

RESPONSE TO JOHN ABRAHAM

by Christopher Monckton



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FOREWORD

by SPPI

Christopher Monckton has issued an extensive and detailed critique and refutation of a widely-circulated 83-minute personal attack on him by one J.P. Abraham, a lecturer in fluid mechanics at the University of St. Thomas, Minnesota.

Professor Abraham's 83-minute lecture with 115 slides purported to demolish a talk about climate change that Lord Monckton had given in [St. Paul, Minnesota](#), in October 2009. More than 2.5 million people have seen Monckton's talk on YouTube, making it one of the most popular viewings on the web.

In June 2010, Abraham posted up an [attack](#) on the internet via the servers of the University of St. Thomas. Within a week, Monckton's response letter with its near-500 questions was in Abraham's hands, to which he has not responded as challenged.

Monckton publicly accuses Abraham of –

- **Bad faith** in having “furtively” spent eight months preparing his savage personal attack behind Monckton's back, entirely contrary to accepted academic practice;
- **Malice** in having made dozens of serious allegations about Monckton when he knew the allegations he had made were false in every material particular, or had no reason to believe the allegations were true;
- **Appealing to a false authority** on the subject of the climate that, as a lecturer in fluid mechanics, he did not possess (Monckton demonstrates Abraham appears at times incompetent even in arithmetic);
- **Academic dishonesty** in having repeatedly made up statements that Monckton had not made, having put those statements to other scientists, having obtained hostile responses from those scientists, and having included those hostile responses in his attack as though they were responses to what Monckton had said; and
- **Lying** repeatedly by misstating what Monckton had said and then attacking those misstatements; by falsely and repeatedly alleging that Monckton had misrepresented scientists' results when Monckton had either accurately represented the results or not cited the scientists he was alleged to have misrepresented at all; by unjustifiably and repeatedly impugning Monckton's integrity, qualifications, experience, and competence in a manner that he knew to be inaccurate; and by repeatedly taking Monckton's words out of their context and making a wilful nonsense of them.

Monckton backs up his rebuttal with a wealth of detail.

The University of St. Thomas has refused a request by Monckton that it should take down the Abraham's talk from its servers and has also refused to comply with its duty to investigate Monckton's complaint about shoddy academic misconduct. Abraham and the University are half-heartedly attempting to characterize the issue as a mere “academic dispute”.

Lord Monckton serves as policy adviser and contributing author to the [Science and Public Policy Institute](#), which has as a courtesy to him and interested readers made his response to Professor Abraham available on its main [website](#) [Scienceandpublicpolicy.org].

Any comments or representations made by any parties in the Monckton/Abraham exchanges are the views of the participants, and not those of SPPI or any of its associates.

In a separate letter to Father Dease, president of the university, Monckton provides summary particulars of his grounds of complaint. The below comments are directly extracted from said letter.

MALICE

Abraham's personal attack on Lord Monckton – described by one observer who wrote to the President of the University of St. Thomas as “the academic equivalent of a drive-by shooting” – was malicious and relentlessly *ad hominem*, when a more measured consideration would have been expected from one who was representing himself as an academic with relevant knowledge correcting an allegedly untutored layman. Some of Abraham's malicious remarks are summarized here:

Abraham's talk says that, though he is “a scientist” (at his slide 2) with “a background in the area of energy, heat and fluids, which is germane to the topic of climate change” (his slide 3), and that he has published “in the area” of climate change (3), Lord Monckton is a “well-known climate skeptic” (1) “who has money and no background in science” (29) and “who has not written a single peer-reviewed science paper on any topic” (4) and has “never published a paper in anything” (37); that “we want to think about the backgrounds people have when we ascribe credibility to the comments people make, particularly for Chris Monckton, because if you listen to his talk you will find that he disagrees with every major science organization” (4-5); that Lord Monckton is “paid” and “employed” by the Science and Public Policy Institute (104), which Abraham describe as “an activist organization that is lobbying against dealing with the issue of global warming and trying to sway public opinion” (104); that Lord Monckton's “deep” connections with this “ideological” organization make it “extremely difficult to believe that you can separate your results from the interests of those people funding you” (104); that, by implication, Lord Monckton claims to know things “that everyone else doesn't know”, and “to see things that other scientists haven't seen” (5), and that “maybe” His Lordship claims to “know more than they do” (50); that many of Lord Monckton's statements “sound absurd”, and that Abraham's “feeling is that if statements sound absurd they probably are” (5); that Abraham is proposing to “investigate” what Lord Monckton says (5); that “the number of errors” Lord Monckton “makes is so enormous it would take a thesis to go through every single one of them” (74); that Abraham is going to “help” Lord Monckton with his “math” (74); that Lord Monckton “presented a lot of data with no citations or no explanation” (105), and “if you don't tell us where it's from we can't assess the data” (109); that Lord Monckton's talk contained assertions that were “not accurate” (7), “total nonsense” (21), “just not true” (34), “sleight-of-hand” (35); “sleight-of-hand” again (59); “a complete fabrication” (47); and “a straw man” that “doesn't hold any water” (53); that my “talk of information” has been “shady” (35); that a graph displayed by Lord Monckton was “almost off by 100%” (40); that when reading data Lord Monckton “can't get it straight” (40); that Lord Monckton “tries to confuse” his audience (61); that Lord Monckton “confuses” and “makes mistakes” that “are different from each other” (40); that Lord Monckton “confuses” his “units” (80); that Lord Monckton's “graphs” of his “own data” do not “agree with themselves”, so “how can you trust conclusions drawn from them?” (42); that Lord Monckton “either deliberately or by mistake misrepresented the data” (114), “misstated data” in a paper that His Lordship had cited (81), “made many mistakes with temperature data” (110), “completely misrepresented” the “conclusions” of scientific researchers (20), “misrepresented” another paper His Lordship had cited (67), and made “a very bald misrepresentation” of a scientific society's statements (85) so that the society “were at the very least upset”, and that the author of yet another paper “was pretty upset” at how His Lordship had used his

data (83); that a **“prediction”** Lord Monckton is alleged to have made was **“rash”** and **“a bit like assuming at dusk that the sun will never rise again”** (79); that **“in some cases”** Lord Monckton says **“there is no global warming, and then in other cases”** His Lordship says **“Hey, it is warming”** (82); that **“you take a look at all this and you gotta ask yourself, who can you trust? ... where can you go, who can you trust?”** (114), **“who has an agenda?”** (115); that **“the purpose of my talk is to show how someone who is a very skilled orator can present information intended for an intelligent but very general audience, and ... of course you’re going to believe him, I mean, that’s a pretty compelling talk; and it takes someone who’s got some time and knows how to find the information a while to track down and ferret out the truth of their statements, and you can’t expect that everyone is going to have the kind of time that I’ve put into this rebuttal”** (115); and that Abraham does not want to have to spend his time **“tracking down the misinformation of folks like Chris Monckton”** (115).

APPEAL TO FALSE AUTHORITY

Abraham compounded the damage to Lord Monckton’s reputation by an extended *argumentum ad verecundiam*, an appeal to an authority in the matter of climate that Abraham said he possessed but did not in fact possess, in that he falsely presented himself as an impartial and knowledgeable expert while describing Lord Monckton as an unqualified layman paid and prejudiced by vested-interest lobbyists. Here are some instances of Abraham’s ignorance of climate science and even of elementary arithmetic:

- Abraham was unable to recognize the Hadley Centre’s headline graph of global mean surface temperature anomalies, though it is displayed repeatedly in the IPCC’s 2007 *Fourth Assessment Report*, from which Lord Monckton took it, and is plainly labeled on my slide as “IPCC, 2007”.
- Abraham was unable to deduce that a lower-troposphere temperature graph labeled “UAH” is from the University of Alabama at Huntsville, one of only two sources for regularly-published satellite temperatures.
- Abraham was unaware that, when Lord Monckton referred to two “Canadian researchers” and displayed their slides demonstrating statistical inadequacies in the IPCC’s “hockey-stick” graph that falsely abolished the medieval warm period, His Lordship was talking of Mr. Steve McIntyre and Professor Ross McKittrick, whose work is well known in climatological circles.
- Abraham repeatedly and falsely assumed that correlation between two datasets implies that one caused the other, when the mere fact of correlation does not tell us the direction of causation (if any), nor whether a third influence independent of both datasets caused the correlation, nor whether the correlation is mere coincidence.
- Abraham confused global warming and sea-level rise, excoriating Lord Monckton for having said that *global warming* had stopped where His Lordship had said, correctly, that there had been little or no *sea-level* rise for four years.
- Abraham confessed to having been “confused” by a simple graph displaying two clearly-labeled curves of different colors, with ordinate and abscissa explicitly labeled.
- Abraham said global temperatures had been “going up consistently since 1880”, when there have in fact been long periods of cooling, most recently the near-decade since the turn of the millennium on 1 January 2001.

- Abraham did not know his Arctic from his Antarctic, unjustifiably citing an irrelevant website comment about the former as the basis for his statement that Lord Monckton had misrepresented the conclusion of a scientific paper about the latter.
- Abraham said the IPCC's sea-level projections "do not include ice-melt" when (excluding only unquantifiable dynamic effects that the IPCC concludes are unlikely to cause major sea-level change "for millennia") they do.
- Abraham repeatedly stated that Lord Monckton had drawn conclusions from unreasonably short periods of data while himself citing a paper giving observations of ice-melt in the Beaufort Sea over a single season as purported evidence against a 30-year graph that His Lordship had presented which showed sea ice growing slightly in the Beaufort Sea.
- Abraham cited a 13-month period of allegedly unprecedented global temperatures, just after having criticized Lord Monckton for having drawn conclusions from periods up to 22 years in length, which Abraham described as too short.
- Abraham criticized Lord Monckton for misstating the growth in CO₂ concentration since 1750 as a percentage of the atmosphere as 0.01%, when it is in fact 0.01%.
- Abraham incorrectly calculated that 0.3 C° of warming over 8 years was equivalent to 0.35 C°/decade, when it is in fact closer to 0.38 C°/decade, and then criticized Lord Monckton for the consequence of his own arithmetic error.

MENDACITY

Throughout his talk, Abraham either stated what he knew or had good reason to know to be untrue or was recklessly negligent as to whether what he said was true or not, presenting as true what was in fact false and what an academic truly versed in the climate question would have known or verified to be false. Abraham's falsehoods are very numerous, and it is their cumulative effect that compounds the damage that each on its own is calculated to cause to Lord Monckton's reputation. Here is a small sample of Abraham's falsehoods. The full – and in our experience unprecedented – extent of Abraham's mendacity may best be gaged by reading His Lordship's recent letter asking Abraham questions about his talk.

1. **Falsehoods in Abraham's account of what Lord Monckton had said:** Abraham frequently misrepresented in his talk what Lord Monckton had actually said, and then unjustifiably criticized His Lordship for having made remarks that His Lordship had not in fact made. On several occasions, Abraham communicated his misrepresentations of Lord Monckton's words to other scientists, obtained highly critical comments from them about remarks that His Lordship had not in fact made, and then reproduced those critical comments in his own talk in a manner calculated unjustifiably to do maximal damage to His Lordship's reputation.
2. **Abraham's falsehoods to the effect that Lord Monckton had misrepresented scientists' results:** Abraham frequently accused Lord Monckton of having misrepresented the work of scientists whom His Lordship had cited, though Abraham knew either that His Lordship had cited the scientists correctly, or that an interpretation other than that which the scientists in question had chosen could fairly and legitimately be placed on their data or results cited by His Lordship, or – in several instances – that His Lordship

had not cited the scientists in question at all, and could not, therefore, have misrepresented them. Abraham's allegations that Lord Monckton had deliberately misstated the work of the climate scientists he had cited, often accompanied by phrases from Abraham such as "misrepresentation", "total fabrication", "sleight-of-hand", "shady", etc., were calculated to do grave damage to His Lordship's reputation.

- 3. Falsehoods by Abraham himself misrepresenting scientists' results:** Abraham frequently misrepresented scientists' results himself, often omitting the passages in their papers that explicitly stated what Lord Monckton had said they had stated, or truncating quotations so as to remove statements by the scientists that evinced support for His Lordship's position. Once again, Abraham's conduct was calculated to damage Lord Monckton's reputation.
- 4. Abraham's falsehoods unjustifiably impugning Lord Monckton:** Abraham frequently and unjustifiably impugned Lord Monckton's integrity, his qualifications, his experience, or his competence, in a manner calculated further to damage His Lordship's reputation.
- 5. Abraham's falsehoods divorcing Lord Monckton's words from their context:** Abraham frequently removed Lord Monckton's words from the context in which they were spoken, and then unjustifiably criticized His Lordship for having made the remarks either in an inappropriate context or *in vacuo*. Abraham knew it was unlikely that any of his listeners would go back to Lord Monckton's talk to check whether Abraham was fairly placing His Lordship's remarks in the context in which they had originally been made. Once again, Abraham's conduct was calculated to damage His Lordship's reputation.

ABRAHAM'S FALSEHOODS

... in his account of what Lord Monckton had said

- Abraham falsely led a third-party scientist, David Hathaway, to believe that Lord Monckton had misrepresented Hathaway as having suggested that solar variability plays a dominant role in climate change, though Abraham knew that Lord Monckton had not cited any opinion of Hathaway's, merely displaying a graph from a paper by Hathaway and citing not Hathaway's conclusion but that of other authors – specifically Scafetta and West (2008) – as having attributed 69% of recent warming to solar activity.
- Abraham falsely represented Lord Monckton to a third-party scientist, David Barber, by saying that "Christopher Monckton is publically [*sic*] saying that ice in the Beaufort Sea is increasing and that polar bears are thriving in warmer weather" (at Abraham's slide 79), without explaining that His Lordship had cited two sources, a graph not from Barber but from Melling demonstrating that sea ice extent in the Beaufort Sea had indeed increased over several decades, and a graph from a document published by the World Wide Fund demonstrating that where the Arctic had warmed the population of polar bears had indeed increased and *vice versa*.
- Abraham falsely represented Lord Monckton as having said that "the world is not warming" (2 and 82), though Abraham knew that though Lord Monckton had correctly stated that there had been global cooling since the turn of the millennium on 1 January 2001, he had also displayed

slides from the IPCC's 2007 *Fourth Assessment Report* showed that the world had warmed at a rate of 0.4 K/century in the 160 years since 1850.

- Abraham falsely represented Lord Monckton as having said that “sea levels are not rising at all” (2; 78-79), though Abraham knew that His Lordship had correctly stated that there had been little or no sea-level rise for four years, that His Lordship had displayed a slide from the University of Colorado showing that sea level had been rising at 1 ft/century since 1993, and that His Lordship had also mentioned the IPCC's projection that sea level would rise by 1 ft 5 in this century.
- Abraham falsely represented Lord Monckton as having said that “ice is not melting” (2), though Abraham knew that Lord Monckton had displayed a slide from the University of Illinois to which His Lordship had added that Arctic summer sea ice was “recovering from a 30-year low in 2007”; that His Lordship had stated that the loss of sea-ice extent in the Arctic over the past 30 years had been matched by a gain in Antarctic sea-ice extent over the same period, reaching a peak in October 2007; and that, accordingly, the University of Illinois' graph of global sea-ice extent had shown remarkably little trend since the satellite record began 30 years ago.
- Abraham falsely represented Lord Monckton as having stated that the IPCC had predicted only 6 cm of sea-level rise in the 21st century when it had in fact predicted 20-50 cm, though Abraham knew that Lord Monckton had said both in his talk and on the relevant slide that the 6 cm sea-level rise represented the contribution from the Greenland and Antarctic ice-sheets alone, since it was those ice-sheets alone whose melting Al Gore had said would cause an imminent sea-level rise, prompting a UK High Court Judge to declare that “the Armageddon scenario that he [Gore] depicts is not based on any scientific view” – a context that Abraham (here as elsewhere) omits.
- Abraham falsely represented Lord Monckton as having stated that “temperatures always change first and CO2 follows” (51), and as having implied that a change in CO2 concentration cannot cause a change in temperature (51), though Abraham knew that Lord Monckton had in fact reported that in the paleoclimate it had always been temperature that had changed first and CO2 concentration that had followed, typically after a lag of 800-2800 years; that at no point had His Lordship said or implied that changes in CO2 concentration could not cause changes in temperature in today's climate; and that the context of His Lordship's remarks, omitted (here as elsewhere) by Abraham in his talk, was a falsehood by the producer of Al Gore's movie, in a children's book, to the effect that in the paleoclimate it was temperature that changed first and CO2 that followed.
- Abraham falsely represented Lord Monckton's talk by implying that His Lordship had stated there was a connection between solar cycle lengths and global surface temperature, though Abraham knew that Lord Monckton had at no point stated or implied that there was any such connection.

... to the effect that Lord Monckton had misrepresented scientists' results

- Abraham falsely represented Lord Monckton as having cited a scientific paper, by Monnett & Gleason (2006), in a manner that Abraham said “did not agree with that author, even though he [His Lordship] used the citation in his presentation”, in that His Lordship had said that Al Gore's movie had incorrectly cited the paper as evidence that polar bears in the Beaufort Sea had died swimming up to 60 miles to find ice, though Abraham knew that Lord Monckton had in no way

misrepresented the authors, who had written: “We believe that the increased risk of swimming in open water is not likely to result simply from long-distance swimming as polar bears are considered strong swimmers (Oritsland 1969; Burns et al. 1981). Long-distance swims may impose higher metabolic costs than standing or walking on ice even under favorable weather conditions. High mortality in 2004 was more likely related to extreme and metabolically demanding conditions, as high sea states associated with stormy weather.”

- Abraham falsely represented Lord Monckton as having “misinterpreted a researcher’s work”, though Abraham knew that His Lordship had not mentioned or cited the researcher in question, Dr. David Barber, and that His Lordship could not, therefore, have misrepresented Dr. Barber.
- Abraham falsely represented Lord Monckton’s evidence that polar bear populations had been shown to increase in regions of the Arctic that had warmed and to decline in regions that had cooled, with no change in regions where temperature had been static, as “totally false” (19), though Abraham knew that His Lordship had correctly reproduced a map demonstrating His Lordship’s conclusion.
- Abraham falsely alleged that Lord Monckton had conducted and had then misrepresented the results of a “Google Scholar” search for scientific papers containing all the words “global”, “climate”, and “change” between 2004 and 2007, also alleging that the quantity of scientific papers retrieved in the search, 539, had been a “complete fabrication” (47) on His Lordship’s part, though Abraham knew, because Lord Monckton had said so in his talk and made clear in the relevant slide, that the search had been conducted by Klaus-Martin Schulte, not by His Lordship; that Mr. Schulte’s search results had been reported in 2006 in a peer-reviewed journal, from which Lord Monckton had accurately cited a key result; that the database searched was not Google Scholar but the ISI Web of Science database; that the search was not for all of the words “global”, “climate”, and “change” but for the exact phrase “global climate change” (a phrase that Naomi Oreskes, a historian of science, had previously used); that the search period had not been 2004 to 2007 *simpliciter* but 2004 to mid-February 2007; and that, contrary to Abraham’s allegation of “complete fabrication”, Mr. Schulte’s search had indeed retrieved 539 scientific papers (Oreskes’ earlier search of the same database using the same search term had retrieved 928 papers spanning the 11 years 1993-2003).
- Abraham falsely represented Lord Monckton as having cited a scientific paper by Caillon *et al.* (2003), and as having made a “suggestion” (51) “not in concert” with Caillon’s paper, when he knew that Lord Monckton had not cited Caillon’s paper; that accordingly His Lordship could not have misrepresented a paper that he had not cited; and that in any event nothing in what His Lordship said had in any way contradicted the paper.
- Abraham falsely represented Lord Monckton as not having displayed “year-to-year ice-cover variations” (61) when showing a graph from IARC/JAXA that recorded the seasonal changes in the extent of Arctic sea ice, though Abraham knew that Lord Monckton’s graph had in fact displayed year-to-year ice-cover variations for eight separate years, each with a curve individually colored and labeled.
- Abraham falsely represented Lord Monckton as having misrepresented the findings in a paper by a now-retired scientist, Dr. Schweingruber, to the effect that the medieval warm period was evidenced by higher tree-lines than today in the polar Urals, though Abraham knew that the scientist whom he had cited as challenging Lord Monckton’s conclusion had not been an author of Schweingruber’s paper, and that that scientist had attempted to rebut Lord Monckton’s

conclusion without any reference to Schweingruber's paper, relying instead upon an unrelated (and defective) argument about the inability of climate models to reproduce today's climate except by assuming that the warming effect of CO₂ was as large as the IPCC maintains.

- Abraham falsely represented Lord Monckton as having misrepresented the findings in a paper by Dr. Lloyd Kiegwin, though Abraham knew that Lord Monckton had correctly reproduced a graph from Dr. Kiegwin's paper, and that Dr. Kiegwin's paper had explicitly stated that the northern Sargasso Sea had been 1 C° warmer than today in the medieval warm period, and that Dr. Kiegwin – at any rate as cited by Abraham – did not specifically refute Lord Monckton's use of his graph, resorting instead to a purely *ad-hominem* comment, repeated by Abraham in his talk, that His Lordship was “another one who has money and no background in science”.
- Abraham falsely represented Lord Monckton as having misrepresented the results of a paper by Noon *et al.*, though Abraham knew that Lord Monckton had correctly reproduced a graph from the paper, and Abraham also that a comment on the internet from one of the authors of the paper, to the effect that the Arctic is today warming rapidly, had little or no bearing on Lord Monckton's use of a graph demonstrating the reality of the medieval warm period in the Antarctic.
- Abraham falsely represented Lord Monckton as having misrepresented the results of a paper by Huang *et al.*, though Abraham knew that Lord Monckton had correctly reproduced a graph from the paper, and that Huang – in a passage somehow omitted by Abraham in his talk – had explicitly stated that the Holocene Climate Optimum, a period earlier than the medieval warm period, had been 1.5-2 C° warmer than the present.
- Abraham falsely represented Lord Monckton as having put forward a case unsupported by the scientific community, repeatedly citing only those scientific papers that supported his viewpoint, particularly but not exclusively in his discussion of polar bears, of the medieval warm period, and of the connection between the Sun and climatic changes, though Abraham knew or ought to have known that in these and other fields the scientific literature contains many papers by respected scientists supportive of Lord Monckton's opinion, and that Abraham, in the interest of fairness to His Lordship, ought to have made that clear in his talk.

... by Abraham himself misrepresenting scientists' results

- Abraham falsely represented the IPCC as saying that, because of unforeseeable dynamic effects, “we just don't know how long it will take for the ice-sheets [of Greenland and West Antarctica] to melt” (6), with the implication that Lord Monckton had misrepresented the IPCC's conclusions in this regard, though Abraham knew or had reason to know – but did not state – that the IPCC had said in its 2001 and 2007 Assessment Reports that neither of the two great ice-sheets would melt unless mean global surface temperatures were sustained well above today's levels “for millennia”.
- Abraham falsely represented Lord Monckton as having “completely misrepresented” (20) the conclusions of the authors of a document issued by the World Wide Fund, though Abraham knew that Lord Monckton had not cited the authors' opinions: he had merely displayed their map unaltered and had drawn his own conclusion from the data shown on the map.

- Abraham falsely stated that Lord Monckton’s global-temperature “numbers don’t agree with NASA”, though Abraham knew or had reason to know that His Lordship had repeatedly displayed the Hadley Center/CRU global-temperature dataset, which agrees in all relevant respects with the NASA GISS dataset preferred by Abraham.
- Abraham falsely represented at least two scientific papers as having stated that in the paleoclimate when CO2 changed the temperature followed, when in fact the scientific literature has long been explicit that in the paleoclimate it was the other way about.
- Abraham cited Solanki *et al.* (2005) as having written, “ ... we point out that solar variability is unlikely to have been the dominant cause of the strong warming during the past three decades” (91), though Abraham knew but failed to read out the first part of Solanki’s sentence: “Although the rarity of the current episode of high average sunspot numbers may indicate that the Sun has contributed to the unusual climate change during the 20th century, ...” (91), a statement lending some support to Lord Monckton’s indication that fluctuations in solar activity have the capacity to influence fluctuations in the terrestrial climate.
- Abraham cited Solanki & Krivova (2003) as having written, “The Sun cannot have contributed more than 30%” [of global warming] (95), though Abraham knew that the remainder of the two researchers’ sentence, which Abraham failed to read out, said: “... of the steep temperature increase that has taken place since [1976]”, and that, therefore, the paper he cited had not ruled out the possibility of earlier solar influence on the Earth’s climate.
- Abraham cited Lockwood and Fröhlich (2007) as having written, “... over the past 20 years all the trends in the Sun that could have had an influence on the Earth’s climate have been in the opposite direction to that required to explain the rise in global mean temperatures”, though Abraham knew that the immediately preceding sentence, which Abraham did not read out, said: “There is considerable evidence for solar influence on the Earth’s pre-industrial climate, and the Sun may well have been a factor in post-industrial climate change in the first half of the last century.”

... unjustifiably impugning Lord Monckton

- Abraham falsely implied that Lord Monckton would not update his graph of monthly global mean surface temperature anomalies to show the sharp global warming that has occurred since His Lordship’s talk, saying that he was “waiting to see when Chris Monckton is going to add this new data to his curve – it’s going to shift everything in a positive direction” (35), though Abraham knew or negligently and recklessly failed to verify that the *Monthly CO2 Reports* compiled by Lord Monckton and published on the web at www.scienceandpublicpolicy.org, a website about which Abraham can be proven to have known, are updated monthly, and duly show the naturally-occurring warming that has arisen in response to the current El Niño Southern Oscillation.
- Abraham falsely stated that “Remember, Chris Monckton’s never published a paper in anything” (37), when he knew or negligently and recklessly failed to check that – to take two examples – Lord Monckton had published papers on the determination of climate sensitivity in the UK’s *Quarterly Economic Bulletin* and in the American Physical Society’s reviewed newsletter, *Physics and Society*, and that *inter alia* His Lordship has given faculty-level physics seminars on determination of climate sensitivity as well as public university lectures on the climate, and has

led international scientific discussions on climate sensitivity, and has published academic papers on subjects such as the theory of currencies, and has addressed delegates at several UNFCCC climate conferences, and will be presenting a paper on reform of the IPCC at the annual Planetary Emergencies session of the World Federation of Scientists later in 2010.

- Abraham falsely represented two of Lord Monckton's "graphs of his own data" as failing to "agree with themselves" (42), though Abraham knew from Lord Monckton's talk that the first of the two graphs was a composite of four global mean surface temperature datasets compiled by His Lordship for the Science and Public Policy Institute, and was labeled as such; that the second of His Lordship's two graphs was a representation of monthly global mean surface temperature anomalies from the National Climatic Data Center in the United States, and was labeled as such; and that, therefore, the two graphs were likely to be different in small details, though similar in the essential point to which His Lordship had drawn his audience's attention: they both showed a declining trend in global temperatures since 2001.
- Abraham falsely represented Lord Monckton as possibly having "made up" (109) a graph displaying a recalculation of the temperatures of the medieval warm period, though Abraham knew that Lord Monckton had stated that it was "two Canadian researchers", McIntyre and McKittrick, who had exposed the medieval temperature reconstruction relied upon by the IPCC as defective.
- Abraham falsely represented Lord Monckton as possibly not having understood what the ARGO network of bathythermograph buoys was, saying, "ARGO is the name of a float which is used to measure temperature around the world, so maybe Chris Monckton doesn't understand that issue" (77), though Abraham knew that Lord Monckton had explained to his audience what the ARGO buoys were and what role they played in measuring, recording, and automatically reporting via satellite the temperature and salinity of the oceans at depths of up to a mile, and that His Lordship had illustrated his words with an explanatory slide taken from the ARGO project's own website.
- Abraham falsely implied that statements in Lord Monckton's talk to the effect that, as Abraham put it, "scientists are lying" (2) were untrue, though Abraham knew that Lord Monckton had at least made a stateable case that several falsehoods existed in the documents of the IPCC and in climatological journals, some of which could be proven to have been deliberate.

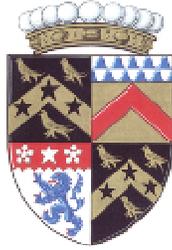
... divorcing Lord Monckton's words from their context

- Abraham falsely represented Lord Monckton as having said that the IPCC had only cited four scientific papers in its 2007 report, though Abraham knew that Lord Monckton had in fact stated – both in his talk and in the relevant slide that he displayed – that the IPCC had relied upon only four papers in the scientific literature for its central conclusion as to the magnitude of the three quantities whose product is final or post-feedbacks climate sensitivity. Here, as elsewhere, Abraham divorced His Lordship's words from their context so that he could make them seem absurd.
- Abraham falsely represented Lord Monckton as having used "sleight-of-hand" to demonstrate that "if you use different timescales you can come up with different temperature trends", though Abraham knew that Lord Monckton was in fact pointing out that the IPCC had used an impermissible statistical technique when it had applied multiple trend-lines with arbitrarily-

chosen to a single stochastic dataset and in drawing from the ratios of the slopes of its arbitrary choice of trend-lines the conclusion that the rate of “global warming” was itself accelerating.

- Abraham falsely represented Lord Monckton as having asked “I mean, is the IPCC way off? How could they be this wrong? If greenhouse gases are going up, why is the temperature going down?” (38), though Abraham knew that Lord Monckton was at that point demonstrating that Mr. Tom Karl, the director of the US National Climatic Data Center, had misled Congress when, in 2009, he had refused upon questioning to admit that global temperatures had followed a falling trend since 1 January 2001.
- Abraham falsely represented Lord Monckton as having drawn conclusions only about Arctic sea ice, which has been on a declining trend for 30 years, though Abraham knew that Lord Monckton had in fact drawn the correct conclusion that Arctic sea ice had been declining but was now recovering, that Antarctic sea ice had been growing for 30 years, and that, therefore, the global extent of sea ice had shown virtually no trend throughout the 30-year record of satellite observations.





CARIE  RANNOCH  PH17 2QJ
monckton@mail.com

From: The Viscount Monckton of Brenchley

10 June 2010

John Abraham, St. Thomas University

By email

CONFIDENTIAL UNTIL 10 JULY 2010

Mr. Abraham,

“But Chris Monckton Said ...”

Last week my attention was drawn to an 83-minute talk by you, entitled “But Chris Monckton Said ...”, consisting of 115 numbered slides each accompanied by your voice-over and bearing the imprint of St. Thomas University on each slide, which has been widely circulated both by the university’s server and on the internet, and remains in circulation on that server despite an earlier request by me to the President of your University that it be taken down pending investigation. Your talk purports to be a **“rebuttal”** (according to your slide 2) of a 95-minute lecture about climate change that I gave at Bethel University, St. Paul, Minnesota, in October 2009, some eight months ago.

You say: **“I’m very happy to supply any of my resources to people on request: feel free to contact me if you have any questions about this presentation or about Christopher Monckton”** (slide 1); **“I’m going to reply as a scientist would reply, and that is with all my resources available to people: I’ll provide links, I’ll provide full citations, and I’ll give people access to this stuff if they request it, and email’s a great way to request it”** (2); **“If there are any questions about this presentation, feel free to write to me. I’d be happy to answer any question and provide any other information that might be useful to anyone listening out there”** (114); and **“Please write to me if you have any questions: you can find me at the University of St. Thomas in Minnesota; my name is John Abraham; please write to me and let me know what you thought; let me know if I was off base; was I convincing or not convincing? I’m happy to hear your comments; and keep in touch”** (115).

Therefore, I should be grateful if you would, at your earliest convenience and in any event not more than one month from the date of this letter, answer the following questions to which your talk gives rise. Should you not wish to answer the questions (there are almost 500), you may prefer instead simply to take down your talk from wherever it is available and issue a public apology for and retraction of it.

You did not give me the opportunity to review your talk before you circulated it widely, as you should have done, and as is normal in academe. By contrast, I am giving you a fair opportunity to respond to this letter privately, and to correct any errors or unfairness. I shall keep the letter confidential for one month. I shall then decide, in the light of your response, whether it should be published. However, in view of the damage that your talk was calculated to cause to my reputation, for my own protection I shall shortly be posting a substantial video response to your talk.

I have sent a brief letter to the President of your University, Father Dease, informing him that I have sent you this letter but not sending him a copy for now. I have told him that, once I have had your response, I may wish to invite him to investigate whether the content and distribution of your talk constitutes gross academic and professional misconduct on your part.

Good faith

1: Are you familiar with the convention in the academic world that if one wishes to rebut the work of another he should notify that other in good time, so as to avoid errors in the rebuttal and to afford the other a fair and contemporaneous opportunity to refute the rebuttal?

2: Since you knew how to contact the Science and Public Policy Institute, which I advise on policy matters, and since you would have had no difficulty in contacting me to notify me that you were intending widely to disseminate your material, what steps (if any) did you take to attempt to notify me of what you proposed to do to ensure that I was given a fair and contemporaneous opportunity to refute your attempt at a rebuttal of my Minnesota talk?

Summary of your talk

3: In summary, does your talk say that you are **“a scientist”** (2) with **“a background in the area of energy, heat and fluids, which is germane to the topic of climate change”** (3); that you have published **“in the area”** of climate change (3); that I am a **“well-known climate skeptic”** (1) **“who has money and no background in science”** (29) and **“who has not written a single peer-reviewed science paper on any topic”** (4) and has **“never published a paper in anything”** (37); that **“we want to think about the backgrounds people have when we ascribe credibility to the comments people make, particularly for Chris Monckton, because if you listen to his talk you will find that he disagrees with every major science organization”** (4-5); that I am **“paid”** and **“employed”** by the Science and Public Policy Institute (104), which you describe as **“an activist organization that is lobbying against dealing with the issue of global warming and trying to sway public opinion”** (104); that my **“deep”** connections with this **“ideological”** organization make it **“extremely difficult to believe that you can separate your results from the interests of those people funding you”** (104); that, by implication, I claim to know things **“that everyone else doesn’t know”**, and **“to see things that other scientists haven’t seen”** (5), and that **“maybe”** I **“know more than they do”** (50); that many of my statements **“sound absurd”**, and that your **“feeling is that if statements sound absurd they probably are”** (5); that you are proposing to **“investigate”** what I say (5); that **“the number of errors”** I make **“is so enormous it would take a thesis to go through every single one of them”** (74); that you are going to **“help”** me with my **“math”** (74); that I **“presented a lot of data with no citations or no explanation”** (105), and **“if you don’t tell us where it’s from we can’t assess the data”** (109); that my talk contained assertions that were **“not accurate”** (7), **“total nonsense”** (21), **“just not true”** (34), **“sleight-of-hand”** (35); **“sleight-of-hand”** again (59); **“a complete fabrication”** (47); and **“a straw man”** that **“doesn’t hold any water”** (53); that my **“presentation of information”** has been **“shady”** (35); that a graph of mine was **“almost off by 100%”** (40); that when reading data I **“can’t get it straight”** (40); that I **“try to confuse”** my audience (61); that I **“confuse”** and **“make mistakes”** that **“are different from each other”** (40); that I **“confuse”** my **“units”** (80); that my **“graphs”** of my **“own data”** do not **“agree with themselves”**, so **“how can you trust conclusions drawn from them?”** (42); that I **“either deliberately or by mistake misrepresented the data”** (114), **“misstated data”** in a paper I had cited (81), **“made many mistakes with temperature data”** (110), **“completely misrepresented”** the **“conclusions”** of scientific researchers (20), **“misrepresented”** another paper I had cited (67), and made **“a very bald misrepresentation”** of a scientific society’s statements (85) so that the society **“were at the very least upset”**, and that the author of yet another paper **“was pretty upset”** at how I had used his data (83); that a **“prediction”** I am alleged to have made was **“rash”** and **“a bit like assuming at dusk that the sun will never rise again”** (79); that **“in some cases”** I say **“there is no global warming, and then in other cases”** I say **“Hey, it is warming”** (82); that **“you take a look at all this and you gotta ask yourself, who can you trust? ... where can you go, who can you trust?”** (114), **“who has an agenda?”** (115); that **“the purpose of my presentation is to show how someone who is a very skilled orator can present information intended for an intelligent but very general audience, and ... of course you’re going to believe him, I mean, that’s a pretty compelling presentation; and it takes someone who’s got some time and knows how to find the information a while to track down and ferret out the truth of their statements, and you can’t expect that everyone is going to have the kind of time that I’ve put into this rebuttal”** (115); and that you do not want to spend your time **“tracking down the misinformation of folks like Chris Monckton”** (115)?

Damage to my reputation

4: Do you accept that your talk was calculated to do very great harm to my reputation?

5: Do you accept that your assertion that you are **“a scientist”** (2), and the fact that you have used the time, facilities, and imprint of your university in preparing and circulating your talk, and the failure of the University to take down your talk from its servers upon request, are likely to amplify the very great harm that your widely-circulated talk was calculated to do to my reputation?

6: Did you fail to tell me of your proposed rebuttal of my speech in good time in the hope that your very lengthy talk would be circulated as widely as possible before I could circulate a detailed refutation?

Your obligation to tell the truth

7: Do you accept that **“we have an obligation, an obligation to be truthful to the general public so that we can make good decisions”** (115), an obligation that applies to you?

8: Was your talk in all respects truthful?

9: Do you appreciate that, in common sense as well as in law, given your claim to expertise **“in the area”** of climate change (2-3), any statement by you in that area that you assert or assume to be true but whose truth you have negligently failed to verify is as much a lie as any statement that you make in the knowledge that it is not true?

Retraction and apology

10: If the questions in this letter lead you to realize that your talk was in material respects untrue and unfair, will you please withdraw your talk from wherever it is available and publish in its place a retraction and apology substantially in the form set forth in my final question to you in this letter?

Your motives and funding

11: Since you have raised questions about my motives and funding and those of my distinguished friend Dr. Willie Soon of the Harvard-Smithsonian Institute for Astrophysics, from whom I had obtained one of the graphs I used in my talk, is it not reasonable for me to ask you questions about your motives and funding?

12: At whose instigation, and why, did you decide to prepare and widely to broadcast your talk? How much time did you spend preparing the talk, who paid for your time and costs, and who paid the costs of hosting your talk on the University’s servers, and who met any and all other costs associated with your talk?

13: Do you have the permission of the University to use your office, its name, its logo, its time, its servers and its facilities for the preparation and distribution of your talk?

14: What evidence do you have for your assertion that I am **“employed”** and **“paid”** by the Science and Public Policy Institute (104) for my policy advice to it, and what evidence do you have that the Science and Public Policy Institute, the Minnesota Free Market Institute, or anyone else paid for or in any way influenced the preparation or delivery of my Minnesota speech? [*Hint: I was paid nothing.*]

15: What evidence do you have for your nasty implication, delivered over a series of slides towards the end of your talk, that Dr. Soon’s sources of funding had in any way influenced his presentation of a single graph from my talk, showing two publicly-available datasets of Japanese meteorological observations?

