

# Climategate: What Really Happened?

*How climate science became the target of "the best-funded, best-organized smear campaign by the wealthiest industry that the Earth has ever known."*

By [Kate Sheppard](#) | Thu Apr. 21, 2011 3:00 AM PDT

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[Read also: Chris Mooney on the science of why we don't believe science.](#) [1]

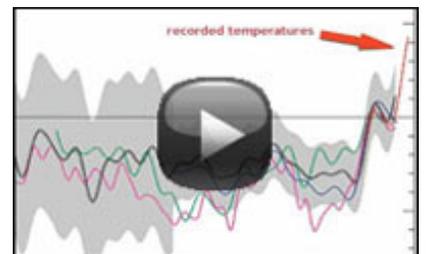
**IT'S DIFFICULT TO IMAGINE** how a guy who spends most of his time looking at endless columns of temperature records became a "fucking terrorist," "killer," or "one-world-government socialist." It's even harder when you meet [Michael Mann](#) [2], a balding 45-year-old climate scientist who speaks haltingly and has a habit of nervously clearing his throat. And when you realize that the reason for all the hostility is a 12-year-old chart, it seems more than a little surreal.

Back in 1999, Mann—then a [newly minted Ph.D.](#) [3] (PDF)—and a pair of colleagues constructed a chart that plotted historical climate data, spanning from 1000 to 1980. Because recorded temperatures only begin in the late 19th century, Mann and his team largely relied on so-called proxy records—measurements of tree rings, coral, and ice cores whose variations illustrate temperature changes over the years. The graph showed that after nearly 900 years of relatively stable temperatures, there was a sharp uptick starting in the 20th century.

You may have seen a version of the graph, known as the "hockey stick," in the film [An Inconvenient Truth](#) [4]—the temperature rise is so steep, [Al Gore](#) [5] [uses a mechanical ladder](#) [6] to reach the most recent temperatures. The graph was featured prominently in a seminal 2001 report from the United Nations' [Intergovernmental Panel on Climate Change](#) [7] (IPCC) that concluded, for its first time, that "the balance of evidence suggests a discernible human influence on global climate."

The film and the IPCC report made the chart famous, but [Mann's version](#) [8] (PDF) appeared in the journal [Geophysical Research Letters](#) [9]. There, he and his colleagues explained the complex methodology, and the uncertainties, involved in their study; but let's face it, phrases like "multiproxy data network" and "extensive cross-validation experiments" are lost on most of us. "This," Mann says with an upward swoop of the arm, "the public understands." The chart tells "a very simple story."

In fact, some complained that it was too simple, [glossing over](#) [11] uncertainties in historical climate readings in order to make [a more dramatic point](#) [12]. Yet numerous other reconstructions of historical temperature records made since Mann's graph have also shown a



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dramatic uptick in the 20th century, and a 2006 assessment from the [National Academy of Sciences concluded](#) [13] (PDF) that while Mann's methodology wasn't perfect, the story the chart told was accurate.

[Watch our video on the truth behind the hockey stick graph](#) [10].

Yet global warming skeptics have made the graph exhibit A in their cause. [Congressional hearings](#) [14] have focused on it, and it has been the impetus for [multiple](#) [15] [critical](#) [16] [books](#) [17] and blog posts. Skeptics have [dismissed the graph](#) [18] as "little more than paleo-phrenology" and claimed that "[Mann-made warming is real](#) [19], while man-made warming remains at best a theory, more likely a hypothesis."

And Mann himself has become a target. Virginia's crusading [Republican attorney general](#) [20] has suggested that he may have committed research "fraud." The [2011 Conservative Political Action Conference](#) [21] had a booth where attendees could throw eggs at his picture. There was a flood of hate mail, much of it containing death threats: "Your work is finished. YOU ARE GOING TO HANG SOON!"

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"Climate science has basically been at the receiving end of the best-funded, best-organized smear campaign by the wealthiest industry that the Earth has ever known—that's the bottom line," Mann told me when I visited him at his Penn State office last November. Near his desk, Mann keeps an actual hockey stick, signed by Middlebury College's championship hockey team to show the school's support for his work.

Things really heated up for Mann in late 2009, when more than 1,000 emails from him and other climate scientists were lifted from a server [at the Climatic Research Unit](#) [22] (CRU) of the UK's University of East Anglia, the world's leading research institution focused on climate change. The emails offered a window into the climate-science bunker, with a view of Mann and his fellow researchers growing increasingly defensive. [One scientist wrote](#) [23] that he was "tempted to beat the crap out of" a skeptic at the libertarian Cato Institute. Another joked that the way to deal with skeptics was "continuing to publish quality work in quality journals (or calling in a Mafia hit)." Scientists suggested that they would rather destroy data than provide them to their critics. They also discussed using "tricks" in their research, debated how to frame uncertainties in some of their data, and attempted to control access to peer-reviewed journals.

Within days, the heist—soon dubbed "[Climategate](#) [26]"—was all over the news. [Glenn Beck called it](#) [27] a "potentially major scandal"; [Fox News crowed](#) [28] that the emails "undercut the whole scientific claim for man's impact on global warming." Rep. [James Sensenbrenner \(R-Wis.\) decried](#) [29] (PDF) them as evidence of "scientific fascism."



[24]

[Click here to see our timeline of the Climategate scandal](#) [25].

The immediate impact on public opinion was dramatic. A [poll by Yale and George Mason University](#) [30] (GMU) found that in November 2008, 71 percent of respondents agreed that the planet is warming (PDF).

Five weeks after Climategate, only 57 percent believed it. The emails, [said a Yale report](#) [31] (PDF), had "a significant effect on public beliefs in global warming and trust in scientists."

**IF A SINGLE PERSON CAN BE** credited with setting the stage for Climategate, it's Stephen McIntyre, the retired mining consultant behind the popular skeptic blog [Climate Audit](#) [32]. Over the past decade, McIntyre has built a reputation for finding methodological errors—some real, some perceived—in climate studies. The [Wall Street Journal heralded McIntyre](#) [33] as "global warming's most dangerous apostate."

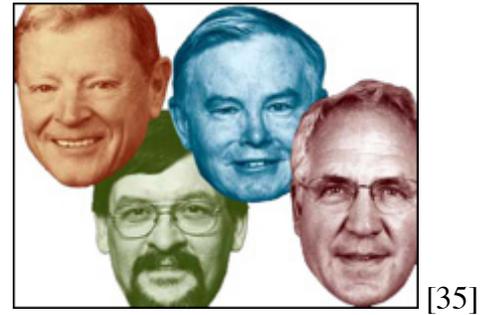
Indeed, McIntyre has made goading scientists—particularly Mann—close to a full-time job. Like Mann, McIntyre is genial in interviews, but on his blog, his tone toward the scientists targeted by his audits ranges from inquisitive to openly hostile.

