Climate Change White Paper
Side-by-Side Analysis of IPCC Methods and Findings[1]
Prepared by F.W. Pontius, Ph.D.
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Subject Area		
IPCC Methods/Findings	**Scientific Methods/Recent Research**	**Implications**
1. Methods and Procedures		
IPCC Methods	**Accepted Scientific Methods**	**Significance**
Political Activism: The IPCC functions as an activist enterprise with an agenda to justify control of emissions of GHGs, and in particular CO_2. Its reports have focused on promoting evidence that supports only the thesis of human-induced climate change.	Scientific assessments are to present an unbiased, impartial, and objective view.	Contrary evidence and alternative hypotheses have not been pursued with the same vigor as the presumed GHG hypothesis adopted by the IPCC. IPCC assessments and reports are based on selective evidence.
Government Approval: Several thousand scientists work on the assessment reports, but only a few are involved in writing the *Summary for Policymakers.* This *summary* is agreed to line-by-line by member governments.	Scientists must be able to review and, when appropriate, have approval authority over their written work and the application of their work in order to avoid political manipulation and misrepresentation.	Each *Summary for Policymakers* cannot be represented as a consensus view among scientific experts. Scientists involved as IPCC authors and reviewers have voiced concerns about their work being misrepresented.
Government Dictates: The 2007 *Summary for Policymakers* of Working Group I was released in Feb. 2007. The full Working Group report was released in May, after it had been changed to "conform" to the *Summary for Policymakers.*	Making changes to a "scientific" assessment to conform to policy after the fact is not appropriate and misleading.	The IPCC process allows government policymakers to dictate to the scientists what scientific findings are acceptable to support a preconceived policy conclusion.

[1] Refer to the full Climate Change White Paper and Appendixes for supporting discussion and references for the points citations made in this table.

1. Methods and Procedures (Continued)		
IPCC Methods	**Accepted Scientific Methods**	**Significance**
Conflict of Interest: The head of the IPCC climate change panel, Dr. Rajendra Pachauri, and others (e.g., Al Gore) financially benefit from ties with "carbon trading" companies.	Scientists with a direct conflict of interest should exclude them selves from deliberations and decision making. Indirect conflicts of interest must also be considered.	Government agencies and research centers funded by the government have a direct, vested interest in continued research funding, and expansion of government regulation of GHGs. The existence or expansion of many government programs and research centers depend on it. In addition, many companies, including some energy utilities, are rebuilding their business models on the presumption that the U.S. Congress or the US Environmental Protection Agency (USEPA) will in fact enact strict legislation and/or regulations to address global warming, impose a cap or tax on carbon emissions, or implement a cap and trade program. Such companies have a vested interest (e.g., making money, gaining power, etc.) in the business of global warming. Obvious biases must be taken into consideration when evaluating statements and claims from any entity.

1. Methods and Procedures (Continued)		
IPCC Methods	**Accepted Scientific Methods**	**Significance of Differences**
Inadequate Peer-Review: The IPCC refused to publicly share the comments submitted by peer-reviewers. Only under pressure, were comments posted online. The IPCC authors rejected, without a response, more than half of all the reviewer's comments on attributing recent warming to human activities.	Experts performing a review of a scientific document are due the courtesy of an adequate written response to either agree with the comment, or to explain the scientific reasons why the comment was not accepted.	Only peer-review comments that supported the presupposition of the IPCC 2007 report author were deemed acceptable. No consideration was given to valid contrary comments.
Attacking those who disagree: The IPCC and its supporters have characterized scientists who disagree with the IPCC 2007 report narrative as "skeptics" and "deniers." These terms are pejorative and are used to suppress dissenting views. In other cases, dissenting scientists have had scientific papers blocked for publication, had funding cuts, physical threats, and/or forced resignations.	Scientific arguments and data should be presented to support or refute a particular scientific claim or counter claim, regardless of who makes the claim.	The IPCC and its supporters have resorted to name-calling (e.g., "denier" or "skeptic") and aggression to attack the personal credibility of scientists who may disagree with the IPCC findings and conclusions. The vitriolic rebuffs by some IPCC scientists and supporters of the IPCC findings against those scientists who disagree are apparently not the product of scientific rigor, but self-protection at any cost.
Invalid Forecasting Methods: The IPCC workgroups develop assessment documents, with a smaller group writing the *Summary for Policymakers.* IPCC reviewers do not provide a true "peer-review" and their comments may be completely ignored.	Whether climate will change over the 21st century, by how much, in what direction, to what effect, and what if anything people could and should do about any changes are all forecasting problems. The forecasting procedures used by the IPCC to assess climate science and prepare the 2007 report violated 81% of 89 principles relevant to climate forecasting (Green and Armstrong 2007).	The scientific basis of the forecasts made by the IPCC in its 2007 report is questionable at best. (See Climate Depot 2010.)

