre; Dr Gerrit van der Lingen, a geologist and paleoclimatologist and former director of Geoscience Research and Investigations New Zealand; Professor Augie Auer (deceased June 2007) of Auckland, past professor of atmospheric science, University of Wyoming, and previously MetService chief meteorologist; Professor Bob Carter, a New Zealand-trained geologist with extensive research experience in palaeoclimatology, now at the Marine Geophysical Laboratory, James Cook University, Warwick Hughes, a New Zealand earth scientist living in Pert; and Roger Dewhurst, of Katikati, a consulting environmental geologist and hydrogeologist.**

The seven "pillars of wisdom" are:

1. Over the past few thousand years, the climate in many parts of the world has been warmer and cooler than it is now. Civilizations and cultures flourished in the warmer periods.

2. A major driver of climate change is variability in solar effects, such as sunspot cycles, the sun's magnetic field and solar particles.

These may account in great part for climate change during the past century. Evidence suggests warming involving increased carbon dioxide exerts only a minor influence.

3. Since 1998, global temperature has not increased. Projection of solar cycles suggests that cooling could set in and continue to about 2030.

4. Most recent climate and weather events are not unusual; they occur regularly.

For example, in the 1930s the Arctic experienced higher temperatures and had less ice than now.

5. Stories of impending climate disaster are based almost entirely on global climate models.

Not one of these models has shown that it can reliably predict future climate.

6. The Kyoto Protocol, if fully implemented, would make no measurable difference to world temperatures.

The trillions of dollars that it will cost would be far better spent on solving known problems such as the provision of clean water, reducing air pollution, and fighting malaria and Aids.

7. Climate is constantly changing and the future will include coolings, warmings, floods, droughts, and storms.

The best policy is to make sure we have in place disaster response plans that can deal with weather extremes and can react adaptively to longer-term climate cooling and warming trends. (LINK)

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Emeritus Professor Lance Endersbee, a former dean of engineering and pro-vice chancellor at Monash University, accused the scientific leaders of trying to stifle debate over the causes of climate change. (LINK) According to a April 5, 2007 article in the Sydney Morning Herald, Professor Endersbee says it is highly probable that increased electromagnetic radiation of the sun is behind global warming. "There are several disturbing aspects of the IPCC report which indicate that the conclusions are based on serious misconceptions about the behavior of the Earth," Prof Endersbee said. "The report reflects little understanding of the dynamic relation between the Earth, the Sun and the Cosmos. In these circumstances it is incredible that some leaders of scientific societies and academies have tried to use their authority to demand acceptance of the IPCC report," Endersbee added. In a follow-up interview on July 6, 2007 on Australia's ABC Western Queensland's Morning Program, Endersbee explained the earth is an electrical conductor moving through the magnetic flux of the sun. "So we have these electric currents being created within the earth in response to the electro-magnetic radiation of the sun and that is the main driver of climate change on earth - it's not man," he explained. Endersbee believes that the world has been warming naturally due to this increased magnetic flow from the sun that started around the year 1700. "And now we're starting to depict that it seems to be reaching an end of that cycle and it does seem as though the earth may be cooling down," he said. Endersbee also said carbon trading schemes were being set up by governments for political reasons, not scientific reasons. "What terrifies me is the way the state governments in Australia [with] their emissions trading are contemplating using the superannuation funds to invest in carbon trading - they're going to lose their money!" He further explained, "Scholarship is being driven by media and media attention and this is a terrifying state of affairs. You can get all the money in the world if the research you're doing is related to climate change... if you say climate change isn't caused by man it's caused by the sun, it doesn't get any money at all." (LINK)

Mathematical researcher Douglas J. Keenan, a former Morgan Stanley employee and current independent mathematical researcher, who has authored numerous peer-reviewed studies, accused the UN of "fabrications" and "discovered that the sources used

by the Intergovernmental Panel for Climate Change (IPCC) have disregarded the positions of weather stations." Keenan accused the UN of "intentionally using outdated data on China from 1991 and ignoring revised data on the country from 1997." (LINK) "One of the big problems in global warming studies, and in science generally, is that research data is often not available to outsiders. Instead, researchers tend to hoard the data for themselves and their friends (who are reluctant to be critical)," Keenan on April 4, 2007. (LINK) Keenan wrote in a March 28, 2007 blog, "The problems with the peer review process have implications for our understanding of global warming (as well as for science generally). Once something has been published in a peer-reviewed journal-particularly a prestigious journal-it tends to be considered as established, possibly even heralded as 'truth'. This means that other researchers will often rely on its conclusions, with little, if any, further checking. The extent to which this happens varies among different branches of science. It seems to be especially so in the study of global warming." Keenan continued, "The primary body tasked with advising government policy makers about global warming is the IPCC (Intergovernmental Panel on Climate Change). Policy makers generally regard the IPCC as authoritative. The IPCC bases its analyses on peer-reviewed research, but it does no checking of that research itself. Yet most peer-reviewed research is not properly checked prior to its publication. In other words, most of the research that is relied upon by the IPCC, and thus government policy makers, has never been properly checked. That probably seems incredible; it is unfortunately true." (LINK)

Chief Meteorologist Craig James, of a Michigan NBC TV affiliate, questions the computer model predictions of climate doom. James, who was elected a fellow of the American Meteorological Society for outstanding contribution to the atmospheric sciences, wrote in a February 14, 2007 blog post, "It seems to make sense, CO2 is a greenhouse gas and if the amount of CO2 in the atmosphere increases, the temperature should increase. Unfortunately, it is not that simple. If CO2 was the only thing that changed and there were no other what are called 'forcings' and 'feedbacks', then maybe it would be simple." "It seems to me there is plenty of room for skepticism about the scenarios painted by the models based on purely scientific grounds. Anyone who takes the time and effort to study the issue would not make the incredible statement that skeptics are on a par with 'Holocaust Deniers' as Ellen Goodman did in a Boston Globe article a couple of weeks ago," James wrote. According to James, computer models do not include volcanoes, which cool the atmosphere, and "the models do not properly account for the role clouds may play in a warmer world. We don't clearly understand whether they produce a positive or negative feedback (additional warming or cooling)." (LINK) James probed the heart of the argument for man-made global warming when he asked in a June 4, 2007 blog, "Is it good science to never once mention the problems with the General Circulation Models (GCMs)?" "The rationale seems to be that the models produce the kind of warming we see only when you include an increasing amount of CO2 into the atmosphere. The warming cannot be reproduced by natural processes alone in the models. That's because the models do not handle those natural processes correctly. They either don't include or are woefully inadequate in their handling of major climate forcings such as the Pacific Decadal Oscillation, the Atlantic Multidecadal Oscillation, El Nino, La Nina, water vapor, cloud feedbacks, etc. This is one case where getting the answer you are looking for in the models occurs for the wrong reason. There may have to be a snowstorm in Miami before it is no longer politically incorrect to say such a thing in public. Actually, the snowstorm would probably be blamed on global warming too," he explained. (LINK) James also wrote a blog

post detailing how the IPCC downplays cold weather is a bigger killer than hot weather. James's April 4, 2007 blog was titled "Heat and Cold Related Deaths." "This paper from WebMD states: 'Cold-related deaths are far more numerous than heat-related deaths in the United States, Europe, and almost all countries outside the tropics," James wrote. (LINK) James summed up his view in a May 28, 2007 blog: "The more I study this subject and become increasingly aware of the failings of the computer models, the more I think you can trust the Old Farmer's Almanac on what next year's winter will be like more than you can trust the climate models." (LINK)

Prize-wining Geologist Dr. Ian Plimer, **a professor of Earth and Environmental** Sciences **at the University of Adelaide in Australia**, rejected alarmist views of climate science in an article in the *Sydney Morning Herald* on April 6, 2007. "The Earth's temperature rose by 0.7 per cent in the 20th century, but there was also an increase in piracy. Does that mean piracy causes global warming?" Plimer asked. "There is new work emerging even in the last few weeks that shows we can have a very close correlation between the temperatures of the Earth and supernova and solar radiation. What if global warming has nothing to do with human activity? What happens if the astronomers are right, and the world is actually entering a cooling period?" Plimer questioned. "We geologists have seen climate change for 4500 million years. Tell us something new," he added. (LINK)

Meteorologist Jim Clark of Florida's WZVN-TV ABC 7 declared he did not agree with what has been labeled the "consensus" view on global warming in a March 30, 2007 radio interview. Clark, an on-air weather forecaster since 1983, said, "The amount of human impact on climate change seems to be pretty small and seems very unlikely to be a disaster." "Climate is something that has always been changing on the planet. It fluctuates, it goes up and down. I have always thought of climate that is not homeostasis. So much of the current debate, it just strikes me as very odd, especially in the popular media where the headlines screamed the debate is over. Well, there never was a debate about whether the globe was warming. The real debate has always been the amount of the human effect on the climate," Clark said. (LINK) In a December 10, 2007 commentary, Clark further expanded on his climate views. "The planet has not warmed over the last decade and climate factors seem to be lining up for a global cool down, despite the ever increasing concentration of atmospheric CO2," Clark wrote. "Those defending an impending global warming crisis try to explain the mid-20th century cooling with the notion that man-made aerosols (air pollution) cut down on the amount of sunshine reaching the surface and caused the cooling. The problem with that argument is that the cooling took place in both hemispheres, while man-made aerosols were primarily in the northern hemisphere. To this day, we do not know very much about how human emitted aerosols impact climate. Some say they produce warming. Others argue for cooling. Still some suggest that the affect of aerosols depends on there location in the atmosphere and may produce warming or cooling at different times," he explained. "Despite the overwhelming evidence that internal cycles like the PDO (Pacific Decadal Oscillation) have played a huge role in 20th century climate change, the IPCC and the global warming community ignore them almost entirely," he added. "It is not possible to tell just how much of the 0.06 degrees warming per decade is the result of increasing CO2 and other 'greenhouse' gases. Even if we assume that it accounts for 2/3 of the observed trend (unlikely), it only leads to a net warming of 0.80 degrees over the next 200 years! Such a warming would be largely beneficial and any

negative impacts could be dealt with cheaply and efficiently at regional levels," Clark concluded. (LINK) & (LINK)

Indur M Goklany, Ph.D, who has represented the United States at the International Panel on Climate Change and in the negotiations leading to the United Nations Framework Convention on Climate Change, also scrutinized the UN's IPCC Summary for Policymakers (SPM) released in 2007. "Once one gets past the opaque verbiage of the SPM, it is clear that most of the negative impacts listed in the SPM are overstated, while the positive impacts are understated," Goklany noted in an April 9, 2007 critique. (LINK) Goklany managed the US Environmental Protection Agency's fledgling emissions-trading program in the 1980s. "These [IPCC] studies estimate impacts for 2085 using technologies from the 1990s or earlier. This is like estimating today's food production and levels of hunger using technologies from the 1910s! You are bound to underestimate food production and overestimate hunger. In developing countries prevalence of chronic hunger declined from 37% to 17% between 1970 and 2001, despite an 83% increase in population, in substantial part because of new technologies," Goklany added. "Similarly, human health impacts are often estimated assuming that adaptive capacities are fixed as of the start date of the analysis. Under such a methodology the mortality and morbidity rates from water related diseases in the U.S., for example, would be the same in 2000 as in 1900. But in fact, these rates have declined by 99% or more during the 20th century for disease such as typhoid, paratyphoid, dysentery, malaria, etc.," Goklany noted.

Global warming author and economist Dr. Thomas Gale Moore is a former professor at Michigan State University, a senior fellow at the Hoover Institute, and author of the book *Climate of Fear: Why We Shouldn't Worry about Global Warming*. "I don't argue that we're having global warming, but I find the effects are going to be small," Moore said according to the September/October 2005 issue of *Stanford Magazine*. The article explained that Moore "insists that Americans in particular will benefit from a warmer climate in many ways, including longer growing seasons and reduced heating costs." (LINK)

Meteorologist Joseph Conklin launched a skeptical website called Climatepolice.com on February 25, 2007. "The goal of the website is to show the public that other research on climate change exists and the debate is not over," Conklin said. Conklin, who specializes in analysis of surface weather observations, also operates NiceWeather.com, a website specializing in monthly weather forecasts. "Scientific research should be apolitical. Extremist groups have promoted global warming as their primary political issue. I want this website to help correct that," Conklin added. (LINK) On August 10, 2007 Conklin wrote: "A few months ago, a study came out that demonstrated global temperatures have leveled off. But instead of possibly admitting that this whole global warming thing is a farce, a group of British scientists concluded that the real global warming won't start until 2009." (LINK)

Dr. David Wojick is a UN IPCC expert reviewer, who earned his PhD in Philosophy of Science and co-founded the Department of Engineering and Public Policy at Carnegie-Mellon University. "In point of fact, the hypothesis that solar variability and not human activity is warming the oceans goes a long way to explain the puzzling idea that the Earth's surface may be warming while the atmosphere is not. The GHG (greenhouse gas)

hypothesis does not do this," Wojick, who specializes in mathematical logic, wrote in a May 2, 2005 commentary. "The public is not well served by this constant drumbeat of false alarms fed by computer models manipulated by advocates," he explained. (LINK)

Oxford-educated economist Tony Gilland is the science and society director of the UK based Institute of Ideas. Gilland, who initiated the UK's Science Education Project, declared the debate about global warming far from over in 2007 and lamented the UN's politicization. "The UN's all-powerful climate change panel is no straightforward scientific body. It is a deeply political organization that was born out of disenchantment with progress," Gilland wrote in a June 28, 2007 essay. "The IPCC, an unelected body, holds an unprecedented influence on the lives of everyone on the planet - and any attempt to question this body's legitimacy or actions is shouted down as 'denial' of the scientific facts," he explained. "It is striking how many in the scientific community have become extremely intolerant of dissent," Gilland added. "The way in which politicians, the media and civil society have come to hang on the latest pronouncements of the IPCC demonstrates how this political failure has allowed a scientific conceptualization of a political problem to become institutionalized across the globe, to the point where conceiving of it differently has become almost unimaginable," he concluded. (LINK)

Analytical chemist Hans Schreuder who publishes the UK based website ILoveMyCarbonDioxide.com, rejected man-made global warming fears in 2007. "Any and all arguments put forward by the perceived consensus of scientists who still have their names engraved on the IPCC report are based on nothing more than theory and best fit computer modeling. Normally varying weather patterns are 'blamed' on AGW (anthropogenic global warming) without any scientific basis and for the sole purpose of scaremongering a gullible public," Schreuder wrote on December 10, 2007. Schreuder also asserted that "ALL 'proof' is based on theories and computer models, not actual direct evidence - cause there ain't none. ALL the records from the past show clearly that CO2 did NOTHING to 'drive' or 'force' any temperature changes. If it did, we would be as hot as hell by now and no life would be possible." (LINK) & (LINK)

Russian scientist Dr. Oleg Sorochtin (name also sometimes translated to spell Soroktin) of the Institute of Oceanology at the Russian Academy of Sciences has authored more than 300 studies, nine books, and a 2006 paper titled "The Evolution and the Prediction of Global Climate Changes on Earth." Sorochtin, who made several Antarctic expeditions, rejected man-made climate fears in 2007. "The temperature increase has a pronounced natural origin and is not determined by the 'greenhouse effect' of greenhouse gases," Sorochtin wrote in an essay on October 9, 2007 in *Ria Novosti*. (translated) "Even if the concentration of 'greenhouse gases' double man would not perceive the temperature impact," Sorochtin wrote. "The real causes of climate change lie in the unevenness of the sun's radiation, in the precession (amendment of the rotational axis) of the earth, in the instability of the ocean currents in the periodic desalination and salinity of surface waters of the Arctic Sea and the other. The main causes of which are the solar activity and the luminosity. The higher these parameters, the higher the temperature," Sorochtin wrote. "The highest point of the warming has already occurred," he wrote. "The low point phase of solar activity, with a sharp decline in temperature will be accompanied; against the year 2041 is expected. The cool climate is at least 50 to 60 years," he added. (LINK)

Climate change author and engineer Rolf Riehm of Germany wrote the 2007 book skeptical of man-made global warming titled *Is the climatic Change inevitable? - About the Environmental Hypocrisy*. "Allegedly the temperature of the earth has risen during the past 20 years by about 0.6° C. And carbon dioxide is claimed to be the reason for it. In reality it is not possible to measure the temperature of the earth: One would have to define before in what region, one would have to say if we compare at night or during day-time. If in summer or in winter. If we measure in the Antarctic or in the Sahara!" Riehm wrote in his book. "In reality climate changes occur in cycles of several 1000 years," he added. Riehm also critiqued former Vice President Al Gore. "Gore has no knowledge of the laws of science. But this does not prevent him from making hundreds of false statements. He showed terrific trick films of the rise of the sea water level and showed how dozens of major towns drowned in the floods," Riehm wrote.

State of Florida Climatologist Dr. Jim O'Brien, professor emeritus of Florida State University, and who serves as the director of the Center for Ocean-Atmospheric Prediction Studies, critiqued the *Associated Press* for hyping climate fears. "The best measurements of sea level rise are from satellite instrument called altimeters. Currently they measure 14 inches in 100 years. Everyone agrees that there is no acceleration. Even the UN IPCC quotes this," O'Brien wrote to EPW on September 23 about an *AP* article predicting dire sea level rise. "If you increase the rate of rise by four times, it will take 146 years to rise to five feet. Sea level rise is the 'scare tactic' for these guys," O'Brien added. (LINK)

IPCC reviewer and climate researcher and scientist Dr. Vincent Gray of New Zealand, an expert reviewer on every single draft of the IPCC reports going back to 1990 and author of The Greenhouse Delusion: A Critique of "Climate Change 2001, declared, "The claims of the IPCC are dangerous unscientific nonsense" in an April 10, 2007 article. Gray is also a member of The New Zealand Climate Science Coalition. "All [UN IPCC does] is make 'projections' and 'estimates'. No climate model has ever been properly tested, which is what 'validation' means, and their 'projections' are nothing more than the opinions of 'experts' with a conflict of interest, because they are paid to produce the models. There is no actual scientific evidence for all these 'projections' and 'estimates'. It should be obvious that they are ridiculous," Gray noted. "Global temperatures have not been rising for eight years. New Zealand temperatures in the last 50 years have gone down with volcanoes and up with El Niños but have no signs of 'warming'. Christchurch has not warmed since 1917. The sea level in Auckland has been much the same since 1960," Gray added. (LINK) In a July 3, 2007 blog post, Gray further explained, "I have written many pages of comments on the various IPCC Reports and most of them have been ignored." "The very few comments made by most of the reviewers suggest that there may be very few actual people who ever read the report itself all the way through except those who write it," he added. "The [IPCC] 'Summary for Policymakers' might get a few readers, but the main purpose of the report is to provide a spurious scientific backup for the absurd claims of the worldwide environmentalist lobby that it has been established scientifically that increases in carbon dioxide are harmful to the climate. It just does not matter that this ain't so," he concluded. (LINK) In a May 28, 2007 letter to Canada's The Hill Times, Gray noted how political the IPCC process has become. "[No one can] deny that the 'Summary for Policymakers' is approved line-by-line by the government representatives because the press has recently mentioned that particular conclusions have involved clashes between the

Russians, Chinese and Americans. The ‘drafting authors' job is to write down what they are told to do," Gray wrote. "...The ‘lead authors' of the report are all chosen (and usually financed) by government representatives, so they can be relied upon to produce results which the governments like. They do not want another fiasco like the one in the 1995 report when they had to alter the ‘final draft' to comply with the ‘Summary for Policymakers.' They have a set of instructions for ‘lead authors' which ensures that they toe the line. This year's report is more extreme than before and there is continuous publicity for its extravagant claims. The ‘lead authors' are certainly behind this, but an increasing proportion of all the other scientists involved with the report are becoming irritated by the propaganda. It is interesting that this year we have had a succession of ‘Summaries for Policymakers' without a single copy of any of the reports upon which they are supposed to be based," he concluded.

Former Harvard University Physicist Dr. Lubos Motl, a string theorist who is currently a professor at Charles University in the Czech Republic, challenged the premise of the C02 driven climate cycles in a April 9, 2007 blog post. (LINK) "As we have explained in 2006, Vostok ice core records show that the carbon dioxide concentration averaged over a few centuries has been correlated with temperature at least for half a million of years. However, we know for sure that the temperature was the cause and the CO2 concentration was its consequence, not the other way around. It follows that the greenhouse effect hasn't been important in the last half a million of years," Motl wrote. "For whatever reason, some people are not willing to accept this obvious conclusion. That's why they invent various bizarre verbal constructs to circumvent the otherwise inevitable conclusion," Motl noted. "However, there are other ways to see that the influence of temperature on the concentration of gases has been more important than any influence in the opposite direction. For example, the ice core records show that the concentration of methane was correlated with temperature, too. If the CO2 concentration were the primary cause, we would have no explanation why the CH4 (Methane) concentration was also correlated. In fact, CO2 and CH4 play the very same role in the ice core records. If some combination of them determined the temperature, we would still have no explanation why these two concentrations were correlated with one another," Motl added. (LINK)

Team of Scientists Question Validity of a 'Global Temperature' - From a March 18, 2007 article in *Science Daily*: "Discussions on global warming often refer to 'global temperature.' Yet the concept is thermodynamically as well as mathematically an impossibility, says **Physicist Dr. Bjarne Andresen**, a professor at The Niels Bohr Institute, University of Copenhagen, who has analyzed this topic in collaboration with **professors Christopher Essex from University of Western Ontario** and **Ross McKitrick from University of Guelph, Canada**." The Science Daily article reads, "It is impossible to talk about a single temperature for something as complicated as the climate of Earth." "A temperature can be defined only for a homogeneous system. Furthermore, the climate is not governed by a single temperature. Rather, differences of temperatures drive the processes and create the storms, sea currents, thunder, etc. which make up the climate." He explains that while it is possible to treat temperature statistics locally, it is meaningless to talk about a global temperature for Earth. "The globe consists of a huge number of components which one cannot just add up and average. That would correspond to calculating the average phone number in the phone book. That is meaningless. Or talking about economics, it does make sense to compare the currency exchange rate of two

countries, whereas there is no point in talking about an average 'global exchange rate.'" The article concludes, "These are but two examples of ways to calculate averages. They are all equally correct, but one needs a solid physical reason to choose one above another. Depending on the averaging method used, the same set of measured data can simultaneously show an upward trend and a downward trend in average temperature. Thus claims of disaster may be a consequence of which averaging method has been used, the researchers point out." (LINK)

Geologist Dr. Don J. Easterbrook, Emeritus Professor at Western Washington University, who has **authored eight books and 150 journal publications,** chastised Gore for his scientific inaccuracies. "But there are a lot of inaccuracies in the statements we are seeing, and we have to temper that with real data," Easterbrook said in a March 13, 2007 *New York Times* article. "[Easterbrook] hotly disputed Mr. Gore's claim that 'our civilization has never experienced any environmental shift remotely similar to this' threatened change.
"Nonsense, Dr. Easterbrook told the crowded session. He flashed a slide that showed temperature trends for the past 15,000 years. It highlighted 10 large swings, including the medieval warm period. These shifts, he said, were up to '20 times greater than the warming in the past century.' Getting personal, he mocked Mr. Gore's assertion that scientists agreed on global warming except those industry had corrupted. 'I've never been paid a nickel by an oil company,' Dr. Easterbrook told the group," the *Times* article explained. (LINK)
Easterbrook rejects the notion that there is a "consensus" on global warming. "There are several hundred thousand scientists in the world. And the people who wrote the [UN IPCC] report that received a lot of publicity in February consisted of 33 policy makers, and the authorship of the entire IPCC report consists of 143 people. And that's hardly representative of the entire meteorological word," Easterbrook told Fox News Channel on March 13, 2007. "The validity of a scientific concept is not a matter of how many people vote for it or against it. It's a matter of the evidence upon which it's based. And the truth is there is no real tangible evidence of the connection between CO2 and global warming," he added.

Paleoclimate expert Augusto Mangini of the University of Heidelberg in Germany, criticized the UN IPCC summary. "I consider the part of the IPCC report, which I can really judge as an expert, i.e. the reconstruction of the paleoclimate, wrong," Mangini noted in an April 5, 2007 article.(translated) "The earth will not die. Our archives show clearly that it has often been warmer, in addition, there have been cooler periods, which occurred just as fast as the current warm phase," Mangini said. "The statement that the heating up of the climate taking place now is comparable only with the heating up before 120,000 years is simply not correct. We have data, which show that there were periods which were similarly warm or even still warmer than today during the last ten thousand years," Mangini said. (LINK)

German climate scientist Dr. Hans von Storch, the Director of Institute for Coastal Research of the GKSS Research Centre, **a professor at the Meteorological Institute of the University of Hamburg who focuses on climate diagnostics and statistical climatology, and has published 11 books.** Storch believes human are influencing climate change, but feels the fear factor has been dramatically overplayed. "We should spend more time talking about adjusting to the inevitable and not about reducing CO2 emissions. We

have to take away people's fear of climate change," Storch told the German publication *Der Spiegel* on March 16, 2007. Storch dismissed fears of mass deaths from future heat waves caused by global warming. "Such claims are completely idiotic and dubious. What they did was to simply perform an extrapolation based on the mortality rate during the exceptionally hot 2003 summer, which took everyone by surprise and for which we were therefore completely unprepared. But if higher summer temperatures become the norm in the future, people will adjust," he explained. (LINK) Storch noted the limitations of science. "We climate researchers can only offer possible scenarios. In other words, things could end up being completely different. But there are undoubtedly parts of the world that will benefit on balance from climate change. Those areas tend to be in the north, where it has been cold and uncomfortable in the past. But it's considered practically heretical to even raise such issues," he said.

Alabama State Climatologist Dr. John Christy of the University of Alabama in Huntsville and NASA, served as a UN IPCC lead author in 2001 for the 3rd assessment report and detailed how he witnessed scientists distorting the science. "I was at the table with three Europeans, and we were having lunch. And they were talking about their role as lead authors. And they were talking about how they were trying to make the report so dramatic that the United States would just have to sign that Kyoto Protocol," Christy told CNN on May 2, 2007. "One of the statements in the [IPCC Summary for Policymakers] SPM was the statement that, if you boil it down, it says we are 90 percent certain that most of the warming in the last 50 years was due to human effects. I don't agree with that. I think things are much more ambiguous," Christy said. Christy also dismissed Gore's warning of a 20 foot sea level rise to due future global warming. "To come up with 20 feet is really grasping at straws, I think, but it does make a dramatic image. It makes a startling announcement," Christy said. (LINK) Christy dismissed fears of man-made climate doom. "I don't see a catastrophe developing from our emissions into the air of what should be correctly identified as 'plant food,'" Christy wrote in a February 6, 2007 article. "The climate cannot be predictably managed with such [emission reduction] proposals given the uncertainty of natural variations. For example, to make a 10 percent dent in CO2 would require 1000 nuclear power plants and this would still not make a measurable difference on whatever the climate will do anyway," Christy explained. "I'm full of optimism about the continued growth of wealth and health around the world. This wealth will create cleaner environments even in countries where persistent poverty has destroyed too much habitat and fouled too many rivers," he concluded. (LINK)

Meteorologist Brian van de Graaff attributed recent warming trends to natural variability. "History has taught us that weather patterns are cyclical and although we have noticed a warming pattern in recent time, I don't know what generalizations can be made from this with the lack of long-term scientific data," van de Graaff said in a December 2006 interview. Van de Graaff, who holds the prestigious Seal of Approval from the American Meteorological Society, also noted how global warming has turned into such a heated debate. "Often, it is so politicized and those on both sides don't always appear to have their facts straight," he said. (LINK)

Meteorologist David Aldrich declared, "I am a global warming skeptic" in an April 9, 2007 blog post. "If you have had doubts, you have come to the right place," Aldrich wrote. "Although, I believe man plays a role in climate change through urbanization ("the heat

island effect" & development), land use changes, and aerosols and gases -- natural factors are ALSO important, most notably the sun and ocean," Aldrich who is certified by both the American Meteorological Society and the National Weather Association, explained. (LINK) "There's a different side to what is causing climate change. I think too much emphasis has been put on CO2. I do not believe CO2 is a pollutant. I'm made of CO2, you're made of CO2 ... the ocean is a reservoir of CO2," Aldrich explained in a June 6, 2007 article in City Paper. (LINK)

Renowned hurricane forecaster Dr. William Gray, Emeritus Professor of Atmospheric Science at Colorado State University (CSU), and head of the schools Tropical Meteorology Project, chastised former Vice President Al Gore as "a gross alarmist" in an April 6, 2007 Associated Press interview. "[Gore's] one of these guys that preaches the end-of-the-world type of things. I think he's doing a great disservice and he doesn't know what he's talking about," Dr. Gray said. The AP article explained, "Gray believes a recent increase in strong hurricanes is not due to global warming but is part of a multi-decade trend of alternating busy and slow periods related to ocean circulation patterns." Gray believes current climate researchers rely too much on computer models. "Us older guys that were around in the pre-satellite, pre-computer age, we had to deal with the real weather. Most of these people don't forecast," he said. "They don't live in a real world. They're living in an imaginary world." (LINK)

Physicist Dr. Freeman Dyson, Professor Emeritus of Physics at the Institute for Advanced Study, in Princeton, is a fellow of the American Physical Society, a member of the US National Academy of Sciences, and a fellow of the Royal Society of London. Dyson called himself a "heretic" on global warming. "Concerning the climate models, I know enough of the details to be sure that they are unreliable. They are full of fudge factors that are fitted to the existing climate, so the models more or less agree with the observed data. But there is no reason to believe that the same fudge factors would give the right behavior in a world with different chemistry, for example in a world with increased CO2 in the atmosphere.," Dyson said in an April 10, 2007 interview. Dyson is also a fellow of the American Physical Society, a member of the US National Academy of Sciences, and a fellow of the Royal Society of London. (LINK) "The fuss about global warming is grossly exaggerated," Dyson also wrote in his 2007 book "Many Colored Glass: Reflections on the Place of Life in the Universe." Dyson focuses on debunking climate models predictions of climate doom: "They do not begin to describe the real world that we live in. The real world is muddy and messy and full of things that we do not yet understand. It is much easier for a scientist to sit in an air-conditioned building and run computer models, than to put on winter clothes and measure what is really happening outside in the swamps and the clouds. That is why the climate model experts end up believing their own models."

Paleoclimate scientist Dr. Bob Carter of Australia's James Cook University and former chairman of the earth science panel of the Australian Research Council, who has published numerous peer-reviewed papers, discredited the UN IPCC. "Many distinguished scientists refuse to participate in the IPCC process, and others have resigned from it, because in the end the advice that the panel provides to governments is political and not scientific. Although at least -$50 billion has been spent on climate research, the science arguments for a dangerous human influence on global warming have, if anything, become weaker since the establishment of the IPCC in 1988," Carter wrote in an April 11,

2007 op-ed in the UK Telegraph. Carter, who has had over 100 papers published refereed scientific journals, continued, "For more than 90 per cent of recent geological time, the cores show that the earth has been colder than today. We modern humans are lucky to live towards the end of the most recent of the intermittent, and welcome, warm interludes. It is a 10,000 year-long period called the Holo-cene, during which our civilizations have evolved and flourished." "Similar cores through polar ice reveal, contrary to received wisdom, that past temperature changes were followed - not preceded, but followed - by changes in the atmospheric content of carbon dioxide. Yet the public now believes strongly that increasing human carbon dioxide emissions will cause runaway warming; it is surely a strange cause of climate change that naturally postdates its supposed effect?" he added. "So the evidence for dangerous global warming forced by human carbon dioxide emissions is extremely weak. That the satellite temperature record shows no substantial warming since 1978, and that even the ground-based thermometer statistic records no warming since 1998, indicates that a key line of circumstantial evidence for human-caused change (the parallel rise in the late 20th century of both atmospheric carbon dioxide and surface temperature) is now negated," Carter concluded. (LINK) Carter also wrote a June 18, 2007 op-ed detailing even more skepticism on climate fears. "Lower atmosphere satellite-based temperature measurements, if corrected for non-greenhouse influences such as El Niño events and large volcanic eruptions, show little if any global warming since 1979, a period over which atmospheric CO2 has increased by 55 ppm (17 per cent)," Carter wrote. "There are strong indications from solar studies that Earth's current temperature stasis will be followed by climatic cooling over the next few decades," he added. (LINK)

Penn State Meteorologist Paul Knight, host and founder of the program "Weather World" expressed skepticism about man-made global warming in 2007. "We have to be very careful about using global temperatures. You have very few people who do it absolutely correctly," Knight said in a April 20, 2007 interview. "I wish the climate system were simple. It is not. Listen to the facts. There is a fair bit we do not understand," Knight said. The article continued, "The southern ice cap over Antarctica has actually gotten larger since the 1970s, Knight said. And the overall average temperature on the southern tundra has actually dropped a half degree Celsius over the last two decades. To understand global climate change, the sun must be taken into account, according to Knight. He said much of the warmer temperatures the earth has experienced may be attributed to longer sunspot cycles on the sun. Some scientists argue sunspots may actually make the sun's powerful rays even stronger during cycles and may cause slightly higher temperatures on Earth." http://www.lancasterfarming.com/node/532

Geophysicist Dr. David Deming, associate professor of arts and sciences at the University of Oklahoma who has published numerous peer-reviewed research articles, dismissed fears of man-made global warming. "Present-day temperatures are not anomalously warm. The best methods we have for estimating past temperatures are borehole temperatures and the elevation of tree lines. Both of these methods indicate temperatures during the High Middle Ages were just as warm as today. Five thousand to 7,000 years ago, temperatures were significantly warmer," Deming wrote in a January 10, 2007 op-ed in the Edmond Sun. "Ninety percent of the greenhouse effect is due to water vapor. The warming response to the concentration of greenhouse gases in the atmosphere is logarithmic. That means if some global warming does occur, most of it will be at night, at winter, and at high latitudes where humidity is low. These are places and times where

warmer temperatures would be beneficial, not detrimental," Deming wrote. "Neither the Greenland nor the Antarctic ice sheets are undergoing any significant ablation or melting. The polar bear population is stable," he added. "No one has ever died from global warming. What kills people is cold, not heat. For more than 150 years, it has been documented in the medical literature that human mortality rates are highest in the winter when temperatures are the coldest," he explained. "In summary, the problem is not one of skepticism, it's one of ignorance. Global warming hysteria is based on ignorance fueled by speculation and alarmism. The average person is more likely to be struck by a meteorite from outer space than harmed by global warming," Deming concluded. (LINK)

Dr. Mel Goldstein, a PhD Meteorologist on Connecticut's TV News Channel 8, questioned the long-range climate models used by the UN's IPCC. "When you are in the trenches and forecasting each and everyday, you begin to realize the inadequacies of our computer models," Goldstein wrote in a March 9, 2007 blog. "I become skeptical when atmospheric models are used to project conditions 100 or 200 years from now," he noted. Goldstein, who established the first and only Bachelor's degree program in meteorology at Connecticut Western Connecticut State University and authored the book *The Complete Idiot's Guide to Weather*, also questioned how the IPCC could account for the range of variables that go into long range climate projections. "There are many important variables we just can't handle with confidence. For example in the IPCC report, the cooling effect of clouds is given a low level of scientific understanding (LOSU). The range of possibilities is so great that the highest estimate of reflectivity from clouds can completely balance the highest estimate of warming from carbon dioxide. Then, there is the whole issue of water vapor which is a powerful greenhouse gas. It can range from 0.2 to 2% in the atmosphere. Whereas, carbon dioxide is about .03%. Sadly, we know so little about water vapor and the heat it generates," Goldstein wrote. (LINK) In a June 29, 2007 blog post, Goldstein continued his critique of the shortcoming of climate predictions. "Long range forecasts are often short on reality. Sure, we have great mathematical equations applied to predicting our weather. But not all is known about our weather. We don't understand how water vapor comes into the equations, and that is a big deal. Heat sources represent other major unknowns, after all, heat drives the atmosphere. We make assumptions about these unknowns, and as long as these fit for the moment, the forecast looks good. But a slight error will only magnify as the forecast is further extended," Goldstein wrote. "We can get an idea of a trend, but specifics 30 days or 90 days out are seldom correct. Most of what we know about the atmosphere was known a hundred years ago. No doubt, technology has advanced faster than our basic understanding of the atmosphere. There are times when even a 24-hour forecast leaves something to be desired," he concluded. (LINK)

Dr. Anthony Lupo, **Professor of Atmospheric Science, University of Missouri-Columbia,** wrote in a May 18, 2007 email to EPW, "I don't believe that the climate change issue is an emergency, or that there is compelling evidence to blame humanity for the current warming. Warming is undoubtedly occurring, but it may have nothing (0%), or a little (0-10%) to do with human activity." Lupo continued, "There is abundant scientific evidence demonstrating that the climate changes cyclically on time-scales ranging from a few years, to hundreds of thousands of years. There is plenty of evidence to suggest that the climate is not ‘stagnant' either. The climate has been relatively cool for the last few hundred years and has warmed to levels which are at or below an inferred maximum approximately 1000 years ago." "There are too many unknowns (e.g., the nature of solar

and internal variability). There are too many things we don't understand about the current climate (e.g., the carbon cycle, atms - ocean interactions)," he added. Lupo has also critiqued Gore's movie. "[Gore's] whole tone of this was, 'We've got to make radical changes in our lifestyle, and we have to make them now, and that's because the science on the issue is settled,'" Lupo said in a July 13, 2006 article in the *Columbia Tribune*. "Well that's not entirely the case. The science, for one thing, is not settled." Lupo disputes the reason for warming temperatures and says recent temperatures are within natural variability. "One thing I can agree with Gore on is the world is getting warmer," he said. "One thing I can't agree on is the cause." (LINK)

Dr. Thomas P. Sheahen, an MIT educated physicist, author of the book *An Introduction to High-Temperature Superconductivity*, and writer of the popular newspaper column "Ask the Everyday Scientist," dismisses the idea of a "consensus" on man-made global warming. "We must all remember that scientific truth is not determined by popular vote. The [UN] IPCC is severely tainted by politics," Sheahen wrote to EPW on June 11, 2007. "No one disputes that the Earth has been warming over the last 150 years. The controversy is over whether it's natural or anthropogenic (AGW)," he added. "I have done computer modeling of physical and chemical phenomena, and I know two things very well: first, your outputs will always be conditioned by the input assumptions you make at the front end; and second, data *always* trumps theory. For a model to be valid, it has to match the data. Given the observations of temperature variations during the 20th century, you really can't make the case that mankind caused such erratic temperature swings," Sheahen concluded. (LINK)