The 63-year-old squash enthusiast from Toronto made his money in mining. He has also consulted for the Canadian oil and gas exploration company [CGX Energy](#) [34]. He says his mining ties don't affect his views on climate change and insists that his prolific blogging on the topic has not benefited him financially—rather, it's taken time away from more profitable business.

McIntyre belongs to the school of skeptics known as "lukewarmers"—those who believe the planet is warming and humans are playing a role (see our [Field Guide to Climate Change Skeptics](#) [35]), but don't think this is as much of a problem as it has been made out to be.

"I'm not particularly comfortable with either side of the US debate," McIntyre told me. "There are obviously competent and intelligent people that view it as a serious problem. That doesn't mean that they're right, but it's not a hoax." Nor does he oppose government regulations on principle, as do some of the free-market think tanks that regularly invite him to DC for speaking engagements. "I'm a Canadian," says McIntyre. "I think governments can do things."

McIntyre's entrée into the climate debate came with a paper he coauthored with economist Ross McKittrick that critiqued [an earlier version of Mann's](#) [36] (PDF) hockey-stick graph. The paper was published in the November 2003 issue of [Energy and Environment](#) [37]. It's a publication known for providing a platform to skeptics—which is why, among the trove of hacked emails, there's [one from Mann urging](#) [38] colleagues to "dismiss this as [a] stunt, appearing in a so-called 'journal' which is already known to have defied standard practices of peer-review." Mann predicted that "the usual suspects are going to try to peddle this crap."



[Click here to see our field guide to climate change skeptics](#) [35].

Sure enough, McIntyre and McKittrick were soon invited to [Washington for a briefing](#) [39] (PDF) arranged by the George C. Marshall Institute and the Competitive Enterprise Institute (CEI), both free-market think tanks that have been heavily funded by ExxonMobil and other oil interests. They were also asked to meet with [Sen. James Inhofe](#) [40] (R-Okla.), who has [called climate change](#) [41] "the greatest hoax ever perpetrated on the American people."

The targets of McIntyre's audits were less enthralled. "I wouldn't send him anything," Mann [emailed CRU head Phil Jones](#) [42] in February 2004. "I have no idea what he's up to, but you can be sure it falls into the 'no good' category...There is no reason to give them any data, in my opinion, and I think we do so at our own peril!"

In February 2005, [McIntyre and McKittrick published](#) [43] (PDF) another critique of the hockey-stick chart in the more-respected *Geophysical Research Letters*. They argued, essentially, that the chart underestimates the uncertainties about historical temperatures and relies on proxy data that they believe are "no more informative about the distant past than a table of random numbers."

McIntyre isn't alone in his skepticism about proxy data—in fact, it's at the heart of the climate debate. Recorded temperature measurements only [go back about 160 years](#) [44], so scientists use data from [tree rings, ice cores, and coral](#) [45] to reconstruct [what the climate was like](#) [46] before that. For two millennia, those data sets align to show swings of about one degree Fahrenheit in either direction. But then, in the 1960s, [some tree-ring data diverge](#) [47] (PDF) and suggest declining temperatures—even as actual temperatures show a dramatic rise. No one knows quite why this is; some researchers suggest the trees may actually be showing the stress from human activities. This divergence is one reason that many skeptics argue against using temperature reconstructions in climate change research.

McIntyre's paper made headlines. A few days after publication, he was featured in a front-page piece in the [Wall](#)

[Street Journal that pitted](#) [48] (PDF) his hockey-stick critique against the whole of global warming science, saying he had "helped to reopen the debate."

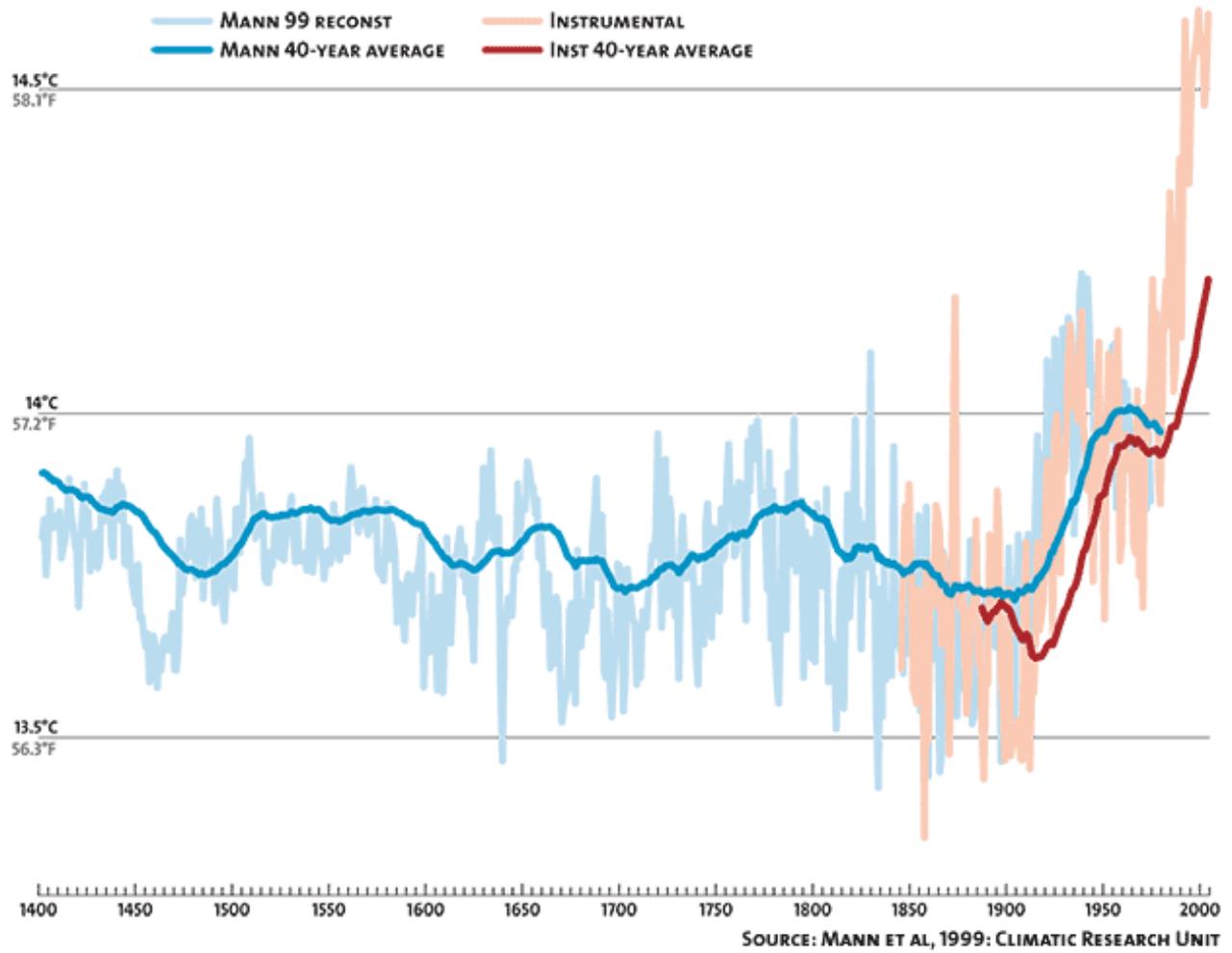
Few scientists will ever get that kind of coverage for their life's work, let alone for a single article on someone else's research. But McIntyre's critique came at a time when those seeking to block action on climate change were on the defensive—many had been pilloried for their ties to industry ([PDF](#) [49]) and right-wing think tanks, and public opinion was turning toward action on climate change. At this pivotal moment, reopening the debate was just what the skeptics, and their industry backers, needed. McIntyre and McKittrick were flown to Washington for another [briefing with the Marshall Institute and CEI](#) [50] (PDF).

