Appendix C – Trajectories

This section contains 24-hour backward trajectories ending at exceedance monitors between 10:00 CST and 20:00 CST on April 6, 12, 13, and 29, 2011. The 10:00 to 20:00 CST time period encompasses the hours contributing to the peak 8-hour ozone exceedances on the event days. The trajectories illustrate transport of smoke to the exceedance monitors and supplement the Causal Relationship section of the Exceptional Events demonstration. All times shown are in Central Standard Time.

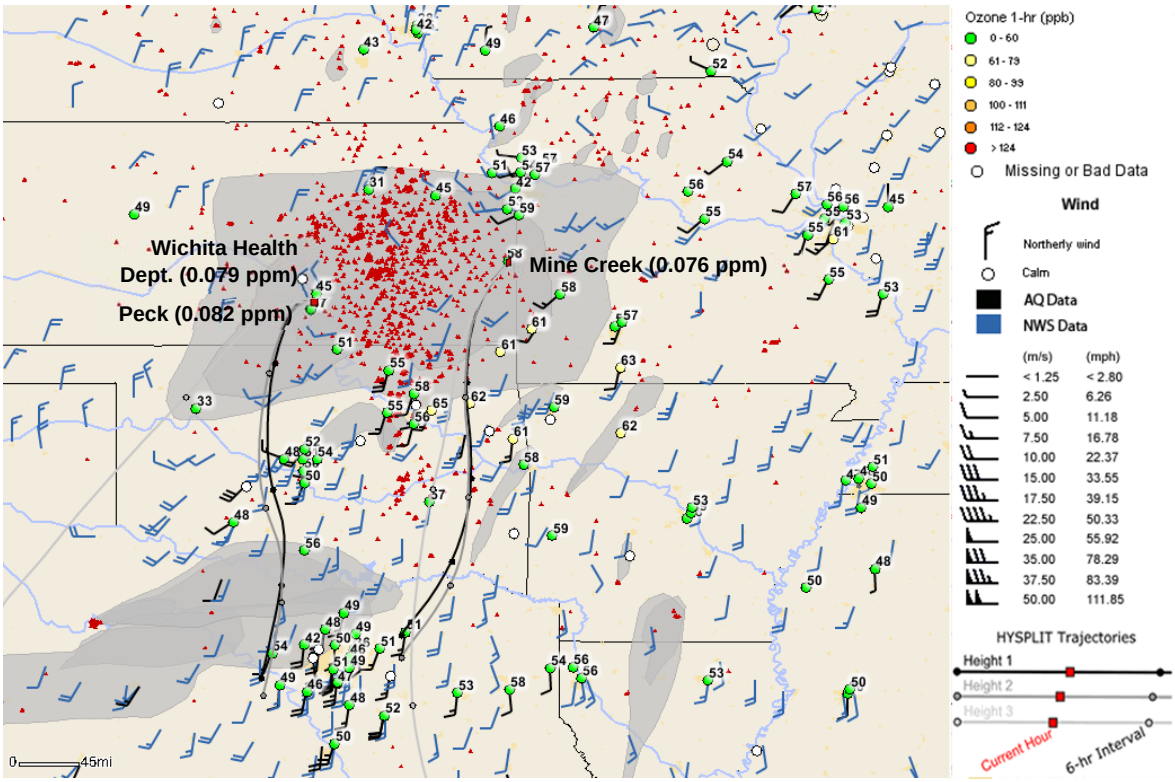

Figure C-1. 24-hour backward HYSPLIT trajectories ending at 10:00 on April 6, 2011. For this and the following trajectory plots, Height 1 = 50 m, Height 2 = 100 m, and Height 3 = 500 m, corresponding to ending height above ground level at each exceedance monitor. Red dots and gray shading show cumulative daily fire and smoke locations, respectively. Daily peak 8-hour ozone concentrations are in parentheses next to the exceedance monitors. Plot created in AIRNow-Tech.

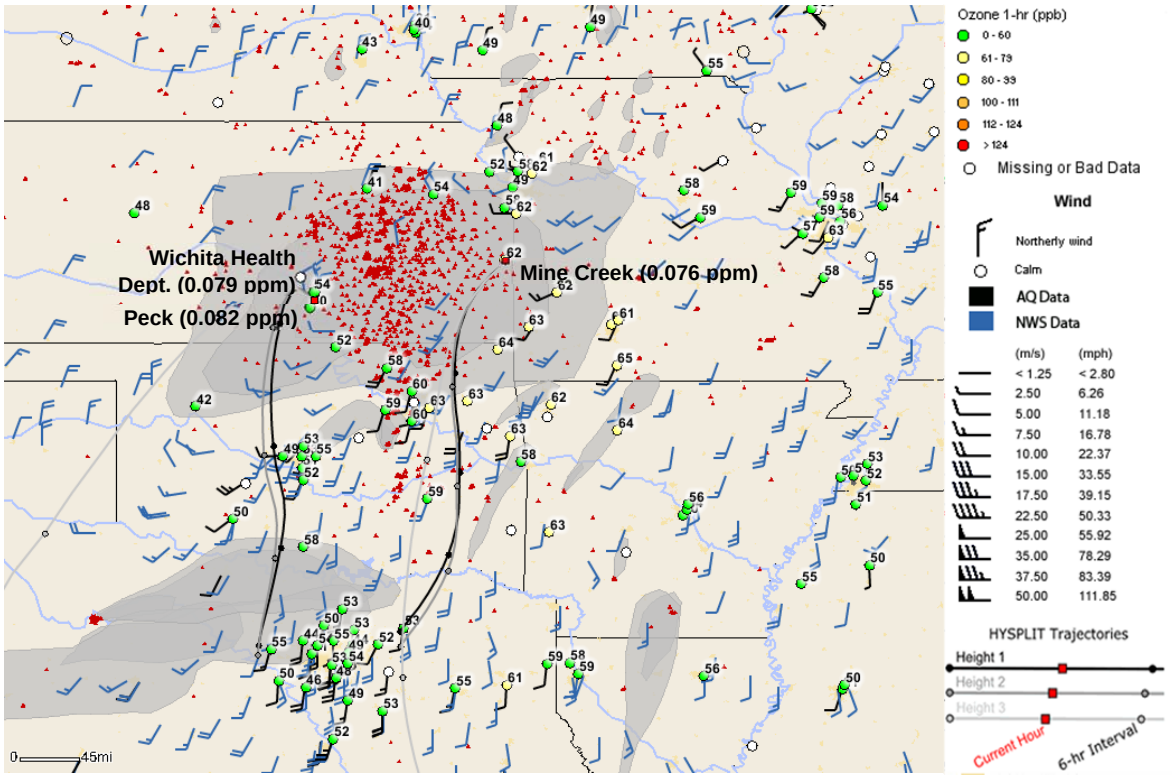

Figure C-2. 24-hour backward HYSPLIT trajectories ending at 11:00 on April 6, 2011.

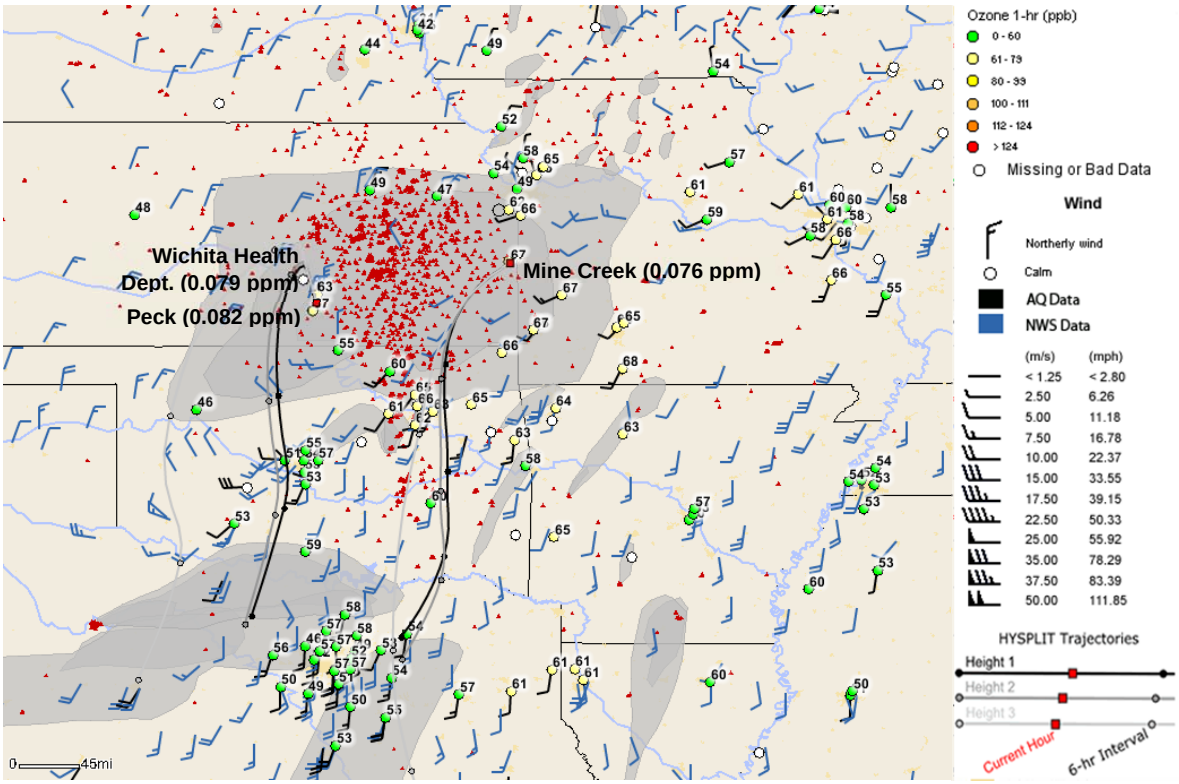

Figure C-3. 24-hour backward HYSPLIT trajectories ending at 12:00 on April 6, 2011.

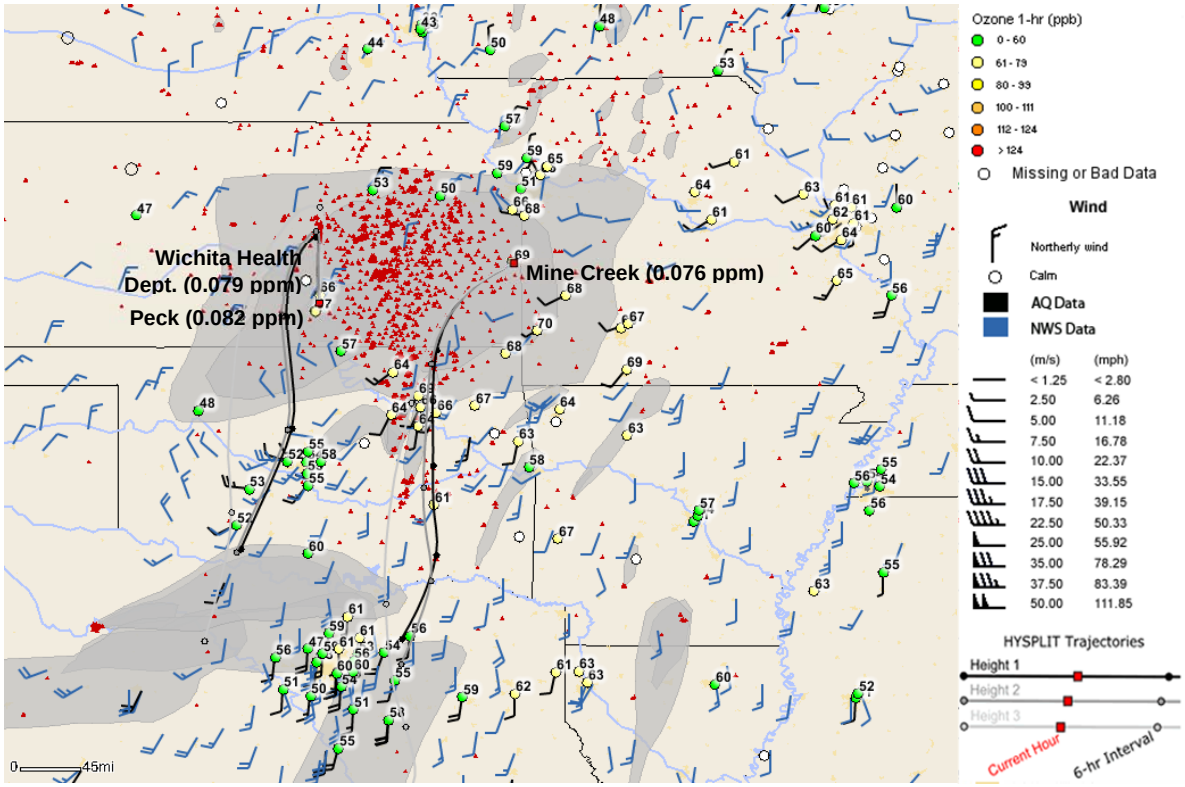

Figure C-4. 24-hour backward HYSPLIT trajectories ending at 13:00 on April 6, 2011.