2. Definition of the Problem		
IPCC Definition	**Conventional Definition**	**Implications**
Persuasive Definition: Climate change in IPCC usage refers to a change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity. This definition presumes that changes in measures represent fundamental changes in climate state, as opposed to simple weather variability. This usage differs from that in the United Nations Framework Convention on Climate Change (UNFCCC), where climate change refers to a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods. However, the IPCC promotes the idea that changes in climate are primarily anthropogenic (due to man-made causes).	Climate is usually defined as the "average weather." More precisely, climate is the statistical description in terms of the mean and variability of relevant measures over a period of time ranging from months to thousands of years. The classical period is 3 decades, as defined by the World Meteorological Organization (WMO). These measures are most often surface variables such as temperature, precipitation, and wind. Climate in a broad sense is the state, including a statistical description, of the climate system. Weather is typically defined as the atmospheric condition at any given time or place. Weather is measured in terms of such things as wind, temperature, humidity, atmospheric pressure, cloudiness, and precipitation. Weather can change from hour-to-hour, day-to-day, and season-to-season. Weather and climate are always changing due to natural forces.	Climate change may result from natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun; natural processes within the climate system (e.g. changes in ocean circulation); human activities that change the atmosphere's composition (e.g. through burning fossil fuels) and the land surface (e.g. deforestation, reforestation, urbanization, desertification, etc.). "Climate change" is any change in statistical "measures of climate," not necessarily changes in the climate state. Hence, the definition assumes any "change in a measure" is caused by a fundamental change in the climate state. However, changes in measures of climate can occur by natural variations in weather without regard to man-made sources of CO_2. It is not possible to accurately determine the proportion of atmospheric CO_2 due to natural sources versus man-made sources. Hence, the proportion of any observed average global temperature increase due to human-caused emissions versus natural forces is unknown.

3. Climate Modeling and Forecasting Methods		
IPCC Methods/Findings	**Scientific Findings**	**Implications**
Primary reliance on computer models: The IPCC used a variety of climate models to develop scenarios for evaluating the effects of potential warming. Computer models are the only basis for claiming atmospheric CO_2 is causing global warming.	To be acceptable for forecasting, a climate model must demonstrate "correspondence"—meaning that the model code must adequately represent the physical phenomenon it is trying to describe. To demonstrate correspondence, a model must be testable and validated.	Global and regional climate models are not able to predict regional and local climate change and variability. Climate models cannot be tested by comparing models with models. Existing models, each with its own hypothesis about how climate functions, do not accurately portray the basic underlying physics.
Positive Feedback Effect Exhibited: All models relied upon by the IPCC exhibit a net positive feedback effect. A net "positive" feedback means that within the model temperature is magnified. This means within the model as small increase in CO_2 will generate a temperature increase that is compounded. Hence, IPCC models can only predict a net warming. A net "negative" feedback means that the temperature will decrease. The amount of feedback occurring within the model is a key factor in determining whether warming or cooling can be expected.	Modeling results should include the full range of plausible climate feedbacks and sensitivities. IPCC models do not correspond to actual atmospheric measurements (Lindzen and Choi 2009). All models have failed to predict the general cooling that has actually occurred since about 1998. IPCC models predict a 1°F warming from 2000 to 2010. No warming has been observed beyond 1998 therefore, the IPCC models have been proven to be incorrect. (Easterbrook 2010)	Ambiguity over observed feedbacks is the largest reason for the large range of global warming projections generated by the IPCC. If an observed temperature change is not accompanied by a good estimate of what caused it, then a positive feedback will most likely be diagnosed. This results in a model bias towards warming. (Spencer 2010)

