

Science or Spin?

Assessing the Accuracy of Cable News Coverage of Climate Science

Aaron Huertas
Rachel Kriegsman

April 2014

Our national debate about climate policy is broken. Too often, policy makers and other public figures make misleading statements that question whether climate change is human-induced—or is even occurring at all—rather than debating whether and how to respond to risks from climate change that scientists have identified. Media outlets can do more to foster a fact-based conversation about climate change and policies designed to address it. Such conversations can help audiences base their positions on climate policy on accurate climate science, as well as their varying political beliefs, attitudes, and values.

To gauge how accurately elite media outlets inform audiences on climate science, we analyzed climate science coverage across the three major cable news networks: Cable News Network (CNN), Fox News Channel, and MSNBC. We found that the accuracy of this coverage varied significantly across networks. In 2013, 70 percent of climate-science-related segments on CNN were accurate, 28 percent of Fox News Channel segments were accurate, and 92 percent of such segments on MSNBC were accurate.

In this report, we discuss social science related to public perceptions of physical science, provide a brief overview of our methods (covered in more detail in the online appendix at www.ucsusa.org/scienceorspin), present results for each network, and discuss each network's coverage. We present recommendations and suggestions for climate science coverage that could serve to improve the scientific accuracy of public discussions about potential responses to climate change.



Accurate Science Coverage Makes Our Democratic Dialogues on Climate Change Stronger

Statements from policy makers and related media coverage exert significant influence on public attitudes toward climate change (Brulle, Carmichael, and Jenkins 2012). CNN, Fox News, and MSNBC are the most widely watched cable news networks in the United States, and their coverage of climate change is an important source of information for the public and for policy makers. Thirty-eight percent of American adults watch cable news (Enda et al. 2013). In 2012, the three major cable news networks enjoyed an average audience of 2 million viewers across the entire day (Holcomb and Mitchell 2013). In 2013, Fox's prime-time audience was 1.76 million while MSNBC's was 640,000, and CNN's clocked in at 568,000 (Kenneally 2014).

Cable news coverage of climate science often reflects and reinforces people's perceptions of the science, which are related to their partisan identification as Democrats, Republicans, Independents, or Tea Party supporters (Pew 2013). Political ideology can also have a large effect on whether or not people accept the scientific consensus on climate change (Kahan, Jenkins-Smith, and Braman 2010). On the cable news networks, as in the halls of Congress, discussions about climate change feature a mix of political opinions and scientific information. Many opponents of policies designed to reduce emissions or prepare for climate change, including hosts and guests on cable news programs, use inaccurate and dismissive portrayals of established

that climate change is occurring, and less than half of the population recognizes that it is largely due to human activities (Leiserowitz et al. 2014).

Too often, debates about climate policy—whether or how to prepare for a changing climate, or what volume of heat-trapping emissions should be allowed to go into the atmosphere—are conflated with false debates about whether or not the science itself is valid. Debates over whether scientific conclusions should be accepted prevent the American public from having an open, democratic dialogue about whether, when, and how to respond to the scientific evidence related to risks from climate change.

Politicians and interest groups sowing confusion and doubt about scientific findings is not new. In the past, scientists who have worked on nuclear weapons, asbestos and lead exposure, acid rain, the ozone hole, and tobacco use have all faced politicized scrutiny and resulting public confusion about their work (Oreskes and Conway 2010). Much of the rancor over scientific findings about these topics has now died down and is no longer a significant aspect of related public policy debates. Instead, citizens and policy makers use the science on these topics as an important, constructive tool for informing personal choices as well as public policy. Public dialogues around climate change policy would be much improved if we were able to move past ideologically based misinformation about scientific findings.

Ideally, media coverage of climate science, especially as it relates to climate policy, would help audiences make informed judgments about proposed responses to climate change, grounded in accurate discussions of climate science.

Statements from policy makers and related media coverage exert significant influence on public attitudes toward climate change.

climate science in order to bolster their political arguments and preferences. Meanwhile, some advocates for proactive climate policies occasionally overstate the effects of climate change, although they make misleading statements far less often than do opponents of climate policy action.

Established climate science is clear: human activities are largely responsible for the majority of recent warming, and climate change is already disrupting human and natural systems (IPCC 2013; NRC 2011). Nevertheless, public attitudes toward climate science lag behind scientific understanding. Only two-thirds of Americans accept

Regardless of where citizens and policy makers might stand on climate policy and the proper role of government in the economy, whether at the local, state, regional, national, or international level, each has a position that can and should be informed by the best available science. For instance, some citizens and policy makers who oppose governmental action on climate change should still be open to recognizing and responding to risks from climate change in their personal lives and at the community level, such as rising seas. Conversely, others who favor government action to decrease global warming emissions, such as carbon pricing and

On the cable news networks, as in the halls of Congress, discussions about climate change feature a mix of political opinions and scientific information.

long-term shifts in energy production, also need to inform their policy preferences with accurate climate science.

Current climate change media coverage and commentary does not always appropriately utilize scientific findings to inform audiences. Media outlets sometimes uncritically reflect or promote the dismissive views that many policy makers and public figures hold of climate science. At the same time, in the course of regular reporting or discussions on climate change, as media outlets convey the science to their audiences, they can simply make errors. Further, when advocates for proactive climate policy appear on television, they sometimes overstate the risks of climate change. In each case, misrepresentations of climate science weaken the public’s ability to understand and grapple with the risks of climate change and cloud the decisions individuals and their communities face as they consider responses to climate change.