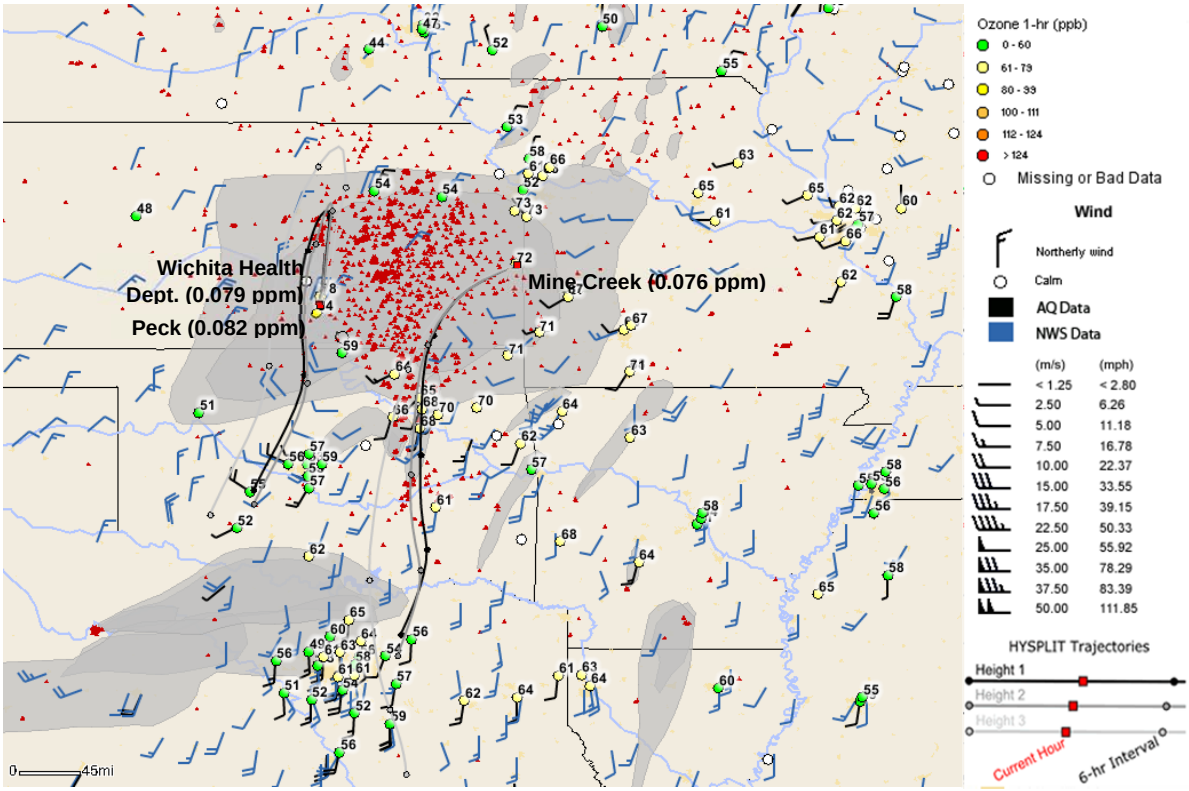

Figure C-5. 24-hour backward HYSPLIT trajectories ending at 14:00 on April 6, 2011.

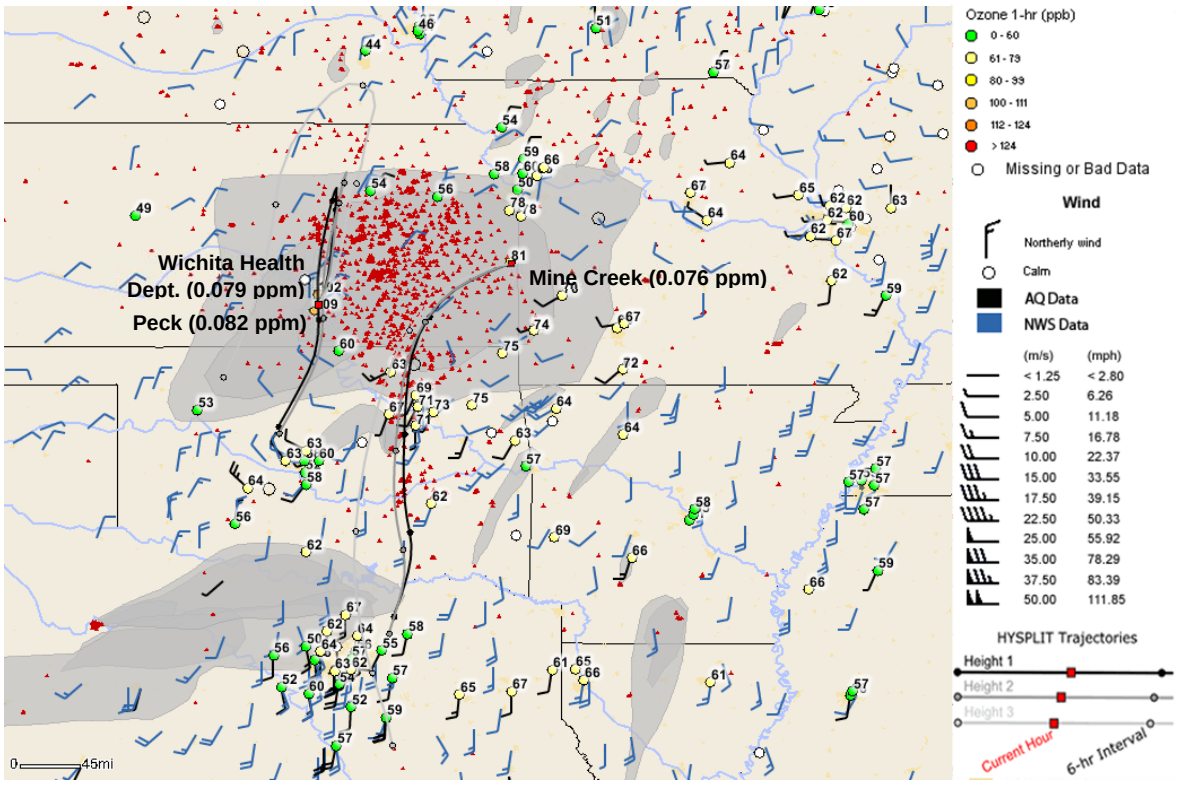

Figure C-6. 24-hour backward HYSPLIT trajectories ending at 15:00 on April 6, 2011.

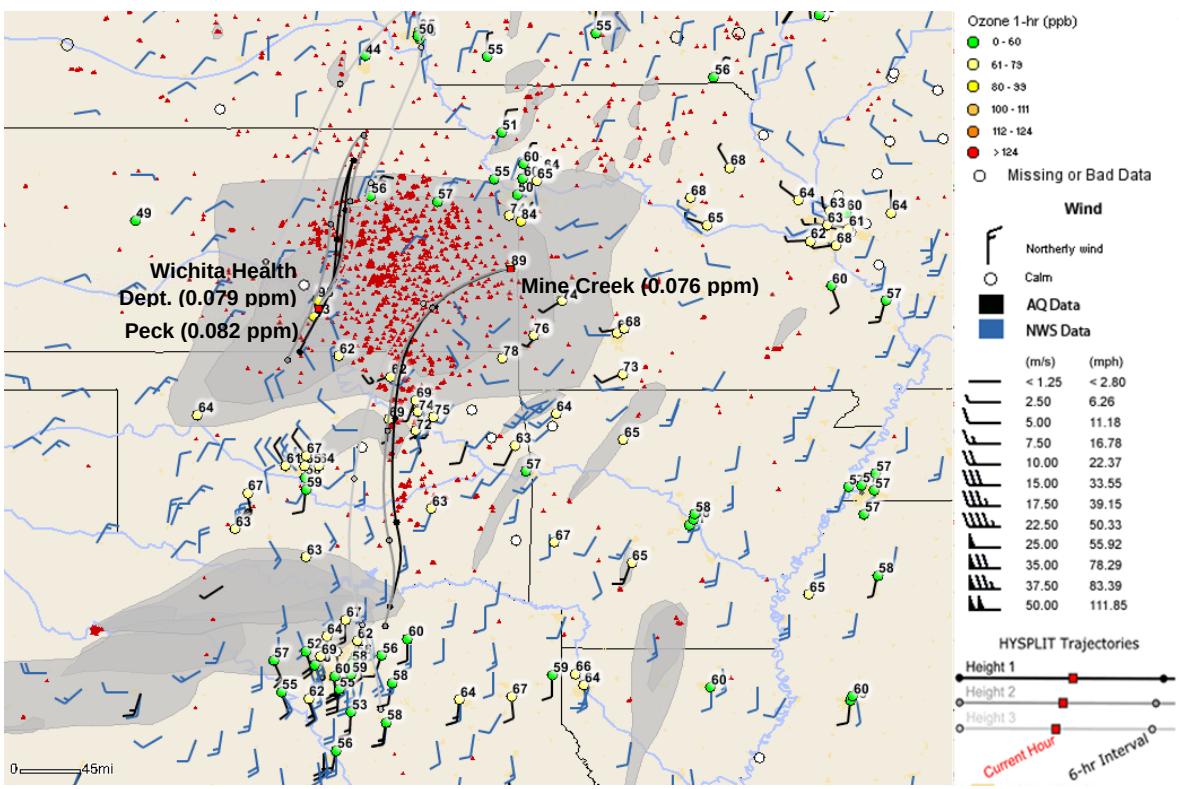

Figure C-7. 24-hour backward HYSPLIT trajectories ending at 16:00 on April 6, 2011.

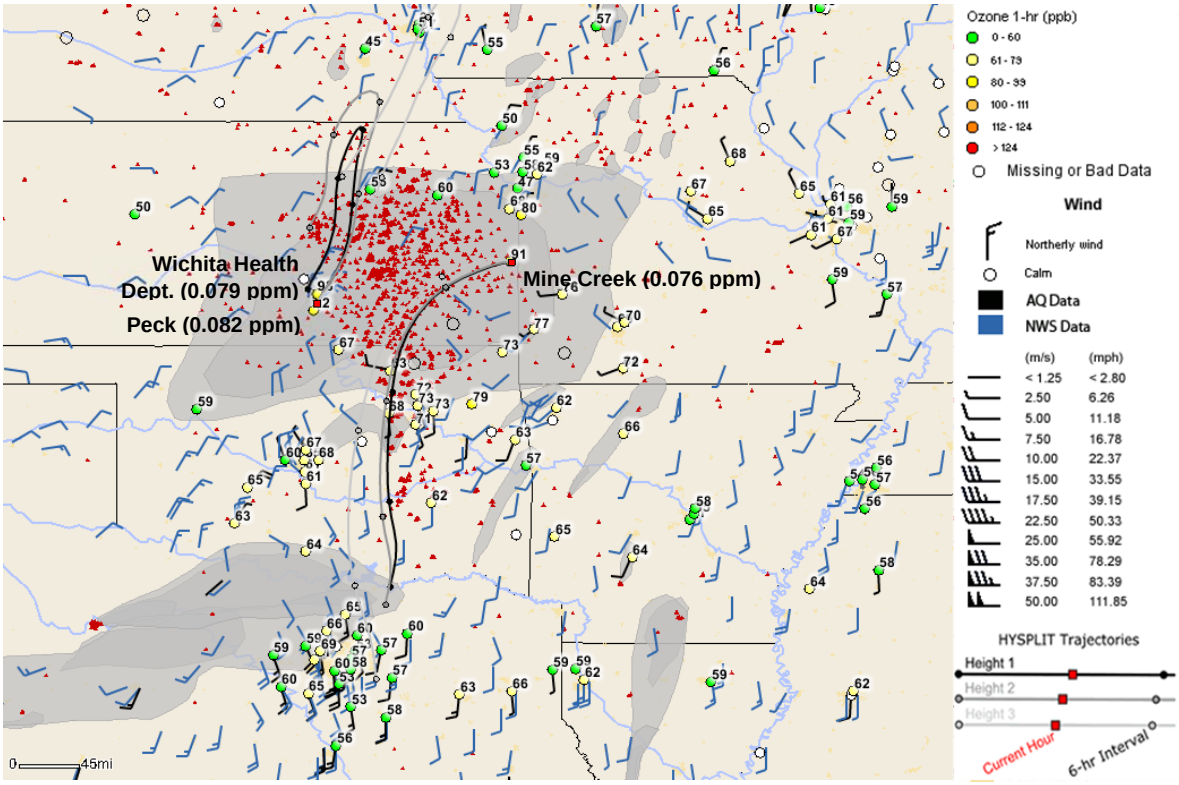

Figure C-8. 24-hour backward HYSPLIT trajectories ending at 17:00 on April 6, 2011.