Congressional conservatives swung into action. Rep. "[Smokey](#)" [Joe Barton](#) [51] (R-Texas), then the chairman of the House Energy and Commerce Committee, launched a formal inquiry into the work of Mann and other climate scientists in June 2005. As part of the inquiry, Barton—who believes acting on global warming is "[absolute nonsense](#) [52]" and said in a hearing that "[when it's hot, we find shade](#) [53]"—enlisted George Mason University [statistician Edward Wegman](#) [54] to produce a report on the hockey stick. (In doing so, [Barton eschewed](#) [55] (PDF) the more [traditional route of requesting](#) [56] (PDF) a report from the National Research Council, a branch of the National Academy of Sciences.)

## The Hockey Game

### 600 years of temperature data can't be wrong. Or can it?

**MICHAEL MANN'S** hockey-stick graph shows average temperatures over the past 1,000 years based on "proxy data" reconstructions from tree rings, ice cores, sediment, coral, and some instrumental data. The last 600 years of Mann's proxy data are shown below in blue. Actual temperatures, starting in the 1850s, are shown in red. (The darker trend lines are based on 40-year averages.) Both sets of data show a sharp temperature spike after the Industrial Revolution and a slight dip in the 1960s followed by a continued rise in recorded temperatures. Other climatologists have done their own studies of historic climate variations, and there is much debate over the fact that some of those studies—specifically those focusing on certain sets of tree-ring data—suggest that modern temperatures are continuing to decline.



In a slideshow meant to highlight GMU's investigations for Congress ([PDE \[57\]](#)), a Wegman staffer noted that

Barton's office warned Wegman's group to expect criticism and told them to have "thick skins." Barton's staff also provided the group with reams of reading material—particularly troubling, considering that none of the statisticians, she said, had "any real expertise in paleoclimate reconstruction." Wegman's group also consulted McIntyre in its evaluation of Mann's study, but it never reached out to Mann.

When it was released in July 2006, [the Wegman report](#) [58] (PDF) essentially agreed with McIntyre, citing statistical problems with the hockey stick and accusing climate scientists of uncritically reinforcing each other's work. Years later, [Barton](#) [59] and [other skeptics](#) [60] still tout the document as proof that the hockey stick is broken (even though GMU is currently investigating [allegations that Wegman](#) [61] may have lifted portions of the report from a previously published book).

Meanwhile, about five months after Barton commissioned Wegman for the report, the [House Committee on Science asked](#) [62] (PDF) the National Academy of Sciences to prepare a formal report on the hockey stick. The [review concluded](#) [63] (PDF) that while some uncertainties "have been underestimated," there was nevertheless "an array of evidence" supporting the main conclusion of Mann's work.

The fights over the hockey stick eventually faded from the headlines, but the data war raged on. McIntyre turned his attention to pursuing the data that climate scientists had drawn from to conclude that the planet is drastically warming. He was particularly interested in East Anglia's Climatic Research Unit, keepers of one of the most complete sets of temperature records in the world. He asked the unit for raw data, but was rebuffed. "If they ever hear there is a Freedom of Information Act (FOIA) now in the UK, I think I'll delete the file rather than send to anyone," [CRU head Phil Jones wrote to Mann](#) [64] in February 2005. He believed that if McIntyre found an error, no matter how minor, the skeptics would have a field day.

Jones' fears were not off-base. In August 2007, [McIntyre discovered an error](#) [65] in NASA's calculation of how the average temperature for a given year varies from the historical average: US temperatures between 2000 and 2006 [had been reported](#) [66] (PDF) as roughly a sixth of a degree higher than they actually were. Separately, [NASA found during its regular](#) [67] updating that 1934 had pulled slightly ahead of 1998 as the hottest year on record to that point ([2005 and 2010](#) [68] have since superseded them). The story was all over the right-wing talk circuit. "The man-made global warming is inside NASA," [Rush Limbaugh declared](#) [69]. "The man-made global warming is in the scientific community with false data."

McIntyre and others kept at it. In 2008, he sought raw data and email correspondence from [Benjamin Santer](#) [70], a scientist at the [Lawrence Livermore National Laboratory](#) [71]. Santer refused, arguing that the data were already publicly available. In a letter to a fellow scientist [he vented that](#) [72] the time-consuming request was part of "a calculated strategy to divert my attention and focus away from research." He called McIntyre "the self-

appointed Joe McCarthy of climate science," continuing, "We should be able to conduct our scientific research without constant fear of an 'audit' by Steven [sic] McIntyre; without having to weigh every word we write in every email we send to our scientific colleagues."

In September 2009, [RealClimate](#) [73], a blog launched by Mann and other scientists to fight back against skeptics, weighed in. Several of the blog's contributors [drafted a public statement](#) [74] about what they saw as a pattern: "An unverified accusation of malfeasance is made based on nothing, and it is instantly 'telegraphed' across the denial-o-sphere while being embellished along the way to apply to anything 'hockey-stick' shaped and any and all scientists, even those not even tangentially related. The usual suspects become hysterical with glee that finally the 'hoax' has been revealed and congratulations are handed out all round...Net effect on lay people? Confusion. Net effect on science? Zip."

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**Emails show scientists lashing out against McIntyre as a "bozo" and "a playground bully." "I think it was a mistake for them to in effect adopt a fatwa against *Climate Audit*," says McIntyre.**

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So how much of a nuisance was McIntyre? Consider his attempts to procure the crucial global temperature data sets that are jointly held by the CRU and the [UK's Met Office Hadley Centre](#) [75]. McIntyre dogged the CRU for access to them for years, a campaign that escalated over the course of 2009. The CRU repeatedly turned down these requests, arguing that granting them would violate agreements over data its partners had collected. Then, in June 2009, McIntyre found out that the CRU had provided the very information he had been requesting to [a scientist at Georgia Institute of Technology](#) [76]. In response, [McIntyre penned](#) [77] an angry screed on *Climate Audit*. In just the last week of July 2009, [CRU received](#) [78] [58 FOIA requests from McIntyre and others](#) [79] (PDF) affiliated with *Climate Audit*. CRU head Phil Jones argued that responding to these requests was creating an unmanageable burden.

