For this lab, everyone is going to contribute their piece to a class project. The Fall 2009 AOS 452 class is going to create their own weather diagnostic tools web page. This page will be useful for future weather class discussions, Friday's Weather Watch, and your own forecast preparation.

So what will you be doing? As a class, we are going to create a list of diagnostic tools that you think would be useful in diagnosing forcing for mid-latitude synoptic weather systems. Then you will attach your name to one of the diagnostic tools. For the lab you will create a script that will be loaded into your crontab and create gif images in your public_html directory.

- Your script should create the same plot for 5 forecast times. (f00, f12, f24, f36, f48)
- Make sure your title includes information about what is plotted, the date/time/forecast hour, and the level at which your plot is made.
- Each plot should be its own image. Four panel plots are hard to see on the projector.
- Choose a garea that gives an overview of the forcing over the continental US.
- Each plot should have a white background (use gpcolor)

To get 5 plots, each with a different forecast hour you will need to change your gdattim each new run, which means you will need to run gpcolor and change your device each new run. Here are some hints on how to make efficient scripts...use a loop...

```bash
# After the source ~/$yourusername
# and cd /ef5/raid10/class/......... add this loop

set hr = {'00','12','24','36','48'}
foreach j (1 2 3 4 5)
    gpcolor << EOF
    colors = 101 = 255:255:255
    device = gif|nameofplot_f$hr[$j].gif
    r
    exit
EOF

# When you run gdplot set GDATTIM=f${hr[$j]}
# Then finally at the end of your script, after exit and EOF, but before gpend, add the line end.

Thuend line will be the end of the foreach loop. The loop will run through each forecast hour so you only have to include gpcolor and gdplot once in your script.

Hint: Get your script working for f00 and foreach (1) then add this loop, this will make debugging easier.

When you have created your crontab, send me the links to the gif images. I will put all the links sent to me on the AOS 452 Weather Page, this page will be linked from the class webpage. Your grade will be based on the presentation of your plots and the working condition of your plots.