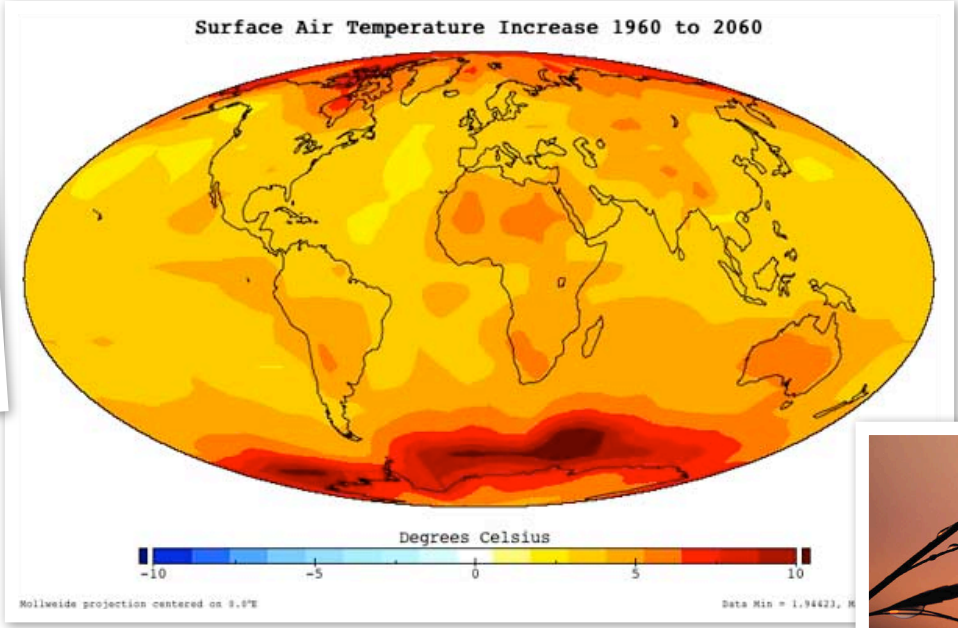

Global Warming

Introduction

The Earth's climate has been every changing through time. According to NASA research scientists, "just in the last 650,000 years there have been seven cycles of glacial advance and retreat, with the abrupt end of the last ice age about 7,000 years ago marking the beginning of the modern climate era — and of human civilization. Most of these climate changes are attributed to very small variations in Earth's orbit that change the amount of solar energy our planet receives.The current warming trend is of particular significance because most of it is very likely human-induced and proceeding at a rate that is unprecedented in the past 1,300 years. Earth-orbiting satellites and other technological advances have enabled scientists to see the big picture, collecting many different types of information about our planet and its climate on a global scale. Studying these climate data collected over many years reveal the signals of a changing climate." To explore more on global warming and its possible impact on Earth visit NASA's website http://climate.nasa.gov/.

How to read the graph

This graph shows relative temperature change over time from 1960 to 2060. This graph is unusual in that it requires you read the small legend at the bottom to understand how much the temperature is projected to change around the globe. Examine the legend at the bottom of the graph and notice that dark blue indicates a negative change in temperature, white indicates no change and dark red indicates a positive increase in temperature.

Questions

1.) Approximately how many degrees will the South Pole increase over the next 60 years? Why does this matter? What resource is held in the South and North Pole that could lead to drastic changes in our coastline?

2.) Rank the following continents in order from lowest temperature change to highest and tell their approximate temperature change: South America, Asia, Europe, Africa, Australia.

3.) Explain how your hometown will be effected by these changes in temperature. What change in temperature will you experience?