Dr. Edward J. Wegman, **a professor at the Center for Computational Statistics at George Mason University and chair of the National Academy of Sciences' Committee on Applied and Theoretical Statistics, played a prominent role in questioning the statistical validity of Michael Mann's UN promoted "Hockey Stick" temperature graph of last 1000 years of Northern Hemisphere temperatures.** Wegman and a panel of statisticians conducted a third-party review the "Hockey Stick." According to a November 28, 2006 article in Canada's National Post, Wegman found that Mann made a basic error that "may be easily overlooked by someone not trained in statistical methodology. We note that there is no evidence that Dr. Mann or any of the other authors in paleoclimate studies have had significant interactions with mainstream statisticians." Wegman found that Mann's "small group of climate scientists were working on their own, largely in isolation, and without the academic scrutiny needed to ferret out false assumptions." "I am baffled by the claim that the incorrect method doesn't matter because the answer is correct anyway. Method Wrong + Answer Correct = Bad Science," Wegman said. (LINK) Wegman also noted how the peer-review process can be skewed by a cozy group of scientists within a specific field. "Of course, if a given discipline area is small and the authors in the area are tightly coupled, then this process is likely to turn up very sympathetic referees. These referees may have coauthored other papers with a given author. They may believe they know that author's other writings well enough that errors can continue to propagate and indeed be reinforced," Wegman wrote in his report to the U.S. Congress. (LINK)

Dr. Richard Tol, the director of the Centre for Marine and Atmospheric Science, **and a prominent economist with Hamburg University in Germany**, dismissed the UN IPCC

touted Stern Report on the economics of climate change as "preposterous." Tol, one of the authors of three of the IPCC Working Groups, dismissed the idea that mankind must act now to prevent catastrophic global warming, according a February 2, 2007 article in Canada's National Post. "Tol doesn't think the evidence is in on global warming and its effects, he doesn't think there's reason to rush to action, and he doesn't think that crash programs to curb global warming are called for," the National Post article explained. Tol debunked the Stern review as "alarmist and incompetent." "There is no risk of damage [from global warming] that would force us to act injudiciously," according to Tol. "We've got enough time to look for the economically most effective options, rather than dash into 'actionism,' which then becomes very expensive," he concluded. Tol wrote the critique despite the fact that his work was cited by the Stern Report no less than 63 times. (LINK) In a separate November 11, 2006 interview, Tol specifically critiqued the UN IPCC process. "Over the years, the IPCC has become ever greener and the few economists, who were previously involved, have been pushed out. Obviously, this casts doubt on the quality of the results," Tol explained. (LINK) Tol has also asserted that the benefits of a warmer world are frequently overlooked. Tol noted that "warming temperatures will mean that in 2050 there will be about 40,000 fewer deaths in Germany attributable to cold-related illnesses like the flu," according to a May 7, 2007 article in Der Spiegel. (LINK)

Dr. Duncan Wingham, Professor of Climate Physics at University College London and Director of the Centre for Polar Observation and Modeling, has presented evidence that Antarctic ice is growing. According to a December 15, 2006 article in Canada's National Post, "Early last year at a European Union Space Conference in Brussels, for example, Dr. Wingham revealed that data from a European Space Agency satellite showed Antarctic thinning was no more common than thickening, and concluded that the spectacular collapse of the ice shelves on the Antarctic Peninsula was much more likely to have followed natural current fluctuations than global warming." "One cannot be certain, because packets of heat in the atmosphere do not come conveniently labeled 'the contribution of anthropogenic warming,' " Wingham said, noting that the evidence is not "favorable to the notion we are seeing the results of global warming." Wingham and his colleagues found that 72% of the ice sheet covering the entire land mass of Antarctica is growing at the rate of 5 millimeters per year. "That makes Antarctica a sink, not a source, of ocean water. According to their best estimates, Antarctica will 'lower global sea levels by 0.08 mm' per year" the National Post article reported. (LINK) Wingham also co-authored a March 2007 review of Antarctic and Greenland ice sheets which found that the current "best estimate" of the contribution of polar ice loss to global sea level rise is 0.35 millimeters per year or less than an inch and a half over a century. (LINK) In a March 16, 2007 interview, Wingham further explained, "Most people don't realize that Antarctica is so cold there isn't much melting going on." (LINK) In 2005, Wingham emphasized the uncertainty of blaming polar ice reductions on human activity. "One cannot be certain, because packets of heat in the atmosphere do not come conveniently labeled 'the contribution of anthropogenic warming,'" Wingham said. (LINK) Wingham has also asserted, "There's a tendency today to associate every change that one sees in the ice on the planet with global warming. Almost certainly some of the changes are nothing to do with global warming at all but are connected with natural variability in the climate system." Wingham, the lead investigator on the UK-led Cryosat spacecraft mission to monitor ice sheets, added, "I wouldn't be surprised if Cryosat will increase the confusion rather than

decrease it, because we will start to see natural processes in the climate system that we don't see today." (LINK)

The Center for the Study of Carbon Dioxide and Global Change and the website "C02 Science" was established to debunk man-made climate fears. An April 11, 2007 report noted that current temperatures in Southern Greenland are "1.5°C colder than the peak warmth of Medieval Times." (LINK) A June 6, 2007 scientific report by the Center also debunked many of NASA's James Hansen's climate claims by finding **"very little evidence to justify [Hansen's] policy prescriptions for dealing with what he calls a 'dangerous climate change.'"** (LINK) The website, run by three scientists, **agronomist Dr. Craig Idso**, **physicist Dr. Sherwood Idso, and botanist Keith Idso,** documents the scientific evidence countering warming fears and offers evidence that the Earth was as warm or warmer during the Medieval Warm Period. The "Medieval Warm Period Project's" goal is to show that "approximately one thousand years ago, when the atmosphere's CO2 concentration was approximately 25% lower than it is currently, earth's near-surface air temperature was equally as warm as, or even warmer than, it is today, demonstrating that today's temperatures are not unnatural and need not be due to the historical rise in the air's CO2 content." Scientific supporters of the Center for the Study of Carbon Dioxide and Global change include: **Climate expert Donald G. Baker** of the University of Minnesota; **Biologist W. Dennis Clark of** Arizona State University; **Chemist Alan Moghissi** of the Institute for Regulatory Science; **Meteorologist William E. Reifsnyder** (Deceased); **Physics professor Clinton H. Sheehan** of Ouachita Baptist University in Arkansas**; Zoologist Kenneth E. F. Watt;** and **Horticulturist Sylvan H. Wittwer** of the Michigan State University. (LINK)

Astrophysicist Piers Corbyn of the UK based long-term solar forecast group Weather Action noted the UN's IPCC fourth assessment had a "serious misrepresentation of solar activity in the Report." Corbyn also ridiculed the idea that the IPCC summary for policymakers was written by 2500 of the worlds "leading scientists" and said IPCC should instead be called a "The IPCC Report by appointees of many governments." "In fact the report is drafted and finalized by appointees of Governments who may have little or no expertise in many of the wide ranging fields covered. It should further be noted that the many scientists who undertake diligent measurement and observational or estimation work which is used to indirectly support the report conclusions have generally no expertise or locus around the key subject on which the findings of the report are actually based, namely 'Climate Models.' This is the preserve of only a handful of people who generally are in government funded institutions rather than more independent bodies," Corbyn wrote in an open letter to UK government officials on February 11, 2007. "Perhaps the phrase 'The (IPCC) Report by appointees of many governments' would be fairer and should be insisted on, and would not incorrectly imply informed confirmed agreement from many scientists whose work, however excellent, does no such thing," Corbyn concluded. (LINK) Corbyn also debunked a 2007 widely publicized no solar-climate link study on July 20, 2007. "In desperate attempts to shore up their crumbling doctrine of man-made climate change, Professor Lockwood and Henry Davenport (Letters, July 14) cherry-pick data themselves. Professor Lockwood's 'refutation' of the decisive role of solar activity in driving climate is as valid as claiming a particular year was not warm by simply looking at the winter half of data. The most significant and persistent cycle of variation in the world's temperature follows the 22-year magnetic cycle of the sun's activity. So what does he do? He 'finds' that

for an 11-year stretch around 1987 to 1998 world temperatures rose, while there was a fall in his preferred measures of solar activity. A 22-year cycle and an 11-year cycle will of necessity move in opposite directions half the time. The problem for global warmers is that there is no evidence that changing CO2 is a net driver for world climate. Feedback processes negate its potential warming effects. Their theory has no power to predict. It is faith, not science. I challenge them to issue a forecast to compete with our severe weather warnings - made months ago - for this month and August which are based on predictions of solar-particle and magnetic effects that there will be periods of major thunderstorms, hail and further flooding in Britain, most notably July 22-26, August 5-9 and August 18-23. These periods will be associated with new activity on the sun and tropical storms. We also forecast that British and world temperatures will continue to decline this year and in 2008. What do the global warmers forecast?" Corbyn wrote. (LINK)

Meteorologist Joseph D'Aleo served as the first Director of Meteorology at The Weather Channel and was the Chief Meteorologist at Weather Services International Corporation and served as chairman of the American Meteorological Society's (AMS) Committee on Weather Analysis and Forecasting. D'Aleo founded a new website and organization skeptical of man-made global warming fears called International Climate and Environmental Change Assessment Project at Icecap.us on April 9, 2007. D'Aleo is a Certified Consultant Meteorologist (CCM) and he was elected a Fellow and a councilor with the AMS. D'Aleo's new website states the affiliated scientists "believe that local problems with the station data and natural cycles such as those in the sun and oceans are also important contributors to the global changes in our climate and weather. We worry the sole focus on greenhouse gases and the unwise reliance on imperfect climate models while ignoring real data may leave civilization unprepared for a sudden climate shift that history tells us will occur again, very possibly soon." D'Aleo wrote on May 17, 2007, "When I started really looking at the data I saw the signatures of urbanization and local land use factor in global temperatures. I also saw that temperatures cycled over time and those cycles correlated far better with the cycles in the sun and ocean temperatures than with greenhouse gases, which would argue for a parallel increase not cyclical warming and cooling." "I have recently done extensive correlative studies that convince me that the sun and oceans are the real drivers and carbon dioxide is a bit player in the scheme of things. I also believe the cyclical warming has peaked as the factors are changing and a cooling has started or will soon do so, depending on what measure you use," he added. **Other scientists affiliated with D'Aleo on his Icecap.us website include: Astrophysicist Dr. Sallie Baliunas, Deputy Director of Mount Wilson Observatory; Hurricane expert Dr. William Gray, Associate Professor head of the Tropical Research Project at Colorado State University; Oregon State Climatologist George Taylor of Oregon State University's College of Oceanic and Atmospheric Sciences; Marine Biologist Dr. Gary D. Sharp of the Center for Climate/Ocean Resources Study; former radiochemist Alan Siddons, Florida State Climatologist Dr. James O'Brien, Director Emeritus of the Center for Ocean-Atmospheric Prediction Studies at Florida State University; Climate scientist Dr. Richard C. Willson of Columbia University's Center for Climate Systems Research.** http://icecap.us

Oceanographer Dr. Willem de Lange of the department of Earth and Ocean Sciences at the University of Waikato in New Zealand has published numerous peer-reviewed papers in the areas of coastal processes and climatic hazards; tsunami and storm

surge prediction and mitigation; wave-induced sediment transport. He has also declared himself skeptical of man-made climate fears. "The Greenhouse Effect is a climate feedback mechanism - it modifies climate change but does not drive it," de Lange wrote to EPW on December 18, 2007. "Earth's climate is a complex system that is continually changing at different temporal and spatial scales - it may change abruptly, or gradually and affect regions or the whole globe. The primary driver of Earth's Climate at Human time scales is the quantity and quality of Solar radiation - the total amount, and the distribution of radiation across different wavelengths," de Lange explained. "Humans affect climate in a variety of ways - Human impacts are greatest at the micro-scale (your office), and diminish at larger spatial and temporal scales (impact at a global scale over the last 100 years is small - as far as I can tell it tends to disappear into the measurement errors). Emissions of greenhouse gases are a minor contribution to climate feedback as the Greenhouse Effect operates between physically constrained limits," he wrote. "Catastrophic climate changes in the next century are unlikely based on observational data," he concluded. (LINK)

Senior Meteorologist Dr. Joe Sobel of Accuweather, winner of the American Meteorological Society 2005 Award for Broadcaster of the Year, asserted that climate change is nothing new. "The climate is changing. The climate has always changed, that is a fact of the earth's existence," Sobel said on January 11, 2007. Sobel has 35 years experience at Accuweather and has also been a member of the American Meteorology Society since 1966. "Only 10,000 years ago -- which is geologically speaking is like [the snap of a finger] -- we were in the midst of an ice age," Sobel said. "There is not much doubt that climate changes and that climate will continue to change," Sobel reiterated. "The question is what is causing it. It is totally a naturally cycle? Is it totally human induced? I suspect the truth lies somewhere in between," he concluded. (LINK) Sobel also lamented the National Hurricane Center's new tropical storm naming policy because he believes it results in false claims of global warming related increases in storms. "Back in the old days... and I'm only talking 5 years or so ago... we did not name sub-tropical storms. Names were only given to storms that were deemed to be truly tropical. In the last few years, there have been a number of sub-tropical storms named. Those named storms go into the total of named storms and obviously increase the number of storms that year and consequently increase the average number of storms per year," Sobel wrote on May 9, 2007 in his blog. "It has been claimed that global warming is responsible for an increasing number of tropical storms and hurricanes, but here is a reason that the number of storms is increasing that has absolutely nothing to do with global warming. It's because we are mixing apples and oranges and calling them all apples!" he added. (LINK)

Economist Dr. Owen McShane, chair of the policy panel of the New Zealand based International Climate Science Coalition, slammed "consensus" science on global warming on April 21, 2007. "There is no scientific evidence to justify the wild claims of doom and catastrophe that have made headlines in recent weeks," McShane said. "All we have is a scenario promoted by government funded scientists who are part of the United Nations Intergovernmental Panel on Climate Change (IPCC), based on computer modeling that has been slammed by many independent climatologists around the world as lacking any scientific validity or credibility," he said. "People generally seem not to be aware that the UN defines ‘climate change' as only the effects of climate that result from human activity. It ignores the natural drivers that have governed the global climate for millions of years past. For reasons that have everything to do with politics and nothing to do with

science or meteorological observations and records, the present Government committed New Zealand to the Kyoto Protocol that even its most ardent supporters admit will not reduce global warming," McShane asserted. "What Kyoto will do, like the sale of indulgences in the Middle Ages, is make people and organizations pay for emissions of carbon dioxide by buying credits from countries like Russia that have vast tracts of forested land," he concluded. (LINK)

Anthropologist Dr. Benny Peiser of the Faculty of Science of Liverpool John Moores University in the UK who has published peer-reviewed studies, debunked a 2004 study published in *Science* which Gore cited in his movie. The study examined 928 peer-reviewed studies and found a virtual 100% consensus on man-made global warming. But Peiser's own analysis found that the study's "entire argument is flawed as the whole ISI data set includes just 13 abstracts (less than 2%) that explicitly endorse what [the author] has called the 'consensus view.'" "In fact, the vast majority of abstracts do not mention anthropogenic climate change," Peiser added. (LINK) Peiser, who edits a climate change Internet newsletter, has also noted that the media ignores the scientists and studies that cast doubt on climate alarmism. "Hardly a week goes by without a new research paper that questions part or even some basics of climate change theory," Peiser told the New York Times on March 13, 2007. (LINK) Peiser noted how science has been overtaken with an "apocalyptic" view of the future climate. "Not since the apocalyptic consensus of the Middle Ages has the prognostication of impending doom and global catastrophe on the basis of mathematical modeling been as widely accepted as today," Peiser noted in an April 18, 2007 presentation to European Parliament on climate change. "Ironically, these apocalyptic predictions of the future are politically sanctioned at the same time as a growing number of scientists are recognizing that environmental and economic computer modeling of an inherently unpredictable future is illogical and futile," Peiser said. "Over the last 10 years, the editors of the world's leading science journals such as Science and Nature as well as popular science magazines such as Scientific American and New Scientist have publicly advocated drastic policies to curb CO2 emissions. At the same time, they have publicly attacked scientists skeptical of the climate consensus," Peiser noted. (LINK)

Atmospheric scientist and hurricane expert Dr. Christopher W. Landsea NOAA's National Hurricane Center who served as a UN IPCC as both an author and a reviewer and has published numerous peer-reviewed research noted that recent hurricane activity is not linked to man-made factors. According to a February 23, 2007 article in Myrtle Beach Online, Landsea explained that "the 1926-1935 period was worse for hurricanes than the past 10 years and 1900-1905 was almost as bad." Landsea asserted that it is therefore not true that there is a current trend of more and stronger hurricanes. "It's not a trend, it's a cycle: 20-45 years quiet, 20-45 years busy," Landsea said. He did say that a warming world would only make hurricanes "5 percent stronger 100 years from now. We can't measure it if it's that small." The article said Landsea blamed Gore's *An Inconvenient Truth*, for "persuad[ing] some people that global warming is contributing to hurricane frequency and strength." (LINK) Landsea, who was both an author and a reviewer for the IPCC's 2nd Assessment Report in 1995 and the 3rd Assessment Report in 2001, resigned from the 4th Assessment Report after becoming charging the UN with playing politics with Hurricane science. "I am withdrawing because I have come to view the part of the IPCC to which my expertise is relevant as having become politicized. In addition, when I have

raised my concerns to the IPCC leadership, their response was simply to dismiss my concerns," Landsea wrote in a January 17, 2005 public letter. "My view is that when people identify themselves as being associated with the IPCC and then make pronouncements far outside current scientific understandings that this will harm the credibility of climate change science and will in the longer term diminish our role in public policy," he continued. "I personally cannot in good faith continue to contribute to a process that I view as both being motivated by pre-conceived agendas and being scientifically unsound," Landsea added. (LINK)

Atmospheric scientist Glen Shaw, a Professor of Physics at the Geophysical Institute at the University of Alaska Fairbanks, who was skeptical of global cooling fears in 1970s, now calls the current warming scare "massively political." Shaw noted in a April 22, 2007 article in *News Miner* that "a significantly large fraction of the science being done on global climate change is perhaps not wrong, but not enough, a little naive, repetitive and incorporating only a fraction of the complexity required to base policy on." "And the issue of global warming has become massively political. Special interests abound. Try getting funding while being a skeptic," he added. Shaw also explained how he ran up against the coming ice age scare three decades ago. "In the 1970s as a young scientist at the Geophysical Institute I wrote passionate letters complaining that for the first time in the geologic era man was changing the atmosphere of the planet. I argued that continued dumping of carbon dioxide into the atmosphere would be associated with a warming of the entire Earth and pled for attention to this matter. The letters were ignored. They were ignored because in the 1970s, *Newsweek*, the *Christian Science Monitor*, the *New York Times,* and countless books and articles were warning of the dangers of global cooling. Things have changed." Shaw concluded: "There is much more in climate science that we simply do not understand. Believe it or not, nobody has any sustainable theory, other than a few clues, about the causes of the ice ages. They are resonant with some of the orbital movements of the planets, but only roughly so and other things are going on that cause and end these spectacular events. We do not know." (LINK)

Geologist Dr. Lee C. Gerhard, past director and state geologist with the Kansas Geological Society and a senior scientist emeritus of the University of Kansas and a UN IPCC reviewer, debunked the notion that human C02 emissions are driving climate change. "Overall, the earth's climate has been cooling for 60 million years, but that is only an average -- temperature goes up and down constantly," Gerhard said in a January article in a *National Policy Analysis* publication. "Depending on the period in earth's history that is chosen, the climate will either be warming or cooling. Choosing whether earth is warming or cooling is simply a matter of picking end points," Gerhard stated. Gerhard also noted that C02 only represents about ¼ of one percent of the total greenhouse gas effect, "hardly a device to drive the massive energy system of earth's climate." (LINK) Gerhard also wrote on August 17, 2006: "I never fully accepted or denied the anthropogenic global warming (AGW) concept until the furor started after [NASA's James] Hansen's wild claims in the late 1980's. I went to the [scientific] literature to study the basis of the claim, starting at first principles. My studies then led me to believe that the claims were false, they did not correlate with recorded human history." Gerhard concluded that "the current climate changes were entirely explainable by geologic history." Gerhard has published more than 150 papers and authored the 2001 book "Geological Perspectives of Global Climate Change."

Climatologist Dr. Roy W. Spencer, formerly a senior scientist for climate studies at NASA's Marshall Space Flight Center where he received NASA's Exceptional Scientific Achievement Medal, and currently principal research scientist at the University of Alabama in Huntsville, questioned how much scientists really know about the climate. "CO2 concentrations - now running at 380 parts per million (ppm), up about 40 percent in the last century - are indeed one possible explanation for our current warmth. But we also know that our climate is a nonlinear, dynamic system - which can go through sizeable gyrations all by itself," Spencer wrote in a February 26, 2007 article in the *New York Post*. "The one atmospheric process that has the greatest control on the Earth's climate is the one we understand the least - precipitation," Spencer, currently a principal research scientist at the Global Hydrology and Climate Center of the National Space Science and Technology Center in Huntsville, Alabama, wrote. "In fact, for the amount of solar energy available to it, our climate seems to have a 'preferred' average temperature, damping out swings beyond one degree or so. I believe that, through various negative feedback mechanisms, the atmosphere 'decides' how much of the available sunlight will be allowed in, how much greenhouse effect it will generate in response, and what the average temperature will be," he concluded. Spencer has published more than two dozen scientific papers in peer-reviewed journals. (LINK)

Dr. Kelvin Kemm, formerly a scientist at South Africa's Atomic Energy Corporation who holds degrees in nuclear physics and mathematics, refuted climate alarmism in an op-ed titled "No scientific basis for global warming contention." Kemm was also honored with a 2003 National Science and Technology Forum Award for sustained outstanding contributions to Science and Technology. "The global-warming mania continues with more and more hype and less and less thinking. With religious zeal, people look for issues or events to blame on global warming," Kemm wrote in an April 27, 2007 op-ed in South Africa's *Engineering News*. "Former US Veep Al Gore is being totally simplistic in his movie by just saying that Mount Kilimanjaro's loss of ice-cap volume is a sign of global warming. Most of Al's movie exhibited the same absence of genuine science, and rather presented itself as part of an election campaign," Kemm explained, while noting that warming temperatures did not cause a ice-cap melt on Kilimanjaro. "It is also a scientific fact that there has been no measurable atmospheric warming in the region of Kilimanjaro. Satellites have been measuring the regional temperature since 1979 in the free troposphere between 1 000-m and 8 000-m altitude and they show no troposphere warming in that area. None. So what is causing the ice cap to melt? The answer appears to be trees, or rather lack of them," Kemm wrote. "...Since the locals have cut down so many trees over the last century, there is much less wet air moving up the mountain than there used to be, so less ice forms at the top," he added. (LINK)

Economist David Henderson, a Professor at the Westminster Business School and former Chief economist for the Organization for Economic Co-operation and Development, derided the UN IPCC process in a presentation in Brussels on April 18, 2007. "I believe that there is a problem of unwarranted trust in the IPCC process and in the role of the Panel itself, a problem which the *Stern Review* shows no awareness of. In peer-reviewed work that the IPCC has drawn on, the authors concerned have failed to make due disclosure of data, sources and procedures, and the IPCC has not required them to do so," Henderson said. Noting that he believed the IPCC "has acquired what is effectively a monopoly position," Henderson said the IPCC was "far from being a model of rigor,

inclusiveness and impartiality." "To begin with, the very idea of creating a single would-be authoritative fount of wisdom is itself open to doubt. Even if the IPCC process were indisputably and consistently rigorous, objective and professionally watertight, it is imprudent for governments to place virtually exclusive reliance, in matters of extraordinary complexity where huge uncertainties prevail, on a single source of analysis and advice and a single process of inquiry. Viewed in this light, the very notion of setting consensus as an aim appears as questionable if not ill-judged," he said. Henderson also dismissed the *Stern Review* as "a heavily biased, exercise in speculative alarmism" and urged governments to "think again" about the focus on C02 reductions. "Rather than pursuing as a matter of urgency ambitious and costly targets for curbing CO2 emissions, [governments] should take prompt steps to ensure that they and their citizens are more fully and more objectively informed and advised," he said. (LINK)

UN IPCC Contributing Author Dr. Aynsley Kellow is a former professor of Social Sciences of the Australian School of Environmental Studies at Griffith University who has presented papers to the Australian Academy of Science and co-authored the book *International Environmental Policy: Interests and the Failure of the Kyoto Process.* Kellow, who was a referee for Chapter 19 in the IPCC's fourth assessment report which covered "Key Vulnerabilities and Risk Assessment," questioned the premise of the IPCC's gloomy future predictions. “They [IPCC] really do emphasize the bad news. They’re looking for bad news in all of this,” Kellow said according to an April 23, 2007 article in Spiked-Online. "The IPCC is assuming rates of economic growth that dwarf the nineteenth-century success of the USA, the twentieth century in Japan and so on. The USA experienced, I think, a nine fold increase in GDP per capita; these are making assumptions about 30-fold increases. So you can question their credibility. But if you do that, you're questioning the emissions scenarios that are driving the climate models," Kellow said. “I’m not holding my breath for this criticism to be taken on board, which underscores a fault in the whole peer review process for the IPCC: There is no chance of a chapter [of the IPCC report] ever being rejected for publication, no matter how flawed it might be,” Kellow said. “The scientists are in there but it is, after all, called the *Intergovernmental* Panel on Climate Change. The scientists are there at the nomination of governments. Governments fund the exercise and sign-off on it ultimately,” Kellow said, noting the politicization of the process. Kellow also asserted that the whole Kyoto Protocol approach to greenhouse gas emissions does not favor developing nations. “The emphasis on CO2 suits largely post-1990 decarbonized European economies worried about justifying high levels of taxation, energy security policies and so on. It doesn’t suit those with ample coal supplies at a quarter of the cost of producing coal in Europe – which includes India and China. There’s a very European slant to Kyoto,” Kellow concluded. (LINK) & (LINK) & (LINK)

Harvard-Smithsonian Center Astrophysicist Dr. Willie Soon, co-author of the book *The Maunder Minimum and the Variable Sun-Earth Connection* (LINK), and chief science advisor to the Science and Public Policy Institute, authored a comprehensive November 2007 study that was published in the peer-reviewed journal *Physical Geography*. The study concluded: "[L]ong-term climate change is driven by solar insolation changes, from both orbital variations and intrinsic solar magnetic and luminosity variations... There is no quantitative evidence that varying levels of minor greenhouse gases like CO2 and CH4 have accounted for even as much as half of the reconstructed glacial-interglacial temperature changes or, more importantly, for the large variations in

global ice volume on both land and sea over the past 650 thousand years. ... [C]hanges in solar insolation at climatically sensitive latitudes and zones exceed the global radiative forcings of CO2 and CH4 by several-fold, and ... [therefore] regional responses to solar insolation forcing will decide the primary climatic feedbacks and changes." (LINK) **Soon also co-authored a November 2007 study that found mankind's emissions are not harming the atmosphere. The paper, co-authored with Dr. Art Robinson and Noah Robinson, was published in *Journal of American Physicians and Surgeons*** and was titled, "Environmental Effects of Increased Atmospheric Carbon Dioxide." The study reported: "A review of the research literature concerning the environmental consequences of increased levels of atmospheric carbon dioxide leads to the conclusion that in creases during the 20th and early 21st centuries have produced no deleterious effects upon Earth's weather and climate. Increased carbon dioxide has, however, markedly in creased plant growth." The study also found, "There are no experimental data to support the hypothesis that increases in human hydrocarbon use or in atmospheric carbon dioxide and other green house gases are causing or can be expected to cause unfavorable changes in global temperatures, weather, or landscape." (LINK)

CBS Chicago affiliate Chief Meteorologist Steve Baskerville expressed skepticism that there is a "consensus" about mankind's role in global warming. "What is the truth about global warming? As you have seen in this program, it depends on who you talk to. As decision makers ponder our future as it relates to climate change, we need to keep asking questions. Because an informed public should have a role in determining the ultimate truth about global warming," the Emmy Award winning Baskerville concluded in an April 28, 2007 TV special he hosted called "The Truth about Global Warming." Baskerville's climate TV special clearly portrayed the science as not settled on man's role in climate change as he featured interviews with prominent skeptics, including MIT climate scientist Richard Lindzen and environmental economist Dennis Avery, co-author of the 2006 book *Unstoppable Global Warming: Every 1500 Years*. (LINK)

Atmospheric scientist and hurricane expert Dr. Neil Frank, former director of the National Hurricane Center, dismissed fears of catastrophic man-made global warming. "It's a hoax," Frank told the *Washington Post* on May 28, 2006 regarding doomsday climate scenarios. According to the article, "[Frank] says cutting carbon emissions would wind up hurting poor people. I ask if he thinks more CO2 in the air would be a good thing. 'Exactly! Maybe we're living in a carbon dioxide-starved world. We don't know.'" Frank also lamented that the UN's IPCC does not reach out to many skeptics of global warming like himself. Frank has published a variety of professional papers on tropical meteorology and served the chairman of the International Hurricane Committee. (LINK)

Statistician Dr. Bjorn Lomborg, author of "The Skeptical Environmentalist" and professor at the Copenhagen Business School, questioned former Vice President Al Gore's scientific presentations. "But if we are to embark on the costliest political project ever, maybe we should make sure it rests on solid ground. It should be based on the best facts, not just the convenient ones," Lomborg co-wrote in a January 21, 2007 *Wall Street Journal* op-ed titled "Will Al Gore Melt?" Lomborg, who proclaimed he "has provided one of the clearest counterpoints to Mr. Gore's tune," accused Gore of "chicken[ing]" out of a debate. "But if we are to follow Mr. Gore's suggestions of radically changing our way of life, the costs are not trivial," Lomborg wrote. "In the year 2100, Mr. Gore will have left the

average person 30% poorer, and thus less able to handle many of the problems we will face, climate change or no climate change. Clearly we need to ask hard questions. Is Mr. Gore's world a worthwhile sacrifice? But it seems that critical questions are out of the question," he continued. "It would have been great to ask [Gore] why he only talks about a sea-level rise of 20 feet. In his movie he shows scary sequences of 20-feet flooding Florida, San Francisco, New York, Holland, Calcutta, Beijing and Shanghai. But were realistic levels not dramatic enough? The U.N. climate panel expects only a foot of sea-level rise over this century. Moreover, sea levels actually climbed that much over the past 150 years. Does Mr. Gore find it balanced to exaggerate the best scientific knowledge available by a factor of 20?" Lomborg wrote. "[Gore] considers Antarctica the canary in the mine, but again doesn't tell the full story. He presents pictures from the 2% of Antarctica that is dramatically warming and ignores the 98% that has largely cooled over the past 35 years. The U.N. panel estimates that Antarctica will actually increase its snow mass this century. Similarly, Mr. Gore points to shrinking sea ice in the Northern Hemisphere, but don't mention that sea ice in the Southern Hemisphere is increasing. Shouldn't we hear those facts?" Lomborg added. (LINK) Lomborg organized some of the world's top Nobel Laureates to form the 2004 Copenhagen Consensus which ranked the world's most pressing problems. The Copenhagen Consensus placed global warming at the bottom of the list in terms of our planet's priorities, behind combating disease, stopping malaria, securing clean water, and building infrastructure to help lift the developing nations out of poverty. (LINK)

Polar bear expert Dennis Compayre, formerly of the conservation group Polar Bears International, has studied the bears for almost 30 years in their natural habitat and is working on a new UK documentary about the bears. Compayre disputed fears of a potential global warming threat to polar bears. A December 7, 2007 article in the UK *Daily Mail* reported, "Dennis Compayre raises bushy grey eyebrows as he listens to the environmentalists predict the polar bear's demise. ‘They (environmentalists) say the numbers are down from 1,200 to around 900, but I think I know as much about polar bears as anyone, and I tell you there are as many bears here now as there were when I was a kid.'" According to the article, Compayre, who was born and raised in the Arctic town, "is among those who eye the new ‘experts' in town with deep suspicion. Compayre added, ‘Churchill [in Northern Canada] is full of these scientists going on about vanishing bears and thinner bears. They come here preaching doom, but I question whether some of them really have the bears' best interests at heart. The bear industry in Churchill is big bucks, and what better way to keep people coming than to tell them they'd better hurry to see the disappearing bears.'" The article also noted, "To some Churchill residents, who base their opinions on personal experience rather than fancy charts and computer models, [the polar bear's demise] is so much nonsense put about by scaremongers for their own dubious ends." (LINK)

David Dilley, founder of Global Weather Oscillations, Inc., rejects the idea of man-made global warming. Dilley's research found that the current global warming episode is a "Natural Recurring Cycle." "Dilley demonstrated that the current global warming episode is a ‘Natural Recurring Cycle,' and that this current cycle will begin to diminish as early as 2015, and no later than 2040," according to an April 6, 2007 press release. "Dilley's 15-years of ongoing climate research have uncovered a very powerful external forcing mechanism that causes shifts in regional weather cycles, and the world's climate. This forcing mechanism is called the ‘Primary Forcing Trigger Mechanism,' or

PFM. The PFM is a cyclical forcing mechanism that can be forecast years in advance, or even traced back through the earth's climate history. The major influence of the PFM on the earth's climate is that it causes the world's dominating regional high-pressure systems to shift position, or become displaced from their normal seasonal position," noted the press release on the website of Global Weather Oscillations. "Dilley states that the current global warming is without a doubt the result of a known external "natural" forcing cycle. According to Dilley, most government officials, climatologists and meteorologists are looking only at the increase in temperatures and carbon dioxide (CO2) levels over the past 50 to 100 years. But when you take into account nearly 40 other global warming episodes over the past 5 thousand years, it becomes very apparent that CO2 levels cannot be the forcing mechanism that has caused global warming," the press release stated. (LINK)

Biologist Josef Reichholf, who heads the Vertebrates Department at the National Zoological Collection in Munich, rejected climate fears and asserted global warming will be beneficial to humans and animals, particularly polar bears. Fears of mass species extinctions because of global warming are "nothing but fear-mongering, for which there is no concrete evidence. On the contrary, there is much to be said for the argument that warming temperatures promote biodiversity. There is a clear relationship between biodiversity and temperature. The number of species increases exponentially from the regions near the poles across the moderate latitudes and to the equator. To put it succinctly, the warmer a region is, the more diverse are its species," Reichholf said in an interview with *Der Spiegel* on May 8, 2007. Reichholf, a professor of ecology and conservation at both of Munich's two universities, and author of the book *A Short Natural History of the Last Millennium*, continued, "As recently as the 1960s, people were more concerned about a new ice age -- and that would indeed pose a great danger to us. The most catastrophic eras were those in which the weather became worse, not phases of warmer climates. Precisely because we have to feed a growing population on this planet, we should in fact embrace a warmer climate. In warmer regions it takes far less effort to ensure survival," he said. "How did the polar bear survive the last warm period? Seals are the polar bear's most important source of food, and the Canadians slaughter tens of thousands of them every spring. That's why life is becoming more and more difficult for polar bears, and not because it's getting warmer. Look at the polar bear's close relative, the brown bear. It is found across a broad geographic region, ranging from Europe across the Near East and North Asia, to Canada and the United States. Whether bears survive will depend on human beings, not the climate," he said. Fear of spreading malaria is also unfounded, according to Reichholf. "That's another one of those myths. Many people truly believe that malaria will spread as temperatures rise. But malaria isn't even a true tropical disease. In the 19th century, thousands of people in Europe, including Germany, the Netherlands and even Scandinavia, died of malaria, even though they had never gone abroad. That's because this disease was still prevalent in northern and central Europe in previous centuries. We only managed to eliminate malaria in Europe by quarantining the sick, improving hygiene and draining swamps. That's why I consider it virtually impossible that malaria would return to us purely because of climate change. If it does appear, it'll be because it has been brought in somewhere," he said. "There have been much faster climate fluctuations in the past, which did not automatically lead to a global extinction of species. As a biologist, I can tell you that only the fewest animals and plants are accustomed to rigid climate conditions," he added. (LINK)

Emmy award-winning Chief Meteorologist for an NBC affiliate Bill Meck, who has earned Seals of Approval from both the American Meteorological Society and the National Weather Association, questioned the notion that there is a scientific "consensus" about global warming. "If the science is 'clear,' and there is no more 'debate,' why is there still a tremendous amount of our tax dollars being allocated to research (and a PR campaign for that matter)? We don't still go around researching why the Earth is round, or why the sky is blue. If it's a done deal, why are folks still trying to justify or prove it?" Meck asked in a February 13, 2007 blog. (LINK) Meck, who produced a TV series called the "Global Warming Myth," praised the March 13, 2007 article in the *New York Times* for debunking much of the science presented in Gore's *An Inconvenient Truth*. "There are many wonderful nuggets of information to pull from [the *New York Times* article], but file away the bits about how there may not be the 'consensus of scientists' you so often hear about. Also check the info toward the end about the natural climate cycles. That is my contention all along. There have been natural climate cycles, always have, always will," Meck explained in a March 12, 2007 blog. "Also take note how there are very few times when the temperature hangs around the 'average', it's either warm or cold balancing out as an 'average'. Our current warming began at the end of the Little Ice Age, just over 100 years ago, when it was REALLY cold. Our current warm spell is simply balancing it out. Now go enjoy the 70's in March, guilt free!" he wrote. (LINK)

Dr. Martin Hertzberg, a retired Navy meteorologist with a PhD in physical chemistry, distrusts climate computer models and believes the models do not adequately account for water in the atmosphere. According to the May 14, 2007 issue of *The Nation* magazine, Hertzberg said water in the form of oceans, snow, ice cover, clouds and vapor "is overwhelming in the radiative and energy balance between the Earth and the sun.... Carbon dioxide and the greenhouse gases are, by comparison, the equivalent of a few farts in a hurricane." The article explained Hertzberg's views: "Water covers 71 percent of Earth's surface. Compared with the atmosphere, there's 100 times more CO2 in the oceans, dissolved as carbonate. As the post-glacial thaw progresses the oceans warm up, and some of the dissolved carbon emits into the atmosphere, like fizz from soda." Hertzberg is quoted saying, "The greenhouse global warming theory has it ass backwards. It is the warming of the Earth that is causing the increase of carbon dioxide and not the reverse." The article noted, "In vivid confirmation of that conclusion, several new papers show that for the last 750,000 years, CO2 changes have always lagged behind global temperatures by 800 to 2,600 years." (LINK) & (LINK)

