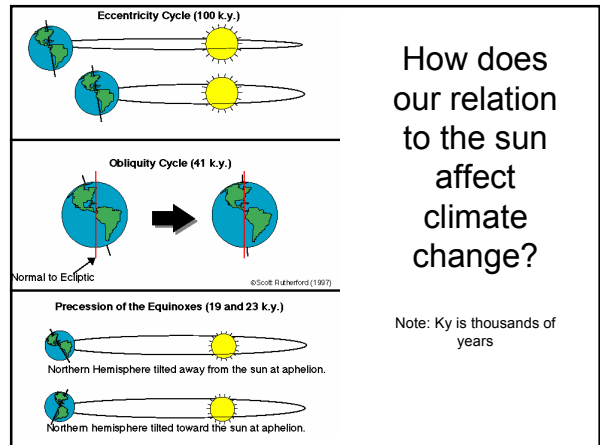


seasons

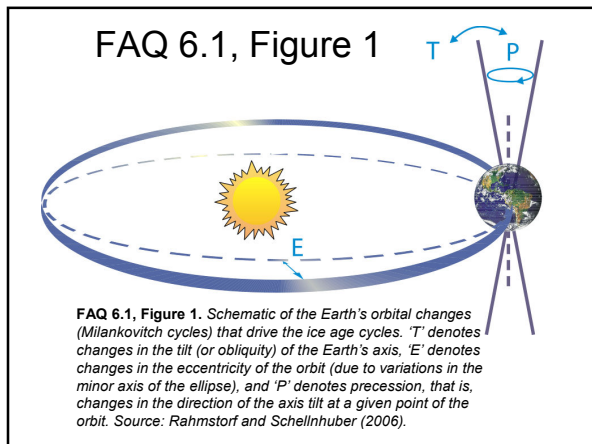
- http://www.classzone.com/books/earth_sci/ence/terc/content/visualizations/es0408/es0408page01.cfm?chapter_no=04

Milankovitch Cycle Animation

- http://www.wwnorton.com/college/geo/eggeof/flash/18_2.swf
- The Milankovitch Theory States these three elements that affect the Earth Sun geometry.
 - Orbital shape (eccentricity)
 - Axial tilt (obliquity)
 - Precession (wobble)



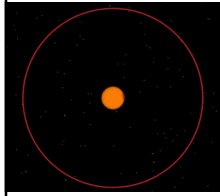
How does our relation to the sun affect climate change?



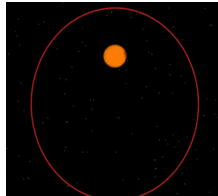
eccentricity

- http://www.windows.ucar.edu/tour/link=physical_sciences/physics/mechanics/orbit/orbit_shape_interactive.html&edu=high

Eccentricity

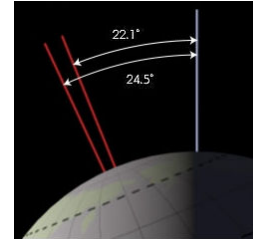


• Eccentricity 0



Eccentricity .5

Tilt



Obliquity

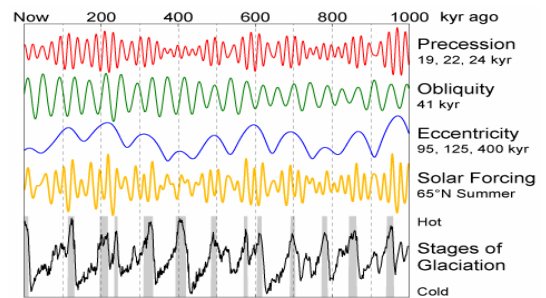
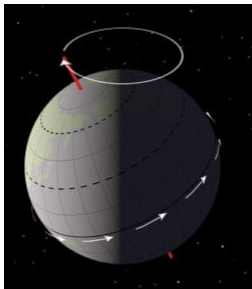
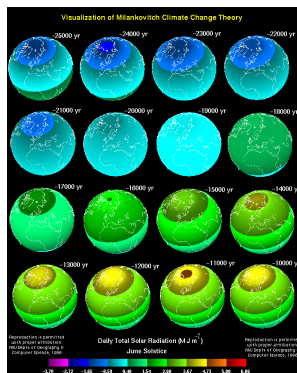


Image from Global Warming Art



What causes ice ages?

- <http://www.canadiangeographic.ca/Magazine/ND97/alacarte.asp>

Ice Ages Links

- The big chill:
- <http://www.pbs.org/wgbh/nova/ice/chill.htm>
↓
- NOAA's paleoclimate program
- <http://www.ncdc.noaa.gov/paleo/paleo.htm>
↓
- Illinois State Museum
- http://www.museum.state.il.us/exhibits/ice_ages/