3. Climate Modeling and Forecasting Methods (Continued)		
IPCC Methods/Findings	**Scientific Findings**	**Implications**
Sensitive Climate System Construct: "Sensitivity" refers to the increase in temperature expected from a given amount of atmospheric CO_2. "Sensitivity" is typically expressed as the temperature increase expected if the atmospheric CO_2 should double. All models relied upon by the IPCC are constructed consistent with a sensitive climate system. These models then produce large estimates of global warming in response to increases in CO_2, which is assumed to be anthropogenic (man-caused).	The real climate systems looks sensitive to climate modelers. Thinking that the climate system is sensitive, the IPCC models are coded to be overly sensitive, producing too much warming. (Spencer 2010) The IPCC models do not consider natural variations or natural events that can drive changes in climate and weather.	Global warming and cooling have been occurring for centuries. The climate system can generate an energy imbalance by itself, resulting in temperature changes. The IPCC models assume that the climate stays the same until it is forced to change due to an external influence. Climate change cannot be understood without first understanding weather. Without knowledge of what controls weather, it is not possible to understand the sources of climate change. (Spencer 2010)
Assumed Greenhouse Effect: The IPCC models are based on the assumption that the greenhouse effect is caused by atmospheric CO_2 and GHGs, resulting in global warming. The IPCC presents only climate model results predicting a warming trend.	No specific scientifically measured real-world evidence of any causal relationship between human CO_2 emissions and the Earth's warming has been found. Gerlich and Tscheuschner (2009) argue that the natural greenhouse effect is not based in physical reality. Roberts (2010) argues that the greenhouse effect as an explanation for global warming is not supported by basic thermodynamics, nor by measured data.	CO_2 absorbs space-bound infrared radiation, thereby increasing the energy available at the Earth's surface for warming or increased evaporation. There is disagreement about how powerful the effect is when considered in combination with other factors, various feedback mechanisms both positive and negative, and other influences that might or might not overwhelm the effect of CO_2. Indeed, the role of CO_2 (and GHGs in general) in changing the climate, if at all, is still very much open to scientific debate.

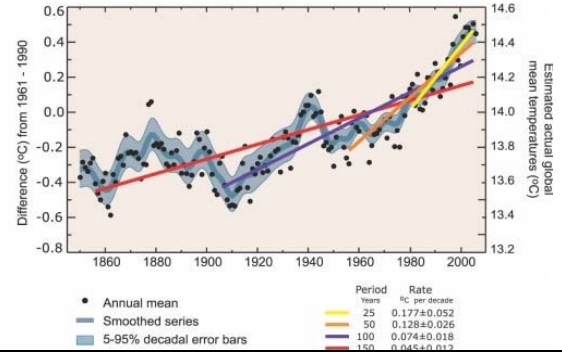
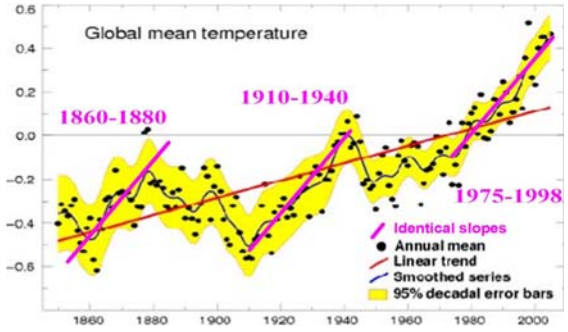
3. Climate Modeling and Forecasting Methods (Continued)		
IPCC Methods/Findings	**Scientific Findings**	**Implications**
Water Vapor and Clouds: The IPCC models do not properly account for water vapor and cloud formation in generating estimates of future temperature changes.	A simple 1% or 2% change in cloud cover could have caused all of the climate change (or global warming) observed in the 20th Century. Such a small change in cloud cover could not be measured (Spencer 2010).	Water vapor is the most important greenhouse gas, yet little research has been done on its effect on atmospheric temperature. Solomon et al. (2010) has shown the stratospheric water vapor is an important driver of decadal global surface climate change.
Misleading Time Series Analysis: The IPCC 2007 reports analyze average global temperature data as a single set of time-series data. Starting and ending points of linear regression lines were carefully selected to illustrate a preconceived conclusion.	Unexpected shifts in a time series of measurements, known as a "structural break," can lead to forecasting errors and model unreliability (Hoffman 2009). Stockwell and Cox (submitted for publication) have found a significant change in temperature series around 1997. Considering trends between significant change points generates a flat global temperature change. (Hoffman 2009).	The IPCC data analysis methods are questionable at best.