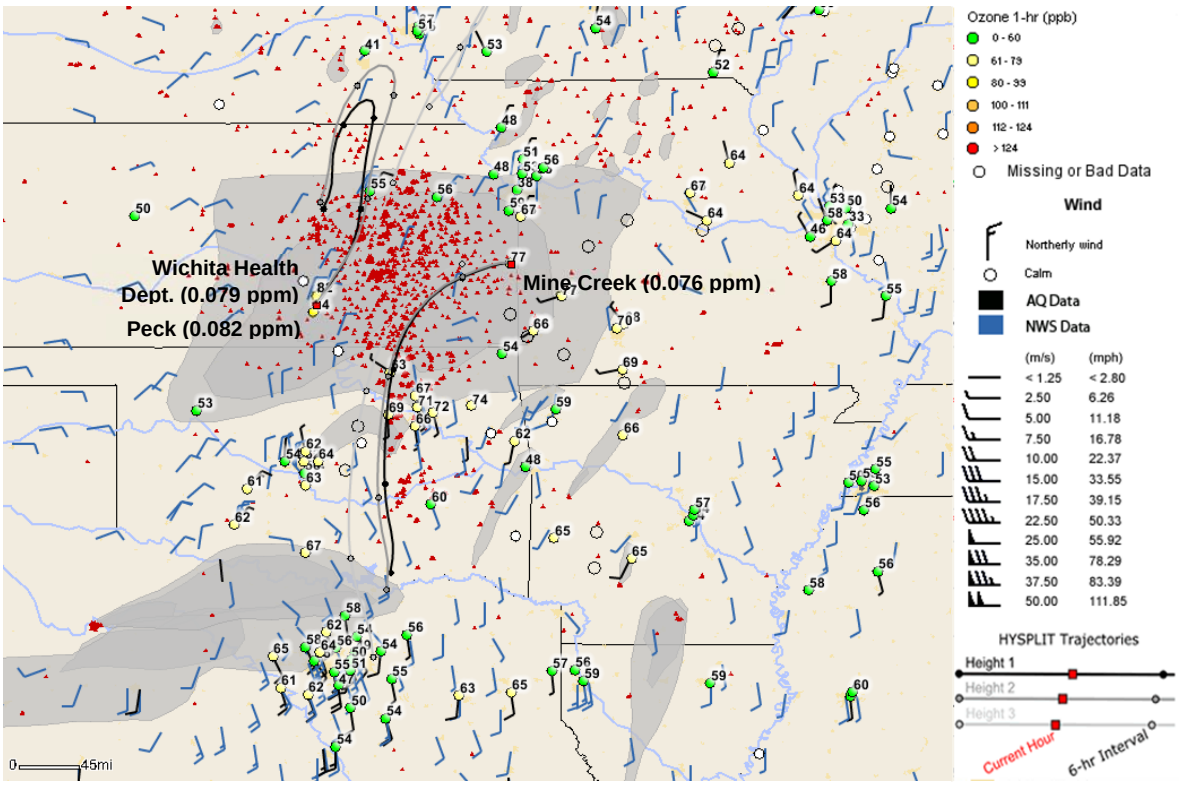

Figure C-9. 24-hour backward HYSPLIT trajectories ending at 18:00 on April 6, 2011.

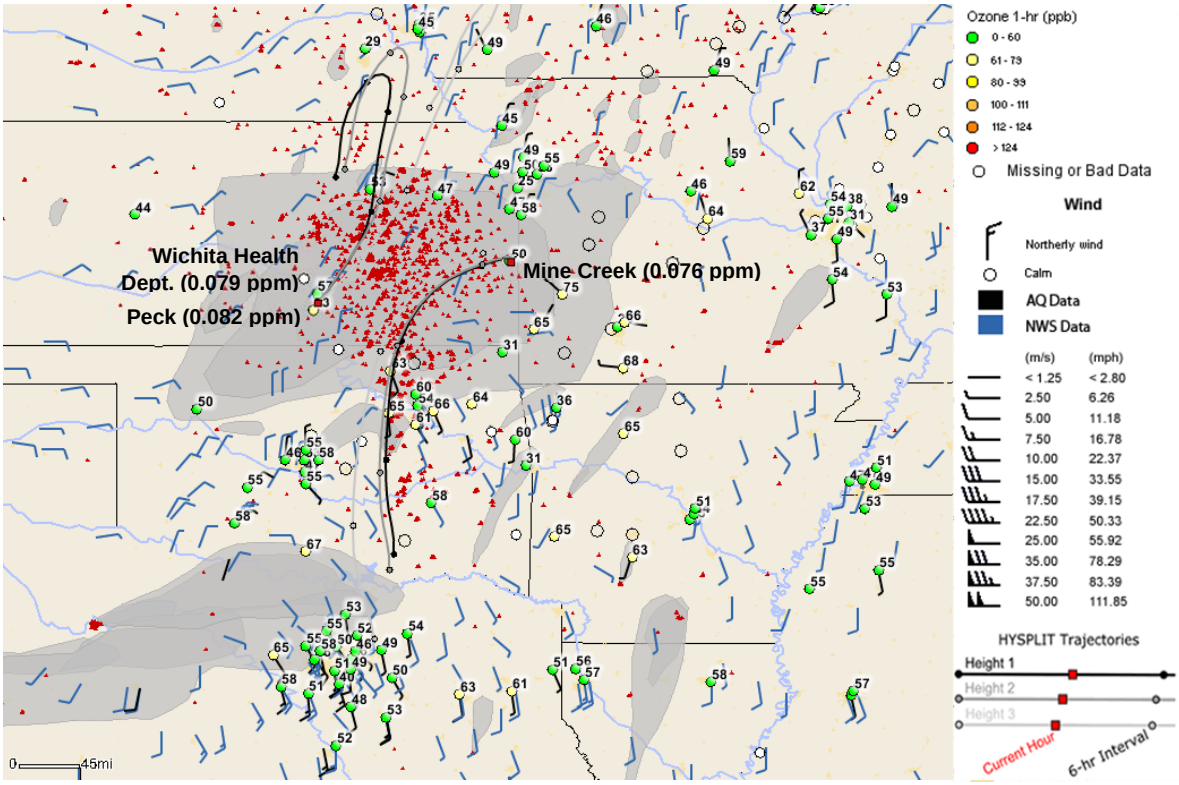

Figure C-10. 24-hour backward HYSPLIT trajectories ending at 19:00 on April 6, 2011.

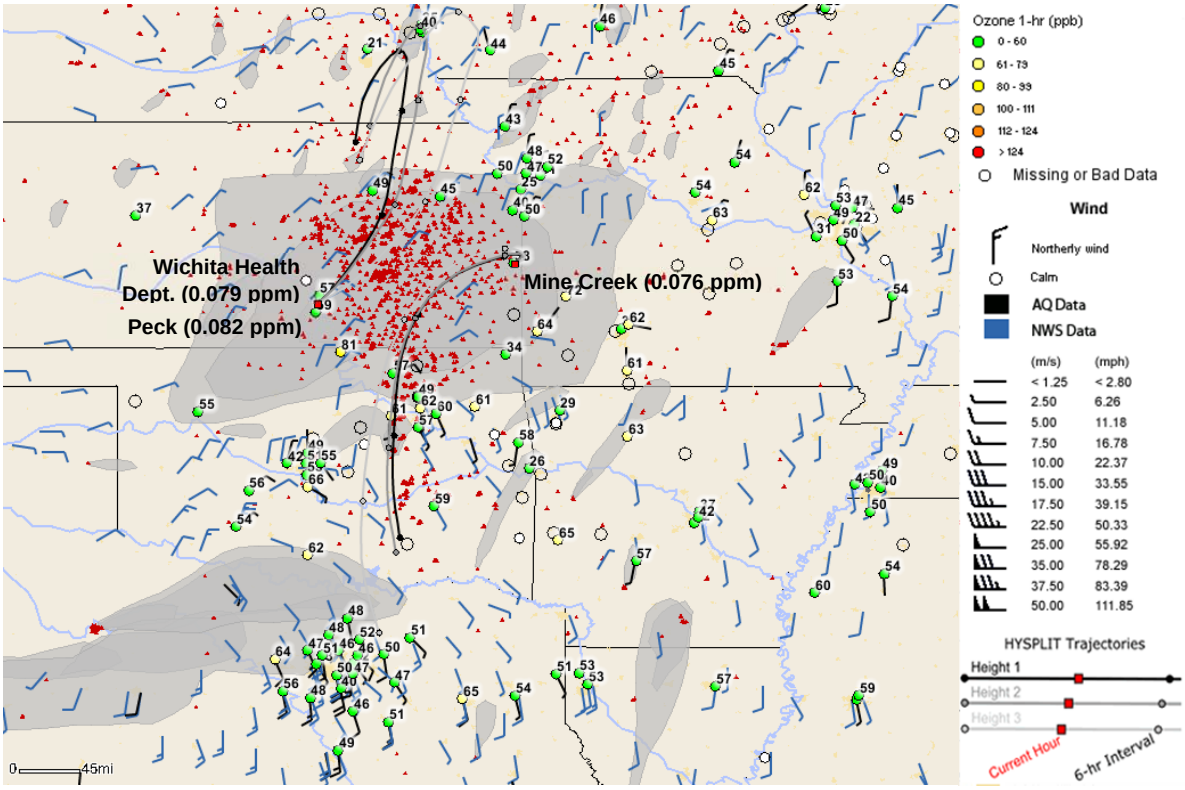

Figure C-11. 24-hour backward HYSPLIT trajectories ending at 20:00 on April 6, 2011.

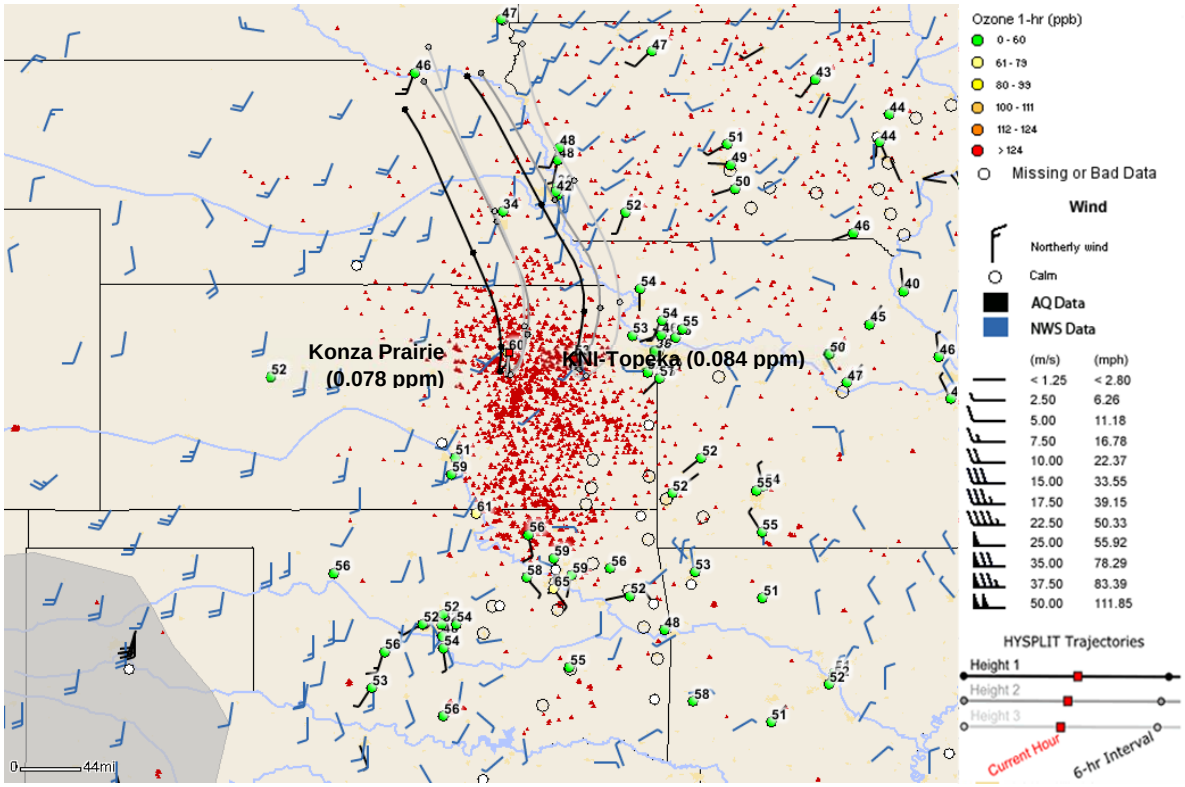

Figure C-12. 24-hour backward HYSPLIT trajectories ending at 10:00 on April 12, 2011.

