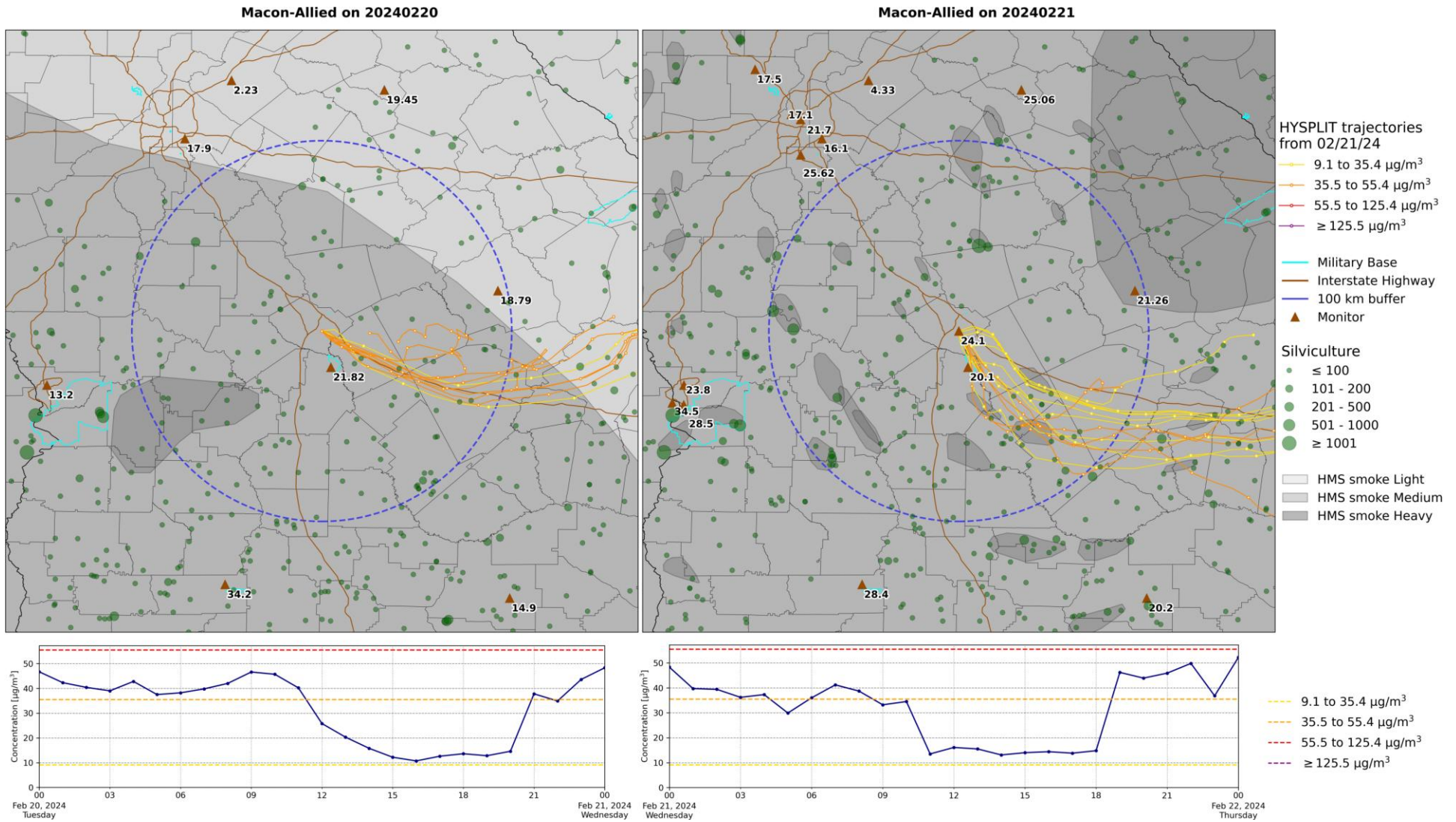