16: Would it not have been fairer if you had verified Dr. Soon’s data instead of sniping at his funding?

Qualifications

17: Please provide a full academic *resume*. Though you have described yourself as a “**professor**” (3, 62) more than once in this presentation, are you in fact an *associate* professor?

18: Please explain which (if any) of the scientific topics covered in my talk fall within your particular field of scientific expertise, and, for each such topic, why your expertise is relevant.

19: Please provide a full list, with references, of all peer-reviewed papers you have published on the science of climate change, including those specifically having a bearing on the scientific topics covered in my talk.

Sources

20: Since you have repeatedly stated that I had not cited my sources adequately, please explain why you regard your own references such as “**Climate Change Conf. 2009**” and “**Solar 2007**” (3) as adequate indications enabling third parties to identify the events in question and your roles at them?

21: Given that you have repeatedly stated that I had not cited my sources adequately, please explain why you did not at any time during the months of preparation of your talk contact me even once to ask me to assist you with identifying the sources of my material.

22: Please provide copies of all email exchanges between you and all those whom you consulted about my talk. You will understand, after reading this letter, why I have reason to suspect that you have repeatedly and deliberately misrepresented to third parties what I said in my talk, in a manner calculated to provoke highly-critical responses from them that you could then deploy against me.

23: Please explain why, before you contacted numerous third parties in connection with my talk, you did not at any time contact me to verify whether your characterization of my conclusions was fair and accurate.

24: How can any of the sources you contacted be regarded as reliable, when not one of them contacted me to verify whether your characterization of my opinions or conclusions was fair and accurate before commenting thereupon, sometimes in the most uncomplimentary and academically unacceptable terms?

25: Did you obtain the permission of any of the scientists or scientific bodies you have quoted, before using quotations from their email responses to you about my opinions or conclusions in your talk?

YOUR GENERAL ALLEGATIONS

26: Please confirm that I have quoted accurately the general allegations that you make at (2) about some of the main points you say I said or, by implication, misled my audience about in my Minnesota talk:

“Chris Monckton gave a presentation last October at Bethel University in Minnesota, and, while his presentation was held in one of their auditoriums it was actually sponsored by a Minnesota free trade organization, a business organization. And Chris Monckton is a great speaker: he’s got a British accent, which lends great credibility to the things he says. Also, he has a good demeanor, he’s a compelling speaker. And if you listen to what he said, you would come to the conclusion that the following things are true:

“The world’s not warming.”

“Ice is not melting.”

“The ocean isn’t heating.”

“Scientists are lying.”

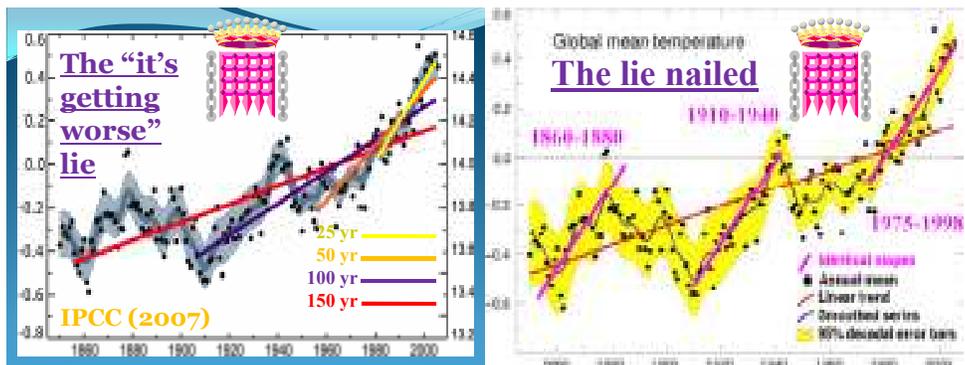
“Sea levels are not rising at all.”

“Polar bears aren’t threatened.”

“There’s no such thing as ocean acidification.”

“There’s a conspiracy.” (2)

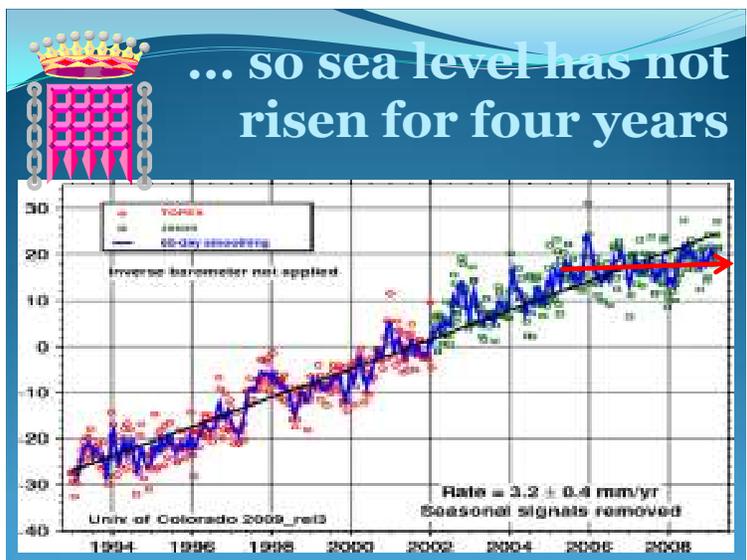
27: What evidence do you have for your assertion that I said, **“The world’s not warming”** (2) Did I display a slide showing global temperatures for the past 160 years, and did that slide indicate that the world *was* warming? *Hint*: the slide is below, alongside another slide showing the same dataset.



28: Since you refer to the above-right slide at your (111), please confirm that you were indeed aware that this slide formed part of my presentation, and that the long, red line plainly labeled “Linear trend” shows the 160-year world warming trend, albeit at a rate of only 0.4 C/century.

29: Standing the visible evidence in the above slides, are you now prepared to retract your assertion that I said, “The world is not warming”, or at least to qualify it by acknowledging that, though I said the world had been cooling since 2001, I had displayed the above graph plainly establishing that the long-term trend is a warming trend?

30: What evidence do you have for your assertion that I said or misled my audience into believing that **“Sea levels are not rising at all”**? Did I display, during my talk, a slide showing sea-level rise since 1993? *Hint*: the slide is below.



31: Does the slide show a rise in sea level since 1993 at a rate of ~1 ft/century?

32: Is it not true that, in my talk, I reported evidence that the ARGO bathythermographs had shown a slight cooling of the oceans throughout the six years since they were first deployed; and that, at the time of my talk, there had been little or no sea-level rise for four years?

33: Confronted with this evidence, are you now prepared to retract your assertion that I led my audience to conclude that **“Sea levels are not rising at all”** (2)?

34: What evidence do you have for your assertion that I said or misled my audience into believing that **“Ice is not melting”** (2)?

35: Did I display, during my talk, a slide stating that Arctic summer sea-ice area “is recovering from a 30-year low in 2007”? *Hint:* The slide is below.



36: Is it not evident from that slide that I did not say **“Ice is not melting”** (2), but that instead I stated that Arctic sea-ice had reached a 30-year low in 2007, from which it is recovering?

37: Given the plain wording of this slide, are you now prepared to retract your assertion that I had led my audience to believe that **“Ice is not melting”** (2)?

38: Though you imply I was wrong to lead my audience to believe that **“polar bears are not threatened”** (2), is it not correct that I made the different statement that they “are doing fine”?

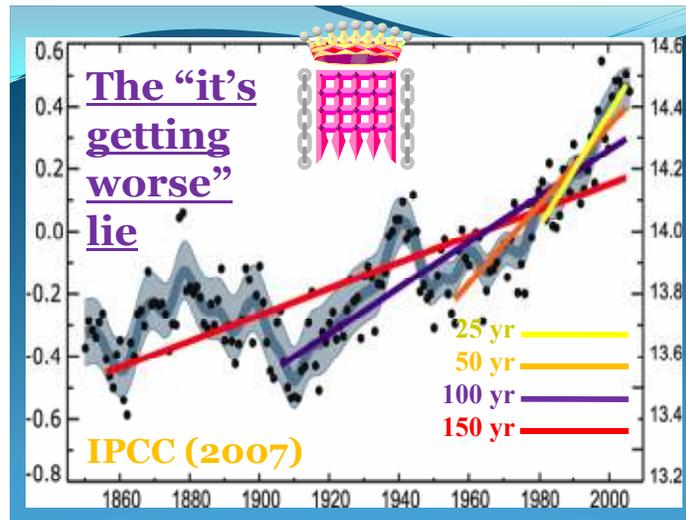
39: Given that the population of polar bears has increased very substantially since the middle of the last century, in what sense was it unreasonable for me to suggest that they are “doing fine”?

40: What evidence do you have that I said there was **“no such thing as ocean acidification”** (2)?

41: Is it not correct that I only mentioned ocean “acidification” briefly, in passing, in the context of mentioning that the “problem” imagined by the climate-extremist movement used to be called “global warming” until warming ceased in the mid-1990s; then it was called “climate change” until it became apparent that the climate continues as changeable as before; now it is called “energy security”; tomorrow it will be called “ocean acidification”; and eventually it will be called “absolute rubbish”?

42: Though you imply I was wrong to lead my audience to believe that **“scientists are lying”** (2), did I not produce clear, visual evidence that some “scientists are lying”? *Hint:* look at the slide below.

43: Do you, as a **“scientist”** (2-3), regard it as true that the rate of “global warming” over the past 150 years is itself increasing, as the IPCC’s multiple trend-lines in the above graph purport to show?

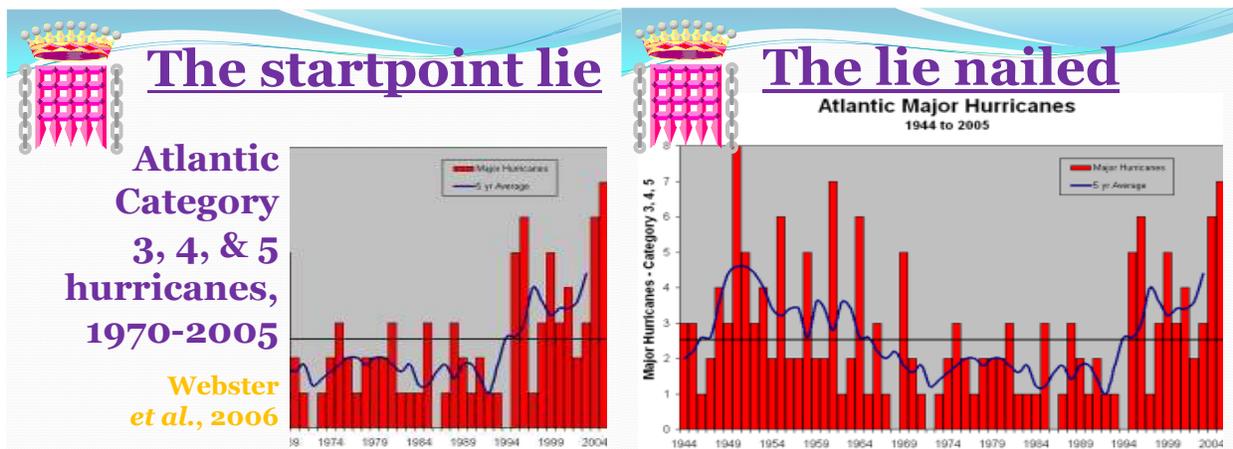


44: Is it not correct that the application of multiple trend-lines with arbitrarily-chosen endpoints to a single stochastic dataset in such a manner that conclusions are drawn from the slopes of the arbitrarily-chosen trend-lines when compared with one another is an impermissible statistical technique?

45: Does it not follow that the IPCC's stated conclusion that "for shorter recent periods the slope is greater, indicating accelerated warming" is incorrect and without scientific foundation?

46: Given that the IPCC and the EPA, both of whom have had this statistical abuse drawn to their attention, have failed to remove or apologize for the defective graph shown above but are persisting in their error, is it not legitimate for me to assume that their error is deliberate and is, therefore, a lie?

47: Why, in the context of your implication that I was wrong to say that some "scientists are lying" (2), did not choose to display or comment upon the following two slides from my talk:



48: Is it not evident to you that the suppression of the earlier part of the temperature record in the scientific paper that I had cited amounted to a deception, in that the incomplete data (left slide) appeared to indicate a sudden and alarming rise in hurricane activity, when the full record (right slide) showed nothing unusual?

49: Bearing in mind these and other examples of scientific mendacity that I revealed in my talk, will you now retract any implication in your (2) that I was wrong to lead my audience to believe that some "scientists are lying", and that you will also retract your implication that I said or implied that *most* or *all* "scientists are lying"?

50: Please point out where in my talk I said that there was "a conspiracy" (2). [Hint: I did not use the word.]

YOUR CRITICISMS OF INDIVIDUAL SLIDES IN MY TALK

Gore on sea level

Source of sea level rise	Rate of sea level rise (mm per year)	
	1961-2003	1993-2003
Thermal expansion	0.42 ± 0.12	1.6 ± 0.5
Glaciers and ice caps	0.55 ± 0.18	0.77 ± 0.22
Greenland ice sheet	0.05 ± 0.12	0.21 ± 0.07
Antarctic ice sheet	0.14 ± 0.41	0.21 ± 0.35
Sum of individual climate contributions to sea level rise	1.1 ± 0.5	2.8 ± 0.7
Observed total sea level rise	1.8 ± 0.5*	3.1 ± 0.7*
Difference (Observed minus sum of estimated climate contributions)	0.7 ± 0.7	0.3 ± 1.0

51: Please confirm that I have fairly encapsulated your criticism of the above slide in the following quotation from your talk:

“In this slide Chris Monckton talks about Al Gore claiming that the oceans are going to rise over 600 cm: yet the IPCC, the Intergovernmental Panel on Climate Change, one of the most authoritative bodies speaking with regard to global warming, projects a 6 cm sea-level rise. Now this is an important slide: I mean, if Al Gore is off over a factor of 100, what do we have to be worried about? Really, is 6 cm that big of a deal? Are we gonna get rid of coal power just because of 6 cm of sea-level rise? That’s a good point. Why should 6 cm concern us? Well, let’s start out by seeing what the IPCC actually said.

“Their actual projections are 20-50 cm ... and what you notice if you read that page is they give a caveat: their projections of 20-50 cm do not include ice-melt. Those projections are due to essentially thermal expansion of the ocean. Why don’t they include ice-melt? Because, they say, it’s too uncertain. So rather than try to estimate the impacts of sea-level rise due to ice-melt, they say, ‘You know what? We don’t know, so we’re just going to be very conservative and we’re going to give a lower bound on sea-level rise.’

“So, you might ask, is the IPCC concerned about ice-melt? And in particular some of the ice that scientists are concerned about are Greenland and Antarctica. Each of them has about 6 m worth of sea-level rise. So if West Antarctica melts you get about 6-7 m and if Greenland melts you get about 6-7 m. Now, let’s see what they say about that uncertainty. Now, on page 409 – it’s the exact same page, I don’t see how Chris could have missed this, it’s stated, and I’ve got the quote here, ‘an important uncertainty is discharge from ice sheets’. But, this is the important part, quantitative projections cannot be made with confidence. So they’re saying, ‘Yeah, this is a real concern, but we just don’t know how long it will take the ice-sheets to melt.’ But I want you to notice, later on page 818, chapter 10, they do talk about the stability of just the West Antarctic Ice Sheet, which could by itself contribute 5-6 m of sea-level rise. So it’s not accurate to say the IPCC said 6 cm of sea-level rise as Chris Monckton suggested: in fact, we now see where Al Gore got his numbers” (6-7).

52: Did you notice that my slide said the IPCC would imply that there would be just 6 cm of sea-level rise *from the great ice-sheets* in 100 years, while Gore’s estimate of an imminent 20 ft (610 cm) sea-level rise that he attributes to *melting Greenland and Antarctic ice* is around 100 times greater?

53: Did you also notice the IPCC’s table of *observed* contributions to sea-level rise over the past 40 years, from which it is not difficult to calculate that on present trends the great ice-sheets will contribute around 6 cm to sea-level rise over the next 100 years?

54: Since you say that the IPCC’s projections of a 20-50 cm sea-level rise in the next 100 years **“do not include ice-melt”** (6), please confirm that you now accept that my use of 6 cm for sea-level rise over the next 100 years from ice-melt is not inherently incompatible with the IPCC’s 20-50 cm overall sea-level rise from other sources, notably thermosteric expansion.

55: Why, in your description of the IPCC’s suggestion that discharge from ice-sheets cannot yet be quantified, did you not make the surely important admission that the IPCC concludes that “If a negative surface mass balance were sustained *for millennia* [my emphasis], that would lead to virtually complete elimination of the Greenland Ice Sheet and a resulting contribution to sea level rise of about 7 m”?

56: Bearing in mind that the IPCC does not expect the Greenland ice-sheet completely to disappear *for millennia*, why did you characterize their view as being that **“we just don’t know how long it will take for the ice-sheets to melt”** (6)?

57: Would it not have been fairer if you had admitted that even if the dynamical ice processes talked of by the IPCC were to occur the 7 m sea-level rise from each of the two great ice-sheets would not occur *for millennia*?

58: Does it not follow that Al Gore’s now-discredited suggestion of an imminent 20 ft sea-level rise in consequence of those “dynamical ice processes” does not enjoy any support from the IPCC, and is at least 100 times greater than the contribution to sea-level rise that would be expected from the two ice-sheets if their rate of melting as shown in the IPCC’s 2007 *Assessment Report* were to continue?

59: Do you now accept that from the IPCC’s documents we cannot **“see where Al Gore got his numbers”** (7); that the British Government, in its failed attempt at a defense of Al Gore’s move in the High Court in 2007, was compelled in the face of the evidence to concede that there was no basis in science for Gore’s assertion; and that, accordingly, Mr. Justice Burton concluded – as is recorded on a slide which formed part of my talk but which you carefully chose not to show or mention – that “The Armageddon scenario that he depicts is not based on any scientific view”?

60: Would it not have been fairer if you had admitted, as another slide of mine that you failed to show or mention demonstrates, that in 2005, the very year Gore was making his movie with its menace of an imminent 20 ft sea-level rise, he bought a \$4 million condo in the St. Regis Tower, San Francisco, just feet from the allegedly-rising ocean at Fisherman’s Wharf? Would you spend \$4 million if you knew that a 20 ft sea-level rise would imminently render your hefty financial investment in ocean-front real-estate worthless?

61: When you cited Rahmstorf *et al.* (2007) to the effect that **“although ice-sheet contribution has been small, observations are indicating that it is rapidly increasing ... these observations underscore the concerns about global climate change”** (8), did it not occur to you to **“investigate”** (5) where the supposedly **“rapidly increasing”** contributions from the great ice sheets to sea-level rise were actually going? What has happened to all that ice? Where has it gone? Is that not a reasonable question to ask? Has there been a surge in the rate of sea-level rise? Does it not seem to you that, if anything, the rate of rise has decelerated somewhat over recent years, as my earlier slide rather clearly showed?

62: Did you not think to check whether Kopp *et al.* (2009), whom you cited, were right to say that **“the last interglacial period was only slightly warmer than the present”** (9)? Was it not in fact up to 5 F warmer than the present, according to some researchers?

63: Would it not have been fairer if you had admitted that many of the citations you make are from scientists who make assertions without evidence, such as Meehl *et al.* (2005): **“Even if concentrations are stabilized, there is a commitment to future climate changes that will be greater than those we have already observed.”** (9)?

64: On the A2 scenario, for instance, would you agree the IPCC predicts *transient* warming of 3.4 C° by 2100, while the IPCC’s own function determining future *equilibrium* warming on that scenario would suggest a central estimate $4.7 \ln(836/368) \approx 3.9$ C°, implying that even if CO2 concentrations were more than doubled from 368 to 836 ppmv over the current century and then stabilized the “commitment” to further warming would be less than 0.5 C°?

65: Since the “commitment” upon CO2 stabilization over an entire century is just 0.5 C°, would you not agree that the “commitment to future climate changes” will be small indeed?

Gore on polar bears



66: Please confirm that I have fairly summarized your criticism of my mention of the paper cited by Al Gore in support of his contention that polar bears “have drowned, swimming distances of up to 60 miles to find ice” as follows (11-15):

“And it’s followed by this slide. Here he reports information from a publication by Monnett & Gleason published in 2006. It was a paper which found four dead polar bears whose carcasses had washed up after a storm, and the point he was trying to make is that these polar bears didn’t die due to global warming, they died because of a storm, and, you know, it’s a good point, if polar bears aren’t in danger from global warming but rather just a few polar bears dying in a storm, why should we be concerned? So let’s go into some more detail about what Chris Monckton says. He says a paper by Monnett & Gleason referred to just four dead polar bears.

“So I’m going to do something crazy: I’m actually going to get the paper. Here is a quotation from that paper: “We further suggest that drowning-related deaths of polar bears may increase in the future if the observed trend of regression of pack ice and/or longer open water periods continues.” Well, just to make sure, let’s go ask the author himself. What does Charles Monnett say? He says, ‘My published work suggests that polar bears may drown under conditions that are expected to develop due to decreasing sea ice. ... I do not believe that CM has read my work, or recent work of prominent polar bear biologists that is easily obtained thru Google.’ OK, so Chris Monckton doesn’t agree with that author, even though he used the citation in his presentation.”

67: Since you appear to have given Dr. Monnett the impression that I had not read his paper, please explain why you failed to point out in your talk that in mine I had reproduced the actual map from his paper demonstrating that just four polar bears had drowned.

68: Please confirm that the paper finds that the four polar bears that Dr. Monnett reports as having died were identified in an aerial survey as having been swamped by high winds and waves in an Arctic storm, and that the paper does not at any point suggest that those four polar bears died – as Al Gore claims the paper said they did – “swimming distances of up to 60 miles to try to find the ice”.

69: If you agree with me that Dr. Monnett’s paper does not in fact state that the four polar bears whose death the aerial survey reported died “swimming distances of up to 60 miles to find the ice”, do you regard Al Gore’s statement to that effect as accurate, and, if so, with what possible justification?

70: Are you aware of the scientific difference between providing evidence that an event has happened at some definite time in the past and merely predicting that an event may happen on some unspecified future occasion?

71: If you are aware of the difference between evidence and prediction, why did it not occur to you that Dr. Monnett’s paper contains *evidence* that polar bears were swamped in a storm, and a mere *prediction* that polar bears will drown more often in the future if warming (whether regional or global) continues to melt the Arctic polar ice?

72: Did I at any point in my presentation state that Dr. Monnett did not believe that polar bears *might* drown at some future date if the regional warming in the Arctic continued and the sea ice in the Beaufort sea began to decline?

73: Are you aware that polar bears evolved some 200,000 years ago as a distinct species (Amstrup, 2003), and that, therefore, in particular, they somehow survived the previous interglacial warm period, when Arctic temperatures were up to several degrees warmer than the present for some 5000 years, and, if so, would it not have been fairer if you had put matters fairly and responsibly into context by admitting that the polar bears had survived 5000 years of temperatures considerably higher than today’s?

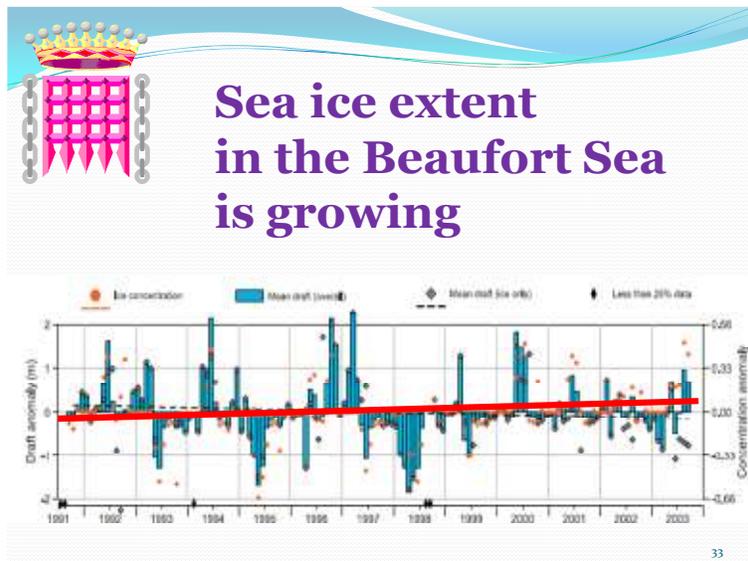
74: Are you aware that the total population of polar bears throughout their Arctic habitat taken as a whole is several times greater than it was 70 years ago, and that the growth in polar-bear numbers is scarcely indicative of a species at imminent threat of extinction, and, if so would it not have been fairer if you had admitted this?

75: Since you have reproduced Dr. Monnett’s reply to an email from you, please explain what evidence you provided to Dr. Monnett that gave him grounds for believing that I had not read his work, and what knowledge you had of whether or not I had read Dr. Monnett’s work.

76: What steps did you take to verify that Dr. Monnett knew whether or not I had read his work before you reproduced his statement that I had not read it?

77: Though you say, **“Chris Monckton doesn’t agree with that author, even though he used the citation in his presentation”** (15), is it not in fact correct that I correctly reported what the authors said about the cause of death of the four polar bears, and that I did not even mention, still less attempt in any way to challenge, the prediction by them that you say I disagree with? Again, are you bearing in mind the difference between the *evidence* that I relied upon in Dr. Monnett’s paper and the *predictions* that he made. It is on the *evidence* that I spoke, not on the *predictions*. Would you not agree with me that there are too many *predictions* in climate science today, and not enough in the way of *evidence* to give those predictions some real-world credibility.

Extent of sea ice in the Beaufort Sea



78: Please confirm that in the following passage I have fairly encapsulated your criticism of my slide (above) showing a rising trend of sea-ice extent in the Beaufort Sea, where Monnett & Gleason's four polar bears were drowned, according to Al Gore's movie, because they were swimming up to 60 miles to find the ice:

“On this slide he says, ‘Sea ice is growing in the Beaufort Sea’: I’m not making that up: that’s actually the title of this slide. So let’s go on and let’s investigate. What you’ll notice is that on that previous slide Chris Monckton didn’t give a citation, so I couldn’t investigate it in great detail. I couldn’t find the paper he read. But let’s just look at what other people are writing on this. OK? I mean, let’s ask a simple question. Is ice growing? Well, here’s a paper from 2009, very recent. Barber *et al.*, 2009: ‘In situ observations found heavily-decayed, very small remnant floes interspersed with new ice between floes, in melt-ponds, thaw-holes and growing over negative-freeboard older ice. This icescape contained approximately 25% open water, predominantly distributed in between floes or in thaw-holes connected to the ocean below.’ And, in fact, you know it’s the Beaufort Sea because it’s listed in the title.

“The problem is, this quote doesn’t agree with what Chris Monckton said. So maybe I’m misinterpreting the work. I think the only way to straighten out who’s right is to go ahead and ask the author himself, so I sent an email to David, which said: ‘I frequently give lectures on the dangers of global warming. Recently, I’ve learned that a skeptic, Christopher Monckton, is publically [*sic*] stating that ice in the Beaufort Sea is increasing and that polar bears are thriving in warmer weather. I do not believe he is correct, and I believe the US Geological survey has clearly stated that reductions in sea ice is [*sic*] ... [part of email missing]. Can you tell me which of our positions your research supports?’ And here is his reply. ‘Hi, John. He is wrong. Please see attached.’ And in the attached he sent the article which I referred to on our preceding slide.

“So we see that Chris Monckton is again misinterpreting a researcher’s work.”

79: Do you accept that the data on the slide indicate that, over the 22-year period of the graph, sea ice in the Beaufort Sea, though highly variable in extent, exhibits a small rising trend?

80: If you agree that the graph shows what I say it shows, why did you snidely remark, **“On this slide he says, ‘Sea ice is growing in the Beaufort Sea’: I’m not making that up”** (15)

81: Why, given that you complain that I did not give a citation for the graph, and given that you had said that you were going to **“go on and investigate”** (15), did you not **“investigate”** (15) to the extent of sending an email to the website of the Science and Public Policy Institute, of whose existence and connections to me I can prove you were and are aware, and simply ask me for the citation?

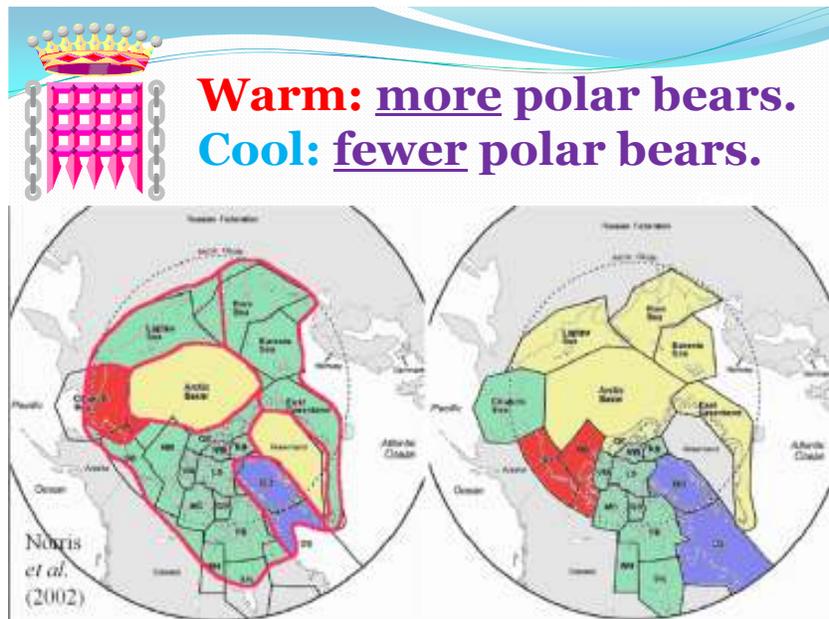
82: Are you aware of the Aristotelian logical fallacy of converse accident, by which the perpetrator of the fallacy argues inappropriately from the particular to the general? Are you also aware that it is an abuse of statistical technique to rely on very short periods of observation, still less on single observations, as indicators of a trend in a data series such as sea-ice extent?

83: Since you were confronted with a graph plainly showing that over 22 years the extent of sea ice in the Beaufort Sea has if anything grown a little, and since you had not bothered to take the elementary step of investigating where the graph had come from and whether it was accurate, on what scientific basis do you and your friend David Barber regard a single, anecdotal observation made by him as being superior to the record almost a quarter of a century in length that was displayed in my slide?

84: Since you explicitly state that, not having tracked down the citation of my graph, you were going to **“look at what other people are writing”** (15) on the question of sea ice in the Beaufort Sea, is it not blindingly obvious to you that, since I had not referred in any way to Barber’s work, I could not fairly have been accused of **“misinterpreting”** that particular **“researcher’s work”** (17)?

85: Would it not have been fairer if you had admitted during your talk that although the extent of sea ice in the Arctic as a whole has been falling, a point which I made quite explicit in one of my slides, I had also shown a slide in my talk that demonstrated a rising trend in Antarctic sea-ice extent throughout the period of the satellite record, together with a further slide showing that the combined Arctic and Antarctic sea-ice extent shows virtually no trend throughout the past 30 years?

Arctic warming and polar-bear populations



86: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above), taken from an admittedly non-peer-reviewed document produced by Norris and Rosenstrator of the World Wide Fund for Nature in 2002, which shows regional changes in Arctic temperature on the left and regional changes in polar-bear populations on the right –

“Here, Chris Monckton says that warm weather means more polar bears, cool weather means fewer polar bears. I’m not making it up: that’s actually the title, and you can see it there. ... Well, he says, of course, that polar bears are thriving in warm weather, so why should we be concerned about polar bears’ health and climate change? It’s a legitimate question. Well, let’s actually read the paper he talked about and here’s a quote: ‘... polar bears in Hudson Bay are being impacted by climate change. As sea ice is being reduced in the area, the polar bear’s [*sic*] basis for survival is being threatened. The sea ice is melting earlier in the spring, which is sending the polar bears to land earlier, without them [*sic*] having developed as much fat reserves for the ice-free season. By the end of the summer they are skinny bears, which in the worst case can affect their ability to reproduce.’

“But let’s make this easy. Let’s actually write to the author. So I wrote to her and here she wrote back: ‘You will find the press release and contact information regarding the report “Polar Bears at Risk” at [website address].’ I’ve highlighted the sentence ‘Human-induced climate change is the number one threat to the survival of the world’s largest terrestrial carnivores’. So you can see that Chris Monckton’s cited a paper which completely misrepresented their conclusions, and the authors confirm that.

“What do other researchers have to say about the polar bear? Well, here’s a paper from the US Geological Survey, Regehr *et al.* (2007): ‘Declining ice extent and degrading ice character have been associated with ... declines in cub survival and observations of drowned, emaciated, and cannibalized polar bears ... Declining sea ice ... where the sea ice melts each year ... has been associated with reduced body condition, reproduction, survival, and abundance.’ And here’s another paper, Amstrup *et al.* (2007): ‘Polar bear populations were forecasted to decline throughout all of their range during the 21st century.’ So, taken together, Chris Monckton’s assertion that polar bears are doing fine, they do well in warm weather, why do we have to worry about reduction of Arctic sea ice is **totally false.**” (18-21).

87: Do you deny that the maps displayed in my slide, showing on the left the region-by-region changes in Arctic temperature and on the right the region-by-region changes in polar-bear populations, were indeed published in the World Wide Fund’s document under the authorship of Norris and Rosenstrator in 2002?

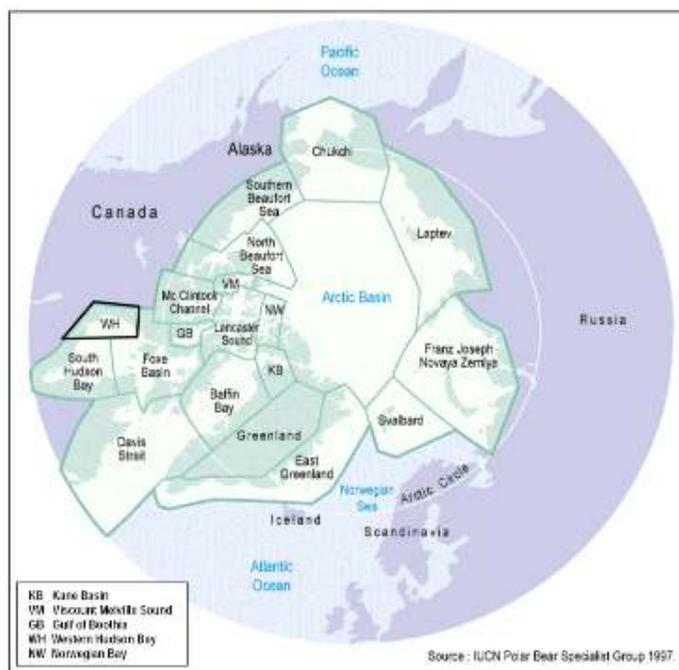
88: Do you deny that the diagram actually shows that in the regions where the Arctic has warmed the population of polar bears has increased; that in the regions where there has been no change in temperature the population of polar bears has remained unchanged; and that in the regions where Arctic has cooled the population of polar bears has declined?

89: Since the graphic is indeed from the World Wide Fund document, and since it plainly shows what I said it shows, in what scientifically-credible sense could it be said that my displaying that slide was in any way a **“totally false”** (21) **“misrepresentation”** (19)?

90: Why are you not aware that, since hunting is the chief threat to polar bears, Norris and Rosenstrator’s (non-peer-reviewed) conclusion that **“human-induced climate change is the number one threat to the survival of the world’s largest terrestrial carnivores”** (18) has long been known to be nonsense?

91: Did you bother to enquire what proportion of the total polar-bear population is represented by the Western Hudson’s Bay population that was the subject of the comments you have reproduced from Norris and Rosenstrator?

92: Are you aware that, according to the IUCN Polar-Bear Specialist Group (see graph above, zone marked “WH”), the Western Hudson’s Bay population of polar bears that was the subject of the comments from Norris and Rosenstrator that you reproduced account for just 4% of the total circumpolar population?



93: Are you aware of the paper by Derocher (2004) which, while making speculations similar to those of Norris and Rosenstrator about the future of polar bears if “global warming” resumes, suggests – just as the map from Norris and Rosenstrator that I reproduced suggests – that the polar bears’ habitat in some areas will actually improve under “global warming”?

94: Are you aware of the 2006 status report by the Polar-Bear Specialist Group that discusses the over-hunting of polar bears in the Baffin Bay region, and attributes to that over-hunting the decline in population that has occurred there, providing further *evidence* – as opposed to the largely-unevidenced speculations and expressions in the papers you have selected for citation – that it is indeed hunting that is the chief threat to the polar bear?

95: Are you aware that Greenland has recently introduced a quota system for the hunting of polar bears, but that the combined Nunavut and Greenland quotas still exceed the estimated sustainable kill by a wide margin, providing further confirmation that it is hunting, and not “global warming”, that is the true threat to polar bears, and that climate change is not responsible for reduction in most of those regional populations that are in decline?

96: Are you aware of the considerable literature (see, for instance, Derocher and Taylor 1994; Ferguson *et al.*, 1997, 1998, 1999, 2000a, 2000b, 2001; Lee and Taylor 1995; Messier *et al.* 1994; Plante *et al.* 2001; Taylor 1994; Taylor and Lee 1995; Taylor *et al.* 1987a, 1987b, 2001, 2002, 2005, 2006) suggesting that the influences on polar-bear populations are far more complex than the naive assertion by Norris and Rosenstrator to the effect that the chief threat to the bears’ survival is “global warming”?

