

April 1, 2015

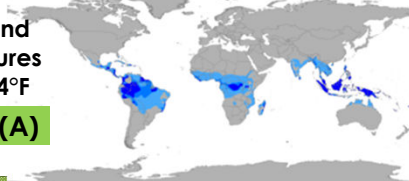
Warm-Up

Today you will need your notebook and pencil.
Homework Page due Friday.

- Don't forget to turn in your Köppen Classification Practice from yesterday!
- **Review: Which type of major climate is highlighted in the map and described below?**

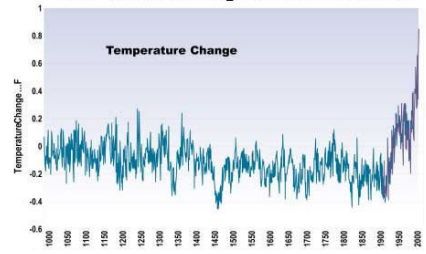
Year-round temperatures above 64°F

Tropical (A)



Climatic Changes

- Earth's history over hundreds of thousands of years shows that climates always have been, and currently are, in a constant state of change.



Ice Age

Homework

- Periods of extensive glacial coverage are known as **ice ages**
- The most recent ice age ended only about 10,000 years ago



Glaciers & Michigan's Great Lakes?

- Start at 0:55 stop at 3:45
- <https://www.youtube.com/watch?v=ibTWQogsbL8>



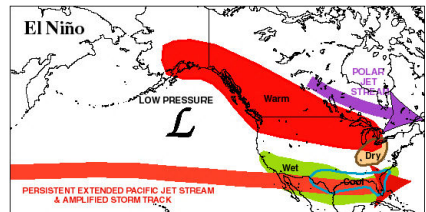
Causes of Climatic Change

1. El Nino/La Nina
2. Volcanic Eruptions
3. Sunspots
4. Shift in Earth's Orbit

Define: El Nino

Homework

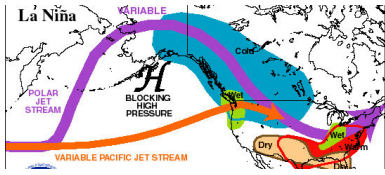
- **El Nino**
- **Definition:** Warm ocean current that develops off the western coast of South American, occurs every 2 to 7 years



Define: La Nina

Homework

- **La Nina**
- **Definition:**
Cooling of the ocean surface off the west coast of South America, occurs every 4 to 12 years



- <https://www.youtube.com/watch?v=0gPFu5xOoLQ>

El Nino/La Nina & Climate

Homework

- **Cause:** Unknown
- **Effect:** El Nino, short-term warming. La Nina, short-term cooling

Volcanic Eruptions


Homework

- **Cause:** Volcanic dust can remain suspended in the atmosphere for several years
- **Effect:** Blocks incoming solar radiation and lowers global temperatures
- Start at 0:48-1:42 skip to 4:10
<https://www.youtube.com/watch?v=pEfbkB4IAcM>

Sunspots

Homework

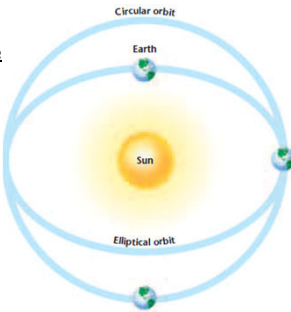
- **Cause:** Cooler areas on the sun are known as sunspots
- **Effect:** Low number of sunspots relate to colder winters; High number relate to warmer winters



Shift in Earth's Orbit

Homework

- **Cause:**
- Changes to more elliptical then to more circular and back in a 100,000 year cycle
- **Effect:**
- Elliptical – Warmer
- Circular - Colder



Climate Change – The Causes

- <https://www.youtube.com/watch?v=RHrFBOUI6-8>
- **During the summary video answer these questions in your notebook:**
 1. What type of gases trap heat in our atmosphere?
 2. Describe one natural cause of climate change.
 3. Why does a growing population change the climate?
 4. How does deforestation change the climate?