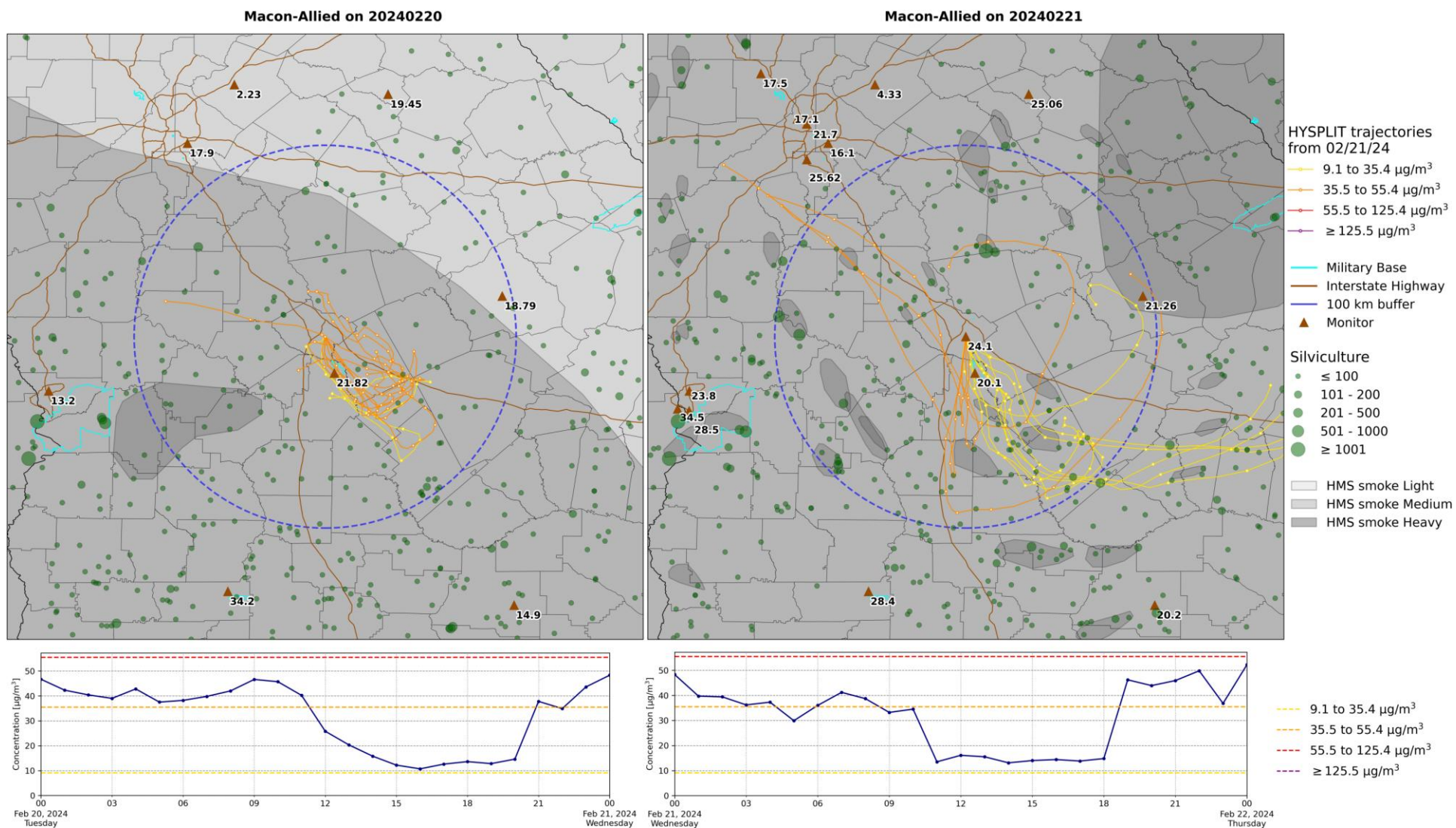


