

Meteo 1 CH 12 Global Climate Fall 2012 Outline

- Climatic Regions of the World (Temperature and Precipitation)
 - Causes:
 - Incident sunlight
 - Distribution land and water
 - Ocean and wind currents
 - High and Low Pressure Areas
 - Mountain Barriers
 - Altitude
- Preview:
 - Hottest: clear skies; sinking air; low humidity; high summer heating on a barren landscape
 - Coldest: little moisture; no clouds, radiative cooling; less solar input; land masses
 - Wettest: Orography
- Climate Classification Systems
 - Thornthwaite System
 - Köppen System
- Major Climate Types:
 - A Tropical Moist:
 - no winters
 - all months < 18 deg C
 - B Dry:
 - deficient precipitation
 - PET and $T > P$
 - C Moist – Mid Latitude, mild Winters:
 - warm to hot summers
 - mild winters
 - ave temp coolest month < 18 deg C, > 13 deg C
 - D Moist – Mid Latitude, severe Winters:
 - Warm summers
 - Cold winters
 - Ave temp coolest month < 13 deg C
 - E Polar
 - Extremely Cold
 - No summer
 - H Highland
 - Rapid changes in elevation = sharp changes in climate