Categorizing Climate Science Coverage

We analyzed transcripts for many of the most highly rated cable news programs (Knox 2014), with the aim of determining how accurately they represented climate science, and filtered the data for the terms “climate change” and “global warming.” All told, we examined 24 cable news programs, including regular programming and special live broadcasts, that aired on weekdays after 5:00 p.m. Eastern time from January 1 to December 31, 2013. We also examined transcripts for five weekend morning programs, which often feature interviews with policy makers, aired over the same calendar year.

Using specified criteria (see the online appendix at www.ucsusa.org/scienceorspin), we determined whether the individual segments identified dealt with climate science and whether the portrayal of climate science was consistent with the best available scientific evidence at the time of broadcast.

We categorized coverage as “misleading” or “accurate.” Segments that accurately represented findings from climate science were categorized accordingly; segments that contained *any* inaccurate or misleading representations of climate science were categorized as misleading.

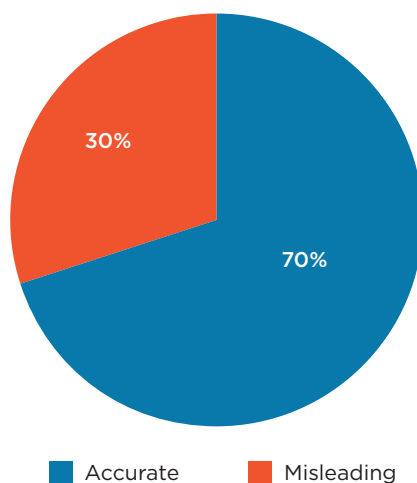
Coverage categorized as accurate also included a subcategory of segments that created accountability for public figures who misrepresented the science by either rejecting established science or overstating the effects of climate change.

We further categorized misleading statements within segments to determine the way in which they may have misinformed viewers about climate science. In the most obvious cases, hosts and guests disparaged scientists or fostered doubt about the validity of climate science. In other cases, they understated the effects of climate change or dismissed the reality of human-induced climate change outright. Many segments featured misleading statements in the context of debates between guests who accepted or rejected established climate science. Finally, some segments overstated the evidence of the effects of climate change, in particular, linking climate change and some forms of extreme weather where the evidence does not support such a specific link.

How Scientific Accuracy Varied among the Networks

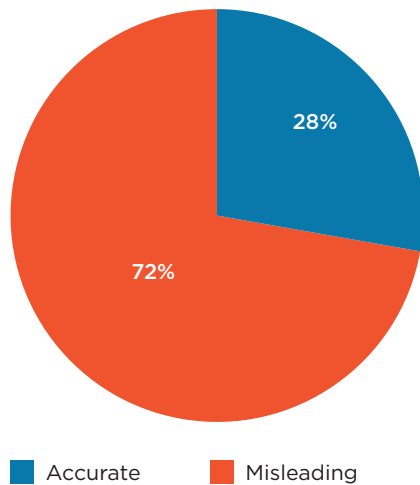
Of the CNN segments that mentioned climate science, 70 percent were entirely accurate, while 30 percent included

CNN Coverage of Climate Science



In 2013, 30 CNN segments referencing climate science were entirely accurate while 13 contained misleading statements.

Fox News Coverage of Climate Science



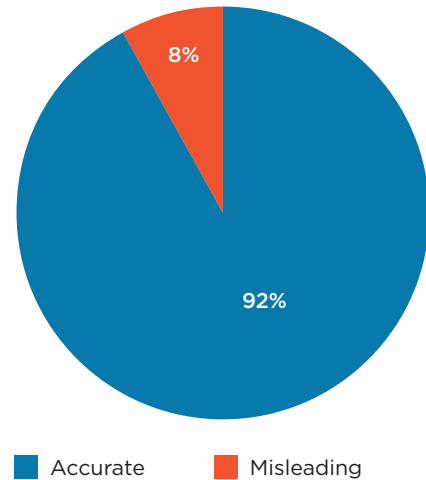
In 2013, 14 Fox News segments referencing climate science were entirely accurate while 36 contained misleading statements.

misleading portrayals of the science. CNN programs referenced the terms “climate change” or “global warming” in 111 segments during 2013 and, of this coverage, 39 percent of the segments touched on climate science. Most of CNN’s misleading coverage stemmed from segments that featured debates between guests who accepted established climate science and other guests who disputed it. Such debate formats represent a framing choice that suggests established climate science is still widely debated among scientists, which it is not. This debate structure also allows opponents of climate policy to convey inaccurate portrayals of the science to viewers.

Of the Fox segments that mentioned climate science, 28 percent were entirely accurate, while 72 percent included misleading portrayals of the science. Fox programs aired 186 segments that touched on climate change, and these segments featured discussions of climate science 27 percent of the time. Fox hosts and guests were more likely than those of other networks to disparage the study of climate science and criticize scientists. Although Fox had the lowest accuracy rating among the three networks, its accuracy improved significantly since 2012, when an analysis found that only 7 percent of segments aired by the network over a six-month period were accurate (Huertas and Adler 2012).

