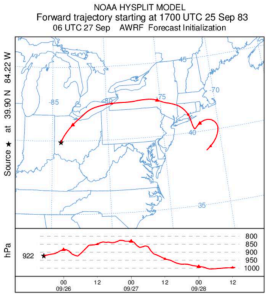
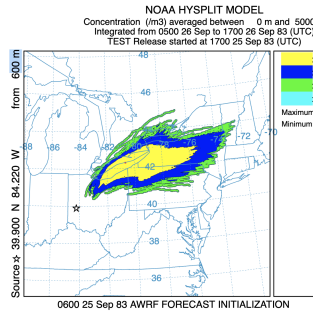
ATSC 595D - Hysplit run assignment - 2024



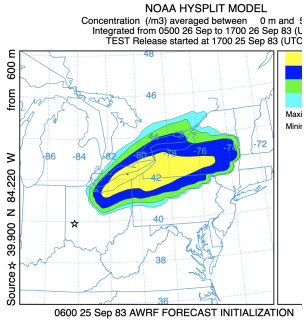
1. Following Reagan McKinney's hysplit tutorial - part 1 (**trajectories**), run hysplit according to her instructions, and submit a large-size screen capture of **your** output image, similar to the figure on her slide 19 (see thumbnail copy at right).

2. From McKinney's hysplit tutorial - part 2 (**concentrations**), make hysplit runs **similar** to her demo for the captex2_wrf27uw.bin meteorological input, but with the following **changes**:



   a) Make a concentration run using 2500 **particles**/cycle
   b) 24 hour Total run time (hrs)
   c) 600 m-agl Start Location Height (m-AGL)
   d) 5000 m Height of levels (M Agl)
   e) And make the run using the Setup File
   f) Display the results (using the default). Note: your ouput will consist of two images. Please submit a large-size screen capture of the 2nd image, as shown by the thumbnail at right [the one that was "Integrated from 0500 26 Sep to 1700 26 Sep 83 (UTC)"].

3. Repeat the concentration run with the settings as above, but for



   a) **Puffs** (Gaussian horizontal - Particle vertical)
   b) 5 puffs released/cycle
   c) Run from your Setup file, and pay close attention to the speed as it is running.
   d) Display the results (using default), and make a large screen capture of the 2nd image to submit.

4. For the run from item (3), Discuss:
   a) How did the run speed vary, if at all? Why?
   b) How many puffs existed at the end of the run?
   c) At what height was most of the pollutant mass at the end of the run?