4. Reliance on Best Available Science and Data		
IPCC	**Available Science/Data**	**Implications**
Reliance on Unpublished Studies: The IPCC 2007 reports rely on unpublished research, new articles, and environmental advocacy group reports (Gray and Lefort 2010, Gunter 2010).	Best available, peer reviewed studies should provide the scientific basis of any climate change assessment, as is required by the Safe Drinking Water Act (SDWA) for drinking water regulation.	Certain claims made in the IPCC 2007 reports are not adequately supported, and therefore should not have been included in the IPCC report.
Chinese Weather Stations: The Climate Research Unit (CRU) at East Anglian University provided substantial data analysis and support to the IPCC. This included analysis of data from China.	The CRU has been accused of making "apparent attempts to cover up data from the Chinese weather stations" (IBD 2010). The location of 42 weather monitoring stations in remote parts of rural China cannot be determined. The data supposedly turned over to American scientists could not be corroborated or confirmed.	How much of the warming seen in recent decades is due to local effects of spreading cities cannot be determined. *The Guardian* contends that the researchers covered up the missing data for years (Pearce 2010a, b).
Carbon Dioxide Fraction: The IPCC claims that increased carbon dioxide persists in the atmosphere long term.	More than 30 studies contradict the IPCC claim (Soloman 2008). Knorr (2009) has re-examined the available atmospheric CO_2 and emissions data including their uncertainties. Despite the predictions of coupled climate-carbon cycle models, no trend in the airborne fraction can be found.	Until the percentage contribution to the presumed greenhouse effect from natural causes can be understood and subtracted from the present temperature trend to establish a reliable baseline, it is not possible to determine the presumed greenhouse effect contribution from human activities.
Cosmic Rays and Chlorofluorocarbons (CFCs): The IPCC does not consider the hypothesis that cosmic rays and CFCs may explain temperature changes.	Qing-Bin Lu (2009) analyzed observations from satellite, ground-based and balloon measurements. Applying an established mechanism CFCs and cosmic ray energy particles were found to be mostly the cause of climate change, rather than CO_2 emissions.	The IPCC has not considered alternative hypotheses.