Of MSNBC segments that mentioned climate science, 92 percent were entirely accurate, while 8 percent included misleading portrayals of the science. MSNBC programs mentioned climate change in 272 segments throughout the year, and 49 percent of the MSNBC segments touched

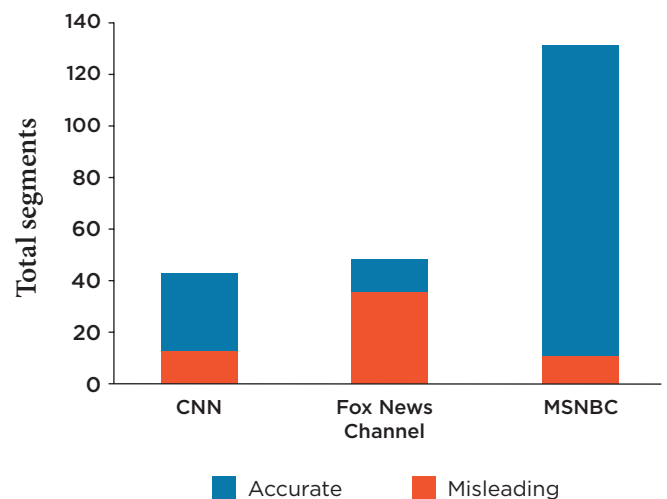
MSNBC Coverage of Climate Science



In 2013, 121 MSNBC segments referencing climate science were entirely accurate while 11 contained misleading statements.

on science. The handful of inaccurate statements made by hosts and guests on MSNBC were all inaccurate in the same manner: all overstated the effects of climate change, particularly the link between climate change and specific types of extreme weather, such as tornadoes.

Accuracy of Climate Science Segments across the Three Major Cable News Networks



In 2013, the frequency and accuracy of network climate science coverage varied significantly across networks. Segments counted as accurate were entirely accurate. Segments counted as misleading contained at least one inaccurate statement.

Our findings are consistent with an analysis of cable news coverage of climate change in 2011, which found that Fox programs were the most likely to dismiss established climate science while CNN's only did so occasionally and MSNBC's did not at all (Feldman et al. 2011).

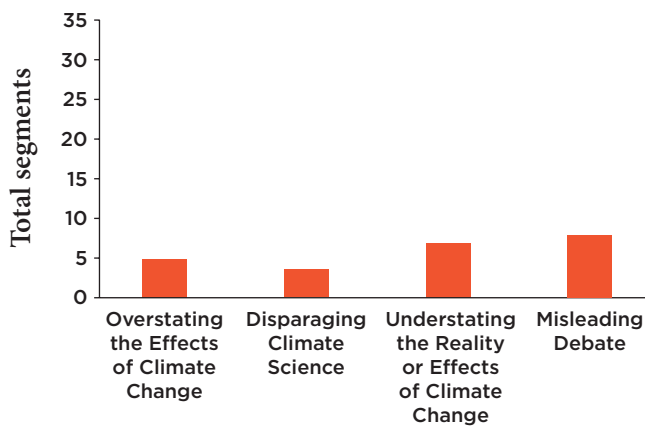
CNN: Misleading Debates Are a Detriment to Accuracy

Most of CNN's misleading coverage stemmed from debates in which participants disputed established science. Of the 43 CNN segments that touched on climate science, 13 included inaccurate statements from hosts or guests, and eight of those 13 segments were debates over established climate science. Those debates took place on *Piers Morgan Tonight* (which was re-named *Piers Morgan Live* in March), *Out Front* with Erin Burnett, and *The 11th Hour*, hosted by Don Lemon.

For example, on January 22, *Piers Morgan Tonight* invited a panel of guests to speak on what the host described as the “very contentious issue” of climate change. During this segment, Grover Norquist, founder and president of Americans for Tax Reform, said that in the “1970s, we had global cooling. Now the same scientists [who] told us that we were having global cooling [are now telling us that] we have global warming.” No consensus on global cooling existed among scientists in the 1970s, as a review of relevant scientific publications of the time demonstrates (Peterson, Connolley, and Fleck 2008).

Similarly, on January 23, Piers Morgan moderated a debate with Michael Brune, president of the Sierra Club, and Marc Morano, a former aide for Senator James Inhofe

Types of Misleading Statements on CNN



Inaccurate statements on CNN were primarily made during debates in which participants argued about established climate science.

Most of CNN's misleading coverage stemmed from debates in which participants disputed established science.

(R-OK). Morano runs a website that criticizes established science on behalf of the Committee for a Constructive Tomorrow, a group opposed to policies that reduce heat-trapping emissions. During the debate, Morano stated that global temperatures have “stalled for 15 or 16 years,” and referred to climate science as “an embarrassment.” Global warming does, in fact, continue, but opponents of climate policy often selectively cite short-term trends in global surface-temperature records to present a misleading narrative that ignores longer-term surface warming trends and neglects advancing sea level rise, melting Arctic ice, and other key indicators of climate change (NASA 2013; Nuccitelli 2013).

Also on January 23, *Out Front with Erin Burnett* hosted a debate that featured Erick Erikson, then a CNN contributor and columnist for *RedState*, who stated that extreme weather was worse in the 1950s than it is today. Erikson argued that, “It doesn't help that scientists have to keep changing the language from global warming to climate change to now extreme weather.” Scientists have, in fact, tracked an increase in many kinds of extreme weather since the middle of the twentieth century, including coastal flooding, heat waves, and changes in precipitation patterns, and they have used the terms “global warming” and “climate change” interchangeably for decades (IPCC 2013).



