METEOROLOGY NAME_____
LAB DATE: / /

PREDICTING SEVERE WEATHER

1. What is the minimum dew point that is typically found in areas where tornadoes and thunderstorms occur?_____
2. Shade in this region on the current weather data map.
3. What are the most common mechanisms for providing the initial lift needed to form tornadoes and thunderstorms?
   _____
4. Using a different color highlight these areas on the current weather map if they are within the region of high dew points.
5. What is the minimum wind speed found within the jet stream?_____
6. Using the 300mb upper level map locate the jet stream and using yet another color draw in its location on the weather map.
7. Locate 6 sounding locations that are closest to the intersection of all these features. Create the soundings for these locations and record the stability indices in the table below.

Sounding Location	LIFT	CAPE	SHOW	SWET

8. What are the values of the following indices typically associated with tornadoes and thunderstorms (See Text P. 96):
   LIFT (Lift Index) _____
   CAPE (Convective Available Potential Energy) _____
   SHOW (Showalter Index) _____
   SWET (Sweat Index) _____
9. What is the most likely location of severe weather today?_____