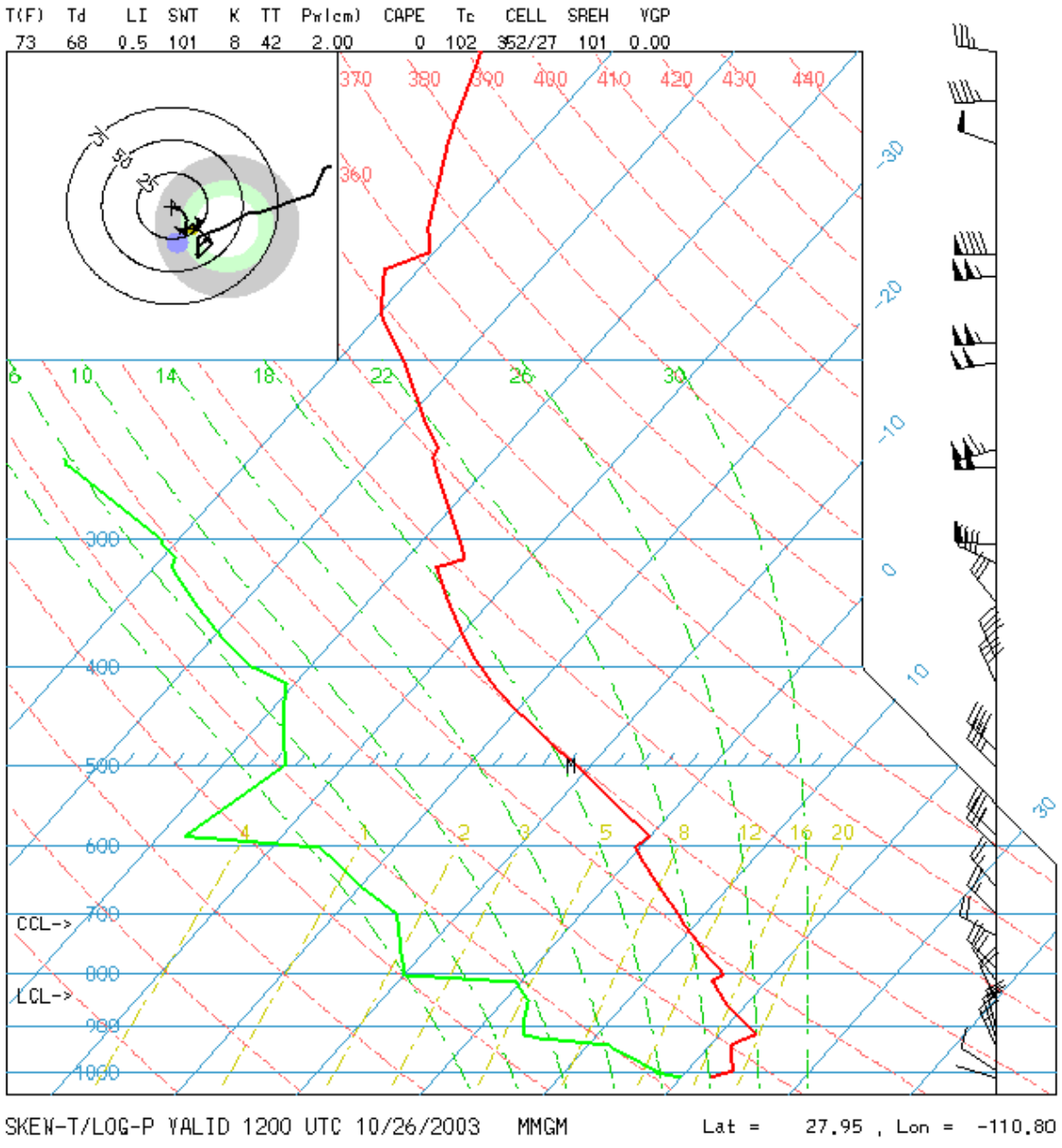
AT 351 Quiz Seven
October 27 2003

Below is a sounding from Guaymas, Mexico, taken yesterday morning:



Take a good look at this sounding - the first seven questions of your quiz will be based on it. :)

1.) The surface temperature in Guaymas yesterday morning was:
    a.) 25 degrees Celsius
    b.) 22 degrees Celsius
    c.) 20 degrees Celsius
    d.) 15 degrees Celsius

2.) The surface dewpoint in Guaymas yesterday morning was:
    a.) 25 degrees Celsius
    b.) 22 degrees Celsius
    c.) 20 degrees Celsius
    d.) 15 degrees Celsius

3.) The lifting condensation level (LCL) for this sounding is:
    a.) 650 mb
    b.) 750 mb
    c.) 850 mb
    d.) 950 mb

4.) Below the LCL, the parcel is in a _____ environment
    a.) stable
    b.) unstable
    c.) neutral
    d.) a diabolical plot involving penguins, the hydrogen bomb, and Dr Pepper

5.) Above the LCL, the parcel follows the moist adiabatic lapse rate, and were it to rise, would initially find itself in a(n) _____ environment
    a.) stable
    b.) unstable
    c.) neutral
    d.) a diabolical pl...oh forget it, it's not answer d.)

6.) Between 500 and 300 millibars, the parcel finds itself in a(n) _____ environment
    a.) stable
    b.) unstable
    c.) neutral
    d.) none of the above

7.) If there are clouds in this sounding, they are between
    a.) 1000-880 millibars
    b.) 675-480 millibars
    c.) 950-580 millibars
    d.) no clouds are currently present in this sounding

the rest of the questions are general questions, not necessarily related to the Guaymas sounding

8.) If the environmental lapse rate is steeper (warmer) than the dry adiabatic lapse rate, the environment is

a.) absolutely stable
b.) absolutely unstable
c.) conditionally unstable
d.) it depends on parcel saturation and the degree of steepness in the environmental lapse rate

9.) If the environmental lapse rate is steeper (warmer) than the moist adiabatic lapse rate, the environment is

a.) absolutely stable
b.) absolutely unstable
c.) conditionally unstable
d.) it depends on parcel saturation and the degree of steepness in the environmental lapse rate

10.) Regions in a skew-T sounding where the environmental dewpoint is roughly the same as the environmental temperature indicate regions of

a.) possible cloudiness
b.) high relative humidity
c.) all of the above
d.) none of the above