During a January 22, 2013, episode of Piers Morgan Tonight, Grover Norquist (president of Americans for Tax Reform) misleadingly claimed that there was once a scientific consensus on global cooling.

If CNN had not hosted any debates about climate science, its accuracy would have increased by 16 percentage points, to 86 percent.

A handful of CNN's prime-time shows also featured hosts or guests who either overstated the link between tornadoes and climate change, uncritically aired misleading claims from climate activists, or overstated the conclusions of individual reports or studies.

The majority of the network's climate science coverage was accurate. Examples of accurate segments included reporting on the results of the Working Group I report from the Intergovernmental Panel on Climate Change, released in September 2013, as well as segments from *The Situation Room* that accurately portrayed the link between climate change and extreme weather. On August 23, the program aired a segment from correspondent Tom Foreman, who explained the link between climate change and wildfires (IPCC 2013; IPCC 2012). On November 12, correspondent Brian Todd accurately tackled the complex science behind hurricanes and climate change, as well as the much more straightforward link between climate change and sea level rise and increased coastal flooding (IPCC 2013; IPCC 2012).

Fareed Zakaria's coverage also stood out. He hosted several conversations with public figures in which he and his guests accurately conveyed the science while discussing its implications for climate policy, including interviews with former Vice President Al Gore and New York Mayor Michael Bloomberg. On March 10, Zakaria hosted Sierra Club President Michael Brune to discuss the Keystone pipeline. Although Brune and Zakaria disagreed on whether or not the pipeline should be built, their discussion accurately portrayed findings from climate science that have bearing on the debate.

RECOMMENDATIONS FOR CNN

The biggest step that CNN could take to increase the accuracy of the information it provides to its viewers is to stop hosting debates about established climate science and instead host debates and discussions about whether and how to respond to climate change through climate policy. If CNN had not hosted any debates about climate science, its accuracy would have increased by 16 percentage points, to 86 percent.

Recently, CNN's Carol Costello, who anchors some of the network's weekday morning news coverage, said that debates over the reality of climate change are invalid. In a column on CNN's website, she questioned why policy makers and advocates are still debating established science, writing, "There is no debate. Climate change is real. And, yes, we are, in part, to blame" (Costello 2014).

At least one other news outlet has concluded that misleading debates about established science are detrimental to informing the public about the risks and consequences of climate change. In a BBC review of its science coverage, the network found that debates about climate policy should not be conflated with debates about scientific facts (Jones 2011).

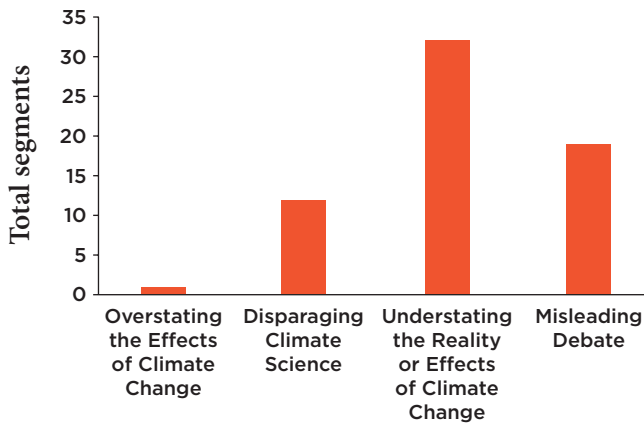
We recognize that producers at CNN and other cable news programs often have tight deadlines for identifying appropriate guests, and hosts have the difficult job of managing live discussions. When programs want to host debates about climate change, it is important that hosts frame those debates not in terms of established science but rather in terms of climate action or climate policy. When finding and choosing guests for such debates, producers and hosts should seek out people who disagree with one another about policy, but who do not dispute or overstate the science. Of course, many opponents of climate policy also reject established climate science. If programs have those public figures on as guests, producers and hosts should make it clear that the debate is about climate policy and advise these guests ahead of time to focus on policy. Importantly, when moderating debates, hosts should be prepared to challenge and fact-check guests who make inaccurate statements about the science. Further, they can redirect guests who misinform viewers about the science toward discussions of their policy positions. Programs could also consider fact-checking inaccurate statements that guests make about climate science on subsequent broadcasts or on their websites. This is especially worth doing if programs host policy makers who are responsible for formulating climate policy but who do not accept established climate science.

Fox: Politicized Rejections of Climate Science Are Emphasized

Of the three major cable news networks, Fox had the lowest percentage of accurate coverage of climate science, at 28 percent. More than half of the network's misleading coverage (53 percent) was from *The Five*, where co-hosts often engaged in arguments about established science. If not for this program, Fox would have had an accuracy rating of 45 percent.

Fox programs featured 12 instances of hosts or guests disparaging climate science by questioning the credibility

Types of Misleading Statements on Fox News



Fox News hosts and guests were more likely to disparage climate science and criticize climate researchers than hosts and guests on other networks.

of scientists and criticizing the study of climate science in general. For instance, on February 13, Sean Hannity said, “I don’t believe that this global warming nonsense is real” and invoked “phony emails” from scientists. Hannity was likely referring to emails that were stolen from climate scientists in 2009. Despite the slew of accusations against these scientists from people who dispute aspects of climate science, the scientists’ credibility has been affirmed in multiple investigations (NSF 2011; UCS 2011; Russell et al. 2010).