Climate scientist Dr. Oliver W. Frauenfeld, a co-author of the 2005 book *Shattered Consensus: The True State of Global Warming* and a research scientist at the Cooperative Institute for Research in Environmental Sciences Division of Cryospheric and Polar Processes at the University of Colorado, questions the accuracy of climate models. "Without question, much more progress is necessary regarding our current understanding of climate and our abilities to model it. Before we can accurately understand the midlatitudes' response to tropical forcing, the tropical forcings themselves must be identified and understood," Frauenfeld wrote in "Shattered Consensus." Frauenfeld, a Contributing Author to the IPCC Working Group 1 Fourth Assessment Report, added, "Only after we identify these factors and determine how they affect one another, can we begin to produce accurate models. And only then should we rely on those models to shape policy. Until that time, climate variability will remain controversial and uncertain." (LINK)

Geologist David Archibald of Summa Development Limited in Australia wrote a scientific paper titled "Solar Cycles 24 and 25 and Predicted Climate Response" in *Energy and Environment* in 2006 (LINK) showing that solar cycles are more important than C02 levels. In a May 2007 updated paper, "The Past and Future of Climate" Archibald predicts an "imminent cooling" by 2030 based on solar cycles states. "Most rural temperature records in the United States were set in the 1930s and 1940s. Greenland had its highest recorded temperatures in the 1930s and has been cooler since," Archibald wrote. "The 1.5° temperature decline from the late 1950s to the mid-70s was due to a weak solar cycle 20 after a strong solar cycle 19," Archibald explains. Archibald also noted that the Medieval Warm Period was originally recognized by the UN IPCC to have been warmer than current temperatures, but it "become inconvenient to the IPCC, so they haven't mentioned it since." Archibald asserted, "Anthropogenic warming is real, it is also miniscule." He explained, "Since the beginning of the Industrial Revolution, increased atmospheric carbon dioxide has increased the temperature of the atmosphere by 0.1°." "There is no correlation in the geologic record between atmospheric carbon dioxide and global temperature. The Earth went into an ice age 450 million years ago despite a level of atmospheric carbon dioxide that is ten times what it is today," Archibald wrote. "There are no deleterious consequences of higher atmospheric carbon dioxide levels. Higher atmospheric carbon dioxide levels are wholly beneficial," he added. "Anthropogenic Global Warming is so miniscule that the effect cannot be measured from year to year, and even from generation to generation," he concluded. (LINK)

Physics professor Kjell Aleklett of the Department of Radiation Sciences and the Uppsala Hydrocarbon Depletion Study Group at Uppsala University in Sweden asserts that severe climate change is unlikely before the Earth runs out of fossil fuels. Writing in a June 5, 2007 post at Australia's Online Opinion, Aleklett suggests that "the combined volumes of these fuels are insufficient to cause the changes in climate." Aleklett believes that "compared with what has been previously asserted, we are going to be much better off in terms of carbon dioxide emissions" because the Earth is nearing "the maximum production rate for oil, or 'Peak Oil.'" He concludes by noting "we must discuss and dispute the temperature increases that the IPCC-families indicate and the fossil fuel resources that the IPCC uses in its prognoses. We need new estimates of future temperature increases based on realistic expectations of oil, natural gas and coal use. Only then can we make sensible decisions for our future. The world's greatest future problem is that too many people must share too little energy." (LINK)

Anthony Watts, former meteorologist for KHSL-TV, a CBS-TV affiliate in Redding, California, has examined 460 of the 1221 official climatic weather stations in the 48 lower states, and discovered multiple irregularities that are causing temperature data to skew higher than it should. Watts, who publishes a website devoted to investigating surface stations, (LINK) believes his research casts doubt on NOAA's current and historical temperature data reports. "I believe we will be able to demonstrate that some of the global warming increase is not from CO2 but from localized changes in the temperature-measurement environment," Watts told the *Pittsburgh Tribune-Review* on June 17, 2007. Watts examined temperature stations that the National Oceanic & Atmospheric Administration's (NOAA) uses as part of its National Climatic Data Center. The NCDC has about 1,221 mostly rural weather observation stations around the country. Watts, who founded the web site surfacestations.org, has made it his mission to quality check weather

stations to see if the data is being accurately captured. (LINK) Watts noted one such weather station in California was "surrounded by asphalt and concrete, its also within 10 feet of buildings, and within 8 feet of a large metal cell tower that could be felt reflecting sunlight/heat. And worst of all, air conditioning units on the cell tower electronics buildings vent warm air within 10 feet of the sensor." Watts concluded, "I can tell you with certainty, the temperature data from this station is useless." Watt's extensive data research was noted by Meteorologist Joseph Conklin on August 10, 2007: (LINK) "The (U.S.) National Climate Data Center (NCDC) is in the middle of a scandal. Their global observing network, the heart and soul of surface weather measurement, is a disaster. Urbanization has placed many sites in unsuitable locations - on hot black asphalt, next to trash burn barrels, beside heat exhaust vents, even attached to hot chimneys and above outdoor grills! The data and approach taken by many global warming alarmists is seriously flawed. If the global data were properly adjusted for urbanization and station siting, and land use change issues were addressed, what would emerge is a cyclical pattern of rises and falls with much less of any background trend." (LINK)

Dr. Wilson Flood, of the Royal Society of Chemistry and a chemistry education consultant, wrote that it is an "unproven hypothesis that rising greenhouse gas levels are largely responsible for climate change" in a June 27, 2007 letter to the *Scotsman* newspaper. "Further Met Office data also shows that global temperatures have actually fallen slightly in the last decade and have shown no statistically significant rise since 1990. Just to cap it all, NASA studies show that atmospheric levels of the greenhouse gas methane are falling, not rising. All of the above are easily verifiable and fly in the face of the conventional wisdom. But, hey, we shouldn't let a few inconvenient facts get in the way of what politicians believe, should we?" Flood wrote. (LINK) In the May 2006 edition of *Education in Chemistry*, Flood explained, "Of all the scientific disciplines, chemistry equips us best to grasp the essentials of the global warming debate. After all global warming comes down to the absorption of infrared radiation by organic molecules, coupled with the mole concept which allows us to convert tonnes of fossil fuels into tonnes of carbon dioxide." Flood continued, "Those claiming that the effects of global warming from additional greenhouse gases can already be detected, I believe, are deluding themselves. It would take 5.5Wm-2 to produce a rise of 1K and an 11K rise (sometimes claimed) would need a massive 55W of additional energy for every square metre of the Earth's surface. There simply is not that amount of energy available still to be absorbed from the Earth's spectrum, most of which is largely saturated anyway owing to absorption by carbon dioxide and water vapour." Flood said, "Those who promote apocalyptic global warming claim that the sensitivity is much higher than 0.18K, some claiming 0.75K and even 1.5K.6 These claims are mainly based on a postulated magnifying effect of water vapour but, from a consideration of infrared absorption spectroscopy in relation to the spectrum emitted by a body at 288K, it is not clear how such large values can be achieved." Flood concluded by noting that the proponents of a climate catastrophe are out "to frighten the population." (LINK)

Senior Meteorologist Peter McGurk, with WSI Corporation, a provider of weather-driven business solutions to such clients as CNN, FOX, NBC, American Airlines, Delta, and FedEX, and formerly a Senior International Meteorologist for the former Weather Services Corporation, dismissed fears of "a global Armageddon in the making." After analyzing temperature data for U.S. states, McGurk, who holds a Master of Science

degree in Geophysics from the University of Chicago, explained in a June 29, 2007 report, "As far as extreme maxes are concerned, not only is the overall average greater during the first half of the last century, but 2/3 of the monthly averages are also greater during the period 1900-1949. Only for the months of March, June, October and December were they warmer during the period 1950-1999." McGurk concluded, "I suspect that if we were truly headed for a Global Meltdown, that this data would vastly different than it is currently. Namely, we would be seeing many more record state maxes occurring more frequently during the recent past that the distant past. Additionally, we should not be seeing more state record extreme mins set during the second half of the past century." He added, "For 3 out of the four seasons there were more record maxes during the first half of the last century and more record mins during the second half of the 1900s. From an extreme state monthly record perspective, hardly a global Armageddon in the making." (LINK) & (LINK) " I don't feel that climate modeling is advanced enough to tell us with any degree of certainty what our planet's climate will be like one to three centuries from now. While I agree that there may have been some slight global warming during the past 150 years, there is still plenty of scientific debate as to what factors are responsible. Certainly the human race does influence the climate here on Earth, but we cannot say with any certainty to what extent this influence is when compared to other natural cycles of climate variability," McGurk wrote in a May 18 e-mail to EPW.

Chief Meteorologist Tom Chisholm of WMTW ABC Portland, Maine, who has also been on camera on The Weather Channel, wrote in an e-mail to EPW, "Variable processes in nature exist on a continuum. Any statement, concluding an absolute fixed state of variable, dissipative structures is folly." Chisholm continued, "This is true concerning accelerating and deaccelerating mathematical equations representing the earth's heat budget. Initializing an absolute measure of the earth's energy is impossible. Therefore, ‘computer models' that global warming pundits exercise and represent as predictively accurate, over long periods of time are, at best, suspect." (LINK)

Atmospheric Scientist Ross Hays of NASA's Columbia Scientific Balloon Facility, in Palestine, Texas, declared himself a skeptic. "My belief is the planetary climate system is an ever changing and evolving one. The climate and geological state of the earth did not develop to this point and time and stop the clock," Hays wrote in a May 18, 2007 e-mail to EPW. Hays, who authored a study on African waves and their development into tropicalkin cyclones, continued, "The climate and the shape of our continents will continue to change. Yes we are in a cycle of warming, and we should protect our planet from pollution, but we will continue to go through cycles and changes no matter what. In the future there will be another cooling phase as our climate continues to take its sinusoidal trek through history."

Senior Meteorologist Jeff Halblaub of WSI Corporation which provides weather-driven business solutions to such clients as CNN, FOX, NBC, American Airlines, Delta, and FedEX, rejected man-made global warming fears. "It is my firm belief that the United Nations Intergovernmental Panel on Climate Change, politicians, some scientists, multinational corporations, environmentalists, moviemakers, and news media are making false claims regarding the effects of humans on the atmosphere," Halblaub wrote in a May 18, 2007 e-mail to EPW. "As recently as three decades ago, Newsweek Magazine reported cataclysmic climate damage would occur from "global cooling." Satellite

observations, which survey the entire Earth (which is mostly water), show no temperature change at all since the late 1970s. Mankind changes climates on small scales through urban sprawl and other land-use modifications; human impact on global temperatures is miniscule compared to atmospheric, oceanic, geologic, and solar anomalies and phenomena," Halblaub wrote. "Carbon Dioxide is a 'trace gas.' Per unit volume, CO2 is not even one tenth of one percent of the gases present. Water vapor is up to 114 times more abundant than CO2. It has a much greater effect as a greenhouse gas. In truth, climate researchers are taking a very small increase in CO2 and projecting it into the future using climate models. These models cannot even reproduce past climates. The results of these modeling studies are overinflated and inaccurate temperature increases. The 'debate' on human-induced global warming is not over; there never was any. The 'science' was decided before the research ever began," he added.

Climatologist Robert Durrenberger, past president of the American Association of State Climatologists, and one of the climatologists who gathered at Woods Hole to review the National Climate Program Plan in July, 1979, rejected man-made climate fears. Durrenberger says Gore's "misinformed" scientific assertions motivated him to get actively involved in the climate debate. "Al Gore brought me back to the battle and prompted me to do renewed research in the field of climatology. And because of all the misinformation that Gore and his army have been spreading about climate change I have decided that 'real' climatologists should try to help the public understand the nature of the problem. I hope by writing a book that I have contributed to the effort to combat the 'alarmists' who are trying to harm this country," Durrenberger wrote to EPW on May 19, 2007. "Put me on the list of skeptical members," Durrenberger, who is also a meteorologist, wrote. He also served as a member of a science panel for the National Academy of Sciences.

Meteorologist John Coleman, Founder of The Weather Channel and former meteorologist for ABC's Good Morning America, slammed the "recent political hype and media frenzy" about man-made global warming fears. "The recent political hype and media frenzy about 'Global Warming' is, in my studied opinion, an unprecedented episode of mass extremism and silliness," Coleman wrote in a May 19, 2007 email to EPW. "I believe that fifty years from now, serious scientists, political leaders and news editors will look back with astonished embarrassment at the irresponsibility of their predecessors. Its not that the Earth's atmosphere isn't somewhat warmer in 2007 than it was in 1907. It is. It is not that mankind's civilization isn't contributing to warming. It is. But the recent warming trend is not extreme or wildly accelerating or irreversible or destined to destroy our way of life. As I see it, the predictions of future catastrophic consequences of warming are totally without foundation," Coleman explained. "Much of what minor warming has been underway in recent years is the result of natural fluctuations in the heat output of the Sun and from other natural cycles. Much of the man made warming is from Urban Heat Islands and is well documented. Many other human activities from agriculture to aviation are having some impact on climate. These changes are worthy of study, reasonable concern and corrective action. All of that is taking place. But as for the dire predictions that dominate the political and media coverage today, there are serious doubts in my mind about their validity," he continued. "The historic data on which many of the 'studies' are based seems to have been selected and massaged to produce the investigators biased predetermined conclusions. And, the notion that the historic measurements are accurate

within less than a degree of two is questionable. The old instruments were crude by any modern standards. And inference of past temperatures from other environmental traces seem to me to be subject to significant error. All computer forecast models require a basic set of assumptions. In many cases the bias of the investigators seem to have produced assumptions that have little reasonable basis," he concluded. (LINK)

Chief Meteorologist Bob Breck of WVUE-TV in New Orleans rejected man-made climate fears. "As you well know, those of us older than 50 recall the same type of scare tactics back in the late 60s & 70s. The 'consensus' of scientists back then were warning of global cooling and the possible beginning of a new Little Ice Age. How could so many brilliant scientists have been so wrong?" Breck wrote to EPW on May 20, 2007. "The new (translation-younger) 'consensus' of scientists want you to believe that they have better data, that they have computer modeling and (worse yet) they're smarter! They want us to believe that the current warming will continue forever, yet there is nothing in the climatological history of our planet that indicates this will be the case. On the contrary, there is ample evidence to explain the current warming, that CO2 is NOT the driver, and that other factors (deep ocean current cycles, solar energy fluctuations) are more responsible," Breck explained. "The media has decided that the facts, other than carbon dioxide being the driver, are not sexy enough to warrant any coverage. I hope there are enough members of Congress who remember the global cooling scare of 30-40 years ago," Breck concluded.

Atmospheric scientist Bruce Schwoegler, former U.S. Navy meteorologist and Boston broadcast meteorologist, rejected man-made climate fears. "It is my contention that too many variables cloud the global warming broth that has boiled over. A rational approach and lower setting on the hot stove political and media agenda is in order," Schwoegler wrote to EPW on May 29, 2007. Schwoegler, who was awarded the American Meteorological Society's Outstanding Broadcast Meteorologist service award, is also an investigator with an international team studying environmental impacts of a Caribbean volcano. "Yes, significant global warming is a concern, and there is a likely relationship between human induced impacts and climate change. But has anyone truly ascertained the scope, depth and outcome in our planetary system which is rife with natural checks and balances? Quantifying them and resultant interactions remains mostly a game of my theory versus yours," he explained. "Urbanization's heat islands, volcanic activity, solar fluctuations, historical climate cycles, oceanic and green canopy carbon budgets and the magnitude of artificial irrigation are but a few of the more blatant examples of puzzle pieces not yet in place. Even proliferating aircraft contrails and changes in measuring techniques and sites must be considered. All comprise a cloudy soup that should be set to low as I am not yet prepared to eat," he concluded.

NASA consultant and former space shuttle engineer John L. Casey of the Florida based Verity Management Services Inc. (VMS), has found solar influences on the climate dominate. An April 3, 2007 press release from VMS touted "A new theory for how the sun contributes to the heating and especially the cooling of the Earth." The release from Casey, who has conducted satellite launch studies for the U.S. Department of Defense, explained, "Discovered in the process of doing research into a book on natural disasters he is writing, the theory uncovered by Casey has identified two important cycles of the sun. One is between 90 and 100 years long and another 207 years long, that he says are the

primary cycles for weather patterns in the US and possibly around the globe. ‘The surprise,' said Casey ‘was the near 100% match between low temperatures and solar activity lows between now and as far back as 900 AD. A correlation this strong is rare and exciting. The data is reliable enough for me to call an end to the current 207 year or ‘Bi-Centennial' cycle with the next solar sunspot period, and with it the start of a new period of declining temperatures.' If the theory's fundamental cycles play out as he predicts, over the next ten years we will be well on our way into a global cool down. He estimates by the peak of the next solar sunspot cycle which he calculates for the year 2012, there should be strong signs the cooler period has started in accordance with the relational cycle theory. He also says signs of a Bi-Centennial cycle changeover are already occurring although modestly. His observations are based on lower sunspot counts and year to year comparisons between 2006 and 2007."

Meteorologist Larry Cosgrove said on Fox News Channel on January 19, 2007, "I do not espouse the global kool-aid line of the American Meteorological Society. Now, I like many people, believe in global warming. You can't refute that. Temperatures are warming around the globe. But, the question is what's causing it. Is it purely man made as the American Meteorological Society and [the Weather Channel's Dr. [Heidi] Cullen espouse or is it a combination of events, namely what's happening on the earth and ‘some help' so to speak, from man kind?" (LINK)

Nuclear Scientist Dr. Michael R. Fox, who holds a PhD in Physical Chemistry and is a science analyst for the Grassroot Institute of Hawaii, dismisses global warming "hysteria." "Regrettably, the current hysteria about global warming is based much more on fear, political agendas, and computer models that don't agree with each other or the climate, rather than hard-nosed evidence and science. The climate forces which have led to the estimated 0.6C degree temperature increase over the past 100 years or more (according to the International Panel on Climate Change) have been assumed to be man-made CO2 emissions from advanced nations including the U.S. We know this can't be true for several reasons," Fox wrote on July 18, 2007. "The first is that water vapor provides 95 percent of the total of the greenhouse gases, not CO2. The total of the CO2 represents less than 3 percent of the total. The second is that of the total atmospheric CO2 inventory, the manmade fraction is less than 3 percent of the CO2 total and therefore far less than 1 percent of the total greenhouse gas inventories. Third, studies of the recent climate variations are finding, for example, (See article by J. Oestermans, Science, p. 375, April 29, 2005) that glaciers have been receding since 1750 or so, well before any significant man-made CO2 emissions occurred. The mid 1700s were at the very depths of the Little Ice Age, which we have learned was the coldest climate over the last 5000 years. Obviously, other warming forces were at work before humans had anything to do with it. Now we have learned much more based upon observations of cosmic radiation, their sources, and the sun's magnetic fields, combined and new discoveries in the laboratory. A new and more comprehensive understanding of our planetary environment has emerged. This gives us a scientifically defensible explanation of both global warming and cooling," Fox explained. "Thanks to some recent excellent experimental work in physics by those such as Danish scientist Henrik Svensmark, we now know that cosmic rays and some of the debris from nuclear collisions with atoms in the atmosphere are directly involved with the initiating mechanisms of cloud formation. Basically, the more cosmic rays, the more clouds are formed and the cooler the temperature. Since many of the cosmic rays can be deflected by

the Sun's magnet field, the cosmic ray intensity varies inversely with the strength of that field. The stronger the solar magnetic field, the fewer cosmic rays hit the atmosphere, fewer clouds are formed, and the climate becomes warmer. Today the sun's magnetic field is more than twice as strong as it was at the turn of the last century. During the mid 1700s during the Little Ice Age there was a 70 year period when there were no sunspots (called the Maunder Minimum), and the solar magnetic field was very weak," Fox added. "What lies ahead are some exciting times in climate physics and our understanding of the environment. Unexplained findings in geological and climate histories are now being explained by these new lines of inquiry. It appears that the Sun's magnetic field has had a stronger effect on our climate than just the variations in solar irradiance could explain. Political leaders, environmental advocates, and even Oscar-winning documentarians who claim that "the debate of climate science is over" have been shown once again to be very wrong," he concluded. (LINK)

Biologist Dr. Jennifer Marohasy, who has been a field biologist in remote parts of Africa and Madagascar and published in international and Australian scientific journals, dismisses climate fears. "I've always considered it somewhat pretentious to believe humans can actually stop climate change, given the earth's climate has always changed," Marohasy wrote on May 25, 2007 in an article entitled "Cooling Heels on Global Warming." (LINK) She also critiqued Gore's presentation of climate science. "Never once during this so-called documentary does Gore acknowledge that there is potential for an alternative thesis on global warming and the role of carbon dioxide. All dissent is met with ridicule and/or name calling. Al Gore certainly doesn't appear to understand the potential value of hypotheses testing. Instead Gore reduces global warming to a moral issue and a contest between the good guys, which according to Gore includes all of the world's climate scientists, and the so-bad so-called skeptics, who he suggests are all hired guns," Marohasy wrote on September 16, 2006. (LINK) She has also stated, "As a consequence of the burning of fossil fuels, atmospheric carbon dioxide levels are currently increasing. There is no evidence, however, to suggest this will bring doom or that, by signing the Kyoto Protocol, Australia would make a significant difference to global carbon dioxide levels or to the rate of climate change." (LINK)

Professor Dr. William J.R. Alexander, Emeritus of the Department of Civil and Biosystems Engineering at the University of Pretoria in South Africa and a former member of the United Nations Scientific and Technical Committee on Natural Disasters, rejected the so-called "consensus" view on global warming. "Mix Al Gore, polar bears, Kilimanjaro, Katrina, the Royal Society, the Stern Review, the 2000 IPCC scientists and what do you get - the end of the world. Should we in Africa start digging our graves or make reservations at the crematorium? Or should we challenge the doomsday scenarios?" Alexander wrote in a May 1, 2007 report. "The claimed increases in surface air temperature resulting from global warming are less than those between breakfast and morning tea on a sunny day. In our part of the world they are also considerably less than those experienced when moving in and out of the shade on a cloudless day," Alexander explained. "Acting under political pressures of their own making, northern hemisphere scientists have allowed themselves to be forced into a claustrophobic position from which there is no escape. They are now desperately trying to convince the rest of the world of the catastrophic terrestrial consequences of global warming. In the absence of believable evidence of the claimed consequences, they are exercising dangerous practices of attempting to suppress all

research that questions human causality. The reprehensible edicts of the Royal Society, the patently dishonest Stern Review and the pompous attempts to prevent the distribution of the DVD on the climate change swindle are evidence of the desperate situation in which the doomsday advocates find themselves," he added. Alexander also expressed concerns that any so-called "solutions" to global warming will harm the poor. "The World Trade Organization has failed in its attempts to lift trade restrictions imposed by affluent countries. In a recent development, some UK organizations have reduced the importation of perishable agricultural products from Africa using the excuse that this will reduce air pollution. Now the developed countries have the audacity to expect African countries to bow to their pressures based on corrupt science and broken promises of aid, in order to save the world from their imaginary doomsday scenarios. We are not that stupid," he concluded. (LINK) Alexander co-authored a June 2, 2007 paper entitled "Linkages between solar activity, climate predictability and water resource development" with **Solar system researcher Frederick Bailey, Hydrogeologist Dr. David B Bredenkamp, Chemical engineer Dr. Alwyn van der Merwe and engineer Nico Willemse.** The paper read in part: "The analysis of this data demonstrates an unequivocal synchronous linkage between these processes in South Africa and elsewhere, and solar activity. This confirms observations and reports by others in many countries during the past 150 years. It is also shown with a high degree of assurance that there is a synchronous linkage between the statistically significant, 21-year periodicity in these processes and the acceleration and deceleration of the sun as it moves through galactic space. Despite a diligent search, no evidence could be found of trends in the data that could be attributed to human activities." (LINK)

Geologist Dr. Cliff Ollier, a Research Fellow at the University of Western Australia, has worked internationally as a geologist, geomorphologist, and soil scientist, and has authored ten books and over 300 publications. Ollier dismissed fears of Greenland and Antarctic ice melts in an October 21, 2007 report entitled "THE GREENLAND-ANTARCTICA MELTING PROBLEM DOES NOT EXIST." Ollier debunked fears of a meltdown promoted by NASA's James Hansen. "Hansen is a modeller, and his scenario for the collapse of the ice sheets is based on a false model," Ollier wrote. "Hansen has a model of an ice sheet sliding along an inclined plane, lubricated by meltwater, which is itself increasing because of global warming. The same model is adopted in many copy-cat papers. Christoffersen and Hambrey (2006) and Bamber et al. (2007). A popular article based on the same flawed model appeared in the June 2007 issue of National Geographic, and the idea is present in textbooks such as The Great Ice Age (2000) by R.C.L. Wilson et al.," Ollier explained. "Hansen's model, unfortunately, includes neither the main form of the Greenland and Antarctic Ice Sheets, nor an understanding of how glaciers flow. The predicted behaviour of the ice sheets is based on melting and accumulation rates at the present day, and on the concept of an ice sheet sliding down an inclined plane on a base lubricated by meltwater, which is itself increasing because of global warming. The idea of a glacier sliding downhill on a base lubricated by meltwater seemed a good idea when first presented by de Saussure in 1779, but a lot has been learned since then," he added. "It is not enough to think that present climate over a few decades can affect the flow of ice sheets. Ice sheets do not simply grow and melt in response to average global temperature. Anyone with this naïve view would have difficulty in explaining why glaciation has been present in the southern hemisphere for about 30 million years, and in the northern hemisphere for only 3 million years," Ollier continued. "Some of the present-day claims

that ice sheets ‘collapse' are based on false concepts. Ice sheets do not melt from the surface down - only at the edges. Once the edges are lost, further loss depends on the rate of flow of the ice. The rate of flow of an ice sheet does not depend on the present climate, but on the amount of ice already accumulated, and that will keep it flowing for a very long time. It is possible that any increase in temperature will cause increased snowfall thereby nourishing the growth of the ice sheet, not diminishing it," he wrote. "The global warming doomsday writers claim the Greenland and Antarctic ice sheets are melting catastrophically, and will cause a sudden rise in sea level of 5 or more metres. This ignores the mechanism of glacier flow which is by creep. Glaciers are not melting from the surface down, nor are they sliding down an inclined plane lubricated by meltwater. The existence of ice over 3 km thick preserving details of past snowfall and atmospheres, used to decipher past temperature and CO2 levels, shows that the ice sheets have accumulated for hundreds of thousands of years without melting. Variations in melting around the edges of ice sheets are no indication that they are collapsing. Indeed ‘collapse' is impossible," he concluded. (LINK)

Atmospheric scientist William R. Kininmonth, who headed Australia's National Climate Centre from 1986 to 1998 and coordinated the scientific and technical review of the 1997-98 El Niño event for the World Meteorological Organization and its input to the United Nations Task Force on El Niño, rejected man-made climate fears and asserted warming is natural. "How often does it need to be said that CO2 is a colourless, odourless gas whose only detrimental characteristic is to form a very weak acid (carbonic acid) when dissolved in water. On the other hand, CO2 is an essential component of photosynthesis: Increased CO2 in the atmosphere is an effective fertiliser of the biosphere as shown by horticulturalists artificially increasing the CO2 content within glasshouses. CO2 is NOT a pollutant," Kininmonth said in a May 30, 2007 article. "There is every reason to believe that increasing CO2 in the atmosphere will have no significant impact on the climate system. The greatest impact of atmospheric CO2 on the earth's radiation budget was the first 20 ppmv. After this concentration the source of IR radiation to space from the active CO2 radiation bands was in the stratosphere, where temperature does not change as the emanation goes to higher and higher altitudes with increasing concentration," Kininmonth explained. "There is every reason to believe that earth is near an upper temperature limit given its present distribution of land and ocean and the strength of solar irradiance. The earth's surface is heated by way of solar radiation and back IR radiation emanating from clouds, greenhouse gases and aerosols; it is cooled by conduction, evaporation and IR emission. Solar radiation and conduction are essentially constant and the earth's surface temperature will vary according to increasing back IR radiation (radiation forcing from CO2 and water vapour) being offset by surface IR emission and latent heat of evaporation," he added. "AGW (anthropogenic global warming) is a fiction and a very dangerous fiction," he concluded. (LINK) On June 1, 2007, Kininmonth wrote, "Not only is it speculative to claim that humans can in any way influence the course of climate but it is arrogant to suggest that today's climate is getting worse than it has been in the past. For example, who would prefer to return to pre-industrial conditions as they were during the Little Ice Age? Frost Fairs were common on many rivers of Europe and the London diarist John Evelyn records that in 1683-84 the Thames River froze from late December to early February. Conditions were terrible with men and cattle perishing and the seas locked with ice such that no vessels could stir out or come in. The fowls, fish and exotic plants and greens were universally perishing. Food and fuel were exceptionally dear

and coal smoke hung so thickly that one could scarcely see across the street and one could scarcely breathe." (LINK)

Economist Des Moore, former deputy secretary of the federal Treasury in Australia and current director of the Institute for Private Enterprise, debunked the UK Stern Report's claims that it is cheaper to act now to confront global warming. "I take a position similar to the Dual Critique of the Stern Review by 14 well-qualified scientists and economists. Their conclusion was that the Review is "flawed to a degree that makes it unsuitable ... for use in setting policy". I also agree with the not dissimilar conclusion on the IPCC's February report by ten qualified economists and scientists, including Australian meteorologist, William Kininmonth, in a February 2007 publication by Canada's Fraser Institute," Moore wrote in a April 29, 2007 report entitled "How Big Can Global Carbon Markets Get?" "Modelling of possible outcomes reflect assumptions that are not necessarily correct about the weightings given to possible influences, or about the simplifications of highly complex human relationships. My analyses of past scientific predictions also suggest to me that, when looking to the future, science faces modelling problems similar to economics and has made as many if not more erroneous predictions," Moore explained. "[The UN IPCC Summary for Policymakers] concluded that it is 90 per cent certain that most of the recent warming is due to increased human activity. However, as two Australian economists have pointed out, 90 per cent certainty is the weakest acceptable level of confidence in a hypothesis test. Moreover, the Summary for Policymakers published by the IPCC on 6 April claims only an 80 per cent chance that warming has caused many of the perceived adverse environmental affects," Moore wrote. "Although there has been an increase in average global temperatures of about 0.6 a degree over the past 100 years, historical evidence suggests that temperature levels have been as high if not higher in periods in the past and that this did not then have adverse effects on societies. Indeed, rather to the contrary: significant economic and other advances seem to have occurred in past warm periods," he concluded. (LINK)

Geologist Bob Foster, director of the Lavoisier Group in Australia denounced the UN IPCC reports. "Belief in the mythical stability of past climate has, as its equally-implausible corollary, belief that 'doing the right thing' about greenhouse gas emissions can ensure a stable future climate," Foster wrote in a May 22, 2005 article. "IPCC's hypothesis of a people-driven climate is said to represent the consensus of 2,500 of the world's top climate scientists; and it has been embraced unquestioningly by Australia's governments, Federal and State. The Mediaeval Warm Period and Little Ice Age have been abolished; and IPCC ostentatiously promotes the 'Mann Hockeystick' - a thousand-year temperature graph purporting to show a stable pre-industrial climate (handle), disturbed only now by humans burning fossil fuels (blade)," Foster wrote. "The Kyoto Protocol is but King Canute's first step toward impoverishing the world for no attainable purpose. But an alternative hypothesis offers two natural drivers for our ever-changing climate. Both have an underlying solar/planetary pace-maker, although via very different mechanisms. Humans can't control the Sun and planets - or climate," he added. (LINK)

Global warming author and engineer Ray Evans, one of the founders of the Australian Lavoisier Group, published "Nine Facts About Climate Change" in February 2007. "Environmentalism has largely superseded Christianity as the religion of the upper classes in Europe and to a lesser extent in the United States," Evans writes in his

publication. "It is a form of religious belief which fosters a sense of moral superiority in the believer, but which places no importance on telling the truth," he says. "The science from the anthropology point of view has collapsed. The carbon-dioxide link is increasingly recognised as irrelevant," Evans wrote. "CO2 only has a limited greenhouse effect in the atmosphere," he argues. "A 'saturation effect' makes the carbon dioxide reduction road to salvation a 'completely futile and irrational exercise in faith'" he says. (LINK) On March 26, 2007, Evan further explained his views. "What is of very great importance to us now is to look for explanations as to why institutions such as the CSIRO so easily and carelessly abandoned reason, and decided to go with the faith alone crowd," he said. "We have quite a way to go before reason can overcome hysteria in this debate," he added. (LINK)

Meteorologist Rob Roseman of Colorado, who earned a Masters degree in Meteorology, expressed man-made global warming skepticism in 2007. "I don't think [global warming] is man-made. I could give you, and will give you, just a couple of examples of -- by way of questions -- that will make people question why they think it's man-made. For some reason we as humans have a tendency to want to believe things that are popular in the media rather than just, say, listen to all of the scientists. Number one, it is not settled science -- I will tell you that; absolutely not settled science," Roseman said on April 23, 2007 on the Caplis & Silverman Show. "Colorado was covered by thousands of feet of ice at some point. How did that melt unless there were some little guys driving around in cars that we didn't know about?" Rosemand asked. "500 years ago, the Earth was about 5 degrees warmer than it is now -- especially in North America and Northern Europe. Guess what? Some of the best climate, the best crop-growing weather and everything else, and the seas weren't 3 feet higher than they are today," he added.

Economist Dr. Robert Higgs, a Senior Fellow for the Independent Institute and who has been a visiting scholar at Oxford University, Stanford University, and a fellow for the National Science Foundation, rejected the notion of a "consensus" on man-made global warming and dismissed the UN IPCC's scientific credentials. "The United Nations (and its committees and the bureaus it oversees) is no more a scientific organization than the U.S. Congress (and its committees and the bureaus it oversees). When decisions and pronouncements come forth from these political organizations, it makes sense to treat them as essentially political in origin and purpose," Higgs wrote on May 7, 2007. "I have thirty-nine years of professional experience -- twenty-six as a university professor, including fifteen at a major research university, and then thirteen as a researcher, writer, and editor -- in close contact with scientists of various sorts, including some in the biological and physical sciences and many in the social sciences and demography. I have served as a peer reviewer for more than thirty professional journals and as a reviewer of research proposals for the National Science Foundation, the National Institutes of Health," Higgs wrote. He then explained how the peer-review process has many flaws. "Personal vendettas, ideological conflicts, professional jealousies, methodological disagreements, sheer self-promotion, and a great deal of plain incompetence and irresponsibility are no strangers to the scientific world; indeed, that world is rife with these all-too-human attributes. In no event can peer review ensure that research is correct in its procedures or its conclusions. The history of every science is a chronicle of one mistake after another," Higgs wrote. (LINK)

Physicist Wm. Robert Johnston, who co-wrote the scientific paper in 2007 "Observations of the Ionospheric Projection of the Plasmapause and Comparisons with Relativistic Electron Measurements" which was submitted to the GRL, expressed his skepticism about global warming in a December 29, 2005 report entitled "What If All the Ice Melts? - Myths and Realities." "The suggestions that human activities will cause significant changes in global temperature and sea level in the next century are flawed predictions which haven't been confirmed by observations. The solutions to this apparently non-existent problem proposed by environmentalists would not have a significant effect on climate, but they would cause a significant amount of human suffering," Johnston wrote. "Note that it has taken 18,000 years to melt 60% of the ice from the last ice age. The remaining ice is almost entirely at the north and south poles and is isolated from warmer weather. To melt the ice of Greenland and Antarctica would take thousands of years under any realistic change in climate. In the case of the East Antarctic Ice Sheet, which accounts for 80% of the Earth's current ice, Sudgen argues that it existed for 14,000,000 years, through wide ranges in global climate," Johnston explained. "It is sad that some youngsters think that burning of hydrocarbons could cause the ice caps to melt and drown cities; it is criminal when teachers don't correct this nonsense," he concluded. (LINK)

Space Physicist Dr. James Wanliss of Embry-Riddle Aeronautical University, **who received a prestigious award from National Science Foundation in 2004,** rejects man-made climate fears and teaches an honors course titled "The Politics and Science of Fear." "I fear that attempts are being made to purposefully subvert the public understanding of the nature of science in order to achieve political goals," Wanliss said according to a May 12, 2007 article in Florida's *News Journal*. "Science is not about consensus, and to invoke this raises the hackles of scientists such as myself. The lure of politics and publicity is no doubt seductive, but it nevertheless amazes me that so many scientists have jumped on the bandwagon of consensus science, apparently forgetting or ignoring the sad history of consensus science," Wanliss explained. "The atmosphere is incredibly complicated, and we know very little about it. We are studying a system which is so big . . . we don't know what all the variables are," he said. "You want certainty, but it's hard to get that," he said. "Science isn't about certainty." Wanliss is heading a team of researchers who will use data gathered from ground- and satellite-based instruments that measure fluctuations in the Earth's magnetic field. (LINK)

Oregon State Climatologist George Taylor of Oregon State University's College of Oceanic and Atmospheric Sciences, had his job title threatened by the state's Governor over his skeptical stance on man-made warming fears. Excerpt from a February 8, 2007 article from KGW.com: "[State Climatologist George Taylor] does not believe human activities are the main cause of global climate change...So the [Oregon] governor wants to take that title from Taylor and make it a position that he would appoint. In an exclusive interview with KGW-TV, Governor Ted Kulongoski confirmed he wants to take that title from Taylor." The article quoted Taylor as stating: "Most of the climate changes we have seen up until now have been a result of natural variations."