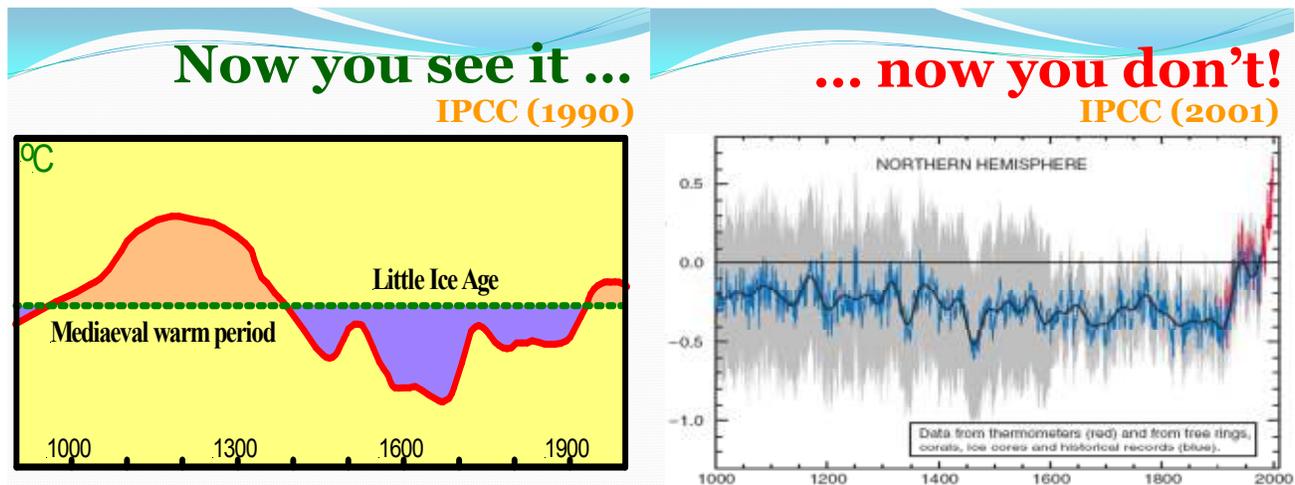
97: Are you aware that polar bears, more than any other species, are adapted to buffer the effects of seasonal disruptions in feeding patterns owing to warming or cooling; that polar bears do not feed at constant rates all year long; that most of their annual energy intake appears to occur as hyperphagia in the late spring and early summer on juvenile ringed seals; that they are well adapted to this feast-and-famine feeding regimen (Lunn and Stirling 1985; Watts and Hansen 1987; Ramsay and Stirling 1988; Derocher and Stirling 1990; Derocher *et al.* 1990); that they are able to alter their metabolism during periods of food deprivation at any time of the year (Nelson *et al.* 1983); and that, unlike other bears, they can shift as needed into a hibernation-like metabolic pattern when confronted by a period of food shortage (Atkinson and Ramsay, 1995; Derocher *et al.*, 1990)?

98: Are you aware that polar-bear densities have historically been low in areas dominated by heavy, multi-year ice, such as Viscount Melville Sound (Taylor *et al.*, 2002), Norwegian Bay, and the Arctic Basin?

99: Are you aware of the reports that the intense cold in recent Arctic winters has caused starvation in some polar bear populations, because the intensity and duration of the cold have been so exceptionally severe?

100: Here and elsewhere in your talk, do you really think it is fair, reasonable or academically acceptable or scientifically credible merely to find three or four papers in which the authors (usually without supplying any evidence) make assertions or predictions that you find congenial, while you fail to do me or your audience the courtesy of admitting that the literature is far more diverse than your presentation of the issues discloses?

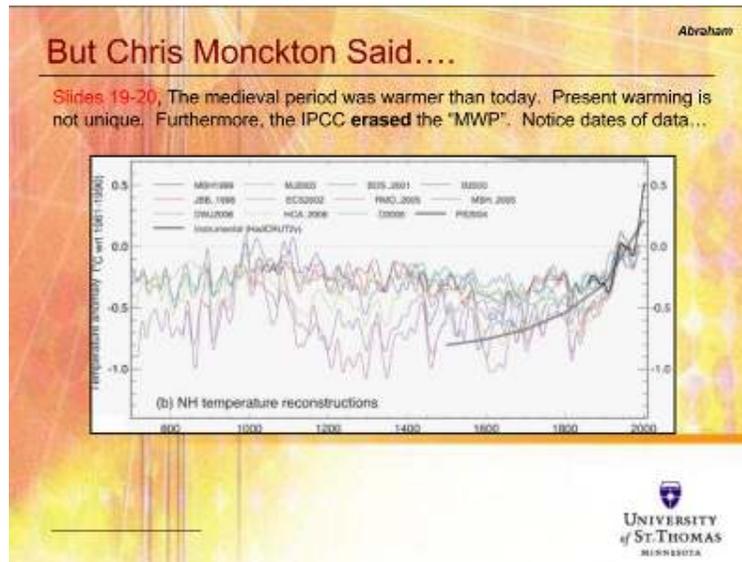
Were the Middle Ages warmer than today?



101. Please confirm that in the following passage I have accurately encapsulated your criticism of my slides (above) showing the IPCC's acknowledgement of the existence of the medieval warm period in its 1990 report, and its purported abolition of the medieval warm period in its 2001 report:

“The next couple slides deal with the medieval warm period. The medieval warm period is a period around 1200 AD where the weather was, we believe, warmer than it usually is: it was followed by what was called the Little Ice Age, which peaked in about 1600-1700, where the weather was colder, and what you see here – this is Chris Monckton's slide – he says, ‘Now you see it ... ,’ and he's going to follow it up with ‘Now you don't.’ In the 1990 report the IPCC had this graph, and this graph showed the medieval warm period – pretty darned warm. Warmer than it is today. But then in 2001 the IPCC had this paper (right-hand slide), this is the famous “hockey-stick” graph attributed often to Michael Mann. So he says, ‘You know what, they got rid of that medieval warm period. Now you see it, now you don't.’

“Well, first of all, the way to read this graph is, the grey represents is uncertainty, and the black line is a running mean, and on the right-hand side you see red, those are instrumental temperatures, those are temperatures made from real thermometer measurements. The blue are what are called proxies, those are temperatures largely from tree-cores. So, you know, this is a good question, is the IPCC fooling us? Did they erase the medieval warm period? So let's actually look at the data.



“This graph shows a number of independent observations of climate going from around 700 AD to modern times. And what you see here is a bunch of curves. And there’s a lot of scatter. And the differences between the curves represent some of the uncertainty. We also see that there is a medieval warm period, and that medieval warm period appears in almost all of these what are called “reconstructions”. You also see that at the right-hand side, which is modern time, the temperature is rising dramatically. Now, the issue is this: if the medieval warm period is warmer than it is today, then do we really have to be concerned? The second issue is, did the IPCC hide the data? Well, first of all, look at the dates on these publications: every one of them appeared after 1990. That means that these studies were not done by the 1990 report. The graph can’t make up data in 1990 that doesn’t exist. The graph from the 1990 report was an estimate, the graph from the 2001 report had some of this data in. You simply can’t make up data in 1990 that didn’t exist, so it was an estimated graph.” (22-24).

102: Since you are a stickler for references, and since you describe the IPCC’s 2001 “hockey-stick graph”, with a long, straight shank and no medieval warm period, followed by the “blade” of 20th-century warming, as **“often attributed to Michael Mann”**, why did you fail to check the reference in the IPCC’s 2001 report, where you will find that the graph was indeed from a paper by Mann, Bradley and Hughes, originally published in *Nature* in 1998 and revised in 1999, with a corrigendum in 2005?

103: Since you are a stickler for references, why is the graph in your slide 24, reproduced above, not referenced, and where does it come from, and who compiled it, and was the source a peer-reviewed paper or a non-peer-reviewed propaganda document from, say, the World Wide Fund or the IPCC?

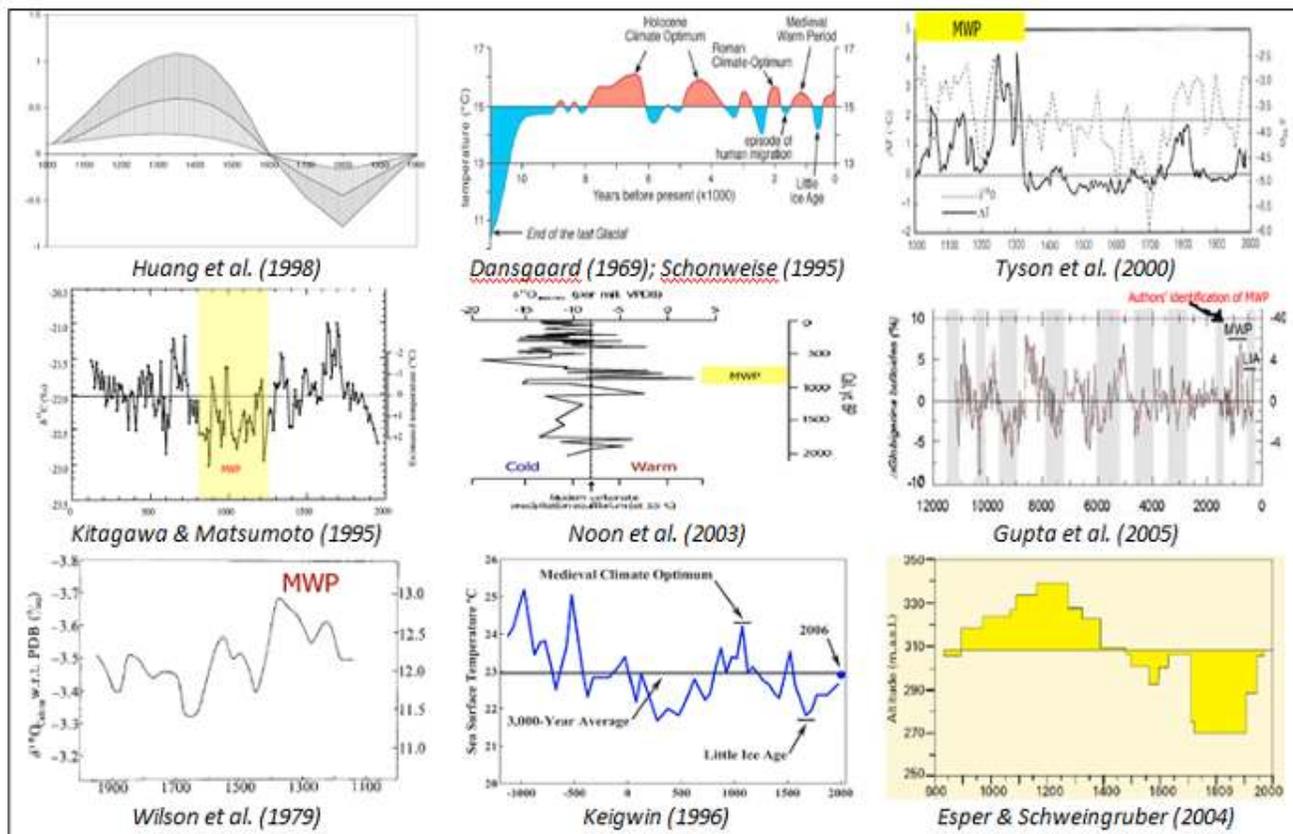
104: Since you say that your graph shows that there was a medieval warm period, albeit not as warm as today, why do you not point out that your graph (wherever it was from) is inconsistent with that of the IPCC in 2001, which plainly shows no medieval warm period?

105: You say that in **“modern time, the temperature is rising dramatically”** (24), so why does your graph somehow fail show the eight-times-more-dramatic increase of 2.2 C° (4 F°) that was measured by thermometers from 1695-1735 in central England, regarded as a reasonable proxy for global temperatures?

106: Would it not have been fairer if you had admitted that in the 20th century global temperature rose by just 0.7 C° (1.3 F°) globally, whereas your graph, based on the northern hemisphere only, shows the warming as having been some 50% above the measured global value, and would you not agree that that important observation makes the 20th-century warming considerably less **“dramatic”** (24) than your slide shows?

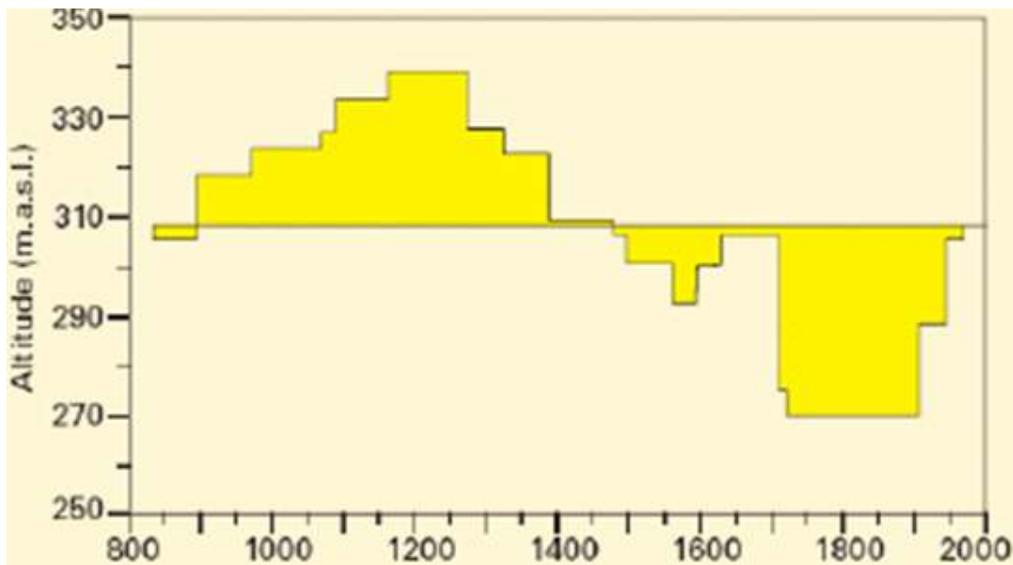
107: Though you say that the graph showing the medieval warm period in the IPCC’s 1990 report was an estimate because data were not available at the time, would it not have been fairer if you had admitted that a considerable quantity of paleoclimate data had been published before 1990, such as Yoshino (1978); Hassan (1981), Alexandre (1987); and Lamb (1988), all of whom provided data indicating that the medieval warm period was warmer than the present?

108: Would it not have been fairer if you had mentioned, at least in passing, some of the substantial body of historical and archaeological data available before 1990, demonstrating the existence of the medieval warm period, such as the fact that the burial-ground of the Vikings at their major settlement at Hvalsey, south-western Greenland, is under permafrost today; that the papal legate to Greenland at the end of the medieval warm period wrote to the Pope to say that he could not reach his territory because “the ice is come in from the north”; that a medieval stained-glass window at Amiens Cathedral in Northern France shows wine-grapes being grown in the region, a feat that is impossible today because it is too cold; the growing of grapes at Hadrian’s wall, also impossible today; etc., etc.?



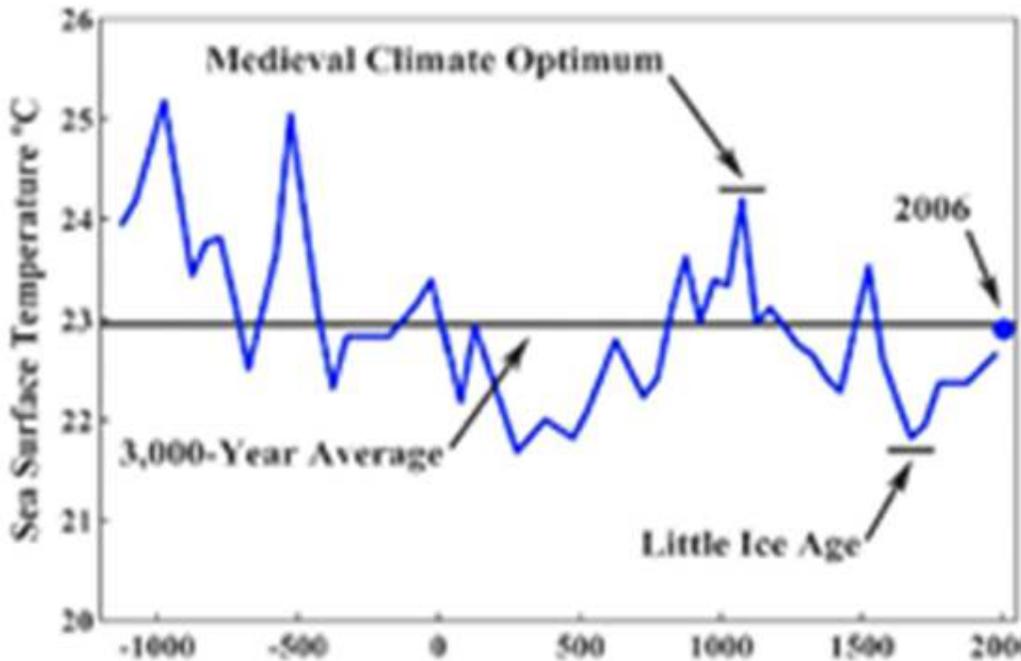
109: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above) showing graphs from a selection of nine papers each showing – in plainly-visible form – proxy evidence that the medieval warm period was warmer than the present:

“And Chris Monckton tries to make his point a little stronger by saying 700 scientists say the medieval warm period was real. And again, if 700 scientists say the medieval period was warmer than it is today, then why are we concerned? If it was warmer than it is today, then maybe we’re just in a natural warming period. Well, let’s treat this as a scientist does and let’s read some of these papers and let’s ask the authors. So, look at the Huang at the upper left, you see Noon in the middle, Kiegin in the bottom middle, and Schweingruber at the lower right. (25-31)



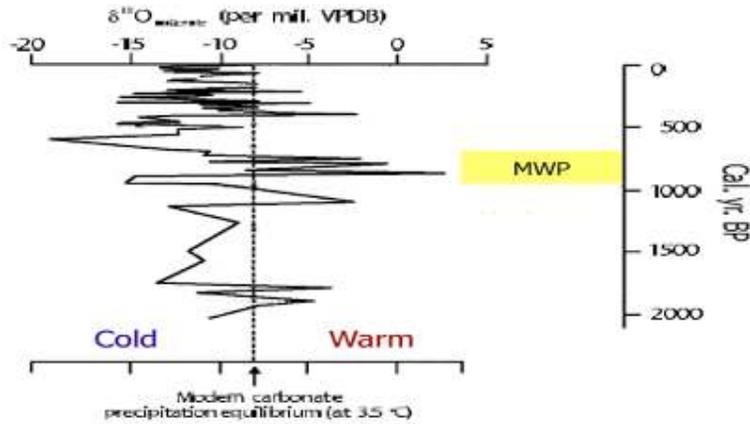
Treeline altitudes from the Polar Urals, 800-2000 AD (Esper & Schweingruber, 2004)

“I contacted Schweingruber to ask whether Chris had correctly interpreted his findings. He’s retired, and he said, ‘You know what, talk to David Frank, a colleague of mine, he’s up to date on this stuff.’ I wrote to David Frank. In his email he said – and let’s just be careful and read this – ‘Data indicate that temperatures now are indeed much warmer than during medieval times. Evidence for anthropogenic causes of this modern warm comes from the fact that climate models can only reproduce modern warmth by including anthropogenic forcings.’ So David Frank is saying, ‘Yeah, it’s warmer now, and it’s due to manmade impacts.’ And you can’t get any clearer than that.



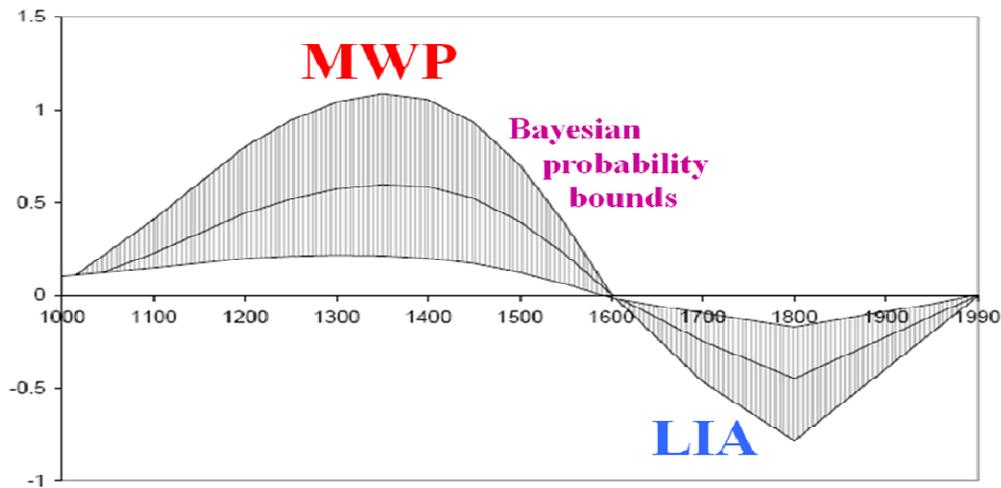
Sargasso sea-surface temperature, 1000 BC to 2000 AD: Keigwin, 1996

“Next, I wrote to Lloyd Kiegin, who’s another of those so-called 700 scientists, and here’s what he said to me. ‘You are absolutely right: and if someone was willing to send me down to St. Thomas I would be delighted to explain in person. ... I read up on C. Monckton, thanks for the heads-up: another one who has money and no background in science. I’ve not heard about him before, but I have to agree with him that our best hope is to go nuclear and reforest as much as we can, about the size of Australia.’”



The medieval warm period in Antarctic lake sediments (Noon et al., 2003)

“Chris next had a paper by Noon: ‘Oxygen-isotope ($\delta^{18}\text{O}$) evidence of Holocene hydrological changes at Signy Island, maritime Antarctica.’ It was in the middle of the slide, and one of the other authors was Viv Jones: What’s interesting is that if you go to Viv Jones’ website ... the first sentence on her web-page is: ‘The Arctic region is currently undergoing rapid climate warming.’ Doesn’t sound like someone who’s not concerned about climate change.



Bayesian temperature probabilities from borehole temperature reconstructions (Huang et al., 2004)

“What about Huang? Here’s a recent paper by Huang (2008): “These reconstructions show the warming from the last glacial maximum, the occurrence of a mid-Holocene warm episode, a Medieval Warm Period a Little Ice Age, and the rapid warming of the 20th century. The reconstructions show the temperatures of the mid-Holocene warm period some 1-2 K above the reference level, the maximum of the medieval warm period at or slightly below the reference level, the minimum of the Little Ice Age at or slightly below the reference level, and the end-of-20th-century temperatures about 0.5 C° above the reference level ... consistent with the amplitudes estimated from other climate proxies as summarized by the IPCC.”

110: Is it not visibly the case that each of the nine separate graphs included on the slide about which you have commented visibly and clearly shows that the medieval warm period was real, and was warmer than the present?

111: Though you say you are going to “**treat this as a scientist does and let’s read some of these papers and let’s ask the authors**” (25), is it the case that you have only “investigated” four of the nine graphs on my slide?

112: Am I right that with the first of these four papers, Esper & Schweingruber, you did not in fact have a substantive conversation with either of the authors, but only with a friend of one of them, and that you did not actually cite Esper & Schweingruber's paper (of 2002, not 2004: I apologize), still less rebut the conclusion in their graph that in the medieval warm period treelines in the polar Urals were considerably higher than they are today, suggesting that the weather was considerably warmer and wetter than today?

113: Are you aware of the Aristotelian logical fallacy of presumption known as the *argumentum ad ignorantiam*, the fallacy of the appeal to ignorance?

114: Is it because you found Dr. Schweingruber's friend's statement congenial to your belief system about "global warming" that you overlooked the fact that his statement to the effect that **"Evidence for anthropogenic causes of this modern warm[ing] comes from the fact that climate models can only reproduce modern warmth by including anthropogenic forcings"** (28) is an instance of the fallacy of the appeal to ignorance?

115: Can you not understand that the fact that climate models "can only reproduce modern warmth by including anthropogenic forcings" does not necessarily imply that anthropogenic forcings are the sole or principal cause of the warming that ceased in the mid-1990s?

116: Did Dr. Schweingruber's friend tell what "data" he was relying on when he stated that **"temperatures now are indeed much warmer than in medieval times"** (28)?

117: What steps, if any, did you take to verify that the "data" referred to by Dr. Schweingruber's friend, and the friend's conclusion from the data, were peer-reviewed, rather than merely the opinion of a person unconnected by authorship with the paper by Dr. Schweingruber from which I had displayed a graph?

118: Is it not transparently the case that the graph that I displayed from Dr. Keigwin's paper plainly indicates that the medieval warm period was warmer than the present?

119: Am I right that Dr. Keigwin's paper of 1996, from which I showed a graph, states that "Results from a radiocarbon-dated box core show that sea-surface temperature [in the northern Sargasso Sea] was ~1°C cooler than today ~400 years ago (the Little Ice Age) and 1700 years ago, and ~1°C warmer than today 1000 years ago (the Medieval Warm Period): thus, at least some of the warming since the Little Ice Age appears to be part of a natural oscillation"?

120: Would you not accept that Dr. Keigwin's conclusion was that in the Sargasso Sea the medieval warm period was indeed warmer than the present, and that accordingly at least some of the warming of our own time appears to be of natural origin?

121: Did you, in fact, at any point in your presentation, even mention – still less refute – the conclusion of Dr. Keigwin's paper which is cited above and demonstrated in the graph from his paper that I displayed, and did Dr. Keigwin himself provide any peer-reviewed data or references casting doubt upon his finding as illustrated in the graph I used and stated explicitly in his own paper?

122: Though you say you are keen on providing references, you did not show during your talk the email you sent to Dr. Keigwin, so we are left entirely in the dark about what it was he replied that you were **"absolutely right"** (29) about. Can you help us here?

123: Are you familiar with the Aristotelian fallacy of logic known as the *argumentum ad hominem*, the fallacy of attacking the person as a way of avoiding having to deal with the substance of his argument?

124: What information did you supply to Dr. Keigwin that led him to believe a) that I had **"no background in science"** (29)?

125: Do you not understand that personal attacks of this kind are instances of the *argumentum ad hominem*, and are not fit to be deployed in academic or scientific discussion, and that if you wish to be regarded seriously as **“a scientist”** (2-3) then you must learn to be adult enough not to use such personal attacks in future?

126: Since I gave advice on a wide range of scientific and technical matters to the British Prime Minister for four years, and ran a successful technical consultancy in the field of public administration for two decades, and have twice very profitably exploited a previously-unsuspected wrinkle in the laws of probabilistic combinatorics, and I have published what is on any view a heavily mathematical paper on the determination of climate sensitivity in a reviewed journal, on what rational basis did you consider it appropriate publicly to disseminate – without any qualification or verification – Dr. Keigwin’s unscientific guess that I had **“no background in science”**? Is this an instance of the care you take, as **“a scientist”**, to verify your facts?

127: Please explain how Dr. Keigwin’s views on how much money or scientific background I have illuminate in any scientific degree the question whether or not the medieval warm period was real, was global, and was warmer than the present.

128: Is it not correct that the graph I displayed from Dr. Noon’s paper once again demonstrates rather clearly, and in visual form, the fact that the medieval warm period was warmer than the present?

129: As **“a scientist”** (2-3), are you aware of the difference between the Arctic and Antarctica? *Hint:* they are the two opposite poles of the Earth, the former an ice-capped ocean, the latter an ice-capped continent.

130: Am I right that Dr. Noon’s paper, from which I displayed a graph, concerned itself with Signy Island, which, the last time I looked, was in Antarctica, and yet is it correct that the only basis on which you seek to question my use of Dr. Noon’s graph is that you visited the website of one of Dr. Noon’s co-authors and found a statement that **“the Arctic region is currently undergoing rapid climate warming”** (31)?

131: Would you like to provide any rational scientific justification for the notion that the fact that that the *Arctic* is warming today has any bearing on whether the weather in the *Antarctic* was warmer than the present a millennium ago?

132: Are you aware that the Arctic is in some places – and perhaps overall – some 1-2 C° cooler than it was in the 1930s and early 1940s?

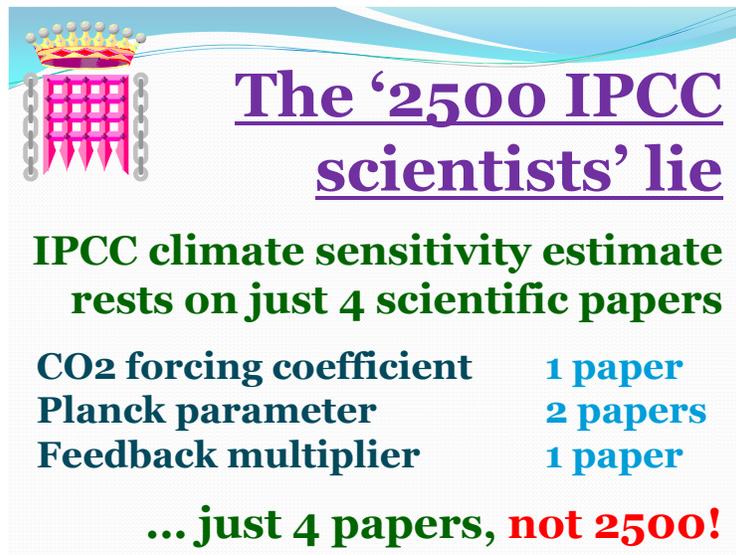
133: Are you aware that the *Antarctic* has been cooling throughout the past 30 years?

134: When citing Dr. Jones’ comment about the warming of the Arctic region, you added the curious comment that **“that doesn’t sound like someone who’s not concerned about climate”** (31); but had I, in my talk, said anything to the effect that any of the scientists who had authored papers providing proxy data establishing the extent and magnitude of the medieval warm period were “not concerned about climate”?

135: Does the graph from Huang *et al.* (1997 not 1998: I apologize) show Bayesian probabilities that the medieval warm period was warmer than the present? And does the paper by Huang and his then co-authors draw the same conclusion?

136: Though it is interesting that Huang now thinks the medieval warm period was a little cooler than the present, is it not right that in a part of his 2008 paper somehow replaced by dots (inadvertently, I am sure) in the extract you typed up on your slide mentions his view that the Holocene Climate Optimum was 1.5-2 C° warmer than the present, confirming what his 1997 paper showed: that today’s temperatures are by no means exceptional?

Climate sensitivity: how many scientists did the IPCC rely on?



The '2500 IPCC scientists' lie

IPCC climate sensitivity estimate rests on just 4 scientific papers

CO₂ forcing coefficient	1 paper
Planck parameter	2 papers
Feedback multiplier	1 paper

... just 4 papers, not 2500!

137: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above) drawing attention to the fact that only four papers in the peer-reviewed literature provide the basis for the IPCC's chosen values for the three key parameters whose product is climate sensitivity, the central variable whose value requires to be determined in the debate about the climate:

“Chris Monckton talks about the ‘2500 IPCC scientists lie’: he says really they just rely on 4 scientific papers, and he says it’s 4 papers, not 2500. Well, it doesn’t take a rocket scientist to know that at the top of the slide Chris Monckton is talking about 2500 scientists, and at the bottom he’s talking about papers, and he says 4 papers, not 2500 papers. He confuses scientists with papers. So I’m going to take the interpretation that he is really referring to papers here, because I think that the title must just be wrong, but I don’t think if I asked Chris Monckton he’d be able to straighten this out.

“What he says, and, just to remind people, first of all he confuses scientists with references. He also says in the video that the number of authors was 50 and that more reviewers rejected it than wrote it. Now that would be incredible: we really wanna investigate that. ... His assertion is incredible and that would be cause for concern, if it were true. But let’s investigate. The number of references in a single chapter – I counted them – in Chapter 1, WG1 – there were 275 references in one chapter, and there are a total of 43 chapters in the entire report. So to say that there were four references is just not true.” (33-34)

138: Were you telling the truth when you asserted that I had said there were only four scientific papers cited in the IPCC's 2007 Climate Assessment Report? If you were not telling the truth, why did you lie?

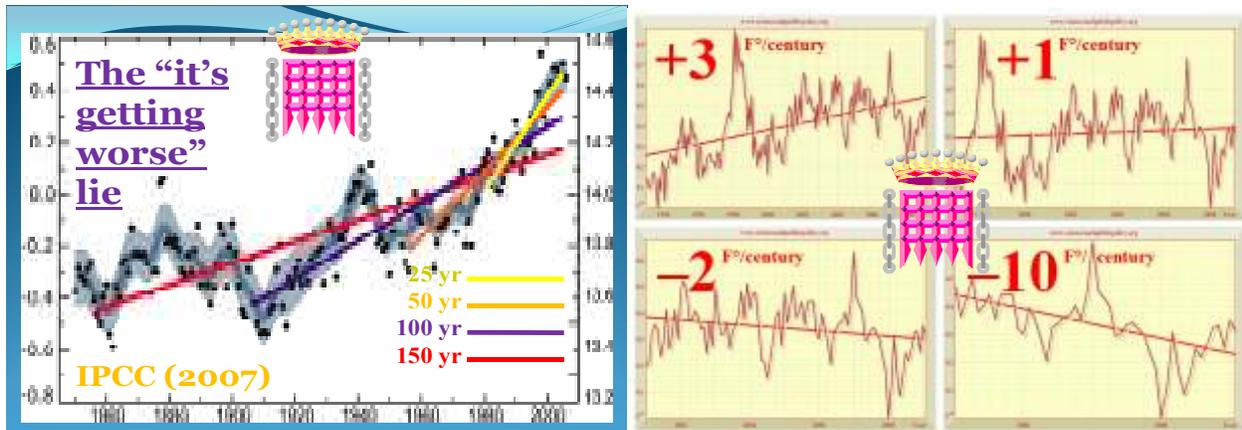
139: Is it not true that in this portion of my talk I explained, as the slide itself makes plain, that I was talking not about *all* scientific references but all those references that provided the IPCC's estimates of the values of the three key parameters which, when multiplied together, yield the IPCC's estimate of how much warming a given increase in CO₂ concentration will cause?

140: In short, was it not obvious to you from my talk and from my slide, which plainly says, “IPCC climate sensitivity estimate rests on just 4 papers”, and not “IPCC cites only 4 papers in its entire report”, that I was concentrating exclusively on one central mathematical issue, and that I was making the point that on this central question only four papers, and, *as I said*, a dozen or so of the 2500 scientists the IPCC says were involved in its report, were directly involved?

141: Do you not realize how scientifically disreputable it is that, here and elsewhere, you have deliberately and wilfully divorced my remarks from the context within which they were delivered and have then placed the worst conceivable interpretation upon them (and, in the present instance, a self-evidently stupid interpretation)?

142: You say, **“I don’t think if I asked Chris Monckton he’d be able to straighten this out”** (33). Don’t you agree that I had in fact **“straightened this out”** explicitly in my talk? In any event, don’t you think it would have been wiser for you to have extended me the usual courtesy of getting in touch with me and doing something of which you have done very little in your talk – *checking*?

Is “global warming” accelerating?



143: Please confirm that in the following passage I have accurately encapsulated your criticism of my slides (above) demonstrating that the application of multiple and arbitrarily-chosen trend-lines to a single stochastic dataset and the drawing of conclusions as to the trend in the data from the relative slopes of the different trend-lines, as the IPCC has done in the left-hand slide, is a grave abuse of statistical technique:

“So this slide [the right-hand slide above] is an interesting collection of data that Chris Monckton presents and you can see the source at the top of each of the graphs, it’s the Science and Public Policy Institute. That’s an organization he works for. You don’t really know if he provided the data or if the data was obtained from someone else. If the citation was given as the Science and Public Policy Institute they should probably be the ones who originated the data but we never know – I mean, we’ve seen how shady the presentation of information has been so far and I think we just can’t work under any assumptions that we would use for a regular scientist.

“But that being said, what Chris Monckton is trying to show is that if you use different timescales you can come up with different temperature trends. ... and that’s something that’s quite well known in the scientific community, and that’s why you don’t look at short-term temperature trends: you look at long-term what are called “running averages” or “smoothed averages”. And in fact when you look at long-term averages the temperatures have been going up, and they have been going up consistently since 1880. So Chris Monckton’s using a bit of sleight-of-hand here.

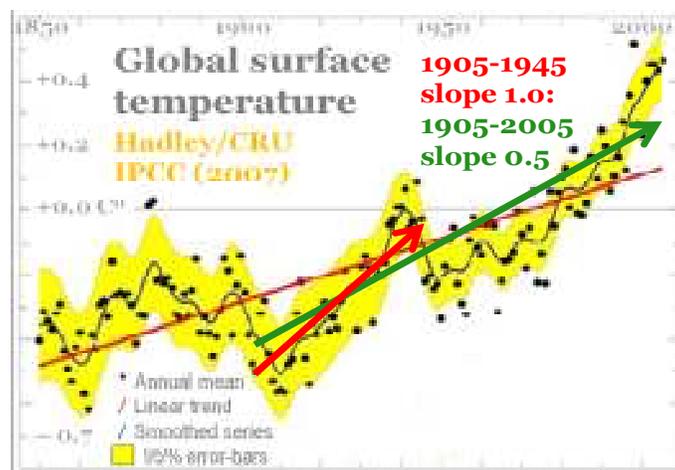
“And what’s also interesting is, he may or may not know that 2009, according to NASA, is the second-hottest year on record, and the 13 months which we’ve just completed – and I’m giving this talk in early summer 2010 – is the hottest 13-month period on record. So I’m waiting to see when Chris Monckton is going to add this new data to his curves – it’s going to shift everything in a positive direction. So we’ll go on and look at what Chris Monckton says next.”

144: Why have you yet again taken my right-hand slide above out of context, by failing to relate it, as I did in my talk, to the left-hand slide?

145: Why did you fail to admit that my intention was to demonstrate that the application of multiple and arbitrarily-chosen trend-lines to a single stochastic dataset and the drawing of conclusions as to the trend in the data from the relative slopes of the different trend-lines, as the IPCC has done in the left-hand slide, is a grave abuse of statistical technique?

146: Why did you not tell your audience that I had displayed the right-hand slide as another instance of the same technique that had been used by the IPCC in the left-hand slide, but with the precisely opposite result, demonstrating that since the technique and the data were the same in both cases but the choice of endpoints for the multiple trend-lines on the same data was different, the technique was defective. Do you have sufficient knowledge of elementary statistics to understand what a stochastic curve is, and why it is inappropriate to apply multiple arbitrarily-chosen trend-lines to such a curve, and then to draw conclusions about the direction in which the data are trending based on the ratios between the slopes of the arbitrarily-chosen trend-lines?

147: Are you trying to maintain that my choice of trend-lines in the right-hand graph above had been applied over too short a period to demonstrate the falsity of the IPCC's technique, and, if so, would you care to comment on the graph below, which shows (and, again, this is the same bogus statistical technique that the IPCC used in its headline graph in the left-hand slide above) that the rise in global mean surface temperature in the 40 years 1905-1945 was twice as rapid as the rise in temperatures in the 100 years 1905-2005?



148: Though you say that **“temperatures have been going up consistently since 1880”** (35), is it not evident to you that the graph actually begins in 1850, and that in the 30 years 1880-1910 global temperatures actually fell consistently?

149: Is it not also evident to you that the rate of warming over the global instrumental temperature record, in the 160 years 1850-2010, was at the not particularly dizzying rate of 0.4 C°/century?

150: Given that before the Industrial Revolution even began the temperature increase in the 40 years 1695-1735 was at a rate of 6.5 C°/century according to the Central England Temperature Record, what is so special about 160 years of warming at 0.4 C°/century?

