MEA 498/598: National Weather Service Student Internship
Week 1 Worksheet - Focus on local observations and precipitation

Name _____ Date _____
Shift _____ Mentor _____

1) Discuss the COOP program and what the COOP data is used for. There are ~60 cooperative observers in the Raleigh County Warning area. http://www.weather.gov/rah/coop

What AWIPS product contains the daily COOP summary? _____

2) Discuss the CoCoRaHS network including a demonstration of the web page (https://www.cocorahs.org/Maps/ViewMap.aspx?state=NC) and how to view rain and snow reports from January 18, 2018. You can also view the special CoCoRaHS report sent to AWIPS by loading the DENCCRAHS text product in AWIPS.

3) Discuss the Hydrology program and Flood Watches, Flood Warnings, Flood Statements, and routine River Summaries and Forecasts.

Have your mentor demonstrate how to view river stage data through Hydroview in AWIPS and AHPS on our web site. http://water.weather.gov/ahps2/index.php?wfo=rah

4) Discuss the Automated Surface Observing System (ASOS). ASOS is designed to support weather forecast activities and aviation operations and, at the same time, support the needs of the meteorological, hydrological, and climatological research communities. In the NWS Raleigh County Warning Area, there are 8 ASOS units.
http://www.weather.gov/rah/virtualtourasos
http://www.nws.noaa.gov/asos/

What's the difference between an ASOS and an AWOS? Who owns or is responsible for monitoring and maintaining an AWOS and how does this relate to the potential quality of the data?

_____

5) Conferring with the AFD and the operations staff, what is the forecast problem of the day?

_____

How might observations from the COOP program, ASOS units, or the radar from central NC or elsewhere be used to help with the forecast problem of the day?

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6) Ask your mentor to show you multi-radar, multi-sensor (MRMS) products in AWIPS. Compare some of the associated quantitative precipitation estimate (QPE) products with those from single radars via the Flash Flood Monitoring and Prediction (FFMP) system.

7) With your mentor, update the WRKSYN (synopsis) product in AWIPS. Keep in mind the synopsis is not an AFD, but rather a general description of the overall synoptic pattern and impact across the region. The length is typically 2 to 3 sentences, don't get too detailed, and understand that the primary audience is the NWR listener but the product is also ingested into the AFD synopsis and the Fire Weather Product.

8) Work with your mentor and create a social media post. There are a wide range of topics that can be used including…

- a short term forecast update (fog will lifting and visibilities improving, skies will be clearing, etc.)
- a local climate topic
- a simple forecast summary of the next few days
- an anniversary of a noteworthy weather event

9) Spend any extra time exploring AWIPS in D2D or the text window.
- load some METARs, 24hr precipitation reports from METARs or some model guidance in D2D
- load the AFD, some MOS guidance, or a climate summary in the text window