Astronomer and Physicist Dr. Hugh Ross, who has conducted research on quasars and galaxies, expressed global warming skepticism in a December 18, 2006 article entitled "Global Warming -- How Concerned Do We Really Need to be?" "We tend to think Earth's climate will always be optimal for human civilization if we just take better care of it. But

nothing could be further from the truth," Ross wrote. "When we put emotion and politics aside and take a rational look at our planet's history, we actually see something quite different. Ice and sediment cores show that over the past four million years, the global climate has oscillated many times. The changes are caused by variations in Earth's orbit. Each cycle lasts about 100,000 years with an ice age typically taking up 90,000 of those years, and a global warming effect, the other 10,000 years," Ross explained. "Contrary to the claims of a few high profile politicians, celebrities, and environmentalists, some of our human activities in fact create a cooling effect," Ross wrote. "The release of aerosols and particulates actually blocks out sunlight and generates light-reflecting cloud layers, especially over densely populated and highly industrialized regions where pollution is loosely, if at all regulated. The bottom line here is that there are dozens of physical, chemical, and biological processes that contribute to both heating and cooling the planet. When any one of these factors gets out of balance with the others, Earth is at risk of losing its optimal climate for human civilization," Ross added. "This delicate balancing act of multiple and diverse natural processes and human activities gives us reason to be cautious. But to suggest that we can stop global warming by simply cutting back on fossil fuel combustion and altering our industrial processes is naïve at best. If we ignore one or more of certain mechanisms that contribute to either global warming or cooling, our attempted solutions could actually make matters worse," he concluded. (LINK)

Paleoclimatologist Dr. Fred Michel, Director of the Institute of Environmental Science and Associate Professor of the Department of Earth Sciences at Carleton University in Canada, rejected global warming fears. "Climate hysteria has been known to be a sham all along," Michel told EPW on May 16, 2007. "As someone who has worked in the arctic on topics such as permafrost, groundwater, and Quaternary glacial history, it has always been quite clear that the climate is constantly changing and that natural processes are able to produce very large changes over very short time periods," wrote Michel, who has worked with the International Energy Agency. We need "to return our focus to the important issues that need to be addressed, which includes being aware of the effects of a changing climate whether it be warmer or colder," he added. (LINK)

State Climatologist Dr. Charles Wax of Mississippi State University and past president of the American Association of State Climatologists, declared his skepticism on warming in 2007. "First off, there isn't a consensus among scientists. Don't let anybody tell you there is," Wax said, according to a May 16, 2007 article. "I don't know if it's going to rain Thursday or not. Certainly I don't know what the temperature is going to be in 2050," Wax explained. "In 1957, all the thermometers (the government uses to track temperatures) were moved from fields onto airports. It went from the Weather Bureau, which supported agriculture, to the Department of Commerce. Cities are hotter. (If you look at the numbers) you'll see a major climate change in 1957 alone," he said. Wax, who chaired the U.S.D.A.'s Southern Region Research Committee for Climatology in Agricultural Production, also explained the geologic history of the Earth. "There was a little ice age from 1400 to 1800. We're warming back up, but it's not nearly as warm as it was 2,000 or 7,000 years ago," he explained. (LINK) & (LINK)

Chemical Engineer Dr. Tony Burns of the University of New South Wales in Sydney, Australia expressed skepticism of man-made global warming. "The common viewpoint is that man-made carbon dioxide is to blame, but the Earth has been through ice ages and

periods of global warming for millions of years," Burns wrote in an April 2006 essay. "As recently as 1,000 years ago, the Earth was a degree warmer in the 'Medieval Warm Period' and the Vikings could grow crops in Greenland," Burns explained. "No one questions how this could happen so many years before our recent fuel consumption excesses. No one questions why man-made carbon dioxide would have any effect on global warming when it constitutes less than 1 percent of greenhouse gases (the major greenhouse gas is water vapor). No one questions the recent Antarctic ice cores from Dome Concordia, with ice up to 700,000 years old, which show increases in atmospheric carbon dioxide concentration occurring about 1,000 years after global temperature rises, thus suggesting that high carbon dioxide levels are a result of global warming, not a cause," he added. Burns decried the demonization of climate skeptics. "In 1633, opposition to the common viewpoint could mean death. This was the case with Galileo when he proposed that the Earth revolved around the sun. He was tried for heresy. Of course things are different today. People who question dogma are no longer burnt at the stake. Instead, they're branded as having suspect motives, as reactionaries or simply as nutcases," he concluded. (LINK)

Dr. Michael J. Economides, Professor of Chemical and Biomolecular Engineering at Cullen College of Engineering at University of Houston and the author of numerous books and over 50 scientific studies, rejected climate fears. "After a desperate literature search over four years, involving as many as 30 engineering and science graduate students, we have yet to come up with one professional paper that shows a quantitative causality between increased carbon dioxide and enhanced global temperature," Economides, who is a member of the Russian Academy of Natural Sciences, wrote in a April 9, 2007 article in *Energy Tribune.* "This means there is not one paper in the literature of heat transfer or thermodynamics that shows the physics of global warming in a quantified way, using well-known laws or principles. There are, however, many arm-waving and postulating writings, often in the popular press, all referencing the other 'hundreds of papers,'" Economides explained. (LINK) & (LINK)

Chemical Scientist Dr. Brian G. Valentine of the U.S. Department of Energy and professor at University of Maryland, has studied computational fluid dynamics and modeling of complex systems and expressed global warming skepticism. "Human development, associated with the continual advance of Civilization on the Earth, has always influenced the local weather; and the degree of influence on local weather is probably proportional to the magnitude of the changes in the Earth's topography that have resulted from continual human advances," Valentine wrote to EPW on May 17, 2007. "There is no evidence that any of these changes in local weather have ever resulted in a change to the global climate. My own research has convinced me that excepting for one situation, there have NEVER been ANY influences that have changed the global climate - not solar, not stellar, not variations in Earth's spin on its axis - nothing - that can be demonstrated beyond reasonable doubt, for which equally valid evidence is available that contradicts the assumption of global climate change," Valentine explained. "This single exception is the known variation of eccentricity of the Earth's orbit about the Sun. This is the periodic variation of distance from Earth to the Sun that changes the distance from the Earth to the Sun within Earth's seasons, and occurs within tens of thousands of year epochs," he concluded. *(Note: Valentine is expressing his personal views.)*

Microbiologist Gary Novak publishes a website detailing his skepticism of man-made global warming. "Arctic ice is melting faster than expected, because oceans are heating more than the atmosphere. No atmospheric temperature increase has been found in eight years. Alarmists are not promoting science; they are promoting propaganda justified through a black-box analysis which generates contrived numbers. Science requires evidence and logic," Novak, who holds a masters degree in microbiology, wrote on his website in 2007. "There is no mechanism for carbon dioxide creating global warming. 'Greenhouse gases' absorb all radiation available to them in a few meters. More of the gas cannot absorb more radiation. A thick sheet of plastic does nothing more than a thin sheet. Doubling the CO2 would only shorten the distance for absorption of radiation from 10 meters to 5 meters, which is not an increase in temperature," Novak explained. "The real cause of global warming could be an increase in solar energy, as critics generally claim; but there is evidence that it is due to variations in heat from the earth's core. Ice ages are caused by oceans heating, which appears to result from increased heat from inside the earth. The primary evidence is the exact cycling of ice ages. Environmental factors would not be so precise. Also, the oceans heating more than the atmosphere points to the heat coming from inside the earth. Atmospheric changes can result from variations in solar activity, but they are superficial compared to heat from the earth's core which drives ice age cycles," he concluded. (LINK) & (LINK)

Biologist and Biophysicist Dr. Paulo N. Correa, who has published extensively in scientific journals, co-authored a recent paper entitled "Global Warming: An Official Pseudoscience." Correa wrote about "mass-hysterias as the pseudoscientific fad of 'global warming.'" "In the 70s, in the wake of the atmospheric cooling experienced between 1945-1947 and 1972, there was a passing fad of 'global' cooling, supposedly buttressed by study of the fossil record and ice samples, which had 'established' the existence of cycles of minor ice-ages (see reference to the Milankovitch model below). At that time, the fear was that the earth was just turning the corner into a new ice-age," Correa wrote. "Just like seawater shows oscillations in temperature or content of sensible heat, the atmosphere, too, is subject to long-term oscillations in energy content, including sensible heat and its measure by temperature. In fact, the evidence indicates that the atmosphere undergoes regular periods of cooling and heating, both near the ground and all the way up, through the troposphere, to the tropopause and the stratosphere. The scientific evidence collected over the past 50 years suggests that there are periods of cooling and warming superimposed on cycles of various scales, and that these variations are connected, in ways not yet understood, to solar periodicities, geothermal energy, varying atmospheric electricity and latent heat, and varying cloud cover and cloud composition," he added. (LINK)

Meteorologist Justin Berk asserted that the "majority of TV meteorologists" are skeptical of dire man-made global warming claims. Berk said in a March 30, 2007 article in The Jewish Times, "I truly believe that global warming is more political than anything else. It's a hot topic. It grabs people's interest. As a meteorologist, I have studied this a lot and I believe in cutting down pollution and in energy efficiency. But I have a hard time accepting stories how we as individuals can stop climate change. It has happened on and off throughout history. We produce pollution but that is a small piece of the entire puzzle." Berk continued: "There are cycles of hurricanes and we had a 30-year cycle from the 1930s to the 1950s. Then from the mid-1960s to the 1990s there was low hurricane activity. We knew there would be another round of higher activity in hurricanes and now

it's happening. [But people have] latched onto this topic and it's been distorted and exploited. I know that a lot of scientists, including the majority of TV meteorologists, agree with me. In the mid-1970s, climate experts said we were heading for an ice age. Thirty years later, they're saying global warming. If you look at the big picture, we've had warming and cooling throughout history. It's a natural cycle. We haven't created it and it's not something we can stop." (LINK)

Physicist George E. Smith, a former physics lecturer at University of Auckland, is a member of the American Association for the Advancement of Science and the American Institute of Physics. Smith expressed climate skepticism in 2007. "There is enough doubt to scuttle any idea that man is causing [global warming]," Smith wrote to EPW on May 27, 2007. "The earth is a giant swamp cooler, with increased warming (mostly in the oceans) leading to increased evaporation, which ultimately leads to more clouds forming somewhere, and hence less solar radiation reaching the ground so it cools down again. So long as we have oceans, we can't change the temperature of the earth, either up or down, even if we wanted to," Smith, who received the Distinguished Alumni Award from the University of Auckland, explained. "The so-called global mean temperature is reputed to be 58F versus about 57 F a century ago. So what value would you like it to be and why?" Smith added. In 2005, Smith also detailed his skepticism in a January 2005 Physics Today article. "The largest single repository of CO2 on Earth is the oceans, and that the solubility of CO2 in water drops as the water temperature increases. So clearly a mechanism exists whereby increasing ocean water temperatures (which is where most of the solar energy goes) causes increased out-gassing of CO2 into the atmosphere. Furthermore, Arctic permafrost zones revert to marshy peat bogs when the Arctic warms, and then bacterial activity takes hold and converts decaying ancient vegetation into atmospheric CO2. Both of those processes are happening right now," Smith wrote. "The Russian Vostok ice cores going back 420 000 years and the Dome-C ice cores going back 730 000 years show that the Antarctic ice sheet has not melted during that time frame, even in the warmest interglacial periods. The ice cores also show periods of rapid global warming followed by rapidly increasing atmospheric CO2," he added. (LINK)

Evolutionary Biologist and Paleozoologist Dr. Susan Crockford of University of Victoria in Canada has published papers in peer-reviewed academic journals and rejected fears that man-made global warming could devastate animal life on Earth. "It is apparent to me that animal species are much more flexible over the long term (centuries and millennia) than we assume based on short-term studies of local populations: most species have the capacity to adjust to abrupt climate or habitat change," Crockford told EPW on December 1, 2007. "While many individuals, or even entire local populations, may perish in the face of change, others do just fine (this variation in 'survivability' among individuals within a population is characteristic of all species). The individuals who survive rebuild the population and the species perpetuates," Crockford added. "Contrary to popular belief, populations can rebound from quite low levels, as demonstrated by the fact that many population expansions (and introductions by humans) derive from a handful of individuals at best and often, a single pregnant female. Polar bears, for example, survived several episodes of much warmer climate over the last 10,000 years than exists today and if global numbers of bears dropped during these times, they must have rebounded nicely or there would not be so many bears today. Ringed seals, the primary prey of polar bears (and similarly dependant on sea ice), also survived these warm periods and are now very

abundant," she added. "In other words, there is no evidence to suggest that the polar bear or its food supply is in danger of disappearing entirely with increased Arctic warming, regardless of the dire fairy-tale scenarios predicted by computer models: evidence from the past is a kind of 'ground truth' we can trust and it tells us that sufficient sea ice will persist, even with significant increases in temperature, to ensure the survival of both polar bears and ringed seals," she concluded. (LINK)

Meteorologist Herb Stevens, one of the original meteorologists at The Weather Channel and founder of Grass Roots Weather, expressed climate skepticism in 2007. "Based on my background as a scientist, you should also know that I am a firm believer that warming of out atmosphere is not caused by man. Quite simply, the evidence does not exist to prove a correlation between greenhouse gas emissions and rising atmospheric temperatures...the correlation does not pass muster with the scientific method, and until it does, thousands of other scientists and I continue to look elsewhere for the answers to questions of short and long term climate change," Stevens wrote on May 17, 2007. "The vast majority of the coverage of global warming suggests catastrophic consequences await in the not too distant future...mind you, all of those predictions for 25, 50, or even 100 years in the future come from computer models, the same technology that quite often can't get tomorrow's weather right," Stevens explained. "It is especially troubling to scientists that the vast majority of spokespersons for global warming have little if any scientific background...politicians, actors, radio and television hosts, and other members of the media, most of whom have journalism backgrounds," Stevens added. "Unfortunately, due to the one-sidedness of the information barrage, much of our society has bought in to the notion that we are on the road to ruin. Several entities within the winter sports industry have become vocal supporters of the notion of human-induced global warming, and they have scared the heck out of a lot of people in the process," he concluded.

Meteorologist Arthur T. "Terry" Safford III, a retired Lt Col. of the U.S. Air Force has declared himself a skeptic. "My principal interest in this subject is not so much how climate change affects public policy, but more the scientific aspects. That does bother me greatly. I was always taught that as a pure scientist, you gather the facts, develop some possible explanation, and select the best-tested solution. That is clearly not the norm with (internationally) government-granted scientists or grants from agenda groups. They tend to start with the conclusion and work backwards to the facts. If the facts aren't convenient, they are adjusted, the sample size reduced, or simply ignored," Safford wrote to EPW on May 21, 2007. "This is 'junk' science, at its worst and needs to uncovered and exposed. It's OK, under the First Amendment, if Hollywood advocates junk science, but it is not OK for the meteorological/climatological community. The science of meteorology has enough trouble with its 'public image' without destroying its credibility altogether," Safford explained. "I am a retired synoptic meteorologist from the Air Force for 29 years. I spent the vast majority of that time directly supporting military operations at a number of locations and differing commands in both the Air Force and Army," he concluded.

The UK-based Scientific Alliance, which bills itself as a "evidence-based approach" to environmental issues and has numerous scientists as members, rejected climate alarm in 2007. "The Scientific Alliance points out that these (the UN IPCC) conclusions are derived from the output of computer models based on an imperfect understanding of the non-linear, chaotic system which is our climate," stated a May 3, 2007 press release from

the group. **Chemist Martin Livermore, director of the Scientific Alliance,** stated in the release, "Politicians and many in the scientific community are putting their faith in the unproven hypothesis that carbon dioxide is the main driver of climate change. They ignore the fact that the formation of clouds - known to have a major influence on climate - is poorly understood. They ignore the major influence of El Niño events, responsible for the record average temperatures in 1998 but the mechanism of which we do not understand. And they ignore the lack of agreement between model predictions and observation in the upper atmosphere and much of the southern hemisphere. This is not a sound basis for the most radical global policy proposals ever seen." The release continued, "It is clear that there has been a significant warming trend in parts of the world in the last 30 years, particularly in the northern hemisphere. But what has caused these changes, and what will happen over the next 30 years, is not well understood. To believe that we can control climate with our current level of knowledge is misguided. In the circumstances, the global community should focus its efforts on protecting vulnerable areas while helping to lift people out of the poverty which increases their vulnerability. Putting reduction of carbon dioxide emissions as top priority will do nothing for the world's poorest countries."
Scientists who are members of the Scientific Alliance include: Professor Tom Addiscott of the University of East London, who was awarded the Royal Agricultural Society of England Research Medal, specializes in research about modelling the processes which determine losses of nitrate from the soil; **Chemist Dr Jack Barrett** of Imperial College has conducted research into spectroscopy and photochemical kinetics and authored several textbooks about Inorganic Chemistry and the Bacterial Oxidation of Minerals; **Dr Sonja Boehmer-Christiansen** has worked with emission modelers; **Biochemist and microbiologist Professor Vivian Moses** of King's College and University College in London; **Professor Anthony Trewavas** of the Institute of Molecular Plant Sciences at the University of Edinburgh who has authored over 220 papers and two books; **Mathematician Mark Cantley** a former adviser in the Directorate for Biotechnology, Agriculture and Food, of the Directorate-General for Research, of the European Commission; **Professor Mick Fuller PhD** is Professor of Plant Physiology at the University of Plymouth and Head of Graduate School and former Head of the Department of Agriculture and Food Studies at Plymouth; **Professor Michael Laughton, DSc(Eng), FREng.** Emeritus Professor of Electrical Engineering in the University of London and currently Visiting Professor in the Department of Environmental Science and Technology at Imperial College; and **Chemical Engineer Professor William Wilkinson,** who was the former deputy chief executive of British Nuclear Fuels and served on the UK Advisory Committee on Research and Development and the Science Research Council**.**
http://scientific-alliance.org/

Climatologist Dr. David R. Legates, the Delaware State Climatologist and the Director, Center for Climatic Research at the University of Delaware, has authored or coauthored 45 peer-reviewed scientific studies. Legates also expressed climate skepticism in 2007. "Scientific debate continues regarding the extent to which human activities contribute to global warming and what the potential impact on the environment might be. Importantly, much of the scientific evidence contradicts assertions that substantial global warming is likely to occur soon and that the predicted warming will harm the Earth's biosphere," Legates wrote in a May 15, 2007 study entitled "Climate Science: Climate Change and Its Impacts." "Sea levels have been rising - in fact, they have been rising since the end of the last ice age 20,000 years ago - but there is no evidence of an

accelerating trend. The complexity of the climate and the limitations of data and computer models mean projections of future climate change are unreliable at best. In sum, the science does not support claims of drastic increases in global temperatures over the 21st century, nor does it support claims of human influence on weather events and other secondary effects of climate change," Legates concluded. Legates has also served as Coordinator of the National Geographic sponsored Delaware Geographic Alliance and served as the Associate Director for the NASA sponsored Delaware Space Grant Consortium. (LINK) Legates has also clashed with the Governor of Delaware in 2007 because of the Governor disagreed with his skeptical views on global warming. (LINK)

Meteorologists Andre and Sally Bernier of WJW-TV, in Cleveland, Ohio, both reject climate fears. "As two degreed and seasoned meteorologists, we will not be selling our snowblower anytime soon or tempted to try planting a palm tree in our front lawn," the Berniers, who were formerly of The Weather Channel, wrote to EPW on May 21, 2007. "There is simply far too little evidence to support entertaining the notion of anthropogenic causes for any climate shift. The focus has been to unearth as much evidence as possible all the while ignoring any evidence that is contrary to the theory the likes of which is far too significant to cast off," the Berniers explained. "Additionally, to rely and act on computer models which do not even come close to accurately capture the infinitely complex climate system of Earth is nothing short of reckless and irresponsible," they explained. "Thirty years ago headlines frightened everyone with an in imminent ice age. We suspect that fifty years from now, real science will have cast off and forgotten these claims similar to the realization that Galileo was right after all," the Berniers concluded.

Yury Izrael, the director of Global Climate and Ecology Institute, a member of the Russian Academy of Sciences and UN IPCC Vice President, rejected man-made global warming fears. "There is no proven link between human activity and global warming," Izrael, **who also served as former first vice-president of the World Meteorological Organization,** wrote on June 23, 2005 in *RIA Novosti*. "Global temperatures increased throughout the 1940s, declined in the 1970s and subsequently began to rise again. Present-day global warming resembles the 1940s, when ships could easily navigate Arctic passages. However, man's impact was much smaller at that time. A Russian expedition that recently returned from the central Antarctic says that temperatures are now starting to decrease. These sensational findings are one of Mother Nature's surprises," Izrael wrote. "Atmospheric carbon dioxide was 280 PPM (parts per million air molecules) in 1880, and now stands at 378 PPM. It has increased by 31% since the pre-industrial era. This is quite a lot, but temperatures have increased by only 0.6 degrees. Paradoxically, temperatures tended to rise by one to 12 degrees at peak intervals, with carbon-dioxide fluctuations totaling not more than 300 PPM. This contradiction is rather baffling. Therefore I believe that the link between man's activities and rising temperatures has not been proved completely. Natural factors and the impact of man seem to be interlinked," he added. "The European Union has established by fiat that a two-degree rise in global temperatures would be quite dangerous. However, this data is not scientifically sound. In ancient times the Earth had periods when maximum CO2 concentrations were 6,000 PPM (in Carboniferous period). But life still goes on," he concluded. (LINK)

Chemist Dr. Joel M. Kauffman, Emeritus Professor of Chemistry at the University of the Sciences in Philadelphia, rejected the notion that "the vast majority" of scientists

believe in man-made global warming. "The truth about this is the opposite; most scientists do not," Kauffman wrote on September 7, 2007. "CO2 can hardly have been the cause of warming because its level in air has been higher than it is now at least 3 times between 1812 and 1962 as shown by 90,000 direct chemical measurements (Beck, E.-G., 180 Years of Atmospheric CO2 Gas Analysis by Chemical Methods, Energy & Environment, 2007, 18(2), 259-282). Further, there is no recent correlation between CO2 levels and atmospheric temps as you may see easily from a NOAA graph," he wrote. "With an allowance for such urban heat island effects, the global temperature rise from 1905-1940 was similar to the one from 1970-2003 (www.giss.nasa.gov). Dr. Hansen's flawed USA ground station temps from 2000-2006 needed a Y2K correction provided by the Canadian Steve McIntyre showing that 1934 was the warmest year of the last 100, not 1998 or 2006," he concluded. (LINK)

Meteorologist Jim Ott, formerly of WTMJ-TV in Wisconsin, a member of the American Meteorological Society and a former lecturer at University of Wisconsin, expressed climate skepticism in 2007 of climate fears. "There is no question that the past 25 years have been warmer than average. There is also no question that background levels of carbon dioxide, or CO2, in the atmosphere have shown a slow but steady increase since the late 1950s, when measurements were begun in a remote spot in the Hawaiian Islands. That is where the certainty ends and the questions really begin," Ott, who hold a masters of science, wrote on February 10, 2007. "Evidence buried deeper in the Earth suggests that there may have been four major glaciations in North America, with each period of cooling followed by warming. Theories abound about why the climate changed enough to form the glaciers and then to melt them, but the fact is no one knows for sure what caused those climate changes. One thing we do know: It wasn't anything that humans did. And if we really don't know the answers, isn't it possible that the same factors that caused those climate changes could become active again?" he wrote. "More questions: If CO2 levels have been increasing since the Industrial Revolution in the 19th century, as many scientists surmise, why have we seen some major changes in weather patterns over that time period that don't fit the global warming theory? For example, why were the 1930s much warmer than the 1960s? And why were some of our most severe winters in the late 1970s and early 1980s? Weren't CO2 levels rising during those times? Obviously, other factors besides man have an impact on climate," he added. "If we conclude that from now on only human activity can affect climate change, we are ignoring factors that we don't understand. Could we be in for some unexpected surprises if we assume that the Earth's climate will only get warmer in the coming decades?" he wrote. "Assuming that 25 years of warmer-than-average weather constitutes a long-term, irreversible climate change ignores other periods of anomalous weather that were only temporary. Assuming that human activity is the only factor that will affect the Earth's climate, and that what is happening now will continue in the future, leaves some big questions unanswered," he concluded. (LINK)

Legendary inventor Ray Kurzweil, described as "an inventor whose work in artificial intelligence has dazzled technological sophisticates for four decades" according to May 2, 2007 CNN article, dismissed former Vice President Al Gore's climate views. "These slides that Gore puts up are ludicrous, they don't account for anything like the technological progress we're going to experience," Kurzweil said, according to the CNN article. The article also noted Kurzweil "invented the flatbed scanner, the first true electric piano, and large-vocabulary speech-recognition software; he's launched ten companies and sold five,

and has written five books; he has a BS in computer science from MIT and 13 honorary doctorates." (LINK) In a June 19, 2006 interview with the *Washington Post*, Kurzweil elaborated more on technology. "None of the global warming discussions mention the word 'nanotechnology. Yet nanotechnology will eliminate the need for fossil fuels within 20 years. If we captured 1% of 1% of the sunlight (1 part in 10,000) we could meet 100% of our energy needs without ANY fossil fuels. We can't do that today because the solar panels are too heavy, expensive, and inefficient. But there are new nanoengineered designs that are much more effective. Within five to six years, this technology will make a significant contribution," he said. "I don't see any disasters occurring in the next 10 years from this. However, I AM concerned about other environment issues. There are other reasons to want to move quickly away from fossil fuels including environmental pollution at every step and the geopolitical instability it causes," he concluded. (LINK)

Atmospheric scientist Dr. Augie Auer of the New Zealand Climate Science Coalition, former professor at the University of Wyoming and former MetService chief meteorologist, dismissed climate fears: "People should not allow themselves to be deluded by the computer-modeled speculation with which they are bombarded in the news media these days. Measurements show mankind's contribution to the greenhouse effect through carbon dioxide emissions has been somewhere between miniscule to indiscernible," said Professor Auer in a April 5, 2007 article. "In any case, records tell us that increases in the level of carbon dioxide in the atmosphere have followed, not led, natural cyclical increases in Earth's temperature," Prof. Auer added. (LINK) Auer took to task doomsday computer predictions. "Most of these climate predictions or models, they are about a half a step ahead of PlayStation 3 (video game). They're really not justified in what they are saying. Many of the assumptions going into [the models] are simply not right," Auer said in May 2007 in a New Zealand radio interview shortly before his death in June 10, 2007. (LINK) Auer also declared man-made climate fears unfounded. "We're all going to survive this," Auer said in a May 19, 2007 article in the Timaru Herald. "If we didn't have the greenhouse effect the planet would be at minus 18 deg C but because we do have the greenhouse effect it is plus 15 deg C, all the time," he explained. "We couldn't do it (change the climate) even if we wanted to because water vapour dominates," he concluded. (LINK) [In Memoriam: Auer died on June 10, 2007]

Geologist Dr. Norman J. Page a retired independent geological consultant, rejected climate fears. "It is clear that periodic changes in the suns activity, its size, irradiance and magnetism strongly affect climate and are likely the main driver of climate change," Page explained in to EPW on May 25, 2007. "The words 'United States' are almost invariably followed by 'the world's biggest polluter.' This is not so. The U.S. emits a large amount of CO2 but land use patterns in the United States also absorb large amounts of CO2. The important figure for any country or region is not the total emitted but the net amount after absorption is subtracted from emissions. The data are not robust, but a paper published in Science magazine in 1998 concludes that on balance North America takes up more CO2 than it emits to the tune of about 100 million tons per year while Eurasia actually puts into the atmosphere on balance about 3.5 billion tons CO2. The United States cleans up its own mess while Europe is a massive net polluter," Page wrote. "Compared to most of earth's history the earth is now impoverished in CO2. At various times in the last 550 million years CO2 levels have often been four or five times current levels and for some eras 10 to 15

times greater than today. Water vapor is by far the most abundant greenhouse gas while CO2 comprises less than 3% of earth's greenhouse gases," Page explained.

Fifteen scientists in the Netherlands signed an open letter declaring "Man is not responsible for global warming" in 2007. "The warming is mainly natural causes," read the January 11, 2007 open letter signed by the 15 scientists in De Volkskrant, Holland. "Some cite the fact that the climate is currently warming and that the level of carbon dioxide in the atmosphere is increasing. True - but correlation is never proof of causation. Besides, the climate cooled for much of the 20th century, from 1940 to 1975 -- even while CO2 was increasing rapidly," the 15 scientists explained. "There are nearly two dozen large models -- each giving a different result, depending on the assumptions fed into the computer," the letter continued. "In any case, model results are never evidence; only actual observations and data count," they added. "The current warming may well be part of the natural 1500-year cycle that has been measured in ice cores, ocean sediments, stalagmites, etc., going back nearly a million years," the scientists concluded. The scientists who signed the open letter included: **Peter Bloemers**, professor of biochemistry, University of Nijmegen: **Adriaan Broere,** an engineer and geophysicist, worked in satellite technology; **Bas van Geel,** paleo-ecology professor, University of Amsterdam; **Hub Jongen,** electrical engineer; **Rob Kouffeld,** professor of energy, TU Delft; **Rob Meleon**, professor of molecular recognition, Utrecht University; **Jan Mulderink**, a chemical engineer, former research director AKZO Arnhem, former chairman for the Foundation of Sustainable Chemical Technology in Wageningen; **Harry Priem,** . professor of planetary and isotope geology, former director ZWO / NWO Institute for Isotope - Geophysical Research, a former chairman Royal Dutch Geological organization; **Henk Schalke**, former chairman of the management team IUGS-UNESCO; **Olaf Schuiling**, Geochemistry professor, University of Utrecht; Dick Thoenes, em. professor chemical process engineering TU Eindhoven, a former chairman Royal Dutch Chemical Society; and **Jan Pieter van Wolfswinkel**, a retired mechanical engineering professor, TU Delft. (LINK)

Australian marine scientist Dr. Walter Starck rallied around NASA's top administrator Michael Griffin's skeptical climate comments. "Griffin makes an important distinction between the scientific findings of climate change and dramatic predictions of catastrophic consequences accompanied by policy demands. The former can be evaluated by its evidence, but; the latter rest only on assertions and claims to authority," Starck said in a June 1, 2007 press release. "Alternate predictions of benefits from projected changes have been proposed with comparable authority and plausibility. For example, unless one chooses to define the Little Ice Age as ‘normal' and ‘optimal' the net effect of any warming has only been beneficial and any anthropogenic contribution very small indeed. Dramatic predictions of imminent disaster have a near perfect record of failure. Griffin's note of caution in the escalating concern over climate change deserves sober consideration," he added. (LINK)

Meteorologist Paul G. Becker, a former chief meteorologist with the Air Force and former Colorado Springs chapter president of the American Meteorological Society, called Gore's view of climate change the "biggest myth of the century." "The most plentiful is water vapor making up 35 to 70 percent of all greenhouse gases. Mankind's total contribution to all greenhouse gases - this includes cars, trucks, manufacturing plants, boats, planes and any pollution producer you can name - the total is less than 1 percent.

Mother Nature provides the other 99 percent," Becker wrote in a June 3, 2007 article. "Remember that most of the natural wonders of the world were caused by various ice ages and periods of global warming. We've warmed one-half of a degree in the last century, but Gore has Florida under water in a decade or so when the ice cap melts," he added. (LINK)

Climate scientist Dr. Christopher L. Castro, a Professor of the Department of Atmospheric Sciences at the University of Arizona, expressed skepticism of a global warming catastrophe in 2007. "I believe the balance of evidence from the paleoclimate record, recent climate history (particularly since the 1980s), and the anthropogenic attribution GCM (Global Climate Models) experiments (e.g., Meehl et al. type studies) support the conclusion that recent climate change is due, in part, to anthropogenic forcing," Castro wrote on June 4, 2007. But Castro also said he generally agrees that "other possible forcings to the climate system besides CO2 (like land-use change, aerosols, etc.) are not accounted for well, if at all" and "models are highly sensitive to parameterized processes, like clouds, convection, and radiation, and these processes can have significant impacts on their results." Castro also said, "GCMs have very limited utility for climate prediction (i.e., seasonal forecasts) or climate projection (i.e., global warming projections) on the regional scale." (LINK) In an October 26, 2007 interview, Castro further explained his views. "In terms of climate-change projection, there are a lot of scary scenarios that have been published in the literature regarding what's going to happen with Arizona's climate in the future. But those predictions are based on coarse-resolution general circulation models, which can't even simulate some basic processes of Arizona climate, for example, the summer monsoon," Castro said. (LINK)

Climatologist Dr. Robert E. Davis, a Professor at University of Virginia, a former UN IPCC contributor and past president of the Association of American Geographers, and past-chair of the American Meteorological Society's Committee on Biometeorology and Aerobiology, dismissed what he termed "hysteria over global warming." "We keep hearing about historically warm years, warm decades, or warm centuries, uncharacteristically long or severe droughts, etc. for which mankind's striving for a high quality of life is to blame, via the internal combustion engine and its by-product, carbon dioxide. But in reality, in most cases, we have a tragically short record of good observations to really determine how much of a record we're even close to setting," Davis wrote on May 12, 2005. "Be wary of global warming psychics warning us of unprecedented climate shifts -- in most cases, they are only unprecedented because of the short life span of most scientists. Remember one of the absolutely fundamental and too-often unstated tenets of science -- there's little point in studying anything that doesn't vary during a scientist's lifetime," he added. Davis has written numerous papers on such topics as atmospheric circulation change." (LINK)

Dr. Robert H. Essenhigh, a Bailey Professor of Energy Conversion in the department of Mechanical Engineering at Ohio State University, who has published over 45 peer-reviewed studies, dismissed climate fears. "Man's addition to the carbon-dioxide flux in the atmosphere, by fossil-fuel combustion, is essentially irrelevant," Essenhigh wrote on June 13, 2005. "Of the two main reasons, the first is that nature does a far bigger job in the carbon-dioxide supply rate, and the second is that carbon dioxide is secondary to water as a so-called greenhouse gas. So shouldn't we first try to control water? And behind that again is the alternative warming concept, most generally known as the Arctic Ocean Model,

which is considered by many to be the real driver for the temperature oscillations and has been for the last million years or so. So, is the carbon dioxide driving the temperature, as so many people seem to believe? Or, is the temperature driving the carbon dioxide? If it's the latter, then what's the problem with carbon dioxide emissions?" Essenhigh wrote. According to the Intergovernmental Panel on Climate Change - and can it be wrong? - nature's rate of carbon supply to the atmosphere (carried as carbon dioxide) and back out again is about 150 gigatons per year. About 60 gigatons per year come from and go back to vegetation, and 90 gigatons per year are from and to the sea. And from man? That's about 5 or 6 or possibly 7 gigatons per year, which is about the size of the noise in the nature data and is essentially trivial by comparison," he added. "And, of the two gases in the atmosphere that do most of the warming, carbon dioxide, as noted, is secondary. Water is responsible for roughly 80 percent to 85 percent of the absorption and re-radiation, and carbon dioxide is responsible for (most of) the balance of 15 percent to 20 percent," he added. (LINK)

Applied Physicist and Engineer Dr. Jeffrey A. Glassman wrote an October 24, 2006 paper entitled "The Acquittal of Carbon Dioxide." In the abstract of the paper appearing in *Rocket Scientist's Journal,* Glassman wrote, "Carbon dioxide in the atmosphere is the product of oceanic respiration due to the well?known but under?appreciated solubility pump. Carbon dioxide rises out of warm ocean waters where it is added to the atmosphere. There it is mixed with residual and accidental CO2, and circulated, to be absorbed into the sink of the cold ocean waters." Glassman further explained, "Next the thermohaline circulation carries the CO2?rich sea water deep into the ocean. A millennium later it appears at the surface in warm waters, saturated by lower pressure and higher temperature, to be exhausted back into the atmosphere." "Notwithstanding that carbon dioxide is a greenhouse gas, atmospheric carbon dioxide has neither caused nor amplified global temperature increases. Increased carbon dioxide has been an effect of global warming, not a cause. Technically, carbon dioxide is a lagging proxy for ocean temperatures. When global temperature, and along with it, ocean temperature rises, the physics of solubility causes atmospheric CO2 to increase. If increases in carbon dioxide, or any other greenhouse gas, could have in turn raised global temperatures, the positive feedback would have been catastrophic. While the conditions for such a catastrophe were present in the Vostok record from natural causes, the runaway event did not occur. Carbon dioxide does not accumulate in the atmosphere," he wrote. (LINK)

Dr. A.T.J. de Laat, who specialized in atmospheric composition and climate research at the Royal Netherlands Meteorological Institute, commented in the February 2007 Bulletin of the American Meteorological Society. "The line of reasoning here is that natural factors alone cannot explain the observed twentieth-century temperature variations, while including greenhouse gases does. The logical fallacy is the 'fallacy of false dilemma/either-or fallacy,' that is, the number of alternatives are (un)intentionally restricted, thereby omitting relevant alternatives from consideration (Haskins 2006)," de Laat wrote. "That global twentieth-century temperature variations can be explained by using a simple model merely points to a certain consistency between this model or climate model simulations and observations. Furthermore, the fact that the late-twentieth-century warming is unexplained by two factors (solar variations and aerosols) and can be explained by including a third factor (greenhouse gases) does not prove that greenhouse gases are the cause; it just points

to a missing process in this model," he explained. "In fact, this whole line of reasoning does not prove the existence of global warming; it is merely consistent with it. As an example, it is still debated whether or not land surface temperature changes during the twentieth century are affected by anthropogenic non-greenhouse gas processes and whether or not these processes affect surface temperatures on a global scale (Christy et al. 2006; Kalnay et al. 2006; de Laat and Maurellis 2006). There is a risk associated with this line of reasoning in that it suggests that understanding temperature variations of the climate system as a whole is very simple and completely understood, all one has to consider is the amount of incoming and outgoing radiation by changes in atmospheric absorbers and reflectors," he added. "Notwithstanding the fact that temperature is not a conserved quantity in any physical system, and thus is not the best metric to study energy within the climate system, it also suggests that other processes and nonlinear behavior of the climate system are either nonexistent or do not affect (decadal and global) temperature variations. Presenting climate science this way oversimplifies the complexity of the climate system and possibly overstates our current understanding," he concluded. (LINK)

Dr. Patrick J. Michaels, former Virginia State Climatologist, a UN IPCC reviewer, and University of Virginia professor of environmental sciences, called Gore's film "science fiction" in a February 23, 2007 article. "The main point of [Gore's] movie is that, unless we do something very serious, very soon about carbon dioxide emissions, much of Greenland's 630,000 cubic miles of ice is going to fall into the ocean, raising sea levels over twenty feet by the year 2100," Michaels wrote. Michaels is a senior fellow in environmental studies at the Cato Institute and author of "Meltdown: The Predictable Distortion of Global Warming by Scientists, Politicians, and the Media." Michaels continued, "Nowhere in the traditionally refereed scientific literature do we find any support for Gore's hypothesis. Instead, there's an un-refereed editorial by NASA climate firebrand James E. Hansen, in the journal *Climate Change* - edited by Steven Schneider, of Stanford University, who said in 1989 that scientists had to choose 'the right balance between being effective and honest' about global warming - and a paper in the *Proceedings of the National Academy of Sciences* that was only reviewed by one person, chosen by the author, again Dr. Hansen. These are the sources for the notion that we have only ten years to 'do' something immediately to prevent an institutionalized tsunami. And given that Gore only conceived of his movie about two years ago, the real clock must be down to eight years! It would be nice if my colleagues would actually level with politicians about various 'solutions' for climate change. The Kyoto Protocol, if fulfilled by every signatory, would reduce global warming by 0.07 degrees Celsius per half-century." (LINK) Michaels lost his position as the VA State Climatologist after a clash with the state's Governor: "I was told that I could not speak in public," Michaels said in a September 29, 2007 Washington Post interview. Excerpt from article: "Michaels has argued that the climate is becoming warmer but that the consequences will not be as dire as others have predicted. Gov. Kaine had warned. Michaels not to use his official title in discussing his views. 'I resigned as Virginia state climatologist because I was told that I could not speak in public on my area of expertise, global warming, as state climatologist,' Michaels said in a statement this week provided by the libertarian Cato Institute, where he has been a fellow since 1992. 'It was impossible to maintain academic freedom with this speech restriction.' (LINK)

