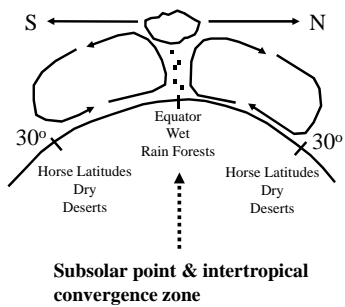


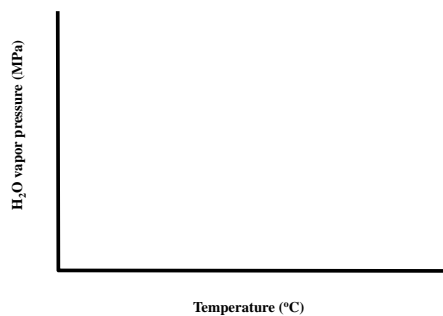
Atmospheric Circulation Affects Climate

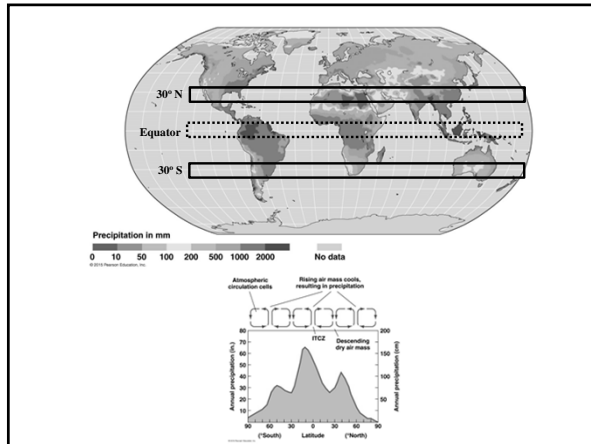
Tropical Hadley Cells

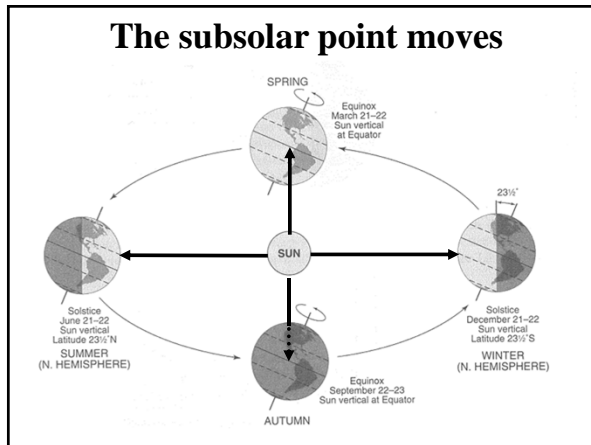


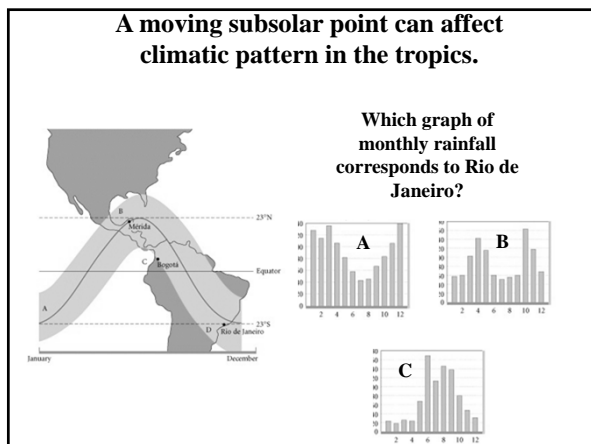
For a given amount of air:

Draw temperature vs. saturation vapor pressure
What is the saturation vapor pressure ?
What is the dew point temperature ?
What is the relative humidity ?

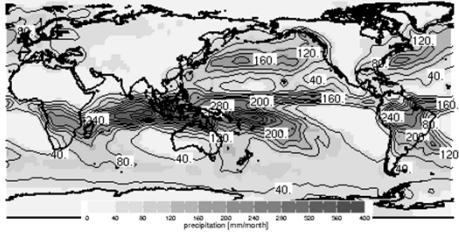








The ITCZ moves with the subsolar line.
But often lags behind – especially over the ocean



