

Extra directions for Lab 5: Atmospheric Soundings

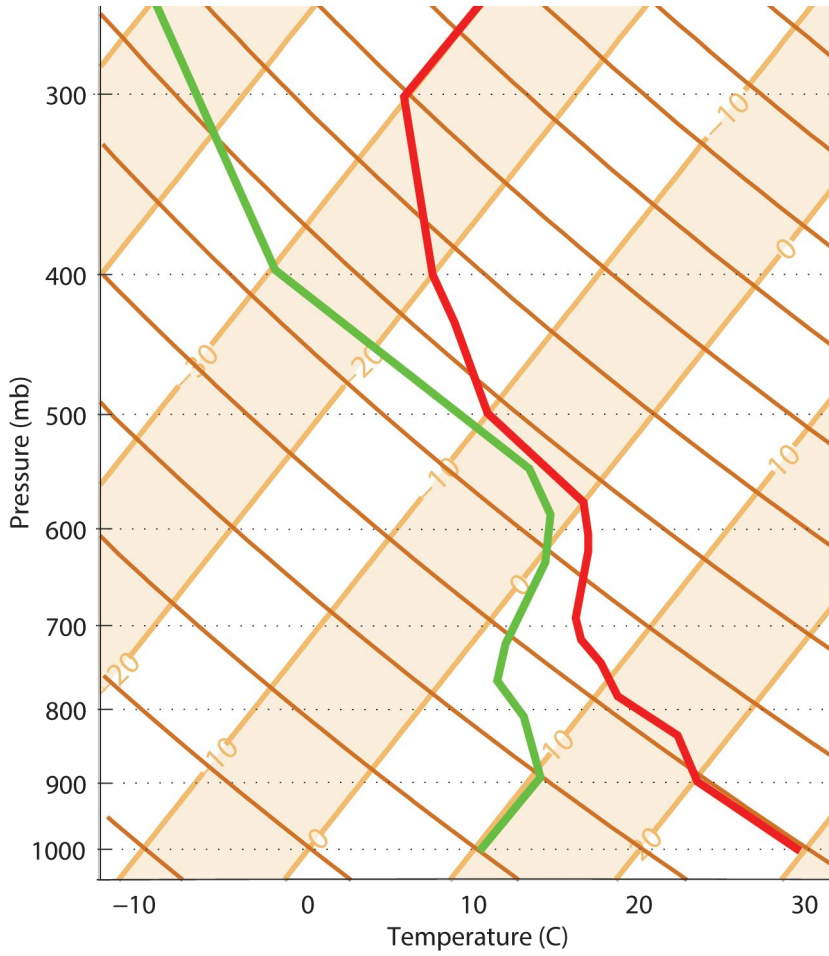


Figure 1

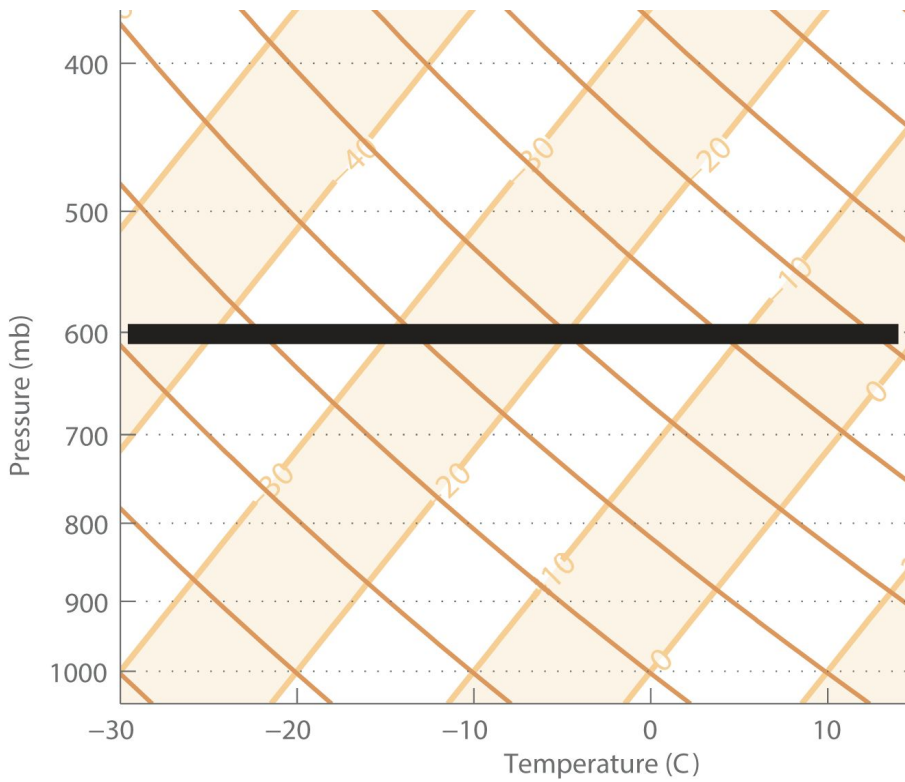


Figure 2

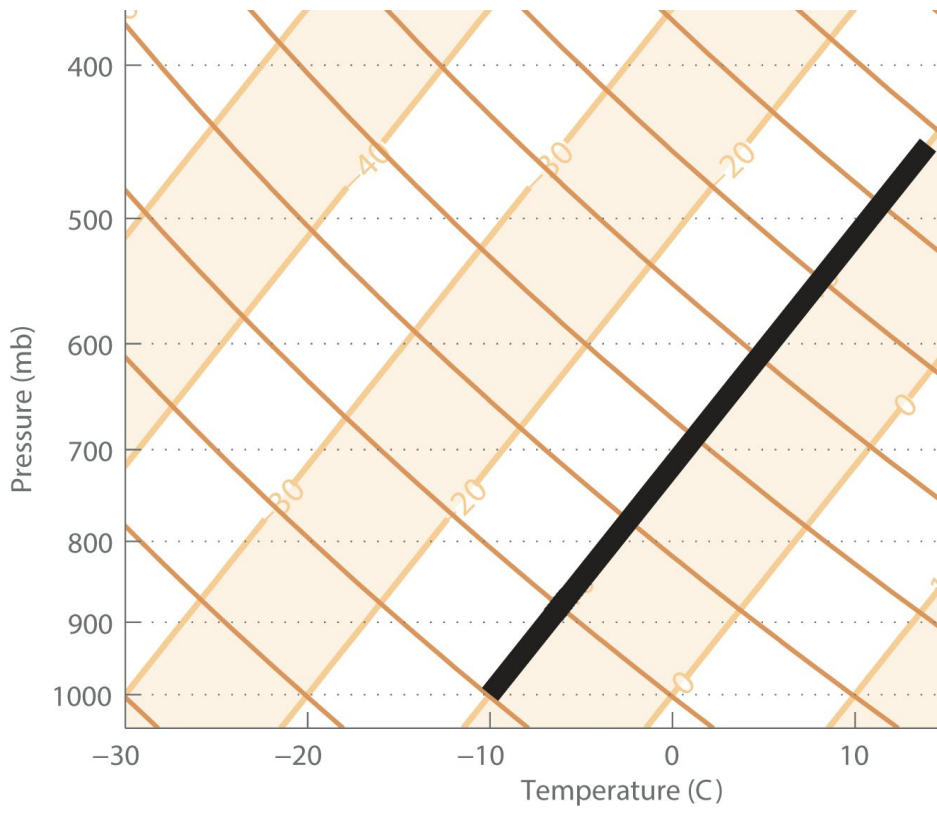


Figure 3

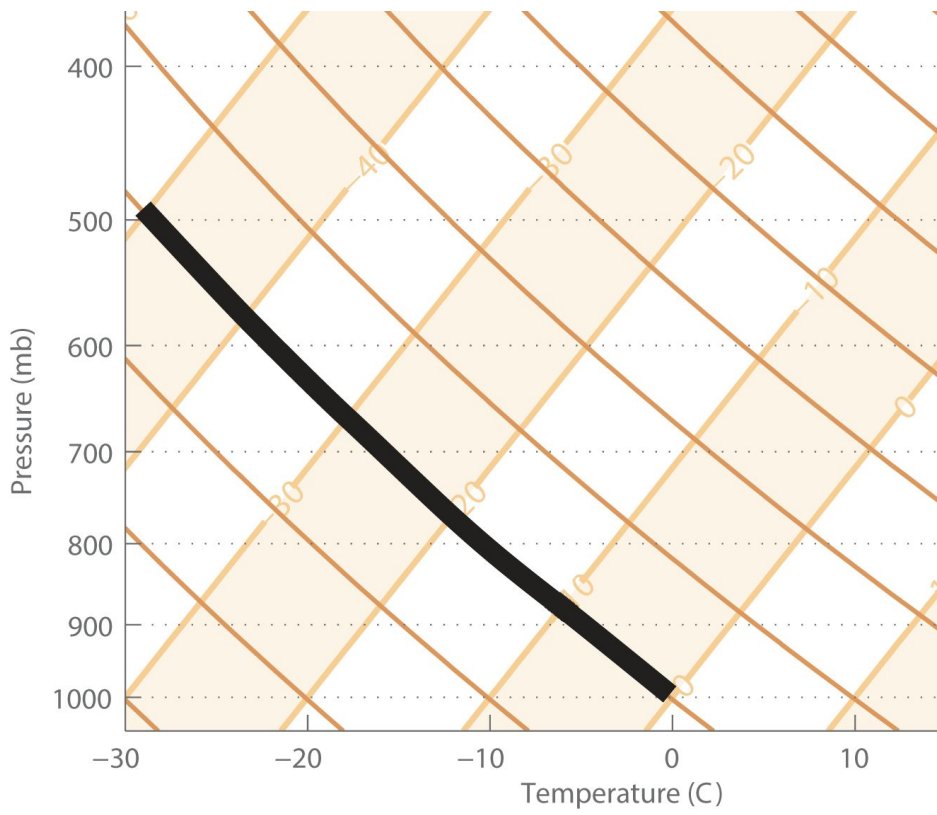
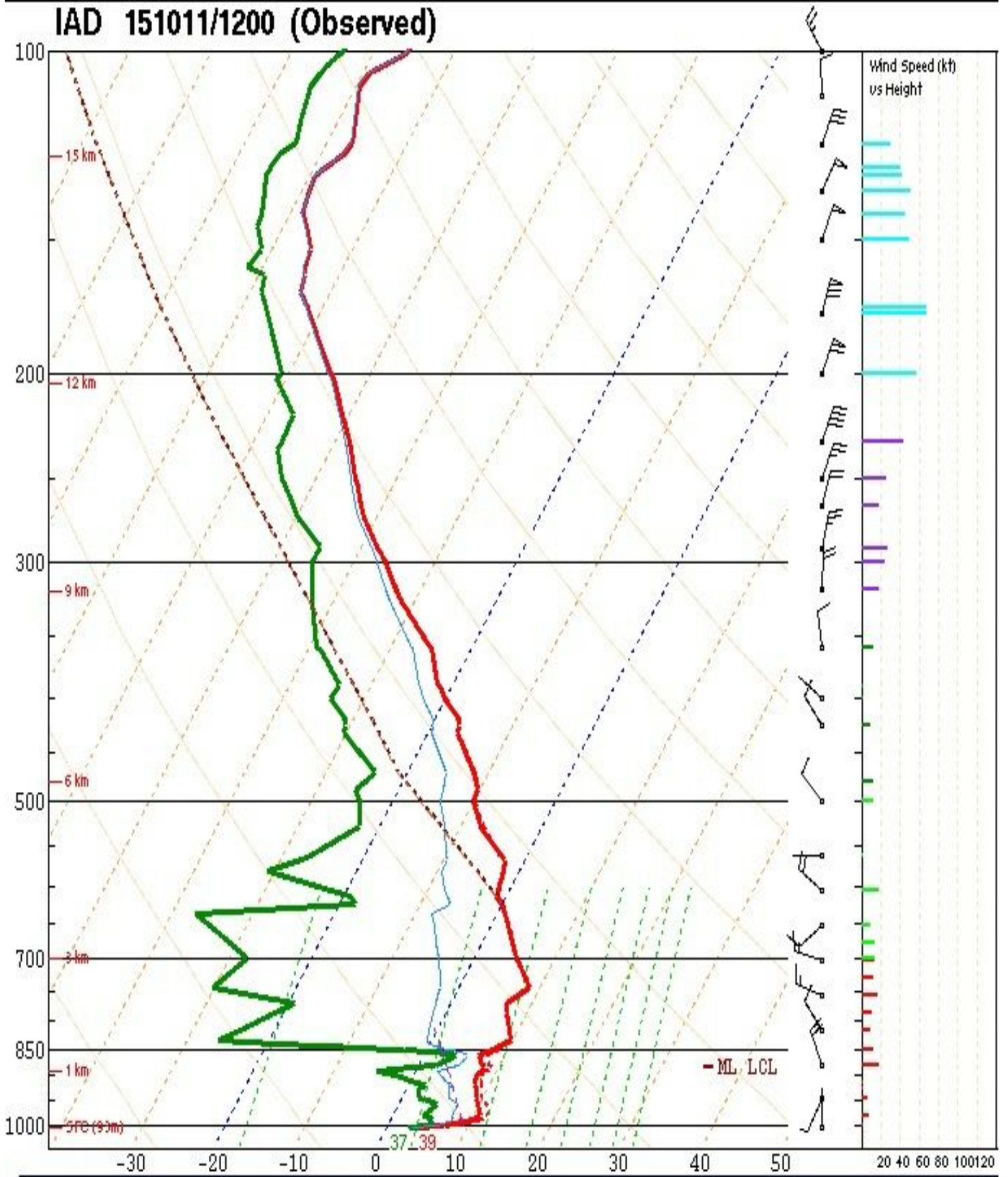


Figure 4

Sounding for Question 11



Correction p. 26

In the **Temperature** paragraph, the altitude should be 400 mb, not 500 mb, where the air temperature is -20 deg Celsius.

Question 1:

Use Figure 1 from above to fill in the table at the top of p. 27.

Question 3:

Do question 4 first for a hint, then come back to 3.

Question 3 should read as:

Based on the sounding,

- a) where is the atmosphere moist (holding almost as much moisture as it can for that temperature)?
- b) where is it relatively dry?

Question 5:

Environmental lapse rate is the same thing as the temperature profile of your skew-T diagram.

Question 6:

Find the pressures of the three types of inversions on p. 26.

Question 9:

For part c, "temperature of the environment" refers to the temperature profile on skew-T diagram you drew.

Question 11:

For question 11, look at the image of the sounding above. Ignore everything else written in the manual for question 11, just do the three parts written here:

- a) Find the pressures of the three inversions mentioned on p. 26.
- b) At what pressure is the atmosphere most moist?
- c) At what pressure is the atmosphere most dry?