On September 30, *The Five’s* Greg Gutfeld accused scientists involved with the Intergovernmental Panel on Climate Change of obfuscation when he said that, “Experts pondered hiding the news that the earth hadn’t... warmed in 15 years, despite an increase in emissions. They concluded that the missing heat was trapped in the ocean. It’s like blaming gas on the dog if the ocean was your dog.” This was not the case, as scientists were publicly discussing questions about the relationship between surface temperature trends, heat trapped in the deep ocean, and the flow of heat throughout the planet as the climate warms (Nuccitelli 2013).

On August 16, during a panel discussion on *Special Report with Bret Baier*, syndicated columnist Charles Krauthammer stated that climate science “is young, it’s new, built on all kinds of assumptions and data which contradicts each other.” In this case, Krauthammer misrepresented the long history of climate science, which has produced scores of conclusions based on consistent evidence and rigorous theoretical frameworks (Oreskes and Conway 2010).

In other cases, hosts or guests made statements about climate science that were incorrect or substantively

misleading. One of the most common points raised involved downplaying long-term warming trends by focusing on relatively short time spans in the global temperature record. Statistically, these arguments are akin to discussing the seventh inning of a baseball game while ignoring the other innings and the final score. Krauthammer, for instance, stated that, “Temperatures have been flat for 16 years.” Rich Lowry of the *National Review* similarly stated that the globe had not warmed for 15 years. Greg Gutfeld also said that there has been a “pause in global warming over 15 years now.” In each case, hosts or guests omitted references to long-term trends in rising temperatures and did not discuss other markers of climate change, such as rising seas or melting glaciers (NASA 2013; Nuccitelli 2013).

Interspersed among these misleading statements, Fox hosts and guests accurately covered climate science 14 times over the course of the year—in 28 percent of the

Of the three major cable news networks, Fox had the lowest percentage of accurate coverage of climate science, at 28 percent.

segments that touched on climate science. On June 23, *Fox News Sunday’s* Chris Wallace interviewed Gabriel Gomez, a Massachusetts Republican, about his race for a seat in the U.S. Senate. During the interview, Gomez affirmed that he accepts established climate science. Two days later, Bret Baier



During a September 30, 2013, broadcast, The Five co-host Greg Gutfeld accused scientists of trying to hide information related to global temperatures.

The most productive step that Fox could take to improve the accuracy of its coverage of climate science would be for hosts and guests to differentiate between scientific facts about climate change and political opinions about climate policy.

interviewed Senator Joe Manchin (D-WV) about energy policy, and they briefly and accurately discussed established climate science. On February 18, during a panel on Baier's program, political analyst Juan Williams accurately stated in a discussion about the Keystone pipeline that heat-trapping emissions cause climate change, and no other panelists challenged him on this point. On March 4, Bill O'Reilly interviewed actress Darryl Hannah about personal steps that individuals can take to reduce pollution. O'Reilly noted that Hannah accepts the science that "fossil fuels are causing global warming" when he opened the interview, although they did not discuss climate science in the interview itself. This interview was aired on two other occasions in 2013.

Some Fox programs also contributed to a more accurate discussion of climate science by criticizing public figures who overstated the science on climate change. On October 7, Bret Baier held up an overstatement about the speed and severity of climate change by musician Bob Geldof for criticism. Similarly, on January 30 and 31, Bill O'Reilly challenged an overstatement made by Christine Hefner, former CEO of Playboy Enterprises, about the relationship between climate change, heat waves, and gun violence.

O'Reilly and Baier's programs, although also airing a number of segments containing inaccurate statements about climate science, were responsible for nearly all of the network's accurate coverage.

RECOMMENDATIONS FOR FOX

Of the three networks analyzed, Fox's coverage was the most dismissive of climate change. Hosts and guests regularly rejected established climate science as a base from which to argue against climate policies. The most productive step

that the network could take to improve the accuracy of its coverage of climate science would be for hosts and guests to differentiate between scientific facts about climate change and political opinions about climate policy. Doing so would give Fox viewers a more realistic foundation from which to advocate for their preferred climate policies and from which to make personal decisions about responding to the near-term effects of climate change.

Many Fox hosts and guests expressed opposition to climate policies without discussing the science, and such segments did not contribute to Fox's low accuracy rating. These segments indicate that it is possible for hosts and guests to argue for their policy goals without appealing to inaccurate portrayals of the science. Fox programs could therefore emphasize coverage that focuses only on policy and steers clear of statements about established science. Co-hosts on *The Five*, in particular, could do more to reduce discussions focused on disputes over climate science and instead highlight their disagreements about climate policy.

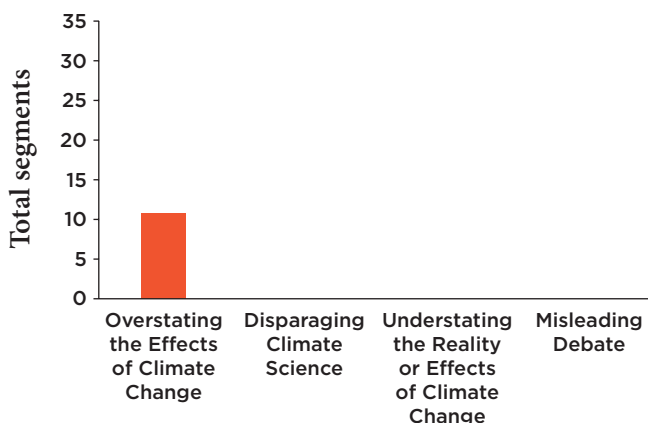
The effects of climate change are pushing many policy makers to adopt and consider climate adaptation policies, but because many Fox hosts and guests question the evidence that climate change is causing disruptive sea level rise, extreme heat, and changes to precipitation, for example, the voices of these public figures and policy makers are largely absent in policy debates. The opinions of Fox hosts and guests, as well as their audiences, about whether and how to deal with the various consequences of climate change therefore remain largely absent in the national debate.