151: Now that you have been made to think a little about what you have said, is it not you and not I who have indulged in what you have here called **“shady ... presentation of information”** (35) and **“sleight-of-hand”** (35)?

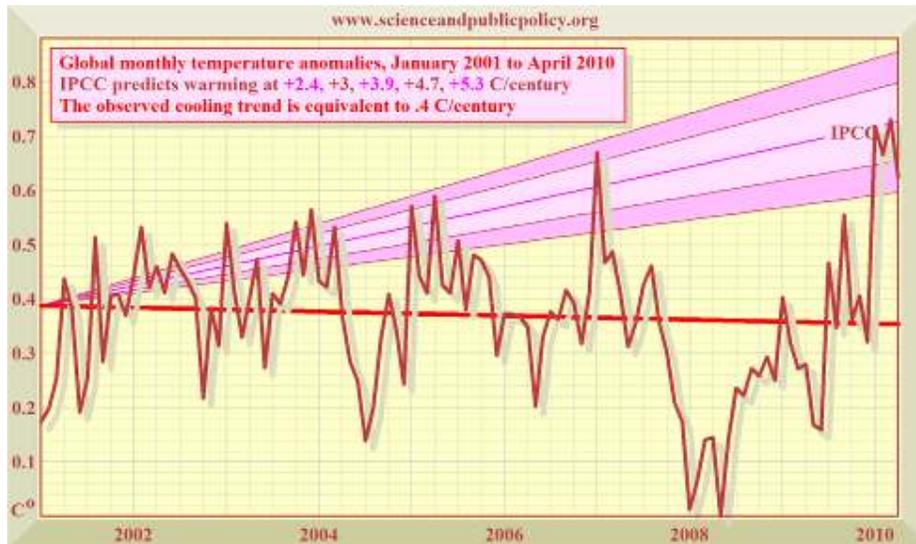
152: Since you have said, **“... if you use different timescales you can come up with different temperature trends. ... and that's something that's quite well known in the scientific community, and**

that's why you don't look at short-term temperature trends: you look at long-term what are called "running averages" or "smoothed averages" (35), would you care to explain why, just a few sentences later, you yourself attempt to draw a conclusion from a temperature trend of just 13 months?

153: Do you understand that 13 months is a very much shorter period than the 4-17 or 40-100 years I have used in my graphs?

154: Since you are aware of the website of the Science and Public Policy Institute, and you could therefore have checked that in fact we update our global temperature index regularly, why were you snide enough to say, "I'm waiting to see when Chris Monckton is going to add this new data to his curves" (35)?

Nine full years' global cooling trend at 0.7 F° (0.4 C°) / century



155: If you go and check the *Monthly CO2 Reports* at www.scienceandpublicpolicy.org, is there a *Monthly Report* for April 2010, the month *before* you issued your talk, and does the above graph from that *Monthly Report* rather plainly and fairly show the recent spike in global mean surface temperature?

156: Should you not have told your audience that the recent temperature spike is attributable to a transient oceanic phenomenon, the El Niño Southern Oscillation, that occurs every three or four years?

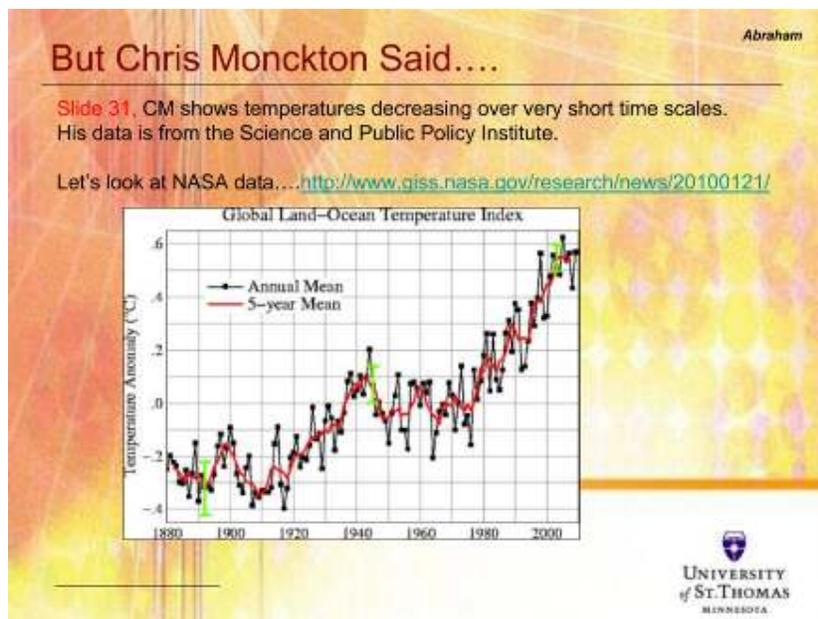
157: Though you say that inclusion in my graph of the temperature changes that have occurred in the eight months since I gave my talk would "shift everything in a positive direction" (35), do you notice that the line indicating the least-squares linear-regression trend on the monthly global temperature anomalies in the almost nine and a half years since the turn of the millennium on 1 January 2001 continues to be downward, indicating that temperatures continue to be on a declining trend?

158: Is not nine and a half years a period almost nine times longer than the 13-month period over which you invite us to draw a conclusion about long-term temperature trends?

159: Since you say, "If the citation was given as the Science and Public Policy Institute they should probably be the ones who originated the data but we never know" (35), why did you contact the Science and Public Policy Institute, whose co-ordinates we can prove you knew, simply to ask?

160: Given that, on behalf of the Science and Public Policy Institute, I compile the graphs in question every month, currently computing them as the arithmetic average of the two satellite-temperature global-temperature datasets (Remote Sensing Systems and University of Alabama at Huntsville, in case as a non-climate scientist you do not know which they are), perhaps you will agree that we have appropriately labeled the graph as ours?

The alleged contrast between my temperature data and that of NASA



161: Please confirm that in the following passage I have accurately encapsulated your criticism of me, based on your slide (above), for having allegedly shown “temperatures decreasing over very short timescales”:

“Chris Monckton showed temperature variations over a very short timescale from the Science and Public Policy Institute, an organisation which he is a member of. Well, let’s compare his data – and again we don’t know the source, he didn’t provide it to us – but let’s compare it with people who are working in the industry. Here is NASA’s temperature data ... and this temperature data goes up through 2009. And what you see here is a red curve, which shows what’s called the five-year running mean or running average, and the black squares are year-to-year temperature variations. And, yeah, you see that on a year-to-year basis the temperatures may go up or down but the trend is consistently upwards, and that trend started in 1880. So what we wanna do is we wanna look at reputable data and we wanna look at data that takes a long-time view of temperature information.”

162: Do you now accept that, contrary to your suggestion here, I did indeed provide the source for the temperature graphs I used: namely, the Science and Public Policy Institute?

163: What significant differences (if any) are there between the 160-year Hadley/CRU global temperature dataset that I referred to at least twice in my talk and the NASA/GISS dataset that you display on your slide?

164: What reasons (if any) do you have for regarding the NASA/GISS data as **“reputable”** (37) and the Hadley/CRU data I used as, by implication, not reputable?

165: Do you now accept that the Hadley/CRU data compilers are **“people working in the industry”** (37), and that their dataset is the longest global temperature dataset in the business, dating back 160 years?

166: On what credible scientific basis would you care to assert that your decision to draw an extreme conclusion from just 13 months of global temperature data was a **“look at data that takes a long-term view of temperature information”** (37)?

Dr. Rajendra Pachauri

167: Please confirm that in the following passage I have accurately encapsulated your criticism of my statement that Dr. Rajendra Pachauri, chairman of the IPCC's climate-science panel, is a railroad engineer:

“Chris Monckton disparages then the IPCC head, saying, ‘Hey, he doesn’t have any environmental experience’. Let’s just look at the experience of the IPCC head, Pachauri. I counted on a February 2 Citation using the SCOPUS scientific search engine that he had published at least 41 articles in these journals: Nature, Science, Sustainability Science, Atmospheric Science Letters, Public Policy Research, Energy and the Environment, Global Climate Change, Environmental Science and Pollution Research, Pacific and Asian Journal of Energy, Indian Journal of Agricultural Economics, Energy Policy, National Resources Forum, Energy, Energy Policy, etc. These journals sound like Pachauri has some experience in science and climate change. And, remember, Chris Monckton’s never published a paper in anything.”

168: Please point out the exact place in my talk where I said of Dr. Pachauri, **‘Hey, he doesn’t have any environmental experience.’** Those do not sound like my words, and I do not recall ever saying that Dr. Pachauri had no **“environmental”** experience.

169: Is it not correct that what I actually said was that Dr. Pachauri’s qualification is as a railroad engineer?

170: Do you deny that Dr. Pachauri’s qualification is as a railroad engineer? Are you trying to say that I got my facts wrong?

171: Please explain what rational scientific basis there could be for appointing a railroad engineer to be the chairman of the IPCC’s climate-science working group.

172: Why do you consider railroad engineering to be an ideal qualification for the chairman of a climate-science working group? Would not a qualification in climate science be a better idea?

173: Why did you not check with me before you decided to say that **“Remember, Chris Monckton’s never published a paper in anything”** (37)? Is it not a fact that, to take one example, in July 2008 I published a paper entitled *Climate Sensitivity Reconsidered* in *Physics and Society*, a learned newsletter of the American Physical Society that publishes reviewed articles on scientific matters of interest to physicists? Does not that paper show a rather more detailed knowledge of climatology than anything written by Dr. Pachauri?

174: Since you mention that Dr. Pachauri has written in *Science*, I checked. Am I right in concluding that, for instance, in 2007 he wrote a non-peer-reviewed editorial comment not about climate science but about “the challenge of widespread worldwide poverty”? Does not this raise the question, which perhaps you may care to answer, whether *any* of the references you incompletely and inadequately cite for Dr. Pachauri are references to peer-reviewed papers on climate science – he is, after all, the chairman of the climate science panel, not the mitigation or adaptation panels – rather than climate politics or economics?

175: Below, I reproduce a report that I published after hearing a “climate science” lecture by Dr. Pachauri at the University of Copenhagen. Assuming that the report is in substance accurate, do you consider that Dr. Pachauri here demonstrates either competence or experience in climate science?

In the Grand Ceremonial Hall of the University of Copenhagen, a splendid Nordic classical space overlooking the Church of our Lady in the heart of the old city, rows of repellent, blue plastic chairs surrounded the podium from which no less a personage than Dr. Rajendra Pachauri, chairman of the IPCC’s science working group, was to speak.

I had arrived in good time to take my seat among the dignitaries in the front row. Rapidly, the room filled with enthusiastic Greenies and enviro-zombs waiting to hear the latest from ye Holy Bookes of Ipecac, yea verily.

The official party shambled in and perched on the blue plastic chairs next to me. Pachauri was just a couple of seats away, so I gave him a letter from me and Senator Fielding of Australia, pointing out that the headline graph in the IPCC's 2007 report, purporting to show that the rate of warming over the past 150 years had itself accelerated, was fraudulent.

Would he use the bogus graph in his lecture? I had seen him do so when he received an honorary doctorate from the University of New South Wales. I watched and waited.

Sure enough, he used the bogus graph. I decided to wait until he had finished, and ask a question then.

Pachauri then produced the now wearisome list of lies, fibs, fabrications and exaggerations that comprise the entire case for alarm about "global warming". He delivered it in a tired, unenthusiastic voice, knowing that a growing majority of the world's peoples – particularly in those countries where comment is free – no longer believe a word the IPCC says.

They are right not to believe. Science is not a belief system. But here is what Pachauri invited the audience in Copenhagen to believe.

1. Pachauri asked us to believe that the IPCC's documents were "peer-reviewed". Then he revealed the truth by saying that it was the authors of the IPCC's climate assessments who decided whether the reviewers' comments were acceptable. That – whatever else it is – is not peer review.

2. Pachauri said that greenhouse gases had increased by 70% between 1970 and 2004. This figure was simply nonsense. I have seen this technique used time and again by climate liars. They insert an outrageous statement early in their presentations, see whether anyone reacts and, if no one reacts, they know they will get away with the rest of the lies. I did my best not to react. I wanted to hear, and write down, the rest of the lies.

3. Next came the bogus graph, which is featured three times, large and in full color, in the IPCC's 2007 climate assessment report. The graph is bogus not only because it relies on the made-up data from the Climate Research Unit at the University of East Anglia but also because it is overlain by four separate trend-lines, each with a start-date carefully selected to give the entirely false impression that the rate of warming over the past 150 years has itself been accelerating, especially between 1975 and 1998. The truth, however – neatly obscured by an ingenious rescaling of the graph and the superimposition of the four bogus trend lines on it – is that from 1860-1880 and again from 1910-1940 the warming rate was exactly the same as the warming rate from 1975-1998.

4. Pachauri said that there had been an "acceleration" in sea-level rise from 1993. He did not say, however, that in 1993 the method of measuring sea-level rise had switched from tide-gages to satellite altimetry against a reference geoid. The apparent increase in the rate of sea-level rise is purely an artefact of this change in the method of measurement.

5. Pachauri said that Arctic temperatures would rise twice as fast as global temperatures over the next 100 years. However, he failed to point out that the Arctic was actually 1-2 Celsius degrees *warmer* than the present in the 1930s and early 1940s. It has become substantially cooler than it was then.

6. Pachauri said the frequency of heavy rainfall had increased. The evidence for this proposition is largely anecdotal. Since there has been no statistically-significant "global warming" for 15

years, there is no reason to suppose that any increased rainfall in recent years is attributable to “global warming”.

7. Pachauri said that the proportion of tropical cyclones that are high-intensity storms has increased in the past three decades. However, he was very careful not to point out that the total number of intense tropical cyclones has actually fallen sharply throughout the period.

8. Pachauri said that the activity of intense Atlantic hurricanes had increased since 1970. This is simply not true, but it appears to be true if – as one very bad scientific paper in 2006 did – one takes the data back only as far as that year. Take the data over the whole century, as one should, and no trend whatsoever is evident. Here, Pachauri is again using the same statistical dodge he used with the UN’s bogus “warming-is-getting-worse” graph: he is choosing a short run of data and picking his start-date with care so as falsely to show a trend that, over a longer period, is not significant.

9. Pachauri said small islands like the Maldives were vulnerable to sea-level rise. Not if they’re made of coral, which is more than capable of outgrowing any sea-level rise. Besides, as Professor Mörner has established, sea level in the Maldives is no higher now than it was 1250 years ago, and has not risen for half a century.

10. Pachauri said that if the ice-sheets of Greenland or West Antarctica were to melt there would be “meters of sea-level rise”. Yes, but his own climate panel has said that that could not happen for thousands of years, and only then if global mean surface temperatures stayed at least 2 C (3.5 F) warmer than today’s.

11. Pachauri said that if temperatures rose 2 C (3.5 F) 20-30% of all species would become extinct. This, too, is simply nonsense. For most of the past 600 million years, global temperatures have been 7 C (13.5 F) warmer than today, and yet here we all are. One has only to look at the number of species living in the tropics and the number living at the Poles to work out that warmer weather will if anything increase the number and diversity of species on the planet. There is no scientific basis whatsoever for Pachauri’s assertion about mass extinctions. It is simply made up.

12. Pachauri said that “global warming” would mean “lower quantities of water”. Not so. It would mean larger quantities of water vapor in the atmosphere, hence more rain. This is long-settled science – but, then, Pachauri is a railroad engineer.

13. Pachauri said that by 2100 100 million people would be displaced by rising sea levels. Now, where did we hear that figure before? Ah, yes, from the ludicrous Al Gore and his sidekick Bob Corell. There is no truth in it at all. Pachauri said he was presenting the results of the IPCC’s fourth assessment report. It is quite plain: the *maximum* possible rate of sea-level rise is put at just 2 ft, with a best estimate of 1 ft 5 in. Sea level is actually rising at around 1 ft/century. That is all.

14. Pachauri said that he had seen for himself the damage done in Bangladesh by sea-level rise. Just one problem with that. There has been no sea-level rise in Bangladesh. At all. In fact, according to Professor Mörner, who visited it recently and was the only scientist on the trip to calibrate his GPS altimeter properly by taking readings at two elevations at least 10 meters apart, sea level in Bangladesh has actually fallen a little, which is why satellite images show 7000 sq. km more land area there than 30 years ago. Pachauri may well have seen some coastal erosion: but that was caused by the imprudent removal of nine-tenths of the mangroves in the Sunderban archipelago to make way for shrimp-farms.

15. Pachauri said we could not afford to delay reducing carbon emissions even by a year, or disaster would result. So here’s the math. There are 388 ppmv of CO₂ in the air today, rising at 2 ppmv/year over the past decade. So an extra year with no action at all would warm the world by just $4.7 \ln(390/388) = 0.024$ C, or less than a twentieth of a Fahrenheit degree. And only that

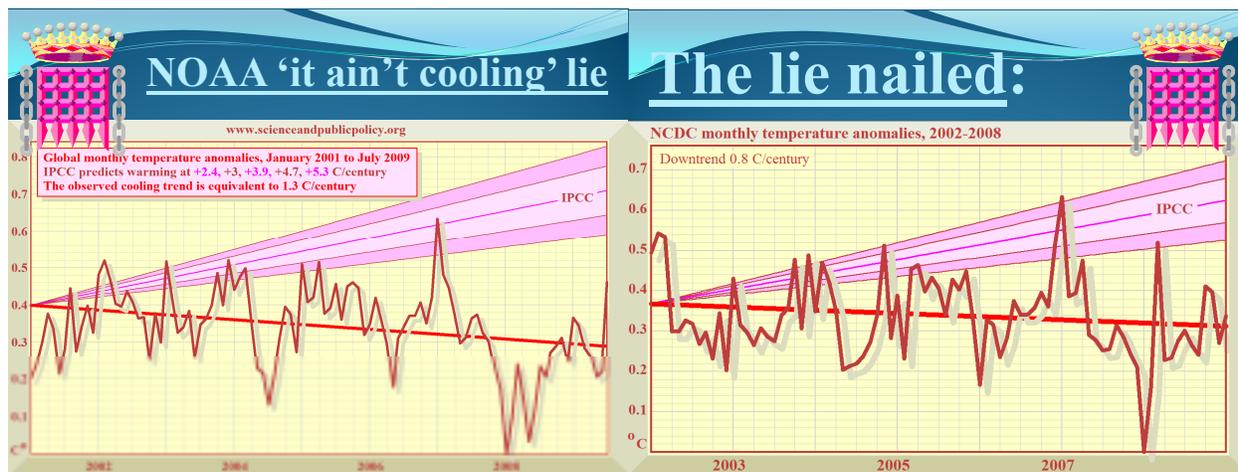
much on the assumption that the UN's sixfold exaggeration of CO2's true warming potential is accurate, which it is not. Either way, we can afford to wait a couple of decades to see whether anything like the rate of warming predicted by the UN's climate panel actually occurs.

16. Pachauri said that the cost of mitigating carbon emissions would be less than 3% of gross domestic product by 2030. The only economist who thinks that is Lord Stern, whose laughable report on the economics of climate change, produced for the British Government, used a near-zero discount rate so as artificially to depress the true cost of trying to mitigate "global warming". To reduce "global warming" to nothing, one must close down the entire global economy. Any lesser reduction is a simple fraction of the entire economy. So cutting back, say, 50% of carbon emissions by 2030, which is what various extremist groups here are advocating, would cost around 50% of GDP, not 3%.

17. Pachauri said that solar and wind power provided more jobs per \$1 million invested than coal. Maybe they do, but that is a measure of their relative inefficiency. The correct policy would be to raise the standard of living of the poorest by letting them burn as much fossil fuels as they need to lift them from poverty. Anything else is organized cruelty.

18. Pachauri said we could all demonstrate our commitment to Saving The Planet by eating less meat. The Catholic Church has long extolled the virtues of mortification of the flesh: we generally ate fish on Fridays in the UK, until the European Common Fisheries Policy meant there were no more fish. But the notion that going vegan will make any measurable impact on global temperatures is simply fatuous.

NOAA and the global cooling since 1 January 2001



176: Please confirm that in the following passage I have accurately encapsulated your criticism of my slides (above) demonstrating that Mr. Tom Karl, the director of NOAA's National Climatic Data Center, had misled Congress when he failed to admit in response to a leading Congressman's direct question that, as my left-hand Science and Public Policy Institute slide compiled from four major global-temperature datasets shows, there has been global cooling for seven years, as my right-hand slide, compiled from Mr. Karl's organization's own global-temperature dataset, shows:

"All right, now we're getting into some good things. You see here [left-hand slide above] a graph, and this graph is taken from the NOAA, which has a center called the NCDC, and we'll talk about that center in just a couple of slides here, but what he shows here is the IPCC projected some increases of temperature but the actual data goes down. So what's going on? I mean, is the IPCC way off? How could they be this wrong? If greenhouse gases are going up, why are the temperatures going down?"

“So in the next slide Chris Monckton overlays his data from his own organization, the Science and Public Policy Institute with the IPCC projections in a different graph. What’s interesting here is he cites the NCDC, which is part of the NOAA organization, as the supplier of that information. So we would assume that NOAA actually sent this temperature data ... to Chris Monckton and his organization – well we can’t be sure, we have to take that on faith, in fact, we’re going to investigate whether that occurred in just a couple of slides, but the interesting thing here is that he’s saying that the IPCC projects temperatures go up and NOAA or NCDC’s information says temperatures are going down.

“Well, we’ve seen already that his numbers don’t agree with NASA, but let’s see if they agree with NOAA. And let’s see if they agree with the IPCC. So on [the left-hand graph] he said, ‘When I produced this graph’... Now, his graph is from the Science and Public Policy Institute, and it shows the IPCC projecting a temperature rise of 0.3 degrees in 8 years: now that’s .35 degrees per decade. Now, that’s funny, because in their Summary for Policymakers they state their temperature increase is only 0.2 degrees per decade, so he’s almost off by 100%.

“What’s fascinating, though, is that if you go to [the right-hand slide] his results are 0.42 degrees per decade, so his results don’t agree with the IPCC.; he can’t get it straight; he confuses and makes mistakes on both slides and the mistakes are different from each other.” (38-40)

177: Once again, why have you deliberately taken my slides out of context by pretending that the point I was making in this part of my talk was to raise questions such as **“I mean, is the IPCC way off? How could they be this wrong? If greenhouse gases are going up, why are the temperatures going down?”** (38), when in fact, as I made explicitly plain, I was addressing an attempt by Mr. Tom Karl, the director of NOAA’s National Climatic Data Center, to refuse to admit that since the turn of the millennium global temperatures have been on a declining trend?

178: What evidence do you have that the left-hand slide above is **“taken from the NOAA”** (38)? Did I not make it explicitly plain in my talk, which you have spent weeks studying, that the left-hand graph above, which states that it is compiled by the Science and Public Policy Institute (whose web address appears prominently enough at the top of the graph), was indeed compiled by me using four different global-temperature datasets [only one of which was from NOAA]?

179: Though you say, **“Well, we’ve seen already that his numbers don’t agree with NASA”** (39), do you now accept that in fact that the 160-year Hadley/CRU dataset that I used in my talk and displayed on several slides does indeed correspond to some degree with the NASA dataset that you favor?

180: May I help you with your math where you say, **“Now, his graph [left-hand slide above] is from the Science and Public Policy Institute, and it shows the IPCC projecting a temperature rise of 0.3 degrees in 8 years: now that’s .35 degrees per decade”** (39)? A temperature rise of 0.3 degrees in eight years is of course equivalent not to 0.35 degrees per decade but rather to almost 0.38 degrees per decade, is it not? And does not the graph explicitly state that the IPCC’s central estimate of warming over the 21st century is **“+3.9 C°”** – surely within the measurement error of reading the graph by eye, if you had done your math right, that is?

181: Where you say, **“What’s fascinating, though, is that if you go to [the right-hand slide] his results are 0.42 degrees per decade, so his results don’t agree with the IPCC; he can’t get it straight; he confuses and makes mistakes on both slides and the mistakes are different from each other”** (39), is not **“0.42 degrees per decade”** also within the measurement-by-eye error range, given that the true IPCC central estimate displayed in the graph, based on the IPCC’s A2 scenario, is 3.9 C° of warming over the 21st century, equivalent to 0.39 C°/decade, as both my graphs correctly show?

182: Where you say my presentation of an IPCC central estimate of 0.39 C°/decade is “**funny, because in their Summary for Policymakers they state their temperature increase is only 0.2 degrees per decade, so he’s almost off by 100%**” (40), why did you not bother to check the position with me?

183: Is it not the case that, using the A2 emissions scenario, two separate temperature projections are derivable from the IPCC’s documents, generating different results: first, the projection of a 0.2 C°/decade warming over the first two decades of the 21st century, rising to well above 0.4 C°/decade over the last two decades of this century, giving a *transient* warming of 3.4 C° over the entire century; and secondly, its projection that, on the A2 scenario, CO2 will increase on an exponential curve from 368 to 836 ppmv over the 21st century, combined with the IPCC’s central estimate of the *equilibrium* rate of warming to be expected in response to any given proportionate increase in CO2 concentration, that estimate being derived from a logarithmic function, thus: temperature change is $4.7 \ln(836/368) = 3.9 \text{ C}^\circ$?

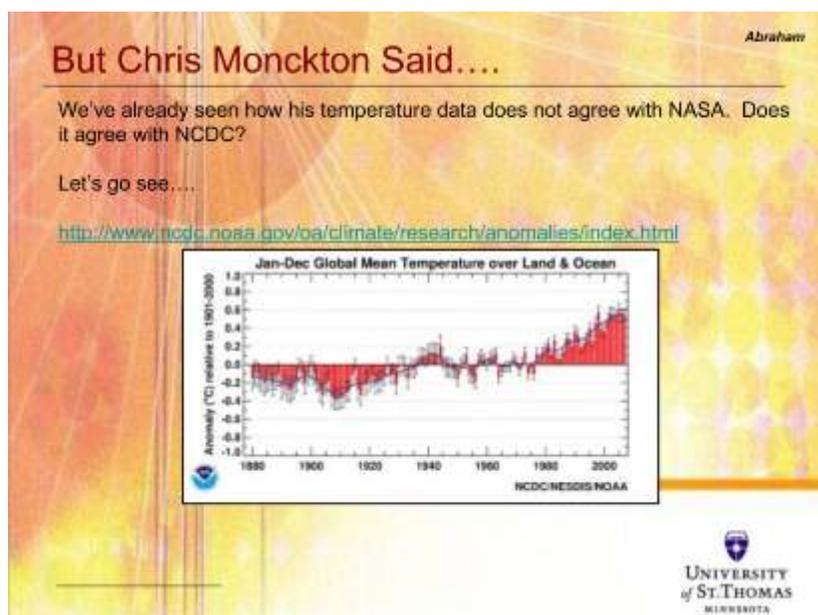
184: Is it not clear to you that if the IPCC is projecting an *exponential* increase in CO2 concentration on the scenario that comes closest to today’s actual CO2 emissions, and is also projecting a corresponding *logarithmic* warming response, the combined result of these two predictions will be a straight line, exactly as shown on my graphs, giving warming at 3.9 C°/century, which, by no coincidence at all, is precisely the same as the warming rate of 0.39 C°/decade that is stated and displayed on my graphs?

185: Would it not have been fairer if you had admitted that you simply have no idea how the IPCC actually calculates its temperature projections, and that – as will be evident from the above questions – I know enough about it to produce accurate and reliable graphs?

186: Why did it not occur to you, as it did to me, that, since the IPCC’s projections of future exponential CO2 growth and logarithmic temperature response necessarily produce a straight line, the IPCC’s detuning of its own projections to reduce the projected temperature change to just 0.2 C°/decade over the first couple of decades of this century has no basis in scientific reality or method?

187: Do you now concede that, in fact, since the turn of the millennium the trend in global mean surface temperatures, on all measures, has indeed been a downtrend, as my graphs correctly show, and that accordingly Mr. Karl had been wrong to refuse to admit before Congress that global temperatures have indeed been falling somewhat since the turn of the millennium?

The NCDC’s global-temperature data



188: Please confirm that in the following passage I have accurately encapsulated your criticism of me for implicitly having produced data inconsistent with those of the NCDC, reproduced in your slide 41 (above):

“Well, we’ve already seen that his temperature data doesn’t agree with NASA: does it agree with the NCDC, where he claims he got his data from? Let’s go check. Here’s the website: you can go there yourself, and here is their temperature graph going back to 1880.” (41)

189: Why do you here repeat your falsehood to the effect that my **“temperature data doesn’t agree with NASA”** (40, 41)? Surely once was enough?

190: In what scientifically-material sense is the NCDC graph displayed on your slide above inconsistent with the graph of NCDC monthly temperature anomalies that I showed on my slide clearly labeled “NCDC”?

191: Why have you displayed a 125-year graph of *annual* temperature anomalies that excludes the last two years data from my 8-year graph of *monthly* temperature anomalies, and, having thus compared chalk and cheese, implied that my graph is not consistent with that of the NCDC?

192: Since you say, **“What’s interesting here is he cites the NCDC, which is part of the NOAA organization, as the supplier of that information [on my graph labeled “NCDC”. So we would assume that NOAA actually sent this temperature data ... to Chris Monckton and his organization – well we can’t be sure, we have to take that on faith, in fact, we’re going to investigate whether that occurred in just a couple of slides”** (38), are you not aware that the NCDC, like many other organizations, publishes its monthly-anomaly data online and grants general permission for those data to be used by third parties provided that due acknowledgement is given (which, on my graph, it very clearly was)?

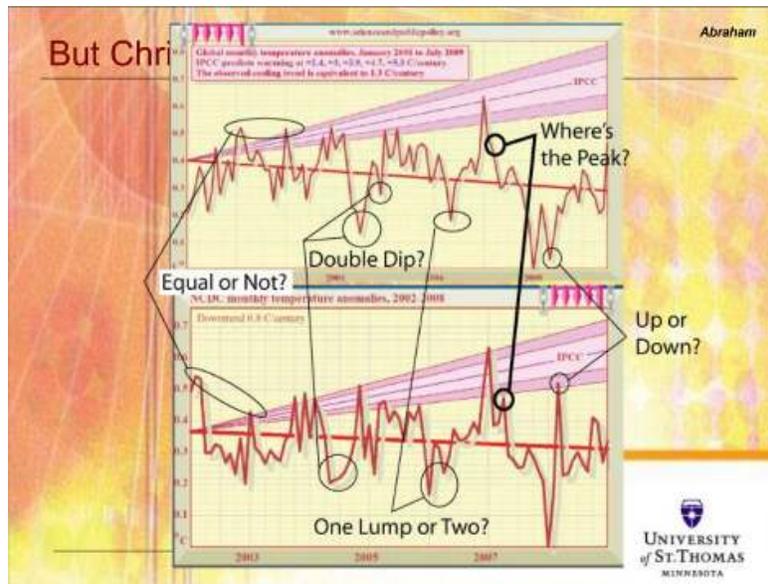
193: Since it is obvious from my “NCDC” graph that I was using monthly temperature anomalies, what steps, if any, did you take to verify whether and to what extent my “NCDC” graph accurately reflected the data publicly available to you as well as to me from the NCDC, rather than comparing them only with the annual temperature data?

194: If, as I have strong reason to suspect, you took no steps whatsoever to verify whether my “NCDC” graph faithfully reflected the monthly-anomaly data publicly available from the NCDC, would you care to explain what scientific basis you had for raising the question whether I had adequately presented the NCDC’s data?

195: Are you aware, and if not why did you not check, that Congress ordered NOAA to check whether the data on my NCDC slide were accurate and that they did not find that the data were inaccurately presented: though, like you, NOAA found it uncongenial that own NCDC data indeed showed the decline in global temperatures that I had said it showed, and they commented that the period of the graph was too short to draw long-run conclusions (though I had not sought to draw any long-run conclusions from the graph: merely to report the fact that there had been no “global warming” at the time of the graph for seven long years)?

196: If it was inappropriate for me to dare to show that the “global warming” that occurred over the best part of a decade since the turn of the millennium was in fact global cooling, was it not, *a fortiori*, still more inappropriate for you to have tried to draw long-term conclusions about temperature trends from just 13 months of temperature data?

Do my data agree with themselves?



197: Please confirm that in the following passage I have accurately encapsulated your criticism of my SPPI-Index and NCDC monthly temperature-anomaly slides for not corresponding with one another in all respects, as your slide (above) purports to illustrate:

“So does he agree with himself? Now this is incredible. You would expect his graphs of his own data to agree with themselves. Let’s look. Here are the two graphs overlaid, one on top of the other. They’re both from the NCDC.

“The only difference between them is, they’re different timespans, the top one goes from 2001-2009 and the bottom one goes from 2002-2009. And let’s just do a quick comparison. These red curves are from the same source. We expect them to be the same. Well, that’s interesting. In the top part the two peaks are equal and in the bottom part they’re not: in fact, they’re way off. In the bottom part there’s a single dip: in the top there’s two dips. Again, is there two dips or one? In the top graph this goes down then down again, in the bottom graph it goes down and up. And then, where’s the peak? So we see that Chris Monckton doesn’t get the IPCC right, he doesn’t get his own data right, so how can you trust conclusions drawn from them?” (42).

198: By now, do you accept that the upper graph on the slide above, labeled as a graph from the Science and Public Policy Institute, compiled by me for the SPPI, as explained earlier in this letter, is indeed a graph of the arithmetic mean of the HadCRUt, NCDC, RSS, and UAH monthly global mean temperature anomalies over the period of the graph, while the second graph, labeled as a graph from the NCDC, is indeed a true graph of the NCDC global-temperature dataset *on its own*, which I had prepared in answer to the question from Congress about whether the NCDC’s director was right in not agreeing with me that there had been global *cooling* since the turn of the millennium?

199: Given that I was at this point in my talk pointing out various falsehoods perpetrated by climate-extremists, including in this instance Mr. Karl’s falsehood in not admitting when asked in Congress that global temperatures have been falling for the best part of a decade, and given that my purpose in producing the NCDC graph was precisely to demonstrate to Mr. Karl that his own data showed the decline he had striven so hard to conceal from Congress, would you not expect that the graph that I had originally shown to Congress, which averaged the four global-temperature datasets, would look different at various points from the graph showing NCDC data alone?

200: Do you not think it would have been fairer if you had revealed, rather than concealing, the background to these two graphs in your talk, so that your audience would have realized at once that the graphs are correct and that the relatively minor differences between them are very much what one would expect in the circumstances?

201: What rational scientific or other basis do you or did you have for your assertion that my two graphs were **“from the same source”** (42), when I had *explicitly* stated during my talk that the first graph was compiled by the SPPI from four data sources and that the second graph was that of NCDC data alone, and each of the graphs is *explicitly* labeled with its source?

202: Given that my two graphs were correctly drawn, will you now withdraw and apologize for your baseless conclusion that **“Chris Monckton doesn’t get the IPCC right, he doesn’t get his own data right, so how can you trust conclusions drawn from them?”** (42)?

Consensus? What consensus?



The ‘consensus’ lie:
**‘Global warming’
will be catastrophic**

The lie nailed:
“Global climate change” papers: 539
Evidence for “catastrophe”: 0
Schulte (2008)

203: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above) demonstrating that not one of 539 peer-reviewed papers containing the exact search phrase “global climate change”, and studied by Klaus-Martin Schulte in a peer-reviewed article in 2006, provides “evidence” that there will be any catastrophic consequence from anthropogenic “global warming”:

“All right, next he talked about the consensus lie, and the consensus lie says that scientists really are not convinced, and there isn’t a consensus. And he says that he did a search on “global climate change” and found 539 papers. In fact, let’s view what he said in his presentation.

“All right, just to set this up, Chris Monckton said he was bored, so he performed a literature search using the words “global climate change”, and he searched all articles between 2004 and 2007 and he found a whopping 539. And, to quote him, ‘None of those provide any evidence at all of any catastrophe arising from any anthropogenic effect on any part of the climate in any part of the world.’ And to show you that I’m not making this up, on the next slide I’m actually going to use a screen-capture and show you a video of him making this claim. Then, on the following slide, we’re going to do a little exercise and we’re going to see if we can reproduce his search results.”

204: What evidence do you have that I **“did a search on “global climate change”** (43)?

205: Is it not a fact that I said in my talk, and recorded on the slide above, that the search was conducted by Klaus-Martin Schulte, who published his results in a peer-reviewed paper in 2006?

206: Given that I had explicitly said that Mr. Schulte had done the search and published the results, what rational scientific or other basis do you have for your twice-repeated assertion that it was I who conducted the search?

207: What evidence do you have that I said I was, as you have strangely put it, **“bored”**?

208: Is it not a fact that what I actually said during my talk was that I do not merely believe what I am told, by whatever faction on whatever side of any scientific question: “I check things: I’m boring that way”?

209: Given what I actually said in a talk that you have spent several weeks studying, what rational basis do you have for your assertion that I said I was **“bored”** (44)?

210: What evidence do you have that a search for “all articles between 2004 and 2007” had been made?

211: Did I not explicitly state in my talk that the search had covered the period from the beginning of 2004 to the beginning of 2007?

212: Are you aware of the not unimportant distinction between the beginning and the end of 2007?

213: Given that you say you are going to **“use a screen-capture and show you a video”** of me saying that not one of the papers searched by Mr. Schulte had provided any evidence for climate catastrophe, is it correct that you did not in fact show any such video in your talk?

Searching the literature for evidence of “catastrophe”



214: Please confirm that in the following passage I have accurately encapsulated your criticism of me for allegedly having incompetently conducted or incorrectly reported the results of Mr. Schulte’s search of the peer-reviewed literature on the Institute for Scientific Information’s Web of Science database from the beginning of 2004 to the beginning of 2007 on the question whether any peer-reviewed papers identified using the exact search phrase “global climate change”:

“So let’s try that search Chris Monckton talked about. If you go to Google, this is a search engine everyone’s familiar with, you can use the ‘Google Scholar’ portion of the search engine, so that you can search just the scientific literature, and I’m showing the button to click to get it. I use Advanced Scholar. If you use Advanced Scholar, you can limit your search to a certain set of years and have more control over the keywords that you’re going to use. So here you would type in the words that you want, and these are the words that Chris Monckton used, ‘global climate change’, they’re shown in red, and then you can put the years 2004-2007, which were the exact dates which he used as well.

“What are you going to find if you do that search? Well, here is a screenshot of my results. And you can see in the upper right-hand corner 826,000 hits, far more than the 539 he talked about. In fact, the first one listed talks about the accumulated evidence suggesting global climate change is now the result of human activities. Some of the other ones you’ll find: extinction risks from global climate change: this is also on the first page of your results. Here are two more that you’ll find, two right in a row, one on the emergence of infectious diseases and one on ocean acidification. Those are issues I would call as bad impacts of global climate change, so whether or not these papers use the exact word ‘catastrophe’, I can’t say, but these are all dealing with the negative impacts of climate change.