Emails from this period show the scientists lashing out against McIntyre. He is referred to as a ["bozo"](#) [80] and ["a playground bully"](#) [81]. McIntyre clearly gets a rise out of irking scientists, whom he frequently refers to as ["the Team"](#) [82] — another play on the hockey-stick metaphor. He likes to "tease these guys and kind of make fun of them," he says, and their evident aggravation at his inquiries only egged him on. "I think it was a mistake for them to in effect adopt a fatwa against *Climate Audit*," says McIntyre.

McIntyre's latest requests for both the raw CRU data and the email correspondence between scientists about those data were formally denied on November 13, 2009. Four days later, a massive bundle of files named FOIA.zip was anonymously posted on several prominent skeptic blogs and RealClimate. In it were years' worth of the climate scientists' email exchanges. McIntyre says he doesn't know who posted the file but adds that the

timing is one of several "really strange coincidences" surrounding the emails, "if it is a coincidence." It was also, notably, just days before the start of the Copenhagen climate talks, which many hoped would result in a new global deal for regulating greenhouse gas emissions.

**SOMETIME ON OR AFTER** November 12, more than 1,000 emails between climate scientists and 3,587 other documents, including raw data and computer code, were copied from the CRU server. The files were posted online, with duplicates posted to several other servers around the world. [At 7:24 a.m. EST](#) [83], a link to the files [appeared in a comment](#) [84] on McIntyre's *Climate Audit*.

Around 7:30 a.m. that day, Gavin Schmidt, a climate modeler at NASA and cofounder with Mann of RealClimate, awoke to find his site disabled. He attempted to log in and failed. When he finally got in as the administrator, he found that the files had been uploaded to the site. At that very moment, the hacker was using a ghost administrator account to try to create a blog post that linked to the files and quoted some portions of the emails.

Schmidt recalls, "I was going, 'What's this? Oh God, this is some emails. I wrote some of these emails.'" Schmidt emailed Mann, Jones, and other scientists whose emails were included.

That same evening, [a comment on \*Watts Up With That?\*](#) [85] (WUWT)—a prominent skeptic blog run by Anthony Watts, a former TV meteorologist—linked to the files posted on a Russian file transfer protocol (FTP) site. "We feel that climate science is, in the current situation, too important to be kept under wraps," read the comment. Charles Rotter, who moderates the site, did not approve the comment for public view, but he did download the files in order to read them himself.

Next, Rotter called his housemate, Steven Mosher. Mosher, who works in marketing in San Francisco, is a frequent contributor to Climate Audit, WUWT, and other skeptic blogs. He is a self-described "data libertarian" and lukewarmer who has agitated for increased access to the data and computer codes that climate scientists use. Mosher says Rotter and Watts requested that he take a look at the files and evaluate whether they were real before posting them. "We didn't know if they were a Trojan horse, a hoax, a trap, or the real deal," says Mosher.

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**One post included a list of 20 juicy teasers from the emails—among them a quote**

Meanwhile, the files were still being posted elsewhere. At 9:57 p.m., a commenter under the handle "FOIA" [posted on the skeptic blog \*Air Vent\*](#) [86] linking to the Russian FTP. This post included a list of 20 juicy teasers from the emails—among them a quote from Mann referring to a document as "dirty laundry" and an outside researcher asking for a chapter of a report by a UEA scientist to be "beefed up." The anonymous poster also sent a follow-up

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comment to WUWT asking why the original comment hadn't yet been published. Mosher says the IP address was traced to a server in Saudi Arabia; the poster was smart enough to cover the trail.

Mosher realized that several of the emails appeared to be from McIntyre to climate scientists, so late that night he called McIntyre, who confirmed that the emails were genuine. Mosher was still parsing the files two days later when he learned that they had already been posted on the *Air Vent*. He began submitting snippets of the emails to another skeptic blog called [The Blackboard](#) [87].

"You get to see somebody with the name of Phil Jones say that he would rather destroy the CRU data than release it to McIntyre," Mosher wrote. "And you get to see what they really say behind the curtain...you get to see how they 'shape' the news, how they struggled between telling the truth and making policy makers happy." As a writer on Andrew Breitbart's conservative news site [Big Journalism](#) [88] would later put it, Mosher "is to Climategate what Woodward and Bernstein were to Watergate. He was just the right person, with just the right influence and just the right expertise to be at the heart of the promulgation of the files."

Watts also helped to spread the word. He was returning from a conference in Brussels on November 19 when he logged on to his blog from Dulles International Airport and [posted his first piece](#) [85] about the files, citing the most damning emails: In one, [CRU's Jones notes](#) [89] the death of a skeptic as "cheering news"; in another, [Jones refers to scientists](#) [90] using a "trick" to "hide the decline" in temperatures that tree-ring data showed beginning in the 1960s. (The "trick" — substituting recorded temperature data when proxy data become unreliable — isn't intended to deceive; it's an acceptable practice in paleoclimatology, since most proxy data sets end around the 1980s, and recorded temperatures are more reliable, anyway.)

"It appears that the proverbial Climate Science Cat is out of the bag," wrote Watts. He said that he had alerted two of the most vocal deniers in the US: the CEI's Christopher Horner and Marc Morano, a former staffer for Sen. Inhofe. Morano is also the editor of [Climate Depot](#) [91], a *Drudge Report*-like clearinghouse for climate skeptics run by the oil-funded think tank [Committee for a Constructive Tomorrow](#) [92]. Blogger [Terry Hurlbut](#) [posted](#) [93] excerpts of the emails on a conservative news site, the *Examiner*.

Even as the buzz around the emails kept building, scientists tried to dismiss them as a non-story. Jones only acknowledged the theft two days after the emails became public, in an interview with the New Zealand magazine

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Even as the buzz around the emails

[Investigate](#) [94]. He said he wasn't sure what exactly was in the hacked data, and noted that the university had not even alerted the police.

By the time the scientists finally reacted, the story was entering the news bloodstream. On the evening of November 19, [CEI's Horner first wrote about it](#) [19] on the *National Review's* website, calling it the "blue-dress moment" for climate change—alluding to the infamous evidence of Bill Clinton's sexual exploits. That same day, Mosher sent a Facebook message to *New York Times* reporter Andrew Revkin, flagging the emails. [Revkin wrote about them](#) [95] the next day, November 20, noting that they were "causing a stir among global warming skeptics."

By that time, [NewsBusters](#) [96], a site devoted to "exposing and combating liberal media bias," ran a story claiming that the documents "appear to indicate a conspiracy by some of the world's leading global warming alarmists." [Fox News' site was running](#) [97] the headline "Climate Skeptics See 'Smoking Gun' in Researchers' Leaked E-Mails." On November 21, the [Washington Post quoted CEI's Myron Ebell](#) [98], a well-known skeptic. "It is clear that some of the 'world's leading climate scientists,' as they are always described, are more dedicated to promoting the alarmist political agenda than in scientific research," he said. "Some of the e-mails that I have read are blatant displays of personal pettiness, unethical conniving, and twisting the science to support their political position."