Australian Scientist Jonathan Lowe, who specializes in statistical analysis of climate change and holds masters in science, is currently working on his PhD, expressed

climate skepticism. "If CO2 emissions were the major cause of global warming then we would see constant increases in temperature across the day and night as the CO2 blanket keeps the heat inside our atmosphere. Scientific research has shown that this has occurred with both minimum and maximum temperature increasing. We have pointed out time and time again how minimum temperatures are not a good indication of night time warming, especially when it rarely occurs at night," Lowe wrote of Australian temperatures on his Gust of Hot Air blog on November 7, 2007. "If CO2 was the major cause of global warming then we would see no significant difference in rate of change of temperature anomalies, in other words, all temperatures should increase equally. If the sun was a major cause of global warming then we would see no or limited changes at night, an increase in the rate of change approaching the middle of the day, and then a decreasing rate of change of temperature anomalies when the sun starts to lose its daytime strength," he explained. "So what do we find when looking at the data?" he asked. "The data points heavily towards sun induced global warming," he concluded. (LINK)

Tim Thornton, who holds degrees in Meteorology and Computer Science, publishes the website "The Global Warming Heretic." "If warming is in fact occurring, is it human-induced (i.e. anthropogenic)? There is no -- zero, zilch, nada -- conclusive evidence to this effect, despite what you hear daily from pundits and politicians. It is often asserted, often assumed, but to my knowledge never demonstrated beyond reasonable doubt or on a preponderance of the evidence," Thornton wrote on May 21, 2007. "It has seemed so clear to me that the global warming (or climate change, or whatever they're calling it this week) juggernaut has been only 10 percent science mixed with 90 percent politics. If this was a purely scientific issue, why would we see it -- alone of all scientific pursuits -- declared to be 'settled' and closed to further inquiry? Why else would the media be giving the time of day to people who say that those who challenge the orthodoxy are the moral equivalent of Holocaust deniers? When some Hollywood climate expert like Leonardo DiCaprio proclaims that humanity possibly faces extinction because of global warming, why doesn't someone on the pro-AGW side ask him to stop making their cause look bad?" Thornton wrote. (LINK)

60 Prominent Scientists came forward in 2006 to question the so-called "consensus" that the Earth faces a "climate emergency." The 60 scientists wrote an open letter in 2006 to the Canadian Prime Minister asserting that the science is deteriorating from underneath global warming alarmists. "If, back in the mid-1990s, we knew what we know today about climate, Kyoto would almost certainly not exist, because we would have concluded it was not necessary," the 60 scientists wrote on April 6, 2006. "Observational evidence does not support today's computer climate models, so there is little reason to trust model predictions of the future...Significant [scientific] advances have been made since the [Kyoto] protocol was created, many of which are taking us away from a concern about increasing greenhouse gases," the 60 scientists wrote. "'Climate change is real' is a meaningless phrase used repeatedly by activists to convince the public that a climate catastrophe is looming and humanity is the cause. Neither of these fears is justified. Global climate changes all the time due to natural causes and the human impact still remains impossible to distinguish from this natural 'noise,'" they added. "It was only 30 years ago that many of today's global-warming alarmists were telling us that the world was in the midst of a global-cooling catastrophe. But the science continued to evolve, and still does, even though so many choose to ignore it when it does not fit with predetermined political

agendas," the 60 scientists concluded. Scientists signing the letter included: **Dr. Paul Copper**, FRSC, professor emeritus, Dept. of Earth Sciences, Laurentian University, Sudbury, Ont.; **Dr. Andreas Prokoph**, adjunct professor of earth sciences, University of Ottawa; consultant in statistics and geology; **Mr. David Nowell**, M.Sc. (Meteorology), fellow of the Royal Meteorological Society, Canadian member and past chairman of the NATO Meteorological Group, Ottawa; **Dr. L. Graham Smith**, associate professor, Dept. of Geography, University of Western Ontario, London, Ont.; **Dr. G. Cornelis van Kooten**, professor and Canada Research Chair in environmental studies and climate change, Dept. of Economics, University of Victoria; **Dr./Cdr. M. R. Morgan**, FRMS, climate consultant, former meteorology advisor to the World Meteorological Organization. Previously research scientist in climatology at University of Exeter, U.K.; **Dr. Keith D. Hage**, climate consultant and professor emeritus of Meteorology, University of Alberta; **Rob Scagel,** M.Sc., forest microclimate specialist, principal consultant, Pacific Phytometric Consultants, Surrey, B.C.; **Dr. Douglas Leahey,** meteorologist and air-quality consultant, Calgary; **Dr. Gerrit J. van der Lingen**, geologist/paleoclimatologist, Climate Change Consultant, Geoscience Research and Investigations, New Zealand; **Dr. Asmunn Moene**, past head of the Forecasting Centre, Meteorological Institute, Norway; **Dr. Jack Barrett**, chemist and spectroscopist, formerly with Imperial College London, U.K.; **Dr. Harry N.A. Priem**, emeritus professor of planetary geology and isotope geophysics, Utrecht University; former director of the Netherlands Institute for Isotope Geosciences; past president of the Royal Netherlands Geological & Mining Society; Dipl.-Ing. **Peter Dietze**, independent energy advisor and scientific climate and carbon modeller, official IPCC reviewer, Bavaria, Germany; **Dr. Hugh W. Ellsaesser,** physicist/meteorologist, previously with the Lawrence Livermore National Laboratory, Calif.; atmospheric consultant; **Dr. Arthur Rorsch**, emeritus professor of molecular genetics, Leiden University, The Netherlands; past board member, Netherlands organization for applied research (TNO) in environmental, food and public health; and **Dr. Alister McFarquhar**, Downing College, Cambridge, U.K.; international economist. (LINK) (See attachment two for full letter and complete list of signatories at end of "Consensus Busters" report)

Physicist and Mathematician Dr. Vladimir Shaidurov of the Russian Academy of Sciences, who has published more than 50 papers in peer-reviewed journals, presented his views on climate change in 2006. According to a March 13, 2006 press release from the University of Leicester in the UK, "A new theory to explain global warming was revealed at a meeting at the University of Leicester (UK) and is being considered for publication in the journal *Science First Hand.* The controversial theory has nothing to do with burning fossil fuels and atmospheric carbon dioxide levels. According to Vladimir Shaidurov of the Russian Academy of Sciences, the apparent rise in average global temperature recorded by scientists over the last hundred years or so could be due to atmospheric changes that are not connected to human emissions of carbon dioxide from the burning of natural gas and oil. Shaidurov explained how changes in the amount of ice crystals at high altitude could damage the layer of thin, high altitude clouds found in the mesosphere that reduce the amount of warming solar radiation reaching the earth's surface." The release continued, "The most potent greenhouse gas is water, explains Shaidurov, and it is this compound on which his study focuses. According to Shaidurov, only small changes in the atmospheric levels of water, in the form of vapour and ice crystals can contribute to significant changes to the temperature of the earth's surface, which far outweighs the effects of carbon dioxide and other gases released by human activities. Just a rise of 1% of water vapour could raise

the global average temperature of Earth's surface more then 4 degrees Celsius." The release concluded, "Shaidurov has concluded that only an enormous natural phenomenon, such as an asteroid or comet impact or airburst, could seriously disturb atmospheric water levels, destroying persistent so-called 'silver', or noctilucent, clouds composed of ice crystals in the high altitude mesosphere (50 to 85km)." (LINK)

Dr. Ross McKitrick, Associate Professor of Environmental Economics at the University of Guelph, is author or coauthor of dozens of peer-reviewed papers in both economics and climate science journals. McKitrick, a UN IPCC expert reviewer, and one of the de-bunkers of the IPCC "hockey stick" graph, is coauthor of the prize-winning best-seller *Taken By Storm: The Troubled Science, Policy and Politics of Global Warming*. In an essay published on December 5, 2007 in the *National Post*, he describes new research that shows the IPCC surface temperature record is exaggerated. "The data come from thermometers around the world, but between the thermometer readings and the final, famous, warming ramp, a lot of statistical modeling aims at removing known sources of exaggeration in the warming trend. In a new article in the December 2007 issue of the peer-reviewed *Journal of Geophysical Research*, Climatologist Dr. Patrick Michaels and McKitrick concluded that the temperature manipulations for the steep post-1980 period are inadequate, and the [IPCC] graph is an exaggeration. McKitrick believes that the United Nations agency promoting the global temperature graph has made "false claims about the quality of its data." McKitrick reports in this new, peer-reviewed study that data contamination problems "account for about half the surface warming measured over land since 1980." (LINK) & (LINK) & (LINK)

Meteorologist Gary England, who pioneered the use of Doppler radar weather-forecasting, dismisses climate fears. "The climate has always been changing and it will most likely always continue to change. In the distant past, we have been much colder than we are now and we have been much warmer than we are now. And all of that happened many times without humans," England wrote on July 1, 2007 in an article in *Associated Content.* "Here in Oklahoma we're a little warmer than we were 30 years ago. Recently we ended a two year drought and it has been replaced with significant, long duration rains. Is all of this a result of global warming? Maybe it is and maybe it isn't. You see, no one really knows. If they say they do, I suggest that person is confused at best or has an agenda at the worst," England explained. "An examination of ice core data is frequently used as proof that CO2 heats the atmosphere. A close examination of that data shows that the air temperature went up first and then the CO2 went up. Mars is loosing pole ice faster that earth is loosing the same. As someone said recently, 'It's the sun stupid!' Recent research suggests that the activity of our sun combined with cosmic radiation from far outside our galaxy interact with our atmosphere to produce effects never dreamed of a few years ago. Is anything or everything in this paragraph correct? Nobody really knows," he concluded. (LINK)

Chemical engineer Robert W. Hahn dismissed climate fears in an article titled "Global Warming Skepticism" on July 5, 2007. "I remain very skeptical that carbon dioxide is the primary cause and that humans either have caused it or can reverse it. According to the data, the temperature near the surface of the Earth has warmed less than one degree Celsius since 1880. That is not very much," Hahn wrote. "Carbon dioxide is not a very potent greenhouse gas. Water vapor and atmospheric methane account for most of

the greenhouse effect, about 95 percent. Humans account for less than one-tenth of one percent of the greenhouse gases and about three percent of the carbon dioxide in the atmosphere. If we stopped burning all fossils fuels, including natural gas, coal, wood, gasoline, diesel, jet fuel and the like, it would have very little effect," he added. "There is a growing body of scientific evidence that the irradiance of our sun is the primary cause of global warming. The sun is at a peak in activity, which drives off more cosmic radiation, which in turn causes less cloud cover, which then warms the surface. Studies in Copenhagen and most recently Canada have confirmed this correlation and have suggested we are heading toward a cooling, not warming, period," he concluded. (LINK)

Economist Tim Curtin, a former advisor with the EU, World Bank, and an Emeritus Faculty member of Australian National University, debunked the notion that global warming would have serious economic consequences. In a June 29, 2007 paper titled "The Da Vinci Code of Climate Change Economics," Curtin wrote, "This paper questions the claims of the IPCC and the Stern Review that the predicted warming climate over the next years will have serious adverse economic consequences for the poor everywhere and above all in Africa. Finally, the paper suggests that attempts to reduce carbon emissions by systems of caps and trades are unlikely to produce any net reductions in emissions." Curtin explained, "With a little more inaction on the part of the government, we will with any luck escape the horrors of carbon emission trading, with its associated armies of inspectors and traders all engaged in an essentially unproductive and useless exercise - useless because when permits have been issued to all current emitters at or pro rata within their current level of emissions, the subsequent trades between emission cutters and emission increasers can only produce ZERO net reduction emissions. In sum, Nicholas Stern's quest for the da Vinci code that will save the globe may seem in retrospect as no more than another of those episodes like the persecution of the Witches of Salem that occasionally beset the most rational and well ordered societies." (LINK)

Scientist Michael Hammer who works as a research scientist/engineer for a high technology manufacturer and major worldwide exporter based in Australia wrote a June 20, 2007 paper titled "A Theoretical Analysis of the Effect of Greenhouse Gases in the Atmosphere." The paper read, "A further hypothesis suggests that only a small portion of the temperature rise is due to the direct action of carbon dioxide with much of the remainder being due to positive feedback via water vapour. The total predicted temperature rise for an increase in CO2 levels to 560 ppm is 2 - 4.5 degrees above current temperatures with 3 degrees most likely. This spectroscopic-based analysis suggests that sensitivity to both gases is likely to be far lower than would be required for such a scenario and does not support either hypothesis. It suggests that an increase in CO2 concentration from the current 379 ppm to 560 ppm is likely to cause a temperature increase of about 0.12 degrees (0.22 degrees C for a change from 280 ppm to 560 ppm) and that the positive feedback effect from water vapour should be less than 15% of this direct effect. These results are about 20 times lower than the IPCC predictions." (LINK)

Hydro-climatologist Stewart Franks is an Associate Professor of Environmental Engineering at the University of Newcastle in Australia whose research has focused flood and drought risk and seasonal climate prediction. A March 17, 2007 article in *The Australian* newspaper explained Franks' climate views. Franks "is increasingly uneasy about the dangerous path the debate is taking, where alternative views are discouraged and

reputations attacked and discredited. Franks says our understanding of the physics of climate is still so limited, we cannot explain natural variability or predict when droughts will break, or the when and why clouds form, which makes him wary of mainstream claims projecting temperature changes over the next century. He argues that greenhouse gases in the atmosphere account for only about 2 per cent to 3 per cent of the overall warming effect, meaning even major increases in gases lead to only slight shifts in temperature: between 0.5C and 1C. He is less certain than other dissenting scientists that variation in solar activity is the cause, but doubts that greenhouse gases are the main driver of temperature changes," the article stated. "It's clear that we don't understand enough of the physics of climate to understand natural variability but I don't expect climate change from CO2 to be particularly significant at any point in the future," Franks said. The article continued, "Franks points to new modeling which has measured changes in the Earth's albedo, or reflectance, driven mainly by cloud formation. The paper by a team of geophysicists reported an unexplained decline in cloud cover until 1998, which caused the Earth to absorb more heat from the atmosphere. This resulted in increases in incoming solar radiation more than 10 times bigger than the same effect attributed to greenhouse gases. Franks says the current IPCC models assume albedo is constant but such research should be added to the body of knowledge, not excluded or rejected. 'It's reached the point that anyone who offers an open mind publicly is basically criticized and put down,' he says." (LINK) Franks also wrote a June 2007 paper titled "Multi-decadal Climate Variability: Flood and Drought - New South Wales" in which he concluded that "strong evidence of multi-decadal climate variability" has dominated the climate. "Climate has never been static!" Franks wrote. "Current drought cannot be directly linked to 'climate change'" and "El Niño/La Niña variability [is] due to natural processes," Franks wrote. (LINK)

Meteorologist Art Horn, currently operating The 'Art' Of the Weather business, is skeptical of man-made climate fears. "It is my belief that climate change is not a product of human activity. Many other meteorologists feel this way," Horn wrote to EPW on May 29, 2007. "The debate on this issue is not over as many who will profit from the 'Global Warming industry' would like it to be. They stand to make millions if not billions of dollars by creating a climate of fear, regulation, carbon offsets and taxes. The atmosphere is regulated by changes in the solar output and it's affects on the oceans. These factors and others impart a far greater influence on our climate than the very small amounts of carbon dioxide and other greenhouse gases in our atmosphere. Carbon dioxide is a natural part of the air. Humans are adding some additional amounts but it is a very small part of the total," Horn explained. "Water vapor is by far the most significant greenhouse gas, five times more effective at retaining heat from the sun and 50 to 100 times more plentiful in our atmosphere. The news media has been using the fear of climate change due to humans as a method of generating audience. Now every news program, documentary, newspaper, magazine and Hollywood star is on the 'bandwagon' to make money from something they don't understand but stand to profit from. In a free society an open debate on this important issue needs to take place, not the one sided drumbeat we get from the media," Horn concluded.

Ivy League Organic Chemist Dr. D. Bruce Merrifield is a former Undersecretary of Commerce for Economic Affairs, Professor Emeritus of the Wharton School of Business at the University of Pennsylvania, and a member of the Visiting Committee for Physical Sciences at the University of Chicago. "The earth has been subjected to

many warming and cooling periods over millions of years, none of which were of human origin," Merrifield wrote on July 11, 2007. "Data from many independent sources have mutually corroborated these effects. They include data from coring both the Antarctic ice cap and sediments from the Sargasso Sea, from stalagmites, from tree rings, from up-wellings in the oceans, and from crustaceans trapped in pre-historic rock formations. The onset of each 100,000-year abrupt warming period has been coincident with emissions into the atmosphere of large amounts of both carbon dioxide and methane greenhouse gases, which absorb additional heat from the sun, a secondary warming effect," he explained. "Solar radiation would appear to be the initial forcing event in which warming oceans waters release dissolved carbon dioxide, and melt methane hydrates, both of which are present in the oceans in vast quantities. Subsequent declines in radiation are associated with long cooling periods in which the green house gases then gradually disappear (are re-absorbed) into terrestrial and ocean sinks, as reflected in the data from coring the Antarctic Ice Cap and Sargasso Sea," he added. "The current 100 year solar radiation cycle may now have reached its peak, and irradiation intensity has been observed to be declining. This might account for the very recent net cessation of emission of green house gases into the atmosphere starting about 1988, in spite of increasing generation of anthropomorphically-sourced industrial-based green house gases. While it seems likely that solar radiation, rather than human activity, is the 'forcing agent' for global warming, the subject surely needs more study," he concluded. (LINK)

Oxford-educated Geochemist Dr. Cal Evans, a prominent researcher who has advised the Alberta Research Council, the Natural Sciences, and Engineering Research Council of Canada, and who is affiliated with the Calgary-based group Friends of Science, dismissed climate fears in 2007. "The primary process that governs global temperature cycles has been identified - it's a combination of solar irradiation and high-energy cosmic rays. Carbon dioxide appears to be a very minor factor. Although the political forces that support the CO2 theory remain formidable, the science has turned decisively against them," Evans said according to an article on July 9, 2007. "Yes, there's been an increase [in CO2] but the quantity remains extremely small, no more than a trace element," Evans said. "Whatever causes global warming must involve clouds and other atmospheric vapour. To date, no one has been able to identify a link between higher CO2 concentrations and greater volumes of atmospheric water vapour," he added. "The slight increase in ground temperature has no parallel in the troposphere. If atmospheric CO2 concentration was actually a significant factor in global warming, it stands to reason that atmospheric temperatures would rise but that hasn't happened," he said. "It's ironic that CO2 propaganda has achieved an unprecedented degree of political penetration in Canada and the United States precisely at the same time that the scientific case is melting away. Billions of dollars in research funding and related activity are at stake, and so are a great many professional reputations. So the truth will certainly be inconvenient for someone, and the struggle won't end for a while yet. Eventually, however, the facts will make themselves known," he concluded. (LINK)

Dr. Peter Ridd, a Reader in Physics at James Cook University in Australia who specializes in Marine Physics and who is also a scientific adviser to the Australian Environment Foundation, dismissed the idea of a "consensus" on man-made global warming. "It should be apparent that scientists and politicians such as Al Gore, who have been telling us that the science is unquestionable on this issue, have been stretching the

truth," Ridd, who has authored over 60 publications in scientific journals, wrote on July 19, 2007. "It seems that there are some good reasons to believe that we may have been swindled," Ridd added. Ridd also debunked fears of global warming negatively impacting coral reefs. "Just as canaries were used to detect gas in coal mines, coral reefs are the canaries of the world, and their death is a first indication of our apocalyptic greenhouse future. The bleaching events of 1998 and 2002 were our warning. Heed them now or retribution will be visited upon us. In fact a more appropriate creature with which to compare corals would be cockroaches - at least for their ability to survive. If our future brings us total self-annihilation by nuclear war, pollution or global warming, my bet is that both cockroaches and corals will survive. Their track-record is impressive," Ridd explained. "Corals have survived 300 million years of massively varying climate both much warmer and much cooler than today, far higher CO2 levels than we see today, and enormous sea level changes. Corals saw the dinosaurs come and go, and cruised through mass extinction events that left so many other organisms as no more than a part of the fossil record. Corals are particularly well adapted to temperature changes and in general, the warmer the better. It seems odd that coral scientists are worrying about global warming because this is one group of organisms that like it hot. Corals are most abundant in the tropics and you certainly do not find fewer corals closer to the equator. Quite the opposite, the further you get away from the heat, the worse the corals. A cooling climate is a far greater threat. The scientific evidence about the effect of rising water temperatures on corals is very encouraging," he added. "Why does a scientist and environmentalist such as myself worry about a little exaggeration about the reef? Surely it's better to be safe than sorry. To a certain extent it is, however, the scientist in me worries about the credibility of science and scientists. We cannot afford to cry wolf too often or our credibility will fall to that of used car salesmen and estate agents - if it is not there already. The environmentalist in me worries about the misdirection of scarce resources if we concentrate on ‘saving' a system such as the Great Barrier Reef," he concluded.

Space physicist Dr. Eigil Friis-Christensen is the director of the Danish National Space Centre, a member of the space research advisory committee of the Swedish National Space Board, a member of a NASA working group, and a member of the European Space Agency. Friis-Christensen co-authored a paper along with physicist Henrik Svensmark on Thursday, July 19, 2007, entitled "What Do We Really Know about the Sun-Climate Connection?" The paper stated, "The sun is the source of the energy that causes the motion of the atmosphere and thereby controls weather and climate. Any change in the energy from the sun received at the Earth's surface will therefore affect climate. During stable conditions there has to be a balance between the energy received from the sun and the energy that the Earth radiates back into Space. This energy is mainly radiated in the form of long wave radiation corresponding to the mean temperature of the Earth." The study continued, "From historical and geological records we know that the Earth's climate has always been changing. Sometimes such changes have been relatively abrupt and have apparently had large sociological effects." In October 2007, Friis-Christensen and Physicist Henrik Svensmark, co-authored another report from the Danish National Space Center Study concluding: “The Sun still appears to be the main forcing agent in global climate change.” (LINK) Friis-Christensen **has authored or co-authored around 100 peer-reviewed papers and chairs the Institute of Space Physics.** (LINK)

UK atmospheric scientist John Kettley, formerly of the Met Office and the Fluid Dynamics Department at the Bracknell headquarters, dismissed the linkage of wild weather in the summer of 2007 in England to global warming. "In my view, none of the severe weather we have experienced is proof of 'climate change.' It is just a poor summer - nothing more, nothing less - something that was the norm throughout most of the Sixties and has been repeated on several occasions more recently," Kettley, a former meteorologist with the BBC, wrote in an op-ed on July 22, 2007 titled "Global Warming? No, Just an Old-Style British Summer." "To many, the black skies and fierce rains must have seemed an ominous portent of things to come: symptomatic of the environmental ravages of global warming. But, however extreme the weather we have experienced over the past few days, its significance in meteorological terms is likely to be more prosaic. This year's apparently extraordinary weather is no more sinister than a typical British summer of old and a reminder of why Mediterranean holidays first became so attractive to us more than 40 years ago," Kettley wrote. "Going further back, history also shows that 1912 was an atrocious summer. It was so bad, in fact, that we are still some way short of the torrential downpours that happened that year. It seemed particularly bad at the time because 1911 had been such an exceptionally good summer. So, taking a long view, there is a pattern of warming and cooling. The Edwardians were experiencing a period of significant warming (much like now) following a cold Victorian spell. There was a period of warming from the Twenties through to the end of the Fifties and, after a cooler period, there has been a further significant warming over the past 20 years," he added. "In the final analysis, this summer may be just such a 'blip' in the charts," he concluded. (LINK) & (LINK)

Geologist Gabriel Salas, who leads a UN High Commission for Refugees funded team, rejected the idea that man-made global warming was causing droughts in Africa. A July 27, 2007 article in *The Christian Science Monitor* reported, "Salas, as a geologist, doesn't see the problem of global warming as a recent phenomenon, but as something that has been going on for thousands of years." "The attack of Rome by Hannibal happened 2,400 years ago, and he took elephants from Carthage and marched them toward Rome. Now, the fact that you had elephants in the North of Africa shows that there has been climate change and that desertification has been taking place for a long time," Salas said. (LINK)

Former New Zealand Science Ministry analyst Don Stewart, a UK-based researcher in geological and biological history, said, "The residual ice caps and glaciers we see today have shrunk considerably since 2450 BC. Furthermore, British reports from navigators and explorers since Elizabethan times show that there has been a significant retreat since those first empirical observations available to us from their logs written up to 200 years before the Industrial Revolution that is often falsely blamed for global warming." "Although the pollution of 200 years of carbon-based industrial activity may have contributed a miniscule factor, either reducing or increasing the already-rising atmospheric temperatures, the globe's own natural heat from molten lava and iron at its core, in addition to the sun's rays heating the atmosphere, means that the ice caps could not exist forever anyway and in fact now look like disappearing altogether within 4500 years (2450 BC - 2050 AD) of their formation." Stewart dismissed claims that UK floods were evidence of man-made global warming. "At the moment, we really have insufficient empirical evidence to conclude that is true," he added. (LINK)

Chemist Frank Britton rejected man-made climate fears in 2007. "CO2 makes a very small contribution to the Earth's temperature. It is only 0.039 percent of the atmosphere. Nitrogen, oxygen, water vapor and argon comprise more than 99 percent of the atmosphere. Furthermore, carbon dioxide is not a particularly effective greenhouse gas. Out of the wide spectrum of radiation received from the sun, CO2 only absorbs energy from three very narrow levels," Britton wrote in a July 28, 2007 article in the *Pasadena Star* titled "Global Warming is Nature's Doing." "Many people believe there is a difference between man-made CO2 and natural CO2. There is no difference. Carbon dioxide is comprised of one carbon atom and two oxygen atoms. CO2 is a natural, vital part of biological life. Ants, termites and decaying foliage account for the formation of most of the CO2. There are more than a quadrillion ants and termites," Britton explained. "Global-warming activists believe mankind is altering the Earth's temperature. Although many know that man's contribution is negligible, it is not to their political advantage to reveal this fact. Climate scientists receive funding from the government to research causes of and solutions to man-made global warming. If the current warming were demonstrated to be the natural cycle, this funding would be cut," he added. "Carbon dioxide's contribution to global warming is minimal; water vapor is the great buffer for the Earth's temperature; the oceans control this process. Human beings have no measurable control over global temperatures," he concluded. (LINK)

Dr. John Brignell is a UK Emeritus Engineering Promfessor at the University of Southampton who held the Chair in Industrial Instrumentation at Southampton and was awarded the Callendar Silver Medal by InstMC. He also served on a committee of the Institute of Physics and currently publishes the website http://www.numberwatch.co.uk/ with the mission to expose "scares, scams, junk, panics and flummery cooked up by the media, politicians, bureaucrats and so-called scientists and others that try to confuse the public with wrong numbers." His motto is "Working to Combat Math Hysteria." "Global warming is a new phenomenon in human affairs. Not only is it now a major religion, but it has an associated industrial complex of a wealth sufficient to give it unheard of political power throughout the world. It presides over a virtual monopoly of research funding," Brignell wrote in July 2007. (LINK) "Clearly, global warming is anthropogenic (man-made). It exists mainly in the human mind and is manufactured from two sources - careless data acquisition and dubious data processing," Brignell wrote. In November 2007, Brignell, who wrote a book entitled *Sorry, Wrong Number: The Abuse of Measurement*, compiled a list of over 600 things allegedly caused by global warming. To see the full list with weblinks to the source, see here: (LINK)

Retired Air Force atmospheric scientist Dr. Edward F Blick, Professor of Meteorology and Engineering at University of Oklahoma, rejected man-made climate fears in 2007. "Is their any solid evidence the earth is warming due to man's use of fossil fuels transferring excessive amounts of CO2 in our atmosphere? The answer is NO!" Blick wrote on June 17, 2007 in an article titled "The Religions of Global Warming." "The amount of CO2 that man puts into the atmosphere each year is about 3 billion tons per year. But this is insignificant compared to the 39,000 billion tons in our oceans, 2,200 billion tons in our vegetation and soils, and 750 billion tons in our atmosphere. Much of the CO2 generated by man is consumed by vegetation," Blick explained. "Man cannot control the weather, but he can kill millions of people in his vain attempt to control it, by limiting or eliminating the fuel that we use," Blick added. He also questioned the accuracy of

temperature gathering. "At the time of the collapse of the Soviet Union (around 1990), they could not afford their weather stations in Siberia, so they were closed. Hence, with the loss of the cooler temperature data from Siberia and rural stations in other countries, coupled with the heat island effects of the large city stations, and errors in thermometers of the 1800's, any increase in the average earth temperature in the past may be an illusion," he wrote. "CO2 is not poison and it is not our enemy. CO2 and oxygen are the twin gases of life. Humans and animals breathe in oxygen and exhale CO2. Plants breathe in CO2, make carbohydrates, and breathe out oxygen. We feed the plants and they feed us," Blick wrote. (LINK)

Iowa State Climatologist Dr. Elwynn Taylor, Professor of Meteorology at Iowa State University and a former project scientist with the National Aeronautics and Space Administration, expressed skepticism of man-made climate fears. An August 2007 article reported that "while Taylor believes entirely in global warming, he hasn't yet jumped on the popular *Inconvenient Truth* bandwagon. 'I don't know how much people have caused,' he says. 'Nobody really knows ... but what I do know is that we had a global cooling period from around the middle 1800s to around 1900, global warming from 1900 to around 1940, global cooling again from 1940 to 1972, and global warming since 1972. Thermometers have measured this for us.'" The article continued, "Taylor accepts that global warming is occurring. But he says the extent to which man is contributing to its acceleration is debatable...he says the popular theories floated by the likes of Al Gore may be slightly overcooked. 'I think people are exaggerating the idea that all of the temperature change occurring on Earth is being caused by this,' he says. 'They shouldn't be saying that. Because pretty soon we could discover that these things are only partially true. And then people, feeling misled, won't do anything.'" The article added, "Taylor is reluctant to blame human activity-specifically, increased emissions of greenhouse gases like carbon dioxide-for [global warming's] apparent acceleration? Because the bigger picture tells him there are more powerful cycles at play. He justifies his pragmatic position with convincing anecdotal evidence from the story he tells about Greenland's super-thick ice cap starting to melt back and revealing that humans inhabited the place 1,400 years ago. 'You could have taken your ship across the North Pole late in the summer then, too,' he says. 'So what we've discovered is there have been occasions throughout history when sea ice in the North Pole would go away during certain times of the year and other spans of history where the ice was essentially permanent. These things go back and forth. We wonder now if there was ever a time when there was no glacier on top of Greenland at all. Geologists say yes-a short 3 million years ago we didn't have any permanent year-round ice on the planet. These things come and go in natural cycles.'" (LINK) & (LINK)

Meteorologist Dr. Fred Ward, who earned his PhD in Meteorology from MIT and is a former meteorologist for Boston TV, ridiculed what he termed "global warming zealots." "Good, worldwide temperature data are available for less than a century, but that hasn't stopped the alarmists from quoting what are called 'temperature' data extending back to the Romans. Such data are not temperatures, but proxies which are claimed to measure temperature," Ward wrote in the New Hampshire *Union Leader* on July 16, 2007. "Such proxies include tree rings, ice cores and the like, but they all suffer from one serious limitation. The proxies can be calculated from the weather, but the weather cannot be calculated from the proxies. The brief reason is that many different weather elements work in complex ways to produce the proxy," he added. "Finally, for those of you old enough to

read in the 1970s, there was a lot of hysteria back then about the global temperature. The same 'if we don't act promptly, in 10 years it will be too late' statements were published, on the covers of reputable papers and magazines, by many of the same 'scientists,' and for many of the same base motives. The only difference between the 1970s and now was that the disaster that was just around the corner was global cooling! How times change, while people don't," he concluded. (LINK)

A 2006 study of Greenland by a team of scientists debunked fears of Greenland melting. The study led by Petr Chylek of Los Alamos National Laboratory, Space and Remote Sensing Sciences found the rate of warming in 1920-1930 was about 50% higher than that in 1995-2005, suggesting carbon dioxide 'could not be the cause' of warming. (LINK) "We find that the current Greenland warming is not unprecedented in recent Greenland history. Temperature increases in the two warming periods (1920-1930 and 1995-2005) are of similar magnitude, however the rate of warming in 1920-1930 was about 50% higher than that in 1995-2005," the abstract of the study read. The peer-reviewed study, which was published in the June 13, 2006 *Geophysical Research Letters*, found that after a warm 2003 on the southeastern coast of Greenland, "the years 2004 and 2005 were closer to normal being well below temperatures reached in the 1930s and 1940s." The study further continued, "Almost all post-1955 temperature averages at Greenland stations are lower (colder climate) than the (1881-1955) temperature average." In addition, the Chylek-led study explained, "Although there has been a considerable temperature increase during the last decade (1995 to 2005) a similar increase and at a faster rate occurred during the early part of the 20th century (1920 to 1930) when carbon dioxide or other greenhouse gases could not be a cause. The Greenland warming of 1920-1930 demonstrates that a high concentration of carbon dioxide and other greenhouse gases is not a necessary condition for a period of warming to arise. The observed 1995-2005 temperature increase seems to be within natural variability of Greenland climate. A general increase in solar activity [Scafetta and West, 2006] since 1990s can be a contributing factor as well as the sea surface temperature changes of tropical ocean [Hoerling et al., 2001]." "To summarize, we find no direct evidence to support the claims that the Greenland ice sheet is melting due to increased temperature caused by increased atmospheric concentration of carbon dioxide." The co-authors of the study were M.K. Dubey of Los Alamos National Laboratory and G. Lesins, Dalhousie University in Canada. Chylek has authored over 100 studies in peer-reviewed journals. Chylek was one of the 60 scientists who wrote an April 6, 2006 letter urging withdrawal of Kyoto to Canadian prime minister Stephen Harper which stated, "If, back in the mid-1990s, we knew what we know today about climate, Kyoto would almost certainly not exist, because we would have concluded it was not necessary." (LINK)

Former California State Climatologist Jim Goodridge, a consultant for the California Department of Water Resources, authored a July 28, 2007 paper noting the impact of the sun on climate change. "Evidence for climate variation is inferred from the sunspot numbers. The 'Solar Constant' sunspot relationship clearly suggests a long-range historic view of solar irradiance from 1500. The solar irradiance has been clearly increasing since 1940. The Maunder Minimum of sunspot numbers from 1660 to 1710 was clearly a time of worldwide cold temperatures. The year 1816 was known as the year without a summer," Goodridge wrote. Goodridge also blamed natural factors for the increase in temperatures in California since the 1970s. "The evidence for a major climate shift since the mid 1970s is

quite real. California indices of rainfall and temperature have both shown an increasing trend since 1975. Physical changes in Earth weather systems that accompany the 1975 weather trend changes include the Pacific Decadal Oscillation (PDO) index, a 1975 change in the Atmospheric Angular Momentum (AAM) index and a 1940 increase in solar irradiance," he explained. "A comparison of the accumulated departure from average of the California temperature and the Pacific Decadal Oscillation Index (PDO) indices indicate both peaking about 1943 and generally declining until the major climate shift of 1975. Again, this suggests a 35-year lag time in solar influence," he added. (LINK)

Geologist Bruno Wiskel of the University of Alberta recently reversed his view of man-made climate change and instead became a global warming skeptic. Wiskel was once such a big believer in man-made global warming that he set out to build a "Kyoto house" in honor of the UN sanctioned Kyoto Protocol which was signed in 1997. Wiskel wanted to prove that the Kyoto Protocol's goals were achievable by people making small changes in their lives. But after further examining the science behind Kyoto, Wiskel reversed his scientific views completely and became such a strong skeptic that he recently wrote a book titled *The Emperor's New Climate: Debunking the Myth of Global Warming*. A November 15, 2006 *Edmonton Sun* article explains Wiskel's conversion while building his "Kyoto house," saying, "Instead, he said he realized global warming theory was full of holes and 'red flags,' and became convinced that humans are not responsible for rising temperatures." Wiskel now says "the truth has to start somewhere." Noting that the Earth has been warming for 18,000 years, Wiskel told the Canadian newspaper, "If this happened once and we were the cause of it, that would be cause for concern. But glaciers have been coming and going for billions of years." Wiskel also said that global warming has gone "from a science to a religion" and noted that research money is being funneled into promoting climate alarmism instead of funding areas he considers more worthy. "If you funnel money into things that can't be changed, the money is not going into the places that it is needed," he said.

Dr. Denis Dutton, Associate Professor of Philosophy at the University of Canterbury in New Zealand and recipient of the New Zealand Royal Society Medal for Services to Science and Technology, teaches a course on the distinction between science and pseudoscience. Dr. Dutton is skeptical about the degree to which human activity has contributed to the general warming trend that began in the 1880s. "Working at the university where Karl Popper taught in the 1940s, I am more than a little aware of the way that adequate scientific hypotheses must always be open to falsification. The best way for science and public policy to proceed is to continuously assess evidence pro and con for anthropogenic global warming," Dutton wrote to EPW on December 4, 2007. "Climate alarmists in particular are too prone to cherry-pick evidence that suits their case, ignoring factors that might disprove it," he added. Dutton recently founded the website Climate Debate Daily, which he co-edits with Douglas Campbell (http://climatedebatedaily.com).