“So let’s continue, going on and looking at some of our results. Here are two more, right in a row, vegetation die-off and drought severity increases with climate change. Here’s another one – sea-level rise and global climate change – so it’s a complete fabrication to say that there are only 539 responses to global climate change 2004-2007, and that none of them talked about negative impacts or catastrophic impacts” (45-47)

215: What evidence do you have that it was “Google Scholar” that was searched to yield the figures reported in my slide on the “consensus lie”?

216: If you had been researching this question properly, why did you not contact me to ask which database was searched, rather than picking one at random?

217: Given that I had explicitly mentioned in my talk that it was the ISI Web of Science database that was searched, what rational basis did you have for your decision to search a different database altogether?

218: Are you aware that a historian of science, Ms. Naomi Oreskes, had published in *Science* a paper summarizing the results of a search by her of the ISI Web of Science Database using the exact phrase “global climate change”, and had found just 928 papers containing that exact phrase from 1993-2003?

219: Standing that published result, why were you surprised that Mr. Schulte’s search from 2004 to mid-February 2007, a period of little more than three years, should have turned up as few as 539 papers containing exactly the same search phrase?

220: Are you aware of the distinction, when using a search engine, between searching for all entries on that database that contain an exact phrase (in the present instance “global climate change”) and searching for all entries on that database that contain all the words in that search phrase, but not necessarily together?

221: Does your screenshot of your search show that instead of using the “exact phrase” search that Ms. Oreskes and Mr. Schulte used, you wrongly chose the “containing all the words” option?

222: Is it not evident from the screenshot of your search results that most of the results you found did not in fact contain the exact search phrase that Oreskes and Schulte had both used, but instead contained separately-occurring instances of the three words in the search phrase, so that you were not comparing like with like?

223: Does your screenshot of your search show that the dates you entered were “2004” to “2007” *simpliciter*, and that you did not exclude all papers found after February 2007, as Mr. Schulte had done?

224: Do you now accept that the search you attempted was not on all fours with the search that Mr. Schulte had conducted, in that you were using the wrong type of search on the wrong search engine over the wrong period?

225: Are you surprised that, in the circumstances, your search identified results that were markedly different from those obtained by Mr. Schulte?

226: In the first of your search results, talking about **“the accumulated evidence suggesting global climate change is now the result of human activities”** (46), what evidence, if any, is there for any catastrophic consequence of any global climate change that might be the result of human activities?

227: What evidence do the other papers you mention provide that outcomes such as **“extinction risks”** (46), **“emergence of infectious diseases”** (46), **“ocean acidification”** (46), **“vegetation die-off”** (47); rising **“sea level”** (47) will occur at all, let alone to a disastrous or catastrophic extent?

228: Considering that you did not analyze any of the papers you mentioned in your search of the wrong database using the wrong search term over the wrong period, to confirm whether they had been peer-reviewed, or whether they provided any evidence for the catastrophic consequences their authors mentioned, why should your audience merely accept that these papers offer evidence, rather than mere opinions or predictions, that catastrophe is likely to occur, and that if it does occur we shall have been substantially to blame?

229: Given the numerous and very serious defects in your talk that arose from your failure to follow up the reference to Schulte (2006) that was stated on my slide, and from your failure to replicate in any material respect the actual literature search that Mr. Schulte carried out, will you now accept that you had no rational scientific basis for your malevolent and libellous but unfounded conclusion that **“it’s a complete fabrication to say that there are only 539 responses to [the search term] ‘global climate change’ [between] 2004-2007”** (47)?

230: Do you understand the distinction between papers that provide *evidence* for *catastrophic* events that are *demonstrably* consequences of *anthropogenic* warming, on the one hand (for those were the papers that Schulte was looking for and not finding), and, on the other, the papers that you were looking for, which were merely **“dealing with the negative impacts of climate change”** (46)?

The Australian environmentalists’ uprooted-tree deception



231: Please confirm that in the following passage I have accurately encapsulated your criticism of me for having allegedly “discounted” sea-level rise:

“Let’s move on to the next major topic of Chris Monckton’s presentation: that’s when he began to discount sea-level rise. He said that ... there was no sea-level rise in the Maldives, which are islands in the Indian Ocean: let’s see what some real researchers are saying about that subject” (48). You then cite papers by two researchers who disagree with Professor Mörner’s results showing no sea-level rise in the Maldives (49).

232: Though you say you are here “moving on to the next topic” (48), at this point in my talk was I not still demonstrating the numerous lies and deceptions by promoters of the climate-extremist viewpoint, and was it not their falsehoods and dishonesties that were the focus of my argument at this point?

233: For what reason, here as so often elsewhere in your talk, did you wrench my words out of their context in a manner calculated to mislead your audience into believing that I had been making a quite different point – and one that you could set up as a straw man and then demolish?

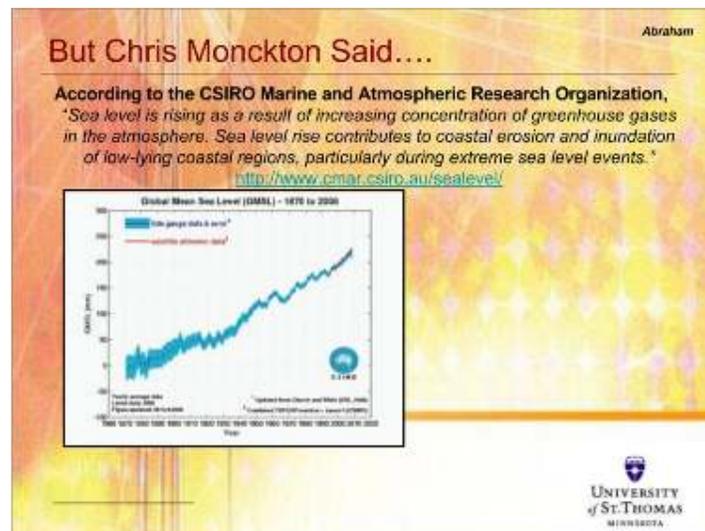
234: At this point, did I not display the above slide from the Maldives, showing a photograph taken by Professor Niklas Mörner in 2007 of an uprooted tree, still in leaf, on the sea-shore?

235: Would it not have been fairer if you had provided the proper context here, making it plain to your audience that it was this tree that was the focus of my discussion at this point in my talk?

236: Did I not explain in my talk that Professor Mörner, who had concluded after a decade-long survey that was probably the most detailed survey of sea-level rise ever to have been conducted anywhere in the world that sea level in the Maldives was similar to what it had been 1250 years ago, had found the uprooted tree by the shore, had been puzzled that it was still in leaf, had asked the locals how it had come to be uprooted and had learned from them that a team of Australian environmentalists, realizing the tree was good evidence that there had been no sea-level rise in the Maldives for 40 years or so, had uprooted the tree to prevent anyone else from using it as evidence?

237: Is it not clear, therefore, that my mention of Professor Mörner’s survey results in the Maldives was not what you have called the **“major topic”** (48), but was merely incidental to my then theme, which was the habitual mendacity of the climate-extremist lobby – a mendacity which your own talk repeatedly exemplifies?

How fast is sea level rising?



238: Please confirm that in the following passage I have accurately encapsulated your criticism of me, illustrated by your slide (50) above, for having cited Professor Mörner as having published peer-reviewed results showing that there had been no sea-level rise in the Maldives:

“This next slide presents data taken from the CSIRO: that’s Australia’s Commonwealth Scientific and Industrial Research Organization. And here on this slide you can see a quotation from that organization: ‘Sea level is rising as a result of increasing concentration of greenhouse gases in the atmosphere. Sea level rise contributes to coastal erosion and inundation of low-lying coastal regions, particularly during extreme sea-level events.’

“And you can see that both measurements – tide-gage and satellite altimetry – show an increase in sea levels in the past 100 years. That’s another organization that would disagree with Chris Monckton’s conclusion. Maybe he knows more than they do: I’ll leave that for you to judge.”

239: Are you aware of the Aristotelian logical fallacy of accident, by which an inappropriate argument from the general to the particular is perpetrated?

240: Is not your slide from the CSIRO plainly labeled **“Global Mean Sea Level (GMSL) – 1870 to 2000”** (50)?

241: Might you not have been able to infer from this title, and to infer without any particular difficulty, that the CSIRO’s graph does not relate to the Maldives, about which I had been talking at this point, but to global sea level?

242: Are you aware that sea level change is highly variable around the world, depending on numerous factors that vary considerably from place to place, so that these days sea level change is determined by satellite altimetry in comparison with a standardized reference geoid?

243: Therefore, is not your excoriation of me for having mentioned Professor Mörner’s result in passing (though you did not admit that I mentioned it only in passing) an inappropriate argument from the general to the particular and, accordingly, an instance of the fallacy of accident?

244: Though you cite the CSIRO as expressing an opinion that **“Sea level is rising as a result of increasing concentration of greenhouse gases in the atmosphere. Sea level rise contributes to coastal erosion and inundation of low-lying coastal regions, particularly during extreme sea-level events.”** (50), do you accept that, at least in the slide you present, no evidence is provided for a causative link between anthropogenic “global warming” and sea-level rise, still less for a quantitative link between the two?

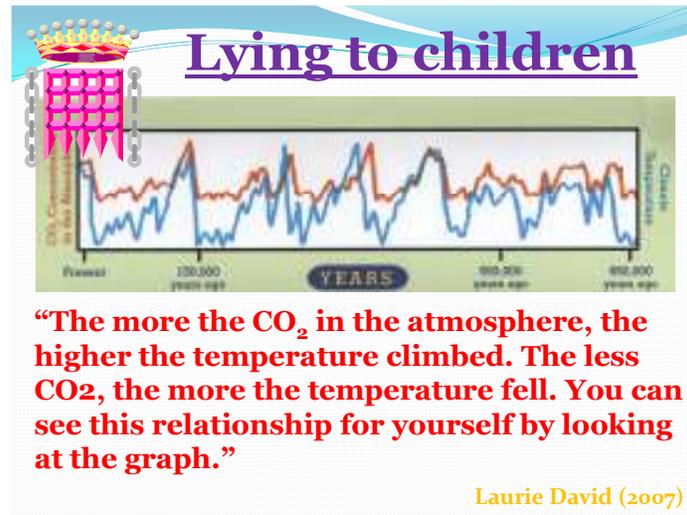
245: Is not your assumption that merely because a sea level rise has been observed it is wholly or substantially attributable to the activities of humankind merely another instance of the Aristotelian logical fallacy of the *argumentum ad ignorantiam*, which we illustrated earlier in this letter: this time the *post hoc ergo propter hoc* species of the fallacy?

246: Is it not clear to you, even from the most cursory examination of the CSIRO slide, that the rate of sea-level rise over the last two decades of the record is no steeper than, and perhaps even rather less than, the rate of sea-level rise from 1930-1950 and again from 1970-1990?

247: Given the extremely poor correlation between changes in the rate of sea-level rise as exhibited in your CSIRO graph, on the one hand, and the Hadley/CRU global temperature record on the other, and the still poorer correlation between the monotonic increase in CO₂ concentration since the late 1950s and the stochastic changes in global temperature over the same period, is it not evident to you that considerable further work will have to be done before anyone can legitimately draw the CSIRO’s conclusion?

248: Indeed, would I not be right in saying that, since absence of correlation necessarily implies absence of causation, it is by no means clear to what extent, if at all, the anthropogenic increase in atmospheric CO₂ concentration in recent years has contributed to sea-level rise, and – on the evidence of the CSIRO graph on your own slide – our activities have certainly not accelerated the long-run rate of sea-level rise?

Which changed first: CO₂ or temperature?



249: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above), in which I draw attention to a deliberate error by Laurie David, the producer of Al Gore’s sci-fi movie, who – of all places in a children’s book published in 2007 – switched the captions on a graph plotting temperature change against change in CO₂ concentration, so as falsely to imply, as the cited text from the children’s book explicitly stated (and continues to state because when Ms. David had the error drawn to her attention both she and her publishers refused point-blank to correct it) that “the more the CO₂ in the atmosphere, the higher the temperature climbed. The less CO₂ the more the temperature fell. You can see this relationship for yourself by looking at the graph”:

“... And that next topic is a bit of a jump from the preceding one. I’m trying to go through Chris Monckton’s talk in the order he presented it in order to be fair to his style and faithful to his presentation, but he makes a sudden jump from oceans to the paleoclimate. And what he says, ... temperatures always change first and CO₂ follows, and he cites the paper which I’ve got the citation listed here, [Caillon *et al.*, 2003], which deals with the timing of CO₂ and Antarctic temperatures.

“And I actually am going to pull a quote from that paper, and that quotation shows that the recent anthropogenic ... CO₂ increase is different from CO₂ increases that have occurred in the past, and CO₂ in the past has served as an amplifier to orbital changes in the Earth’s climate, that is changes in the Earth’s climate due to the way the Earth’s orbit around the sun changes. And he says that the authors say that you cannot directly relate CO₂ increases that we have now to CO₂ increase that we had then in terms of causation.

“However, the fact remains that you don’t get temperature increases without CO₂ increases and you don’t get temperature decreases without CO₂ decreases, and that’s the point made by the authors. The suggestion that Chris Monckton gave in his presentation is not in concert with what the authors meant [when they said]: ‘The situation differs from the recent anthropogenic CO₂ increase ... The radiative forcing due to CO₂ may serve as an amplifier of initial orbital forcing which is then further amplified by fast atmospheric feedbacks that are also at work for the present-day and future climate.’” (51).

250: Once again, why do you rip my remarks out of their context, mischaracterize them, and then attack your own mischaracterization of what I actually said? Is it unreasonable of me to expect that you would at least fairly and honestly represent what I actually said before you try to criticize it?

251: For example, why do you start by saying that this topic is “a bit of a jump from the preceding one” (51), when in my talk I am still giving examples, and make it clear I am still giving examples, of the lies and deceptions to which the climate-extremist faction routinely and brazenly resorts?

252: Why do you not, at any point in your discussion of the above slide from my talk, tell your audience at any point that this slide is not taken from a scientific paper but from a children’s book by Laurie David, the producer of Al Gore’s sci-fi movie?

253: Why do you not, at any point, tell your audience that what I am saying here is that Laurie David switched the captions on the graphs so as to pretend that in the early climate it was CO₂ concentrations that changed first and global temperatures that followed, when in fact the data show that the relationship was the other way about?

254: What evidence do you have for your assertion that I have ever said that “**temperatures always change first and CO₂ follows**” (51)?

255: Did I not make it clear in my talk that it was the paleoclimate that I was talking about? Was I not careful to avoid drawing any conclusion to the effect that CO₂ today cannot be or become a cause of “global warming”?

256: What evidence do you have that I cited Caillon *et al.* (2003) in my talk?

257: If you now agree that I did not in fact cite Caillon *et al.*, why – here as elsewhere – do you take me to task for having allegedly misrepresented the content of a paper that I had not cited in the first place?

258: Given that the point I made in my talk was that in the paleoclimate it had always been temperature change that had preceded CO₂ concentration change, and given that for some reason you have chosen to cite Caillon *et al.* (2003) on the subject, why were you so careful not to cite the passage in which the authors conclude – and I quote – that

“the CO₂ increase lagged Antarctic deglacial warming by 800 ± 200 years”?

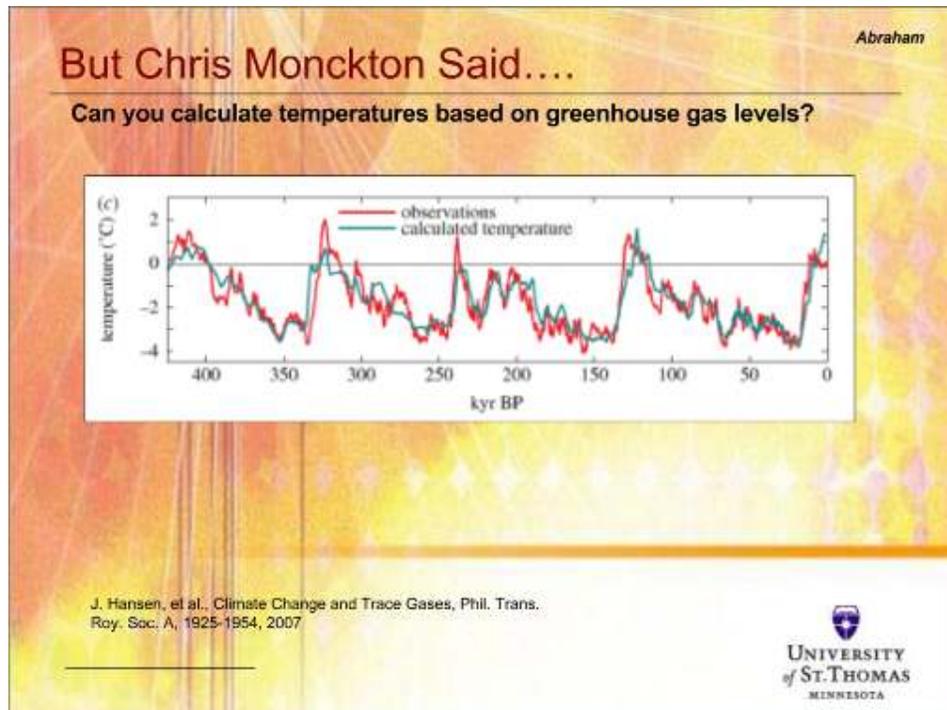
Is that not the very point that I was making, and do not the authors – in this quotation that you somehow managed to withhold from your audience – make that point too, after a meticulous examination of the evidence?

259: Would it not also have been fairer if you had cited the explicit conclusion of Caillon *et al.*, directly contrary to that of Gore in his horror movie and David in her dreadful children’s book, that “CO₂ is not the forcing that initially drives the climatic system during a deglaciation”?

260: Can you cite any passage in what I actually said, rather than in your numerous and malevolent misquotations from what I said, in which I in any way contradicted the passage that you chose to quote from Caillon *et al.* (2003)?

261: Since I did not say anything that actually contradicted Caillon, since Caillon said nothing that contradicted me, since Caillon upheld in the clearest terms the point I was making, and since I did not cite Caillon in the first place, I am at a loss to explain why you have chosen to devote so large a passage to his paper. Please explain.

How are CO2 concentrations and temperatures linked?



262: Please confirm that in the following passage I have accurately encapsulated your implicit criticism of me for not agreeing with Hansen *et al.* (2007), who, in the graph on your slide 52 above, say they can predict temperature anomalies (in blue in their graph) that are closely correlated with the temperature anomalies (in red) that are inferred from ratios of ^{18}O to ^{16}O in air trapped in Antarctic ice strata:

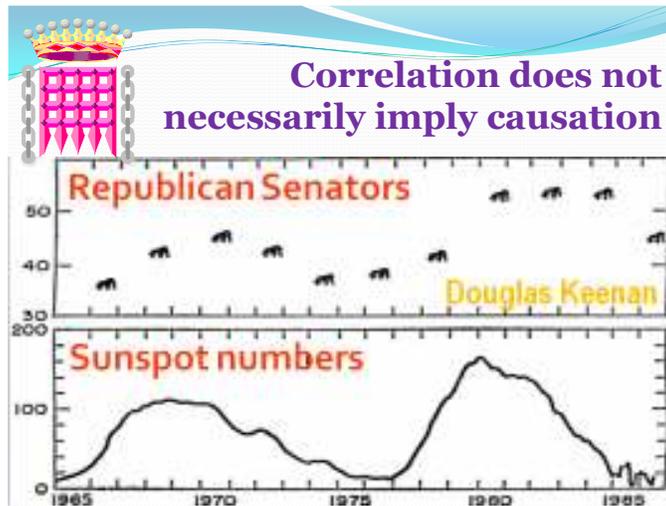
“So we’ll move on. Just to reinforce just how tightly greenhouse-gas levels and temperatures are linked, the following data is presented [from Hansen *et al.*, 2007]. The red line [shows] observed temperatures over the last 450k years, and the blue line [shows] calculated temperatures that you would obtain if your model accounted for the changes in temperature primarily due to greenhouse gases. So what James Hansen and his co-authors said is, ‘Let’s ignore all other forces of climate and let’s just model the climate based on greenhouse-gas forcings, and here’s what they get, you can see that the blue and red are in great agreement with each other and it’s extremely strong evidence that CO2, the greenhouse effect is the biggest contributor to past climate change’.” (52)

263: Are you aware that in logic, while absence of correlation between two datasets necessarily implies absence of causation, correlation does *not* necessarily imply causation?

264: Are you aware that the mere fact of correlation tells us nothing either about the direction of the causation (i.e. about which of the datasets is the cause of the other)?

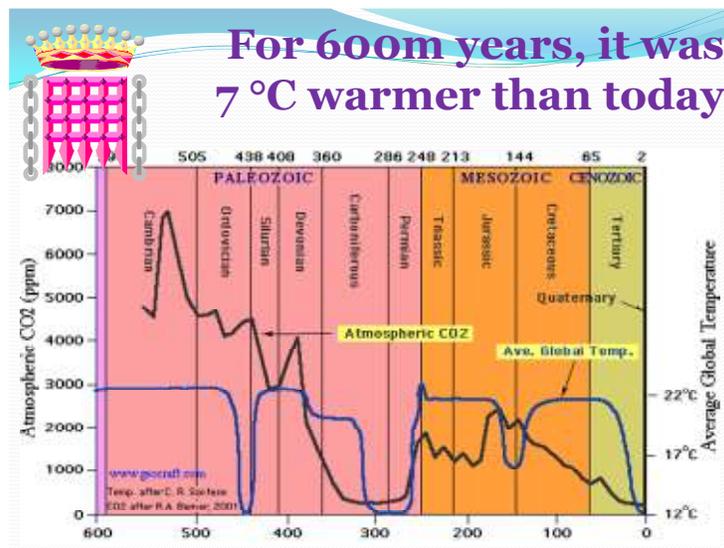
265: Are you aware that an unsuspected third cause may be causative of the two datasets, which may be dependent on the third cause but otherwise independent of each other?

266: Are you aware that in logic it is also possible that two apparently-correlated datasets may not be causatively linked at all, but may be correlated by pure coincidence? I have taken the liberty of recalling to your mind a slide from my talk, below, to illustrate this possibility:



267: Do you now accept, therefore, that the apparent correlation between Hansen’s calculated temperatures and the real-world temperatures is not, as you say it is, **“extremely strong evidence that CO2, the greenhouse effect is the biggest contributor to past climate change”** (52), since there is no rational basis in logic for any such assertion?

Temperatures over the past 600 million years



268: Please confirm that in the following passage I have accurately encapsulated your criticism of my graph (above) showing that over long geological time the correlation between CO2 concentration change and temperature change has been poor, necessarily implying the absence of any significant causative connection between the two (in either direction), and that for much of the past 600 million years global temperatures have been ~7 C warmer than the present, suggesting that today’s temperatures are not exceptional:

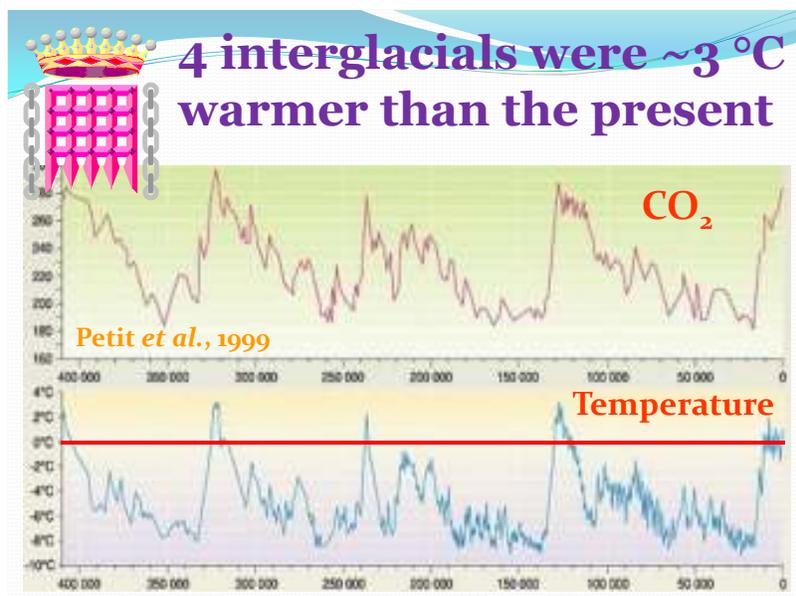
“Chris Monckton continues going back in time and this slide ... he says for 600 m years it was warmer than it is today. And that’s a bit of a straw man, I mean, the fact is, sure it’s been warmer than it is today, but would you want to go back to a time period 600 m years ago? Do you want to go back to a period where ocean levels were 100 m higher than they are today? Or would you want to go back to a time period like the glacial periods, where ice extended over Minneapolis and New York all year long? I think the answer is no, I mean, we live in a great climate and we’re adapted to this climate. Just because temperatures have been higher in the past doesn’t mean that we want to revisit those. So it’s a bit of a straw man, and anyone just thinking about it very briefly can see that it doesn’t hold any water.” (53)

269: Yet again, why have you mischaracterized what I said, and why have invented what you yourself twice call a “straw man”, so that you could knock it down?

270: Did I at any time say that temperatures 7 °C above or below today’s would be more desirable than today’s? I do not recall having made any such point, which would in any event be speculative and, as must by now be apparent to you, I do not consider that science should be conducted by speculation, but rather by observation, measurement, and rigorous deduction.

271: Was I not quite clear about the import of this slide: that over the long run there was no correlation between CO₂ concentration (which reached 20 times today’s concentration in the Cambrian era, when the calcite corals first achieved algal symbiosis), and that, seen in the context of the past half billion years, today’s temperatures are, if anything, very much on the low side, suggesting that in the past there have been powerful natural forces other than CO₂ that have been the principal drivers of climate?

Temperatures in recent interglacial warm periods



272: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above), from Petit *et al.* (1999), which shows that in each of the past four interglacial warm periods, at approximate intervals of 125,000 years, surface temperatures were ~3 C° warmer than the present:

“Chris Monckton refers to a paper by Petit (1999), and he claims that past interglacial periods were about 3 C warmer than they are at present. The inference is that hey, you know, it’s been warmer in the past so this recent warming may be natural and who cares about it? Well, let’s go look at the paper Chris Monckton referenced and see what the authors actually concluded.

“So here is a reply to that slide, restating that Chris Monckton says that past interglacials were 3 C° warmer than today, so why should we worry? These authors... use that record to show that carbon dioxide and methane are strongly linked to Antarctic temperatures. ... So this is a very troubling paper, I mean, the authors have used this data to say, you know, when greenhouse gases go up temperatures go up, and when greenhouse gases go down temperatures go down. The two things are correlated with each other very strongly. And the fact of the matter is we now have greenhouse gas levels that are higher than they’ve been in ... at least 800,000 years.

“So in the past, as suggested by this paper by Petit, whenever greenhouse gases go up you’re going to get an increase in temperatures, and conversely when things decrease they decrease, and coincidentally we can then expect that we’re going to get an increase in temperatures due to the recent increase in greenhouse-gas levels. So, far from minimizing the impact, this paper presents a very sobering assessment of where we’re headed. One thing that’s interesting that I should mention before we go on: the sentence in the lower left: ‘Present-day atmospheric burdens of these two important greenhouse gases are unprecedented during the past 420,000 years’” (54-55).

273: Yet again, have you not mischaracterized what I actually said in my talk, restating in a rather silly form that you presumably find easier to knock down than my *ipsissima verba*?

274: Can you provide any evidence that I said that because the past interglacial periods were warmer than the present we need not worry about the climate today?

275: Please supply evidence that Petit *et al.* (1999) have said, **you know, when greenhouse gases go up temperatures go up, and when greenhouse gases go down temperatures go down”** (54).

276: Do not Petit *et al.* (1999), in common with Genthon *et al.* (1987); Fischer *et al.* (1999); Clark and Mix (2000); Indermuhle *et al.* (2000); Monnin *et al.* (2001); Mudelsee, (2001); and Caillon *et al.* (2003: *op. cit.*), say that in the paleoclimate temperatures that changed first and CO₂ concentrations followed suit?

277: Do you agree that the dataset that changed later cannot have induced the change in the dataset that changed earlier (though it is possible that once the temperature had changed and had induced the CO₂ concentration to change the CO₂ change then amplified the temperature change)?

278: Is it not correct that even if **“present-day atmospheric burdens of these two important greenhouse gases [CO₂ and methane] are unprecedented during the past 420,000 years”** (55), their concentrations are certainly orders of magnitude lower than they were in geological time?

279: For instance, in the Neoproterozoic Era, some 750 million years ago, was atmospheric CO₂ concentration ~300,000 ppmv, or around 720 times today’s concentration, so that the CO₂ in the oceans could bond not only with the superabundance of calcium ions in the oceans but also with the magnesium ions to precipitate the dolomitic rocks that are now found all over the world, and which contain ~44% CO₂?

280: Surely the crucial question is this: not *whether* the current concentrations of CO₂ and methane are likely to cause some warming (of course they are), but *how much* warming they are likely to cause (to which, as best I can make it out, the answer is “not a lot”)?

Ocean “acidification”

281: Please confirm that in the following passage I have accurately encapsulated your criticism of my alleged remark that, as you have put it, “ocean acidification is rubbish”:

“Chris Monckton said that ocean acidification is rubbish. And we’re going to look at what some of the experts say, but the issue of ocean acidification is that carbon dioxide has been dissolved in the ocean, making carbonic acid, and that makes it difficult for animals who want to grow calcium carbonate shells. Ocean acidification is a big, big worry in the scientific community. This is something that the media hasn’t picked up on and the general public hasn’t picked up on. But this is a big, big problem because if the ocean becomes too acidic we’re going to destroy the ability of carbonate-shell life-forms to survive. This is a big deal. Now, Chris Monckton says it’s absolute rubbish, but let’s actually look at what researchers are saying about this.

- “Hoegh-Guldberg et al., 2007, say: ‘Under conditions expected in the 21st century, global warming and ocean acidification will compromise carbonate accretion, with corals becoming increasingly rare on reef systems.’ So if you like coral reefs and if you like sea life, you should be concerned. If you don’t care about coral reefs and you don’t care about sea life, then it’s not that big of a deal.
- “Fbary *et al.*, 2008: ‘Oceanic uptake of anthropogenic carbon dioxide is altering the seawater chemistry of the world’s oceans with consequences for marine biota.’
- “Anthony et al., 2008: You can’t be any clearer: ‘Ocean acidification represents a key threat to coral reefs by reducing the calcification rate of framework builders.’”
- “Doney et al., 2009: ‘Rising atmospheric carbon dioxide, primarily from human fossil fuel combustion, reduces ocean pH and causes wholesale shifts in seawater carbonate chemistry. The process of ocean acidification is well documented in field data, and the rate will accelerate over this century unless future CO₂ emissions are curbed dramatically.’
- “Guinotte & Fabry, 2008: ‘Ocean acidification is rapidly changing the carbonate system of the world oceans.’
- “McNeil et al, 2008: ‘Southern Ocean acidification via anthropogenic CO₂ uptake is expected to be detrimental to multiple calcifying plankton species by lowering the concentration of carbonate ion to levels where calcium carbonate (both aragonite and calcite) shells begin to dissolve.’

“So I’ve presented six very recent papers. I could get no doubt many more. I’ve tried to just pick a sampling but the scientific community is very, very clear on this issue. Ocean acidification is a big deal. It’s not absolute rubbish, regardless of what Chris Monckton says.

282: You have stated thrice in this passage that I described ocean “acidification” as “absolute rubbish”. Was that the main point of what I was saying here?

283: Is it not correct that, yet again, you have grossly misstated the point I was actually making? Was I not saying that yesterday they called the climate scare “global warming”; then, when warming stopped, they called it “climate change”; then, when the climate changed no more than usual, they called it “energy security”; then they would probably try to call it “ocean acidification”; and eventually they would have to call the climate scare what it is: absolute rubbish?

284: Is it not evident to you that my reference to ocean “acidification” was merely a passing reference, and that it did not constitute a major – or any – segment of my talk?

285: Is it correct to say that there is already 70 times as much CO₂ dissolved in the oceans as there is concentrated in the atmosphere; that if we double the CO₂ concentration in the atmosphere this century one-third of the extra CO₂ will end up in the oceans; and that, therefore, the oceanic partial pressure can only increase by (at most) 30% of one-seventieth of what is already there, or a dizzying 0.4%?

286: Since you have cited half a dozen papers, can you cite a single paper in which the authors added as little as 0.4% more CO₂ to seawater and then studied the effect on calcifying organisms?

287: Is it not a fact that shell formation and other types of calcification take place in a localized, biogenic environment in which the acid-base balance (the pH) of the surrounding seawater is to a large extent irrelevant?

288: Am I right to say that if the atmosphere warms Henry’s Law mandates that the oceans will outgas CO₂, substantially compensating for the higher atmospheric concentration?

289: In the Cambrian era, when the calcite corals were formed, was not the atmospheric concentration of CO₂ some 20 times today's? *Hint:* A graph from the IPCC's 2001 report shows this to be true.

290: In the Jurassic era, when the aragonite corals were formed, was not the atmospheric concentration of CO₂ some 15 times today's? *Hint:* The same graph from the IPCC's 2001 report shows this to be true.

291: Has there yet been a systematic, worldwide program of monitoring oceanic pH levels, akin to the ARGO bathythermographs for ocean temperatures and salinity, or are global changes in ocean pH little more than mere guesswork at present?

292: Am I not right in understanding that seawater is alkaline and basic, and that – because it runs over rocks, which are pronouncedly alkaline – it must remain so?

293: Even if there were a shift in oceanic pH, would not that be a shift in the direction of neutralization, rather than into outright acidity?

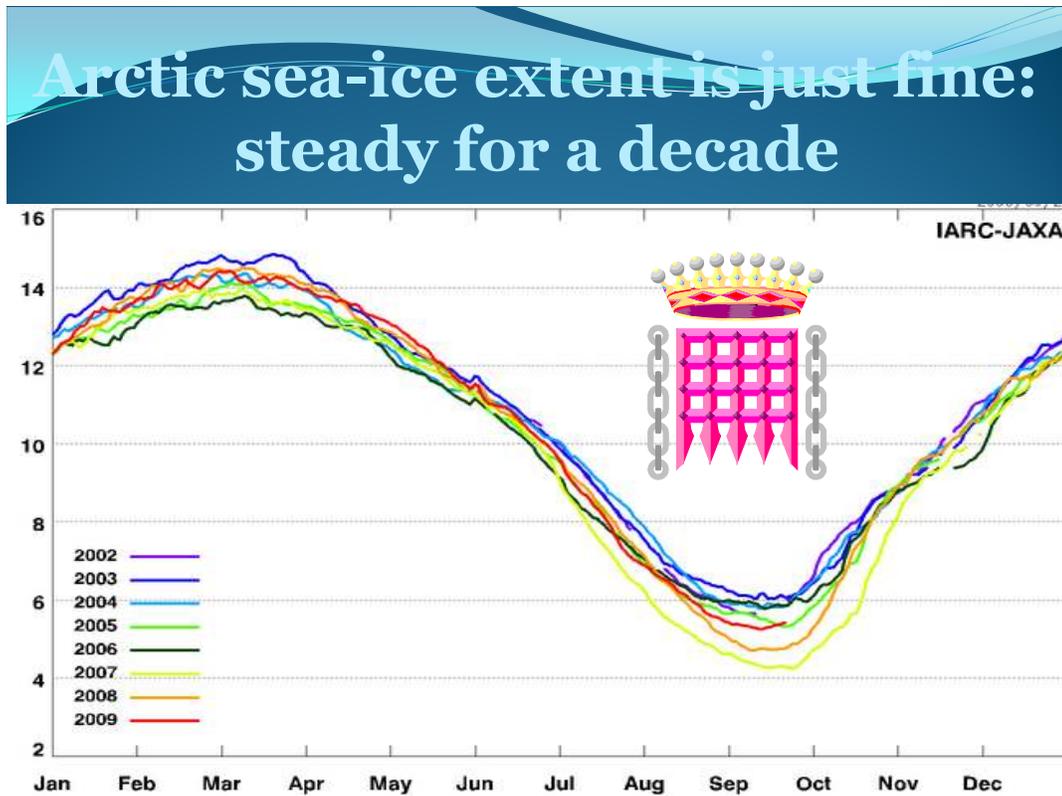
294: May I put the “acidification” question into some perspective by pointing out that the pH of seawater is 8.2, any value above 7.0 being alkaline, and any value below 7.0 being acid, and that clean rainwater is acid, with a pH of 5.6?

295: Since seawater is a highly buffered solution, is it not correct that it can take up a substantial amount of dissolved inorganic carbon without any significant effect on pH, and that in particular there is not the slightest possibility that the oceans could approach the neutral pH of pure water, even if all the fossil fuel reserves in the world were burned simultaneously. Once again, has there not been a widespread failure of perspective here?

296: Why did you select only papers that stated (most of them without much in the way of evidence) that ocean “acidification” may prove a problem? Would you not agree that the following papers provide some evidence that ocean “acidification” may, at least in some species, not be as much of a problem as some have suggested by way of balance:

- Marubini & Thake (1999): Experiments indicate that the pre-existing dissolved inorganic carbon content of the ocean limits coral growth, a limitation exacerbated by nitrate and ammonium, and that adding dissolved inorganic carbon, as we should if we could increase the atmospheric concentration of CO₂, would increase coral calcification rates and confer protection against nutrient enrichment.
- Riebesell (2004): Observations show that coccolithophorids and other CO₂-sensitive taxa should benefit from the present increase in atmospheric CO₂.
- Iglesias-Rodriguez *et al.* (2008) confirm Riebesell's findings experimentally, concluding that coccolithophores, which account for one-third of all marine calcium carbonate production, flourish and calcify much more efficiently at higher levels of CO₂.
- Vogt *et al.* (2008), experimenting with atmospheric concentrations up to thrice today's, found that ecosystem composition, bacterial and phytoplankton abundances and productivity, grazing rates and total grazer abundance and reproduction were not significantly affected by CO₂-induced effects.
- Richardson and Gibbons (2008) reported that in the North Sea there were no observed declines in the abundance of calcifiers with declining pH, and that the role of pH in structuring zooplankton communities in the North Sea and further afield is at present tenuous.
- Gutowska (2008) subjected cuttlefish larvae to CO₂ concentrations of 6000 ppmv, some 15 times today's CO₂ concentration, giving a pH of 7.1. Results showed no differences in soft-tissue growth performance or metabolic rates or mantle growth, though in the 6000 ppmv trial the CO₂-incubated cuttlefish incorporated significantly more calcium carbonate into their cuttlebones than the control group, but with no loss of functional control of buoyancy regulation via the cuttlebones.