By December 1, the flap had [even made The Daily Show](#) [99]. "Poor Al Gore," mocked Jon Stewart. "Global warming completely debunked via the very internet you invented. Oh, oh, the irony!"

Things didn't get much better for climate scientists when [glaciologists pointed out an embarrassing error](#) [100] in the 2007 IPCC report—a [thinly sourced and false claim](#) [101] that the Himalayan glaciers would melt away by 2035. (True, 90 percent of the world's glaciers are receding, but the Himalayas aren't expected to be ice-free for several hundred years.) The [IPCC acknowledged](#) [102] (PDF) in a statement that the "well-established standards of evidence...were not applied properly." That Glaciergate coincided so closely with Climategate was a happy coincidence for skeptics, who used it as further evidence of the unreliability of climate science.

By the end of December, the Copenhagen climate talks had ended in a [frustrating standoff](#) [103] between [the US and China](#) [104], with no major agreements about worldwide greenhouse gas regulations.

Many of the think tanks that seized upon the scandal in weeks that followed were the same anti-regulation, oil-coated outlets that have been promoting climate change denial for years. The Cato Institute, which has received funding from oil giants Koch Industries and ExxonMobil, was a key player—Cato senior fellow Patrick Michaels

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got prime real estate in the [New York Times](#) [95], on the opinion pages of the [Wall Street Journal](#) [105], and on [CNN's Anderson Cooper 360](#) [106]. In a January 2010 newsletter, [Cato boasted](#) [107] that its senior fellow was at the "center of the 'Climategate' controversy."

Meanwhile, CEI, which has also enjoyed Koch and ExxonMobil funding, trotted out Horner at every opportunity: In May 2010, he wrote about what he called "green thuggery" at the National Review's website. In July 2010, [Michaels was back](#) [108] in the *Wall Street Journal* opinion pages accusing scientists of "ugly pressure tactics" and "professional misconduct, data manipulation and jiggering of both the scientific literature and climatic data."

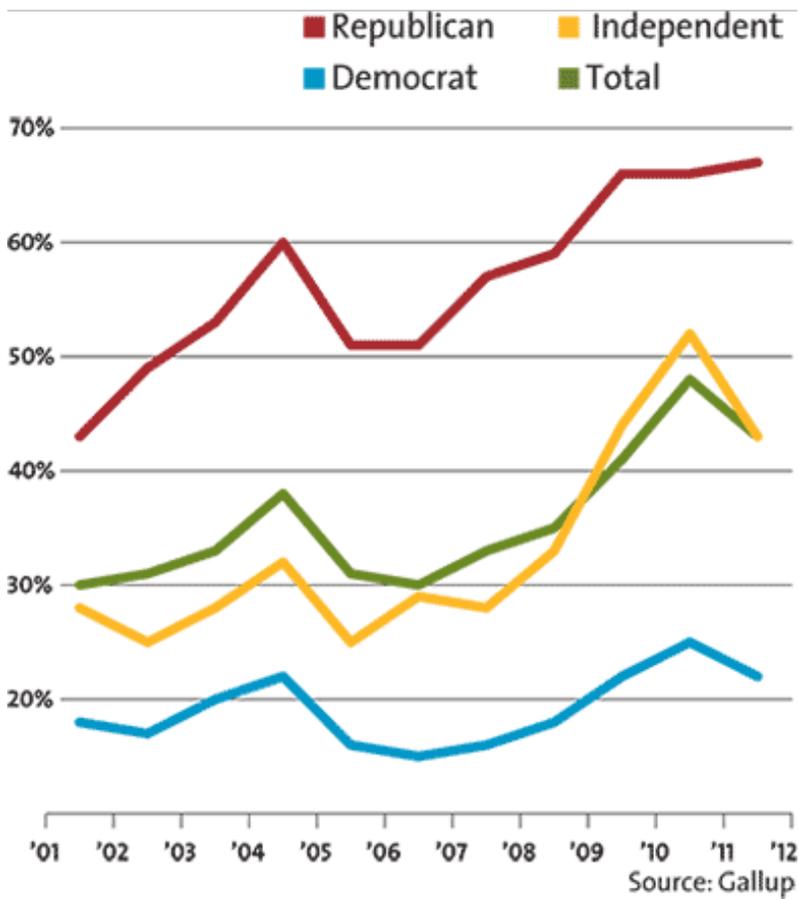
The story unleashed darker forces, as well. Mann's inbox was flooded with messages, the most civil of which called him a "fraud." Some contained death threats. Images of Mann and other scientists were posted on neo-Nazi sites. The CRU's Jones temporarily stepped down from his post; he later said he contemplated suicide.

## Don't Believe the Hype?

**AMERICAN SKEPTICISM** about the danger of global warming was already on the rise when Climategate hit the news in 2009, but the story made independents (and some Democrats) far more likely to answer yes to the question: Do the media exaggerate the seriousness of climate change?

**A YEAR AND A HALF LATER,** the question of who stole the emails and released them has never been answered. Mosher and other climate skeptics maintain that it was likely an inside job, carried out by someone at the University of East Anglia who wanted problematic science exposed. The CRU, on the other hand, maintains that it was the work of someone outside of the university—a "very professional job," says [Trevor Davies](#) [109], pro-vice chancellor for research at East Anglia and the former head of the CRU.

Meanwhile, the university hasn't disclosed the evidence for its assertion, nor has the [Norfolk Constabulary](#)



[110], the local police department responsible for the official ongoing investigation. McIntyre says British counterterrorism officers have contacted him and other bloggers about the case, but as far as he knows, nothing has ever come of the inquiry.

It's clear that the hacker was at least familiar with the climate-science debate; he knew enough to search through the hacked emails using keywords like "Mann," "hockey stick," and "Phil Jones" and to sort them accordingly. A source close to the CRU explains that the unit's security wasn't very tight—its server is separate from the rest of the university's.

That said, the cybersecurity experts I talked to noted that a hack like this would have required some sophisticated skills. Once the hacker breached the server, he still would have had to find his way into the system administrator's account, a feat that could have required special software to access the password. Then, in order to remain anonymous when posting the emails online, he would have had to scan the internet for nonsecure servers to work from—this would have allowed him to cover his own IP address. The hacker also used servers in multiple countries, making it even more difficult to trace his whereabouts.

It later became clear that [CRU was not the only target](#) [111]. In the fall of 2009, unknown parties posing as network technicians attempted to break into the office of a climate scientist at the University of Victoria in British Columbia. There were also attempts to gain access to servers at the Canadian Centre for Climate Modelling and Analysis. According to a source within the institution, there were also unsuccessful attempts to breach the server at the National Center for Atmospheric Research in Colorado. A [US diplomatic cable that WikiLeaks](#) [112] released in late 2010 also revealed "evidence of an attempt to gain unauthorized entry to computer systems" belonging to the State Department's climate bureau in 2009. The cable warned that "as negotiations on the subject of climate change continue, it is probable intrusion attempts such as this will persist."

