Objective: to become familiar with the skew-T again, to become comfortable identifying various features in soundings, and most importantly to begin to be able to conceptualize how these features fit into the bigger picture.

Part 1: Using the University of Wyoming soundings page (a link to which is provided on the class web page), find examples of the following types of soundings and/or sounding features:
   a. absolutely stable layer
   b. conditionally unstable layer
   c. absolutely unstable layer (may be difficult, but try!)
   d. well-mixed layer
   e. elevated well-mixed layer
   f. stratified layer
   g. subsidence inversion
   h. radiation inversion
   i. deep convection
   j. arctic air mass
   k. tropical maritime air mass

Note: you don't have to use a different sounding for each feature.

Part 2: Pick one sounding and identify the level(s) at which you expect to find clouds. Label the tropopause.

Part 3: Pick one location and examine at least 3 successive soundings (e.g. at CHS from 0Z, 12Z and 0Z the next day). What sorts of differences do you see? Are the differences simply diurnal (boundary layer variations with time of day) or do they indicate changing weather? If the latter, what appears to be going on?