4. Reliance on Best Available Science and Data (Continued)		
IPCC	**Available Science/Data**	**Implications**
Data Availability and Peer Review: The British government has determined that someone at East Anglia University committed a crime by refusing to release global warming documents sought in 95 Freedom of Information Act Requests. The CRU is one of three international agencies compiling global temperature data. Requests for data have been blocked and/or unnecessarily delayed.	Data and key documents should be made publicly available.	Not all climate researchers have made their raw data available for independent corroboration of their analytical results.
Russian Data Omission: The Hadley Center for Climate Change based at the headquarters of the British Meteorological Office in Exeter (Devon, England) is active in supporting the IPCC.	The Moscow-based Institute of Economic Analysis (IEA) issued a report that the Hadley Center had probably tampered with Russian-climate data (Delingpole 2009). Only 25% of the Russian data was used, excluding 40% of the Russian territory.	D'Aleo and Watts (2010) examine the impact of the omitted Russian data on temperature estimates. Exclusion of the data results in an upward bias.
U.S. Data Quality: The National Oceanic and Atmospheric Administration (NOAA) U.S. National Climatic Data Center (NCDC) is one of the centers actively supporting the IPCC.	The NCDC has been accused of manipulating weather data (Murray and Abbott 2010). Forty years ago there were 6,000 surface-temperature measuring stations, but only 1,500 by 1990. Most of the deleted stations were in colder regions, resulting in misleading higher average temperatures.	The National Aeronautics and Space Administration (NASA) has admitted that its temperature records are inferior to those maintained by both the CRU and the NCDC.
Research Integrity: Errors in the IPCC report and release of the CRU emails (CliamteGate) have raised serious concerns regarding the integrity of the IPCC and climate science and research.	In the U.S., an inquiry was conducted by Pennsylvania State University on the methods used by Dr. Michael Mann to construct the famous "Hockey Stick." A report has been released, which has been criticized as not addressing the issues.	The IPCC has recognized that it has an integrity problem. A review of the IPCC is being undertaken by the UN InterAcademy Council (IAC). Critics charge that IPCC review by another UN body will not be objective.

4. Reliance on Best Available Science and Data (Continued)		
IPCC	**Available Science/Data**	**Implications**
Cosmic Ray Flux: The IPCC does not consider cosmic ray flux and solar activity to be a significant factor affecting climate change.	Marsh (undated) examined the impact of galactic cosmic ray flux and low altitude could cover, concluding that carbon dioxide appears to play a very limited role in setting interglacial temperatures. Archibald (2007), a solar scientist, has put forward an analysis predicting imminent cooling to 2030. Even if it is recognized that anthropogenic warming is real, climate change is dictated by solar cycles, not CO_2 levels.	Solar scientists in general consider the link between the Sun and Earth's climate incontrovertible, which the IPCC dismisses out of hand. Recently, more solar scientists have been speaking out (Solomon 2010b). Other scientists have presented credible evidence that the global cooling currently being observed should be expected, and will have more adverse effects, than the global warming predicted by the IPCC (Easterbrook 2010).
Urban Heat Island Effect: The Urban Heat Island Effect (UHIE) refers to the observation that air temperatures increase in urban areas as compared to rural areas, by virtue of the effects of development.	The UHIE has not caused warming in rural areas. Long (2010) has presented a critique of the NCDC's treatment of historical data for the contiguous U.S., finding that the NCDC committed the same data tampering with U.S. data, as the Moscow-based IEA found the Hadley Center for Climate Change had done with historical temperature data for Russia.	Given poor quality data, the significance of the confounding effect of UHIE on global temperature measurements is not known. The surface temperature measurements used by the IPCC are not scientifically credible (D'Aleo and Watts 2010).
Canadian Temperature Records: NOAA and NASA Goddard Institute for Space Studies (GISS) have relied on a dwindling number of temperature monitoring stations in Canada.	Two American researchers claim that NOAA and GISS have reduced the total number of Canadian weather stations in the database, and have "cherry picked" the ones that remain (Foot 2010).	In the 1970s, nearly 600 Canadian weather stations fed surface temperature reading into the global database assembled by NOAA. Now NOAA only collects data from 35 stations across Canada.

4. Reliance on Best Available Science and Data (Continued)		
IPCC	**Available Science/Data**	**Implications**
Ice Core Data: The IPCC relies on analysis of ice core CO_2. Ice core records have been widely used a "proof" that, due to man's activity, the current atmospheric level of CO_2 is about 25% higher than in pre-industrial times.	German Biologist Ernst-Georg Beck (2007a,b) has put forth a peer-reviewed paper arguing that the IPCC reliance on ice core CO_2 figures in incorrect. Jaworowski (2004) has testified, presenting scientific arguments, that ice core samples do not represent atmospheric reality.	Ice core data are not reliable proxies for atmospheric CO_2. Even if accepted, ice core results do not correspond to observed fluctuations in Arctic temperatures (Akasofu 2008). As a result, it is not possible to conclude with confidence that the temperature rise after 1975 is mostly caused by the greenhouse effect.