**SO DID THE SCIENTISTS DO** something more diabolical than gripe about critics and fret over how their research would be interpreted? Not according to seven separate inquiries on the subject, each of which found that the researchers' work was not in question—though several concluded that their behavior was. An independent probe [organized by the University of East Anglia](#) [113] (PDF) found that some had turned down "reasonable requests for information" and had, at times, been "unhelpful and defensive." It noted "a consistent pattern of failing to display the proper degree of openness."

But none of the exonerations mattered: The scientists had lost control of the narrative. The percentage of people who believe that the world is warming has fallen 14 points from its 2008 high, [according to polling](#) [31] (PDF). [Gallup's annual poll](#) [114] in 2010 found that 48 percent of Americans said they believe that fears of global warming "are generally exaggerated"—the highest figure since pollsters began asking that question in 1997.

Most significant, however, has been the long-term hardening of the political divide on the issue. In 1997, the percentage of Republicans and Democrats who believed in climate change was nearly the same—47 percent and 46 percent, respectively. By March 2010, 66 percent of Democrats and only 31 percent of Republicans agreed that global warming was already occurring. Half of the [new House GOP members](#) [115] flatly deny that the planet is warming, and [only four say](#) [116] they accept the science of climate change.

Rep. Darrell Issa (R-Calif.), the new head of the [House Committee on Oversight and Government Reform](#) [117] (PDF), last fall outlined plans to hold hearings on the "Politicization of Science," focused largely on Climategate. Rep. [Ralph Hall](#) [118] (R-Texas), the new chairman of the House Committee on Science, Space, and Technology, has already said that he plans to look into "the global warming or global freezing." The vice chairman of the same committee, Rep. James Sensenbrenner (R-Wis.), has accused climate scientists of a "[massive international scientific fraud](#) [119] (PDF)." Virginia's attorney general, [Ken Cuccinelli, has subpoenaed](#) [120] (PDF) records from Mann's time at the University of Virginia in an attempt to prove that he committed "fraud." Congressional Republicans are also [using Climategate as fodder](#) [121] in their fight to bar the Environmental Protection Agency from regulating greenhouse gas emissions.

But climate scientists don't tend to be adept at politics, and most of them didn't enter the field expecting to land in the middle of a controversy over the future of industrial society. Accustomed to the slow-moving peer-review process, they were utterly unprepared to deal with the real-time, 24/7 news circus.

The press gave the think tanks and pundits a bully pulpit in the form of airtime and headlines—without bothering to dig into the hacked emails and figure out what the fuss was about. While journalists were quick to quote email snippets that were causing a ruckus, it wasn't until December 12—nearly a month after the initial release—that a team of [Associated Press reporters finally parsed](#) [22] the entire set of emails and published a more accurate

picture of their contents.

Still, you can't completely blame journalists, says [Tom Rosenstiel](#) [122], director of the Pew Research Center's [Project for Excellence in Journalism](#) [123]. "That's the typical arc of any story," he says. "Allegations and accusations can move more quickly through the media ecosystem than sorting out what's really true." What's more, for years, the press had become accustomed to the refrain that the "science is settled" on global warming, and that it was now time to figure out how to deal with it. The "[science is settled](#)" [mantra](#) [124] downplayed the many uncertainties that remain about the impacts and implications of climate change and the hard-fought battles over every conclusion. So when the debates about data were laid bare, the scandal was much easier to report than the science.

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**"Science was revealed for what it actually is, which is a messy process that involves a lot of disputes and actual human beings."**

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Attempting to figure out what we don't yet understand is the pursuit of science —and as the emails showed, it's not always pretty. "Science was revealed for what it actually is, which is a messy process that involves a lot of disputes and actual human beings," says the *Times*' Revkin. The problem is that it takes a lot of complicated studies to show that the planet is warming due to human actions—but all that contrarians have to do to sustain inaction is create doubt. "It's asymmetric warfare," says Revkin.

If something good came of Climategate, says Mann, it's the realization that climate scientists need a better communication and crisis-management strategy. To that end, a trio of scientists last fall formed the [Climate Science](#)

[Rapid Response Team](#) [125], an effort to get climate researchers more directly engaged with the public by linking experts with reporters. "We have to accept much of the blame," says [Scott Mandia](#) [126], a professor of physical sciences at Suffolk County Community College and co-coordinator of the project. "It's not good enough to publish information in journals and expect it to get out." Nor, he says, can scientists leave the task of public communication—and of catching all the flak—to a small handful of colleagues.

The communications work will only get harder in the years to come. The [next report from the IPCC](#) [127], due out in 2013, is expected to include even more urgent warnings than the last edition, based on the current acceleration of climate change. And with the help of new sophisticated models for actual climate processes, scientists will attempt to provide a more nuanced and realistic picture of what's to come, writes [Kevin Trenberth](#) [128], head of climate analysis at the [National Center for Atmospheric Research](#) [129], in [a recent \*Nature\* article](#) [130] (PDF). But he also warns that the report could raise more questions than it answers: "[W]hile our knowledge of certain factors does increase, so does our understanding of factors we previously did not account for or even recognize." At the leading edge of climate science, he writes, displaying the limits and uncertainties of

science so publicly is not without risk, so the IPCC should proceed with caution when sounding the alarm bells.

"In other disciplines, this might not matter so much, but what to do about climate change is a high-profile, politically charged issue involving winners and losers, and such results can be misused," Trenberth adds. "In fact — to offer one more prediction — I expect that they will be."