## Appendix A. Macon-Allied Prescribed Fire Exceptional Events Plots

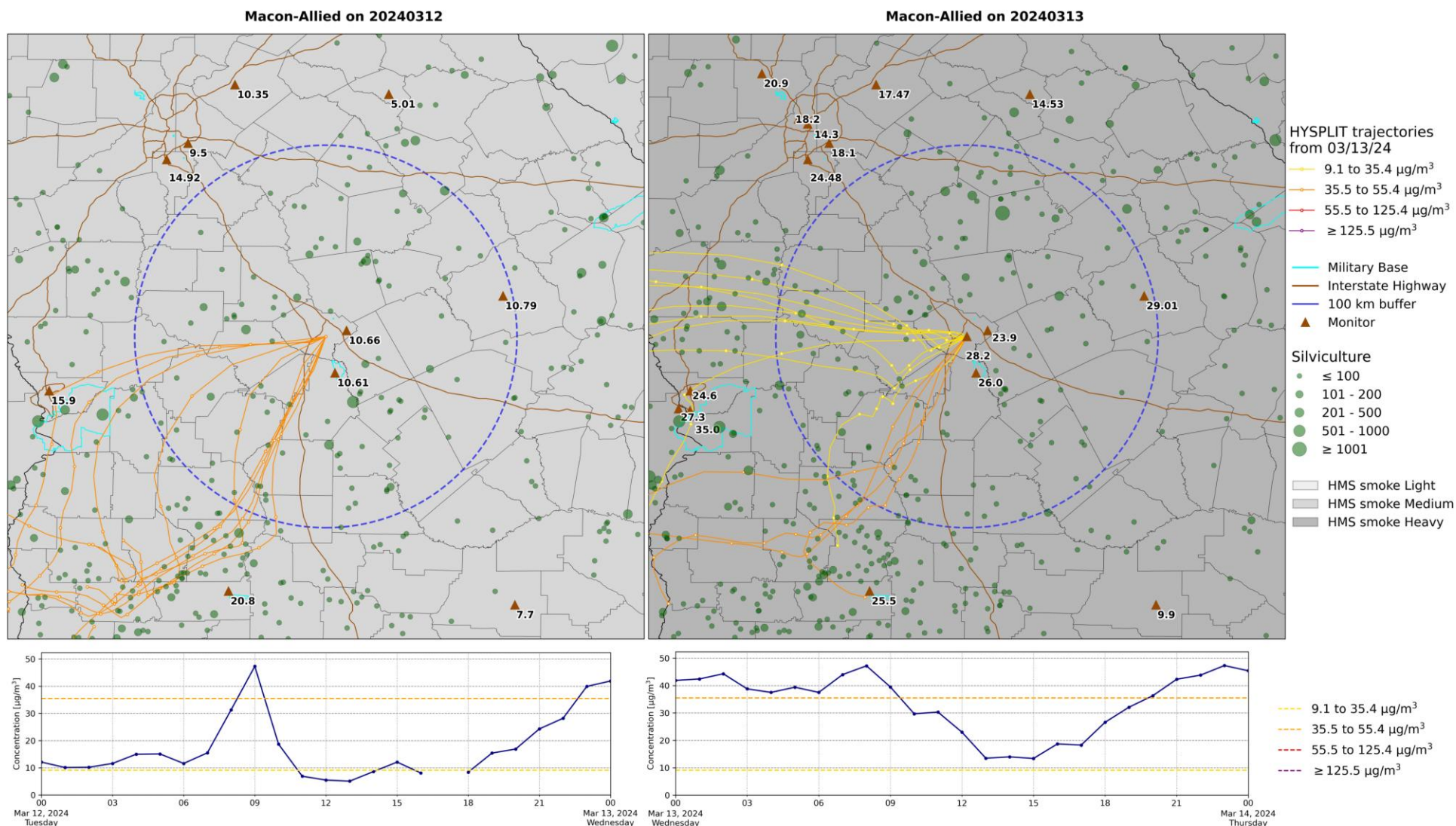


**Figure 1A.** The top left map contains burn permits issued, HMS smoke plumes, and 24-hour  $\text{PM}_{2.5}$  concentrations at the Macon-Allied  $\text{PM}_{2.5}$  monitor on February 20, 2024. The top right map contains the same information for February 21, 2024. Both maps contain HYSPLIT back trajectories (released at 100 m, 24-hour duration) from the Macon-Allied  $\text{PM}_{2.5}$  monitor on February 21, 2024. The left map shows the back-trajectories for 0:00 AM-9:59 AM EST and the right map represents back-trajectories for 10:00 AM-11:59 PM EST. HYSPLIT markers are spaced in 3-hour intervals. In the time series plots, the blue line shows hourly observations from the monitor. The dashed lines correspond to the AQI breakpoints for  $\text{PM}_{2.5}$  concentrations.