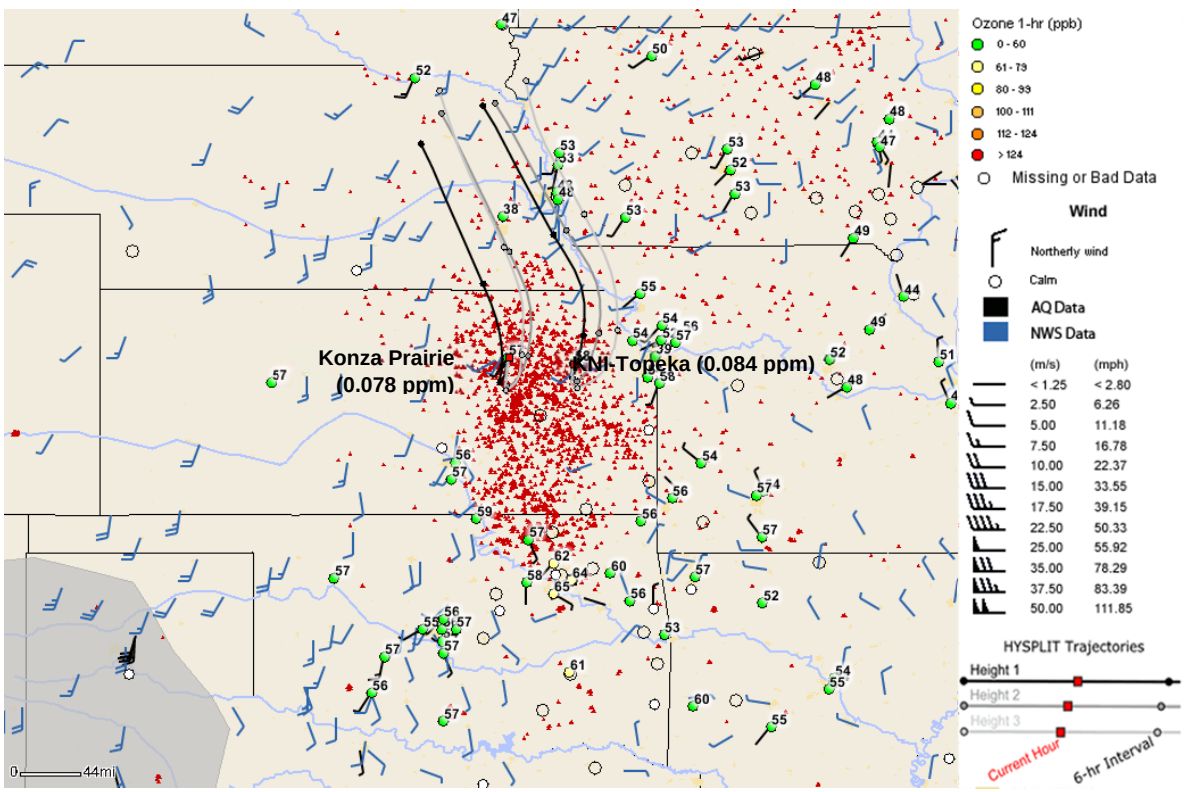

Figure C-13. 24-hour backward HYSPLIT trajectories ending at 11:00 on April 12, 2011.

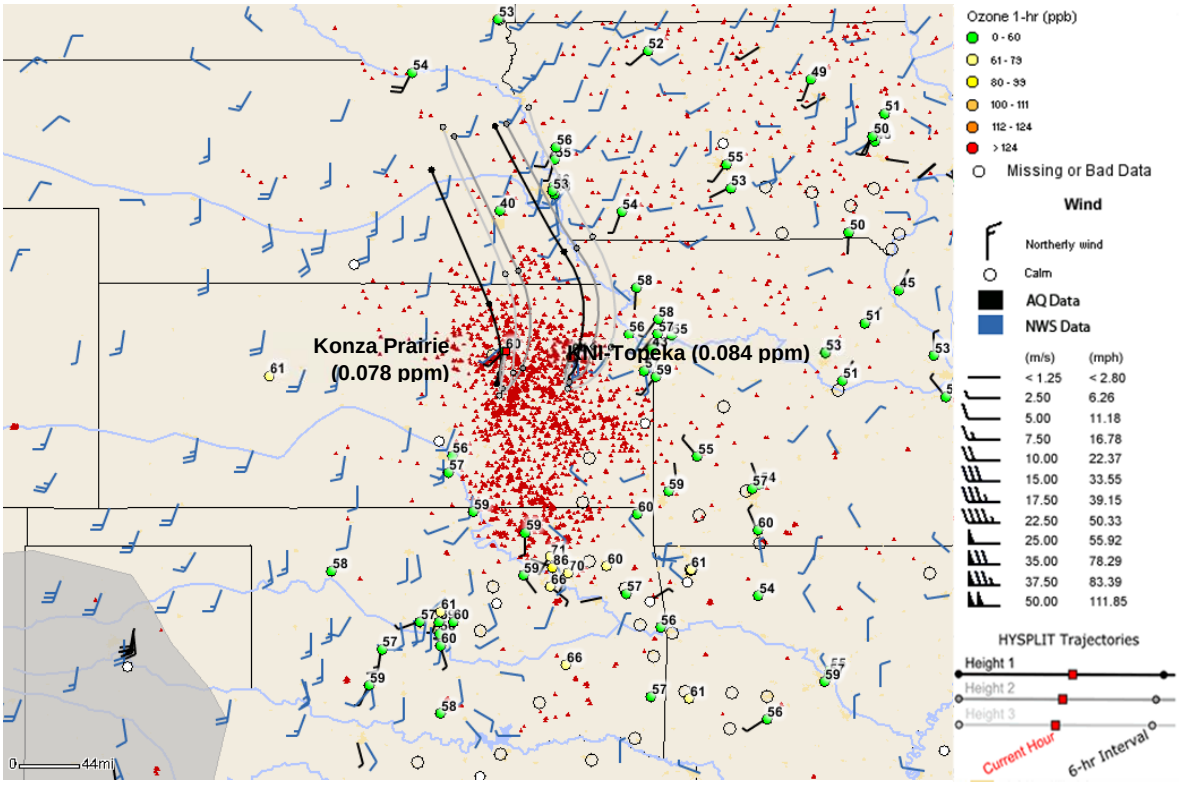

Figure C-14. 24-hour backward HYSPLIT trajectories ending at 12:00 on April 12, 2011.

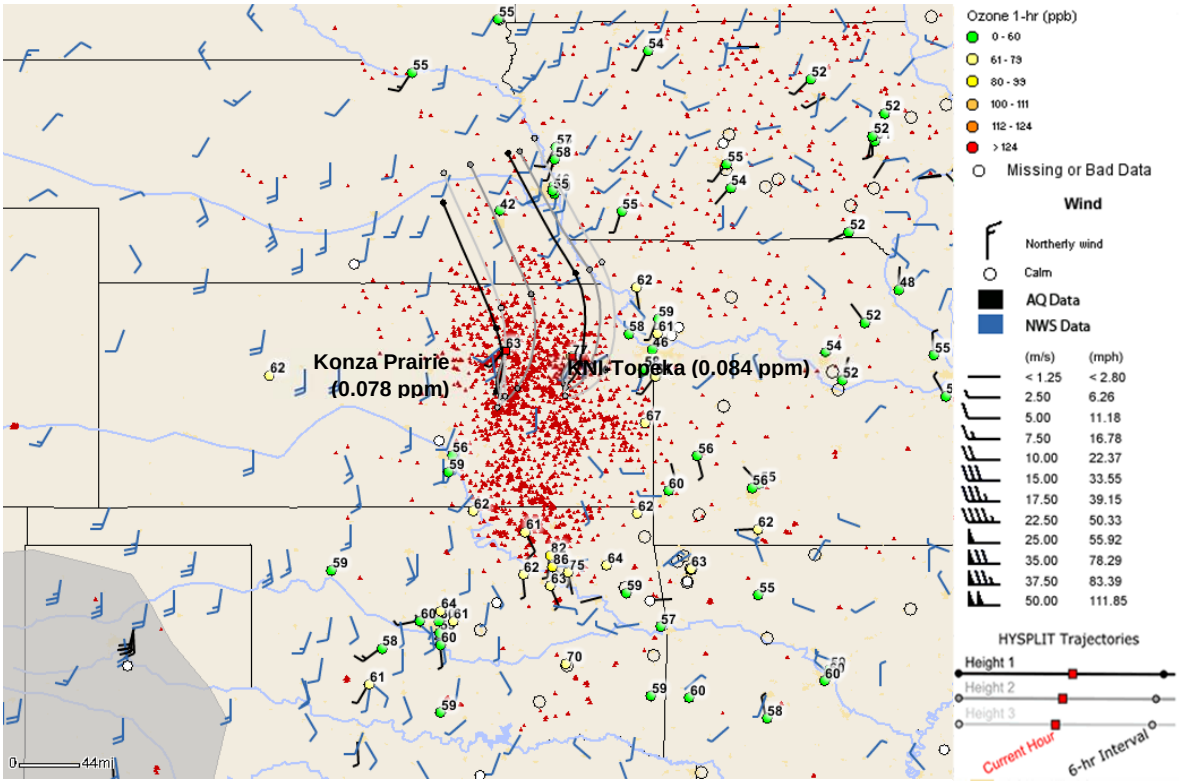

Figure C-15. 24-hour backward HYSPLIT trajectories ending at 13:00 on April 12, 2011.

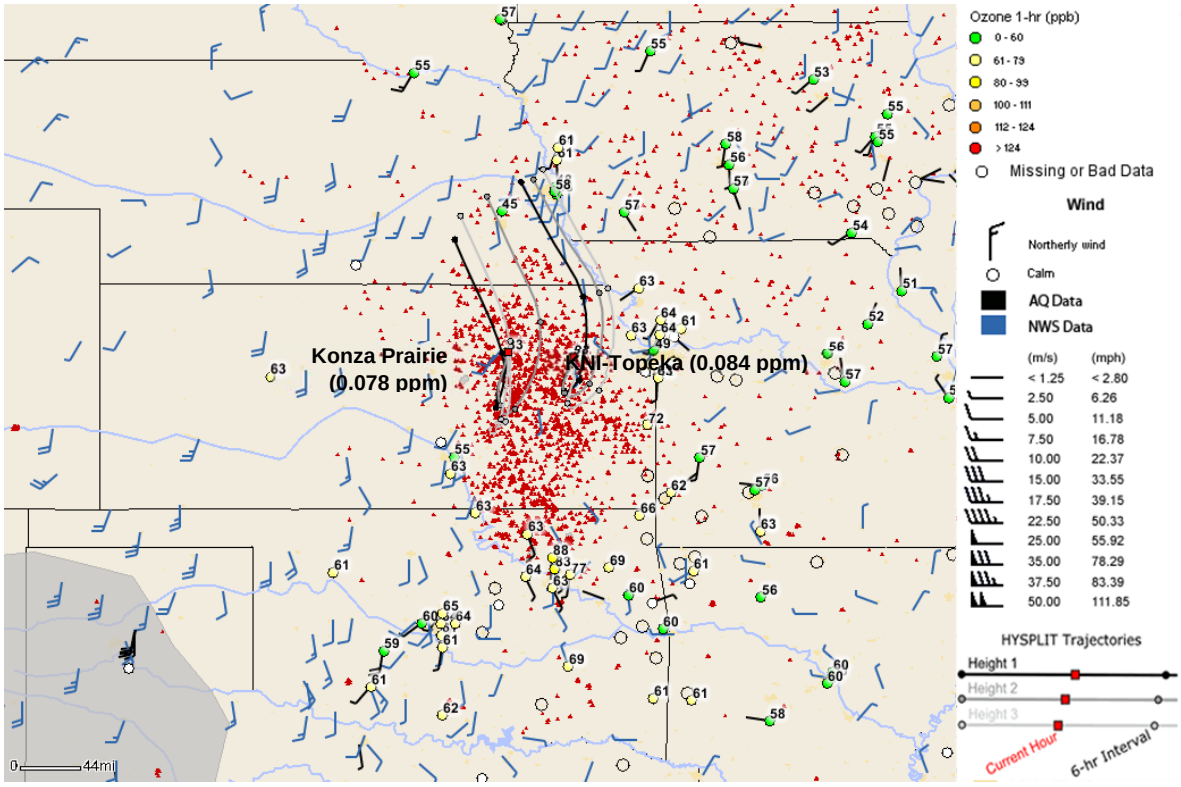

Figure C-16. 24-hour backward HYSPLIT trajectories ending at 14:00 on April 12, 2011.