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- [8] [https://motherjones.com/files/11\\_mann\\_geophysical\\_rsch\\_letters\\_study\\_1999.pdf](https://motherjones.com/files/11_mann_geophysical_rsch_letters_study_1999.pdf)
- [9] <http://www.agu.org/journals/gl/>
- [10] <http://www.youtube.com/watch?v=HZWQtjrgcqq>
- [11] <http://www.ncpa.org/pub/ba478>
- [12] <http://www.guardian.co.uk/environment/2010/feb/09/hockey-stick-graph-ipcc-report>
- [13] [https://motherjones.com/files/21\\_nrcreport.pdf](https://motherjones.com/files/21_nrcreport.pdf)
- [14] <http://energycommerce.house.gov/108/Hearings/07272006hearing2001/hearing.htm>
- [15] [http://www.stacey-international.co.uk/v1/site/product\\_rpt.asp?Catid=329&catname=](http://www.stacey-international.co.uk/v1/site/product_rpt.asp?Catid=329&catname=)
- [16] [http://www.rowmanlittlefield.com/Catalog/SingleBook.shtml?  
command=Search&db=^DB/CATALOG.db&eqSKUdata=0742549224&thepassedurl=  
\[thepassedurl\]](http://www.rowmanlittlefield.com/Catalog/SingleBook.shtml?command=Search&db=^DB/CATALOG.db&eqSKUdata=0742549224&thepassedurl=)
- [17] <http://www.regnery.com/books/redhotlies.html>
- [18] <http://climateaudit.org/2010/05/02/cuccinelli-v-mann/>
- [19] <http://www.nationalreview.com/planet-gore/14827/mann-made-warming-confirmed/chris-horner>
- [20] <http://motherjones.com/blue-marble/2010/10/cuccinellis-attack-climate-science-continues>
- [21] <http://www.youtube.com/watch?v=PpgYNsB3x38>
- [22] [http://www.msnbc.msn.com/id/34392959/ns/us\\_news-environment/](http://www.msnbc.msn.com/id/34392959/ns/us_news-environment/)
- [23] <http://www.climate-gate.org/email.php?eid=1045>
- [24] <http://motherjones.com/environment/2011/04/climategate-timeline>
- [25] <http://motherjones.com/environment/2011/03/climategate-anatomy-scandal>
- [26] <http://motherjones.com/blue-marble/2010/04/climategate-officially-fake-scandal>
- [27] <http://mediamatters.org/research/200911230052>
- [28] [http://www.youtube.com/watch?v=UXBo20oztXk&feature=mfu\\_in\\_order&list=UL](http://www.youtube.com/watch?v=UXBo20oztXk&feature=mfu_in_order&list=UL)
- [29] [http://www.noaanews.noaa.gov/stories2009/pdfs/cqtranscript\\_dec2houseclimatehearing.pdf](http://www.noaanews.noaa.gov/stories2009/pdfs/cqtranscript_dec2houseclimatehearing.pdf)
- [30] <http://environment.yale.edu/uploads/AmericansGlobalWarmingBeliefs2010.pdf>
- [31] [http://environment.yale.edu/climate/files/Climategate\\_Opinion\\_and\\_Loss\\_of\\_Trust\\_1.pdf](http://environment.yale.edu/climate/files/Climategate_Opinion_and_Loss_of_Trust_1.pdf)
- [32] <http://climateaudit.org/>
- [33] [http://online.wsj.com/article/SB10001424052748704335904574496850939846712.html?  
mod=googlenews\\_wsj](http://online.wsj.com/article/SB10001424052748704335904574496850939846712.html?mod=googlenews_wsj)
- [34] <http://cgxenergy.ca/>
- [35] <http://motherjones.com/environment/2011/04/field-guide-climate-change-skeptics>
- [36] <http://www.uoguelph.ca/~rmckitri/research/MM03.pdf>
- [37] [http://multi-science.metapress.com/content/p240t311h5u5/?  
p=2da5fe779751430b8a764c4a8e926f96&pi=44](http://multi-science.metapress.com/content/p240t311h5u5/?p=2da5fe779751430b8a764c4a8e926f96&pi=44)

[38] <http://www.eastangliaemails.com/emails.php?eid=376>  
[39] <http://www.marshall.org/pdf/materials/188.pdf>  
[40] [http://rossmckitrick.weebly.com/uploads/4/8/0/8/4808045/db\\_response.pdf](http://rossmckitrick.weebly.com/uploads/4/8/0/8/4808045/db_response.pdf)  
[41] <http://inhofe.senate.gov/pressreleases/climateupdate.htm>  
[42] <http://www.eastangliaemails.com/emails.php?eid=400>  
[43] <http://climateaudit.files.wordpress.com/2009/12/mcintyre-grl-2005.pdf>  
[44] <http://www.cru.uea.ac.uk/cru/data/temperature/hadcrut3gl.txt>  
[45] [http://www.grida.no/publications/other/ipcc\\_tar/](http://www.grida.no/publications/other/ipcc_tar/)  
[46] [http://muller.lbl.gov/pages/iceagebook/history\\_of\\_climate.html](http://muller.lbl.gov/pages/iceagebook/history_of_climate.html)  
[47] [https://motherjones.com/files/118\\_darrigo\\_et al.pdf](https://motherjones.com/files/118_darrigo_et al.pdf)  
[48] <http://www.climateaudit.info/pdf/news/wsj.2005.pdf>  
[49]  
[http://democrats.science.house.gov/Media/File/Commdocs/hearings/2007/oversight/28mar/mccarthy\\_testimony.pdf](http://democrats.science.house.gov/Media/File/Commdocs/hearings/2007/oversight/28mar/mccarthy_testimony.pdf)  
[50] <http://www.marshall.org/pdf/materials/316.pdf>  
[51] <http://motherjones.com/environment/2010/11/joe-barton-wegman-report>  
[52] [http://www.eenews.net/tv/video\\_guide/512?page=59&sort\\_type=date](http://www.eenews.net/tv/video_guide/512?page=59&sort_type=date)  
[53] <http://republicans.energycommerce.house.gov/news/PRArticle.aspx?NewsID=6912>  
[54] [http://statistics.gmu.edu/people\\_pages/wegman.html](http://statistics.gmu.edu/people_pages/wegman.html)  
[55] [http://www.realclimate.org/Boehlert\\_letter\\_to\\_Barton.pdf](http://www.realclimate.org/Boehlert_letter_to_Barton.pdf)  
[56] [https://motherjones.com/files/nrc\\_studycommitteprocess\\_pamphlet.pdf](https://motherjones.com/files/nrc_studycommitteprocess_pamphlet.pdf)  
[57] <http://deepclimate.files.wordpress.com/2010/09/said-talksept7.pdf>  
[58] [http://energycommerce.house.gov/108/home/07142006\\_Wegman\\_Report.pdf](http://energycommerce.house.gov/108/home/07142006_Wegman_Report.pdf)  
[59] <http://www.washingtonpost.com/wp-dyn/content/article/2010/10/11/AR2010101105679.html>  
[60] <http://motherjones.com/politics/2010/11/gop-climate-investigations-issa-barton-sensenbrenner>  
[61] [http://www.usatoday.com/weather/climate/globalwarming/2010-11-21-climate-report-questioned\\_N.htm](http://www.usatoday.com/weather/climate/globalwarming/2010-11-21-climate-report-questioned_N.htm)  
[62] [http://deepclimate.files.wordpress.com/2010/07/boehlert\\_2005.pdf](http://deepclimate.files.wordpress.com/2010/07/boehlert_2005.pdf)  
[63] <http://www.uoguelph.ca/~rmckitri/research/NRCreport.pdf>  
[64] <http://www.eastangliaemails.com/emails.php?eid=490&filename=1107454306.txt>  
[65] <http://climateaudit.org/2007/08/06/quantifying-the-hansen-y2k-error/>  
[66] [http://www.columbia.edu/~jeh1/distro\\_LightUpstairs\\_70810.pdf](http://www.columbia.edu/~jeh1/distro_LightUpstairs_70810.pdf)  
[67] <http://data.giss.nasa.gov/gistemp/graphs/>  
[68] [http://www.noaanews.noaa.gov/stories2011/20110112\\_globalstats.html](http://www.noaanews.noaa.gov/stories2011/20110112_globalstats.html)  
[69] [http://www.rushlimbaugh.com/home/daily/site\\_080907/content/01125106.guest.html](http://www.rushlimbaugh.com/home/daily/site_080907/content/01125106.guest.html)  
[70] <http://www-pcmdi.llnl.gov/about/staff/Santer/index.php>  
[71] <https://www.llnl.gov/>  
[72] <http://assassinationresearch.com/climategate/1/FOIA/mail/1226451442.txt>  
[73] <http://www.realclimate.org/>  
[74] <http://www.realclimate.org/index.php/archives/2009/09/hey-ya-mal/>  
[75] <http://www.metoffice.gov.uk/hadobs/>  
[76] <http://webster.eas.gatech.edu/>  
[77] <http://climateaudit.org/2009/07/24/cru-refuses-data-once-again/>  
[78] [http://www.uea.ac.uk/is/foi/disclosure/research/2009\\_July](http://www.uea.ac.uk/is/foi/disclosure/research/2009_July)  
[79] <http://www.nature.com/news/2009/090812/pdf/460787a.pdf>  
[80] <http://www.eastangliaemails.com/emails.php?eid=683&filename=1146062963.txt>  
[81] <http://www.eastangliaemails.com/emails.php?eid=935&filename=1226456830.txt>  
[82] <http://climateaudit.org/?s=%22the+team%22>  
[83] <http://climateaudit.org/2010/01/12/the-mosher-timeline/>  
[84] <http://climateaudit.org/2009/11/16/luckman-at-the-canadian-society-for-petroleum-geologists/#comment-201848>  
[85] <http://wattsupwiththat.com/2010/11/19/one-year-ago-today-breaking-news-story-cru-has-apparently-been-hacked-hundreds-of-files-released/>  
[86] <http://noconsensus.wordpress.com/2009/11/13/open-letter/#comment-11917>  
[87] <http://rankexploits.com/musings/2009/real-files-or-fake/>

