On 6 February 2017, 'The Times' published an article by Viscount Ridley on page 25 that made some incredible accusations about a paper by Dr Thomas Karl and co-authors, which had been published in June 2015. Viscount Ridley's article was <u>published online</u> the previous evening on the newspaper's website.

<u>It was immediately apparent</u> that the article by Viscount Ridley, who is <u>an adviser to the Global Warming Policy Foundation</u>, included many inaccurate and misleading claims.

In the days following publication, there were a number of new revelations that now show much of Viscount Ridley's article to be untrue. Here we identify 11 false claims in the article and compare them with the facts.

These false claims are highlighted in a complaint that has now been submitted to the Independent Press Standards Organisation because they breach the <u>Editors' Code of Practice</u>, which states: "The Press must take care not to publish inaccurate, misleading or distorted information or images, including headlines not supported by the text".

FALSE CLAIM 1: "Devastating new testimony from John Bates, a whistleblowing senior scientist at America's main climate agency, the National Oceanic and Atmospheric Administration, alleges that scientists themselves have been indulging in alternative facts, fake news and policy-based evidence."

FACT: This is hyperbolic nonsense. Viscount Ridley's article refers to <u>a blog</u> by Dr John Bates, a former employee at the National Oceanic and Atmospheric Administration, which was made public on the evening of 4 February. While it is true that the blog includes criticisms of a paper by Dr Thomas Karl and co-authors, Dr Bates has since backed down from many of the allegations he made, <u>telling Associated Press on 7</u>
<u>February</u> that there was "no data tampering, no data changing, nothing malicious".

FALSE CLAIM 2: "Dr Bates's essay on the Climate Etc. website (and David Rose's story in The Mail on Sunday) documents allegations of scientific misconduct as serious as that of the anti-vaccine campaign of Andrew Wakefield."

FACT: This is wrong. While it is true that the blog by Dr Bates includes criticisms of a paper by Dr Thomas Karl and co-authors, Dr Bates has since backed down from many of the allegations he made, <u>telling Associated Press on 7 February</u> that there was "no data tampering, no data changing, nothing malicious". Viscount Ridley also fails to mention that the article by David Rose in 'The Mail on Sunday' has been <u>shown to contain many inaccurate and misleading claims</u>.

FALSE CLAIM 3: "Dr Bates's boss, Tom Karl, a close ally of President Obama's science adviser, John Holdren, published a paper in 2015, deliberately timed to influence the Paris climate jamboree."

FACT: This is untrue. As indicated by the <u>information at the end of the paper by Dr Karl</u> and co-authors, it was submitted to the journal 'Science' on 23 December 2014, accepted

for publication on 21 May 2015, and published online on 4 June 2015. The paper was also not "deliberately timed to influence" the United Nations climate change summit in Paris, which took place between 30 November and 12 December 2015, almost 12 months after Dr Karl and his colleagues submitted it for publication.

FALSE CLAIM 4: "The paper was widely hailed in the media as disproving the politically inconvenient 18-year pause in global warming, whose existence had been conceded by the Intergovernmental Panel on Climate Change (IPCC) two years earlier."

FACT: This is misleading. The so-called "pause" in global warming was not "conceded" by the IPCC in 2013. The contribution of Working Group I to the Fifth Assessment Report of the IPCC actually <u>summarised on pages 61-63</u> earlier academic studies that had already suggested a possible slowdown in the rate of rise in global mean surface temperature after 1998, such as <u>a paper by Dr David Easterling and Dr Michael Wehner</u>, which was published in the journal 'Geophysical Research Letters' in April 2009.

FALSE CLAIM 5: "Dr Bates says Mr Karl based the "pausebuster" paper on a flawed land-surface data set that had not been verified or properly archived; and on a sea-surface set that corrected reliable data from buoys with unreliable data from ship intakes, which resulted in a slightly enhanced warming trend."

