## What Web Searches Reveal About Global Warming — And Us | The Yale Forum on Climate Change & The Media

http://www.yaleclimatemediaforum.org/2011/10/what-web-searches-reveal-about-global-warming-and-us/

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Readily available research tools from Google and Yahoo! help paint a picture of peoples' interests in climate change ... or is it, 'global warming'? ... providing valuable insights for climate communicators.

When people have questions about climate change, they often turn to search engines and the Internet.

Near midnight on March 1, 2006, one AOL user typed the following: "will cobras survive global warming"?

Several weeks later, AOL user No. 8737767 asked, "What will happen if global warming continues"?

And user No. 3392103 wondered, "Can we control global warming"?

These and other questions can be found among a trove of data that <u>AOL released</u> in 2006, comprising 20 million Web searches from more than 650,000 users. After bloggers and AOL users expressed privacy concerns, the company removed the data from its own website, but it remains available on sites hosted by others.

Since 2006, search engine traffic, of course, has only grown. In August 2011 alone, Internet users conducted more than 11 billion Google searches and 2.8 billion Yahoo! searches, <u>according to comscore.com</u>. AOL users conducted 230 million searches.

Although Google and Yahoo! do not make records of individual searches available, the companies offer free tools for exploring aggregated search data, such as <u>Google Trends</u>, <u>Google Insights</u>, and Yahoo! Clues.

### Global Warming ... In Your Face, Angelina Jolie! (though only briefly)

These tools reveal useful insights about search trends related to climate change.

During the past seven years, for example, "global warming" has consistently remained a more popular search term than "climate change" — and virtually no one searches for "greenhouse effect."

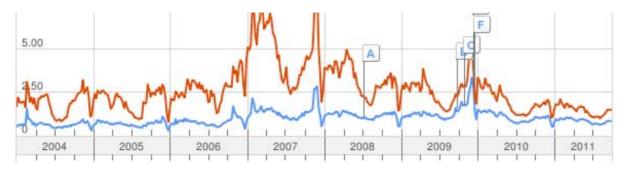
In 2007, when searches for "global warming" peaked, that search term briefly became more popular than searches for "Angelina Jolie." And in 2011, searches for information on GOP presidential candidate Mitt Romney and global warming, such as "romney global warming," are rapidly increasing.

In an age when many editors use search data to drive decisions about <u>headlines</u> and <u>more</u>, familiarity with search trends is more important than ever.

#### **Searches Wax and Wane Since 2004**



Google searches for "global warming"



"climate change" (blue) for 2004-2011. The data are scaled relative to

(red) and

the average search traffic for that term. For example, searches for "global warming" were more than seven times more common in early 2007 as they are in 2011.

The past seven years have been a roller coaster ride when it comes to public interest and concern about global warming.

In 2004, about half of Americans said they worried "a great deal" or "a fair amount" about global warming, <u>according to Gallup</u>. By 2007, 65 percent of Americans agreed with that sentiment. But by 2011, Americans' global warming fears had fallen back to 2004 levels.

Meanwhile, the belief that global warming was "generally exaggerated" rose. In <u>March 2006</u>, 30 percent of Americans said that warming was exaggerated; <u>five years later</u>, 43 percent agreed with that stance.

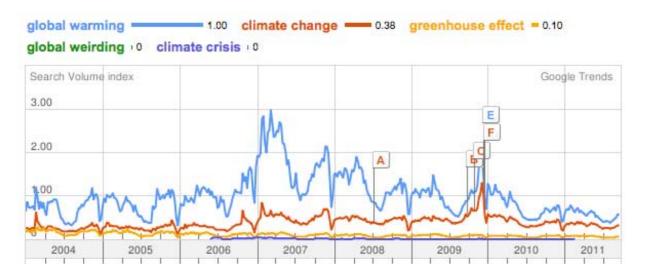
Search trends suggest a rapid rise and fall in interest in global warming and climate change.

Searches for "global warming" peaked in 2007, during the period when former Vice President Al Gore's documentary, "An Inconvenient Truth," attained widespread attention. The film, released in 2006, won an Oscar in February 2007, just weeks after the Intergovernmental Panel on Climate Change released its Fourth Assessment report concluding that climate change was "very likely" human-caused. In October of that year, Gore and the IPCC won the Nobel Peace Prize for their work on climate change.

"Global warming" remained a relatively popular search in 2008, when then-presidential candidates Barack Obama and John McCain each pledged to combat the problem. Then, searches briefly peaked again in late 2009, during the period of the United Nations climate talks in Copenhagen and the unauthorized release of e-mails from servers at the Climatic Research Unit at the University of East Anglia.

By 2011, searches for "global warming" had fallen below 2004 levels.

### 'Global warming' Is More Popular Than 'Climate Change'



One perennial dilemma in climate

communication is whether to use the term "global warming" or "climate change."