[88] <http://bigjournalism.com/pcourrielche/2010/01/12/peer-to-peer-review-part-iii-how-climategate-marks-the-maturing-of-a-new-science-movement/#more-2402>

[89] <http://www.climate-gate.org/email.php?eid=393&s=kwcheering%20news>

[90] <http://www.eastangliaemails.com/emails.php?eid=154>

[91] <http://www.climatedepot.com/>

[92] <http://www.cfact.org/s.asp?tag=climate%20depot>

[93] <http://www.examiner.com/essex-county-conservative-in-newark/hadley-cru-hacked-with-release-of-hundreds-of-docs-and-emails>

[94] [http://briefingroom.typepad.com/the\\_briefing\\_room/2009/11/hadleycru-says-leaked-data-is-real.html](http://briefingroom.typepad.com/the_briefing_room/2009/11/hadleycru-says-leaked-data-is-real.html)

[95] <http://www.nytimes.com/2009/11/21/science/earth/21climate.html>

[96] <http://newsbusters.org/>

[97] <http://www.foxnews.com/scitech/2009/11/21/climate-skeptics-smoking-gun-researchers-leaked-e-mails/>

[98] <http://www.washingtonpost.com/wp-dyn/content/article/2009/11/20/AR2009112004093.html?hpid=sec-nation>

[99] <http://www.thedailyshow.com/watch/tue-december-1-2009/scientists-hide-global-warming-data>

[100] <http://www.physorg.com/news183201942.html>

[101] <http://www.guardian.co.uk/environment/2010/jan/20/himalayan-glaciers-melt-claims-false-ipcc>

[102] <http://www.ipcc.ch/pdf/presentations/himalaya-statement-20january2010.pdf>

[103] <http://www.nytimes.com/2009/12/15/science/earth/15climate.html>

[104] <http://www.washingtontimes.com/news/2009/dec/17/us-china-deadlock-copenhagen/>

[105] <http://online.wsj.com/article/SB10001424052748704398304574598230426037244.html>

[106] [http://www.youtube.com/watch?v=ffgj6Deni\\_Y](http://www.youtube.com/watch?v=ffgj6Deni_Y)

[107] [http://www.cato.org/pubs/policy\\_report/v32n1/cpr32n1-4.html](http://www.cato.org/pubs/policy_report/v32n1/cpr32n1-4.html)

[108] <http://online.wsj.com/article/SB10001424052748704075604575356611173414140.html>

[109] <http://www.uea.ac.uk/env/people/facstaff/daviest>

[110] <http://www.norfolk.police.uk/aboutus.aspx>

[111] [http://https://motherjones.com/files/136\\_national\\_post\\_dec\\_4\\_2009\\_a8.pdf](http://https://motherjones.com/files/136_national_post_dec_4_2009_a8.pdf)

[112] [http://blogs.pcmag.com/securitywatch/2010/12/wikileaks\\_cable\\_shows\\_spear-ph.php](http://blogs.pcmag.com/securitywatch/2010/12/wikileaks_cable_shows_spear-ph.php)

[113] <http://www.cce-review.org/pdf/FINAL%20REPORT.pdf>

[114] <http://www.gallup.com/poll/126560/Americans-Global-Warming-Concerns-Continue-Drop.aspx>

[115] <http://thinkprogress.org/2010/11/03/gop-frosh-class/>

[116] <http://www.grist.org/article/2010-11-03-half-of-gop-caucus-are-climate-zombies>

[117] [http://motherjones.com/files/9-22-10\\_ogr\\_report\\_-\\_a\\_constitutional\\_obligation\\_-\\_congressional\\_oversight\\_of\\_the\\_executive\\_branch.pdf](http://motherjones.com/files/9-22-10_ogr_report_-_a_constitutional_obligation_-_congressional_oversight_of_the_executive_branch.pdf)

[118] <http://dyn.politico.com/members/forums/thread.cfm?catid=22&subcatid=76&threadid=4835977&adv=1>

[119] [https://motherjones.com/files/172\\_administrationsviewonstateofclimatescience.pdf](https://motherjones.com/files/172_administrationsviewonstateofclimatescience.pdf)

[120] <http://voices.washingtonpost.com/virginiapolitics/New%20Mann%20CID.PDF>

[121] <http://washingtonindependent.com/69480/citing-climategate-gop-leaders-call-on-epa-to-withdraw-endangerment-finding>

[122] [http://www.journalism.org/about\\_pej/staff](http://www.journalism.org/about_pej/staff)

[123] <http://www.journalism.org/>

[124] [http://www.ecolo.org/documents/documents\\_in\\_english/climate\\_change\\_Schlesinge.htm](http://www.ecolo.org/documents/documents_in_english/climate_change_Schlesinge.htm)

[125] <http://www.climaterapidresponse.org/about.php>

[126] <http://www2.sunysuffolk.edu/mandias/>

[127] <http://www.ipcc.ch/activities/activities.shtml>

[128] <http://www.cgd.ucar.edu/cas/trenbert.html>

[129] <http://ncar.ucar.edu/about-ncar>

[130] <http://www.nature.com/climate/2010/1002/pdf/climate.2010.06.pdf>