The network would do well to feature more fact-checking on statements made by Democrats and liberals that overstate the effects of climate change. Additionally, hosts could interview more conservative public figures who accept mainstream climate science and who endorse emissions reduction and climate adaptation policies that they feel are consistent with conservative values, such as reforming federal disaster relief to reduce government spending or reducing taxes on individuals through a revenue-neutral carbon tax. Such coverage could be consistent with hosts' values and would offer a more accurate representation of climate science to their audiences.

MSNBC: Climate Coverage Is Prioritized, Climate Change Impacts Are Occasionally Overstated

Overall, 92 percent of MSNBC segments that touched on climate science were entirely accurate. MSNBC hosted no debates about established science, and no hosts or guests disparaged climate science or scientists, questioned

Types of Misleading Statements on MSNBC



All inaccurate statements tracked on MSNBC overstated the effects of climate change. The network hosted no debates about climate science and hosts and guests did not disparage climate science or understate its effects.

established science on climate change, or understated the consequences of a changing climate. Still, in 11 cases, MSNBC hosts or guests overstated the consequences of climate change, for instance, regarding the links between climate change and some forms of extreme weather and the speed and severity of sea level rise. Importantly, each of these misstatements was in the context of a segment that otherwise contained accurate portrayals of climate science.

In one example, on January 27, Melissa Harris-Perry linked climate change to the “severity and frequency of the major storms hitting the East Coast.” While it would have been accurate to talk about a link between climate change and storm severity—due to an increase in storm intensity in the North Atlantic combined with sea level rise—the mention of frequency is not backed up by the best available science (IPCC 2013).

MSNBC’s coverage was almost always accurate, and hosts and guests often accurately described scientific findings on extreme weather.

On June 25, *Hardball* host Chris Matthews overestimated the speed with which sea level rise is predicted to inundate portions of Miami. On June 22, Maya Wiley, a guest from the Center for Social Inclusion on *Up with Steve Kornacki*, said that in “roughly 50 years, south Florida will be gone.” While major parts of Florida will likely face repeated coastal flooding as sea levels rise, the science does not project that major portions of the state will be permanently inundated within such a time frame (NOAA 2012).

Still, MSNBC’s coverage was almost always accurate, and hosts and guests often accurately described scientific findings on extreme weather. Importantly, they drew distinctions between established science on extreme weather and an individual’s views about the potential connection between climate change and certain weather phenomena. For instance, on May 21, Chris Matthews interviewed Weather Channel meteorologist Greg Forbes regarding tornadoes. Forbes described broad scientific opinion when he said, “The jury, so to speak, is out a little bit in terms of the climate relationship to tornadoes.” Forbes went on to share his personal expert view that the area over which tornadoes form may be changing as the planet warms.

Chris Hayes’s coverage also stood out for the frequency and depth with which he approached climate coverage. Hayes covered climate science more than any other host examined across the three networks, with 30 segments on *All In with Chris Hayes*, including a multi-segment prime-time special on climate change, and nine segments on *Up with Chris Hayes*. Melissa Harris-Perry also hosted several panel discussions on climate change that included a wide variety of voices, particularly from social justice groups, that were often absent from climate coverage on other networks.

Much of MSNBC’s accurate coverage, 57 percent, involved criticisms of politicians and other figures for rejecting climate science. This coverage fostered accountability for public figures who reject climate science



During a June 25, 2013, episode of Hardball, Chris Matthews overestimated the speed with which major portions of Miami will be permanently inundated as sea levels rise.

Although MSNBC aired a handful of overstatements in 2013 about the link between climate change and extreme weather, hosts and guests much more often accurately represented nuanced findings around climate change and extreme weather.

and varied in the length and the degree to which hosts discussed science in detail. For the most part, it criticized some Republicans and Tea Party supporters for rejecting climate science. Some segments featured only brief and non-substantive criticisms of policy makers for rejecting established science, sometimes within the context of accurate discussion of climate science or discussions of climate policy. In other cases, hosts presented rebuttals to inaccurate climate science statements from public figures.

On January 22, *Politics Nation* host Al Sharpton aired a segment called “*Politics Nation Science Lab*,” during which he played several clips of politicians making misleading statements about climate change, and followed up by citing the Intergovernmental Panel on Climate Change and research regarding the extent of the scientific consensus on human-induced climate change. Chris Hayes also explored why people accept and dispute established climate science with Sam Thernstrom, a former White House official who worked on energy and climate policies under a Republican administration, and Bob Inglis, a former Republican member of Congress who accepts established climate science. Several programs discussed politicized attacks on climate researchers. Hayes and Chris Matthews went a step further, with both hosts interviewing Pennsylvania State University climate researcher Michael Mann, who has faced such attacks on his research.