Professor Emeritus Peter R Odell of International Energy Studies at the University of Rotterdam questioned why global temperatures have not increased since 1998. "The UK's Meteorological Office research centre has now had to confirm a fall in average global temperatures since 1998. This clearly opens to challenge the widely-held view that it is primarily the growth in carbon dioxide emissions, released by mankind's use of carbon fuels, that cause global warming," Odell wrote on August 13 in an unpublished letter to the

UK *Guardian* newspaper. "Indeed, since 1998 there has been a record near-25% increase in the production and use of coal, oil and natural gas - totaling an additional 2000 million tons of oil equivalent over the nine year period. Two-fifths of this has been coal, the most polluting of the three carbon fuels, so generating voluminous additional carbon dioxide for the atmosphere. Yet, in spite of an all-time peak period of carbon fuels' use, it seems that no overall global warming phenomenon has been generated!" Odell wrote. "Thus, instead of the Met Office's think-tank apparent acceptance of the concept of a demonstrable relationship between global warming and carbon dioxide emissions for its future forecasts, should it not first be held responsible for an explanation as to why this has not happened over the past nine years - and why it will not happen for at least the next three years?" he asked.

UK Astronomer Dr. David Whitehouse, who authored the 2004 book *The Sun: A Biography*, detailed the sun's significant influence on the climate. "Something is happening to our sun. It has to do with sunspots, or rather the activity cycle their coming and going signifies. After a period of exceptionally high activity in the 20th century, our sun has suddenly gone exceptionally quiet. Months have passed with no spots visible on its disc. We are at the end of one cycle of activity and astronomers are waiting for the sunspots to return and mark the start of the next, the so-called cycle 24. They have been waiting for a while now with no sign it's on its way any time soon," Whitehouse wrote on December 5, 2007 in the UK *Independent*. "Throughout the 20th century, solar cycles had been increasing in strength. Almost everyone agrees that throughout most of the last century the solar influence was significant. Studies show that by the end of the 20th century the sun's activity may have been at its highest for more than 8,000 years. Other solar parameters have been changing as well, such as the magnetic field the sun sheds, which has almost doubled in the past century," Whitehouse explained. "Since [1998] average temperatures have held at a high, though steady, level. Many computer climate projections suggest that the global temperatures will start to rise again in a few years. But those projections do not take into account the change in the sun's behaviour. The tardiness of cycle 24 indicates that we might be entering a period of low solar activity that may counteract man-made greenhouse temperature increases. Some members of the Russian Academy of Sciences say we may be at the start of a period like that seen between 1790 and 1820, a minor decline in solar activity called the Dalton Minimum. They estimate that the sun's reduced activity may cause a global temperature drop of 1.5C by 2020. This is larger than most sensible predictions of man-made global warming over this period," he added. (LINK)

MIT Climate Scientist Dr. Richard Lindzen, former UN IPCC lead author and reviewer and an Alfred P. Sloan Professor of Meteorology, Dept. of Earth, Atmospheric and Planetary Sciences, called fears of man-made global warming "silly" in January 31, 2007 CNN interview. "I think it's mainly just like little kids locking themselves in dark closets to see how much they can scare each other and themselves," Lindzen said. "Nobody's arguing that man has zero impact on the climate. But the question is can you distinguish it from all the other stuff going on? And I think the answer is still no," Lindzen told the Weather Channel on January 14, 2007. "Controlling carbon is kind of a bureaucrat's dream. If you control carbon, you control life," he also told the Weather Channel on March 31, 2007. Lindzen dismisses "solutions" to global warming like changing light bulbs to fluorescent or participating in the Kyoto Protocol. "If you had a decision to make which actually would matter, then, of course it would be a very difficult

situation," Lindzen said in an April 28, 2007 CBS Chicago TV special "The Truth About Global Warming." "One of the things the scientific community is pretty agreed on is those things will have virtually no impact on climate no matter what the models say. So the question is do you spend trillions of dollars to have no impact? And that seems like a no-brainer," he said. (LINK) Lindzen also explained the UN's IPCC Summary for Policymakers involves only a dozen or so scientists. "It's not 2,500 people offering their consensus, I participated in that. Each person who is an author writes one or two pages in conjunction with someone else...but ultimately, it is written by representatives of governments, of environmental organizations like the Union of Concerned Scientists, and industrial organizations, each seeking their own benefit," Lindzen said. "At present, the greenhouse forcing is already about three-quarters of what one would get from a doubling of CO2. But average temperatures rose only about 0.6 degrees since the beginning of the industrial era, and the change hasn't been uniform-warming has largely occurred during the periods from 1919 to 1940 and from 1976 to 1998, with cooling in between. Researchers have been unable to explain this discrepancy," Lindzen wrote in the April 16, 2007 issue of Newsweek. (LINK)

Astronomer Dr. Ian Wilson of the University of Southern Queensland, Australia, specializes in statistical analysis and astrophysics research, and was a former operations astronomer at the Hubble Space Telescope Institute in Baltimore, MD. Wilson declared man-made global warming fears "bit the dust" after a 2007 peer-reviewed study found that even a doubling of atmospheric carbon dioxide would not have an alarming impact on global temperatures. "Anthropogenic (man-made) global warming bites the dust," declared Wilson about the study titled "Heat Capacity, Time Constant, and Sensitivity of Earth's Climate System," authored by Brookhaven National Lab scientist Stephen Schwartz. "Effectively, this [new study] means that the global economy will spend trillions of dollars trying to avoid a warming of ~ 1.0 K by 2100 A.D.," Wilson wrote in an August 19, 2007 note to the Senate Environment & Public Works Committee. Wilson was referring to the trillions of dollars that would be spent under such international global warming treaties like the Kyoto Protocol. "Previously, I have indicated that the widely accepted values for temperature increase associated with a doubling of CO2 were far too high, i.e. 2 - 4.5 Kelvin. I indicated that a figure closer to 1 Kelvin (corresponding to an increase in the world mean temperature of ~ 0.1 K per decade) was more appropriate. This new peer-reviewed paper by Stephen Schwartz appearing in the *Journal of Geophysical Research* claims a value of 1.1 +/- 0.5 K increase for a doubling of CO2," he added. (LINK)

Geologist Dr. Al Pekarek, professor of geology, earth and atmospheric sciences at St. Cloud State University, ridicules man-made global warming fears as a "media circus." "Climate is a very complex system, and anyone who claims we know all there is to know about it, let's say, is charitably misinformed or chooses to be," Pekarek said according to a September 7, 2007 article. "We fool ourselves if we think we have a sufficiently well-understood model of the climate that we can really predict. We can't," he explained. "Geologists know that the Earth's climate has done this all the time in its history. We also know that man has not been around very long and could not have caused that. So we know that there are many natural forces that have caused our climate to change," he continued. "Those of us who don't jump on the bandwagon - we're called deniers and Hitlers and I don't know what all else. Some of us have been threatened - I think some with their life, but

more it's trying to destroy our reputations," Pekarek added. He also pulled no punches in criticizing former Vice President Al Gore's documentary *An Inconvenient Truth*, calling the film "a total misrepresentation of science." He dismissed computer model fears of a climate doomsday. "It's an abuse of science. They are misquoting science. They are misusing science. They are making predictions of dire consequences in the name of science that will not come true, and science will lose its credibility," he explained. "In some of our schools, we are scaring the hell out of our kids. ... They think they have no future," he said. "In 10 years, you won't hear anything about global warming," he concluded. (LINK)

Botanist Dr. David Bellamy, a famed UK environmental campaigner, former lecturer at Durham University, and host of a popular UK TV series on wildlife, recently converted into a skeptic after reviewing the science and now calls global warming fears "poppycock." According to a May 15, 2005 article in the UK *Sunday Times*, Bellamy said that "global warming is largely a natural phenomenon. The world is wasting stupendous amounts of money on trying to fix something that can't be fixed." "The climate-change people have no proof for their claims. They have computer models which do not prove anything," Bellamy added. Bellamy's conversion concerning global warming did not come without a sacrifice, as several environmental groups have ended their association with him because of his views on climate change. The severing of relations came despite Bellamy's long activism for green campaigns. The UK *Times* reported Bellamy "won respect from hard-line environmentalists with his campaigns to save Britain's peat bogs and other endangered habitats. In Tasmania he was arrested when he tried to prevent loggers cutting down a rainforest." On July 1, 2007, in an op-ed titled "THE GLOBAL WARMING MYTH," Bellamy called man-made catastrophic global warming promotion "a political football that has lost its foundations in real science." "There are no facts linking the concentration of atmospheric carbon dioxide with imminent catastrophic global warming, there are only predictions based on complex computer models," he explained. Bellamy turned his skepticism on Gore, asking "Why scare the families of the world with tales that polar bears are heading for extinction when there is good evidence that there are now twice as many of these iconic animals, most doing well in the Arctic than there were 20 years ago? Why cry wolf on a rise in the spread of malaria thanks to rising temperatures when this mosquito borne disease was a main killer of people throughout the Little Ice Age in Britain and northern Russia?" (LINK) (LINK)

Naturalist Nigel Marven is a trained zoologist and botanist and a UK wildlife documentary maker who spent three months studying and filming polar bears in Canada's arctic in 2007. Marven expressed skepticism about fears that global warming would devastate polar bears. "I think climate change is happening, but as far as the polar bear disappearing is concerned, I have never been more convinced that this is just scaremongering. People are deliberately seeking out skinny bears and filming them to show they are dying out. That's not right," Marven said according to a December 7, 2007 article in the UK *Daily Mail*. "Of course, in 30 years, if there's no ice over the North Pole, then the bears will be in trouble. But I've seen enough to know that polar bears are not yet on the brink of extinction," Marven added. The article also noted that indigenous residents of the Arctic also reject polar bear fears. "After almost three months of working with those who know the Arctic best - among them Inuit Indians, who are appalled at the way an animal they have lived beside for centuries has become a poster species for 'misinformed' Greens - Nigel Marven finds himself in broad agreement," the article reported. (LINK) & (LINK)

Nobel Prize-winning Economist Gary S. Becker, who is a senior fellow at the Hoover Institution and University Professor of Economics and Sociology at the University of Chicago, debunked the notion that acting now to reduce greenhouse gases will save in the long run. "Future generations would be better off if the present generation, instead of investing the $800 billion in greenhouse gas-reducing technologies, invested the same amount in capital that would be available to future generations," Becker wrote on February 4, 2007. "One criticism of this argument is that if the resources were not invested in reducing greenhouse gases, they would not be invested in other capital that would accrue to future generations. Perhaps not. But bear in mind that during the past 150 years, more recent generations in the United States and other developed and developing nations have been much better off than earlier generations when measured by income, health, education, and virtually all other important criteria," Becker explained. "This rising standard of living across generations has been achieved mainly through advances in technology, and generous savings and investments for children and grandchildren by parents and their elected representatives. Why should this fundamental aspect of family and public behavior change as a result of the accumulation of the harmful greenhouse gases in the atmosphere?" he wrote. "Discounting is sensible behavior. Common sense also suggests that technologies will be much improved in the future, including those that can improve health, income, and the environment. Put differently, later generations have benefited from large and continuing advances in technologies of all kinds in the past 150 years, including those related to the environment," he added. (LINK)

Lev Zeleny, director of the Institute of Space Research at the Russian Academy of Sciences and an Academy corresponding member, rejects man-made climate fears. According to a September 28, 2007 article in the Russian publication *RIA Novosti*, Zeleny "believes that before making Kyoto Protocol-like decisions, we should thoroughly study the influence of all factors and receive more or less unequivocal results. In order to treat an illness, we must diagnose it first, he insists." Zeleny noted, "Judging by Venus, a planet, which is similar to the Earth in all respects, we can see how far this can go. The temperature on its surface is about 500° C (mostly due to a greenhouse effect). At one time, Venus did not have a layer of clouds, and this is probably when it was warmed up by the Sun, causing a greenhouse effect. What if the Sun is responsible for the warming of our climate?" Zeleny asked. "There are two channels of energy transfer from the Sun - electromagnetic and corpuscular radiation," he explained. "The bulk of it - about 1.37 kW per square meter of the Earth's surface - which equals the power of an electric kettle - comes via the electromagnetic channel. This flow of energy primarily fits into the visible and infrared range of the spectrum and its amount is virtually immune to change - it alters by no more than a few fractions of a percent. It is called the 'solar constant.' The flow of energy reaches the Earth in eight minutes and is largely absorbed by its atmosphere and surface. It has decisive influence on the shaping of our climate," Zeleny said. "Solar wind becomes more intense when the Sun is active. It sweeps space rays out of the solar system like a broom," he added. "This affects cloud formation, which cools off both the atmosphere and the whole planet. We know from historic records that it was quite cold in 1350-1380. The Sun was very active during this time," he said. "Some dangers are much less discussed today, for instance, the inversion of the Earth's magnetic field," Zeleny warns. "It is gradually changing its polarity; the poles are crawling to the equator at increasing speed. There were whole epochs in the Earth's history when the magnetic field

all but disappeared. Such oscillations have taken place throughout almost its entire geological history," he concluded. (LINK)

CNN Meteorologist Rob Marciano compared Gore's film to "fiction" in an on air broadcast on October 4, 2007. When a British judge ordered schools that show Gore's *An Inconvenient Truth* to include a disclaimer noting multiple errors in the film, Marciano applauded the judge saying, "Finally, finally." Marciano then added, "The Oscars, they give out awards for fictional films as well." Marciano specifically critiqued Gore for claiming hurricanes and global warming were linked. (LINK)

Geologist C. Robert Shoup authored a summer 2007 scientific study for the American Association of Petroleum Geologists in which he debunked global warming fears**.** "The hypothesis of Anthropogenic Global Warming does not yet meet the basic scientific standards of proof needed to be accepted as a viable hypothesis, much less as accepted fact," Shoup wrote in the study titled "Science Under Attack." Shoup concluded, "A comprehensive review of the climate data suggests that many global warming advocates do not present data that is contradictory to their beliefs. In addition, the constant call to end debate and silence scientists who challenge the hypothesis of Anthropogenic Global Warming is a violation of scientific protocol and has the affect of suppressing healthy scientific debate."

Horticulturalist Alan Titchmarch, a prominent naturalist who hosts the popular "The Nature of Britain" program on the BBC, received the Royal Horticultural Society's highest award – the Victoria Medal of Honor – for outstanding services to horticulture. Titchmarch **also** joined the climate skeptics in 2007. "Our climate has always changed," Titchmarch said according to an October 6, 2007 article in the UK *Telegraph*. "I wish we could grow up about it," he explained, "I'm sure we are contributing to global warming, and we must do all we can to reduce that, but our climate has always changed. The Romans had vineyards in Yorkshire. We're all on this bandwagon of 'Ban the 4x4 in Fulham'. Why didn't we have global warming during the Industrial Revolution? In those days you couldn't have seen across the street for all the carbon emissions and the crap coming out of the chimneys," he said. Titchmarch also rejected fears of warming induced species loss. "We'll lose some, we'll gain others. Wildlife is remarkably tenacious. Nature always copes," he said. (LINK)

Alexandre Amaral de Aguiar, communications director for Brazil's MetSul Weather Center and weatherman for Ulbra TV in Porto Alegre, Brazil, debunked former Vice President Al Gore's science claims in 2007. "It was exactly 10 years ago today. October 14th 1997. The guest in the El Niño Community Preparedness Summit in Santa Monica, California, was the Vice President of the United States Al Gore. It was another opportunity to him to propagate the scary vision of a warmed globe. The main point was the super El Niño event of that year. Gore took advantage of the scene to forecast a future without (cooling) La Niña events. El Niño (warming) events, according to him and his fellow scientists, would become permanent," Aguiar wrote on October 14, 2007 on the skeptical website IceCap.US. "Gore's theory bankrupted exactly ten years after its release. The largest ocean in Earth is much colder than average and global climate starts to feel the impacts of a moderate La Niña event that may reach the strong threshold," Aguiar explained. "It will take some more years for 'Mother Nature' to dismiss some or all of Gore

forecasts, but earlier predictions made by him are already proving to be an inconvenient mistake," he concluded. (LINK)

Chief Meteorologist Karl Spring of Duluth, Minnesota, who is certified by both the American Meteorological Society and the National Weather Association, expressed skepticism of former Vice President Al Gore's climate views. On the day Gore's Nobel Prize was announced in October 2007, Spring declared on KUWS radio, "I wouldn't pay a dime to see [*An Inconvenient Truth*] for many reasons." Spring then ridiculed Gore. "Politically, he's a left-wing nut. And he does things for other agendas." He added that Gore "takes facts and extrapolates them to such extremes," and he projects "a doomsday scenario." **Meteorologist Kyly Underwood joined Spring in dismissing Gore's scientific opinions during on KUWS radio.** "We need to be careful about where we get our information on global warming, and this debate unfortunately is driven by politicians." (LINK) & (LINK)

Gwyn Prins of the London School of Economics and Steve Rayner of Oxford authored a report prominently featured in the UK journal *Nature* in October 2007 calling on the UN to "radically rethink climate policy," and they cautioned against a "bigger" version of Kyoto with even more draconian provisions. Prins and Rayner's report in the influential journal bluntly declared "... as an instrument for achieving emissions reductions [Kyoto] has failed. It has produced no demonstrable reduction in emissions or even in anticipated emissions growth." Their report was titled "Time to Ditch Kyoto" and was highlighted in an October 24, 2007 *National Post* article. "But as an instrument for achieving emissions reductions it has failed. It has produced no demonstrable reduction in emissions or even in anticipated emissions growth. And it pays no more than token attention to the needs of societies to adapt to existing climate change." The report also noted, "Kyoto's supporters often blame non-signatory governments, especially the United States and Australia, for its woes." The report continued, "But the Kyoto Protocol was always the wrong tool for the nature of the job." Prins and Rayner instead urged investment in new technologies and adaptation as the most promising method to deal with climate change. (LINK) Prins and Rayner also strongly dissented from the Kyoto style approaches advocated by the UN IPCC in a December 7, 2007 article in the Wall Street Journal. “This week in Bali, Indonesia, [UN] delegates are considering climate policy after the Kyoto Protocol expires in 2012. We will witness a well-known human response to failure. Delegates will insist on doing more of what is not working: in this case more stringent emissions-reduction targets, and timetables involving more countries. A bigger and ‘better’ Kyoto will be a bigger and worse failure,” they wrote. (LINK) Earlier in 2007, Prins and Rayner warned of creating ‘bizarre distortions in public policy” by downplaying adaptation to climate change. “Similarly, non-climate factors are by far the most important drivers of increased risk to tropical disease. For instance, one study found that without taking into account climate change, the global population at risk from malaria would increase by 100% by 2080, whereas the effect of climate change would increase the risk of malaria by at most 7%. Yet tropical disease risk is repeatedly invoked by climate-mitigation advocates as a key reason to curb emissions. In a world where political attention is limited, such distortions reinforce the current neglect of adaptation,” they wrote in February 2007 in the journal Nature. (LINK)

Chinese Scientists Say C02 Impact on Warming May Be 'Excessively Exaggerated' - **Scientists Lin Zhen-Shan's and Sun Xian's 2007 study published in the peer-reviewed journal Meteorology and Atmospheric Physics** noted that "although the CO2 greenhouse effect on global climate change is unsuspicious, it could have been excessively exaggerated." Their study asserted that "it is high time to reconsider the trend of global climate change." The study looked at "multi-scale analysis of global temperature changes" and concluded "that 'global climate will be cooling down in the next 20 years.'" The scientists concluded that even if atmospheric CO2 were to stabilize, "the CO2 greenhouse effect will be deficient in counterchecking the natural cooling of global climate in the following 20 years." "The global climate warming is not solely affected by the CO2 greenhouse effect. The best example is temperature obviously cooling however atmospheric CO2 concentration is ascending from 1940s to 1970s. Although the CO2 greenhouse effect on global climate changes is unsuspicious, it could have been excessively exaggerated. It is high time to re-consider the global climate changes," Zhen-Shan and Xian concluded. (LINK) & (LINK) & (LINK)

Physicist Dr. Henrik Svensmark released a report with his colleagues at the Danish National Space Centre which shows that the planet is experiencing a natural period of low cloud cover due to fewer cosmic rays entering the atmosphere. "We have the highest solar activity we have had in at least 1,000 years," Svensmark said in the February 11, 2007 article in the UK Telegraph. "Humans are having an effect on climate change, but by not including the cosmic ray effect in models it means the results are inaccurate. The size of man's impact may be much smaller and so the man-made change is happening slower than predicted," Svensmark said. Svensmark published his finding on the influence that cosmic rays have on cloud production in the Proceedings of the Royal Society Journal in late 2006 and he has a new 2007 book entitled The Chilling Stars: A New Theory of Climate Change. "It was long-thought that clouds were caused by climate change, but now we see that climate change is driven by clouds," Svensmark said. In October 2007, Svensmark co-authored another report from the Danish National Space Center Study concluding: "The Sun still appears to be the main forcing agent in global climate change." The report was authored with Physicist Henrik Svensmark and Eigil Friis-Christensen. (LINK)

Air resources engineer Tom Scheffelin, who estimates on-road vehicle emissions for the California Air Resources Board, declared himself a climate skeptic in 2007. "Does carbon dioxide affect the climate? Carbon dioxide levels track temperature changes between 300 to 1,000 years after the temperature has changed. Carbon dioxide has no direct role in global warming; rather, it responds to biological activity, which responds to climate changes," Scheffelin wrote in a November 5, 2007 article titled "Global Warming Causes Carbon Dioxide." Scheffelin critiqued what he termed "the quasi-religious fervor surrounding global warming." He explained, "Cyclic global warming is normal and must occur no matter what anyone does or does not do. The most frequent global climate cycle is caused by the ocean's response to the orbits of the earth and moon." Scheffelin continued, "Carbon dioxide levels track temperature changes between 300 to 1,000 years after the temperature has changed. Carbon dioxide has no direct role in global warming; rather, it responds to biological activity, which responds to climate changes." He concluded by issuing a warning to the public about climate fears. "Beware future radical government mandates designed to save the planet. What can one do? Elect legislators who do not fall prey to the global warming hysteria. Walk or bicycle as often as possible; the world is a

better place when experienced on foot or by bicycle. Grow two ears of corn where before only one ear grew (*Gulliver's Travels*). Stop worrying over global warming; worry causes poor health. Study geology, it's fascinating. Enjoy life during this, the most productive, safe and healthful era in the history of mankind," he concluded. (LINK)

Atmospheric scientist Dr. Chris Walcek is a professor at the University at Albany in NY and a Senior Research Associate at the Atmospheric Sciences Research Center who studies the relationship of pollutants within the atmosphere. Walcek is also a skeptic of man-made global warming fears. "10,000 years ago we were sitting under 2,000 feet of ice right here. It looked like Antarctica right here. And then over a one to two thousand year period, we went into today's climate and the cause of that change is not, well, nobody has a definitive theory about why that happened," Walcek said according to a November 6, 2007 article. (LINK) In a separate May 5, 2007 interview, Walcek expanded on his climate skepticism and accused former Vice President Al Gore of having "exaggerated" part of his film. "A lot of the imagery like hurricanes and tornados. And as far as tornados go, there is no evidence at all that tornados are affected. And a recent committee of scientists concluded that there isn't a strong correlation between climate change and hurricane intensity. A lot of people are saying we're going to see more Katrina's and there's just not much evidence of that. We have had strong hurricanes throughout the last hundred years and we're probably going to have strong hurricanes once in a while," Walcek said. "We are over-due for an ice-age if you look at the geological records, we have had a period of not having a thousand feet of ice sitting here in Albany" New York, he added. (LINK) & (LINK)

Environmental expert Sergei Golubchikov, Vice President of Russia's National Geocryological Foundation, expressed skepticism of man-made global warming in 2007. "Humanity is focusing environmental efforts on the boogeyman of global warming," Golubchikov wrote in a November 8, 2007 article in *RIA Novosti*. "Environmental phobias go hand in hand with technological civilization. Anxiety over climate change is carried too far, to my mind," Golubchikov continued. "Anxiety easily turns to panic, forcing the world into hasty, and possibly wrong, steps. The Kyoto Protocol, for instance, was ratified even before the link between global warming and the concentration of carbon dioxide in the atmosphere had been proved," Golubchikov explained. "But is the gas [CO2] so bad? It is no poison, and plants need it as much as we humans need our daily bread. At present it makes up a mere 0.037% of the atmosphere. Greater concentrations cause plant life to flourish-especially forests, the greatest absorbers of greenhouse gases. If the release of carbon dioxide into the atmosphere were suddenly stopped, the earth's plant life would consume that remaining in a matter of 8-11 years. After that they would curl up and die. Every living thing on earth would be doomed with them," he wrote. "As 95% of the world's carbon dioxide is dissolved in saline water, global warming makes the sea the principal source of emissions, leaving industry far behind. To my mind, international agreements should instead seek to reduce emissions of sulfur dioxide, carbonic and nitric oxides, benzpyrene, soot, heavy metals and other toxic substances responsible for causing cancer and mutations. These are, in fact, the greatest environmental challenge to governments and the public," he added. (LINK)

Aeronautical engineer Bob Edleman, former Chief Engineer of Boeing's Electronic Systems Division who also worked as a software engineer in data reduction and flight

simulation, expressed skepticism about man-made climate fears promoted in former Vice President Al Gore's film. "My conclusion is that the movie is mostly misleading and, yes, we'd better stop the ideological wrangling and consider the facts," Edelman wrote on October 4, 2007. "There is no consensus. Even if there were it would have no value in science. Proof leads to consensus, not the other way around," he added. (LINK)

Geologists Dr. George Chilingar, and L.F. Khilyuk of the University of Southern California authored a December 2006 study in the peer-reviewed journal Environmental Geology which found warming temperatures were due to natural factors, not mankind. "The current global warming is most likely a combined effect of increased solar and tectonic activities and cannot be attributed to the increased anthropogenic impact on the atmosphere. Humans may be responsible for less than 0.01°C (of approximately 0.56°C (1°F) total average atmospheric heating during the last century)," the paper concluded. "Recalculating this amount into the total anthropogenic carbon dioxide emission in grams of CO2, one obtains the estimate 1.003×1018 g, which constitutes less than 0.00022% of the total CO2 amount naturally degassed from the mantle during geologic history. Comparing these figures, one can conclude that anthropogenic carbon dioxide emission is negligible (indistinguishable) in any energy-matter transformation processes changing the Earth's climate," Chilingar and Khilyuk added. Chilingar is a professor of civil and petroleum engineering at UCLA and is the former president of the U.S. chapter of the Russian Academy Sciences. (LINK) & (LINK)

Chemist Dr. Daniel W. Miles, a former professor of physics who earned his PhD from the University of Utah, expressed skepticism of climate fears in 2007. "It is very apparent from a dozen or so peer-reviewed scientific articles that fluctuations in cosmic radiation have an important impact on climate change," Miles wrote in a November 8, 2007 essay titled "Scientific Consensus on Global Warming Not Overwhelming." "It is claimed that even if the carbon dioxide concentration in the air were doubled, its greenhouse effect would be canceled by a mere one percent rise in cloudiness. The reason is simply that greater cloudiness means a larger deflection of the solar radiation away from the surface of our planet," he wrote. "The more intense the influx of cosmic rays, the more clouds. Cosmic rays ionize air molecules, transforming them into condensation nuclei for water vapor, where the ice crystals - from which clouds are created - are formed. The quantity of cosmic rays impacting the atmosphere is controlled by changes in the so-called solar wind - when the winds are stronger, they drive cosmic radiation away from the Earth, fewer clouds are formed and the Earth becomes warmer," Miles explained. (LINK)

Engineer David Holland authored a November 2007 study titled "Bias and Concealment in the IPCC Process: The 'Hockey-Stick' Affair and its Implications" which was published in the scientific journal *Energy & Environment.* Holland also wrote a 2006 critique of the Stern Review for *World Economics*. Holland, who is a member of the Institution of Engineering and Technology, critiqued modern climate science methods and the UN IPCC process. "[Climate science] is by all measures as important a field of research as medicine, and ought to operate to standards at least as high, but it does not. On the contrary, it is steeped in bias, concealment and spin," Holland, wrote in his November paper for *Energy & Environment*. "Strong and well-founded scientific disagreement remains," he wrote. Holland took the IPCC to task. "The IPCC's governing principles are interpreted loosely, for example the strong scientific and statistical

disagreements expressed by reviewers are not adequately, if at all, recorded in IPCC reports. Unpublished papers supporting IPCC orthodoxy are included even though their supporting data and methodology are not available. The use of non-disclosure agreements runs entirely counter to the IPCC's role," he wrote. (LINK)

Meteorologist Morgan Palmer of Texas TV's KLTV, who holds Seals of Approval from both the American Meteorological Society (AMS) and the National Weather Association (NWA), declared himself skeptical of man-made climate fears in 2007. "Any idea can become mainstream if you just hear one side of the argument," Palmer said on November 8, 2007. Palmer called man-made warming a theory and accused proponents of becoming political. "It is because of money," Palmer explained. "Folks that are writing these papers that a lot of institutions are going after grant money, and grant money is given by folks who might have very good intentions, but unfortunately the papers that are being written are heavily weighed on man-made Global Warming," he added. (LINK) & Click to watch video: (LINK)

Berkeley University- and MIT-educated scientist Jeffrey P. Schaffer, now a professor at the Department of Science & Mathematics at Napa Valley College in California, questioned man-made climate fears in 2007. Gore's claims of a "20-foot sea level rise due to rapid melting of the Greenland ice sheet is far from reality," Schaffer wrote on November 14, 2007 in an article titled "A Scientist's Take on Global Warming" in the *Napa Valley Register*. "Beginning in 1986 I became seriously interested in global warming, and learned that the sea level would rise about 20 feet very rapidly due to melting ice shelves and sea ice. However, as any science-literate elementary school kid can tell you, when floating ice melts, it contracts; there is no increase in volume, so no sea-level rise. After about 10 years with this impending doom scenario, scientists dropped it. I suppose some elementary school kid told them about the 'floating ice cubes' class experiment," Schaffer explained. Schaffer also detailed why he believes climate science has become politicized and recommended the book *State of Fear* by Michael Crichton. Crichton "shows how environmental organizations such as the Sierra Club create imaginary crises. Having been on the board of one organization and observing others, I can vouch for this. A perceived crisis really boosts your membership! For example, here is a global-warming quote by Stanford University climatologist Stephen Schneider: 'We need to get some broad-based support to capture the public's imagination. That of course, entails getting loads of media coverage. So we have to offer up scary scenarios, make simplified, dramatic statements, and make little mention of any doubts we might have,'" Schaffer concluded. (LINK)

Climate scientist Dr. David Douglass of the University of Rochester refuted the entire basis for man-made climate fears in 2007. Douglass co-authored a December 2007 peer-reviewed paper published in the *International Journal of Climatology of the Royal Meteorological Society* which found the evidence for human influence for warming temperatures lacking in the atmosphere. "The observed pattern of warming, comparing surface and atmospheric temperature trends does not show the characteristic fingerprint associated with greenhouse warming. The inescapable conclusion is that the human contribution is not significant and that observed increases in carbon dioxide and other greenhouse gases make only a negligible contribution to climate warming," said Douglass, the paper's lead author on December 10, 2007. The paper was co-authored with **Physicist Dr. S. Fred Singer, Climatologist Dr. John Christy and Benjamin D. Pearson.** (LINK)

Climate scientist Dr. Dick Morgan, former director of Canada's Met/Oceano Policy and Plans, a marine meteorologist and a climate researcher at both Exeter University and the Bedford Institute of Oceanography, rejected man-made climate fears in 2007. "I have had over 65 years of global climatic experience in every ocean of the world and am convinced that solar variability is the major component of climate change. It influences the global thermohaline circulation and the quasi-permanent pressure oscillations which export polar air towards the ITF via the Trade Winds. Hence, seasonal Monsoons, Tropical Storms and ENSO generation," Morgan, a former associate of the British Antarctic Survey Group at Cambridge, wrote to EPW on November 18, 2007. "The Major GHGs (greenhouse gases) are water vapour and ozone -- the latter being more important than CO2 in fossil fuel emissions because of its effect upon aerosols which determine cloud albedo and chemistry. Having been a forecaster at an airfield in Glasgow, during the coal burning period, I can vouch for that statement empirically," Morgan explained. "CO2 warming is not entirely detrimental because of its feedback as a catalyst for the greening of the terrestrial surface as its own sink in forestry, food production and grazing crops for animals. Its attributes and detriments are probably near balanced," he wrote. "As there is a perfect correlation between population growth and CO2, the major objective of Kyoto should be population control, otherwise it is simply pissing against the wind," he added. "As the IPCC does not have an adequate representation of oceanographers and solar scientists in its WG1 (Working Group 1) and [IPCC] Panel, it is not representative of the total scientific forum of experts in climate change integers, Centers of expertise in oceanography are almost unanimously advising that if IPCC models are right then the Gulf Stream will fail and scientists in highly reputable solar research centers are anticipating 60 years of solar quiescence are imminent. The IPCC are not advising the public of these alternative theses which advocate cooling -- countering anthropogenic warming," he concluded.

Iowa Meteorologists George Waldenberger and Gary Shore expressed skepticism about whether mankind was driving climate change in 2007. "Well, I went to school at UCLA, a big climate school. And it isn't really an issue as to if the global climate has been warming," Waldenberger said on April 11, 2007. "It has over the past 40 years. The question is what type of role do we take in that warming. Is it all natural fluctuations or are the increased concentrations of carbon dioxide part of this? And that's a subject that's up in the air," Waldenberger explained. ***[Note: There have been questions raised regarding whether Waldenberger belongs in this report. For clarification, please see this January 13, 2008 letter to Waldenberger. (LINK)]***

Meteorologist Gary Shore, **agreed with Waldenberger.** "There's definitely global warming," Shore said on April 11, 2007. "No question about that. And it seems very likely that what we're doing has some part of that, some impact; but as to exactly how much of it is us and how much of it is other things, nobody knows," Shore explained. Waldenberger further commented, "But you know carbon dioxide is a greenhouse gas just like water vapor, which is actually the most efficient greenhouse gas. And that's why we're actually 60 degrees warmer than we would be without water vapor in the air. So if you're talking about the greenhouse effect, that's very real, and we need it to survive. But as far as carbon dioxide concentrations increasing over the last 100 years, they have about 30 percent. And temperatures have increased about a degree on average across the entire globe over the last hundred years as well. So it seems to be a reasonable argument." "So the debate now goes

into, well, what does that mean? Are things going to keep going in the direction that they're going or does increased carbon dioxide sort of fertilize the air and does that create more plants which in turn digest more carbon dioxide and create more oxygen? You know, there's a wide variety of ways we can go from here. So the debate then becomes: What do we need to do now?" he added. (LINK)

Atmospheric scientist H. Michael Mogil, a 30-year veteran of NOAA (National Oceanic and Atmospheric Administration), who is certified by the American Metrological Society and currently owns the "How the Weatherworks" consulting firm, questioned man-made global warming fears in 2007. "As a certified consulting meteorologist who has written extensively about weather, I am compelled to address the spate of stories that appear almost daily promoting climate fears," Mogil, who holds a masters degree in Meteorology, wrote in a commentary published on October 27, 2007 in the *Napa Valley Register* titled "Earth is Warming, but it's Not Our Fault." "Long-term climate studies show that the Earth goes through large- and small-scale weather and climate patterns. These are based on solar energy output and solar flare activity, wobbles of the Earth's rotation, changes in land locations (plate tectonics or continental drift, depending upon your age when the subject was taught), periodic melting and reformation of glaciers and much more. Humans are clearly affecting some of these typical variations, but we are not their cause," Mogil explained. "While the Intergovernmental Panel on Climate Change (IPCC) and Al Gore claim that humans are almost certainly the cause of the changes, I disagree. The warming began as the last ice age waned some 500 years ago, not as humans started to industrialize," he wrote. "I'm not sure why so many of my meteorological colleagues who have similar feelings have not spoken up. Perhaps it is because the news media is presenting mostly a one-sided approach to the topic. So, in my new book, *Extreme Weather*, coming in November [2007], and in letters like this, I'm pushing for a more scientific examination of the evidence and a more balanced perspective," he concluded. (LINK)

Geologist Brian R. Pratt, a professor in the Department of Geological Sciences at the University of Saskatchewan in Canada, is an award-winning sedimentologist and paleontologist who specializes in earth's environmental history in Deep Time. Pratt is also a skeptic of climate change fears. "I have reviewed the observational evidence of climate change which leads me to interpret climate fluctuations and weather patterns as natural phenomena not caused by anthropogenic activities," Pratt told EPW on November 27, 2007. "I am very concerned that Earth's physical, chemical and biological processes are being widely misunderstood by the public, by politicians and even by many scientists. Consequently, ‘stopping' global warming has been adopted as a mission by people with the power to cause severe economic harm and divert efforts away from more critical measures involving conservation, population growth, poverty and so forth," he wrote. (LINK)

Climate Scientist Dr. S. Fred Singer, former director of the U.S. Weather Satellite Service, past vice chairman of the U.S. National Advisory Committee on Oceans and Atmosphere and global warming co-author of the 2006 book (LINK) *Unstoppable Global Warming: Every 1500 Years* which details the solar-climate link using hundreds of studies from peer reviewed literature and "shows the earth's temperatures following variations in solar intensity through centuries of sunspot records, and finds cycles of sun-linked isotopes in ice and tree rings." Singer explained on February 14, 2007, "Good

evidence confirms that current warming is mostly part of a natural climate cycle, most likely driven by the sun. The available data show that the human contribution from greenhouse gases is not detectable and must be insignificant. It is a non-problem. Trying to mitigate a natural warming (or cooling) is futile and a big waste of money better spent on real societal problems."