FACT: This is inaccurate and misleading. The data for land surface temperatures used in the paper by Dr Karl and colleagues were not "flawed". The methods and results used by Dr Karl and co-authors in their paper were rigorously reviewed by independent referees for the journal 'Science'. Dr Karl and co-authors used a new dataset, version 4, for land temperature measurements from the Global Historical Climatology Network. This was an update on the previous version 3 (GHCN.v3), which was released in May 2011. In a commentary for the website 'Carbon Brief' about the land surface temperature data, GHCN.v4, used by Dr Karl and co-authors, Dr Hausfather wrote that "the land record was largely similar to their prior record and was responsible for relatively little of the increase in warming they showed". The details of ERSST.v4 dataset for sea surface temperature, which was used by Dr Karl and co-authors, were provided in a paper by Dr Boyin Huang and co-authors, published in the 'Journal of Climate' on 4 February 2015. The paper described 11 improvements that were made in ERSST.v4 compared with the previous version, ERSST.v3b. These corrections increased the short-term rate of warming between ERSST.v3b and ERSST.v4 by 0.099°C per decade from 2000 to 2014. The largest correction resulted from an adjustment for differences between measurements taken from water in buckets drawn from the side of ships and those from the intake of water onto ships for cooling. This accounted for 0.030°C per decade of the difference in short-term trend between ERSST.v3b and ERSST.v4. A much smaller correction was applied due to the difference between the measurements obtained from ship intake and buoys. This accounted for 0.014°C per decade of the difference in short-term warming rates between ERSST.v3b and ERSST.v4. Dr Karl and co-authors explicitly acknowledged that ship intake measurements tend to be warmer than those from buoys. However, they also noted that "buoy data have been proven to be more accurate and reliable than ship data, with better-known instrument characteristics and automated

sampling". Hence the authors also applied another correction to give more weight to measurements by buoys compared with ships. This accounted for 0.012°C per decade of the difference in short-term warming rates between ERSST.v3b and ERSST.v4. <u>Dr Bates told Associated Press</u> that there was "no data tampering, no data changing, nothing malicious" by Dr Karl and co-authors.

FALSE CLAIM 6: "Science magazine is considering retracting the paper."

FACT: This is misleading. Dr Jeremy Berg, the editor-in-chief of 'Science', provided the following statement to David Rose of 'The Mail on Sunday' ahead of the publication of his article on 5 February: "Bates raises some serious concerns. After the results of any appropriate investigations – which would need to be led by the NOAA Scientific Integrity Officer – are available, we will consider our options (which could include retracting that paper)". However, Dr Berg told a journalist at 'Propublica', Andy Revkin, on 6 February that "from materials that have come to our attention today, it appears that these accusations are not new, but have been investigated inside NOAA and found to be without substantial merit".

FALSE CLAIM 7: "Dr Bates is no "denier"; he was awarded a gold medal by the US government in 2014 for his climate-data work. Having now retired he writes of 'flagrant manipulation of scientific integrity guidelines and scientific publication standards', of a 'rush to time the publication of the paper to influence national and international deliberations on climate policy' and concludes: 'So, in every aspect of the preparation and release of the data sets leading into [the report], we find Tom Karl's thumb on the scale pushing for, and often insisting on, decisions that maximize warming and minimize documentation."

FACT: This is inaccurate and misleading. While it is true that these statements are contained in his blog, they have since been shown to be misinformed and Dr Bates has subsequently abandoned the allegations. He told Associated Press that there was "no data tampering, no data changing, nothing malicious". The paper complied with the rules of 'Science', a leading scientific journal. There was no "rush" to publish the paper. As indicated by the information at the end of the paper by Dr Karl and co-authors, it was submitted to the journal 'Science' on 23 December 2014, accepted for publication on 21 May 2015, and published online on 4 June 2015. Dr Marcia McNutt, who was editor of 'Science' at the time the paper was published, told Associated Press: "The paper was not rushed in any way. It had an exceptional number of reviewers, many more than average because we knew it was on a controversial topic. It had a lot of data analysis." Dr McNutt is now President of the United States National Academy of Sciences.

FALSE CLAIM 8: "This is more than just a routine scientific scandal. First, it comes as scientists have been accusing President Trump and other politicians of politicising science. Second, it potentially contaminates any claim that climate science has been producing unbiased results. Third, it embarrasses science journalists who have been chronicling the growing evidence of scientific misconduct in medicine, toxicology and

psychology, but ignored the same about climate science because they approve of the cause, a habit known as noble-cause corruption."

FACT: This is misleading. The false reporting by Mr Rose and Viscount Ridley does not seriously cast doubt on the integrity of the results of climate research. Viscount Ridley provides no evidence to support his incredible claim that science journalists have "ignored" scientific misconduct by climate scientists because "they approve of the cause". Furthermore, Viscount Ridley fails to disclose that he is an adviser to the Global Warming Policy Foundation, which disseminates inaccurate and misleading information about climate change, and that he has also been guilty of promoting false claims about climate research.