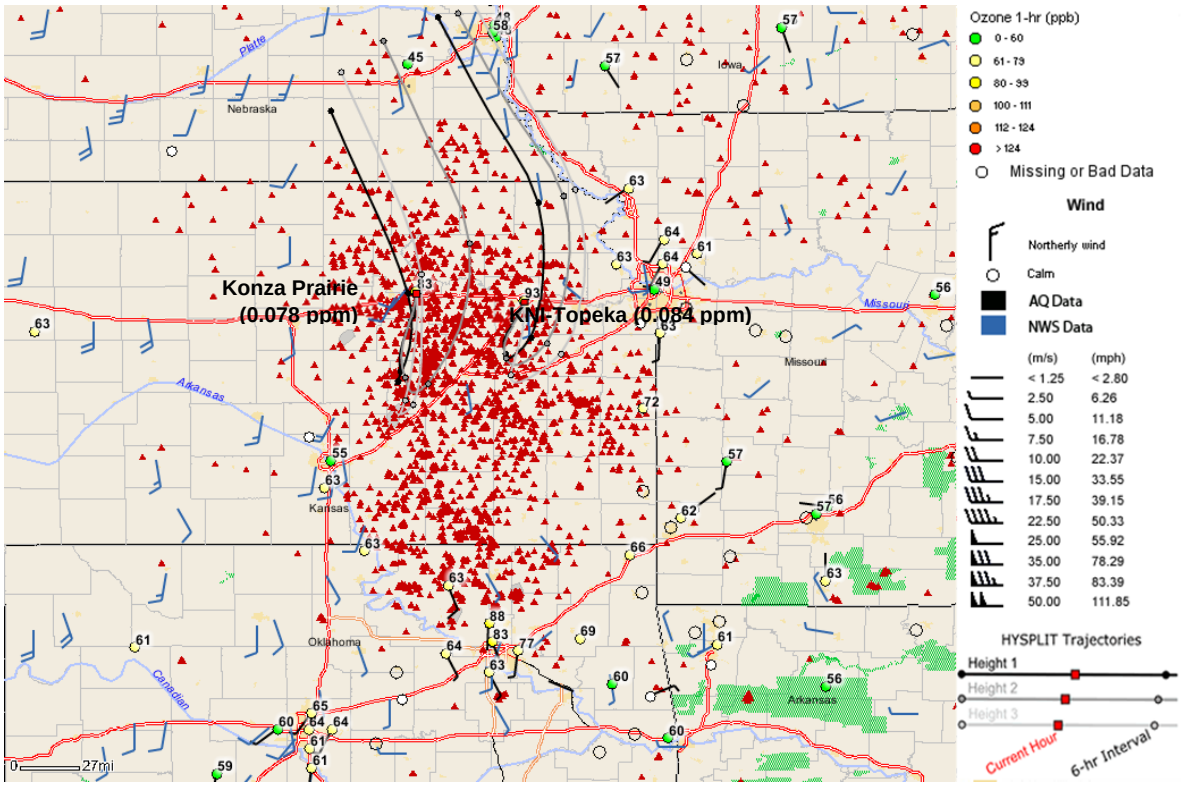

Figure C-17. 24-hour backward HYSPLIT trajectories ending at 14:00 on April 12, 2011 (same as Figure C-16 but zoomed on eastern Kansas).

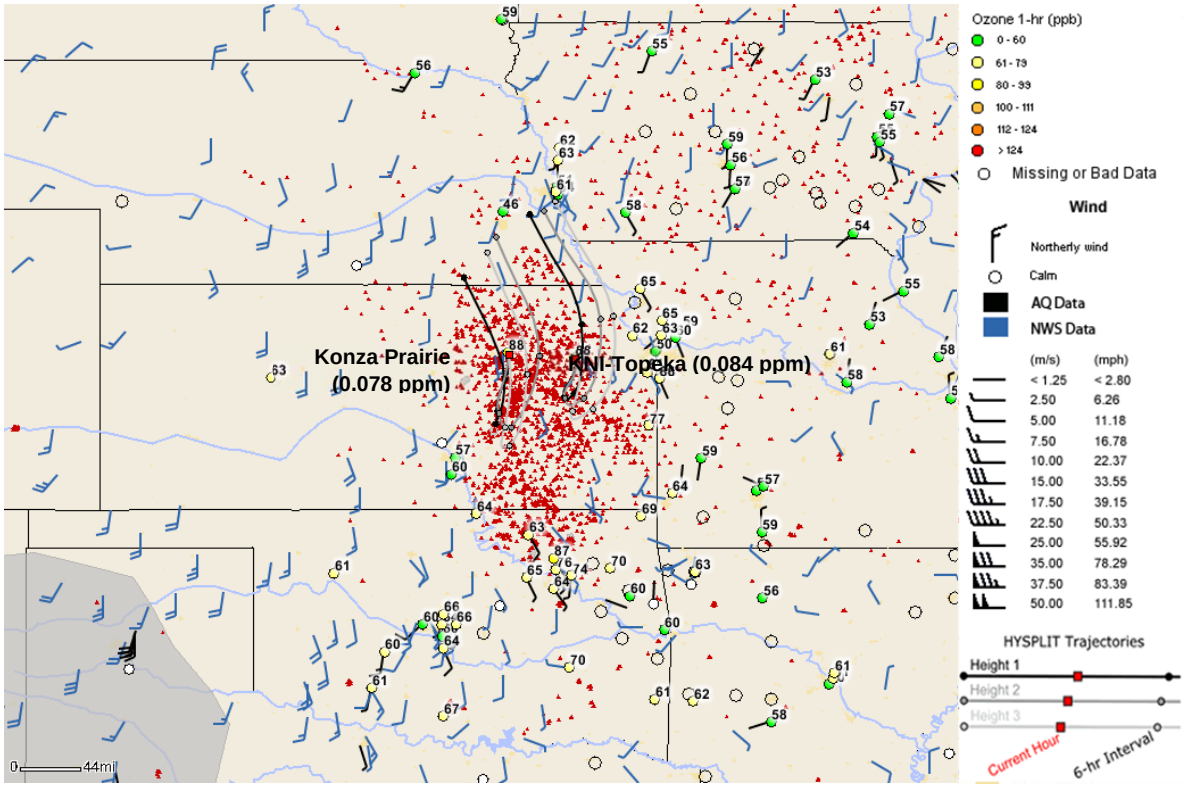

Figure C-18. 24-hour backward HYSPLIT trajectories ending at 15:00 on April 12, 2011.

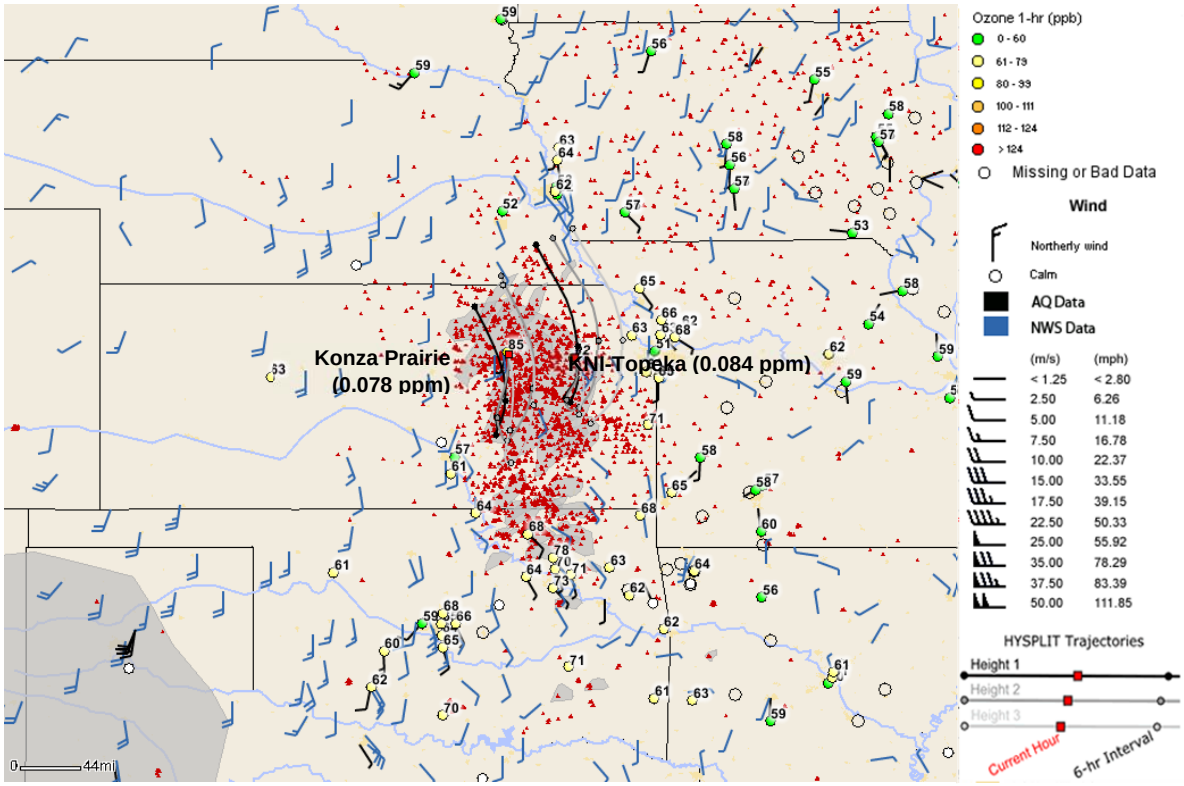

Figure C-19. 24-hour backward HYSPLIT trajectories ending at 16:00 on April 12, 2011.

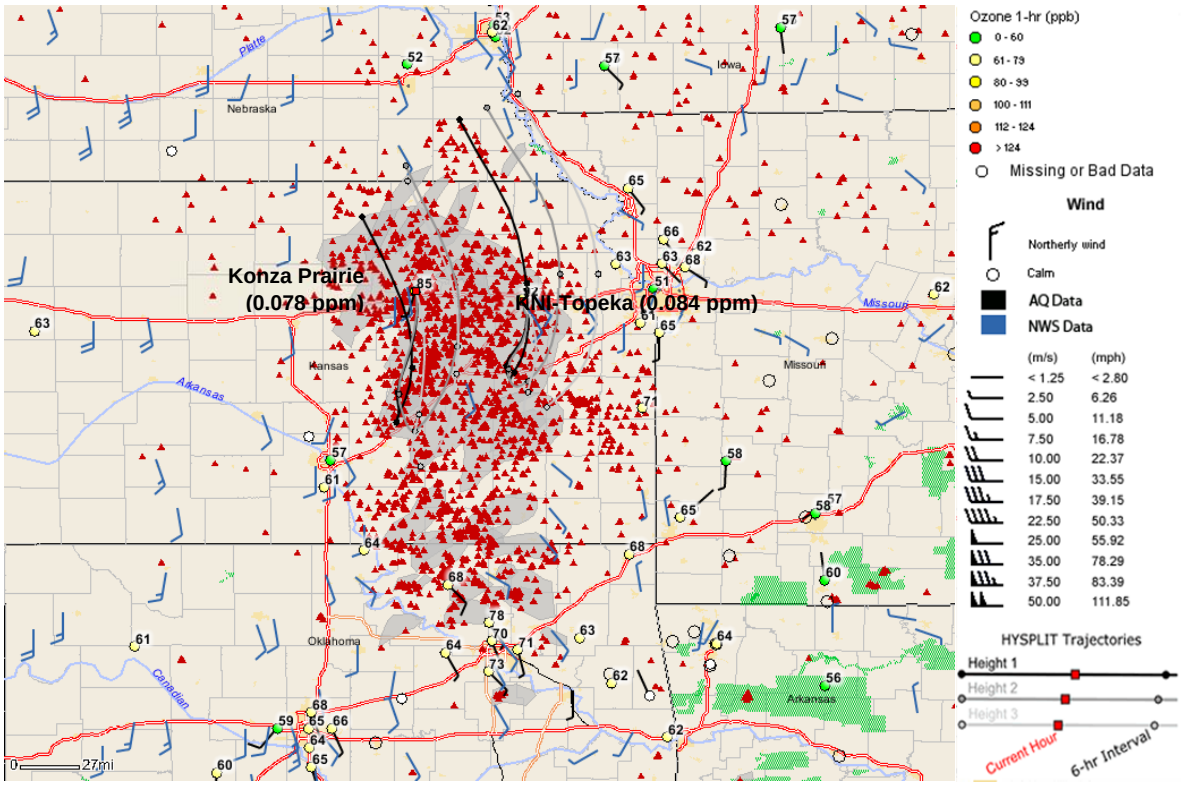

Figure C-20. 24-hour backward HYSPLIT trajectories ending at 16:00 on April 12, 2011 (same as Figure C-19 but zoomed on eastern Kansas).

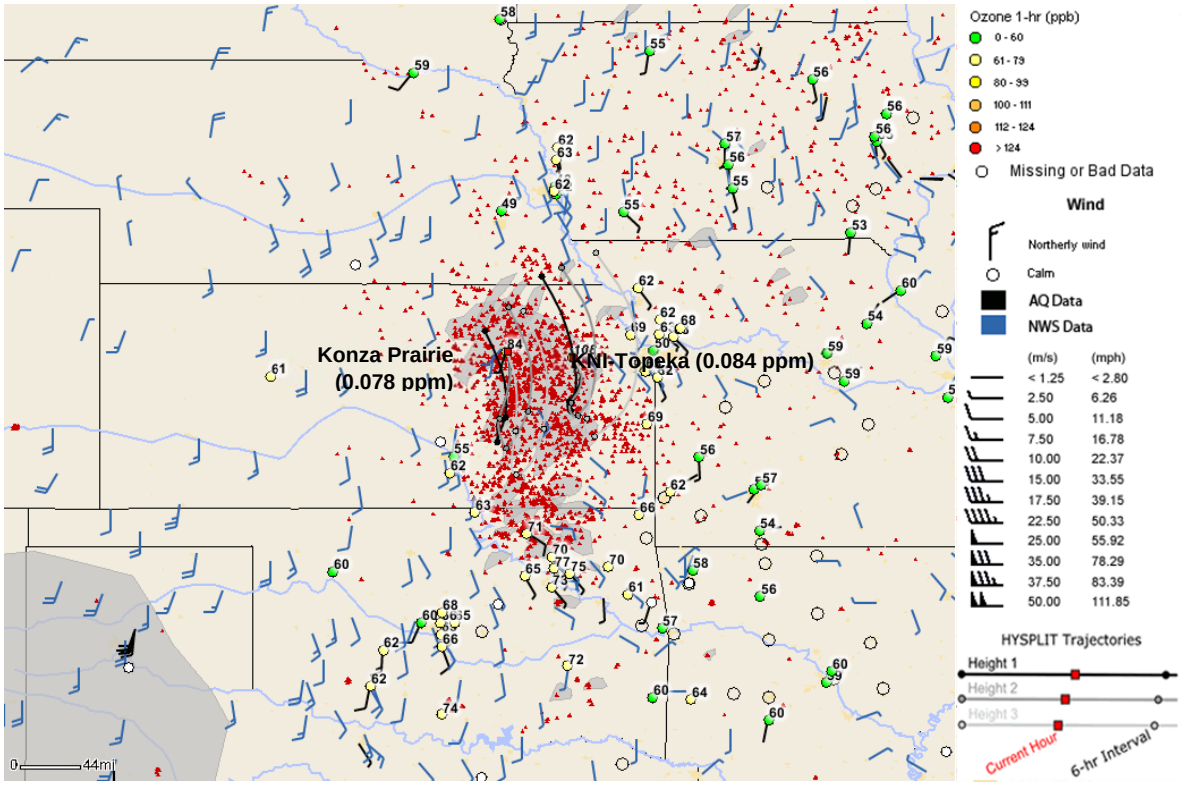

Figure C-21. 24-hour backward HYSPLIT trajectories ending at 17:00 on April 12, 2011.