Chemist James Hammond, a councilor for the American Chemical Society's San Gorgonio section, refuted man-made climate fears in 2007. "Data published during the past few years show that all other life on Earth contributes 1,000 times as much greenhouse gases as do people and all their activities," Hammond said at an American Chemical Society meeting in Redlands, California, according to a November 16, 2007 article. The article noted that Hammond explained that "all humans and human activity, from driving cars to raising cattle, produce just 14 percent of all carbon dioxide emissions." The article also explained that Hammond noted a single cow "emits about 1 1/3 tons of carbon dioxide a year, while a human on average emits 1 ton - though it depends on a person's size and diet." Hammond continued, "Reasonable sources of extra CO2 would be all other life on Earth, including plants, animals and insects. As the Earth warmed, more food would grow, so people and animal populations could grow, thereby increasing greenhouse gas production. Dead and rotting plants, animals and people contribute carbon dioxide, methane, nitrous oxide, ammonia, sulfurous gases and others that add to greenhouse gases." Hammond concluded, "CO2 is only one part of the problem. We're not looking at the whole picture." (LINK)

Aeronautical engineer Roy Clark made a presentation at an American Chemical Society meeting in Redlands, California, rejecting man-made global warming fears. "Changes since the 1950s of surface temperatures of the Earth have nothing to do with CO2," Clark said according to a November 16, 2007 article. "It comes from ocean current circulation," which shifts about every 10 years, Clark added. Clark attributed sun spot activity to warming and other natural factors. "Most global warming models require assumptions," he explained. "We assume global warming is real, so we build it into our models so we can calculate CO2 concentration. It's all a big joke." He concluded, "Water vapor and clouds drive climate temperature." (LINK)

Dr. Richard Courtney, a UN IPCC expert reviewer and a UK-based climate and atmospheric science consultant, declared the case for man-made climate fears is weakening. "The case for anthropogenic (human-caused) global warming (AGW) is getting weaker and weaker, not ‘stronger and stronger and stronger' as many have claimed," Courtney wrote on November 27, 2007. "To date, no convincing evidence for AGW has been discovered. And recent global climate behavior is not consistent with AGW model predictions. Mean global temperature has not again reached the high it did in 1998 (an El Niño year) and it has been stable for the last 6 years despite an increase in atmospheric carbon dioxide concentration of by 4% since 1998," Courtney explained. "Global temperature has not increased since 1998 because, while the northern hemisphere has warmed, the southern hemisphere has cooled. Global warming was supposed to actually be global, not hemispheric," he added. "Scares of hypothetical ‘tipping points,' run-away sea level rise, massively increased storms, floods, pestilence and drought are simply that, unjustified and unjustifiable scares," he concluded. (LINK)

Meteorologist Kevin Williams of the New York based WEATHER-TRACK and Chief Meteorologist at WHEC-TV in Rochester is skeptical of man-made climate fears. "It is said that the one constant in life is change. The same can be said about the Earth's climate," Williams, who holds the American Meteorological Society's Seal of Approval, wrote on June 8, 2007. "For millions of years our planet has undergone colossal climatic upheavals that would make recent storms and heat waves pale in comparison. And while we know these events were not the result of humans burning fossil fuels, some claim that recent miniscule warming portends a coming, man-made catastrophe. While it is my belief that we need to be good stewards of the planet and to develop sound alternative energy sources, I also believe that the climate will continue to warm and cool naturally due to planetary and solar cycles, independent of human activities," Williams, the author of three books about the weather, explained.

The Dean of Pittsburgh's Graduate School of Public Health, Donald S. Burke, rejected climate fears relating to the spread of infectious diseases in 2007. "There are no apocalyptic pronouncements," Burke said, according to a December 5, 2007 *Boston Globe* article. "There's an awful lot we don't know," Burke added. The article explained that Burke "noted that the 2001 study found that weather fluctuation and seasonal variability may influence the spread of infectious disease. But he also noted that such conclusions should be interpreted with caution." The article continued, "Burke said he is not convinced that climate change can be proven to cause the spread of many diseases, specifically naming dengue fever, influenza, and West Nile virus." (LINK)

Harold Brown, an agricultural scientist and professor emeritus at the University of Georgia and author of *The Greening of Georgia: The Improvement of the Environment in the Twentieth Century,* mocked global warming fears in 2007. "Global warming is a wonderful environmental disease," Brown said according to a December 7, 2007 article. "It has a thousand symptoms and a thousand cures and it has tens of thousands of practitioners with job security for decades to come unless the press and public opinion get tired of it." Brown also noted that many were worried about "global cooling" in the 1970s. According to the article, Brown "said some of the direst effects of a warming world, such as an increase in the number of deaths because of heat-related illnesses, might not be as bad as some feared, even if climate change were to continue." (LINK)

Chief Meteorologist Mark Scirto of Texas TV's KLTV, a degreed Meteorologist who holds the Seals of Approval from both the American Meteorological Society (AMS) and the National Weather Association (NWA), expressed climate skepticism in 2007 and predicted climate fears would eventually fade. "The late 1800s, early 1900s, we were so cold parts of Galveston Bay froze over," Scirto said on November 8, 2007. "In parts of the 20th century it was one of the warmest ever, then we cooled off again and then it was the drought." Scirto predicted the fears about man-made global warming will fade. "Eventually, what is going to happen 20, 30 years from now, this is all going to be gone because we will not be warming anymore," Scirto said. (LINK) & Click to watch video: (LINK)

Dr. Sonja Boehmer-Christiansen, of the faculty of science at the University of Hull in the UK who served as a Reader at the University's Department of Geography, is the editor of the science journal *Energy & Environment*. Boehmer-Christiansen, who has

worked with emission modelers and published numerous peer-reviewed articles on the politics of global warming with special reference to the role of science and research lobbies, expressed climate skepticism in 2007. "I am pretty certain that the link between fossil fuel use and climate remains speculative and hypothetical," Boehmer-Christiansen wrote on December 10, 2007. "Neither [the] Stern [Report] nor the IPCC final summaries reflect true academic opinion; they are the products of civil servants and UN policy ambitions. They have been exaggerating the climate 'threat' in order to serve the interests primarily of fossil fuel-poor industrialized countries," Boehmer-Christiansen continued. "As it stands, the Climate Change convention and the supporting rhetoric about catastrophe and serious future risks to humanity, and even to 'the creation,' serve a number of political, ideological and now financial interests that far outweigh the influences of 'science,'" Boehmer-Christiansen added. "The UNFCCC did not ask for a scientific examination of climate and climate variability. It did not ask for an examination of the natural influences on climatic variability. As a result the so-called science of climate change consists to a large degree of 'cherry picking,'" Boehmer-Christiansen wrote. Boehmer-Christiansen warned, "Beware of the [UK] Stern Review. This is not an independent piece of academic research, but a UK government document closely tied to a major diplomatic effort."

Canadian biologist Dr. Mitchell Taylor, the director of wildlife research with the Arctic government of Nunavut, dismissed these fears of global warming devastating polar bears. "Of the 13 populations of polar bears in Canada, 11 are stable or increasing in number. They are not going extinct, or even appear to be affected at present," Taylor said in 2006, noting that Canada is home to two-thirds of the world's polar bears. He added, "It is just silly to predict the demise of polar bears in 25 years based on media-assisted hysteria." In September 2007, Taylor further debunked the latest report hyping fears of future polar bear extinctions. "I think it's naive and presumptuous," Taylor said, referring to a recent report by the U.S. government warning that computer models predict a dire future for the bears due to projected ice loss. Taylor also debunked the notion that less sea ice means less polar bears by pointing out that southern regions of the bears' home with low levels of ice are seeing booming bear populations. He noted that in the warmer southern Canadian region of the Davis Strait with lower levels of ice, a new survey will reveal that bear populations have grown from an estimated 850 bears to an estimated 3000 bears. And, despite the lower levels of ice, some of the bears measured in this region are among the biggest ever on record. "Davis Strait is crawling with polar bears. It's not safe to camp there. They're fat. The mothers have cubs. The cubs are in good shape," he said, according to a September 14, 2007 article. He added, "That's not theory. That's not based on a model. That's observation of reality." [Note: The U.S. Fish & Wildlife Service estimates that the polar bear population is currently at 20,000 to 25,000 bears, up from as low as 5,000-10,000 bears in the 1950s and 1960s. A 2002 U.S. Geological Survey of wildlife in the Arctic Refuge Coastal Plain noted that the polar bear populations 'may now be near historic highs.'] (LINK)

Bryan Leyland, head of the International Climate Science Coalition and an engineer, disputed man-made global warming fears in 2007. "Let us start with a simple question: 'Is the world warming?' The surface temperature records used by the IPCC show that it has warmed by 0.7 deg C since 1900. The world has not warmed since 1998 and temperatures have been steady since 2002. So the only answer can be: 'It warmed between 1900 and

1998. Nobody knows if the current slight cooling trend will soon end or continue,'" Leyland wrote in a November 2007 commentary. Leyland also disputed any link between man-made CO2 and temperature. "Computer models of the climate show that if it did, the largest increase in temperature would be 10 km above the tropics. Radiosonde observations published in 2006 show NO sign of faster warming. Therefore, we can be sure that man-made carbon dioxide is not causing global warming," Leyland wrote.

Aerospace engineer and physicist Dr. Michael Griffin, the top administrator of NASA and former head of the Space Department at Johns Hopkins University's Applied Physics Laboratory, expressed man-made global warming skepticism in 2007. "To assume that [global warming] is a problem is to assume that the state of Earth's climate today is the optimal climate, the best climate that we could have or ever have had and that we need to take steps to make sure that it doesn't change," Griffin said in a May 31, 2007 interview on National Public Radio's (NPR) "Morning Edition." "I guess I would ask which human beings - where and when - are to be accorded the privilege of deciding that this particular climate that we have right here today, right now is the best climate for all other human beings. I think that's a rather arrogant position for people to take," Griffin explained. "I have no doubt that a trend of global warming exists. I am not sure that it is fair to say that it is a problem we must wrestle with," he added. (LINK)

Research physicist Dr. Tom Quirk, a former University lecturer, fellow of three Oxford Colleges, and a board member of the Australian based Institute of Public Affairs, authored a June 7, 2007 paper questioning carbon dioxide measurements in the atmosphere titled "Everyone is Entitled to Their Own Opinion But Not Their Own Facts." Quirk's paper found that "it is not possible to compare peaks and valleys in CO2 measurements from VOSTOK or EPICA with contemporary atmospheric time series. There is a mismatch in gas age resolutions. Peaks are flattened and valleys are fill of rice core measurements." The paper concluded, "Thus on our contemporary timescale it is not possible to say that CO2 level has not been above 300 ppm for the last 500,000 years. The same comment applies to comparing the 'rapid' run up of contemporary CO2 levels with the ice core records where 'sharp' pulses of less than 100 years may well be smoothed away." http://www.lavoisier.com.au/

Dr. Alex Robson, a professor in the School of Economics in the College of Business and Economics at the Australian National University and a former Economist at the Federal Treasury, ridiculed the notion of taking out an "insurance policy" against man-made global warming. "Simply put, as far as the benefits of emissions reductions are concerned, there is no 'risk' for Australia to 'manage,'" Robson wrote in a paper on June 29, 2007. "As a matter of science, economics and logic this 'insurance policy' analogy is completely inappropriate and indeed grossly misleading. As far as Australia's CO2 emissions reductions are concerned, the entire 'risk management' argument simply cannot be sustained," Robson explained. "A policy of emission reductions is like taking out an 'insurance policy' in which there is never any positive payoff," he added. http://www.lavoisier.com.au

Meteorologist Chris Allen of Kentucky Fox affiliate WBKO dismissed what he termed "consensus nonsense" on global warming. "But, just because major environmental groups, big media and some politicians are buying this hook, line and sinker doesn't mean as a TV

weatherperson I am supposed to act as a puppy on a leash and follow along," Allen said in his blog titled "Still Not Convinced" on February 7, 2007. "All of this (global warming alarmism) is designed to get your money and then guilt you in to how you live your life," Allen explained. Allen has the Seal of Approval of the National Weather Association. "As I have stated before, not only do I believe global climate change exists - it has always existed. There have been times of global warming and cooling," Allen concluded. (LINK) "If there is a consensus among scientists about man-made global warming, then at what temperature would they all agree the earth should be before they say global warming no longer exists? The answer - there is not a scientific consensus and will never be. And if there were one, they would not agree as to what temperature the earth needs to be 'normal' again," Allen wrote in another blog post on June 5, 2007. (LINK)

Statistician Dr. Richard Mackey authored a 2007 peer-reviewed study which found that the solar system regulates the earth's climate. The paper was published August 17, 2007 in the *Journal of Coastal Research* - Excerpt: "According to the findings reviewed in this paper, the variable output of the sun, the sun's gravitational relationship between the earth (and the moon) and earth's variable orbital relationship with the sun, regulate the earth's climate. The processes by which the sun affects the earth show periodicities on many time scales; each process is stochastic and immensely complex." (LINK) & (LINK)

New York's WABC-TV Senior Meteorologist Bill Evans, who has won the Outstanding Meteorologist Award from the National Weather Service and hosted the National Hurricane Conference, expressed man-made global warming skepticism in 2007. "There is climate change. The planet is warming. But we're coming off an ice age. So you would expect naturally the planet is warming," Evans said in an interview on Fox News Channel on August 19, 2007. "There's really no data to just show that man is causing the warming in the atmosphere or contributing to the mass of CO2 that's in the atmosphere. We are seeing changes in the planet, but the planet changes all the time," Evans said. (LINK)

Nuclear physicist Dr. Dennis Jensen, a PhD-trained scientist and a former researcher for Australia's Commonwealth Scientific and Industrial Organization (CSIRO) and the Defense Science and Technology Organization (DSTO), questioned man-made climate fears in 2007. "It has been found that warming is occurring on Pluto, Mars, Jupiter and Triton," Jensen said on February 27, 2007. "The last time I looked, there were no evil greenhouse gas belching industries on those planets, subplanets and moons," he said, which clearly indicated that increased solar activity was a significant factor," Jensen explained. He also noted that studies of ice core data reveals that warming precedes rising CO2 levels in the atmosphere. "In other words, it would be more correct to say that temperature changes cause CO2 concentration changes," he said. (LINK)

Environmental scientist and flood hydrologist Robert Ellison, an expert on environmental risk assessment, the movement of pollutants through soils, water, and the atmosphere, and hydrology and hydraulics, noted the impact of natural climate factors on warming temperatures. "We have moved into a cool (referring to sea surface temperatures) La Niña Phase of the Pacific Decadal Variation - this should lead to lower global surface temperatures over a couple of decades. The lack of increase in average

surface temperature over a decade certainly suggests that there is some other process in play - it is fitting the pattern of ENSO variation," Ellison wrote to EPW on December 17, 2007. "Superimposed on the alternation of La Niña and El Niño are longer- term variations in the frequency and intensity of El Niño and La Niña. A period of more frequent and intense La Niña between the mid forties and 1975 was followed by more frequent and intense El Niño between 1976 and 1998. The pattern appears in centuries of proxy data - that is in tree and coral rings, sedimentation and rainfall and flood records," Ellison wrote on November 28, 2007 in a commentary titled "ENSO Variation and Global Warming." "Global surface temperatures have a similar trajectory. Falling from 1946 to 1975, rising between 1976 and 1998 and declining since," Ellison explained. "It is difficult to explain how ENSO variations have been neglected by so many for so long. ENSO involves 97% of greenhouse gases. The surface temperature impacts are significant. Note the 0.25 0C difference between 1998 and 2000. ENSO variation goes in both directions. The indications are that ENSO variation added to global surface temperatures between 1976 and 1998. It has been almost 10 years since temperatures peaked in1998. The planet may continue to be cooler over the next few decades as a cool La Niña phase of ENSO emerges," he concluded. (LINK)

# # #

The following scientists may not be referred to as "skeptical" but they make very important and noteworthy points: (Note: The below scientists are not included in total tally of skeptical scientists)

Paleoclimatologist Dr. Amy Frappier labeled climate fears oversimplified. Boston College's professor of Geology and Geophysics Frappier explained in a February 1, 2007 article in Boston College's newspaper The Heights, "The geologic record shows that many millions of years ago, CO2 levels were indeed higher - in some cases many times higher - than today." Frappier noted that greenhouse gas concentrations in the atmosphere do not consistently continue to have a warming effect on Earth, but gases instead stabilize in the atmosphere and cease having a warming effect. "At some point the heat-trapping capacity of [the gas] and its effect get saturated," said Frappier, "and you don't have increased heating." According to the article, Frappier, who believes mankind is having an impact on the climate, criticized Gore because "his movie fails to mention any ancient incongruity between carbon dioxide and temperature."

Scientists Claim Computer Model Predictions are 'Useless Arithmetic' - Orrin H. Pilkey, a coastal geologist and emeritus professor at Duke and his daughter Linda Pilkey-Jarvis, a geologist in the Washington State Department of Geology, wrote a book in 2007 entitled *Useless Arithmetic: Why Environmental Scientists Can't Predict the Future*. Thought the authors stress their book does not specifically address man-made global warming fears, it does present "an overall attack on the use of computer programs to model nature," according to a February 20, 2007 *New York Times* book review. The *Times* book review explained how these models "may include coefficients (the authors call them 'fudge factors') to ensure that they come out right. And the modelers may not check to see whether projects performed as predicted." "Nature is too complex, they (the authors) say, and depends on too many processes that are poorly understood or little monitored - whether the process is the feedback effects of cloud cover on global warming or the movement of grains of sand on a beach," the *Times* article explained. "And instead of demanding to know exactly how high seas will rise or how many fish will be left in them or what the average global temperature will be in 20 years, they argue, we should seek to discern simply whether seas are rising, fish stocks are falling and average temperatures are increasing. And we should couple these models with observations from the field. Models should be regarded as producing 'ballpark figures,' they write, not accurate impact forecasts," the *Times* article continued. The coastal models are so flawed that Pilkey recommends dredging up a lot of sand and dumping it on the beach "willy-nilly" and he predicts you would end up with the same result, minus the "false mathematical certitude." (LINK)

Climatologist/seismologist Dr. Jose Rial of the University of North Carolina is studying glacial seismic activity in Greenland and has chastised the media and criticized a proponent of man-made climate fears for presenting a "falling-sky" view of Greenland's climate. "I also know that there is no evidence to suggest that these quakes [linked to ice melt on Greenland] 'are happening far faster than ever anticipated' [as Robert Corell of The Heinz Center claimed]," wrote Rial in a September 13, 2007 letter to the UK *Guardian*. Rial criticized the UK newspaper for presenting a 'falling-sky' alarmist perspective and added that "it will take years of continued surveying to know whether anything here [in Greenland] is 'accelerating' towards catastrophe, as the article [featuring Corell] claims."

Rial concluded, "I believe that to battle global climate change effectively we need the strong support of a well-informed, actively engaged public. There is great urgency indeed in all these climate matters and I understand the threat of climate change to society; but the evidence needs to be there before we needlessly alarm the public who sustain our research." (LINK)

Oceanographer and Meteorologist Bill Patzert of NASA's Jet Propulsion Laboratory detailed how land use changes impact the climate. "Everybody's talking about the carbon coming out of the SUV exhaust or the coal plant, but in the past 50 years in California the bigger impact has been urbanization and suburbanization," Patzert said in a March 30, 2007 Reuters article. The article noted, "Average temperatures across California rose slightly from 1950 to 2000, with the greatest warming coming in the state's big cities and mostly caused by urbanization -- not greenhouse gases -- authors of a study released on Wednesday said." Patzert believes mankind's C02 emissions and land use changes are key factors in climate change. "The study found that average temperatures in California rose nearly 2 degrees Fahrenheit (nearly one degree Celsius) in the second half of the 20th century, led by large urban centers such as San Francisco and Southern California," Reuters explained. "This (warming) has already had a huge impact on the state of California. It's changed the way we do agriculture, it's changed the energy and water demands, it's changed the number of days we've had frost or extreme heat," Patzert said. (LINK)

Prominent environmentalists Ted Nordhaus and Michael Shellenberger broke ranks with their counterparts on key aspects of man-made global warming fears and environmentalism in 2007. **In their book *Break Through: From the Death of Environmentalism to the Politics of Possibility*** they argue that any potential warming may have some beneficial impacts. "Global warming could bring drought, disease and war - and it could bring prosperity, cooperation and freedom," they wrote. Nordhaus and Shellenberger chastised the green movement for engaging in what they termed "quasi-authoritarian politics" that "aims to short-circuit democratic values" and "is hobbled by its resentment of human strength." An October 5, 2007 book review in the *San Francisco Chronicle* noted, "Environmentalists, the authors suggest darkly, are partially morally culpable for the human suffering in disasters such as Hurricane Katrina." Nordhaus and Shellenberger wrote, "Environmentalists have attacked adaptation and preparedness in the belief that taking steps to prepare for global warming - for instance, by building higher seawalls and levees or identifying new water supplies for regions likely to be affected by drought - would undermine their arguments for carbon reductions." (LINK) In an October 14, 2007 *San Francisco Chronicle* op-ed titled "Look who's in denial about global warming now," Nordhaus and Shellenberger explained how the green movement is in denial about global warming. "The problem isn't that the voters don't care about global warming. They do. It's that they don't care all that much. Consider that despite extensive publicity, Al Gore's movie, *An Inconvenient Truth*, had almost no impact on public opinion. The Pew Center for People and the Press conducted a telephone survey in June 2006, at the height of media attention for the movie, and found that 'out of a list of 19 issues, Republicans rank global warming 19th and Democrats and independents rank it 13th.' After six more months of high-profile coverage, the relative importance of global warming had declined even further," they wrote. "There are political consequences to all of this. In November 2006, months after the supposed 'tipping point' for global warming, voters in California - a

relatively liberal state - rejected a ballot initiative that would have taxed the state's oil production in the name of global warming," they added. (LINK)

Geologist Dr. Simon Brassell, of the Department of Geological Sciences at the Indiana University, noted "climate change is nothing new." According to an October 16, 2006 *Washington Post* article, "Brassell said the evidence of climate change so long ago during a period without humans could influence the modern-day understanding of global warming." "If there are big, inherent fluctuations in the system, as paleoclimate studies are showing, it could make determining the Earth's climatic future even harder than it is," Brassell said. "We're learning our climate, throughout time, has been a wild beast," Brassell added. The study was conducted with the Royal Netherlands Institute for Sea Research and the results were published in the October 2006 issue of *Geology*. [Brassell was moved to this section to more accurately reflect his views. - 05-12-2008] (LINK)

AccuWeather Meteorologist Mark Paquette questioned man-made global warming theory in 2008. "The increase in carbon dioxide levels will, by itself and no other changes in the climate system, lead to warming in the earth's atmosphere. However, this warming may or may not be seen in actuality. It may be hidden, or masked, by factors that are cooling the climate," Paquette wrote on November 15, 2008. "On the other hand, if warming of the climate is shown to be occurring, the increase in carbon dioxide levels are playing a role in this warming, but are not entirely responsible for all of the warming as many other factors are involved," Paquette explained. "Yes, an increase in carbon dioxide leads to warming on the planet. This is a very simplistic approach and assumes that nothing else in the climate system changes, and all the warming observed in the earth's climate is directly attributed to the change in the levels of carbon dioxide. As we all know, the assumptions made directly above are not true," he added. "The earth's climate is ridiculously complicated, and carbon dioxide is not the only thing that influences the climate that is changing. In fact, probably EVERYTHING in the earth's climate system changes at one time or another. So, earth's changing climate can not be entirely attributed to carbon dioxide levels rising," Paquette explained. [Paquette was moved to this section to more accurately reflect his views.] (LINK)

Statistician Lenny Smith of the London School of Economics, who co-authored a study on the uncertainties of climate models for the Tyndall Centre for Climate Change Research in Oxford, dubbed climate modeling "naive realism." "Our models are being over-interpreted and misinterpreted," Smith said, according to a *New Scientist* article from August 16, 2007. "They are getting better; I don't want to trash them per se. But as we change our predictions, how do we maintain the credibility of the science?" Smith explained. "We need to drop the pretence that they are nearly perfect," he added. The article noted that Smith believes that the "over-interpretation of models is already leading to poor financial decision-making." The article continued: "[Smith] singled out for criticism the British government's UK Climate Impacts Programme and Met Office. He accused both of making detailed climate projections for regions of the UK when global climate models disagree strongly about how climate change will affect the British Isles." [Smith was moved to this section to more accurately reflect his views.] (LINK)

Veteran climate researcher Erich Roeckner of the Max Planck Institute for Meteorology laments the lack of climate computer model reliability. "Clouds are still our

biggest headache," Roeckner conceded, according to a May 7, 2007 article in DER SPIEGEL (LINK) According to the article, "Even the most powerful computer models are still too imprecise to simulate the details. However, the clouds alone will determine whether temperatures will increase by one degree more or less than the average predicted by the models. This is a significant element of uncertainty. Roeckner is a conscientious man and a veteran of climate research, so he, of all people, should know the limits of simulation programs. Roeckner, who constantly expects surprises, neatly sums up the problem when he says, 'No model will ever be as complex as nature.'" The Der Spiegel article continued, "'According to our computer model, neither the number nor intensity of storms is increasing,' says Jochem Marotzke, director of the Hamburg-based Max Planck Institute for Meteorology, one of the world's leading climate research centers. 'Only the boundaries of low-pressure zones are changing slightly, meaning that weather is becoming more severe in Scandinavia and less so in the Mediterranean.'" Roeckner also questioned some of the computer "scenarios" used by the UN IPCC to predict the future impacts of global warming. "Some emissions scenarios are perhaps already demonstrably wrong," Roeckner said according to January 26, 2006 interview in the journal Nature. "It is possible that all of them are wrong." (LINK) [Roeckner was moved to this section to more accurately reflect his views.]

Alex Gourevitch, a Doctoral candidate at Columbia University, compared the environmental movements' promotion of global warming and other eco-concerns to the same "politics of fear" he believes marks the war on terror. "Let's say it: Environmentalism is a politics of fear. It is not a progressive politics. When I say it is a politics of fear, I don't mean that it just deploys hysterical rhetoric or that it exaggerates threats, which I think it does. I mean it in a much deeper sense," Gourevitch stated according to an October 31, 2007 article in the *New York Times*. "What the science cannot tell you is what our political and social response should be," he explained. "Environmentalism is not just some politics. It's a political project, a full-bodied ideology, and one that presents itself in terms of progress and aspiration. But when you look at what this ideology is built on, it's built on the idea that a collective threat that makes security the basic principle of politics and makes the struggle for survival the basic and central aim of our social and political life. This, to me, is not a progressive politics at all," Gourevitch added. "What is it that moves us? It's not actually ideals. We're not stirred to action by ideals. We're compelled by the force of circumstances. It's the sheer spur of necessity that drives us forward. What's more, this ostensible politics is really anti-politics, because the idea is that we should put to one side the conflicts of interest and ideals that are the real cut and thrust of politics," he said. Yale educated Dr. Mark Greif, co-editor of journal n+1 agreed with Gourevitch during the panel discussion at Columbia University. Greif argued that "the politics of global warming produces the possibility of left-wing fantasies of a state of emergency in which we wouldn't have to go through normal politics in order to get things done." (LINK)

# # #

Sampling of inconvenient scientific developments in 2007 for proponents of catastrophic man-made global warming: [Updated - 12-24-2007]

A September 26, 2007 report from the international group Institute of Physics' found no "consensus" on global warming. Excerpt: "As world leaders gathered in New York for a high-level UN meeting on climate change, a new report by some of the world's most renowned scientists urges policymakers to keep their eyes on the 'science grapevine', arguing that their understanding of global warming is still far from complete. Recognizing that powerful computer-based simulations are a key element in predicting climate change, a new Institute of Physics (IOP) report, published on 26 September 2007, shows that leading climate-physicists' views on the reliability of these models differ. The IOP is also urging world leaders 'to remain alert to the latest scientific thought on climate change.'" (LINK)

A November 3, 2007 peer-reviewed study in the Journal of Geophysical Research found that "solar changes significantly alter climate." Scafetta and West conclude that: "if we assume that the latest temperature and TSI secular reconstructions, WANG2005 and MOBERG05, are accurate, we are forced to conclude that solar changes significantly alter climate, and that the climate system responds relatively slowly to such changes with a time constant between 6 and 12 years. This would suggest that the large-scale computer models of climate could be significantly improved by adding additional Sun-climate coupling mechanisms." (LINK) & (LINK)

A December 2007 peer-reviewed study recalculated and halved the global average surface temperature trend between 1980 - 2002. The analysis appeared in the Journal of Geophysical Research and was authored by Climatologist Dr. Patrick Michaels and Dr. Ross McKitrick, associate professor at the University of Guelph. The study concluded that the temperature manipulations for the steep post-1980 period are inadequate, and the [UN IPCC] graph is an exaggeration. McKitrick believes that the United Nations agency promoting the global temperature graph has made "false claims about the quality of its data." McKitrick reports in this new, peer-reviewed study that data contamination problems "account for about half the surface warming measured over land since 1980." (LINK) & (LINK)

A December 2007 peer-reviewed study by a team of scientists found that "warming is naturally caused and shows no human influence." Climate scientist Dr. David Douglass of the University of Rochester, co-authored the December 2007 peer-reviewed paper published in the International Journal of Climatology of the Royal Meteorological Society which found the evidence for human influence for warming temperatures lacking in the atmosphere. "The observed pattern of warming, comparing surface and atmospheric temperature trends does not show the characteristic fingerprint associated with greenhouse warming. The inescapable conclusion is that the human contribution is not significant and that observed increases in carbon dioxide and other greenhouse gases make only a negligible contribution to climate warming," said Douglass, the paper's lead author on December 10, 2007. The paper was co-authored with Physicist Dr. S. Fred Singer, Climatologist Dr. John Christy and Benjamin D. Pearson. (LINK)

A November 2007 study published in Energy & Environment found the Medieval Warm Period "0.3C warmer than 20th century" The study was authored by C. Loehle and titled "A 2000-year global temperature reconstruction based on non-treering proxies." (LINK) & (LINK)

A June 29, 2007 scientific analysis by Gerd Burger of Berlin's Institute of Meteorology in the peer-reviewed Science Magazine challenged a previously touted study claiming the 20th century had been unusually warm. Excerpt: "Burger argues that [the 2006 temperature analysis by] Osborn and Briffa did not apply the appropriate statistical tests that link the proxy records to observational data, and as such, Osborn and Briffa did not properly quantify the statistical uncertainties in their analyses. Burger repeated all analyses with the appropriate adjustments and concluded "As a result, the 'highly significant' occurrences of positive anomalies during the 20th century disappear." (LINK) Burger's technical comments in Science Magazine state: "Osborn and Briffa (Reports, 10 February 2006, p. 841) identified anomalous periods of warmth or cold in the Northern Hemisphere that were synchronous across 14 temperature-sensitive proxies. However, their finding that the spatial extent of 20th-century warming is exceptional ignores the effect of proxy screening on the corresponding significance levels. After appropriate correction, the significance of the 20th-century warming anomaly disappears." (LINK)

A November 2007 peer-reviewed study in the journal Physical Geography found "Long-term climate change is driven by solar insolation changes." Harvard-Smithsonian Center Astrophysicist Dr. Willie Soon, authored the new study**.** The study concluded: "[L]ong-term climate change is driven by solar insolation changes, from both orbital variations and intrinsic solar magnetic and luminosity variations... There is no quantitative evidence that varying levels of minor greenhouse gases like CO2 and CH4 have accounted for even as much as half of the reconstructed glacial-interglacial temperature changes or, more importantly, for the large variations in global ice volume on both land and sea over the past 650 thousand years. ... [C]hanges in solar insolation at climatically sensitive latitudes and zones exceed the global radiative forcings of CO2 and CH4 by several-fold, and ... [therefore] regional responses to solar insolation forcing will decide the primary climatic feedbacks and changes." (LINK)

New peer-reviewed study finds global warming over last century linked to natural causes: Published in Geophysical Research Letters: Excerpt: "Tsonis *et al*. investigate the collective behavior of known climate cycles such as the Pacific Decadal Oscillation, the North Atlantic Oscillation, the El Nino/Southern Oscillation, and the North Pacific Oscillation. By studying the last 100 years of these cycles' patterns, they find that the systems synchronized several times. Further, in cases where the synchronous state was followed by an increase in the coupling strength among the cycles, the synchronous state was destroyed. Then a new climate state emerged, associated with global temperature changes and El Nino/Southern Oscillation variability. The authors show that this mechanism explains all global temperature tendency changes and El Nino variability in the 20th century. Authors: Anastasios A. Tsonis, Kyle Swanson, and Sergey Kravtsov: Atmospheric Sciences Group, Department of Mathematical Sciences, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, U.S.A. See August 2, 2007 Science Daily – "Synchronized Chaos: Mechanisms For Major Climate Shifts" (LINK)

A September 2007 peer-reviewed study counters global warming theory, finds carbon dioxide did not end the last Ice Age. Excerpt: Deep-sea temperatures rose 1,300 years before atmospheric CO2, ruling out the greenhouse gas as driver of meltdown, says study in Science. Carbon dioxide did not cause the end of the last ice age, a new study in Science suggests, contrary to past inferences from ice core records. "There has been this continual reference to the correspondence between CO2 and climate change as reflected in ice core records as justification for the role of CO2 in climate change," said USC geologist Lowell Stott, lead author of the study, slated for advance online publication Sept. 27 in Science Express. "You can no longer argue that CO2 alone caused the end of the ice ages." Deep-sea temperatures warmed about 1,300 years before the tropical surface ocean and well before the rise in atmospheric CO2, the study found. The finding suggests the rise in greenhouse gas was likely a result of warming and may have accelerated the meltdown – but was not its main cause. < > "The climate dynamic is much more complex than simply saying that CO2 rises and the temperature warms," Stott said. The complexities "have to be understood in order to appreciate how the climate system has changed in the past and how it will change in the future." (LINK)

Harvard-Smithsonian Center Astrophysicist Dr. Willie Soon co-authored with Dr. Art Robinson and Noah Robinson, a November 2007 study that found mankind's emissions are not harming the atmosphere. The paper, published in journal of American physicians and Surgeons was titled, "Environmental Effects of Increased Atmospheric Carbon Dioxide." The study reported: "A review of the research literature concerning the environmental consequences of increased levels of atmospheric carbon dioxide leads to the conclusion that in creases during the 20th and early 21st centuries have produced no deleterious effects upon Earth's weather and climate. Increased carbon dioxide has, however, markedly in creased plant growth." The study also found, "There are no experimental data to support the hypothesis that increases in human hydrocarbon use or in atmospheric carbon dioxide and other green house gases are causing or can be expected to cause unfavorable changes in global temperatures, weather, or landscape." (LINK) & **(**LINK **)**

An August 2007 peer-reviewed study finds clouds may greatly reduce global warming: Excerpt: This study published on August 9, 2007 in the Geophysical Research Letters finds that climate models fail test against real clouds. "To give an idea of how strong this enhanced cooling mechanism is, if it was operating on global warming, it would reduce estimates of future warming by over 75 percent," Dr. Roy Spencer said. "At least 80 percent of the Earth's natural greenhouse effect is due to water vapor and clouds, and those are largely under the control of precipitation systems. Until we understand how precipitation systems change with warming, I don't believe we can know how much of our current warming is manmade. Without that knowledge, we can't predict future climate change with any degree of certainty," Spencer added. The paper was co-authored by University of Alabama Huntsville's Dr. John R. Christy and Dr. W. Danny Braswell, and Dr. Justin Hnilo of Lawrence Livermore National Laboratory, Livermore, CA. (LINK)

An August 2007 peer-reviewed study finds that the solar system regulates the earth's climate - The paper, authored by Richard Mackey, was published August 17, 2007 in the Journal of Coastal Research - Excerpt: "According to the findings reviewed in this paper, the variable output of the sun, the sun's gravitational relationship between the earth (and

the moon) and earth's variable orbital relationship with the sun, regulate the earth's climate. The processes by which the sun affects the earth show periodicities on many time scales; each process is stochastic and immensely complex. (LINK) & (LINK)

An October 2007 Danish National Space Center Study concludes: "The Sun still appears to be the main forcing agent in global climate change." The report was authored by Physicist Henrik Svensmark and Eigil Friis-Christensen. (LINK) Several other recent scientific studies and scientists have debunked a media hyped UK study alleging there has not been a solar-climate link in the past 20 years. UK Astrophysicist Piers Corbyn confirmed the Danish study and also debunked the "No Solar-Climate Link Study" on July 14, 2007. Excerpt: "[The study claiming to prove a] 'refutation' of the decisive role of solar activity in driving climate is as valid as claiming a particular year was not warm by simply looking at the winter half of data. The most significant and persistent cycle of variation in the world's temperature follows the 22-year magnetic cycle of the sun's activity," Corbyn, who heads the UK based long-term solar forecast group Weather Action, wrote. (LINK) Other studies and scientists have found also confirmed the solar-climate link. (LINK) & (LINK) & (LINK)

An April 2007 study revealed the Earth's climate "seesawing" during the last 10,000 years, according to Swedish researchers Svante Björck, Karl Ljung and Dan Hammarlund of Lund University. Excerpt: During the last 10,000 years climate has been seesawing between the North and South Atlantic Oceans. As revealed by findings presented by Quaternary scientists at Lund University, Sweden, cold periods in the north have corresponded to warmth in the south and vice verse. These results imply that Europe may face a slightly cooler future than predicted by IPCC, the Intergovernmental Panel on Climate Change. < > We can identify a persistent "seesaw" pattern. When the South Atlantic was warm it was cold in the North Atlantic and vice versa. This is most certainly related to large-scale ocean circulation in the Atlantic Ocean. The main current system - "the Great Ocean Conveyor" - is driven by sinking of dense, relatively cold and salty water in the northern North Atlantic. This results in southward-flowing deep-water that is replaced by warm surface water brought to high northern latitudes from the tropics and ultimately from the South Atlantic, says Svante Björck. < > Our results from Nightingale Island in the Tristan da Cunha island group, between South Africa and Argentina, for the first time give evidence of warming of the South Atlantic associated with cooling in the north. This is a major breakthrough in palaeoclimate research. (LINK)

Team of Scientists Question Validity Of A 'Global Temperature' – The study was published in Journal of Non-Equilibrium Thermodynamics. Excerpt from a March 18, 2007 article in Science Daily: "Discussions on global warming often refer to 'global temperature.' Yet the concept is thermodynamically as well as mathematically an impossibility, says Bjarne Andresen, a professor at The Niels Bohr Institute, University of Copenhagen, who has analyzed this topic in collaboration with professors Christopher Essex from University of Western Ontario and Ross McKitrick from University of Guelph, Canada." The Science Daily article reads: "It is impossible to talk about a single temperature for something as complicated as the climate of Earth", Bjarne Andresen says, an expert of thermodynamics. "A temperature can be defined only for a homogeneous system. Furthermore, the climate is not governed by a single temperature. Rather,

differences of temperatures drive the processes and create the storms, sea currents, thunder, etc. which make up the climate." (LINK)