RECOMMENDATIONS FOR MSNBC

MSNBC’s coverage accurately engages and informs its audience on a variety of climate science issues that have

bearing on policy debates, on both adaptation and emissions reductions. MSNBC’s misleading statements were few and far between. Although the network aired a handful of overstatements in 2013 about the link between climate change and extreme weather, hosts and guests much more often accurately represented nuanced findings around climate change and extreme weather. They could do so more often and achieve even higher levels of accuracy.

In addition, hosts may wish to seize more opportunities to hold politicians who reject climate science accountable in more robust ways. In some cases, hosts and guests briefly criticized politicians for rejecting climate science. In other cases, they used rejection of climate science as an opportunity to reaffirm to their audiences what is known scientifically. Less commonly, they took time to explore why people are rejecting science in the first place. Ultimately, the latter two types of accountability coverage may do more to advance public understanding of climate science and public dialogues around climate policy than brief criticisms of policy makers who dispute established science.

Toward Accurate Climate Science Coverage that Can Inform Policy Debates

If citizens are to contribute to a democratic debate about responses to climate change and efforts to curb it, established climate science should always be portrayed accurately in the media. Every news or opinion program, regardless of its approach to questions of climate policy, should empower its viewers with accurate portrayals of the physical realities we face. Audiences deserve coverage that accurately informs them about climate science, so they can apply their own values and reasoning to questions of climate policy. But the differences among the cable networks in the accuracy of their science coverage are stark. Networks differ dramatically in the degree to which they are equipping their viewers to be active, informed citizens when it comes to climate policy deliberations at the federal, state, and local levels, and in their personal lives.

Climate science can be complex and can be difficult to cover. Still, each of these networks, regardless of its overall performance, has shown that it can get the science right. This is a trend to build upon. Each can—and should—do more to achieve higher levels of accuracy.

Climate science should not be treated as a political punching bag. Our national dialogue requires that we utilize scientific evidence to identify risks and inform the choices that we, as individuals and as a society, face. Mutual acceptance of the facts as they are is a prerequisite to having a reasoned debate about whether and how to respond to those facts.

While misinformed or outdated views on climate science will continue to be held by public figures and decision makers, cable networks should fact-check and challenge those views when they contradict established science, and not present them as a valid alternative. Even if hosts on a network oppose certain climate policies, such as forthcoming Environmental Protection Agency rules that would reduce heat-trapping emissions from power plants, it is ultimately counter-productive to use the rejection of science as a means to bolster a case against addressing climate change—doing so degrades our ability to understand and grapple with the world as it is.

At the same time, proponents of climate policy would do well for themselves—and for the public they seek to inform and engage—to make sure they accurately reflect the scientific links between climate change and extreme weather, especially as that science continues to evolve.

Every cable news network has the opportunity to empower its viewers with accurate information, even as its hosts, guests, and audiences express varying attitudes, beliefs, and values around questions of climate policy. They should seize this opportunity. Even as some policy makers and interest groups continue to spread misinformation about science, cable news networks can elevate the voices of people and public figures who are responsibly engaging in climate policy debates and getting the science right. Doing so would go a long way toward fixing our broken climate debate.

Aaron Huertas is a science communications officer at the Union of Concerned Scientists (UCS). Rachel Kriegsman is a program assistant in the UCS Climate and Energy Program.

Mutual acceptance of the facts as they are is a prerequisite to having a reasoned debate about whether and how to respond to those facts.

ACKNOWLEDGMENTS

This report was made possible by the Energy Foundation, The Grantham Foundation for the Protection of the Environment, the Mertz Gilmore Foundation, and the support of UCS members.

The authors would like to thank their colleague Melanie Fitzpatrick for reviewing segments of this analysis for scientific accuracy. They would also like to thank Robert Brulle, Peter Dykstra, Lauren Feldman, Stephan Lewandowsky,

Laura Marchelya, Karin Matchett, Tyson Miller, Dana Nuccitelli, and Shauna Theel for their valuable feedback on this report, as well as their colleagues at UCS: Angela Anderson, Dave Anderson, Eric Bontrager, Doug Boucher, Nancy Cole, Brandy Doyle, Brenda Ekwurzel, Pipa Elias, Peter Frumhoff, Sarah Goldberg, Gretchen Goldman, Rich Hayes, Kanoko Maeda, Calen May-Tobin, Tara Mosby, Elliott Negin, Lisa Nurnberger, Kathleen Rest, Andrew Rosenberg, Suzanne Shaw, Seth Shulman, Jean Sideris, Bryan Wadsworth, and David Wright.

The opinions expressed herein do not necessarily reflect those of the organizations that funded the work or the individuals who reviewed it. The authors bear sole responsibility for the report's content.