5. Scientific Claims		
IPCC Claims	**Alternative Findings**	**Implications**
Accelerated Warming: The IPCC 2007 report claims that the rate of warming has been accelerating, especially since 1975. The following graph provides the primary basis for this claim. 	The same IPCC data correctly interpreted shows that the rate of warming during warming periods is the same (identical slopes). 	The IPCC 2007 graph gives the false impression that the rate of warming over the past 150 years has accelerated. The data actually indicate that the global temperature increase is a continuation of the recovery of global temperatures from the Little Ice Age, overlaid by a 60-year cycle in global temperature. These data do not in anyway indicate anthropogenic global warming has occurred. (Monckton 2009)
Africa Food Shortages: The IPCC 2007 report claims that by 2020 yields from rain-fed agriculture could be reduced by up to 50% in some African countries as a result of climate change. This would cause a North African food shortage.	The IPCC claim is not supported scientifically and has been discredited (Davidson 2010, Pile 2010). A key author of the team behind this report has admitted that he could find no evidence to support his own group's claim (FoxNews 2010b).	Professor Chris Field, the new lead author of the IPCC climate impacts team: "I was not an author on the "Synthesis Report", but on reading it I cannot find support for the statement about African crop yield declines." The claim should not have been included.
Alaska Glaciers: Claims have been made that glaciers are melting worldwide at an alarming rate due to global warming rate due to global warming. Computer models used to predict future warming rely on data such as glacier loss.	A peer-reviewed study of Alaska glaciers published Jan. 17, 2010, found that prior studies largely overestimated by 40 percent Alaskan glacier loss for 40 years (Berthier et al. 2010).	Berthier et al. (2010) suggest that the estimates of mass loss from glaciers and ice caps in other mountain regions could be subject to downward revisions.

5. Scientific Claims (Continued)		
IPCC Claims	**Research Findings**	**Implications**
Amazon Rainforests: The IPCC 2007 report claims that climate change will have a devastating effect on the Amazon rainforest, writing that 40 percent of the Amazon rainforest in South America was endangered by global warming.	A NASA-funded study has found that the most serious drought in the Amazon for more than a century had little impact on the rainforest's vegetation (Gray 2010). Differences in the greenness level of Amazon forests were not significant between drought and non-drought years.	The IPCC claims were based on numbers from a study by the World Wildlife Fund written by a freelance writer and green activist which had nothing to do with global warming (Koporowski 2010).
Antarctic Sea Ice: The IPCC 2007 performed a brief analysis of Antarctic sea ice, concluding that while there has been an apparent increase in the sea ice extent around Antarctica from 1979 through 2005, the increase has been slight and not statistically significant (Knappenberger 2010).	Other assessments of Antarctic sea ice have found results that differ from the IPCC (World Climate Report 2010). Idso and Singer (2009) found a statistically significant trend in Antarctic sea ice about 2 to 3 times greater than the IPCC 2007 reported.	Antarctic sea ice is increasing, not decreasing. (Likewise, an analysis of natural cycles challenge global warming claims that the North Pole will be free of ice in summer by 2013 (Rose 2010a). Arctic sea ice has increased by 409,000 square miles, or 26 percent, since 2007.)
Debris Flow Overestimated: IPCC climate scientists predicted that mudslides and landslides, known as debris flow, will increase due to global warming.	Matthews et al. (2009) could find no obvious correlation between debris flow frequency and a relative warm climate. There is no consistent upward trend in debris-flow frequencies over recent decades.	The IPCC claim is unsupported by recent research.
Disaster Costs: The IPCC 2007 Working Group II Assessment Chapter 1 included a graph suggesting a relationship exists between increasing temperatures and rising disaster costs.	The graph was created by the IPCC and did not exist in any peer-reviewed literature or the grey literature (Appendix C).	The IPCC extrapolated beyond the peer-reviewed literature to develop and include a graph to further promote its belief that increasing temperatures have adverse affects.