Arctic sea ice extent



297: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above) showing the steady seasonal rise and fall in Arctic sea ice over nearly all of the past decade:

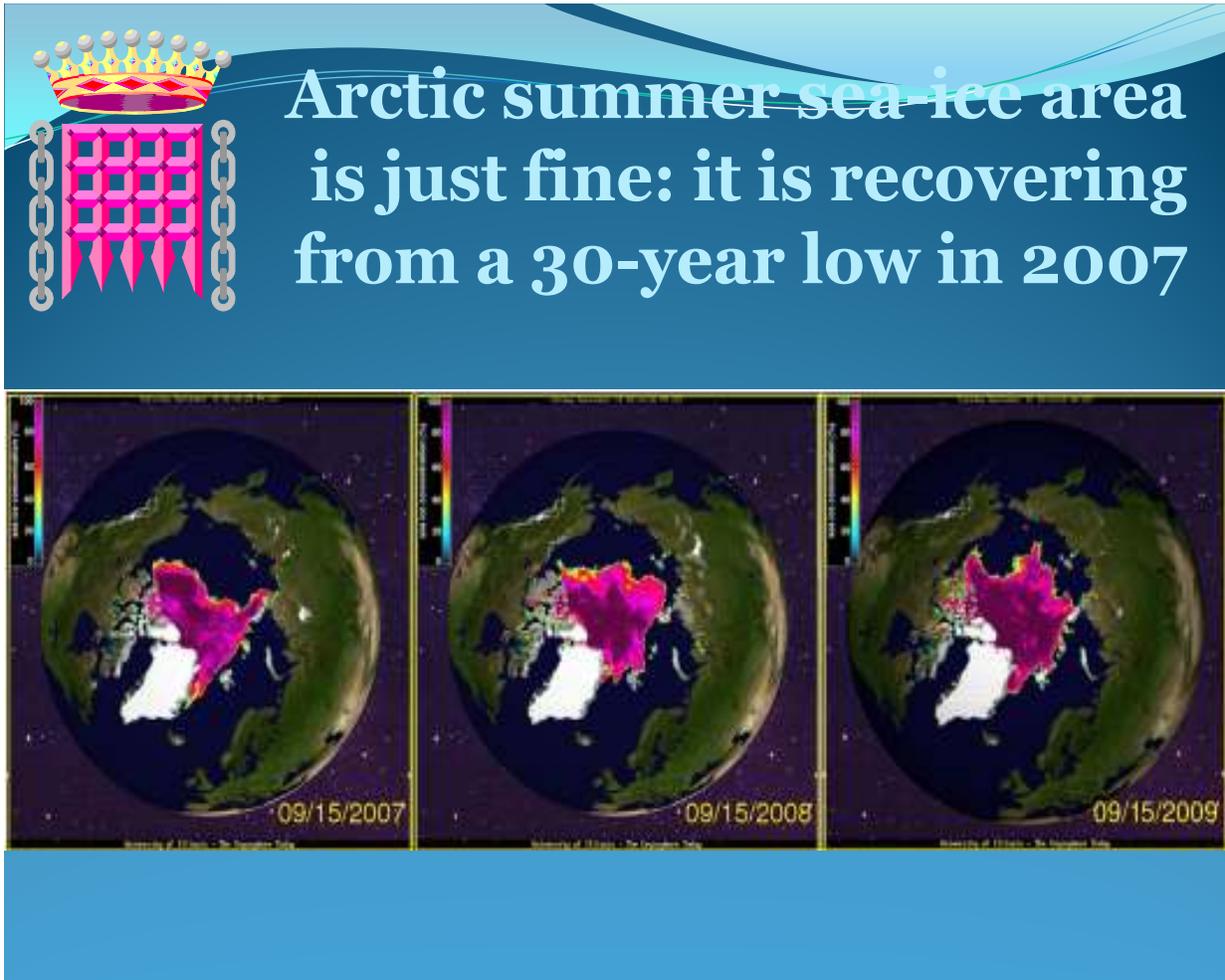
“All right, this is going to be a fun one. Chris Monckton shows a graph taken from IARC/JAXA ... This graph shows ice levels in the Arctic over a year-long period. What you see in this graph is that there’s a rise of ice in the winter, in February and March, when the Arctic ice peaks, and then a fall, and the minimum of the ice occurs in September and October. And what Chris Monckton does, it’s a bit of a sleight of hand, he says, ‘Look at this: ice is going up, and it’s going down: there’s no problem.’ In fact, his title says ice is fine, it’s been steady for a decade. So let’s just try investigating this further, and see where the investigation leads us.

“... So let’s try something crazy: let’s actually write to the IARC. I wrote to John Walsh, their chief scientist. Here’s his reply to me. And, I’ve highlighted one key sentence: “the reductions in Arctic sea ice provide a physical basis for extreme summer losses.” (59-60)

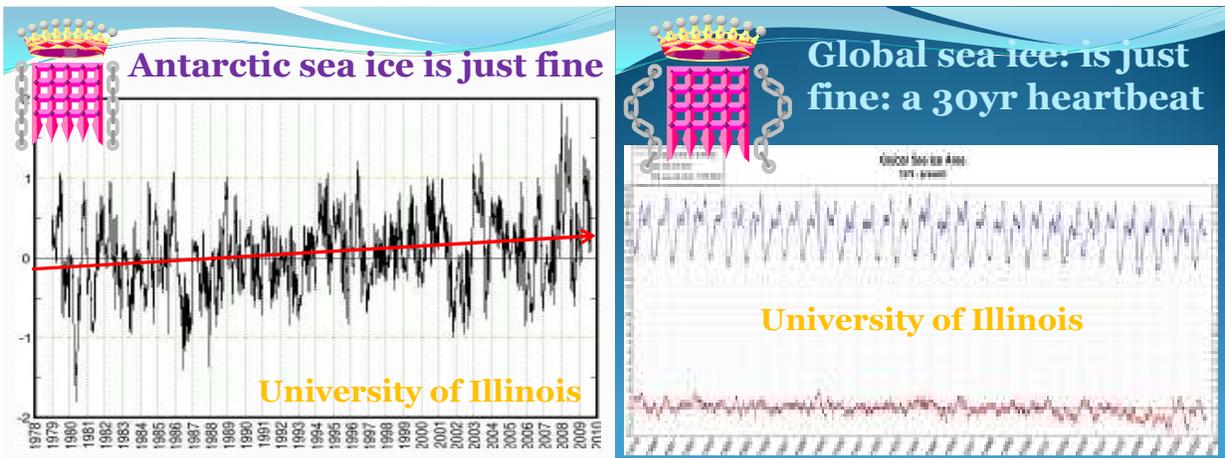
298: Is the graph I have shown an accurate representation of the Arctic sea-ice extent graph from IARC/JAXA?

299: If the graph is accurate, what rational basis do you have for saying that my displaying of the graph amounted to “sleight-of-hand”? One understands that you may find the graph’s results uncongenial, but in that event you can scarcely hold me to blame for it.

299: If the graph is accurate, does it not appear to you that after the **“extreme ice losses”** (60) that persisted for six weeks either side of the summer sea-ice minimum in 2007, there is a **“physical basis”** (60), by means of direct measurement, for the fact that in 2008 there was a partial recovery of the summer sea ice, and for the fact that in 2009 there was an almost complete recovery to the decadal mean?

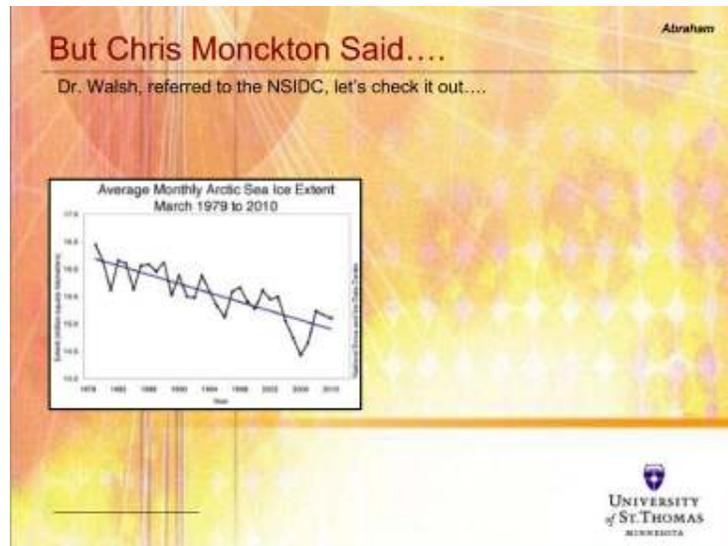


300: If your **“investigating”** (59) had carried you as far as the very next slide in my presentation (above), would not the actual satellite images of the summer minimum sea-ice extent, this time from the University of Illinois, have confirmed the **“physical basis”** (60) for the sea-ice recovery?



301: Might it not also have been fairer if you had also included some mention of my slides showing that Antarctic sea-ice extent has been growing for 30 years (left-hand slide above); that it reached a 30-year peak in October 2007 just three weeks after the Arctic sea-ice extent reached a 30-year minimum; and that, consequently, global sea-ice extent, also from the University of Illinois (right-hand slide above) shows practically no trend throughout the 30-year period of the satellite record?

30-year loss of Arctic sea ice



302: Please confirm that in the following passage I have accurately encapsulated your criticism of me (illustrated by your slide 61, above) for allegedly having failed to draw my audience's attention to the fact that Arctic sea-ice extent has declined over the 30 years of the satellite record:

“You’ll notice that Dr. Walsh referred to the National Snow and Ice Data Center, and they are the repository of information on snow and ice round the world. So if you go to the NSIDC website you’re going to find a graph which is shown here ... What this graph shows, unlike the prior graph Chris Monckton showed, is year to year ice-cover variations, and we know that some years ice goes up, some years ice coverage goes down. Again what you want to look at is the long term trend, indicated by the blue line, and it is sloping downwards. And over the past 30-some years there has been a continuous decrease in ice cover, that’s the big issue. So Chris Monckton may try to confuse you and may try to say that the Arctic ice is just fine, but I think we’re too smart for that, but, you know, Chris Monckton really gave a different story. I mean, am I interpreting this graph wrong? I mean, Chris Monckton says the ice is right. Maybe this is a misprinted graph.

“Let’s go ask Mark Serreze at the NSIDC, see what he has to say. So here’s the email I sent to him and, you know, when I send an email I’m not trawling for answers, I mean, this is the kind of email, pardon the question, I’m a professor at the university, I give lectures, etc., Chris Monckton is a climate skeptic, has been claiming that there is no cause for concern with regard to recent ice loss in the Arctic and that *all* recent losses are temporary and solely caused by wind-ocean fluctuations, and that’s something Chris Monckton did claim. I’m pretty even-handed here: I say my understanding is there’s a systematic decrease. Annual variations are related to oscillations. But the time-smoothed trend is largely a result of Arctic warming. Who’s right? Am I right or is Chris Monckton right?

“Well, can’t be clearer than this: here’s his reply. ‘Monckton is wrong. See below’, the graph. So even the folks at the Center that Chris Monckton is using for data are in disagreement with him.

“Just one more party heard from. I actually wrote another person at the IARC in the UAF (that is the University of Alaska at Fairbanks campus), and I wrote essentially a similar question that I posed to Mark at the NSIDC and here Larry Hinzman writes back, ‘I believe we would side with you on this argument.’ Now, who is he and what does he know? Well, it turns out he’s the director of the IARC.” (61-64)

303: You say the IARC/JAXA Arctic sea-ice extent graph that I displayed does not show **“year-to-year ice-cover variations”** (61). Perhaps you would care to explain what the eight individual curves on that graph represent (*Hint*: the eight curves are individually color-coded, and the colors are clearly labeled “2002” to “2009”).

304: You say, **“Over the past 30-some years there has been a continuous decrease in ice cover, that’s the big issue”** (61): however, is it not well known that the Arctic climate is highly variable, and is it not also true, though less well known because it does not fit the climate-extremist story-line, that Antarctic sea-ice extent has grown just about as fast as the Arctic sea-ice extent has declined?

305: Does not the fact that the growth of Antarctic sea ice more or less matches the loss of Arctic sea ice, so that global sea ice extent shows practically no trend over the 30-year satellite record, suggest to your mind the possibility that the fluctuations in polar sea-ice extent, specifically including the 30-year decline and the temporary loss of summer sea ice in 2007, may have been driven chiefly by regional rather than by global climatic trends? Would you not expect a global climatic trend to produce effects at both Poles simultaneously? Or have I somehow misunderstood the usual meaning of the word “global”?

306: Given that the Arctic climate has long been known to be highly variable, that the earliest photographs in the region show considerable variability of ice extent in the same location but in different years, that in 1922 the US Weather Service reported a major but transient loss of sea-ice extent that easily matched the 2007 loss (a loss that was also transient), that in 1957 an explorer drew a map of the Arctic coastline of Greenland that showed ice extent broadly similar to that of today, and that we only have an accurate record of sea-ice extent going back 30 years, in what sense can it be fairly said that I have tried to **“confuse”** my audience by stating, on the basis of the most recent decade of that record, that Arctic sea-ice extent is “just fine”?

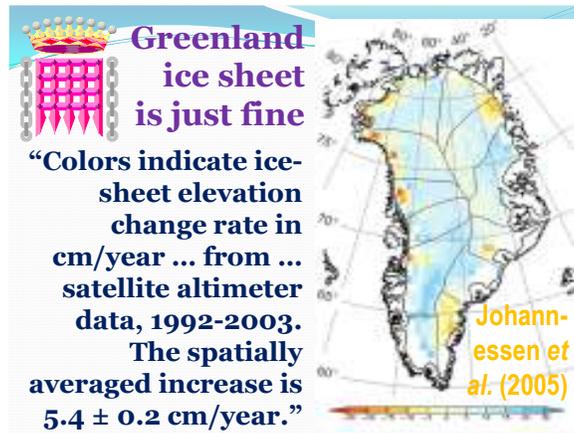
307: You wrote to Mark Serreze at NSIDC to say that, in your own words, **“Chris Monckton is a climate skeptic, has been claiming that there is no cause for concern with regard to recent ice loss in the Arctic and that all recent losses are temporary and solely caused by wind-ocean fluctuations, and that’s something Chris Monckton did claim** (61). Would you be kind enough to draw my attention to that point in my talk at which I said that *all* recent ice losses – rather than merely the sudden ice-loss of 2007 – are “temporary and solely caused by wind-ocean fluctuations?”

308: If, upon checking my talk, you find that the remarks I made were indeed confined to the loss of sea-ice in the summer of 2007, do you appreciate what a serious matter of academic dishonesty it is that you have written, by your own admission, to a senior academic at another institution, lying about what I said, and have then widely published not only your own lie, together with that senior academic’s comment that I was “wrong” – a comment that was prompted solely by the lie you had told?

309: Is the “Mark Serreze” to whom you say you wrote the same Mark Serreze who said in September 2009 that “the Arctic is becoming a blue ocean” and that “we are seeing an expression of climate change here”, but who has more recently admitted that drawing conclusions from the single ice-loss event for a few weeks in the summer of 2007 had perhaps been over-hasty, and that one should not rush to draw conclusions from individual events such as this?

310: Am I correct in assuming that you also conveyed similar falsehood about I had said to the Director of IARC, so that you could provoke him too into saying that he disagreed with what I had said, when in fact he had disagreed only with your misrepresentation of what I had said? If so, what are you going to do to put matters to rights?

The Greenland ice sheet



311: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above) demonstrating by laser altimetry that the Greenland ice-sheet had thickened by more than 2 inches *per year* for more than a decade between 1992 and 2003:

“So the story keeps getting thicker and thicker and thicker. Chris Monckton talked about the Greenland ice sheet being just fine, and there’s no issue of concern here, ice isn’t going down, in fact he quotes a paper by Jonannessen et al., 2005, which talks about Greenland ice sheet. In fact, Chris Monckton says, Greenland ice is just fine, you can see it on the top of the slide. Now, just to be very clear, on the next slide we’re going to go through the actual quotation that Chris Monckton gave in this connection.

“So, Chris Monckton says, ‘Here is a paper by Jonannessen *et al.*, a very diligent Danish researcher, using laser altimetry. And what he found was that from 1992 until 2003 the average thickness of the vast Greenland ice sheet increased by 2 inches a year.’ And I say, ‘Wow! That would be very, very interesting if it were true.’ So, I just did what any good investigator would do: I contacted the author. He referred me to the following paper, a paper from 2009, very recent, and here you see this paper talks about the loss of 273 gigatons of ice loss on Greenland. ...

“A file on Greenland ice loss, I’m just going to take some selected quotes from that paper. ... the trend in surface mass balance appeared to be a response to global climate change’ essentially, the loss of mass of Greenland’s ice sheet is due to climate change. And again, ‘recent observations show the Arctic is particularly vulnerable and it’s warmed by 0.46 degrees since 1979.’ What’s interesting is, and they report that here, the Arctic warming is quite a bit higher than the average. ... ‘attributed increases in Greenland summer temperatures and Greenland ice sheet melt and runoff since 1990 to global warming ... all suggest that a response of the Greenland ice sheet to global warming may be emerging. ...’. So this is the reply from Johannessen, whom Chris Monckton cited. I think Chris Monckton misinterpreted Johannessen’s work.

“And just so you know I’m telling the truth, here is the email from Johannessen with the paper which you can get and the 2009 article which I referred to.

“So that covers Johannessen. So, what about other people? This is a really busy slide. What I want to show is that there are four citations here, I’m not going to go quote by quote through all these papers, but there are papers from 2005, 2006, 2007, 2008. All of these people are talking about ice loss from Greenland related to climate change. Either they’re all wrong or Chris Monckton is wrong. I’ll leave you to decide.” (65-69)

312: Is it not curious, after all the huffing and puffing you do about how you are going to contact Johannessen and put to him my quotation from his paper of 2005, and about how interesting his conclusion would be if it were true, the one answer you do not record from him is his answer on whether his paper indeed contains the quotation reproduced on my slide above, which says that the spatially-averaged increase in the mean thickness of the Greenland ice sheet, measured over more than a decade from 1992-2003, showed that mean thickness increasing by 5.4 cm (that is, more than two inches) *per year*?

313: Am I to take it, in view of your silence on the obvious question whether I accurately recorded what Johannessen's paper had said, that you know perfectly well that I had recorded it accurately and had not misrepresented it in any way?

314: If you now accept, as I think you must, that I accurately cited Johannessen's 2005 paper, perhaps you would care to withdraw and apologize for your serious and of course entirely unfounded allegation that I had "misrepresented" Johannessen's work?

315: If you had simply wished to point out, in a courteous fashion, that Johannessen has revisited the question of Greenland's mass balance since 2005 and has now reached a conclusion that contradicts his earlier work, why did you not do so in a straightforward and honest way, rather than resorting to what you well know to be false allegations that I had "misrepresented" the paper I had cited on my slide?

316: You say, as though the figure you cite is somehow blood-curdling, that Johannessen's 2009 paper talks of a loss of some 273 gigatonnes of ice from the Greenland ice sheet. Since the ice-covered area of Greenland, according to the CIA, is 1,755,637 square kilometers, would I be right in calculating that what Johannessen is in fact reporting here is the loss of *six inches* of mean Greenland ice thickness, or around a quarter of the gain in mean Greenland ice thickness that he had previously reported?

317: Given that the Earth's ocean surface is ~361,226,400 square kilometers, and that the density of ice is 0.915 times that of water, is it right that the 273 gigatonnes of ice loss reported by Johannessen *et al.* from Greenland would be expected to raise global sea level by less than 1 millimeter? Or am I misunderstanding something here?

318: You say, **"What's interesting is, and they report that here, the Arctic warming is quite a bit higher than the average (67),** but surely that warming differential has nothing to do with climate change and is merely what climate scientists call "polar amplification", caused by the advection of warmed air from the tropics towards the poles, where the air subsides? Since this phenomenon is well known, why are you surprised by it?

319: Given the simple calculations by which I have checked whether 273 gigatons of ice loss actually matters, and given my reasons for concluding that the ice loss is insignificant both for the future of the vast Greenland ice sheet and for global sea level, should I see anything in your argument about Greenland, or in the various papers you have cited, that raises any concern that a dynamic ice loss sufficient to cause anything like the 20 ft imminent sea-level rise predicted by Al Gore will occur? Or should I remain with the IPCC and its prediction that a major failure of the Greenland ice sheet is unlikely to occur *for millennia*?

320: Is it not right that, precisely because of the polar amplification at which you seem so surprised, Greenland's climate – like that of the Arctic as a whole – is very volatile, so that Chylek *et al.* (2004) reported that Greenland's air temperature warmed by 2-4 C° in less than a decade in the 1920s, so that by the mid-1930s it was 1-2 C° warmer than it is today?

321: Would you not agree with Cazenave (2006), who concludes that a long series of space-based observations will be necessary before we can resolve the disturbingly large scatter in Greenland's ice-loss calculations as obtained from the GRACE satellites – 50-200 gigatons a year, or 1-4 inches, of ice-loss – and provide a definitive view of what is happening in Greenland?

Himalayan glaciers



322: Please confirm that in the following passage I have accurately encapsulated your criticism of my brief mention of the fact that Professor M.I. Bhat of the Indian Geological Survey (who kindly sent me the above slide, which has proven popular with my audiences) had, on a number of occasions, kindly communicated to me his findings that the 9,575 glaciers that debouch from the Himalayan plateau into India are advancing and retreating much as they have done in the 200 years since the British Raj first kept records:

“I wanna talk about Himalayan glaciers, and Chris Monckton talked about those as well: he said Himalayan glaciers aren’t receding. Well, let’s see what authors researchers in this area say. Berthier *et al.*, 2007. ‘On most glaciers, a clear thinning is measured at low elevations ... This rate of ice loss is twice higher than the long-term (1977-1999) ... All three samples show ice loss.’ They had three samples, all showed ice losses.

“Here’s another paper, published 2005. I’ve got a quote from that paper: Singh *et al.*, 2005: ‘The continuous increase in the emission of greenhouse gases has resulted in global warming, and substantial changes in the global climate are expected by the end of the current century.’

“We’ll do a couple more on Himalayan glaciers, because it’s so popular right now. Ren *et al.*, 2006: ‘Glacier variation is one of many indicators of climate change ... Many glaciers on the south slope of the central Himalaya have been in retreat, and recently their retreat has accelerated ... The strongest warming has occurred in the last 30 years. These data suggest that the current glacier retreat is due to the combined effect of reduced precipitation and warmer temperatures, and, if these conditions continue, the glaciers in the region will continue to shrink.’

“And one more on Himalayan glaciers: Kulkarni *et al.*, 2007: ‘The investigation has shown an overall reduction in glacier area from 2077 sq. km in 1962 to 1628 sq. km at present, an overall deglaciation of 21%. This indicates that a combination of glacial fragmentation, higher retreat of small glaciers and climate change are influencing the sustainability of Himalayan glaciers.’ Could not be clearer.” (70-73)

- 323:** Why have you yet again taken my remarks out of context? Would it not have been fairer if you had admitted to your audience that I had mentioned the Himalayas only in passing, in the context of showing Professor Bhat's entertaining slide and reporting very briefly his conclusions about the glaciers in his care?
- 324:** Please cite the passage of my talk that you would seek to rely upon in justification of your statement that **“Chris Monckton ... said Himalayan glaciers aren't receding”** (70). Did I not in fact cite Professor Bhat as saying that they were doing fine, except where local geological disturbances nothing to do with “global warming” had caused recession?
- 325:** Is it not a fact that many mountain glaciers worldwide have been receding since 1880, long before Man's influence on the climate could have been significant? Does the mere fact of glacial recession allow Man to be blamed as the cause?
- 326:** Do you now admit what you withheld from your audience in your talk: that recently the IPCC has admitted that the Himalayan glaciers, which it had said were receding so fast that they would all be gone in 2035, would in fact still be there until 2350?
- 327:** Did not the lead author of the IPCC chapter in question admit publicly, once the IPCC's error had been exposed, that he knew that the glaciers would not disappear in 2035, but that he had left the incorrect year in place, implying that all of the Himalayan glaciers would have melted away just 25 years from now,
- 328:** Even if I had said that **“Himalayan glaciers aren't receding”** (70), rather than saying that according to an expert at the Indian Geological Survey the pattern of advance and retreat has not shown much change in the 200 years since records have been kept, would it not have been fairer if you had pointed out in your talk the far more serious misstatement perpetrated in the latest official major report by the IPCC?
- 329:** Would it not also have been fairer if you had pointed out to your audience that the literature on the supposed recession of the Himalayan glaciers is by no means as unanimous as you have sought to suggest?
- 330:** Your citation from Berthier *et al.* (2007) mentions recession in just three glaciers. Given that 9,575 glaciers flow from the Himalayas into India alone, is this not another incidence of the fallacy of converse accident – of arguing inappropriately from the particular to the general?
- 331:** Is it not the case that the passage you cite from Singh *et al.* (2005) fails to mention the Himalayan glaciers at all: it merely recites the IPCC's mantra that, as a result of anthropogenic “global warming”, there will be substantial changes in the climate by the end of this century? Would it not have been more informative for your audience if you had presented something of the *evidence* that Singh *et al.* had to offer of the effect of these “substantial changes” on the climate of the Himalayas?
- 332:** Are you aware of the paper by Yadav and Singh (2002), who studied tree-ring-based spring temperature patterns over the past 400 years in the western Himalayas, and reported that “The most conspicuous feature of the temperature reconstruction is the long-term cooling trend since the late 17th century that ended early in the 20th century.” The abrupt termination of this cooling, which marked the end of the Little Ice Age, led to the warmest 30-year period of the 20th century in the region: 1945-1974.
- 333:** Does not Yadav & Singh's conclusion that even the exceptionally warm 30-year period from 1945-1974 in the western Himalayas was “well within natural variability” tend to confirm Professor Bhat's point that the pattern of advance and recession of the Himalayan glaciers today is not unusual?
- 334:** Are you aware of Chaujar (2009), who reports that “research on various glaciers of the northern and southern hemisphere has shown that most of them started their retreat in the mid-18th century, thereby indicating the end of the Little Ice Age maximum, which ... suggests the possibility of a common trend in mountain areas of both hemispheres and the Himalayas”, indicating that “climatic changes in the world

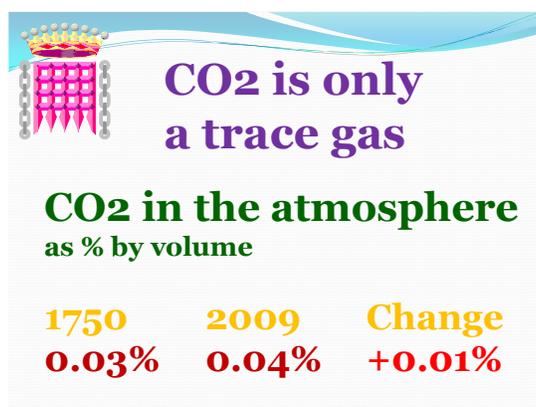
started during [the] early to mid-18th century”, long before the anthropogenic increase in atmospheric CO₂ concentration could have had any effect on their retreat.

335: Does not Chaujar’s result suggest to your mind the possibility that, where the Himalayan glaciers are retreating, along with other mountain glaciers worldwide, the retreat may be caused – at least in part – by a continuing recovery of global temperatures after the Little Ice Age? Would it not have been fairer if you had drawn your audience’s attention to results like this, by way of balance? Does not Chaujar’s result tend to support my conclusion that many glaciers worldwide began to recede in the 1880s, and some in the 1820s, long before CO₂ concentrations had risen enough to make any measurable difference?

336: Are you aware of Bhattacharyya *et al.* (2007), who report that a climate reconstruction based on analysis of lake sediments in the North-East Himalaya showed a “warm and moist climate, similar to the prevailing present-day conditions” around AD 240, coinciding with the later part of the Roman warm period, and another similar period that was “warmer [than the present] 1100 years before the present (around AD 985), corresponding to the Medieval Warm Period”?

337: Are you aware of Cook *et al.* (2003), who report a tree-ring temperature reconstruction of the Himalayan region of Nepal, which they describe as “the best yet produced from the High Asia region spanning the Himalayas, Karakoram, and Tibetan Plateau”? The paper reports that in the past 25 years only the October-February period shows any indication of unusual late-20th-century warming”, but even then the temperatures were not as great as those a century earlier, so that, for the Oct-Feb season there was no net warming, and perhaps even a slight cooling, over the past 100 years, and, for the February to June period, there was a net cooling, with temperatures having dropped dramatically through the late 1950s and early 1960s and remaining below the long-term average to the end of the record.

CO₂ is only a trace gas



338: Please confirm that in the following passage I have accurately encapsulated your criticism of my slide (above) describing CO₂ as “only a trace gas” and showing that its atmospheric concentration, as a percentage of the atmosphere by volume, has increased from 0.03% to 0.04%, an increase of 0.01% of the atmosphere by volume:

“And we’re going to skip forward a little bit, because the number of errors Chris Monckton makes is so enormous it would take a thesis to go through every single one of them. I’m trying to pick a representative sample. He says that the change in CO₂ as a percentage by volume is 0.01%. And this is the danger of small numbers. What people would infer from this is that there hasn’t been much of a change in CO₂. Now, technically what he’s saying is CO₂ as a percentage of the atmosphere hasn’t changed very much. The inference that people get is incorrect, based on these numbers. And let’s help him with his math. Let’s get these numbers in a little more detail.

“Chris Monckton suggests that because carbon dioxide is a trace gas it cannot affect the climate. And the increase is 0.01%. If we look at the math, the current level is 390 [parts per million by volume], the pre-industrial level is 280 [ppmv], that’s a 39% increase in carbon dioxide, not a 0.01% increase. A significant increase, and we know that the increase in carbon dioxide is from the increase in burning fossil fuels: in fact, there’s an isotopic signature that proves that, so there’s no question, no reputable scientist says that the increase has been small or that it’s not due to humans. It’s clearly due to human emissions.” (74-75)

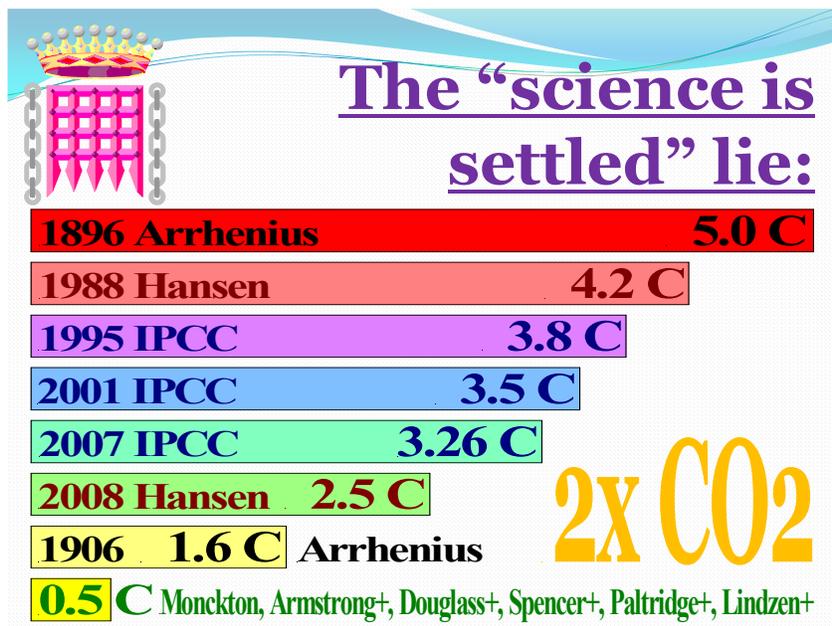
339: May I help you with your math? 280 parts per million by volume is approximately 0.03% of the atmosphere, as my slide correctly shows. 390 parts per million by volume is approximately 0.04% of the atmosphere, as my slide correctly shows. The increase from 280 to 390 parts per million by volume over the past 260 years, on your own figures for CO2 concentration, which are about right, is 110 parts per million by volume, which is approximately 0.01% of the atmosphere, as my slide correctly shows. Do you agree? If not, on what rational scientific basis do you disagree?

340: Why, when mentioning the atmospheric concentration of CO2 in your talk, did you twice give the value of the concentration without mentioning the unit in which that value is expressed? Could it be that you omitted this unit because if you had included it your audience would at once have realized that my slide was at all points correct?

341: Given that the arithmetic in my slide was at all points correct, why did you say at this point that you are going to help me with my math? Is it not blindingly obvious to you that I needed no help with my math, since my math – as long as the units of measurement are not concealed from your audience – was at all points correct?

341: Though you imply that I denied that anthropogenic influences have caused the increase in CO2 concentration that has occurred since 1750, can you provide any quotation from anything I said in my talk that would give you any justification for any such implication?

342: Though you have stated, when talking about the numbers on my slide, that **“the inference that people get is incorrect, based on these numbers”** (74), did I not make it explicitly plain in at least two places in my talk that the central question in the climate debate was *how much* warming a given increase in CO2 concentration would cause?

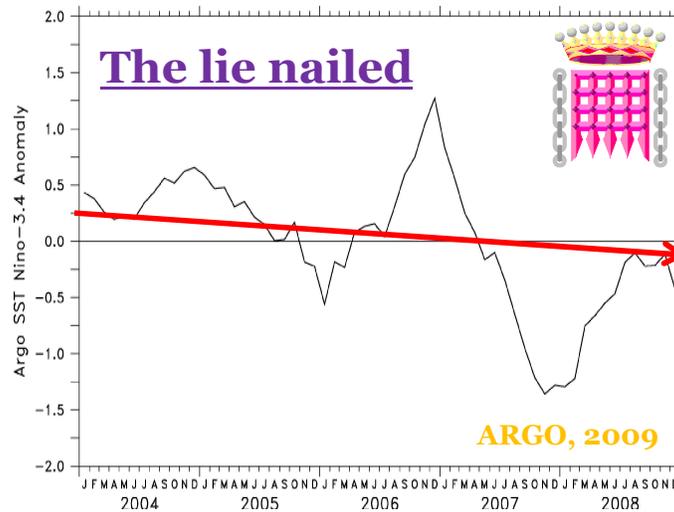


343: Did I not also make it explicitly plain at several points in my talk that increases in CO2 concentration would indeed cause warming, and did I not show a histogram providing various estimates of how much warming increases in CO2 concentration would cause, including an estimate from me? (*Hint:* The slide is above).

344: Does the IPCC refer to CO2, as I did, as a “trace gas”? [*Hint:* Yes.]

345: Do you think the IPCC is wrong to refer to CO2 as a trace gas? If not, then why do you take me to task for calling it what it is?

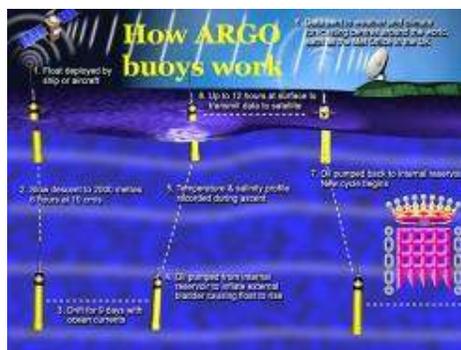
Recent ocean cooling



346: Please confirm that in the following passage I have accurately encapsulated your criticism of my use of the slide (above), by which I demonstrated by reference to the data from the ARGO bathythermograph network that across the six years of the 3000+ automated buoys’ deployment throughout the world’s oceans, the buoys have been reporting via satellite that the oceans have been cooling:

“Let’s move on to oceans. One of the things that Chris Monckton claims is that oceans are cooling. ARGO, 2009. In the past, Chris Monckton has used the name of the author, so you might think ARGO is the name of an author. ARGO is the name of a float which is used to measure temperature around the world, so maybe Chris Monckton doesn’t understand that issue, but ARGO is not an author. This is not a citation. ARGO 2009 is no paper that has ever appeared” (76-77).

347: Did I not make it explicit, in my opening remarks in my talk, that I should be relying upon the peer-reviewed literature and also the published scientific *data*? Is it not a fact that the 3300+ automated bathythermograph buoys of the ARGO project are intended to provide, and do provide, *data*?

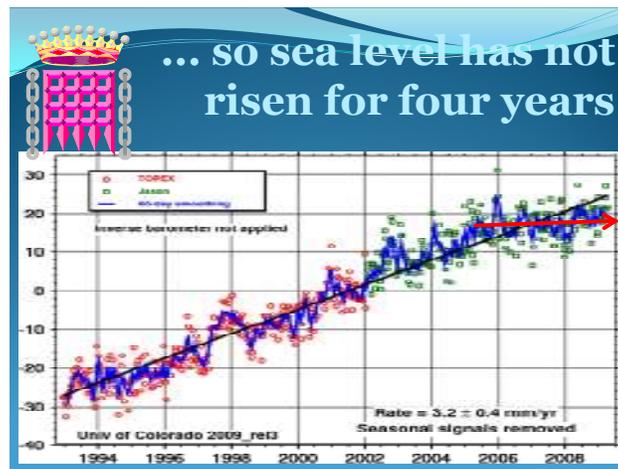


348: Given that in my talk I had explained to the audience, by reference to the above schematic, how the ARGO bathythermograph network operates, what rational basis would you like to offer for your statement that **“ARGO is the name of a float which is used to measure temperature around the world, so maybe Chris Monckton doesn’t understand that issue, but ARGO is not an author”** (77)?

349: If, as a non-climate scientist, you were unfamiliar enough with what is one of the world’s most elaborate systems for measuring sea-surface temperature that you could not at once identify the ARGO project from the word “ARGO” on my slide, why did you not simply contact me and ask?

350: If you look at the page related to the Pacific Marine Atlas on the ARGO project’s central website at http://www.argo.ucsd.edu/Marine_Atlas.html, can you not see the graph that I reproduced in my slide? Is it not, therefore, a respectably-sourced graph that has indeed **“appeared”**, and in a reputable place?

Sea level and temperature



351: Please confirm that in the following passage I have accurately encapsulated your criticism of my use of the slide (above) in which I showed that sea level is rising at just 1 ft/century, a value I mentioned in my talk, and that in the four years up to my presentation it had scarcely been rising at all:

“But let’s go further and see what Chris Monckton says about sea level and sea temperatures. You see a graph, and there isn’t a publication citation, but on the left you can see ‘Univ. of Colorado, 2009’. So I’m going to expect that this data came from the University of Colorado. And what you see here, and it’s not clearly labelled, but this is supposedly sea-level rise, and what Chris Monckton says is, ‘Hey, in the last four years there’s been no rise in sea level.’ So you get this trend for a decade and a half, and then it looks like there’s this flat period. And the question is, ‘You know what, has global warming stopped?’

