

The Royal Society has issued a booklet on Climate Change controversies
(www.ilovemycarbondioxide.com/RS_science.html)

From it I quote (highlight by me):

"This is not intended to provide exhaustive answers to every contentious argument that has been put forward by those who seek to distort and undermine the science of climate change and deny the seriousness of the potential consequences of global warming. Instead, the Society - as the UK's national academy of science - responds here to eight key arguments that are currently in circulation by setting out in simple terms, **where the weight of scientific evidence lies.**"

Each of those eight key arguments will now be dealt with using the weight of proper scientific evidence.

Due to the extent of misrepresentation of proper science, each RS page will need to be subdivided, lest each email becomes too large.

#1(a): Title: The Earth's climate is always changing and this is nothing to do with humans.

It is true that the world has experienced warmer or colder periods in the past without any interference from humans. The ice ages are well-known examples of global changes to the climate. There have also been regional changes such as periods known as the 'Medieval Warm Period', when grapes were grown extensively in England, and the 'Little Ice Age', when the River Thames sometimes froze over. However, in contrast to these climate phases, the increase of three-quarters of a degree centigrade (0.74°C) in average global temperatures that we have seen over the last century is larger than can be accounted for by natural factors alone.

The Earth's climate is complex and influenced by many things – particularly changes in the Earth's orbit in relation to the Sun, which has driven the cycles of ice ages in the past. Volcanic eruptions and variations in the energy being emitted from the Sun have also had an effect. But even when we take all these factors into account, we cannot explain the temperature rises that we have seen over the last 100 years both on land and in the oceans – for example, eleven of the last twelve years have been the hottest since records started in 1850.

A: "... the increase of 0.74°C in average global temperatures [...] over the last century is larger than can be accounted for by natural factors alone."

Firstly, the maximum averaged increase, according to HadCRUT, was only ever 0.6°C with an additional one-year spike during 1998, a spike which in turn had been neutralised by the end of 1999.

Thus, on that point alone, the RS statement is misleading to lay people and policymakers alike.

Secondly, the global temperature record shows that by mid 2009 the averaged global temperature increase was down to only 0.2°C, thus almost neutralising all of the warming at the end of the last century (HadCRUT3v) whilst MSU Satellite Lower Trop indicates a temperature anomaly of exactly zero.

Thus, using up-to-date data, any "unexplained warming" amounts to between zero and 0.2°C, at most an insignificant amount and not worthy of the climate alarm perpetuated by RS science.

Thirdly, no account was taken of a variety of parameters that explain, each in their own way, the mechanisms by which the temperature increases can be accounted for, such as ozone destruction by CFCs, extraordinary solar activity or cloud variations, to name just three such known parameters, making it unscientific to state the words like "can be accounted for by natural factors alone".

Thus, RS is shown to be biased and unwilling to consider perfectly acceptable scientific explanations for temperature variations.

B: "But even when we take all these factors into account, we cannot explain the temperature rises [...]"

Firstly, temperature rises and falls have been part of the natural climate oscillations seen over all of the known history of our planet. The MWP and LIA temperature fluctuations might have been localised events, *a point that is by no means a scientific fact yet is presented as such here*, they nonetheless indicate a clear movement of temperatures irrespective of atmospheric carbon dioxide concentration. According to Leohle (2007) and MSU-2/UAH(2009) the temperature anomaly around 850AD, using the same scale as the modern baseline, was also 0.6°C.

Thus, on that point alone, the RS statement is misleading to lay people and policymakers alike.

Secondly, averaged global temperatures decreased from about 1942 to about 1975, all the while when carbon dioxide concentrations increased continually. Besides short-term trends, the longer term trend since 1850 has been slightly upwards, a to-be-expected trend as *minimum* temperatures continue to rise after the LIA. Absolute *maximum* temperatures have not risen in a continuous pattern, only *averaged* temperatures.

Thus, RS only looks at temperature rises and ignores periods of cooling which are just as important a part of decadal climate change as any warming trend.

C: "... eleven of the last twelve years have been the hottest since records started in 1850.