FALSE CLAIM 9: "Colleagues of Mr Karl have been quick to dismiss the story, saying that other data sets come to similar conclusions. This is to miss the point and exacerbate the problem. If the scientific establishment reacts to allegations of lack of transparency, behind-closed-door adjustments and premature release so as to influence politicians, by saying it does not matter because it gets the "right" result, they will find it harder to convince Mr Trump that he is wrong on things such as vaccines."

FACT: This is inaccurate and misleading. Other climate researchers have dismissed the article by David Rose in 'The Mail on Sunday' because it contains many false allegations. The accusations that Dr Karl and co-authors were guilty of a "lack of transparency", "behind-closed-door adjustments", and "premature release" are wrong. The paper was thoroughly reviewed by independent referees for the journal, and then subjected to further independent scrutiny by Dr Zeke Hausfather and co-authors, who published their results in the journal 'Science Advances' in January 2017. Dr Hausfather and co-authors were able to access the data used by Dr Karl and co-authors in order to carry out their evaluation. In a commentary for the website 'Carbon Brief', Dr Hausfather wrote: "While I cannot speak to how well the authors followed internal protocols, they did release their temperature anomalies, spatially gridded data land and ocean data, and the land station data associated with their analysis. They put all of this up on NOAA's FTP site in early June 2015, at the time that the Karl et al paper was published." He added: "Rose's claim that NOAA's results 'can never be verified' is patently incorrect, as we just published a paper independently verifying the most important part of NOAA's results".

FALSE CLAIM 10: "Besides, this is just the latest scandal to rock climate science. The biggest was climategate in 2009, which showed scientists conspiring to ostracise sceptics, delete emails, game peer review and manipulate the presentation of data, including the truncation of a tree-ring-derived graph to disguise the fact that it seemed to show recent cooling ("hide the decline"). The scientists concerned were criticised by two rather perfunctory inquiries, but have since taken to saying they were 'exonerated'."

FACT: This is inaccurate and misleading. 'Climategate' is the term that climate change 'sceptics' use to describe the illegal hacking of emails and other documents from the Climatic Research Unit at the University of East Anglia. There is no similarity between

the false allegations contained in Viscount Ridley's article and the controversy over emails and documents from the Climatic Research Unit, which, Viscount Ridley failed to mention, were stolen from a computer server at the University of East Anglia. Although nobody was ever brought to justice for the crime, a statement by Norfolk Police concluded that "the data breach was the result of a 'sophisticated and carefully orchestrated attack on the CRU's data files, carried out remotely via the internet". It added: "There is no evidence to suggest that anyone working at or associated with the University of East Anglia was involved in the crime". Nine independent investigations, not "two rather perfunctory inquiries", were conducted into the content of the emails and documents by the Independent Climate Change Email Review, the International Panel set up by the University of East Anglia to examine the research of the Climatic Research Unit, the House of Commons Select Committee on Science and Technology, Pennsylvania State University, the United States Environmental Protection Agency, the Inspector General of the United States Department of Commerce and the United States National Science Foundation. Although some of these investigations criticised practices by researchers in relation to the UK's Freedom of Information Act, none of these inquiries concluded that the stolen emails showed serious misconduct by any climate scientists.

FALSE CLAIM 11: "And don't forget Rajendra Pachauri, chairman of the IPCC for 13 years and often described as the "world's top climate scientist". He had to retract his "voodoo science" dismissal of a valid finding that contradicted claims from Dr Pachauri's own research institute about Himalayan glaciers, which had led to a lucrative grant. That scandal resulted in a highly critical report into the IPCC by several of the world's top science academies, which recommended among other things that the IPCC chairman stand down after one term."

FACT: This is inaccurate and misleading. The United Nations Secretary-General and the Chair of the IPCC wrote to the InterAcademy Council on 10 March 2010 to request a review of the IPCC's processes following the discovery of some small but significant errors in the Fourth Assessment Report, which had been published in 2007. The report of the review was published on 30 August 2010. It made a number of recommendations for improving the IPCC's processes, as requested. The report was not "highly critical". Indeed it stated: "The Committee concludes that the IPCC assessment process has been successful overall and has served society well".