“ . You notice, though, that there are other periods of time when it doesn’t look as though there’s a sea-level rise. Look at from 1998-2001, there was very little sea-level rise. Look again from 2001-2002, there’s actually a decline. What you want to do is you want to look at the general trend, what’s called the smoothed trend in the slope. So I would argue with his interpretation of this slide, but let’s see what the authors of the slide themselves would say.

“... Let’s ask the researcher who made that figure. [In his email replying to me,] he says, ‘There is a levelling-off over the past c. 1.5 years, but Monckton’s conclusion that sea level rise is over on this basis strikes me as a bit like assuming at dusk that the sun will never

rise again. It's not actually an impossible outcome, but it's probably worth waiting until morning to find out if you're right.' Then, again, later, he says: 'But not enough to explain exactly what's happening. Predictions tend to be a rash business, and if Monckton is claiming that the evidence shows that sea level rise is now over, that's a lot more rash.' So this author, who provided the data that Monckton used, does not agree with the conclusion Monckton drew" (78-79).

352: If, notwithstanding the plain words "Univ. of Colorado" which you accept are clearly visible, you were uncertain whether the graph of sea-level rise from the University of Colorado that appears on my slide is a graph of sea-level rise from the University of Colorado, why did you not simply get in touch with me and ask? Is that not what a real researcher, a real scientist, would do?

353: Given that the graph is clearly labeled "... so sea level has not risen for four years", would you care to explain on what rational basis you say, **"... it's not clearly labeled, but this is supposedly sea-level rise"** (78)?

354: Did I at any point or in any way use the above slide to raise the question you have put in my mouth, **'You know what, has global warming stopped?'** (78)? If so, please quote back to me exactly what I said.

355: Given that this is plainly a slide about sea-level rise, why have you put in my mouth a question about whether *global warming*, as opposed to *sea-level rise*, has stopped? Do you have difficulty in comprehending the notion that global warming and sea-level rise are different concepts, and that global warming is not the only factor that affects sea level?

356: Once again, have you not stripped this part of my presentation away from its context, invented a new context of your own that was not in any way mentioned by me, and then attacked your own fiction rather than what I actually said? Do you regard such misconduct as academically honest or acceptable?

357: Did I not make it plain that at this point in my talk I was reviewing some of the evidence that anthropogenic influences might not have been the cause of the 300-year period of warming that ceased in the mid-1990s; that I had pointed out in the previous slide that for the entire six-year period of the ARGO bathythermograph project, which measures sea temperatures throughout the world's oceans via automated buoys reporting their data by satellite, the oceans had not been accumulating heat, as the "official" theory suggested they should, but had been cooling; and that I was looking at the sea-level data to see whether there was any evidence of a slowdown in the thermal expansion of the oceans in the past few years to correspond with the recent cooling of the oceans?

358: Is it not a fact that at the time of my talk there did appear to have been a slowdown in the rate of sea-level rise over the past four years?

359: Had I not made it explicit earlier in my talk that sea level was rising at about 1 ft/year?

360: Did I say anything in my talk to the effect that I believed the long-run trend in sea-level rise that I had stated was at about 1 ft/year would permanently decline, let alone that it had ceased altogether? If so, please cite the relevant passage from my talk.

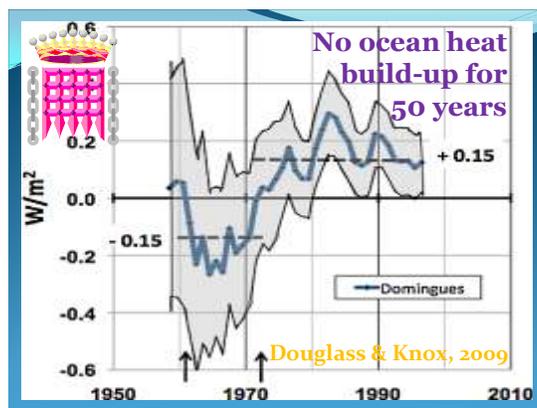
361: Since you have not supplied to me the email you sent to the researcher who produced the University of Colorado's sea-level graph, perhaps you would be kind enough to send me a copy of your full correspondence with him.

362: Am I correct in deducing that in your correspondence or conversations with that researcher, you told a lie to the effect that I had stated in my talk that sea level rise had permanently ceased, or would do so? Is that conclusion not fairly deducible from the researcher's answer that **"There is a levelling-off over the past c.**

1.5 years, but Monckton's conclusion that sea level rise is over on this basis strikes me as a bit like assuming at dusk that the sun will never rise again" (79)?

363: Since I did not in fact draw any conclusion to the effect that sea-level rise had permanently slowed, still less stopped, do you not appreciate how academically dishonest of you it was to tell the researcher that that was what I had said, and then to encourage that researcher to criticize a conclusion that I had not in fact stated, and then publicly to disseminate his understandably hyper-critical response that **"predictions tend to be a rash business, and if Monckton is claiming that the evidence shows that sea level rise is now over, that's a lot more rash" (79)**, and then to add your own characteristically pusillanimous little gloss to the effect that **"... this author, who provided the data that Monckton used, does not agree with the conclusion Monckton drew" (79)**, and to draw the general conclusion at the end of your talk that I am untrustworthy on the ground that this and other researchers to whom you have lied have disagreed with your serial, serious, and wilfully mendacious attributions to me of statements that you know I have not made?

No change in top-of-atmosphere radiative flux for 50 years



364: Please confirm that in the following passage I have accurately encapsulated your criticism of my use of the slide (above) in which I refer to the peer-reviewed paper by Professors David Douglass and Robert Knox of Rochester University, New York State, published in 2009, in which they conclude – contrary to data from NOAA and other sources – that the degree of net accumulation of heat in the oceans required to match the “official” theory of manmade warming had not occurred for at least half a century, a conclusion I said they had reached after considering data such as that implied from Domingues (2008) that is shown in the slide:

“Now we’re getting out of the business of sea-level rise and we’re getting into ocean heat level. On this slide, Chris Monckton presents data from someone named Domingues, we’ll get into their data on my rebuttal slide. But you see the statement at the top, it’s as clear as can be: he says, ‘No ocean heat build-up for 50 years.’ So Chris Monckton is saying on this slide that the ocean hasn’t heated in 50 years and he’s used Domingues’ data to show that. I want to point out on the left he uses units of Watts per square meter and that is not a measure of heat: that is what’s called an energy flux. The proper units of energy are joules. So Chris Monckton does confuse his units here. But let’s go on and let’s see what Domingues says:

“And again, I mean, Chris Monckton showed this data – no ocean heating for 50 years – and, you know, if that were true, that would be incredible, and it would be great news. Here’s the actual paper that’s cited, it’s a 2008 paper published in the journal *Nature*, and here’s a graph from the paper and you can see that on the left-hand side there’s ocean heat content in joules, as I mentioned, and you can see that there’s an inexorable rise in ocean temperatures and energy over the recorded period. I did write to Domingues, and here is the response: “You are correct”, meaning John is correct, “and the upper 700 m of the ocean has warmed” as published in the 2008 paper which they did attach to the email. So

Chris Monckton has misused Domingues' data, in fact, misused is I think a little too easy to say: Chris Monckton has misstated the data: the authors and the paper themselves disagree with the statements that Chris Monckton has made. It can't be clearer than that."
(80-81)

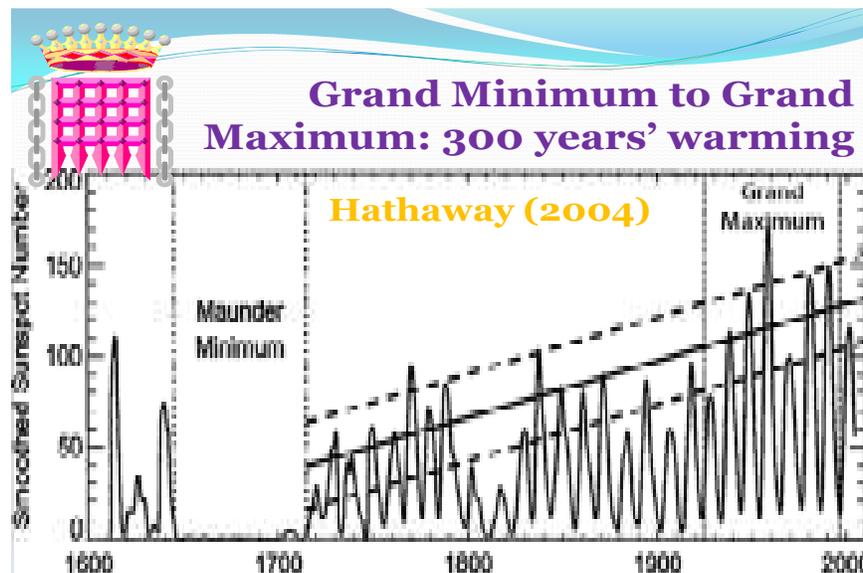
365: Do you not concede that, yet again, you have taken my remarks out of the context in which they were made, which was that the cooling of the oceans in recent years, as shown by the ARGO results, appeared to contradict the "official" theory of "global warming", and that Douglass & Knox (2009), whose graph of top-of-atmosphere radiative fluxes implicit in ocean heat-content data from Domingues (2008) I showed, had concluded from these and other observations that there had an insufficient increase in ocean heat-content, [and hence no increase in top-of-atmosphere radiative fluxes], for half a century?

366: Since Douglass and Knox (2008), in their graph, were presenting the top-of-atmosphere radiative fluxes implicit in the ocean heat-content data from Domingues, with whom they had had constructive discussions, would you not expect the units in the graph to be in Watts per square meter, as they are?

367: Is not the bottom line this: that if net top-of-atmosphere radiative fluxes, as inferred from changes in ocean heat-content data, are in fact net-zero or even slightly net-negative, what evidence is there the large-scale, net-positive change in radiative flux at the top of the atmosphere that is essential to the "official" anthropogenic-global-warming theory, so that it is evident from Douglass & Knox's paper that in a number of fundamental respects the real climate is simply not responding in the alarming fashion predicted by the IPCC's theory?

368: Would it not have been fairer if you had not withheld from your audience the fact that I had stated that NOAA disagreed with the idea that ocean heat content had not increased?

The Sun-climate connection



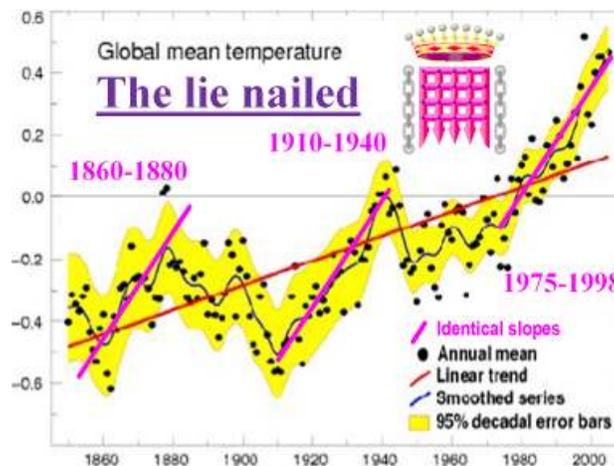
369: Please confirm that in the following passage I have accurately encapsulated your criticism of my use of the slide (above) from Hathaway (2004), illustrating the fact that for the 70 years of the solar Grand Minimum, 1645-1715, there were very few sunspots visible on the Sun, so that it was less active than at any time in the previous 11,200 years; that thereafter solar activity increased very rapidly for 300 years, culminating in the 70-year solar Grand Maximum of 1925-1995, peaking in 1960, when the Sun was more active than at almost any time in the previous 11,400 years; and that, according to Scafetta & West (2008), some 69% of recent "global warming" was attributable to solar activity?:

“The next issue that Chris Monckton takes up is solar effects. He says, ‘Hey, maybe this global warming is due to solar effects.’ And it’s sort of funny, because in some cases Chris Monckton says there is no global warming, and then in other cases he says, ‘Hey, it is warming, but it’s due to this effect or that effect.’ On this slide he says, ‘You know what? It’s warming, but it’s due to solar impacts. Solar energy is increasing.’ And he cites Hathaway, 2004. Let’s see what the author has to say about Chris Monckton’s interpretation.

“... I wrote to Hathaway: I actually read the paper. It doesn’t say – huh - that the global warming is due to sunspots or solar activity. And here is a quote from the author: ‘I did not then, nor did I ever, suggest that solar variability plays a dominant role in climate change.’ I think Hathaway was pretty upset that Chris Monckton had used his data in such a way.” (82-83)

370: Though you say I said, “Hey, maybe this global warming is due to solar effects” (82) [and, by the way, I seldom say, “Hey”, and I should also hesitate to say “due to” where “owing to” would perhaps be grammatically preferable], did I in fact use these words? Or did I merely point out the increase in solar activity evident in Hathaway’s slide, and then cite *not* Hathaway, as you have falsely alleged, but Scafetta & West (2008) to the effect that some 69% of recent warming was heliogenic?

Was I inconsistent about “global warming”?



371: You have said, “And it’s sort of funny, because in some cases Chris Monckton says there is no global warming, and then in other cases he says, ‘Hey, it is warming, but it’s due to this effect or that effect.’” (82). Please look at the above slide from my talk, which – just to remind you, since you seem unable to recognize this well-kent climatological dataset on sight – is the Hadley/CRU global-temperature dataset from 1850 to 2005. Is it not clear to you from even the most cursory inspection of that graph that, within the long-run warming trend of 0.4 C°/century, there are various periods when it is warming and various periods when it is cooling?

372: If there was any point in my talk during which I ever said that there had been “no global warming” (82), would you be kind enough to point it out to me?

373: Do you think that anyone who, as you appear to do, fails to recognize that there have been various periods of cooling as well as warming in recent history – such as the cooling over almost a decade from the turn of the millennium to the present – has anything useful to contribute to climatological discussion?

374: Since you say you “actually read” (83) Hathaway’s paper, do you now accept that the graph of sunspot activity that I reproduced in my talk, and labelled “Hathaway 2004”, is indeed the graph from Hathaway’s paper?

375: Does that graph, or does it not, show solar activity increasing over the past 300 years?

376: Did I, at any time in my talk, state that Hathaway had ever suggested **“that solar variability plays a dominant role in climate change”** (83)?

377: Or did I, in my talk, show Hathaway’s slide indicating that solar activity had increased over the past 300 years, and then, *without citing any opinion of Hathaway’s at all*, remark that two entirely different authors, Scafetta and West (2008) had attributed some 69% of recent warming to solar activity?

378: Once again, you have cited Hathaway’s comment on what you told him I had said, without revealing to your audience what you told him I had said. In view of the many previous instances in which it is clear that you have wilfully distorted what I have said, have invited comments on your own distortions of my words, and have then seen fit to publish those comments and then to hold those comments against me, do you appreciate why it is that I require you to supply me with copies of your email correspondence with all of the third parties whose comments you have used in your talk, including Dr. Hathaway?

IAU symposium, 2004



379: Please confirm that in the following passage I have accurately encapsulated your criticism of my use of the slide (above) in which I record the conclusions of a symposium under the aegis of the IAU in 2004:

“... He says that, and this is really incredible ... On the lower right you see the letters “IAU” – that stands for “International Astronomical Union”. And in 2004 they had a conference. And Chris Monckton said that the IAU came out with this statement. And the statement is shown on the slide here. So you would assume, in fact not assume, there’s no assumption that needs to be made, Chris Monckton said that this was an official statement coming out of the 2004 meeting. Well, I took the crazy and radical step of asking the IAU. Let’s see what they say.

“I figured the president of their division on sun and heliosphere would know a little bit about this, so I asked, and here’s the reply. ... “There is not such a formal position endorsed by the IAU, let alone any claim from IAU that suggests that global warming (defined as the heating trend observed on Earth during the last *[sic]* mid 20th century) can be explained by solar variability. Please pass this information to whoever might have used IAU name to claim otherwise.” That is a clear rebuttal of Chris Monckton’s statement. And what’s incredible is this: if you’re listening to the presentation that Chris Monckton gives and you say, “Oh, man, the IAU says global warming is due to solar activity, Hathaway says it, and all these authors are telling me a story which I’m not hearing in the media”, unless you dig into these issues you’re not going to find the truth, and Chris Monckton is – this is a very bald misrepresentation of the IAU’s statements. And I can tell you from my communications with them that they were at the very least upset.” (84-85)

380: Did I say that the statement shown on the above slide “**was an official statement**” (85)? Or did I say, instead, that the IAU had had a symposium in 2004, and that the symposium had projected that because of the then-quietening sun we were in for a period of global cooling?



381: Were not the members of the symposium who made the projection I stated in my talk proven right? [Hint: the above slide, taken from my talk, shows the temperature record for 2005 to early 2009, with the least-squares linear-regression trend on the data].

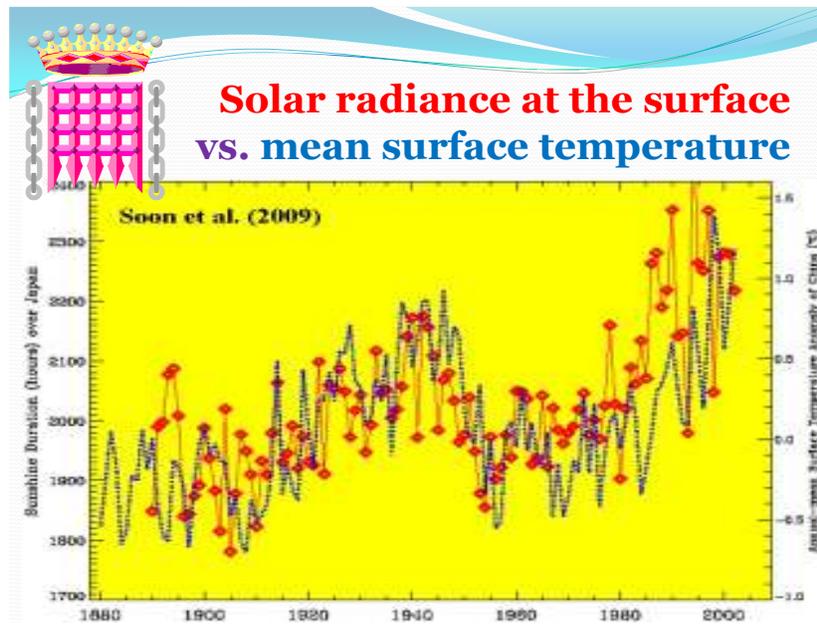
382: Did I not go on to say that the “global warming” over the past 300 years had been very small, and that, although most solar physicists considered the sun influential, it was not necessary to posit solar or any other influence as the cause of the warming of the last 300 years, which fell well within the natural variability of the climate?

383: Did you not notice that the quotation that you gave from the IAU spokesman whom you consulted does not actually address the questions whether the IAU actually held a symposium in 2004 (it did), or what conclusions it came to?

384: Given that you have not, in what you call your “investigation”, actually found out what the conclusions of the IAU’s 2004 symposium were, do you have any rational or scientific basis for your assertions that, in what you will now appreciate was my mild and sensible account of those conclusions was a “**misrepresentation**” (85)?

385: Once again, I must insist on being shown what you told the IAU I had said, so that I may discern whether they were “**upset**” (85) by any error that I may have made in giving an account of the conclusions of the 2004 symposium or whether they were instead upset because you had exaggerated or misrepresented what I had actually said, as you appear to have done so often throughout your talk?

The Sun-temperature connection in Japan



386: Please confirm that in the following passage I have accurately encapsulated your criticism of my use of the slide (above), which I said had not yet been published, but which appears to indicate a correlation between changes in the hours of sunlight striking pyranometers at various points on the Japanese land surface over the past 130 years (plotted in red) and changes in regional surface temperature (in blue):

“All right, well, he continues on with the solar activity ... and he references Soon (2009), Soon stands for Willie Soon: 2009 would be the year it was published. And when Chris Monckton gave this presentation that paper hadn’t been published. I did a search, and maybe it’s been published now, I don’t know, but I do know a little bit about Willie Soon and we’re going to talk a bit about who he is. But first I want to talk about solar. If you look at this graph, it’s a confusing graph, but it shows temperature scale on the right, it shows sunlight duration hours over Japan, so this is a localized measurement. Says, ‘Hey, solar radiation and mean surface temperature, they’re linked – it’s the Sun, why do we care about greenhouse gases.’ So let’s see how scientists interprets this argument, because at the outset it sounds convincing.” (86)

387: Is it not the case that I made it explicit in my talk that the graph by Dr. Soon **“hadn’t been published”** (86)? Given that I had made that fact explicit, why did you need to do a search to reveal the fact that it had not been published? Why make an issue of it at all?

388: In what way is Dr. Soon’s graph **“confusing”** (86)? Are you perhaps unfamiliar with the standard methods for graphical representation of climatological data? You do seem to have a remarkable difficulty in understanding even the very simplest graphs. Or do you say the graph is “confusing” merely because you find its results uncongenial? Please explain.

389: Would it not have been fairer if you had pointed out that I made it explicit in my talk that the apparent correlation between the anomalies in sunlight reaching the surface and in regional surface temperature did not necessarily imply causation?

390: You say, **“I do know a little bit about Willie Soon and we’re going to talk a bit about who he is”** (86). But why do you need to know anything at all about Dr. Soon in order to examine a straightforward plot of recorded hours of sunlight in Japan against a straightforward plot of temperatures in the region?

391: Is it not obvious to you that the two datasets plotted in this graph are readily available to scientists, and that you could – if you had genuinely wished to check Dr. Soon’s result – have obtained the original data from him, as I did?

392: Though data from pyranometers in other regions do not always show the correlation with surface temperatures that the Japanese data show, would you not accept that, since the Japanese record is the longest reliable regional pyranometer record we have, it is of no small evidential value, and raises the possibility of organizing an ARGO-style project to obtain and automatically to report standardised pyranometer and temperature measurements from locations all round the world?

393: Do you not understand that the IPCC itself admits that the largest source of uncertainty in its attempts to determine solar activity is the changing pattern of cloud cover worldwide, and that, therefore, Dr. Soon’s consideration of this question is both necessary and welcome?

394: Are you aware of results such as that of Pinker *et al.* (2005), and of several other researchers and data gathering organizations? Pinker found that in 18 years and 1 month from 1983-2001 a naturally-occurring global brightening, attributable at least in part to a reduction in cloud cover at low latitudes and altitudes, had increased the flux of solar radiation reaching the surface by 2.9 Watts per square meter, an increase sufficient to account for all of the “global warming” over the period?

The literature on the Sun and climate

395: Please confirm that in the following passage I have accurately encapsulated your criticism of me for having failed to take account of various papers on solar activity and climate that you cite, which I have reproduced in red below. I shall add my comments after each paper you have cited:

“So I’m just going to go through a few of these [papers]. ...

- **“Benestad & Schmidt, 2009, very recent, says that ‘Our analysis shows that the most likely contribution from solar forcing on global warming is $7 \pm 1\%$ for the 20th century and is negligible for warming since 1980.’ That means 93% of it cannot be related to solar variability.”** (87).

396: Would it not have been fairer if you had at least made some reference to my citation of Scafetta and West (2008), who found that more than two-thirds of recent “global warming” was attributable to solar variability, showing a difference of opinion between different solar researchers rather than citing only those on your side of the case and then misleadingly inviting your audience to draw the conclusion that my mildly-worded suggestion that solar variability might have had some influence on climate was altogether scientifically baseless?

- **“Pittock, 2009: and here the author reviews 100 papers and concludes that there is little correlation between sunspot cycles and climate.”** (88).

397: Are you not aware of the results of the astronomer William Herschel in 1801, who, when reading a table of annual anomalies in grain prices in Adam Smith’s *Enquiry into the Nature and Causes of the Wealth of Nations*, concluded that the grain prices were anti-correlated with the 11-year cycles in sunspot activity, suggesting that even the very small variations in total solar irradiance over the 11-year cycles were having a detectable effect on climate, such that more sunspots and consequently greater solar activity caused better growing seasons, grain surpluses and a drop in grain prices?

- **“Rozelot & Lefebvre, 2006: ‘Changes from 1861-1975 show an unexpected remarkable correlation, whereas the period 1976-2000 completely deviates from the previous analysis.’ This paper shows that since 1975 there’s been a deviation of solar direction and**

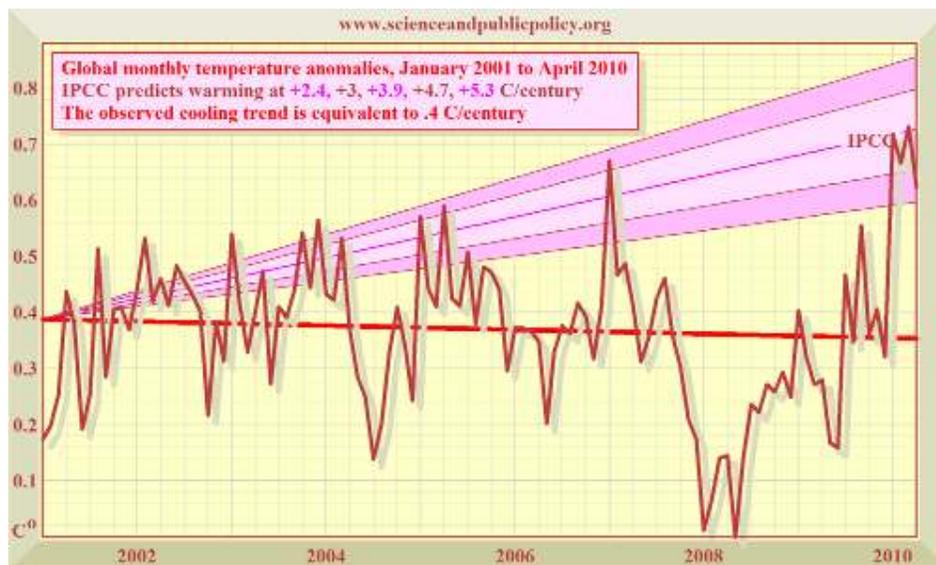
global warming, which means that the sun radiation is going down since 1976, yet global temperatures are going up. They're deviating from each other. We'll continue on.” (89).

398: Is it not true that the “deviation” between the direction of solar activity and “global warming” coincided with the pronounced reversal of the Pacific Decadal Oscillation from its cooling to its warming phase in 1976?

399: How difficult is it for you, as a non-climatologist, to understand that in a complex, non-linear, chaotic object such as the climate there are numerous influences simultaneously at work, which will sometimes pull together and sometimes countervail against one another, so that simplistic correlations such as that which you wrongly accuse me of making generally break down from time to time?

➤ **“Lockwood 2008. Notice that most of my papers are recent. I could have found 100 or more papers that deal with solar impacts and the small effect they have on climate change. I tried to just pick some sample recent papers to provide the strongest argument in the shortest amount of time, but this paper says that the contribution of solar variability is small in the downwards ... it's in the opposite direction – according to solar activity it should be cooling – the globe should be cooling.” (90).**

400: Since you say that according to Lockwood (2008) the globe should be cooling now that the Sun is declining from its peak of activity at the height of the Grand Maximum in 1960, ought you not to have checked to see whether the globe is in fact cooling? [*Hint:* see the slide below, compiled as the arithmetic mean of the monthly global lower-troposphere temperature anomalies of the Remote Sensing Systems Inc. and University of Alabama at Huntsville].



➤ **“Solanki *et al.*, 2005: ‘Unusual Activity of the Sun during recent decades compared to the previous 11,000 years’, and they say that solar variability is unlikely to have been the dominant cause of warming in the last three decades: ‘... we point out that solar variability is unlikely to have been the dominant cause of the strong warming during the past three decades.’” Let’s continue. (91).**

401: Would it not have been fairer if, in this slide of yours, which is only onscreen in your talk for some 17 seconds, you had either highlighted onscreen or mentioned in your talk the not uninteresting earlier part of the sentence from the abstract of Solanki’s paper that you truncated out:

“Although the rarity of the current episode of high average sunspot numbers may indicate that the Sun has contributed to the unusual climate change during the 20th century ...”

402: “The last three decades” before the date of publication of Solanki’s paper in 2005 take us back to 1976. Did it not occur to you to ask what happened in 1976 to cause the solar and temperature records that had previously appeared to be correlated to diverge?

403: Is it not clear to you that, since the increase in CO₂ concentration since reliable mass-spectroscopy measurements were first taken by the formidable Charles David Keeling at Mauna Loa in March 1958, the increase in CO₂ concentration has been near-monotonic, while the sudden change in direction of global temperatures in 1976 was indicative of a stochastic dataset, and that, therefore, the absence of correlation that is inherent in any comparison between a monotonic and a stochastic dataset necessarily implies absence of causation, and that, therefore, CO₂ cannot have been the primary cause of the divergence between the solar and temperature records in that year?

- **“Damon & Peristykh, 2005: ‘Our solar irradiance model accounts for about 18% of 20th-century global warming to 1997 and predicts that the next maximum would occur in AD 2040 and contribute 0.2 C to 21st-century Northern Hemisphere warming.’”** (92).

404: Once again, let me help you with your math. As you yourself pointed out elsewhere in your talk, the “global warming” predicted by the IPCC in the coming decades is 0.2 C°/decade. So the Sun, if these authors are right, would be contributing the equivalent of a quarter of the anthropogenic warming over the coming four decades. Do you not accept that the predicted solar contribution you show here is some three times greater than the solar contribution posited by Benestad in the paper you cited earlier? Taken with the estimate by Scafetta & West that some 69% of “global warming” in the past half-century is anthropogenic, does not this discrepancy indicate uncertainties in attribution of warming that are simply not reflected honestly or at all in your talk, but which were reflected in mine?

- **“Caspar Ammann, 2007 ... and the quote it’s in the last sentence of the abstract: ‘The impacts of greenhouse gas have dominated since the second half of the last century.’”** (93).

405: Let us examine Ammann’s declaration of faith (for you certainly do not demonstrate, merely by citing this extract, that he has produced any evidence for his contention). Are you not aware that the climate is sufficiently complex that one cannot be sure, in attempting to establish the aetiology of climatic changes, whether one has considered all of the influences that one should properly take into account?

406: We have already demonstrated that the Pacific Decadal Oscillation appears to cause medium-term but quite sharp changes in temperature, and that it changed from its cooling to its warming phase in 1976, and that a naturally-occurring global brightening from 1983-2001 must also have made a major contribution to the warming of the past half-century. Did you check with Ammann to find out whether he had made due allowance for these and other influences, in addition to the solar influence, before you merely recited his conclusion?

- **“Foukal *et al.*, 2006: ‘Brightening of the sun is unlikely to have had a significant influence on global warming since the 17th century.’ And I think you’re getting the picture.”** (94).

407: However, am I not right in recalling that, in the passage from Solanki *et al.* (2005) that you somehow failed to highlight or mention in your talk when selecting only that part of the same passage that you found congenial, there is evidence that the Sun has indeed contributed to the climate change of the 20th century? Would you agree with me that the 20th century came after the 17th?

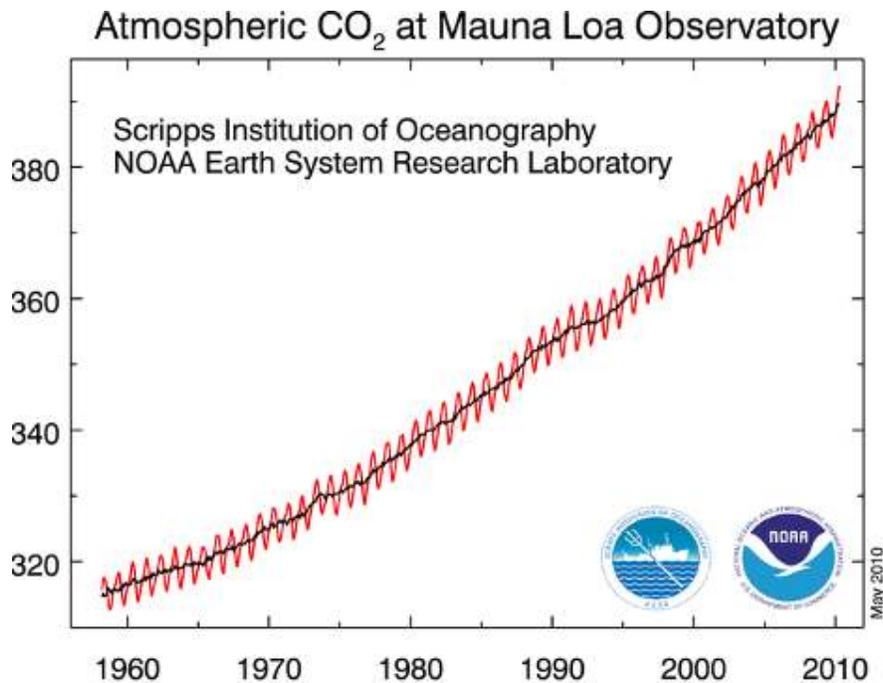
- **“Solanki & Krivova, 2003: ‘The Sun cannot have contributed more than 30%.’ And I’ve got just a couple more, I don’t want to bore people.”** (95).

408: Do you not here do the formidable solar physicist Sami Solanki a second dishonest disservice by selectively quoting that part of his sentence that happens to accord with your argument, while truncating the remainder? Is it not true that the full sentence, with the words in green omitted by you, reads as follows:

“The Sun cannot have contributed more than 30% of the steep temperature increase that has taken place since [1976]”?

409: Do you notice, yet again, that it is the year 1976 that is the turning-point?

410: Please check the Mauna Loa record of increases in atmospheric CO₂ concentration. Does it happen to show a sudden jump in 1976, sufficient to account for the sudden increase in global temperatures that began that year (at the same time as the phase-change in the Pacific Decadal Oscillation) and continued until 2001? [*Hint: the Mauna Loa data, in parts per million by volume, are presented as a graph below.*]



➤ **“Lockwood and Frohlich, 2007: ‘Here we show that over the past 20 years all the trends in the Sun that could have had an influence on the Earth’s climate have been in the opposite direction to that required to explain the observed rise in global mean temperatures.’ This shows that, again, solar effects have had a minimal impact.”** (96).

411: Once again – and this is the third time in the past few citations – would you please explain why you saw fit to truncate your cited authors’ quotation? Your slide was only onscreen for 12 seconds, which is why I took a close look at it to see what you were hiding. In the present instance, please explain why you failed to read out, or to highlight on your slide, the sentence immediately preceding that which you quoted. That sentence reads as follows:

“There is considerable evidence for solar influence on the Earth’s pre-industrial climate, and the Sun may well have been a factor in post-industrial climate change in the first half of the last century.”

412: Would you care to explain why you failed to mention that the paper by Lockwood and Fröhlich, which was in fact addressing the question whether Svensmark and his colleagues at the Danish Space Institute had successfully demonstrated an amplification of the small fluctuations in total solar irradiance via displacement of cosmic-ray particles by the solar wind, with a consequent decline in cloud-nucleation, had been comprehensively refuted in a subsequent paper by Friis-Christiansen and Lassen?

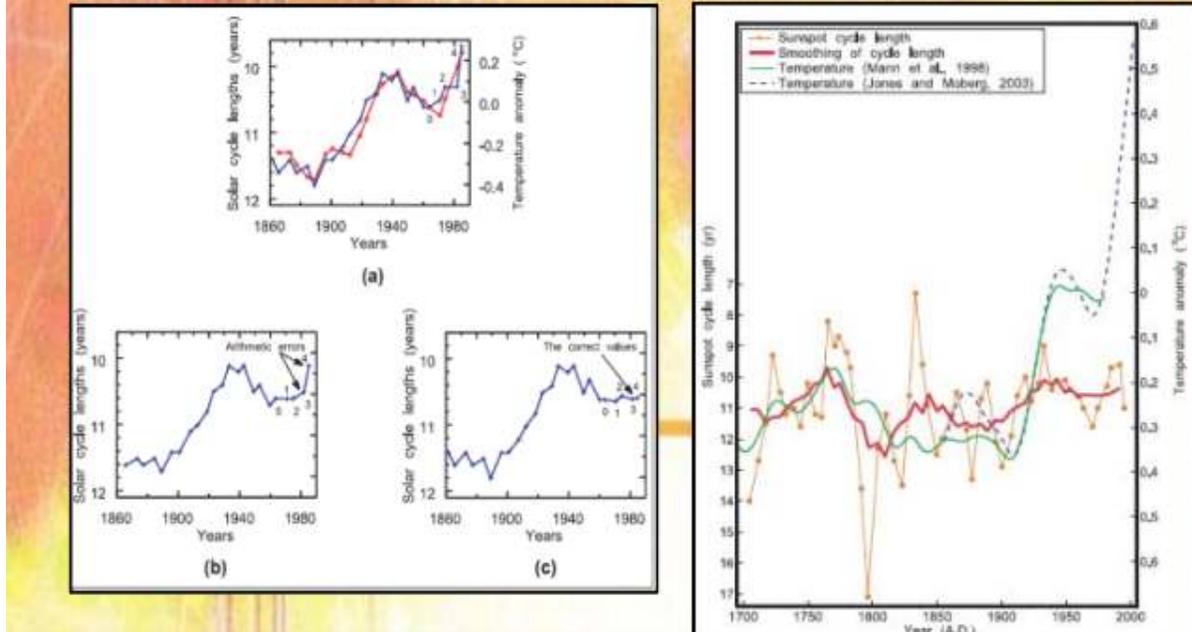
Solar cycle lengths and temperature

Abraham

Could it be Solar?

P. Damon and P. Laut, Patterns of Strange Errors Plagues Solar Activity and Terrestrial Climate Data, EOS, 85, 2004.

Images taken from this article.