Jan

Pacific slope of Panama during dry season
January through April

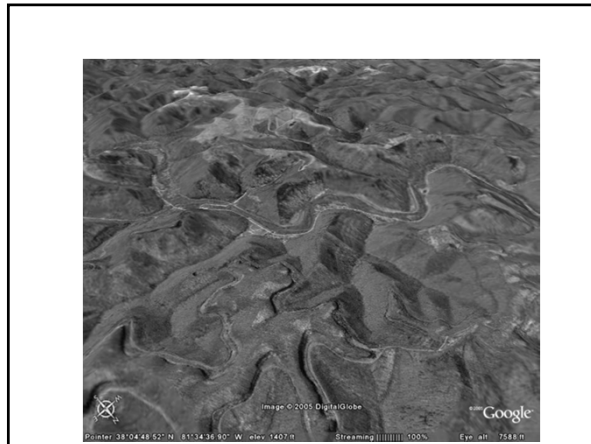


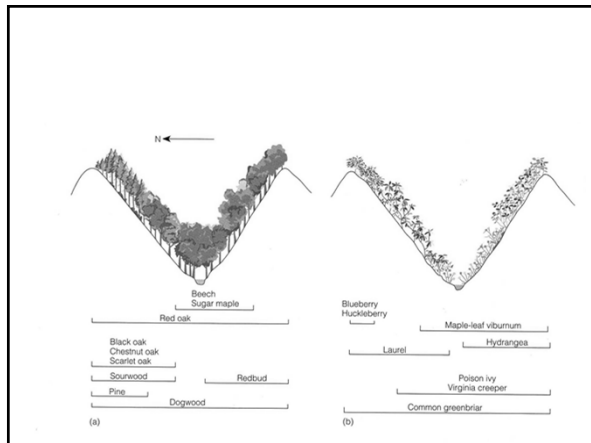
Thought Question

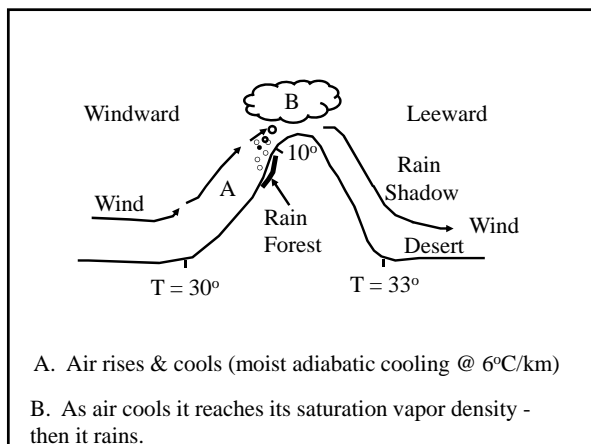
If the angle between the orbital plane of the Earth around the Sun and the plane formed by the Earth's equator were to decrease (currently it's 23.5°), what effect would this have on the seasons in the N. Hemisphere?

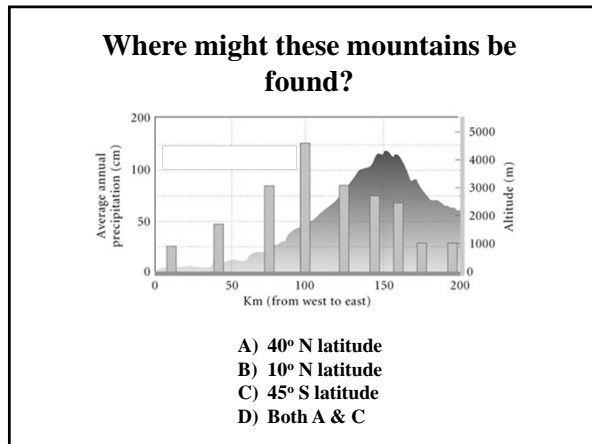
If the angle were 0°, when would an equinox occur?

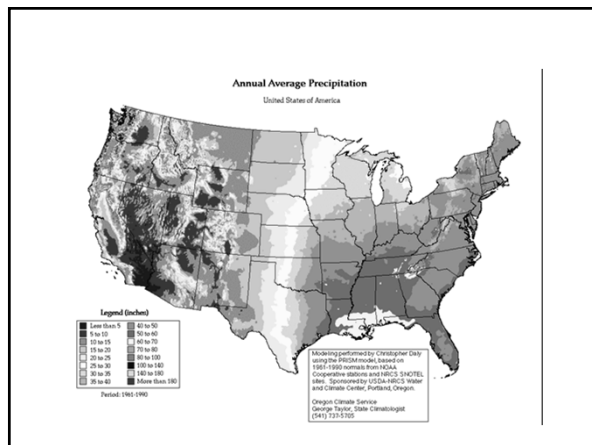
Lectures 6-7

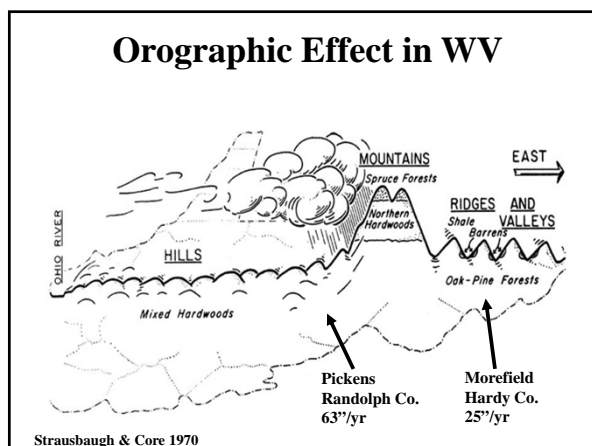








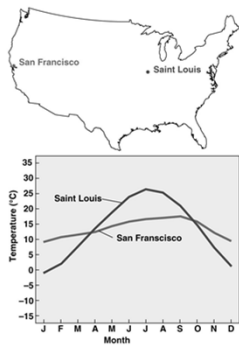


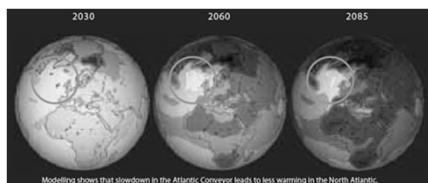
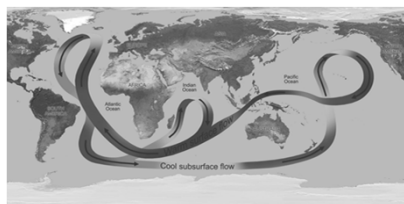


Ocean Circulation Can Affect:

- Regional climate.
- The price of fish.