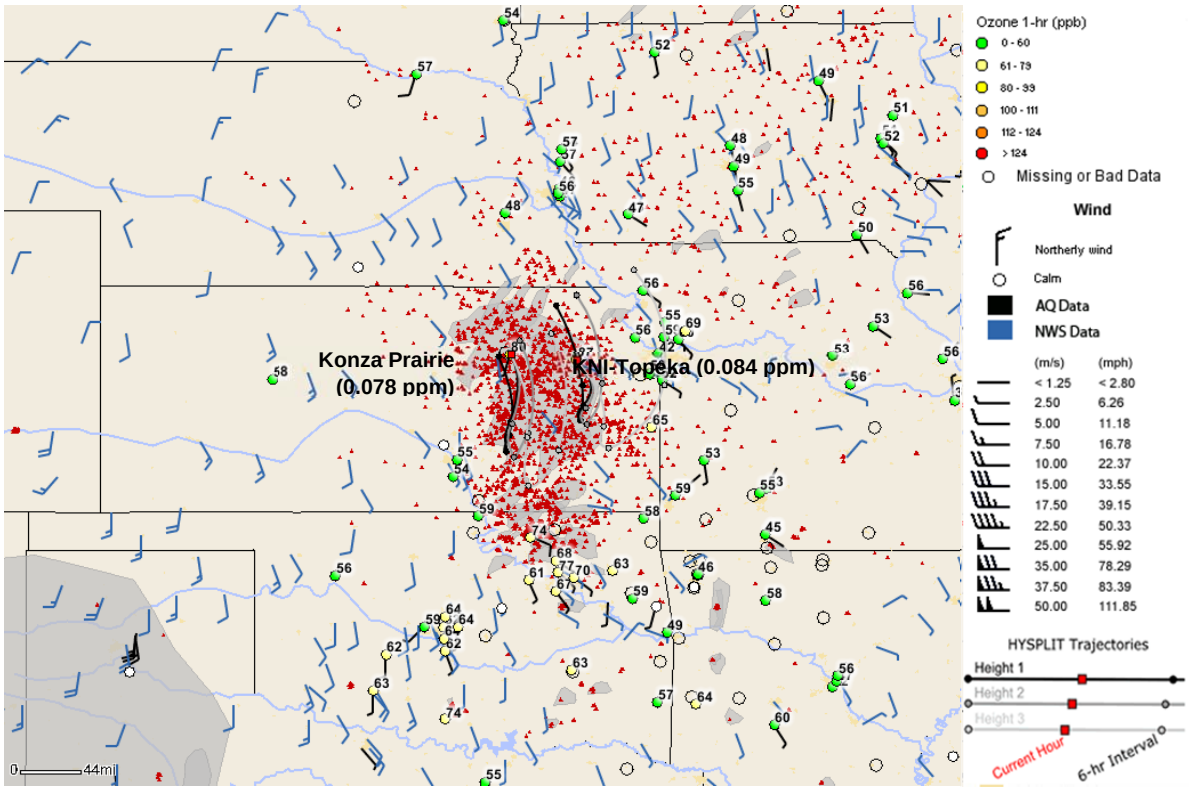

Figure C-22. 24-hour backward HYSPLIT trajectories ending at 18:00 on April 12, 2011.

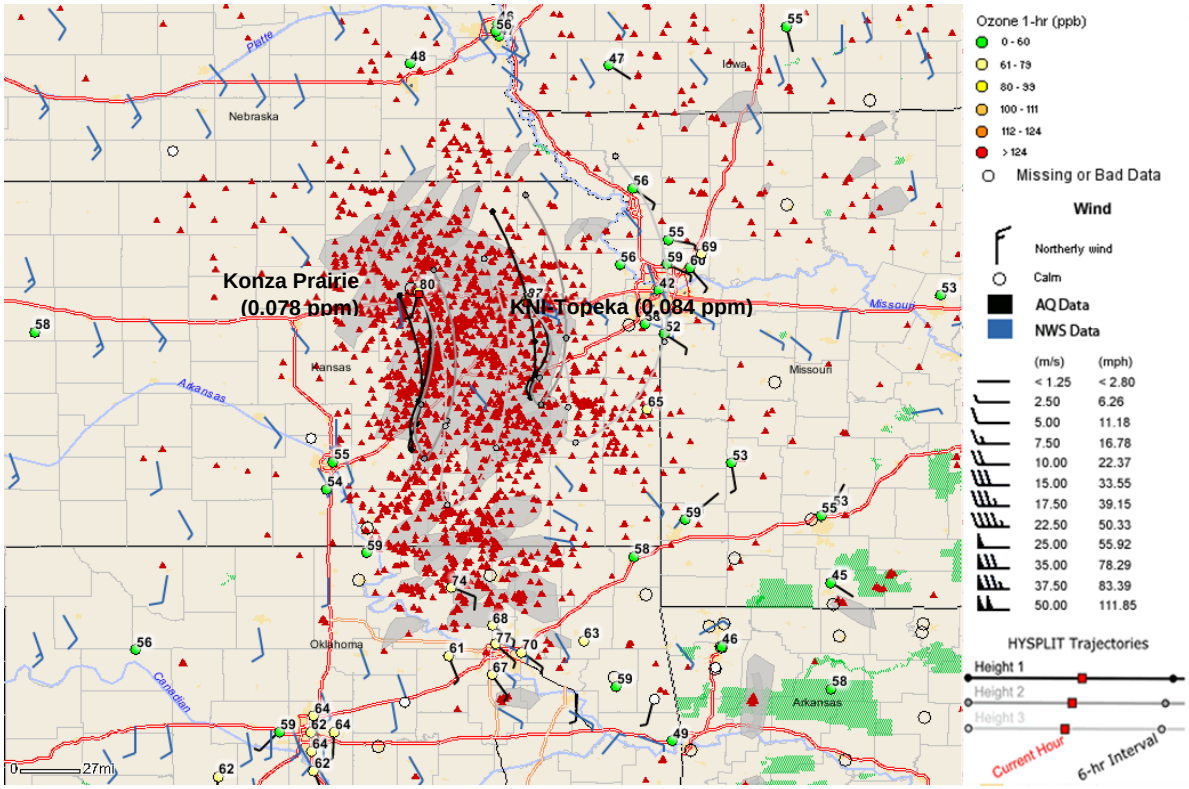

Figure C-23. 24-hour backward HYSPLIT trajectories ending at 18:00 on April 12, 2011 (same as Figure C-22 but zoomed on eastern Kansas).

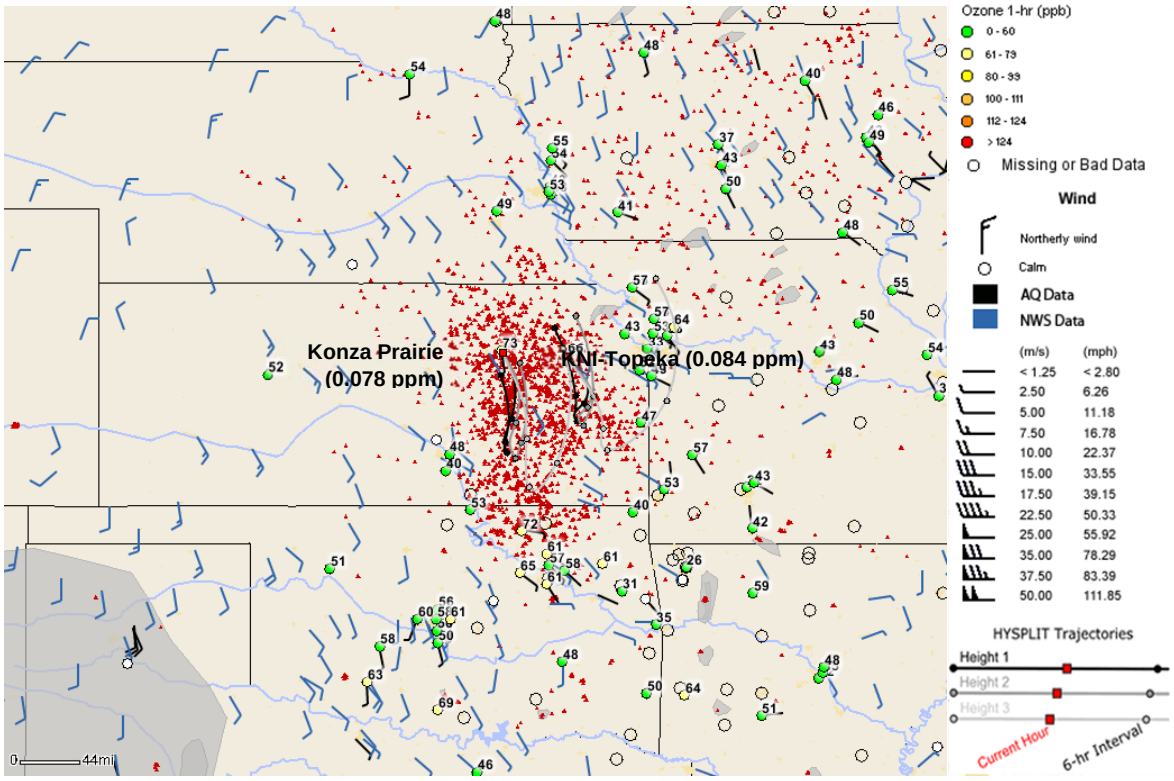

Figure C-24. 24-hour backward HYSPLIT trajectories ending at 19:00 on April 12, 2011.

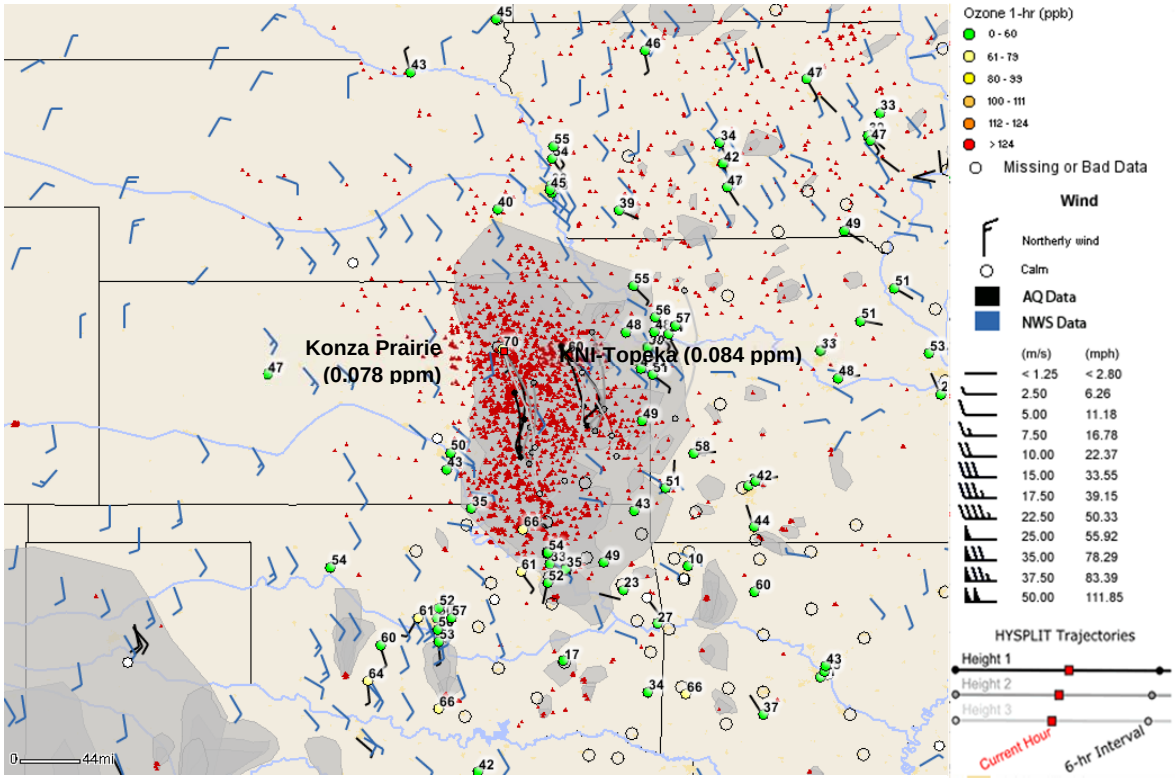

Figure C-25. 24-hour backward HYSPLIT trajectories ending at 20:00 on April 12, 2011.

