

## **The Climate Top Ten**

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Here are my top ten resources for climate change science information. Why do I like these? They try to tell BOTH sides of the story. They take a skeptical look at a specific claim (for example, anthropogenic global warming) and examine the fundamental science through an objective lens.

### **1. Skeptical Science ([www.skepticalscience.com](http://www.skepticalscience.com))**

From their “Newbie’s start here” page:

Skeptical Science is based on the notion that science by its very nature is skeptical. Genuine skepticism means you don’t take someone’s word for it but investigate for yourself. You look at all the facts before coming to a conclusion. In the case of climate science, our understanding of climate comes from considering the full body of evidence.

In contrast, climate skepticism looks at small pieces of the puzzle while neglecting the full picture. Climate skeptics vigorously attack any evidence for man-made global warming yet uncritically embrace any argument, op-ed, blog or study that refutes global warming. If you began with a position of climate skepticism then cherry-pick the data that supports your view while fighting tooth and nail against any evidence that contradicts that position, I’m sorry but that’s not genuine scientific skepticism.

So the approach of Skeptical Science is as follows. It looks at the many climate skeptic arguments, exposes how they focus on small pieces of the puzzle and then puts them in their proper context by presenting the full picture. The skeptic arguments are listed by popularity (e.g. - how often each argument appears in online articles). For the more organized mind, they’re also sorted into taxonomic categories.

### **2. Pew Center on Global Climate Change (<http://www.pewclimate.org/>)**

The smartest people in the world work at the Pew Center. Their information is organized into concepts like economy, policy, state-specific issues, and energy. AND they have a “Kid’s Corner”, which is a great starting point for the younger generation.

### **3. NASA Global Climate Change Program (<http://climate.nasa.gov>)**

NASA was looking at Earth long before they started looking at other planets. This website is QUICK and EASY: updated change monitoring statistics, a climate time machine, sea-level and ice viewers, and easy-to-read interactive graphics that spell out the key points of scientific evidence for climate change.

#### **4. The GLOBE Project (<http://globe.gov>)**

GLOBE projects offer a worldwide network of students, teachers, and scientists working together to study and understand the global environment. Students and teachers from over 13,587 schools in more than 100 countries are working with research scientists to learn more about our planet. By participating in GLOBE, teachers guide their students through daily, weekly, and seasonal environmental observations, measuring variables such as air temperature and precipitation. This is an excellent opportunity for K-12 teachers to integrate computers and the World Wide Web into classroom activities.

#### **5. Yale Climate Change Communication Project (<http://environment.yale.edu/climate>)**

Talking about climate change is hard. The Yale Project on Climate Change Communication works to:

- 1) Advance public understanding and engagement with climate change science and solutions, and;
- 2) Catalyze action by the general public and leaders of government, business, academia, and the media through improved knowledge and understanding.

The Yale Six Americas project has been revolutionary in increasing our understanding of how to communicate about climate change because it figured out who the listeners are, and what the best way to talk to them was.

#### **6. Union of Concerned Scientists Climate HOTMAP (<http://www.climatehotmap.org/>)**

What better way to talk about climate change impacts than picking someplace off of a map and looking at what the signs of climate change are in that location? Easy to read and understand short summaries that accompany well-explained graphs and pictures.

#### **7. PBS NOW Global Warming Classroom (<http://www.pbs.org/now/classroom/globalwarming.html>)**

PBS not only produces quality videos and interactive media, they produce lessons plans specifically targeted at high school classrooms. Brought to you by the letter 'G' and the number '4'.

## **8. Intergovernmental Panel on Climate Change (<http://www.ipcc.ch/>)**

IPCC Reports are produced by hundreds of the world's best scientists, and serve as a consensus on the state of the climate and humanities role in it. The IPCC also produced the global climate model emissions scenarios, which drive forecasts of future climate. This is the leading authority that is referenced by scientists everywhere as they do their research.

## **9. NOAA Climate Education Resources Page (<http://www.education.noaa.gov/Climate/>)**

NOAA is the keeper of the vast majority of climate data in the US (at least in it's original form – as observations). Their website is an excellent portal to the different types of data and classroom resources. For more advanced discussions and forecasts of long-term climate and teleconnections (like El Niño), check out the NOAA Climate Prediction Center website (<http://www.cpc.ncep.noaa.gov/>).

## **10. NOAA Climate Services ([www.climate.gov](http://www.climate.gov))**

NOAA Climate Services has produced several great products about climate literacy and climate change education. They also produce reports on climate conditions – called '*State of the Climate*' – and events/natural disasters like hurricanes, tornadoes, snowfall, etc. This is the site to go to when your students ask "Why did this weather event happen, and how is it linked to climate change?"

## **LOCAL RESOURCES FOR IDAHO AND THE INLAND NORTHWEST**

### **1) Inland Northwest Climate Tracker (<http://www.wrcc.dri.edu/research/jtwrcc/idaho-mon/>)**

Want to see the temperature and precipitation records for your local area for the last 100+ years? How different is this year from the past? This website produces graphics of the raw data – so you can look at it and ask questions about what you are seeing with your students.

### **2) Climate Impacts Group (<http://cses.washington.edu/cig/>)**

This group (based at University of Washington) focuses on making complex climate science relevant specifically to the Pacific Northwest (including Idaho). They have a lot of good regional climate information.