REFERENCES

- Brulle, R.J., J. Carmichael, and J.C. Jenkins. 2012. Shifting public opinion on climate change: An empirical assessment of factors influencing concern over climate change in the U.S., 2002–2010. *Climatic Change* DOI 10.1007/s10584-012-0403-y.
- Costello, C. 2014. Why are we still debating climate change? CNN.com. Online at <http://www.cnn.com/2014/02/24/opinion/costello-debate-climate-change/>, accessed February 24, 2014.
- Enda, J., M. Jurkowitz, A. Mitchell, and K. Olmstead. 2013. How Americans get TV news at home. Pew Research Journalism Project. Online at <http://www.journalism.org/2013/10/11/how-americans-get-tv-news-at-home>, accessed February 4, 2014.
- Feldman, L., E. Maibach, C. Roser-Renouf, and A. Leiserowitz. 2011. Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC. *International Journal of Press/Politics* 17(1):3–31.
- Holcomb, J., and A. Mitchell. 2013. The state of the news media 2013. Cable: By the numbers. Pew Research Center's Project for Excellence in Journalism. Online at <http://www.stateofthemediamedia.org/2013/cable-a-growing-medium-reaching-its-ceiling/cable-by-the-numbers>, accessed February 4, 2014.
- Huertas, A., and D. Adler. 2012. Is News Corp. failing science? Cambridge, MA: Union of Concerned Scientists. Online at http://www.ucsusa.org/assets/documents/global_warming/Is-News-Corp-Failing-Science.pdf, accessed February 27, 2014.
- Intergovernmental Panel on Climate Change (IPCC). 2012. *Managing the risks of extreme events and disasters to advance climate change adaptation. A special report of Working Groups I and II of the Intergovernmental Panel on Climate Change*. Edited by C.B. Field, V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley. Cambridge, UK, and New York, NY: Cambridge University Press.
- Intergovernmental Panel on Climate Change (IPCC). 2013. *Climate change 2013: The physical science basis. Contribution of Working Group I to the fifth assessment report of the Intergovernmental Panel on Climate Change*. Edited by T.F. Stocker, D. Qin, G.K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P.M. Midgley. Cambridge, UK, and New York, NY: Cambridge University Press.
- Jones, S. 2011. Review of impartiality and accuracy of the BBC's coverage of science. BBC Trust. Online at http://www.bbc.co.uk/bbctrust/our_work/editorial_standards/impartiality/science_impartiality.html, accessed March 7, 2014.
- Kahan, D., H. Jenkins-Smith, and D. Braman. 2010. Cultural cognition of scientific consensus. *Journal of Risk Research* 14(2):147–174.
- Kenneally, T. 2014. Cable news ratings 2013: Fox tops while CNN slides into second. The Wrap. Online at <http://www.thewrap.com/fox-news-cnn-msnbc-cable-news-ratings>, accessed February 4, 2014.

- Knox, M. 2014. The top cable news shows in 2014 were... TV Newser. Online at http://www.mediabistro.com/tvnewser/the-top-cable-news-shows-of-2013-were_b208967, accessed February 4, 2014.
- Leiserowitz, A., E. Maibach, C. Roser-Renouf, G. Feinberg, S. Rosenthal, and J. Marlon. 2014. Climate change in the American mind: Americans' global warming beliefs and attitudes in November, 2013. New Haven, CT: Yale Project on Climate Change Communication.
- National Air and Space Administration (NASA). 2013. Ask a climate scientist: Global warming pause? Online at <http://www.youtube.com/watch?v=MmoYStB-Rzw>, accessed February 21, 2014.
- National Oceanic and Atmospheric Administration (NOAA). 2012. Global sea level rise scenarios for the United States national climate assessment. Online at http://cpo.noaa.gov/sites/cpo/Reports/2012/NOAA_SLR_r3.pdf, accessed February 5, 2014.
- National Research Council (NRC). 2011. America's climate choices. Washington, DC: National Academies Press.
- National Science Foundation (NSF), Office of the Inspector General. 2011. Closeout memorandum case number A09120086. Online at <http://www.nsf.gov/oig/search/A09120086.pdf>, accessed February 22, 2014.
- Nuccitelli, D. 2013. The global climate continues to warm rapidly. Skeptical Science. Online at <http://www.skepticalscience.com/ipcc-global-warming-pause.htm>, accessed February 4, 2014.
- Oreskes, N., and E. Conway. 2010. *Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming*. New York City, NY: Bloomsbury Press.
- Peterson, T., M. Connolley, and J. Fleck. 2008. The myth of the 1970s global cooling scientific consensus. *Bulletin of the American Meteorological Society* 89:1325–1337.
- Pew Research Centers for the People and the Press (Pew). 2013. GOP deeply divided over climate change. Online at <http://www.people-press.org/2013/11/01/gop-deeply-divided-over-climate-change>, accessed February 4, 2014.
- Russell, M., G. Boulton, P. Clarke, D. Eyton, and J. Norton. 2010. The independent climate change e-mails review. Norwich, UK: University of East Anglia. Online at <http://www.cce-review.org/pdf/FINAL%20REPORT.pdf>, accessed February 22, 2014.
- Union of Concerned Scientists (UCS). 2011. Debunking misinformation about stolen climate emails in the "Climategate" manufactured controversy. Online at http://www.ucsusa.org/global_warming/solutions/fight-misinformation/debunking-misinformation-stolen-emails-climategate.html, accessed February 4, 2014.

[Union of Concerned Scientists

FIND THIS DOCUMENT ONLINE: www.ucsusa.org/scienceorspin

The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet's most pressing problems. Joining with citizens across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

NATIONAL HEADQUARTERS

Two Brattle Square
Cambridge, MA 02138-3780
Phone: (617) 547-5552
Fax: (617) 864-9405

WASHINGTON, DC, OFFICE

1825 K St. NW, Suite 800
Washington, DC 20006-1232
Phone: (202) 223-6133
Fax: (202) 223-6162

WEST COAST OFFICE

2397 Shattuck Ave., Suite 203
Berkeley, CA 94704-1567
Phone: (510) 843-1872
Fax: (510) 843-3785

MIDWEST OFFICE

One N. LaSalle St., Suite 1904
Chicago, IL 60602-4064
Phone: (312) 578-1750
Fax: (312) 578-1751