

## Hyperlinks within the *Climate Change Science and Modeling: What You Need to Know* Education Module

Slide Number	Slide Title	Hyperlink Description	Hyperlink
4	Climate Change/Increasing Temperature	This hyperlink leads to the NASA Goddard Institute of Space Studies (NASA GISTEMP specifically) where the data for the global and U.S. temperature graphs was retrieved.	<a href="http://data.giss.nasa.gov/gistemp/graphs_v3/">http://data.giss.nasa.gov/gistemp/graphs_v3/</a>
5	Milankovitch Cycle	This hyperlink leads to the temperature data for the temperature and carbon dioxide graph. The temperature data was retrieved from the Vostok Ice Core, available from NOAA, National Climate Data Center.	<a href="http://www.ncdc.noaa.gov/paleo/icecore/antarctica/vostok/vostok_isotope.html">http://www.ncdc.noaa.gov/paleo/icecore/antarctica/vostok/vostok_isotope.html</a>
		These hyperlinks lead to carbon dioxide data for the temperature and carbon dioxide graph. The carbon dioxide data was retrieved from the Vostok ice core the Law Dome ice core, both from NOAA, National Climate Data Center, and the Mauna Loa Observatory, NOAA, Earth System Research Laboratory.	Vostok ice core: <a href="http://www.ncdc.noaa.gov/paleo/icecore/antarctica/vostok/vostok_co2.html">http://www.ncdc.noaa.gov/paleo/icecore/antarctica/vostok/vostok_co2.html</a> Law Dome ice core: <a href="http://www.ncdc.noaa.gov/paleo/icecore/antarctica/law/law_data.html">http://www.ncdc.noaa.gov/paleo/icecore/antarctica/law/law_data.html</a> Mauna Loa Observatory: <a href="http://www.esrl.noaa.gov/gmd/ccgg/trends/">http://www.esrl.noaa.gov/gmd/ccgg/trends/</a>
		This hyperlink leads to a NASA Earth Observatory, website with more information on the Milankovitch Cycle.	<a href="http://earthobservatory.nasa.gov/Features/Milankovitch/milankovitch.php">http://earthobservatory.nasa.gov/Features/Milankovitch/milankovitch.php</a>
6	Greenhouse Gas Causes	This hyperlink leads to the U.S. Energy Information Administration website, as a citation for fact listed in the Fossil Fuel Use pop-up box.	<a href="http://www.eia.gov/tools/faqs/faq.cfm?id=307&amp;t=10">http://www.eia.gov/tools/faqs/faq.cfm?id=307&amp;t=10</a>
		This hyperlink leads to a document published by the U.S. Energy Information Administration. This is a citation for a fact listed in the Fossil Fuels Use pop-up box.	<a href="http://www.eia.gov/environment/emissions/ghg_report/ghg_overview.cfm">http://www.eia.gov/environment/emissions/ghg_report/ghg_overview.cfm</a>
		This hyperlink leads a publication on the North American carbon budget. This is a citation for a fact listed in the Fossil Fuels pop-up box.	<a href="http://www.treesearch.fs.fed.us/pubs/13120">http://www.treesearch.fs.fed.us/pubs/13120</a>
		This hyperlink leads to the homepage for the U.S. Energy Information Administration website for more information on fossil fuel use. This hyperlink is available in the Fossil Fuels Use pop-up box.	<a href="http://www.eia.gov/">http://www.eia.gov/</a>

6	Greenhouse Gas Causes (continued)	This hyperlink leads to a publication on the North American carbon budget. This is a citation for a fact listed in the Deforestation/Land-use Change pop-up box.	<a href="http://www.treesearch.fs.fed.us/pubs/13120">http://www.treesearch.fs.fed.us/pubs/13120</a>
		This hyperlink leads to the webpage for the U.S. Forest Service Forest Inventory Analysis. This is a citation for a fact listed in the Deforestation/Land-use Change pop-up box.	<a href="http://www.fia.fs.fed.us/Forest%20Carbon/default.asp">http://www.fia.fs.fed.us/Forest%20Carbon/default.asp</a>
		This hyperlink leads to a publication on deforestation and agricultural lands. This is a citation for a fact listed in the Deforestation/Land-use Change pop-up box.	<a href="http://www.pnas.org/content/early/2010/08/30/0910275107.full.pdf">http://www.pnas.org/content/early/2010/08/30/0910275107.full.pdf</a>
		This hyperlink leads to the homepage for the United Nations REDD program. This hyperlink is available in the Deforestation/Land-use Change pop-up box.	<a href="http://www.un-redd.org/Home/tabid/565/Default.aspx">http://www.un-redd.org/Home/tabid/565/Default.aspx</a>
		This hyperlink leads to a publication by the Global Carbon Project. This is a citation for a fact listed in the Land-use Change/Deforestation pop-up box.	<a href="http://www.globalcarbonproject.org/carbonbudget/13/files/GCP_budget_2013.pdf">http://www.globalcarbonproject.org/carbonbudget/13/files/GCP_budget_2013.pdf</a>
		This hyperlink leads to an EPA website as a citation for a fact listed in the Land-use Change/Deforestation pop-up box.	<a href="http://www.epa.gov/climatechange/ghgemissions/sources.html">http://www.epa.gov/climatechange/ghgemissions/sources.html</a>
		This hyperlink leads to an EPA website as a citation for a fact listed in the Land-use Change/Deforestation pop-up box.	<a href="http://www.epa.gov/climatechange/ghgemissions/sources/lulucf.html">http://www.epa.gov/climatechange/ghgemissions/sources/lulucf.html</a>
		This hyperlink leads to an EPA website about Greenhouse Gas emissions. This hyperlink is available in the Land-use Change/Deforestation pop-up box.	<a href="http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html">http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html</a>
10	Carbon Dioxide Measurements	These hyperlink lead to the carbon dioxide data in the carbon dioxide at Mauna Loa graph. The carbon dioxide data was retrieved from NOAA, Earth Systems Research Laboratory and the Scripps Institute of Oceanography.	NOAA, ESRL: <a href="http://www.esrl.noaa.gov/gmd/ccgg/trends/">http://www.esrl.noaa.gov/gmd/ccgg/trends/</a> Scripps Institute: <a href="http://scrippsco2.ucsd.edu/">http://scrippsco2.ucsd.edu/</a>
		This hyperlink leads to carbon dioxide, methane, and nitrous oxide data for the concentration of greenhouse gases graph. This data was retrieved from the Law Dome ice core from NOAA, National Climate Data Center.	<a href="http://www.ncdc.noaa.gov/paleo/icecore/antarctica/law/law_data.html">http://www.ncdc.noaa.gov/paleo/icecore/antarctica/law/law_data.html</a>
		This hyperlink leads to the National Ice Core Laboratory website. This link is available from the pop-up box on calculations of past gas measurements.	<a href="http://www.icecores.org/icecores/index.shtml">http://www.icecores.org/icecores/index.shtml</a>
12	Regional Observed Changes in Climate	This hyperlink leads to the U.S. Global Change Research Program image gallery website.	<a href="http://www.globalchange.gov/resources/gallery">http://www.globalchange.gov/resources/gallery</a>
		This hyperlink leads to the regional page for the Southeast region created from the U.S. Global Change Research Program 2009 National Climate Assessment Report.	<a href="http://nca2009.globalchange.gov/northeast">http://nca2009.globalchange.gov/northeast</a>