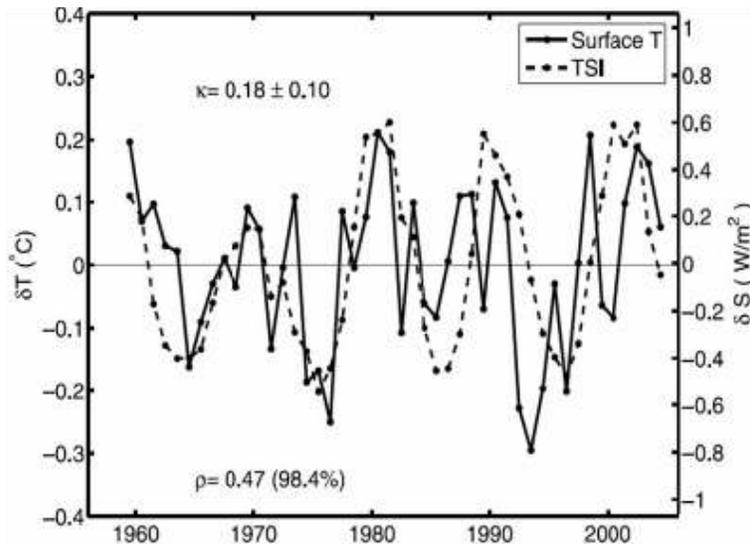
413: Please confirm that in the following passage I have accurately encapsulated your introduction and discussion of a paper by Damon and Laut (2004), demonstrating that in recent decades no link between solar cycle length and surface temperature can be established:

“This is a paper published in 2004 and there was a thought that solar cycle lengths could be related to global climate change and there was a paper published with a graph that was shown in the upper left-hand portion of my screenshots, and you see a red and a blue line that are in lock-step with each other. And that really raised some questions: ‘Hey, maybe the length of solar cycles plays a role in climate.’ It was found out that there were some arithmetic errors. In the arithmetic, errors actually caused there to be a greater association than was actually occurring. And you can see in the blue graphs in the lower left-hand side there is the so-called corrected value, so when the errors were corrected the solar cycle lengths flattened out and then you see on the right-hand side the temperature trends in green and blue and the solar cycle length in red: they deviate from about 1925, so they cannot explain the trend in temperatures.” (97).

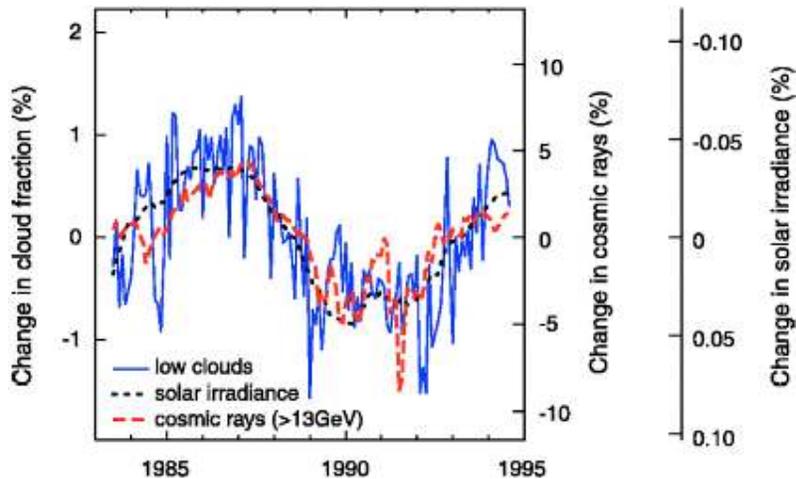
414: Had I stated, at any point in my talk, that there might be a link between solar cycle lengths and changes in global surface temperature?

415: Do you appreciate that there are numerous solar indices, of which solar cycle length is only one?

416: Do you understand that, merely because there appears to be no link between solar cycle length and global mean surface temperature, there is no logical reason to prevent correlation of other solar indices with temperature?



417: For example, why did you not mention Camp & Tung (2007), who find half a century of correlation (above) between total solar irradiance (TSI: dotted curve) and global mean surface temperature (solid curve)?



418: Why did you not mention Carslaw, Harrison and Kirby (2002, who find (above) an interesting and by no means counter-intuitive correlation between change in fraction of low cloud cover (<3 km), change in cosmic-ray flux, and change in solar irradiance over a recent complete 11-year solar cycle (1984-1994)?

419: Once again, have you not perpetrated the Aristotelian logical fallacy of arguing inappropriately from the particular paper you cited to the (incorrect) general proposition that there is little or no correlation between recent solar activity and recent climatic change on Earth?

Who were my sources?

420: Please confirm that in the following passage I have accurately encapsulated your criticism of me for having failed to cite my sources in the peer-reviewed literature and in the published climatological data:

“One of the problems with the Chris Monckton presentation is that he presented a lot of data with no citations or no explanation. If you do that, if you just show a graph with data and you don’t show where you got it from it’s hard for somebody on the outside to assess its quality. And let me give you a few examples. Here are the slides. Actually, these aren’t all of them: these are just some of the slides without attribution.” (105)

421: Have you heard of Mr. Alexander Graham Bell’s wondrous invention, the electric telephone?

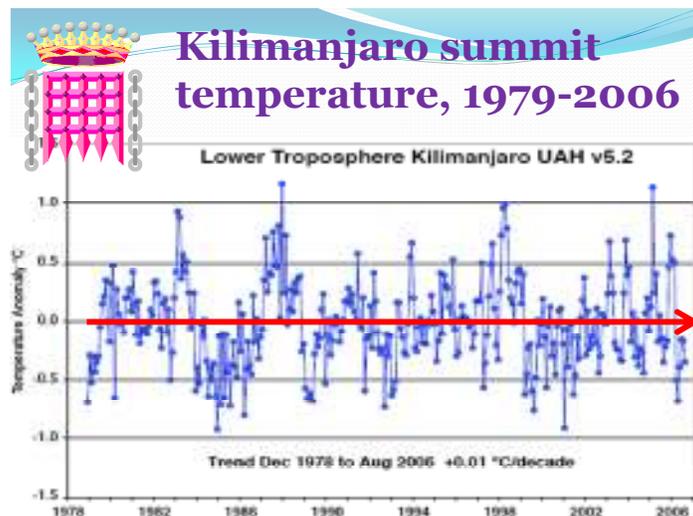
422: Have you heard of Mr. Albert Arnold Gore’s astounding invention, the World Wide Web?

423: If you had been truly interested in discovering any of my sources that a non-climatologist such as yourself would not be familiar with, why did you not, even once in the months you say you spent preparing your talk, use either the electric telephone or the World Wide Web to contact me and simply ask? Yes, I have raised this question several times before in this letter, but that is because in your talk you kept on and on and on about it.

424: Surely you cannot deny that you knew how to get in touch with me, because a) you knew my talk had been given to the Minnesota Free Market Institute, whose personnel could be presumed to know how to reach me; b) you knew that I have published close to 100 papers on climate and related matters for the Science and Public Policy Institute (notwithstanding your silly assertion that I had **“never published a paper in anything”** (37); c) you knew, or could rapidly have found out simply by Googling me, that I had published a reviewed paper in *Physics and Society* for July 2008, from which you could no doubt have deduced that the editors knew where to find me?

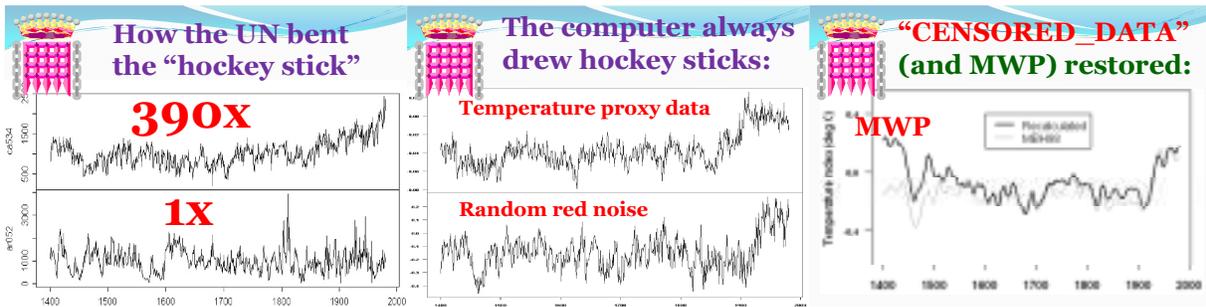
425: Are you aware of the distinction between an academic paper or lecture, in which the custom is to provide full references, and a talk to an audience of the general public, where less rigor in providing citations is expected?

426: Did you have any reason to believe that I should not have been just as willing to provide references to you as to other members of the general public who have, admittedly, exhibited a more genuine wish than you have shown to follow up my sources in a spirit of proper and honest enquiry?



427: What difficulty did you have in understanding who it was that had produced the data for the above slide? Is it not clearly labelled “Lower Troposphere Kilimanjaro UAH v5.2”? From this, might not a climatologist, as opposed to a fluid-mechanics engineer posturing as some sort of expert in climatology, have inferred at once that a) the reference to the lower troposphere indicated the likelihood that this was either a radiosonde, drop-sonde, or satellite record; b) that it was a record of temperatures in the region of Mount Kilimanjaro; and c) that it was compiled by the University of Alabama at Huntsville, one of only two suppliers of monthly-updated satellite-based lower-troposphere temperature records?

428: When you used the words **“no attribution here”** (106) in reference to this slide, what rational basis could you have had for such an assertion, given that the slide is plainly attributed to UAH, and that even the version number of the dataset is supplied?



429: Please confirm that in the following passage I have accurately encapsulated your criticism of me for allegedly having failed to provide any attribution for the three slides (above) that I showed in connection with the question whether the graph falsely abolishing the medieval warm period, presented by the IPCC in its 2001 report, was honourably and competently constructed:

“Another slide, on the so-called hockey stick [left above]. No attribution here. Where did he get his data? We don’t know.

“A corollary slide, again on the hockey stick [center above]. Where did he get his data? Impossible to tell.

“Another uncited bit of work of Chris Monckton’s: here he’s referring to the medieval warm period that we’ve just talked about [right above]. He shows two graphs, one is MBH 1998, I think that is Michael Mann, Ken Briffa [actually Bradley] and Hughes: they published some papers in the late 1990s on the medieval warm period and paleoclimate.

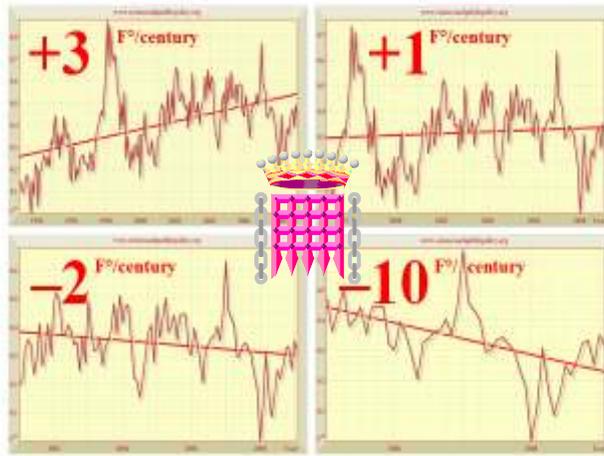
“What’s interesting is that Chris Monckton shows a curve called “recalculated”, huh, and I’m assuming that’s not someone’s name, but there’s no way to find out whose data this is, and for all we know this is just a curve that Chris Monckton made up. So Chris Monckton says that ‘recalculated’ – huh - shows that the medieval warm period was real and it was really warm, but the problem is that if you don’t tell us where it’s from we can’t assess the data.” (107-109)

430: Given that I had said in my talk that the exposure of the “hockey-stick” graph as a statistical fraud had been made by two Canadian researchers, would not anyone with more than a casual interest in the climate question have known at once – as you surely knew perfectly well yourself – that the researchers in question were Steve McIntyre and Professor Ross McKittrick, the latter of the University of Guelph, Canada, who published their peer-reviewed findings about the IPCC’s now-discredited “hockey-stick” graph in *Energy and Environment* in 2003 and in *Geophysical Research Letters* in 2005?

431: Since I had mentioned “two Canadian researchers”, on what rational basis do you say it is **“impossible to tell”** (108) where I obtained the data?

432: What rational basis did you have for thinking that the curve marked “recalculated” on the right-hand slide above might have been **“made up by me”** (109), when I had explicitly stated in my talk that it was the two Canadian researchers who had recalculated the graph by reinserting the true proxy data for the medieval warm period, which the authors of the “hockey-stick” graph had removed and replaced with estimates of their own while stating that they had used the true data?

433: I ask again, if you had genuinely wanted to **“assess the data”** (109), why did you not get in touch with me and simply ask where the graph came from?



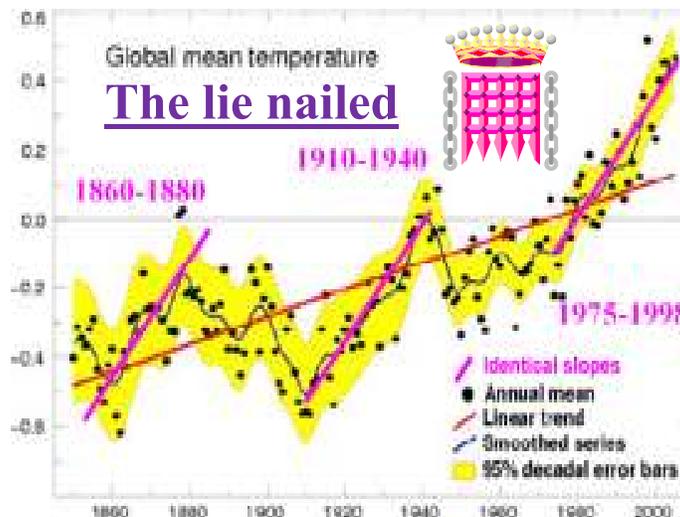
434: Please confirm that in the following passage I have accurately encapsulated your criticism of me for allegedly having failed to provide a proper attribution for the slide (above) that I showed in order to demonstrate that a graph by the IPCC was based on a dishonest statistical technique:

“You’ve seen this slide before: these are temperature data curves that come from his organization, the Science and Public Policy Institute. But again you don’t know the original source of their data: did they take the measurements? I doubt it? Where did they get the data from? We saw before that they had made many mistakes with temperature data.” (110)

435: Since I explicitly stated in my talk that my temperature graphs were compiled by me for the SPPI from four separate global-temperature anomaly datasets, of which I took the arithmetic average, do you now accept that it was appropriate to label the graphs “www.scienceandpublicpolicy.org”?

436: If you had been genuinely interested in finding out which four datasets I used – HadCRUt, NCDC, RSS, and UAH – why did you not ask me? Or why did you not look at the *Monthly CO2 Reports* at the SPPI website: www.scienceandpublicpolicy.org?

437: Is it not by now all too apparent to you that, by your academic dishonesty in not having contacted me to ask for the sources of my temperature data or to warn me that you intended to disseminate a highly uncomplimentary attempt at a rebuttal of my talk, and by your negligence in not having paid attention either to what I said about the sources of my data or to what appears on the face of the slides, and by your laziness in not having looked up the *Monthly CO2 Reports* where the data are displayed and explained in some detail, it is you and not I who have **“made many mistakes”** (110) with the temperature data?



438: Please confirm that in the following passage I have accurately encapsulated your criticism of me for allegedly having failed to provide a proper attribution for the slide (above) which shows that, far from an inexorable acceleration in the rate at which “global warming” is occurring, the gentle long-run warming trend is overlain by ~60-year cycles corresponding broadly to the phases of the Pacific Decadal Oscillation, a naturally-occurring oceanic phenomenon, and that three periods of rapid warming, at identical rates, have occurred in the global instrumental record: 1860-1880; 1910-1940; and 1975-2001:

“Here’s another slide ... global mean temperatures. Where is this data from? Give us the citation.” (111)

439: Given that exactly the same data curve, albeit in a different color, occurs just two slides previously, and given that the earlier slide is rather prominently marked “IPCC (2007)”, might it not have been possible for you to deduce that the data curve on the slide above is also from the IPCC’s 2007 report, where it appears at least three times?

440: If you had genuinely wanted to find the source of the data, but had nevertheless wanted to maintain your concealment from me the fact that you were about to launch a personal attack without giving me the usual academic courtesy of advance notice of your intention, would it have been very difficult for you to go to the IPCC’s website at www.ipcc.ch, find the graph in the 2007 *Assessment Report* and notice that the source was the Hadley Centre and the Climatic Research Unit at the University of East Anglia?

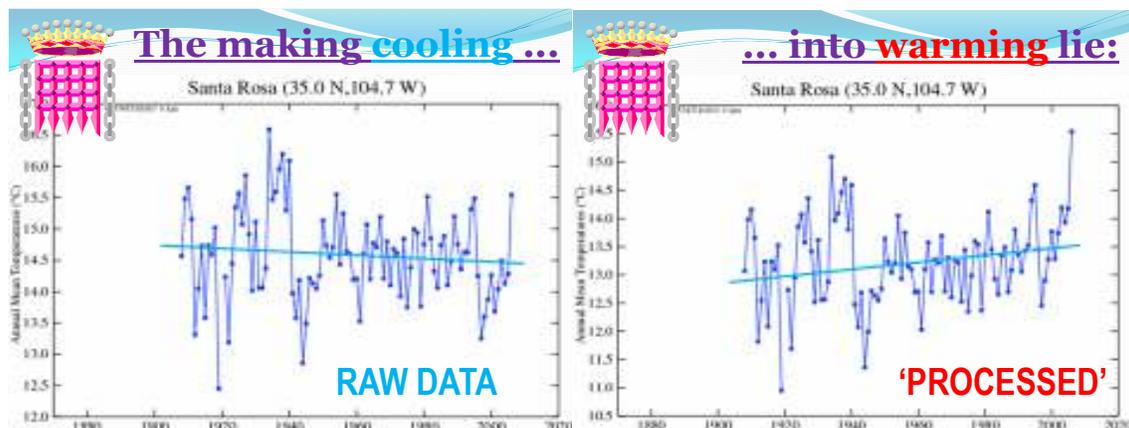
441: Given that on my behalf my Noble Friend the Lord Leach of Fairford kindly put down a Question in the House of Lords in 2009

“To ask Her Majesty’s Government whether the rate of increase in global mean surface temperatures between 1975 and 1998 was similar to the rates of increase between 1860 and 1880 and between 1910 and 1940, ...”,

and given that the written answer from Lord Hunt of King’s Heath on St. George’s Day was that

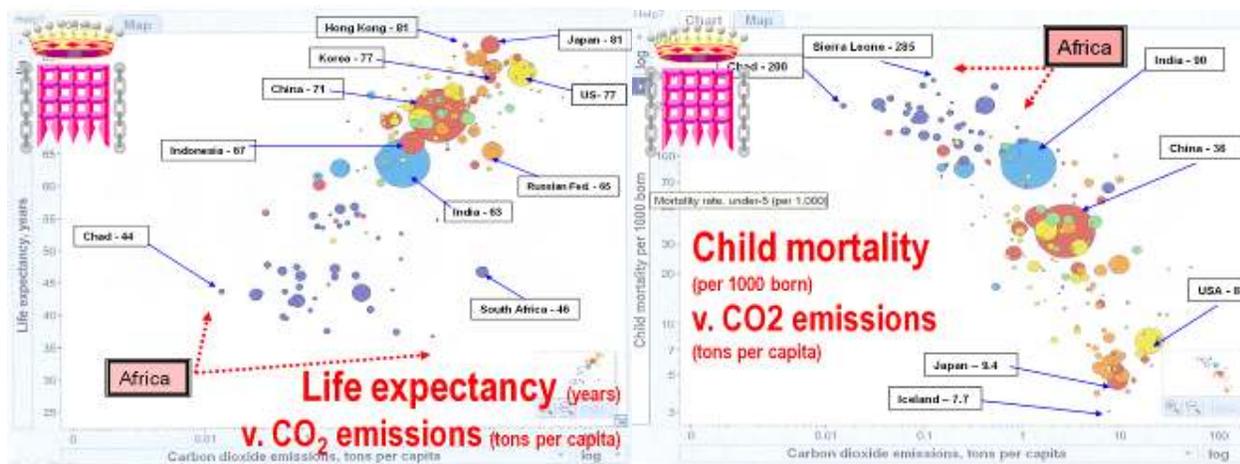
“Observations collected at the Met Office Hadley Centre and the University of East Anglia Climate Research Unit indicate that the rate of increase in global average surface temperature between 1975 and 1998 was similar to the rates of increase observed between 1860 and 1880 and between 1910 and 1940 (approximately 0.16 C°/decade) ...”,

will you agree with me that the three parallel warming rates that I show in the above slide are justifiable?

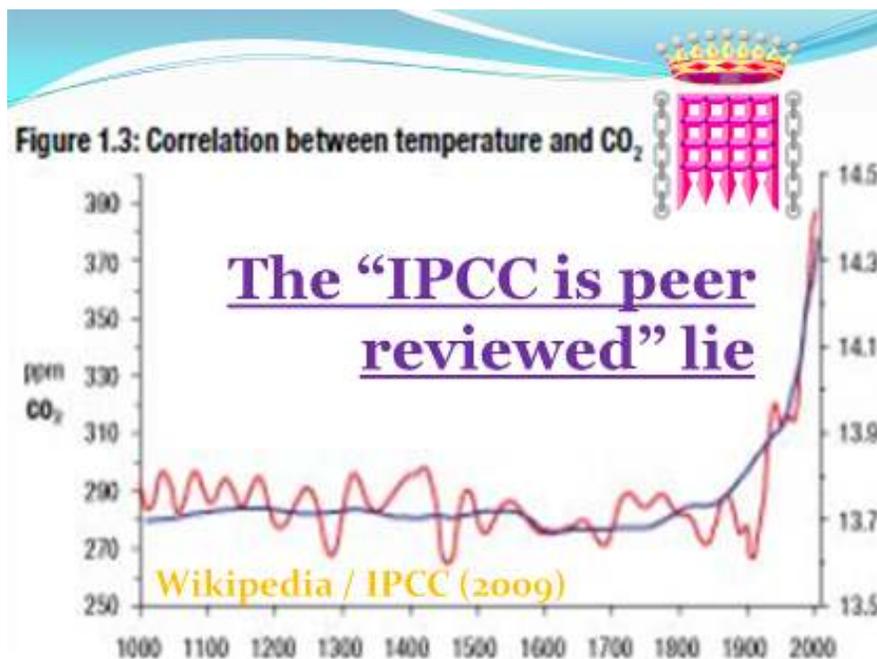


442: Given that I had mentioned that these data related to the NOAA headquarters at Santa Rosa, and that these and other data had been “processed” by NASA GISS, what rational basis did you have for considering that I had insufficiently sourced these graphs?

Points you did not comment on



443: Did you not find it interesting that, as the two above slides show, CO2 emissions, expressed in tons per capita, are a good predictor of general prosperity and hence of life expectancy and child mortality? Would you not draw from these slides the conclusion that, since fossil fuels that emit CO2 when burned provide the cheapest form of electricity, and that, since the provision of electricity is one of the most important influences lifting emerging nations out of poverty and hence stabilizing their populations, the widespread use of CO2 as planned by China, India, and other third-world countries will in the long run reduce the total environmental footprint of Man?



444: Were you not shocked to discover that a recent IPCC update report lifted a non-peer-reviewed graph from Wikipedia, the world's least reliable source of information, and mentioned it in the text as though there were a genuine, peer-reviewed reference for it, although such reference was to be found at the end of the document?

445: Given your strictures (whether appropriate or not) about my own use of references, what steps have you taken publicly to draw attention to this and many other abuses of the normal system of academic publication and use of data by the IPCC?

The “IPCC is peer reviewed” lie

Meters / century	1961-2003	1993-2003
Thermosteric expansion	0.042	0.160
Glaciers & ice caps	0.050	0.077
Greenland ice-sheet: IPCC	0.050	0.210
Antarctic ice-sheets: IPCC	0.140	0.210
IPCC's TOTALS	0.110	0.280

446: Since you have offered to “help” me with my “math” (74), what steps have you taken to help the IPCC with *its* math? Why was it left to me as a layman, rather than to you as a “scientist” (2-3), to draw the IPCC’s attention – on the day of publication of its 2007 *Fourth Assessment Report* about the climate – to the fact that the table shown in the above slide, which had not been in the final draft report approved by the scientists who wrote it, did not add up correctly?

447: What steps did *you* take to remind the IPCC that it should not have moved four decimal points rightward so as arbitrarily and capriciously to multiply by ten the observed contributions of the Greenland and Antarctic ice-sheets to global sea-level rise?

448: Since you are a stickler for full references (except, that is, where your own activity in respect of climate change is concerned) (2), perhaps you would like to go public and state how shocked you are that the IPCC’s bureaucrats had inserted the above table into the draft; had multiplied the contributions of the Greenland and Antarctic ice-sheets by ten; and had not made public that they had amended the scientists’ final draft without even following the attenuated and feeble version of the procedure for peer review that it claims to follow?

449: Does it not matter, and matter a very great deal, that the official body that is entrusted with publishing what are supposed to be authoritative reports can monkey about with them in this way?

450: Is it not far more important that you should attempt to prevent the IPCC from getting away with mendacities of this kind than to worry about whether a Peer of the Realm who is not even a scientist has gotten his science right? Where is your sense of due perspective?

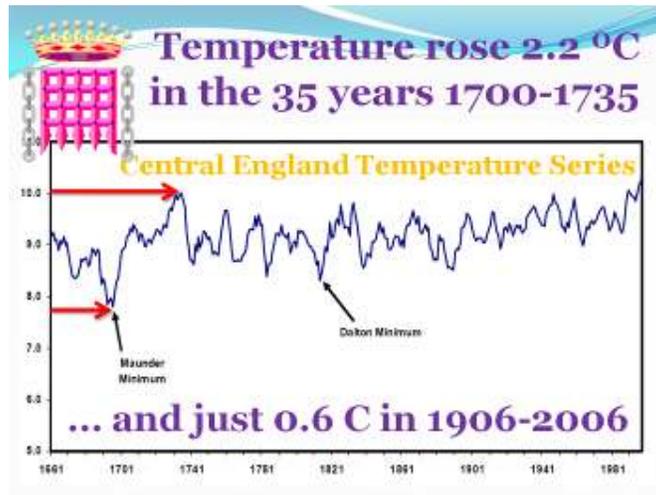
451: Would you not have expected the IPCC to announce publicly in the revised text of its 2007 report that it had amended the *published* text within a day or two of publication to reflect the correction that I and – no doubt – many other commentators on the scientists’ final draft had demanded?

452: What steps will you now take to contact the IPCC and ask it why it tampered with its own report in this way, why it subsequently altered the published report without acknowledgement of those who had pointed out its error, and why it did not even admit that it had altered the published report.

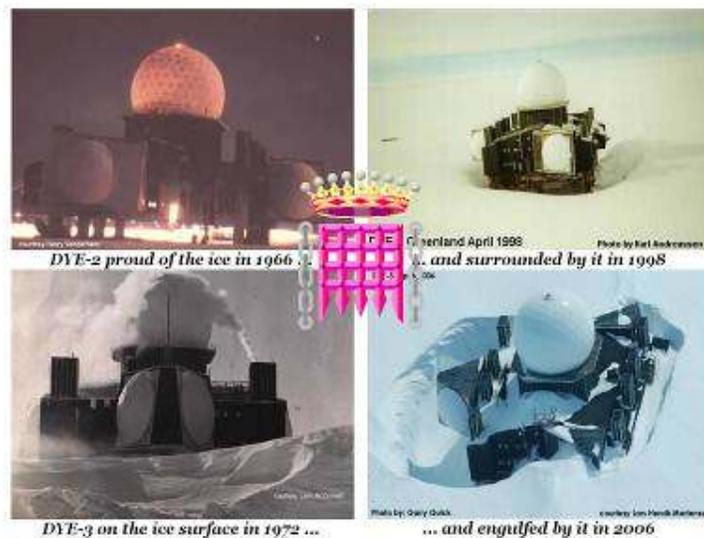
453: Since you think it so important that full sources should be cited, and all such academic procedures should be scrupulously followed (except when listing your own contributions in the field of climate change) (2), will you now demand that the IPCC publicly change the current version of its published 2007 report to admit that it had made the change I have described in this section?

<p>The attribution lie BEFORE (#1)</p> <p>“No study to date has positively attributed all or part [of observed climate change] to anthropogenic causes.”</p> <p>IPCC (1995)</p>	<p>The attribution lie BEFORE (#2)</p> <p>“When will an anthropogenic effect on climate be identified? It is not surprising that the best answer to this question is, ‘We do not know.’”</p> <p>IPCC (1995)</p>	<p>The attribution lie AFTER</p> <p>“The body of ... evidence now points to a discernible human influence on global climate.”</p> <p>IPCC (1995) rewrite</p>
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454: Given that the first two of the above three slides represented the five-times-stated conclusion of the scientists who wrote the final draft of the IPCC’s 1995 report that no anthropogenic effect on climate could yet be identified, do you not think it unacceptable that the final version of the report should have been rewritten by just one man so that all five statements that no anthropogenic effect was discernible were removed and replaced by the single statement that appears on the right-hand slide, *and that the procedures of the IPCC allowed this?*



455: Since you are apparently so concerned about even small changes in temperature, and about minute variations in the peaks and troughs of the global temperature curve from one graph to another, are you not truly astonished to find that in the Central England Temperature Record, compiled since 1659 and, because of its latitude and other regional characteristics, a reasonable proxy for global temperature anomalies, shows that in the 40 years 1695-1735, before the Industrial Revolution even began, Central England temperature rose by 4 F°, a rate eight or nine times greater than the warming of the 20th century?



456: Given that you showed great interest in a paper suggesting that ice-melt from Greenland was great enough to cause sea level to rise by what turned out to be less than 1 millimeter, why were you silent when confronted with the above visual evidence, from the US Department of Defense, showing that half a century ago its DEW-line early-warning radar stations were standing proud of the ice, while now the allegedly melting ice is accumulating rapidly around them?

The Stefan-Boltzmann Equation

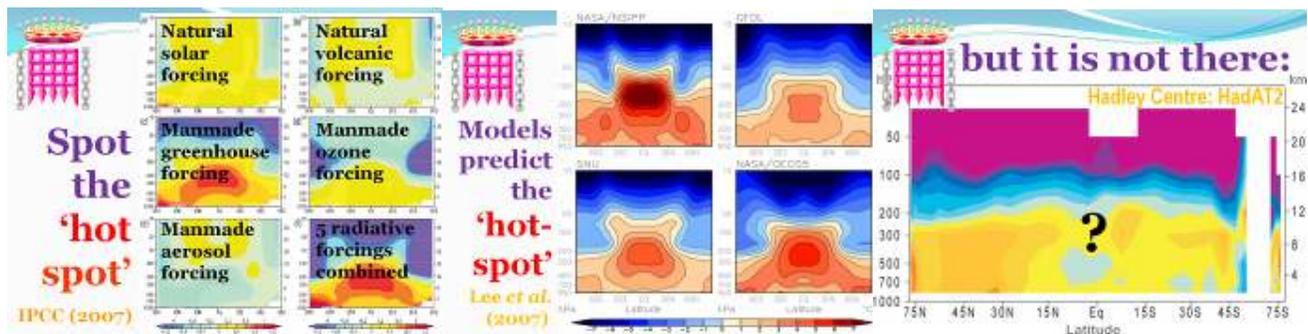
$$F = \epsilon \sigma T^4$$

This equation is not mentioned once in 1600 pages of the UN's 2007 report

Why not?

457: Since you are so interested in helping me with my math, would you not also like to help the IPCC with its math, by recommending to it that in its climate assessment reports it should make at least one mention of the fundamental equation of radiative transfer, shown here, which relates changes in radiative flux at the characteristic-emission surface of an astronomical body to the temperature at that surface, by reference to the emissivity of the surface with respect to the wavelengths in question, and to a scaling constant?

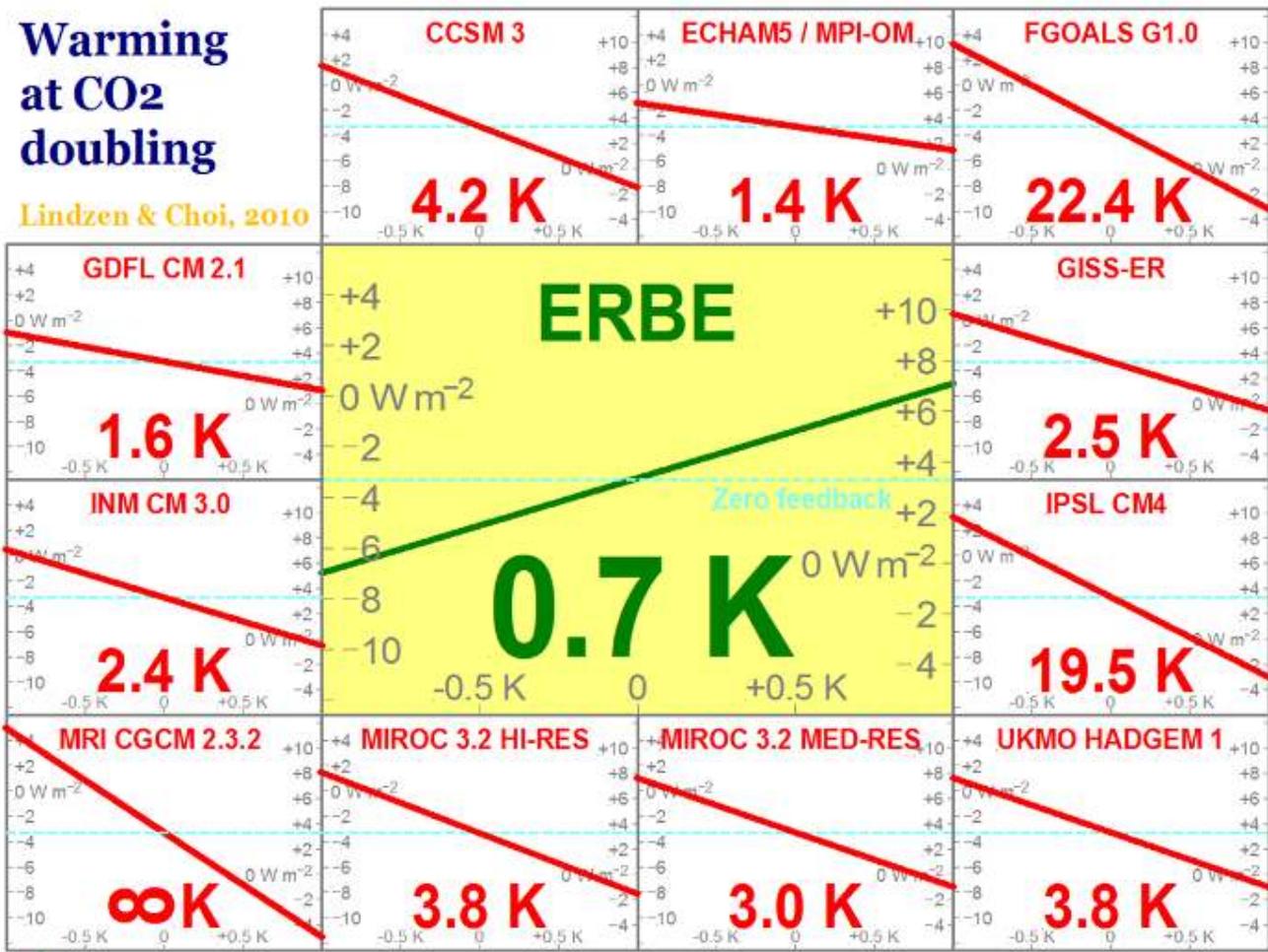
458: Because the equation is a biquadratic relation, is it not a fact that, if we take the first differential of this equation using the temperatures and fluxes prevalent on Earth, one requires a substantial change in radiative flux to bring about a minuscule change in temperature?



459: Were you not interested to note the startling difference between the predictions of the computer models relied upon by the IPCC to the effect that the tropical mid-troposphere should warm at thrice the surface rate if and only if anthropogenic influences were to blame (left and center above), while all but one of the datasets of radiosonde and satellite measurements of the upper troposphere actually warming at much the same rate as the surface?

460: As one who repeatedly says he is shocked by the failure of a non-academic to provide full academic references for every slide used in a talk to the general public, are you not, *a fortiori*, so much more shocked to discover that the only paper that purports to show the tropical upper troposphere warming at the rate predicted by Santer *et al.* (2003), from which the IPCC took the left-hand slide above, is a further paper by – well – Santer? And are you not still more shocked to learn that the dataset upon which Santer relied in his second paper (published in 2008) had not previously been published, was not peer-reviewed, and did not accord with any other dataset of temperature change in the tropical upper troposphere?

461: Are you not still more shocked to find that the Santer who did these things was also the Santer who rewrote the IPCC's 1995 report, on his own, so as to change its principal finding by 180 degrees? What steps have you taken to draw these deficiencies in the IPCC's procedures and conclusions to a waiting world?



462: Were you not intrigued to learn that the above comparison between the outgoing-radiation outputs of 11 IPCC models forced with real-world changes in sea-surface temperature and the real-world measurements of the ERBE and CERES satellites over the past 20 years (with the ordinates here normalized so that the zero-feedback case has a zero slope) suggests very strongly that most of the radiation that the IPCC's theory says should be trapped in the Earth's atmosphere so that it can cause "global warming" is in fact escaping to space much as usual, so that the warming to be expected from a doubling of CO₂ concentration is not 3.26 C° but just 0.7 C°? Is that not good news – or, at the very least, research that should be very carefully replicated, because, if it is confirmed, then we have nothing to worry about from CO₂ at all?

463: Are you thinking that the above result, from Professor Richard Lindzen and his postdoctoral student Young-Sang Choi last year, was dismissed in scathing terms by several of the Climategate emailers, also last year? Just to reassure you, the above graph is my representation of the Professor's revised results, which demonstrate very little difference to the bottom-line calculation.

464: Would it not have been fairer if, in your talk, you had been willing to concede that those parts of my talk that you were disinclined to overturn might have some merit?

What happens next?

465: By now, is it not all too painfully apparent to you that you have not conducted yourself in a manner that is appropriate to your station as a lecturer at a University? You will surely appreciate that if I had done to you what you have tried to do to me you would be justifiably disconcerted; and you will note that, apart from a single angry statement for which I apologize, my public response to your less than honest talk has taken the form of a mild-mannered and straightforward refutation of your falsehoods, too many of which seem more than accidental.

466: Will you, therefore, now be good enough to take down your talk from whatever public places it has reached; to pay \$10,000 to the United States Association of the Order of Malta for its charitable work in Haiti; to ensure that your University, which failed upon my request to have your talk taken off its servers at once, pays \$100,000 to the same charity for the same purpose; and publicly to disseminate a written apology and retraction substantially in the following terms:

“The Viscount Monckton of Brenchley

“We, St. Thomas University, Minnesota, and John Abraham of that University, retract, apologize to Lord Monckton for, and undertake never again to repeat all or any part of, the 83-minute talk with 115 slides entitled “But Chris Monckton Said ...”, that we prepared without notification to him and then widely disseminated via the University’s servers and other media.

“We have agreed that, in token of our good faith, by 30 June 2010 without fail we shall have paid between us US\$110,000 to the United States Association of the Sovereign Military Order of Malta for its charitable work in the reconstruction and relief of Haiti.”

Yours faithfully,

Viscount Monckton of Brenchley

Small cover photo of John Abraham from [St. Thomas University](#).



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