Firstly, as per 'B' above, hotter-than-before trends have been the norm since records started, as have colder-than-normal trends. Neither trend is indicative of anything other than cyclical and perfectly normal fluctuations. Right now, in 2009, despite still just being in a warmer-than-average year, the trend over the past 7 years has been decidedly downwards.

Thus. the RS implied logic is that we are still getting warmer and warmer, quite the opposite of observations, including those of HadCRUT.

Secondly, records go back a lot further than 1850 and there is a plethora of scientific papers on the subject of temperature fluctuations over the past millennia. Nowhere is there an indication that the last two decades of the 20th century were abnormally warm.

Thus, the RS leads the uninformed reader to infer that the current trend is exceptional, which it isn't.

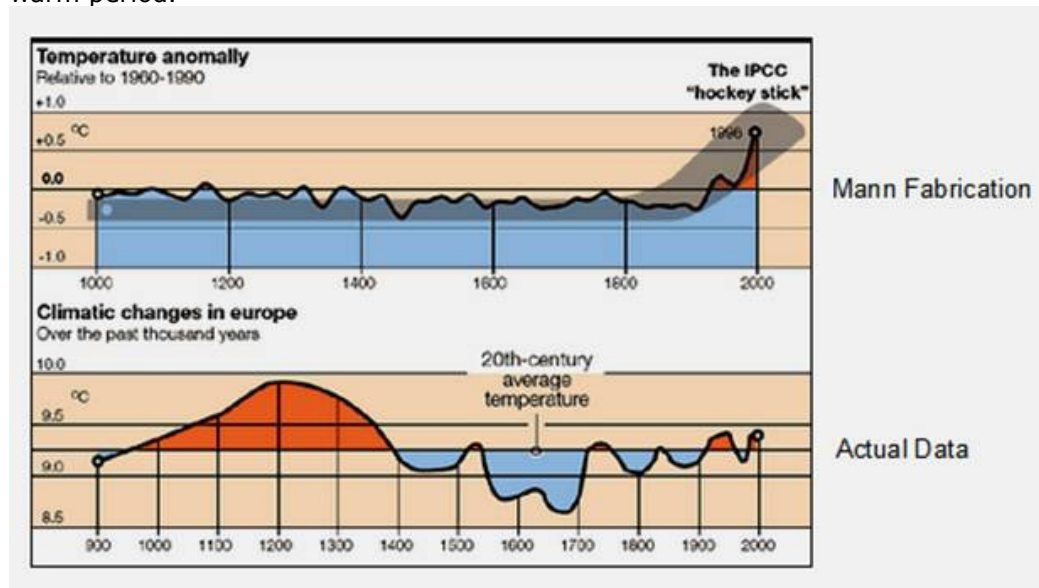
Thirdly, actual observations from right now, right here (mid-November 2009) make these points:

Recently, parts of the Northern Hemisphere, including the central U.S., observed *one of the coolest summers* since the end of the so-called 'Little Ice Age' in 1850.

October of 2009 was the third coldest since at least 1895 in the U.S., *more than 4 degrees below normal*. For Kansas and Oklahoma, it was the *most frigid October in recorded history dating back to the Civil War Days*.

As of this mid-November writing, the 2009 harvest season in the nation's midsection has been *one of the latest on record*. Only half of the 2009 corn crop was "in the bins". The rest of the crop was still "trapped in the fields of mud and slime" on November 19.

Fourthly, as can be clearly discerned from the graph below, the modern era warm period has some distance to go before it can even equal the Medieval warm period.



The lower graph was in the 1990 IPCC Assessment Report, but mysteriously disappeared. There are 68 studies that support the accuracy of this graph compared to a limited number of studies after 1990 that show much less warming during medieval times. The ClimateGate release of CRU emails confirms that Michael Mann altered temperatures to support his false temperature increase claims that had been proved earlier by Steven McIntyre to be incorrect. The fabrication by Mann is clearly indicated by comparison with the actual data.

Thus, RS science gives actual observations less credence than mathematical formulae run through sophisticated computers.

Royal Society, defend yourself and your science.

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