MEA 498/598: National Weather Service Student Internship
Extended Forecast Worksheet

Name _____   Date _____
Shift _____   Mentor _____

Extended Forecast:
The Extended Forecast generally involves Days 4 through 7 of the forecast. In this period, current observational trends become less important and the following become more important:

- Climatology
- Pattern Recognition
- Model Diagnostics

When working on the extended forecast, we often use climatology as a baseline. The difficult part is determining whether or not we should deviate from climatology - and the justification for that deviation. Pattern recognition, experience, and model diagnostics are all critical factors to consider when creating the extended forecast. The Weather Prediction Center (WPC) issues products that offer guidance for the extended forecast.

PMDEPD – Extended Forecast Discussion
http://www.wpc.ncep.noaa.gov/discussions/hpcdiscussions.php?disc=pmdepd

PMDHMD – Model Diagnostic Discussion
http://www.wpc.ncep.noaa.gov/discussions/pmdhmd.html

1) Have your mentor:
- Discuss his/her confidence in the extended forecast and what tools/data were used to arrive at that conclusion.
- Discuss the NWS Superblend and its limitations in the extended range forecast.

2) Answer the following questions in the space provided below:
- Climatologically, what would be expected in the Day 4-7 portion of the forecast?
- Are there reasons to deviate from climatology? If so, what are they?

3) In the space provided below, identify the primary forecast problem(s) in the extended
    forecast period.

4) How can ensembles be helpful in the extended range?