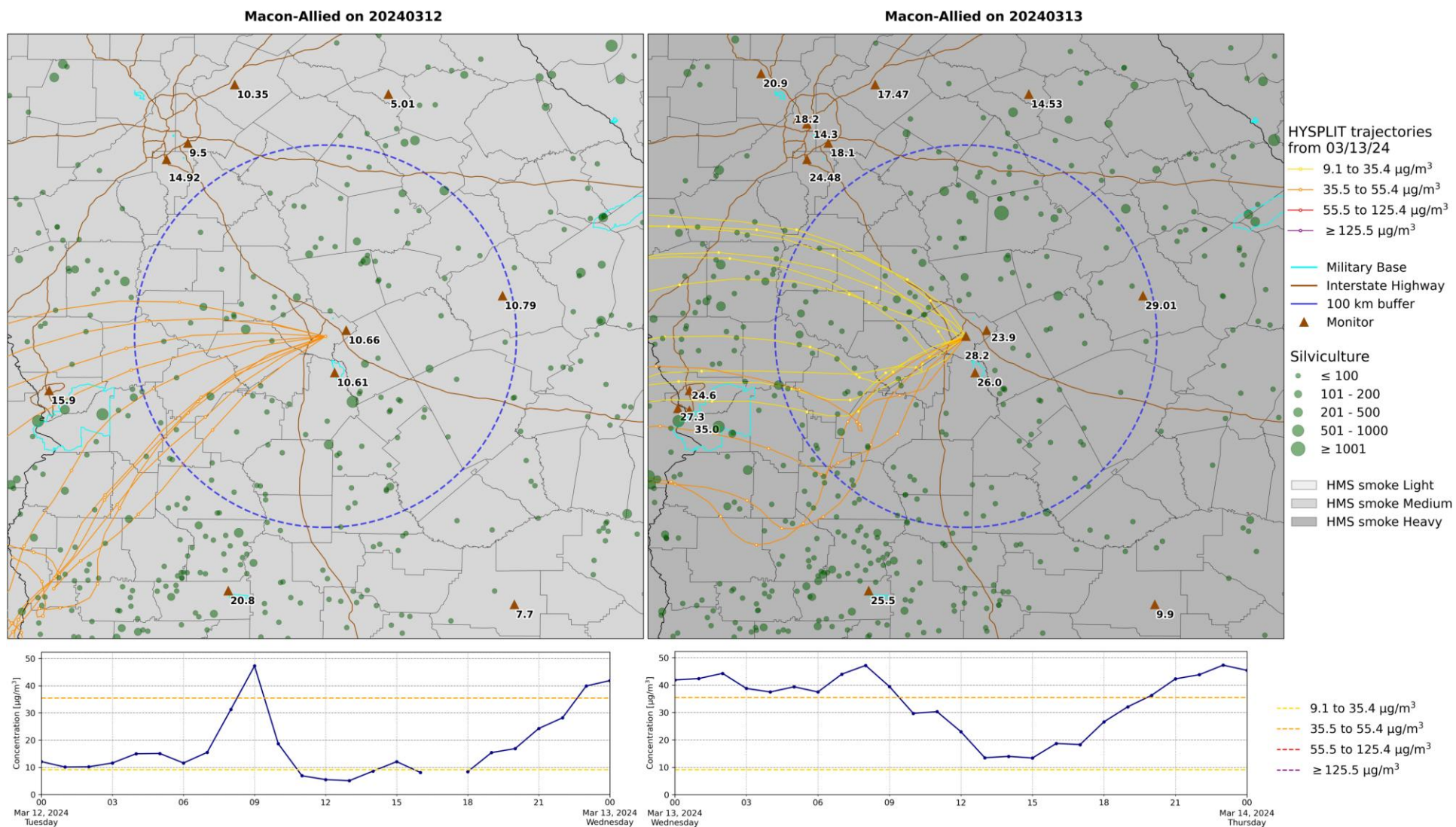


**Figure 1B.** The same as Figure 1A except HYSPLIT back trajectories are released at 500 m from the Macon-Allied PM<sub>2.5</sub> monitor.





**Figure 2A.** The top left map contains burn permits issued, HMS smoke plumes, and 24-hour PM<sub>2.5</sub> concentrations at the Macon-Allied PM<sub>2.5</sub> monitor on March 12, 2024. The top right map contains the same information for March 13, 2024. Both maps contain HYSPLIT back trajectories (released at 100 m, 24-hour duration) from the Macon-Allied PM<sub>2.5</sub> monitor on March 13, 2024. The left map shows the back-trajectories for 0:00 AM-9:59 AM EST and the right map represents back-trajectories for 10:00 AM-11:59 PM EST. HYSPLIT markers are spaced in 3-hour intervals. In the time series plots, the blue line shows hourly observations from the monitor. The dashed lines correspond to the AQI breakpoints for PM<sub>2.5</sub> concentrations.



**Figure 2B.** The same as Figure 2A except HYSPLIT back trajectories are released at 500 m from the Macon-Allied  $\text{PM}_{2.5}$  monitor.