5. Scientific Claims (Continued)		
IPCC Claims	**Research Findings**	**Implications**
Greenland Glaciers: Melting of glaciers in Greenland has been pointed to as proof of the detrimental effects of global warming.	Nick et al. (2009) has applied numerical modeling to examine changes in Greenland glacier dynamics. Results imply that the recent rates of mass loss in Greenland's outlet glaciers are transient and should not be extrapolated into the future.	Greenland tidewater outlet glaciers are highly sensitive to changes in terminous boundary conditions. The glaciers adjust very rapidly, which explains why these glaciers change in concert with short-term fluctuations in climate.
Himalayan Glaciers: The IPCC report claims that Himalayan glaciers are receding faster than in any other part of the world and will have melted by 2035 (Pearce 2010).	A November 2009 report by the Geological Survey of India concluded "It is premature to make a statement that glaciers in the Himalayas are retreating abnormally because of global warming. Himalayan glaciers have not in any way exhibited, especially in recent years, any abnormal annual retreat." (Raina 2009). Senior scientists at the Wadia Institute of Himalayan Geology (WIHG) have rejected the global warming theory. Global warming has no role in controlling the conditions in the Himalayas, which are controlled by winter snowfall (Maindola 2010).	The IPCC claim that Himalayan glaciers are set to disappear by 2035 was fabricated. Dr. Murari Lai, the scientist behind the claim in the IPCC report admitted that the claim was made up to put political pressure on world leaders (Rose 2010b). In addition, Lai claims that the glacier error was known by the IPCC all along (Pielke 2010). As a result, the Indian government has established its own body to monitor the effects of global warming because it "cannot rely" on the IPCC (Nelson 2010).
Hurricanes: News stories periodically appear suggesting a link between hurricane impacts and global warming (Poor 2008).	Linkages have not been found between global warming and hurricane impacts (Pielke, Jr., et al. (2005, 2008). Knutson et al. (2010) could not conclusively identify anthropogenic signals in past tropical cyclone data. Peer-reviewed studies have not found a relationship (Kuleshov et al. 2010, Zhou et al. 2009).	Recent global warming has not caused an increase in severe tropical cyclones. In fact, cyclone activity is basically flat despite the increase in human CO_2 emissions.

5. Scientific Claims (Continued)		
IPCC Claims	**Research Findings**	**Implications**
Mountain Ice: The IPCC claims that mountain ice in the Andes, Alps, and in Africa is being reduced due to global warming.	The IPCC claims are based on a feature story of climber anecdotes in a popular mountaineering magazine, and a dissertation by a Switzerland university student, quoting mountain guides.	The IPCC claims are not adequately supported and should not have been included in the report.
Netherlands Sea Levels: The IPCC 2007 report claimed rising sea levels endanger the 55 percent of the Netherlands it says is below sea level.	The portion of the Netherlands below sea level actually is 20 percent.	The Dutch Environmental Minister has indicated that climate researcher's errors will no longer be tolerated (FoxNews 2010a).
Reef Degradation: The IPCC report claims a link exists between climate change and coral reef degradation.	The IPCC cited advocacy articles by Greenpeace, an environmental advocacy group, as its sole source for this claim (Hoegh-Guldberg et al. 1999, 2000).	The IPCC claim is not adequately supported and should not have been included in the report.
Sea Level Rising: The IPCC stated that sea level would probably rise by 18 cm to 59 cm by 2100, stressing that this was based on incomplete information about ice sheet melting and that the true rise could be higher.	A 2009 paper in *Nature Geosciences* claimed that sea levels would rise by up to 82 cm by the end of the century. In Februray 2010, the authors formally withdrew this paper, stating that there were 2 mistakes that impact the estimation of the true sea level rise. Zukerman (2010) reports that rather than sea level rising, South Pacific Islands are simply changing their shape.	Whether sea level will rise or fall as a result of climate change is unknown.