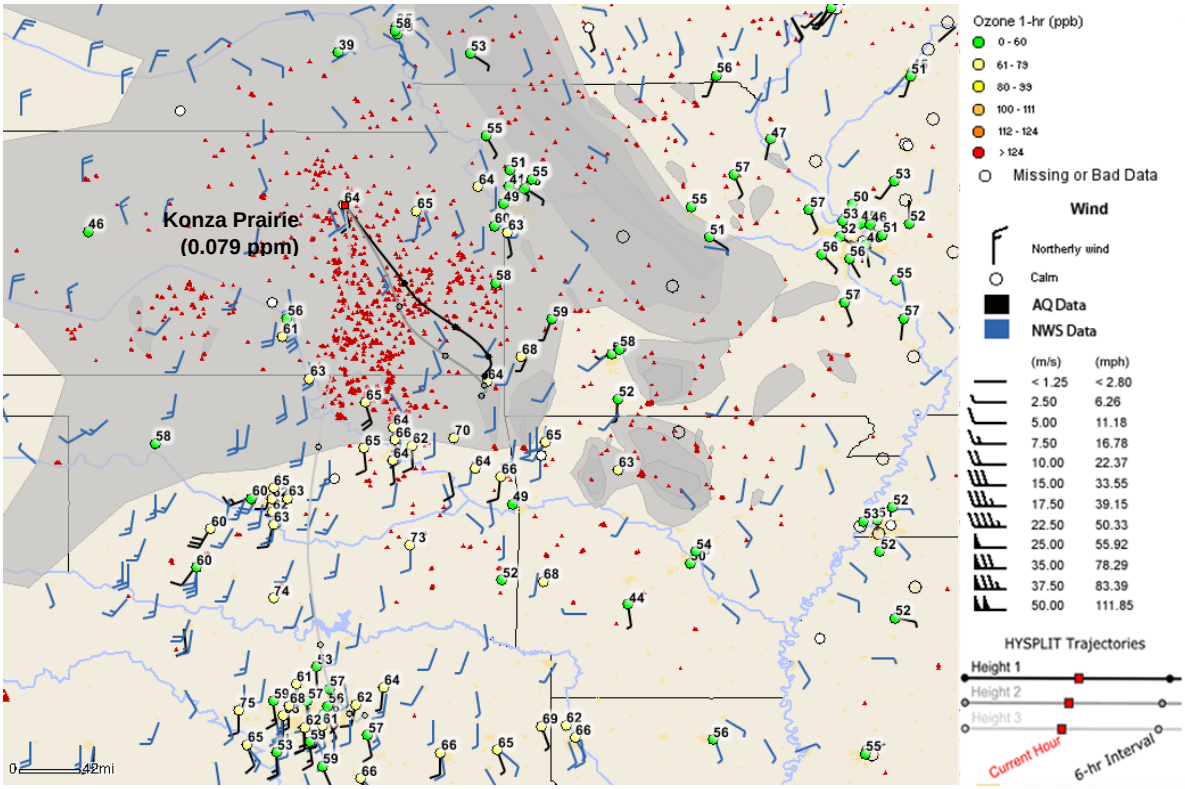

Figure C-26. 24-hour backward HYSPLIT trajectories ending at 10:00 on April 13, 2011.

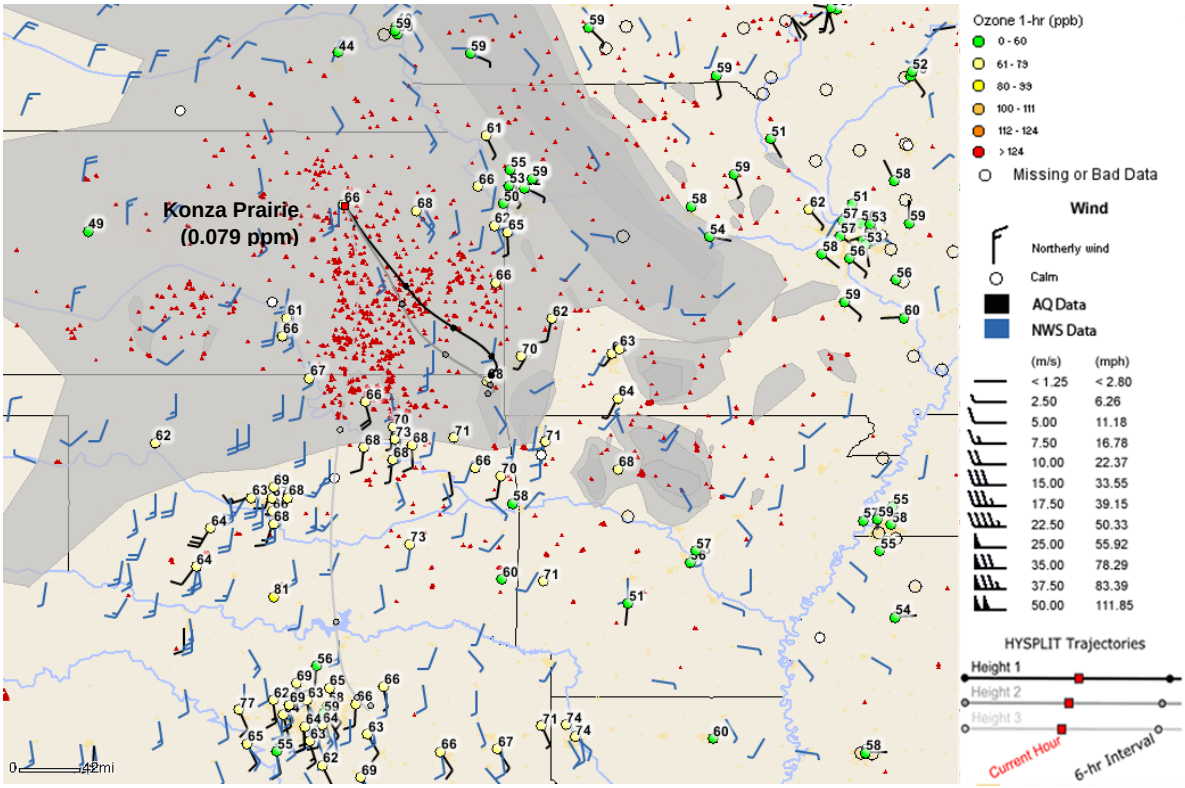

Figure C-27. 24-hour backward HYSPLIT trajectories ending at 11:00 on April 13, 2011.

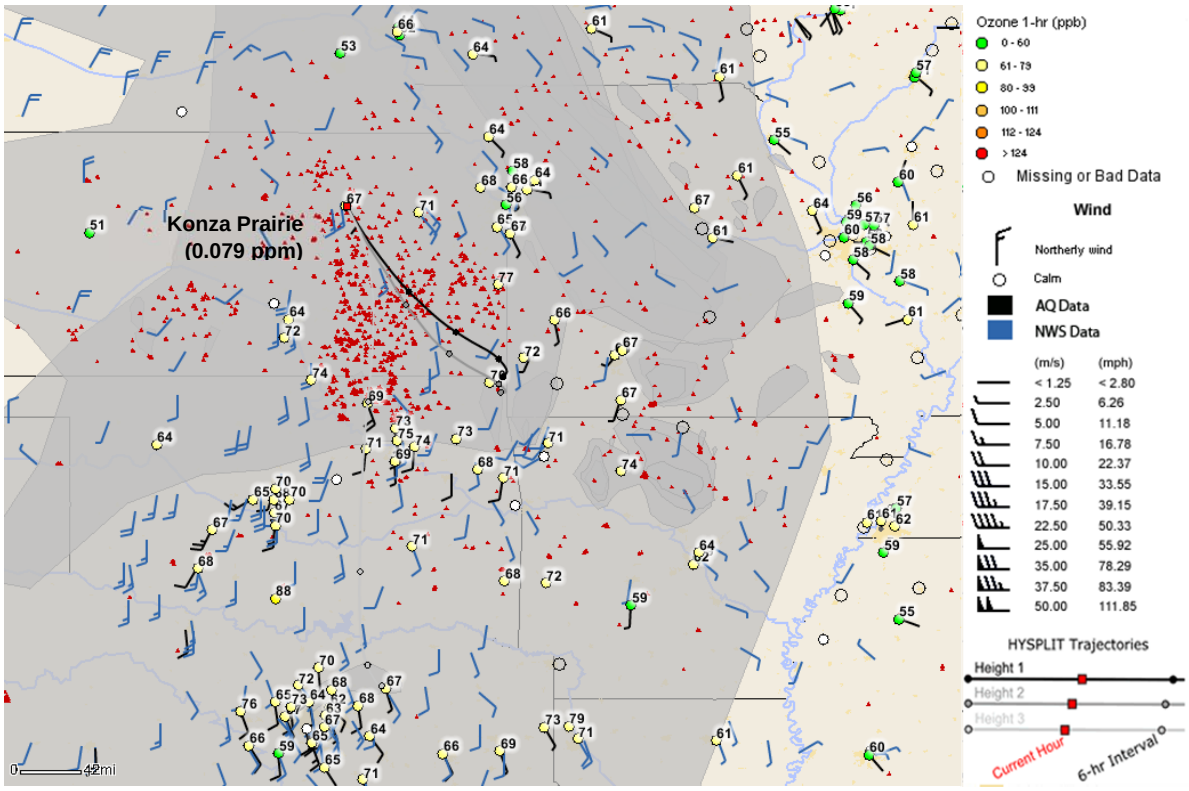

Figure C-28. 24-hour backward HYSPLIT trajectories ending at 12:00 on April 13, 2011.

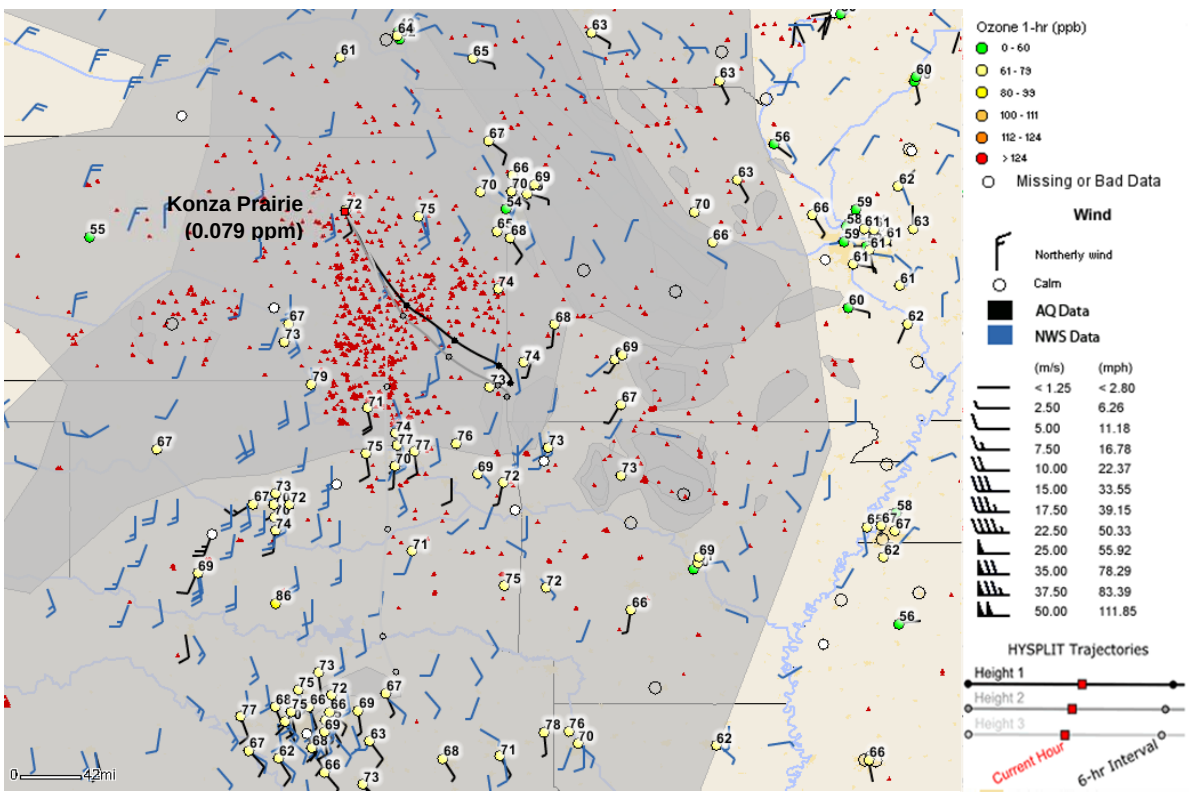

Figure C-29. 24-hour backward HYSPLIT trajectories ending at 13:00 on April 13, 2011.