Belgian weather institute's (RMI) August 2007 study dismisses decisive role of CO2 in warming: Excerpt: "Brussels: CO2 is not the big bogeyman of climate change and global warming. This is the conclusion of a comprehensive scientific study done by the Royal Meteorological Institute, which will be published this summer. The study does not state that CO2 plays no role in warming the earth. "But it can never play the decisive role that is currently attributed to it", climate scientist Luc Debontridder said. "Not CO2, but water vapor is the most important greenhouse gas. It is responsible for at least 75 % of the greenhouse effect. This is a simple scientific fact, but Al Gore's movie has hyped CO2 so much that nobody seems to take note of it." said Debontridder. "Every change in weather conditions is blamed on CO2. But the warm winters of the last few years (in Belgium) are simply due to the 'North-Atlantic Oscillation'. And this has absolutely nothing to do with CO2," he added. (LINK)) [***Note: Though Debontridder dampened climate fears with such quotes as "There's no need either to needlessly frighten the public. Bruges will not be on the coastline by 2050," he reportedly claims he and his report were not translated correctly in media reports from 2007. (LINK)***]

Chinese scientists Lin Zhen-Shan, and Sun Xian's 2007 study, published in the peer-reviewed Meteorology and Atmospheric Physics, noted that CO2's impact on warming may be "excessively exaggerated." Excerpt: "The global climate warming is not solely affected by the CO2 greenhouse effect. The best example is temperature obviously cooling however atmospheric CO2 concentration is ascending from 1940s to 1970s. Although the CO2 greenhouse effect on global climate change is unsuspicious, it could have been excessively exaggerated. It is high time to reconsider the trend of global climate change," the two scientists concluded. (LINK) & (LINK)

An August 2007 NASA temperature data error discovery has lead to 1934 -- not the previously hyped 1998 -- being declared the hottest in U.S. history since records began. Revised data now reveals four of the top ten hottest years in the U.S. were in the 1930's while only three of the hottest years occurred in the last decade. Excerpt: "NASA has yet to own up fully to its historic error in misinterpreting US surface temperatures to conform to the Global Warming hypothesis, as discovered by Stephen McIntyre at ClimateAudit.org." (LINK) ***[EPW note: 80% of man-made CO2 emissions occurred after 1940. (LINK)]***

Numerous U.S. temperature collection data errors exposed by team of researchers led by Meteorologist Anthony Watts in 2007 (LINK) **-** "The (U.S.) National Climate Data Center (NCDC) is in the middle of a scandal. Their global observing network, the heart and soul of surface weather measurement, is a disaster. Urbanization has placed many sites in unsuitable locations — on hot black asphalt, next to trash burn barrels, beside heat exhaust vents, even attached to hot chimneys and above outdoor grills! The data and approach taken by many global warming alarmists is seriously flawed. If the global data were properly adjusted for urbanization and station siting, and land use change issues were addressed, what would emerge is a cyclical pattern of rises and falls with much less of any background trend," Meteorologist Joseph Conklin wrote in an August 10, 2007. (LINK)

A July 2007 analysis of peer-reviewed literature thoroughly debunks fears of Greenland and the Arctic melting and predictions of a frightening sea level rise. Excerpt: "Research in 2006 found that Greenland has been warming since the 1880's, but since 1955, temperature averages at Greenland stations have been colder than the period between 1881-1955. A 2006 study found Greenland has cooled since the 1930's and 1940's, with 1941 being the warmest year on record. Another 2006 study concluded Greenland was as warm or warmer in the 1930's and 40's and the rate of warming from 1920-1930 was about 50% higher than the warming from 1995-2005. One 2005 study found Greenland gaining ice in the interior higher elevations and thinning ice at the lower elevations. In addition, the often media promoted fears of Greenland's ice completely melting and a subsequent catastrophic sea level rise are directly at odds with the latest scientific studies." [See July 30, 2007 Report - Latest Scientific Studies Refute Fears of Greenland Melt – (LINK)]

Antarctic ice GROWS to record levels, in 2007. Excerpt: While the news focus has been on the lowest ice extent since satellite monitoring began in 1979 for the Arctic, the Southern Hemisphere (Antarctica) has quietly set a new record for most ice extent since 1979. This can be seen on this graphic from this University of Illinois site The Cryosphere Today, which updated snow and ice extent for both hemispheres daily. The Southern Hemispheric areal coverage is the highest in the satellite record, just beating out 1995, 2001, 2005 and 2006. Since 1979, the trend has been up for the total Antarctic ice extent. < > This winter has been an especially harsh one in the Southern Hemisphere with cold and snow records set in Australia, South America and Africa. (LINK) & (LINK)

A February 2007 study reveals Antarctica is not following predicted global warming models. Excerpt: "A new report on climate over the world's southernmost continent shows that temperatures during the late 20th century did not climb as had been predicted by many global climate models." The research was led by David Bromwich, professor of professor of atmospheric sciences in the Department of Geography, and researcher with the Byrd Polar Research Center at Ohio State University. [See: Antarctic temperatures disagree with climate model predictions - (LINK)]

A NASA study published in the peer-reviewed journal Geophysical Research Letters on October 4, 2007, found "unusual winds" in the Arctic blew "older thicker" ice to warmer southern waters. Despite the media's hyping of global warming, Ignatius Rigor a co-author of the NASA study explained: "While the total [Arctic] area of ice cover in recent winters has remained about the same, during the past two years an increased amount of older, thicker perennial sea ice was swept by winds out of the Arctic Ocean into the Greenland Sea. What grew in its place in the winters between 2005 and 2007 was a thin veneer of first-year sea ice, which simply has less mass to survive the summer melt." (LINK) "Unusual atmospheric conditions set up wind patterns that compressed the sea ice, loaded it into the Transpolar Drift Stream and then sped its flow out of the Arctic," said Son Nghiem of NASA's Jet Propulsion Laboratory and leader of the study. (LINK)

A November 2007 peer-reviewed study conducted by a team of NASA and university experts found cyclical changes in ocean currents impacting the Arctic. "Our study confirms many changes seen in upper Arctic Ocean circulation in the 1990s were mostly decadal in nature, rather than trends caused by global warming," said James Morison of the

University of Washington's Polar Science Center Applied Physics Laboratory in Seattle, according to a November 13, 2007 NASA release. Morison led the team of scientists using data from an Earth-observing satellite and from deep-sea pressure gauges to monitor Arctic Ocean circulation from 2002 to 2006. Excerpt: A team of NASA and university scientists has detected an ongoing reversal in Arctic Ocean circulation triggered by atmospheric circulation changes that vary on decade-long time scales. The results suggest not all the large changes seen in Arctic climate in recent years are a result of long-term trends associated with global warming. < > The team of scientists found a 10-millibar decrease in water pressure at the bottom of the ocean at the North Pole between 2002 and 2006, equal to removing the weight of four inches of water from the ocean. The distribution and size of the decrease suggest that Arctic Ocean circulation changed from the counterclockwise pattern it exhibited in the 1990s to the clockwise pattern that was dominant prior to 1990. Reporting in Geophysical Research Letters, the authors attribute the reversal to a weakened Arctic Oscillation, a major atmospheric circulation pattern in the northern hemisphere. The weakening reduced the salinity of the upper ocean near the North Pole, decreasing its weight and changing its circulation. < > "While some 1990s climate trends, such as declines in Arctic sea ice extent, have continued, these results suggest at least for the 'wet' part of the Arctic – the Arctic Ocean – circulation reverted to conditions like those prevalent before the 1990s," Morison added. (LINK)

In September 2007, it was announced that a soon to be released survey finds Polar Bear population rising in warmer part of the Arctic. Excerpt: Fears that two-thirds of the world's polar bears will die off in the next 50 years are overblown, says [Arctic biologist] Mitchell Taylor, the Government of Nunavut's director of wildlife research. "I think it's naïve and presumptuous," Taylor said. < > The Government of Nunavut is conducting a study of the [southern less ice region of the] Davis Strait bear population. Results of the study won't be released until 2008, but Taylor says it appears there are some 3,000 bears in an area - a big jump from the current estimate of about 850 bears. "That's not theory. That's not based on a model. That's observation of reality," he says. And despite the fact that some of the most dramatic changes to sea ice is seen in seasonal ice areas such as Davis Strait, seven or eight of the bears measured and weighed for the study this summer are among the biggest on record, Taylor said. "Davis Strait is crawling with polar bears. It's not safe to camp there. They're fat. The mothers have cubs. The cubs are in good shape," Taylor said, according to a September 14, 2007 article. (LINK) **[*EPW Note: In a case of observed reality versus unproven computer model predictions, the U.S. Fish & Wildlife Service estimates that the polar bear population is currently at 20,000 to 25,000 bears, up from as low as 5,000-10,000 bears in the 1950s and 1960s. A 2002 U.S. Geological Survey of wildlife in the Arctic Refuge Coastal Plain noted that the polar bear populations 'may now be near historic highs.']***

In 2007, even the UN IPCC cut sea level rise estimates significantly since 2001 and has reduced man's estimated impact on the climate by 25%. Meanwhile a separate 2006 UN report found that cow emissions are more damaging to the planet than all of the CO2 emissions from cars and trucks. (LINK)

Geologists Dr. George Chilingar, and L.F. Khilyuk of the University of Southern California authored a December 2006 study in the peer-reviewed journal Environmental Geology which found warming temperatures were due to natural factors,

not mankind. "The current global warming is most likely a combined effect of increased solar and tectonic activities and cannot be attributed to the increased anthropogenic impact on the atmosphere. Humans may be responsible for less than 0.01°C (of approximately 0.56°C (1°F) total average atmospheric heating during the last century)," the paper concluded. "Recalculating this amount into the total anthropogenic carbon dioxide emission in grams of CO2, one obtains the estimate 1.003×1018 g, which constitutes less than 0.00022% of the total CO2 amount naturally degassed from the mantle during geologic history. Comparing these figures, one can conclude that anthropogenic carbon dioxide emission is negligible (indistinguishable) in any energy-matter transformation processes changing the Earth's climate," Chilingar and Khilyuk added. Chilingar is a professor of civil and petroleum engineering at UCLA and is the former president of the U.S. chapter of the Russian Academy Sciences. (LINK) & (LINK)

(Also See August 2007 Report: "New Peer-Reviewed Scientific Studies Chill Global Warming Fears" - LINK)

# # # #

Attachment Number 1: Full Text of December 13, 2007: Over 100 Prominent International Scientists Warn UN Against 'Futile' Climate Control Efforts in a December 13, 2007 open letter.

Complete Letter with all signatories - As published in Canada's National Post on December 13, 2007:

The National Post

Don't Fight, Adapt; We Should Give Up Futile Attempts to Combat Climate Change

Dec. 13, 2007

Link to Letter:

Key Quote from Scientists' Letter to UN: "Attempts to prevent global climate change from occurring are ultimately futile, and constitute a tragic misallocation of resources that would be better spent on humanity's real and pressing problems."

His Excellency

Ban Ki-MoonSecretary-General,

United Nations New York, N.Y.

Dear Mr. Secretary-General,

Re: UN climate conference taking the World in entirely the wrong direction

It is not possible to stop climate change, a natural phenomenon that has affected humanity through the ages. Geological, archaeological, oral and written histories all attest to the dramatic challenges posed to past societies from unanticipated changes in temperature, precipitation, winds and other climatic variables. We therefore need to equip nations to become resilient to the full range of these natural phenomena by promoting economic growth and wealth generation.

The United Nations Intergovernmental Panel on Climate Change (IPCC) has issued increasingly alarming conclusions about the climatic influences of human-produced carbon dioxide (CO2), a non-polluting gas that is essential to plant photosynthesis. While we understand the evidence that has led them to view CO2 emissions as harmful, the IPCC's conclusions are quite inadequate as justification for implementing policies that will markedly diminish future prosperity. In particular, it is not established that it is possible to significantly alter global climate through cuts in human greenhouse gas emissions. On top of which, because attempts to cut emissions will slow development, the current UN approach of CO2 reduction is likely to increase human suffering from future climate change rather than to decrease it.

The IPCC Summaries for Policy Makers are the most widely read IPCC reports amongst politicians and non-scientists and are the basis for most climate change policy formulation. Yet these Summaries are prepared by a relatively small core writing team with the final drafts approved line-by-line by government representatives. The great majority of IPCC contributors and reviewers, and the tens of thousands of other scientists who are qualified to comment on these matters, are not involved in the preparation of these documents. The summaries therefore cannot properly be represented as a consensus view among experts.

Contrary to the impression left by the IPCC Summary reports:

*Recent observations of phenomena such as glacial retreats, sea-level rise and the migration of temperature-sensitive species are not evidence for abnormal climate change, for none of these changes has been shown to lie outside the bounds of known natural variability.

*The average rate of warming of 0.1 to 0. 2 degrees Celsius per decade recorded by satellites during the late 20th century falls within known natural rates of warming and cooling over the last 10,000 years.

*Leading scientists, including some senior IPCC representatives, acknowledge that today's computer models cannot predict climate. Consistent with this, and despite computer projections of temperature rises, there has been no net global warming since 1998. That the current temperature plateau follows a late 20th-century period of warming is consistent with the continuation today of natural multi-decadal or millennial climate cycling.

In stark contrast to the often repeated assertion that the science of climate change is "settled," significant new peer-reviewed research has cast even more doubt on the hypothesis of dangerous human-caused global warming. But because IPCC working groups were generally instructed (http://ipcc-wg1.ucar.edu/wg1/docs/wg1_timetable_2006-08-14.pdf) to consider work published only through May, 2005, these important findings are not included in their reports; i.e., the IPCC assessment reports are already materially outdated.

The UN climate conference in Bali has been planned to take the world along a path of severe CO2 restrictions, ignoring the lessons apparent from the failure of the Kyoto Protocol, the chaotic nature of the European CO2 trading market, and the ineffectiveness of other costly initiatives to curb greenhouse gas emissions. Balanced cost/benefit analyses provide no support for the introduction of global measures to cap and reduce energy consumption for the purpose of restricting CO2 emissions. Furthermore, it is irrational to apply the "precautionary principle" because many scientists recognize that both climatic coolings and warmings are realistic possibilities over the medium-term future.

The current UN focus on "fighting climate change," as illustrated in the Nov. 27 UN Development Programme's Human Development Report, is distracting governments from adapting to the threat of inevitable natural climate changes, whatever forms they may take. National and international planning for such changes is needed, with a focus on helping our most vulnerable citizens adapt to conditions that lie ahead. Attempts to prevent global

climate change from occurring are ultimately futile, and constitute a tragic misallocation of resources that would be better spent on humanity's real and pressing problems.

Yours faithfully,

The following are signatories to the Dec. 13th letter to the Ban Ki-moon, Secretary-General of the United Nations on the UN Climate conference in Bali [List of signatories: LINK]:

Don Aitkin, PhD, Professor, social scientist, retired Vice-Chancellor and President, University of Canberra, Australia

Syun-Ichi Akasofu, PhD, Professor of Physics, Emeritus and Founding Director, International Arctic Research Center of the University of Alaska Fairbanks, U.S.

William J.R. Alexander, PhD, Professor Emeritus, Dept. of Civil and Biosystems Engineering, University of Pretoria, South Africa; Member, UN Scientific and Technical Committee on Natural Disasters, 1994-2000

Bjarne Andresen, PhD, physicist, Professor, The Niels Bohr Institute, University of Copenhagen, Denmark

Geoff L. Austin, PhD, FNZIP, FRSNZ, Professor, Dept. of Physics, University of Auckland, New Zealand

Timothy F. Ball, PhD, environmental consultant, former climatology professor, University of Winnipeg, Canada

Ernst-Georg Beck, Dipl. Biol., Biologist, Merian-Schule Freiburg, Germany

Sonja A. Boehmer-Christiansen, PhD, Reader, Dept. of Geography, Hull University, UK; Editor, Energy & Environment journal

Chris C. Borel, PhD, remote sensing scientist, U.S.

Reid A. Bryson, Ph.D. D.Sc. D.Engr., UNEP Global 500 Laureate; Senior Scientist, Center for Climatic Research; Emeritus Professor of Meteorology, of Geography, and of Environmental Studies, University of Wisconsin, U.S.

Dan Carruthers, M.Sc., wildlife biology consultant specializing in animal ecology in Arctic and Subarctic regions, Alberta, Canada

Robert M. Carter, PhD, Professor, Marine Geophysical Laboratory, James Cook University, Townsville, Australia

Ian D. Clark, PhD, Professor, isotope hydrogeology and paleoclimatology, Dept. of Earth Sciences, University of Ottawa, Canada

Richard S. Courtney, PhD, climate and atmospheric science consultant, IPCC expert reviewer, U.K.

Willem de Lange, PhD, Dept. of Earth and Ocean Sciences, School of Science and Engineering, Waikato University, New Zealand

David Deming, PhD (Geophysics), Associate Professor, College of Arts and Sciences, University of Oklahoma, U.S.

Freeman J. Dyson, PhD, Emeritus Professor of Physics, Institute for Advanced Studies, Princeton, N.J., U.S.

Don J. Easterbrook, PhD, Emeritus Professor of Geology, Western Washington University, U.S.

Lance Endersbee, Emeritus Professor, former Dean of Engineering and Pro-Vice Chancellor of Monasy University, Australia

Hans Erren, Doctorandus, geophysicist and climate specialist, Sittard, The Netherlands

Robert H. Essenhigh, PhD, E.G. Bailey Professor of Energy Conversion, Dept. of Mechanical Engineering, The Ohio State University, U.S.

Christopher Essex, PhD, Professor of Applied Mathematics and Associate Director of the Program in Theoretical Physics, University of Western Ontario, Canada

David Evans, PhD, mathematician, carbon accountant, computer and electrical engineer and head of 'Science Speak', Australia

William Evans, PhD, Editor, American Midland Naturalist; Dept. of Biological Sciences, University of Notre Dame, U.S.

Stewart Franks, PhD, Associate Professor, Hydroclimatologist, University of Newcastle, Australia

R. W. Gauldie, PhD, Research Professor, Hawai'i Institute of Geophysics and Planetology, School of Ocean Earth Sciences and Technology, University of Hawaii at Manoa

Lee C. Gerhard, PhD, Senior Scientist Emeritus, University of Kansas; former director and state geologist, Kansas Geological Survey, U.S.

Gerhard Gerlich, Professor for Mathematical and Theoretical Physics, Institut für Mathematische Physik der TU Braunschweig, Germany

Albrecht Glatzle, PhD, sc.agr., Agro-Biologist and Gerente ejecutivo, INTTAS, Paraguay

Fred Goldberg, PhD, Adj Professor, Royal Institute of Technology, Mechanical Engineering, Stockholm, Sweden

Vincent Gray, PhD, expert reviewer for the IPCC and author of The Greenhouse Delusion: A Critique of 'Climate Change 2001,' Wellington, New Zealand

William M. Gray, Professor Emeritus, Dept. of Atmospheric Science, Colorado State University and Head of the Tropical Meteorology Project, U.S.

Howard Hayden, PhD, Emeritus Professor of Physics, University of Connecticut, U.S.

Louis Hissink M.Sc. M.A.I.G., Editor AIG News and Consulting Geologist, Perth, Western Australia

Craig D. Idso, PhD, Chairman, Center for the Study of Carbon Dioxide and Global Change, Arizona, U.S.

Sherwood B. Idso, PhD, President, Center for the Study of Carbon Dioxide and Global Change, AZ, USA

Andrei Illarionov, PhD, Senior Fellow, Center for Global Liberty and Prosperity, U.S.; founder and director of the Institute of Economic Analysis, Russia

Zbigniew Jaworowski, PhD, physicist, Chairman - Scientific Council of Central Laboratory for Radiological Protection, Warsaw, Poland

Jon Jenkins, PhD, MD, computer modelling - virology, Sydney, NSW, Australia

Wibjorn Karlen, PhD, Emeritus Professor, Dept. of Physical Geography and Quaternary Geology, Stockholm University, Sweden

Olavi Kärner, Ph.D., Research Associate, Dept. of Atmospheric Physics, Institute of Astrophysics and Atmospheric Physics, Toravere, Estonia

Joel M. Kauffman, PhD, Emeritus Professor of Chemistry, University of the Sciences in Philadelphia, U.S.

David Kear, PhD, FRSNZ, CMG, geologist, former Director-General of NZ Dept. of Scientific & Industrial Research, New Zealand

Madhav Khandekar, PhD, former Research Scientist Environment Canada; Editor "Climate Research" (03-05); Editorial Board Member "Natural Hazards, IPCC Expert Reviewer 2007

William Kininmonth M.Sc., M.Admin., former head of Australia's National Climate Centre and a consultant to the World Meteorological organization's Commission for Climatology

Jan J.H. Kop, M.Sc. Ceng FICE (Civil Engineer Fellow of the Institution of Civil Engineers), Emeritus Professor of Public Health Engineering, Technical University Delft, The Netherlands

Professor R.W.J. Kouffeld, Emeritus Professor, Energy Conversion, Delft University of Technology, The Netherlands

Salomon Kroonenberg, PhD, Professor, Dept. of Geotechnology, Delft University of Technology, The Netherlands

Hans H.J. Labohm, PhD, economist, former advisor to the executive board, Clingendael Institute (The Netherlands Institute of International Relations), The Netherlands

The Rt. Hon. Lord Lawson of Blaby, economist; Chairman of the Central Europe Trust; former Chancellor of the Exchequer, U.K.

Douglas Leahey, PhD, meteorologist and air-quality consultant, Calgary, Canada

David R. Legates, PhD, Director, Center for Climatic Research, University of Delaware, U.S.

Marcel Leroux, PhD, Professor Emeritus of Climatology, University of Lyon, France; former director of Laboratory of Climatology, Risks and Environment, CNRS

Bryan Leyland, International Climate Science Coalition, consultant - power engineer, Auckland, New Zealand

William Lindqvist, PhD, consulting geologist and company director, Tiburon, California, U.S.

Richard S. Lindzen, PhD, Alfred P. Sloan Professor of Meteorology, Dept. of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, U.S.

A.J. Tom van Loon, PhD, Professor of Geology (Quaternary Geology), Adam Mickiewicz University, Poznan, Poland; former President of the European Association of Science Editors

Anthony R. Lupo, PhD, Associate Professor of Atmospheric Science, Dept. of Soil, Environmental, and Atmospheric Science, University of Missouri-Columbia, U.S.

Richard Mackey, PhD, Statistician, Australia

Horst Malberg, PhD, Professor for Meteorology and Climatology, Institut für Meteorologie, Berlin, Germany

John Maunder, PhD, Climatologist, former President of the Commission for Climatology of the World Meteorological Organization (89-97), New Zealand

Alister McFarquhar, PhD, international economist, Downing College, Cambridge, U.K.

Ross McKitrick, PhD, Associate Professor, Dept. of Economics, University of Guelph, Canada

John McLean, Climate Data Analyst, computer scientist, Melbourne, Australia

Owen McShane, B. Arch., Master of City and Regional Planning (UC Berkeley), economist and policy analyst, joint founder of the International Climate Science Coalition, Director - Centre for Resource Management Studies, New Zealand

Fred Michel, PhD, Director, Institute of Environmental Sciences and Associate Professor of Earth Sciences, Carleton University, Canada

Frank Milne, PhD, Professor, Dept. of Economics, Queen's University, Canada

Asmunn Moene, PhD, former head of the Forecasting Centre, Meteorological Institute, Norway

Alan Moran, PhD, Energy Economist, Director of the IPA's Deregulation Unit, Australia

Nils-Axel Morner, PhD, Emeritus Professor of Paleogeophysics & Geodynamics, Stockholm University, Sweden

Lubos Motl, PhD, physicist, former Harvard string theorist, Charles University, Prague, Czech Republic

John Nicol, PhD, physicist, James Cook University, Australia

Mr. David Nowell, M.Sc., Fellow of the Royal Meteorological Society, former chairman of the NATO Meteorological Group, Ottawa, Canada

James J. O'Brien, PhD, Professor Emeritus, Meteorology and Oceanography, Florida State University, U.S.

Cliff Ollier, PhD, Professor Emeritus (Geology), Research Fellow, University of Western Australia

Garth W. Paltridge, PhD, atmospheric physicist, Emeritus Professor and former Director of the Institute of Antarctic and Southern Ocean Studies, University of Tasmania, Australia

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Al Pekarek, PhD, Associate Professor of Geology, Earth and Atmospheric Sciences Dept., St. Cloud State University, Minnesota, U.S.

Ian Plimer, PhD, Professor of Geology, School of Earth and Environmental Sciences, University of Adelaide and Emeritus Professor of Earth Sciences, University of Melbourne, Australia

Brian Pratt, PhD, Professor of Geology, Sedimentology, University of Saskatchewan, Canada

Harry N.A. Priem, PhD, Emeritus Professor of Planetary Geology and Isotope Geophysics, Utrecht University; former director of the Netherlands Institute for Isotope Geosciences

Alex Robson, PhD, Economics, Australian National University

Colonel F.P.M. Rombouts, Branch Chief - Safety, Quality and Environment, Royal Netherlands Air Force

R.G. Roper, PhD, Professor Emeritus of Atmospheric Sciences, School of Earth and Atmospheric Sciences, Georgia Institute of Technology, U.S.

Arthur Rorsch, PhD, Emeritus Professor, Molecular Genetics, Leiden University, The Netherlands

Rob Scagel, M.Sc., forest microclimate specialist, principal consultant, Pacific Phytometric Consultants, B.C., Canada

Tom V. Segalstad, PhD, (Geology/Geochemistry), Head of the Geological Museum and Associate Professor of Resource and Environmental Geology, University of Oslo, Norway

Gary D. Sharp, PhD, Center for Climate/Ocean Resources Study, Salinas, CA, U.S.

S. Fred Singer, PhD, Professor Emeritus of Environmental Sciences, University of Virginia and former director, U.S. Weather Satellite Service

L. Graham Smith, PhD, Associate Professor, Dept. of Geography, University of Western Ontario, Canada

Roy W. Spencer, PhD, climatologist, Principal Research Scientist, Earth System Science Center, The University of Alabama, Huntsville, U.S.

Peter Stilbs, TeknD, Professor of Physical Chemistry, Research Leader, School of Chemical Science and Engineering, KTH (Royal Institute of Technology), Stockholm, Sweden

Hendrik Tennekes, PhD, former Director of Research, Royal Netherlands Meteorological Institute

Dick Thoenes, PhD, Emeritus Professor of Chemical Engineering, Eindhoven University of Technology, The Netherlands

Brian G Valentine, PhD, PE (Chem.), Technology Manager - Industrial Energy Efficiency, Adjunct Associate Professor of Engineering Science, University of Maryland at College Park; Dept of Energy, Washington, DC, U.S.

Gerrit J. van der Lingen, PhD, geologist and paleoclimatologist, climate change consultant, Geoscience Research and Investigations, New Zealand

Len Walker, PhD, power engineering, Pict Energy, Melbourne, Australia

Edward J. Wegman, Bernard J. Dunn Professor, Department of Statistics and Department Computational and Data Sciences, George Mason University, Virginia, U.S.

Stephan Wilksch, PhD, Professor for Innovation and Technology Management, Production Management and Logistics, University of Technology and Economics Berlin, Germany

Boris Winterhalter, PhD, senior marine researcher (retired), Geological Survey of Finland, former professor in marine geology, University of Helsinki, Finland

David E. Wojick, PhD, P.Eng., UN IPCC Expert Reviewer, energy consultant, Virginia, U.S.

Raphael Wust, PhD, Lecturer, Marine Geology/Sedimentology, James Cook University, Australia

Zichichi, PhD, President of the World Federation of Scientists, Geneva, Switzerland; Emeritus Professor of Advanced Physics, University of Bologna, Italy.

# # #

Attachment Number Two: 60 Prominent Scientists came forward in 2006 to question the so-called "consensus" that the Earth faces a "climate emergency."

Open Kyoto to debate, 60 Scientists call on Harper to revisit the science of global warming (The Financial Post)

April 6, 2006

Click Here for the Link:

An open letter to Prime Minister Stephen Harper:

Dear Prime Minister:

As accredited experts in climate and related scientific disciplines, we are writing to propose that balanced, comprehensive public-consultation sessions be held so as to examine the scientific foundation of the federal government's climate-change plans. This would be entirely consistent with your recent commitment to conduct a review of the Kyoto Protocol. Although many of us made the same suggestion to then-prime ministers Martin and Chretien, neither responded, and, to date, no formal, independent climate-science review has been conducted in Canada. Much of the billions of dollars earmarked for implementation of the protocol in Canada will be squandered without a proper assessment of recent developments in climate science.

Observational evidence does not support today's computer climate models, so there is little reason to trust model predictions of the future. Yet this is precisely what the United Nations did in creating and promoting Kyoto and still does in the alarmist forecasts on which Canada's climate policies are based. Even if the climate models were realistic, the environmental impact of Canada delaying implementation of Kyoto or other greenhouse-gas reduction schemes, pending completion of consultations, would be insignificant. Directing your government to convene balanced, open hearings as soon as possible would be a most prudent and responsible course of action.

While the confident pronouncements of scientifically unqualified environmental groups may provide for sensational headlines, they are no basis for mature policy formulation. The study of global climate change is, as you have said, an "emerging science," one that is perhaps the most complex ever tackled. It may be many years yet before we properly understand the Earth's climate system. Nevertheless, significant advances have been made since the protocol was created, many of which are taking us away from a concern about increasing greenhouse gases. If, back in the mid-1990s, we knew what we know today about climate, Kyoto would almost certainly not exist, because we would have concluded it was not necessary.

We appreciate the difficulty any government has formulating sensible science-based policy when the loudest voices always seem to be pushing in the opposite direction. However, by convening open, unbiased consultations, Canadians will be permitted to hear from experts on both sides of the debate in the climate-science community. When the public comes to understand that there is no "consensus" among climate scientists about the relative importance of the various causes of global climate change, the government will be in a far better position to develop plans that reflect reality and so benefit both the environment and the economy.

"Climate change is real" is a meaningless phrase used repeatedly by activists to convince the public that a climate catastrophe is looming and humanity is the cause. Neither of these fears is justified. Global climate changes all the time due to natural causes and the human impact still remains

impossible to distinguish from this natural "noise." The new Canadian government's commitment to reducing air, land and water pollution is commendable, but allocating funds to "stopping climate change" would be irrational. We need to continue intensive research into the real causes of climate change and help our most vulnerable citizens adapt to whatever nature throws at us next.

We believe the Canadian public and government decision-makers need and deserve to hear the whole story concerning this very complex issue. It was only 30 years ago that many of today's global-warming alarmists were telling us that the world was in the midst of a global-cooling catastrophe. But the science continued to evolve, and still does, even though so many choose to ignore it when it does not fit with predetermined political agendas.

We hope that you will examine our proposal carefully and we stand willing and able to furnish you with more information on this crucially important topic.

CC: The Honourable Rona Ambrose, Minister of the Environment, and the Honourable Gary Lunn, Minister of Natural Resources

- - -

Sincerely,

Dr. Ian D. Clark, professor, isotope hydrogeology and paleoclimatology, Dept. of Earth Sciences, University of Ottawa

Dr. Tad Murty, former senior research scientist, Dept. of Fisheries and Oceans, former director of Australia's National Tidal Facility and professor of earth sciences, Flinders University, Adelaide; currently adjunct professor, Departments of Civil Engineering and Earth Sciences, University of Ottawa

Dr. R. Timothy Patterson, professor, Dept. of Earth Sciences (paleoclimatology), Carleton University, Ottawa

Dr. Fred Michel, director, Institute of Environmental Science and associate professor, Dept. of Earth Sciences, Carleton University, Ottawa

Dr. Madhav Khandekar, former research scientist, Environment Canada. Member of editorial board of Climate Research and Natural Hazards

Dr. Paul Copper, FRSC, professor emeritus, Dept. of Earth Sciences, Laurentian University, Sudbury, Ont.

Dr. Ross McKitrick, associate professor, Dept. of Economics, University of Guelph, Ont.

Dr. Tim Ball, former professor of climatology, University of Winnipeg; environmental consultant

Dr. Andreas Prokoph, adjunct professor of earth sciences, University of Ottawa; consultant in statistics and geology

Mr. David Nowell, M.Sc. (Meteorology), fellow of the Royal Meteorological Society, Canadian member and past chairman of the NATO Meteorological Group, Ottawa

Dr. Christopher Essex, professor of applied mathematics and associate director of the Program in Theoretical Physics, University of Western Ontario, London, Ont.

* Dr. Gordon E. Swaters, professor of applied mathematics, Dept. of Mathematical Sciences, and member, Geophysical Fluid Dynamics Research Group, University of Alberta (* Note: Swaters later recanted his signature on the open letter)

Dr. L. Graham Smith, associate professor, Dept. of Geography, University of Western Ontario, London, Ont.

Dr. G. Cornelis van Kooten, professor and Canada Research Chair in environmental studies and climate change, Dept. of Economics, University of Victoria

Dr. Petr Chylek, adjunct professor, Dept. of Physics and Atmospheric Science, Dalhousie University, Halifax

Dr./Cdr. M. R. Morgan, FRMS, climate consultant, former meteorology advisor to the World Meteorological Organization. Previously research scientist in climatology at University of Exeter, U.K.

Dr. Keith D. Hage, climate consultant and professor emeritus of Meteorology, University of Alberta

Dr. David E. Wojick, P.Eng., energy consultant, Star Tannery, Va., and Sioux Lookout, Ont.

Rob Scagel, M.Sc., forest microclimate specialist, principal consultant, Pacific Phytometric Consultants, Surrey, B.C.

Dr. Douglas Leahey, meteorologist and air-quality consultant, Calgary

Paavo Siitam, M.Sc., agronomist, chemist, Cobourg, Ont.

Dr. Chris de Freitas, climate scientist, associate professor, The University of Auckland, N.Z.

Dr. Richard S. Lindzen, Alfred P. Sloan professor of meteorology, Dept. of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology

Dr. Freeman J. Dyson, emeritus professor of physics, Institute for Advanced Studies, Princeton, N.J.

Mr. George Taylor, Dept. of Meteorology, Oregon State University; Oregon State climatologist; past president, American Association of State Climatologists

Dr. Ian Plimer, professor of geology, School of Earth and Environmental Sciences, University of Adelaide; emeritus professor of earth sciences, University of Melbourne, Australia

Dr. R.M. Carter, professor, Marine Geophysical Laboratory, James Cook University, Townsville, Australia

Mr. William Kininmonth, Australasian Climate Research, former Head National Climate Centre, Australian Bureau of Meteorology; former Australian delegate to World Meteorological Organization Commission for Climatology, Scientific and Technical Review

Dr. Hendrik Tennekes, former director of research, Royal Netherlands Meteorological Institute

Dr. Gerrit J. van der Lingen, geologist/paleoclimatologist, Climate Change Consultant, Geoscience Research and Investigations, New Zealand

Dr. Patrick J. Michaels, professor of environmental sciences, University of Virginia

Dr. Nils-Axel Morner, emeritus professor of paleogeophysics & geodynamics, Stockholm University, Stockholm, Sweden

Dr. Gary D. Sharp, Center for Climate/Ocean Resources Study, Salinas, Calif.

Dr. Roy W. Spencer, principal research scientist, Earth System Science Center, The University of Alabama, Huntsville

Dr. Al Pekarek, associate professor of geology, Earth and Atmospheric Sciences Dept., St. Cloud State University, St. Cloud, Minn.

Dr. Marcel Leroux, professor emeritus of climatology, University of Lyon, France; former director of Laboratory of Climatology, Risks and Environment, CNRS

Dr. Paul Reiter, professor, Institut Pasteur, Unit of Insects and Infectious Diseases, Paris, France. Expert reviewer, IPCC Working group II, chapter 8 (human health)

Dr. Zbigniew Jaworowski, physicist and chairman, Scientific Council of Central Laboratory for Radiological Protection, Warsaw, Poland

Dr. Sonja Boehmer-Christiansen, reader, Dept. of Geography, University of Hull, U.K.; editor, Energy & Environment

Dr. Hans H.J. Labohm, former advisor to the executive board, Clingendael Institute (The Netherlands Institute of International Relations) and an economist who has focused on climate change

Dr. Lee C. Gerhard, senior scientist emeritus, University of Kansas, past director and state geologist, Kansas Geological Survey

Dr. Asmunn Moene, past head of the Forecasting Centre, Meteorological Institute, Norway

Dr. August H. Auer, past professor of atmospheric science, University of Wyoming; previously chief meteorologist, Meteorological Service (MetService) of New Zealand

Dr. Vincent Gray, expert reviewer for the IPCC and author of The Greenhouse Delusion: A Critique of 'Climate Change 2001,' Wellington, N.Z.

Dr. Howard Hayden, emeritus professor of physics, University of Connecticut

Dr Benny Peiser, professor of social anthropology, Faculty of Science, Liverpool John Moores University, U.K.

Dr. Jack Barrett, chemist and spectroscopist, formerly with Imperial College London, U.K.

Dr. William J.R. Alexander, professor emeritus, Dept. of Civil and Biosystems Engineering, University of Pretoria, South Africa. Member, United Nations Scientific and Technical Committee on Natural Disasters, 1994-2000

Dr. S. Fred Singer, professor emeritus of environmental sciences, University of Virginia; former director, U.S. Weather Satellite Service

Dr. Harry N.A. Priem, emeritus professor of planetary geology and isotope geophysics, Utrecht University; former director of the Netherlands Institute for Isotope Geosciences; past president of the Royal Netherlands Geological & Mining Society

Dr. Robert H. Essenhigh, E.G. Bailey professor of energy conversion, Dept. of Mechanical Engineering, The Ohio State University

Dr. Sallie Baliunas, astrophysicist and climate researcher, Boston, Mass.

Douglas Hoyt, senior scientist at Raytheon (retired) and co-author of the book The Role of the Sun in Climate Change; previously with NCAR, NOAA, and the World Radiation Center, Davos, Switzerland

Dipl.-Ing. Peter Dietze, independent energy advisor and scientific climate and carbon modeller, official IPCC reviewer, Bavaria, Germany

Dr. Boris Winterhalter, senior marine researcher (retired), Geological Survey of Finland, former professor in marine geology, University of Helsinki, Finland

Dr. Wibjorn Karlen, emeritus professor, Dept. of Physical Geography and Quaternary Geology, Stockholm University, Sweden

Dr. Hugh W. Ellsaesser, physicist/meteorologist, previously with the Lawrence Livermore National Laboratory, Calif.; atmospheric consultant.

Dr. Art Robinson, founder, Oregon Institute of Science and Medicine, Cave Junction, Ore.

Dr. Arthur Rorsch, emeritus professor of molecular genetics, Leiden University, The Netherlands; past board member, Netherlands organization for applied research (TNO) in environmental, food and public health

Dr. Alister McFarquhar, Downing College, Cambridge, U.K.; international economist

Dr. Richard S. Courtney, climate and atmospheric science consultant, IPCC expert reviewer, U.K.

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