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EarthComm Earth System Evolution: Climate Change and Your Community Activity 2

This investigation will help you to:

- Direct Records and Proxies
- Fossil Pollen
- Ice Cores
- Sea Sediments
- · Glacial Landforms and Sediments
- Tree Rings
- To learn more about the Greenland Ice Sheet Project (GISP2), visit the following web sites:
- To learn more about techniques for dating deep-sea sediments, visit the following web sites:
- To learn more about paleoclimates in the United States, visit the following web sites:

Direct Records and Proxies

- Proxy Climatic Data, NOAA Paleoclimatology Program
 This site lists and describes the widely-used proxy climate data types.
- Paleoclimates and Pollen

On this web site, information is offered on the background, trends, and evidence of paleoclimates.

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Fossil Pollen

- Fossil Pollen of the Colorado Plateau, Northern Arizona University Learn why fossil pollen is a useful tool for determining paleoclimates.
- Fossil Groups: Spores and Pollen, USGS

Learn how pollen can yield records of vegetation and community changes over time by exploring this site.

Investigating Climate Change of Western North America, USGS
 Learn more about climate change and the study of the geological record for Western North America.

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Ice Cores

- Why Study Ice Cores, National Ice Core Laboratory (NICL)

 This site includes a brief description about why ice cores are an important source of information.
- How is it done? NICL

This section of the National Ice Core Laboratory web site takes you step by step through the process of taking, obtaining, studying an ice core.

Sea Sediments

• Sea Sediments, Enviropedia

Learn more about sediments found on the sea floor and information that can be revealed by investigating these sediments, visit this site.

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Glacial Landforms and Sediments

What is a Glacier, National Snow and Ice Data Center
 This web site provides information on glacial formation, movement, and associated landforms.

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Tree Rings

- Photo Gallery of Trees and Tree Rings, University of Tennessee
 This web site provides photographs about tree-ring research. Each photograph is annotated with captions poses a thought-provoking question.
- Classic References in Dendrochronology, University of Tennessee
 If you are in need of additional resources for tree ring research, visit this site.

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To learn more about the Greenland Ice Sheet Project (GISP2), visit the following web sites:

 Greenland Ice Sheet Project 2, National Snow and Ice Data Center
 This web site explores the retrieval of the longest deep-ice core available in history of its kind from the Northern Hemisphere.

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To learn more about techniques for dating deep-sea sediments, visit the following web sites:

- Magnetic Stripes and Isotopic Clocks, USGS
 This web site provides information on astounding observations of ocean rocks that led to the unlocking of one of ocean's secrets.
- The Use of Biostratigraphy in Different Sediment Types
 This site provides basic information on biostratigraphy in two main environments: terrestrial and marine.

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To learn more about paleoclimates in the United States, visit the following web sites:

- North American Drought: A Paleo Perspective, NOAA
 This web site explores paleoclimatic data and how it can provide information about past droughts.
- Climatologist's Toolbox, University of Wisconsin
 Learn how mud sediment in Walden Pond reveals evidence of its past environments by exploring this site.

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