12	Regional Observed Changes in Climate (continued)	This hyperlink leads to the regional page for the Northeast region created from the U.S. Global Change Research Program 2009 National Climate Assessment Report.	<a href="http://nca2009.globalchange.gov/southeast">http://nca2009.globalchange.gov/southeast</a>
		This hyperlink leads to the regional page for the Midwest region created from the U.S. Global Change Research Program 2009 National Climate Assessment Report.	<a href="http://nca2009.globalchange.gov/midwest">http://nca2009.globalchange.gov/midwest</a>
		This hyperlink leads to the regional page for the Great Plains region created from the U.S. Global Change Research Program 2009 National Climate Assessment Report.	<a href="http://nca2009.globalchange.gov/great-plains">http://nca2009.globalchange.gov/great-plains</a>
		This hyperlink leads to the regional page for the Southwest region created from the U.S. Global Change Research Program 2009 National Climate Assessment Report.	<a href="http://nca2009.globalchange.gov/southwest">http://nca2009.globalchange.gov/southwest</a>
		This hyperlink leads to the regional page for the Northwest region created from the U.S. Global Change Research Program 2009 National Climate Assessment Report.	<a href="http://nca2009.globalchange.gov/northwest">http://nca2009.globalchange.gov/northwest</a>
		This hyperlink leads to the regional page for the Alaska region created from the U.S. Global Change Research Program 2009 National Climate Assessment Report.	<a href="http://nca2009.globalchange.gov/alaska">http://nca2009.globalchange.gov/alaska</a>
		This hyperlink leads to the regional page for the Islands region created from the U.S. Global Change Research Program 2009 National Climate Assessment Report.	<a href="http://nca2009.globalchange.gov/islands">http://nca2009.globalchange.gov/islands</a>
13	General Circulation Models	This hyperlink leads to a publication on downscaling and climate projections. This link is available from the box on the left-hand side of the screen asking about interest in downscaling.	<a href="http://www.fs.fed.us/rm/pubs/rmrs_gtr277.pdf">http://www.fs.fed.us/rm/pubs/rmrs_gtr277.pdf</a>
15	Uncertainty with Climate Change	This hyperlink leads to a publication by the World Meteorological Organization.	<a href="http://library.wmo.int/opac/index.php?lvl=notice_display&amp;id=15110">http://library.wmo.int/opac/index.php?lvl=notice_display&amp;id=15110</a>
17	Emissions Scenarios Continued	This hyperlink leads to a draft copy of the 2013 National Climate Assessment Report, retrieved from the U.S. Global Change Research Program.	<a href="http://www.globalchange.gov/what-we-do/assessment">http://www.globalchange.gov/what-we-do/assessment</a>
		This hyperlink leads to a section on emissions scenario storylines on the IPCC website. This link is available from the box on the left-hand side of the screen asking about the IPCC AR4 scenarios.	<a href="http://www.ipcc.ch/ipccreports/sres/emission/index.php?idp=91">http://www.ipcc.ch/ipccreports/sres/emission/index.php?idp=91</a>
		This hyperlink leads to a section on representative concentration pathways on the IPCC website. This link is available from the box on the right-hand side of the screen asking about the IPCC AR5 pathways.	<a href="http://sedac.ipcc-data.org/ddc/ar5_scenario_process/RCPs.html">http://sedac.ipcc-data.org/ddc/ar5_scenario_process/RCPs.html</a>

Activity Portion	This hyperlink leads to the Climate Wizard website, where the data for the climate maps was downloaded.	<a href="http://www.climatewizard.org/">http://www.climatewizard.org/</a>
	This hyperlink leads to the National Center for Atmospheric Research website on the climate model, CCSM3, which was used for the climate maps.	<a href="http://www.cesm.ucar.edu/models/ccsm3.0/">http://www.cesm.ucar.edu/models/ccsm3.0/</a>