

# Climate Change in Earth History

## Trends

- In general, the Earth has been hotter and more humid than it is today. However, there are times like the ice ages, where the Earth's climate has been much colder.

### Study Tip

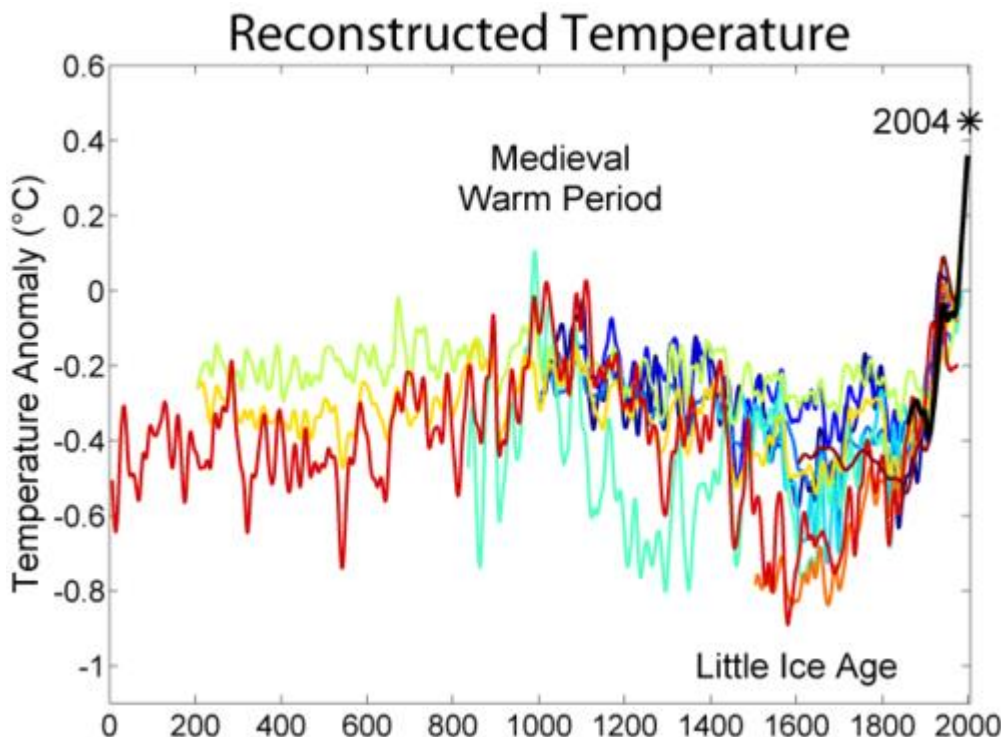
Think about how the Earth's climate has been changing in the past. Do you think it will continue to change? Will it get hotter or colder? Do you think humans contribute to climate change?

## Changing Temperatures

- A small temperature change translates to a great change in the global climate.
- For instance, during the ice ages, the average temperature of the Earth was only 5.5 degrees Celsius (10 degrees Fahrenheit) lower than it is today.
- Over the past 2000 years, human civilization was able to thrive because the climate was stable. We are currently in an interglacial period that has lasted 10,000 years.
- The stability of the climate allowed humans to develop agriculture, which would be the foundation for new societies.

## Effects of Temperature Shifts

- When the temperature is lower sea levels are lower because much of the continent is covered in ice
- When temperatures are higher sea levels are higher because much of the continental ice melts.



Over the past 2000 years there were periods of fluctuating warmth. Different methods were used to record temperatures. These methods are indicated by the different colored lines.

## Concept Check

- How would you describe the climate change over the history of the Earth?
- Why were humans able to develop societies over the past 2000 years?