Scientists and other climate professionals often <u>make a distinction</u> between the terms. They use "global warming" to mean a rise in global temperature over land and oceans, and they use "climate change" to signify the effects of increasing greenhouse gases, such as changing precipitation, rising sea levels, and ocean acidification. Some journalists and many members of the public use the terms interchangeably.

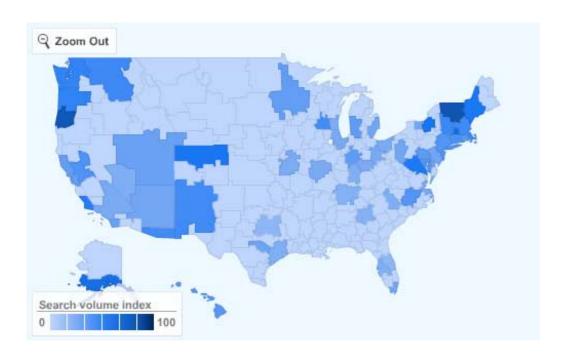
Complicating matters, Republican consultant and pollster Frank Luntz argued a few years back that opponents of greenhouse regulations should use the words "climate change" instead of "global warming."

As he explained in <u>a memo leaked in 2003</u>, "'climate change' is less frightening than 'global warming.'" … "While global warming has catastrophic connotations attached to it, climate change suggests a more controllable and less emotional challenge."

Meanwhile, researchers at the University of Michigan reported earlier this year that Americans are more likely to agree that the world's climate is changing when the phenomenon is called "climate change" than when it is called "global warming." The same study found that liberal think tanks refer to "climate change," while conservative think tanks are more likely to call it "global warming."

Using Google's tools, one can compare the relative popularity of various search terms. Conducting this comparison for "global warming" and "climate change" reveals the chart shown above, which suggests that Internet users are more likely to look for information about "global warming" than about "climate change." But both phrases are far more popular than the "greenhouse effect" or other terms, such as "global weirding" or "climate crisis."

Geography may also play a role in <u>searches on the topic</u>. For example, in the United States, searches for "climate change" originated relatively more often in the Northeast and the West, while searches for "global warming" were more evenly distributed across the country.

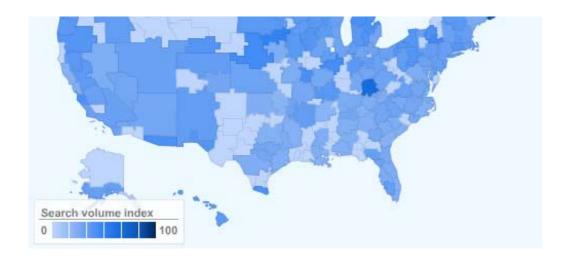




# Global Warming vs. Unemployment ... No Contest

As noted earlier,
Google's comparison
tool shows that for
several months in
2007, "global warming"
was a more frequent
search term than
"Angelina Jolie." (The
actress quickly
regained her popularity
and has dominated
ever since.)

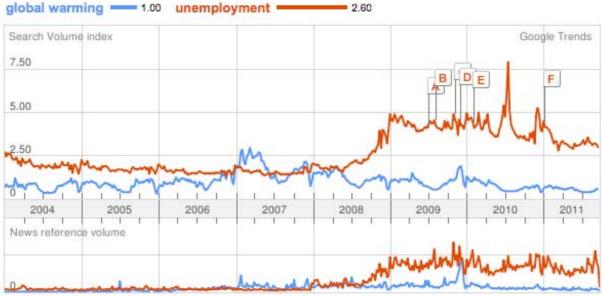
The tool also <u>shows</u> the relative frequency of searches for



"unemployment" and "global warming."

During the height of public concern over and interest in global warming in 2007, the topic was a more popular search than "unemployment," no doubt reflecting an economic situation not then beset by persistent recession and sky-





unemployment numbers. But after the 2008 financial crisis and during the subsequent recession, "unemployment" has far eclipsed "global warming" as a search term. The Google trend tool also shows that in recent years, media coverage of unemployment has outweighed coverage of global warming.

#### Using Google Insights To Find Out What People Want To Know

The Google Insights tool allows users to identify popular search terms, which can be a useful feature for climate communicators. Knowing which terms people use is a key to "search engine optimization" or SEO, or designing websites so that searchers can better find what you have to say.

Rising searches		
1.	romney global warming	Breakout
2.	global warming 2011	+4,300%
3.	perry global warming	+1,650%
4.	tornadoes global warming	+400%
5.	tornado global warming	+350%
6.	globalization	+100%
7.	nasa global warming	+100%

To use the tool, visit <u>Google Insights</u> and type your preferred terms, such as "global warming" or "climate change." Scroll to the bottom of the page, and you'll see popular searches related to those terms.

For example, in the United States during 2011, searches related to presidential candidates Mitt Romney and Rick Perry and global warming have grown in popularity. Other popular searches this year include "tornado global warming" and "nasa global warming."

+50%

Many more insights can be teased from search trend data. Find something interesting? Let us know in the comments section below.