Atmosphere energy and global temperatures

Atmospheric
Pressure
Atmosphere composition
- Heterosphere

- Homosphere

4 layers
- Thermosphere
  - Upper layer
  - T incr.
  - Low density
  - Function
- Mesosphere
  - Coldest layer
- Stratosphere
  - Important function
    - Ozone (O_3)

- Troposphere

- T decr with alt
  - Normal lapse rate

  - If it's 85˚F at sea level
    - What's the T at 10,000feet?

Energy through the atm
- Transmitted
- Absorbed by earth
- Reradiated

- Scatter

albedo
- %reflected

absorption

- Conduction

- Convection

Greenhouse effect

- Natural effect

Global warming
- Should we be concerned?

Argument 1
- Global warming is happening

Evidence
- Temps and CO2

- Glacial retreat

- Ice shelves breaking

Biological
- Increase in vegetation at poles

- Abrupt climate change

Impacts

- Flooding
- Drought
- Crop failure
- Natural disaster

- http://www.climatecrisis.net/
- An inconvenient truth

Argument 2

- Change is natural and beyond human influence
- Milankovitch cycles
  - Eccentricity
  - Axial tilt

- Nature's influence

- Temps and CO^2