Large bodies of water heat up and cool down more slowly than land





The Day After Tomorrow ?

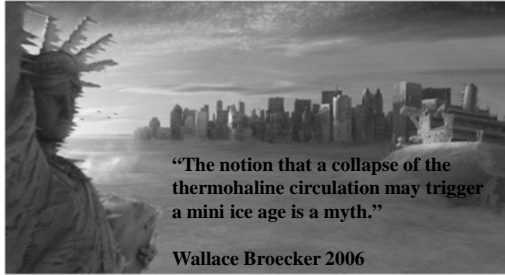
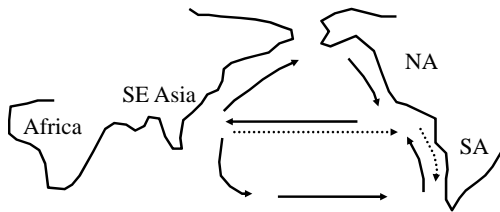


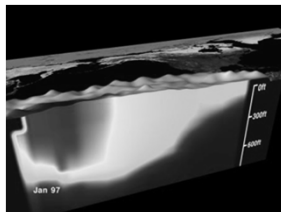
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Effects of ocean currents on climate

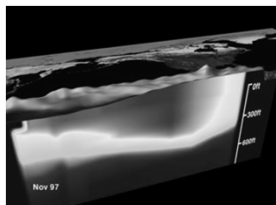


El Nino
(about every 3-5 years)
Normal ———

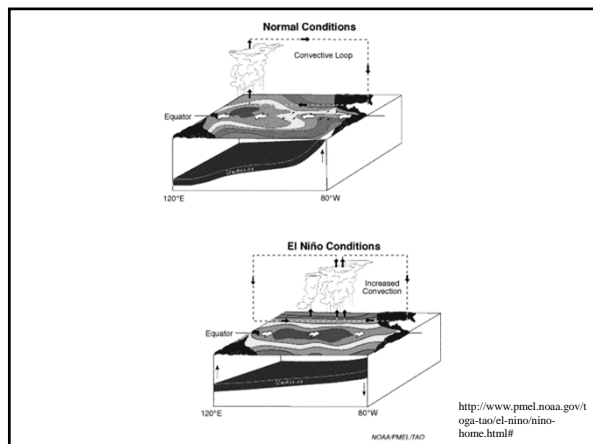
Normal

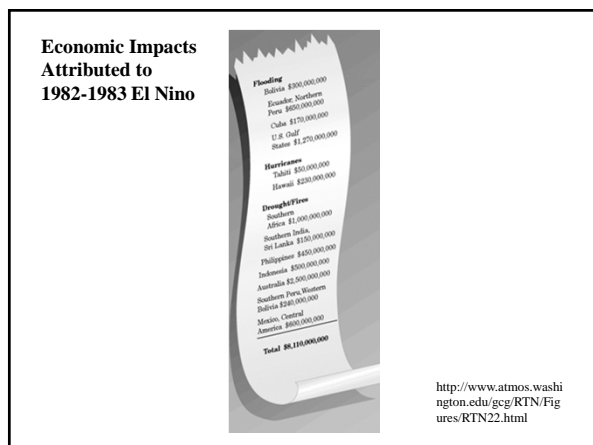


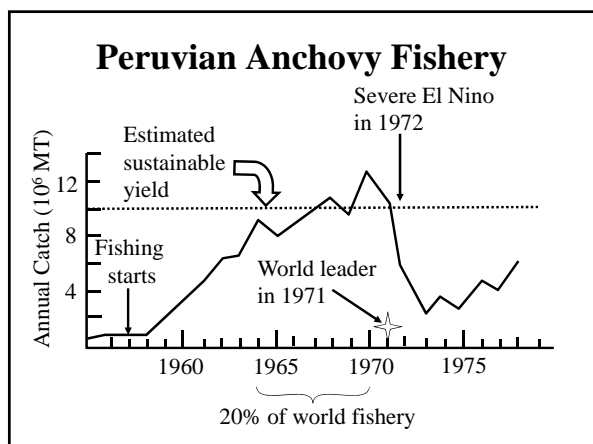
El Nino



<http://www.pmel.noaa.gov/ogatao/el-nino/nino-home.html#>







Low catch for ~ 20 years
Has improved but still sensitive

