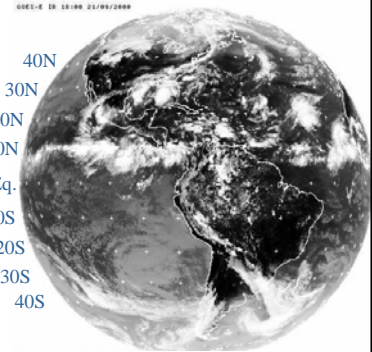


Chapter 10 Review

- What is a circulation cell?
- What are the names of the three circulation cells?
- What is different about the circulation cell in mid-latitudes from the tropical and polar circulation cells?
- Where are:
 - ◆ Intertropical convergence zone (ITCZ)
 - ◆ Doldrums
 - ◆ Trade winds
 - ◆ Subtropical high (Bermuda and Pacific)
 - ◆ Horse latitudes
 - ◆ Westerlies

Review

- Find in this infrared satellite picture:
- ITCZ
- Subtropical jet across Mexico
- Upslope rain on west side of Andes
- Low stratus clouds over eastern Pacific by N & S America capped by sinking air in region of high pressure.



Review

- Climatologically, where do you find regions of upper-level high pressure? Low pressure?
- Relative to the highs and lows, where are the fastest winds?
- What is a jet stream? Where do they occur relative to warm and cold air?
- Do the fastest winds occur in summer or winter? Why?
- What meteorological factor contributed to Columbus landing in the Caribbean instead of in New England?
- For satellite pictures showing many different kinds of things, see: <http://www.osei.noaa.gov/>

Review: Ocean currents

- What is the direction of the major ocean currents in the Atlantic and Pacific Ocean? Why do they have that direction?
- What is upwelling? What is the effect of upwelling on the ocean temperature in a region?
- How can a wind parallel to a coastline produce upwelling?
- What is an Ekman spiral?
- Is the typical ocean temperature warm or cold by the coast of Peru?
- Why is the Pacific Ocean so warm by Indonesia?

Review

- What is the trigger that starts warm water sloshing eastward along the equatorial Pacific?
- What are conditions in the Pacific like during El Niño? During La Niña?
- How does the atmosphere above the Pacific Ocean respond to the ocean's temperature changes?
- How often do El Niños occur?
- Give examples of climatic effects associated with El Niño and La Niña.