

MEA 498/598: National Weather Service Student Internship
Week 5 Worksheet - Getting to know the forecast desk and the forecast process

Name _____
Shift _____

Date _____
Mentor _____

This is the first week on the forecast desk, probably something you have been looking forward to. This week we will get to know the forecast desk a little bit and start on some of the approaches to forecasting. You have received a copy of Dr Lackmann's handout on general approaches to weather forecasting (it is also available [here](#)).

In a few weeks you'll be writing your own forecast discussion, but before we get to that, spend the next couple of weeks getting familiar with loading model data in AWIPS and thinking in the forecast funnel framework. Ask your mentor if you can do the some/all of the navigating on AWIPS so you get familiar with products/methodology.

- 1) Work with your mentor and determine the forecast problem of the day. What and where are the weather producing features associated with the forecast problem of the day (ex. short wave upstream with clouds, modifying air mass overhead and temperatures, approaching cold front with precipitation)?

- 2) How might a hand analysis of a surface or upper air chart help with the problem of the day?

- 3) On the CONUS scale, what is the pattern of the westerlies and how is that pattern evolving (fast, flat flow; deepening eastern U.S. trough, Omega pattern, progressive slightly amplified pattern, etc)? In general terms what does this pattern typically mean for weather across the Carolinas?

- 4) On the CONUS scale, what observational data can help you with your assessment of the problem of the day noted in question 1 and how did you use it (water vapor loop, thickness analysis from RAOBS, upstream radar/precipitation data)?

- 5) Ask your mentor to find an area of somewhat significant weather (precipitation) anywhere in the CONUS and work together to determine what forcing for ascent is producing the clouds and precipitation.

- 6) With your mentor, update the WRKSYN (synopsis) product in AWIPS.

- 7) Have your mentor give you a quick 20 minute introduction into GFE including the layout, the various grids and how we make some changes.