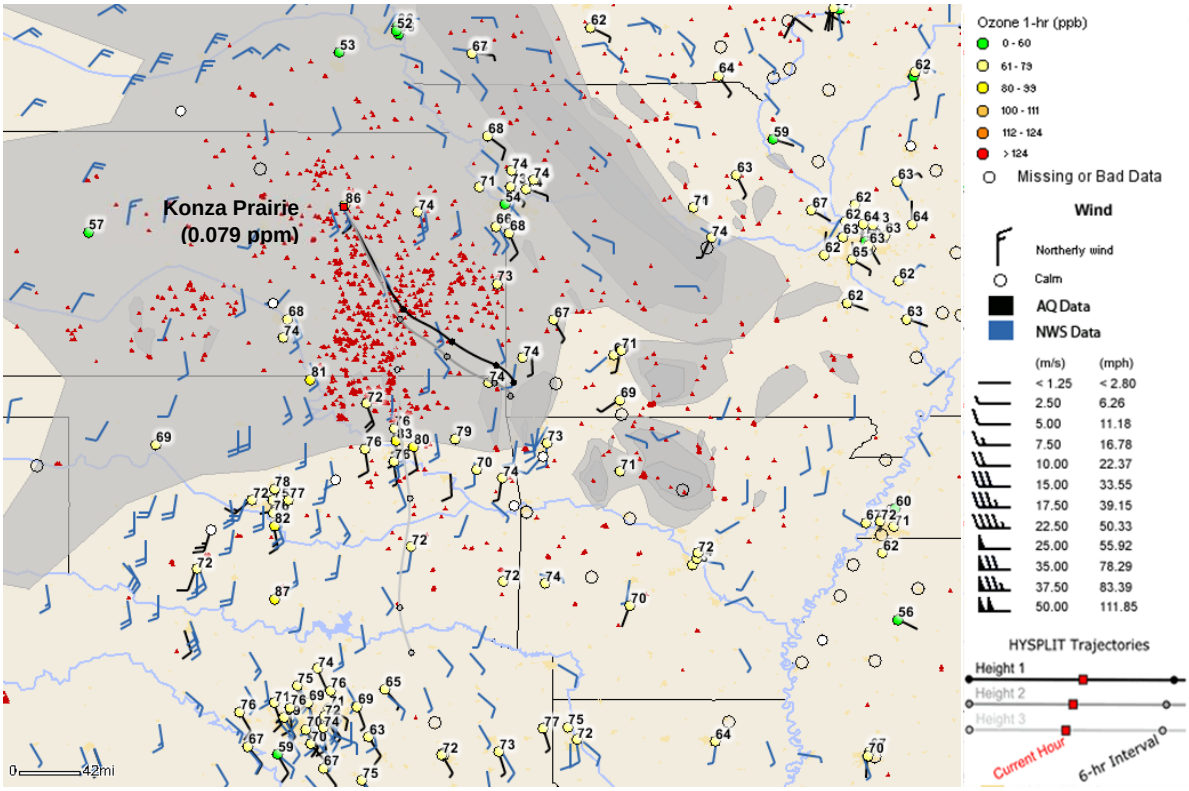

Figure C-30. 24-hour backward HYSPLIT trajectories ending at 14:00 on April 13, 2011.

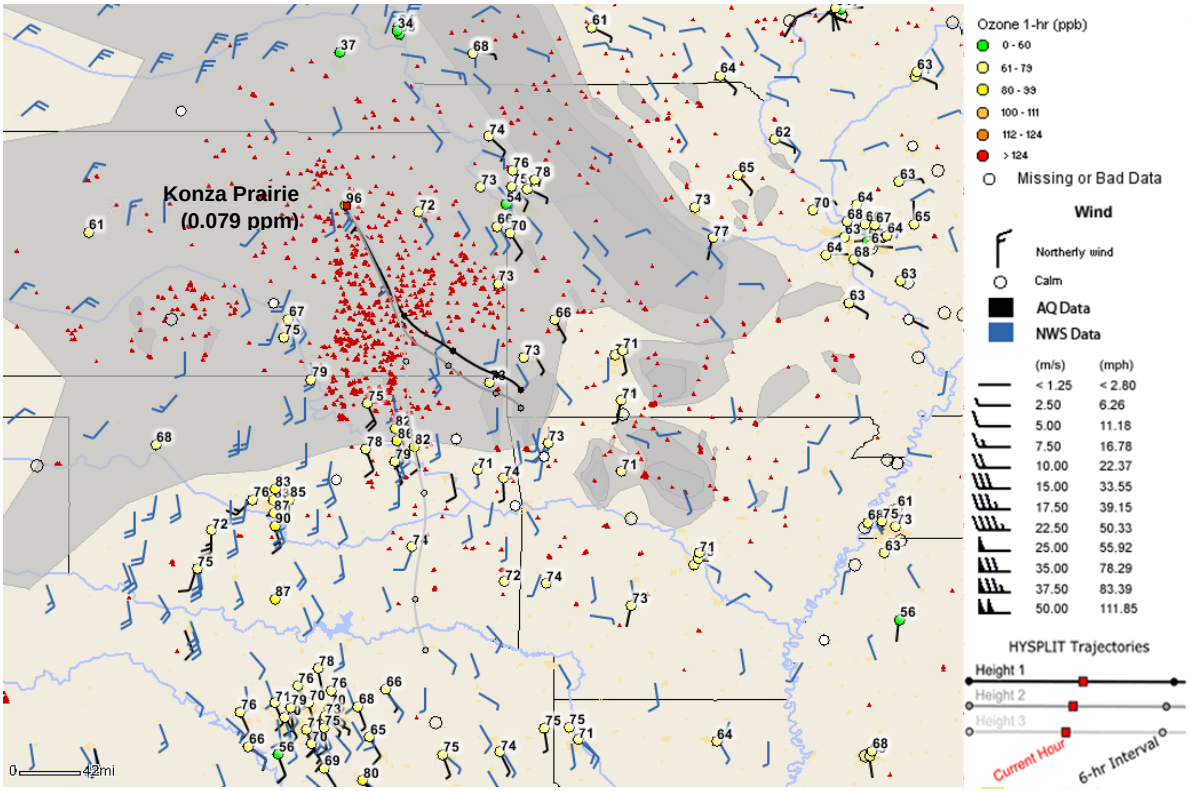

Figure C-31. 24-hour backward HYSPLIT trajectories ending at 15:00 on April 13, 2011.

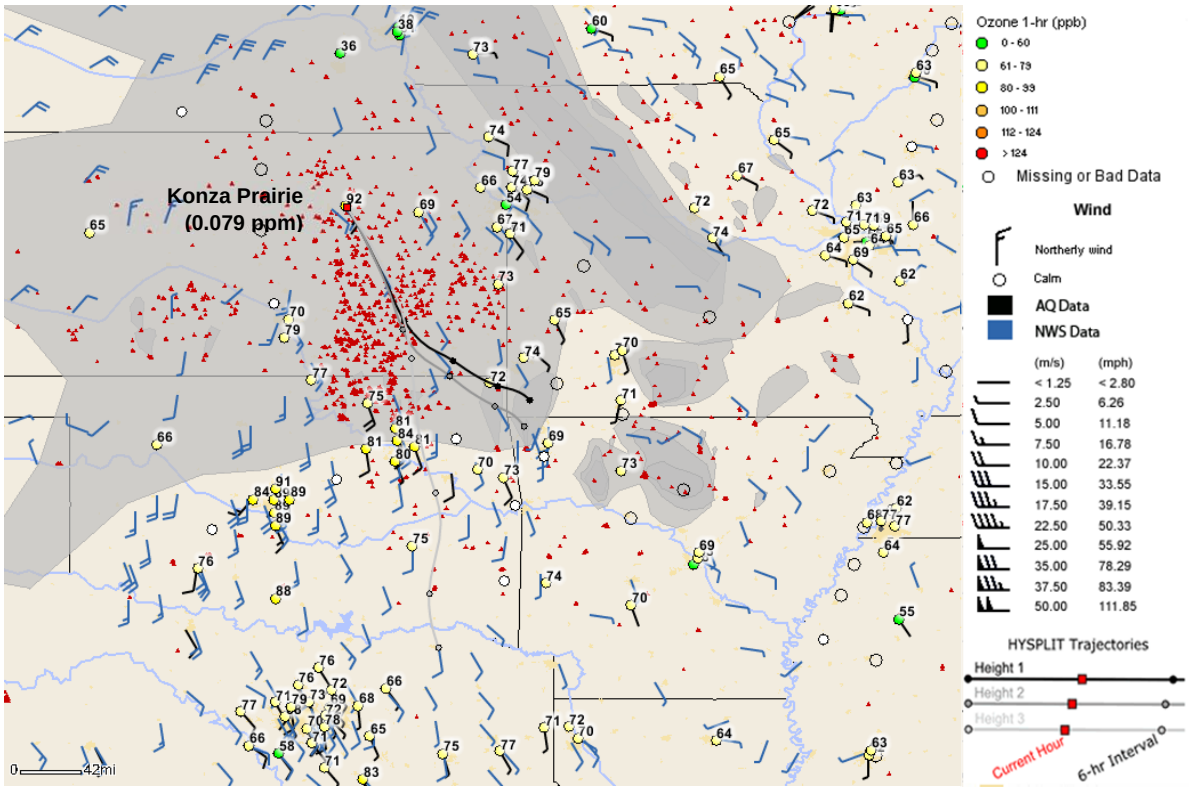

Figure C-32. 24-hour backward HYSPLIT trajectories ending at 16:00 on April 13, 2011.

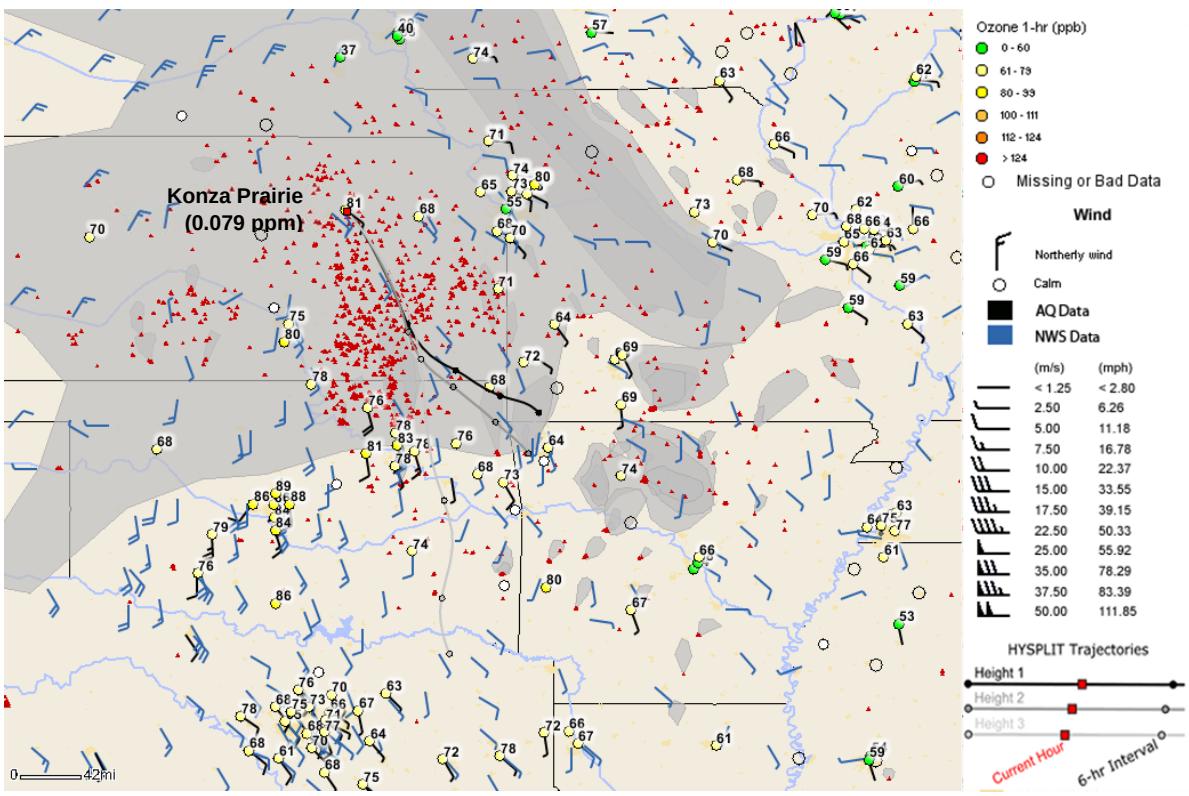

Figure C-33. 24-hour backward HYSPLIT trajectories ending at 17:00 on April 13, 2011.

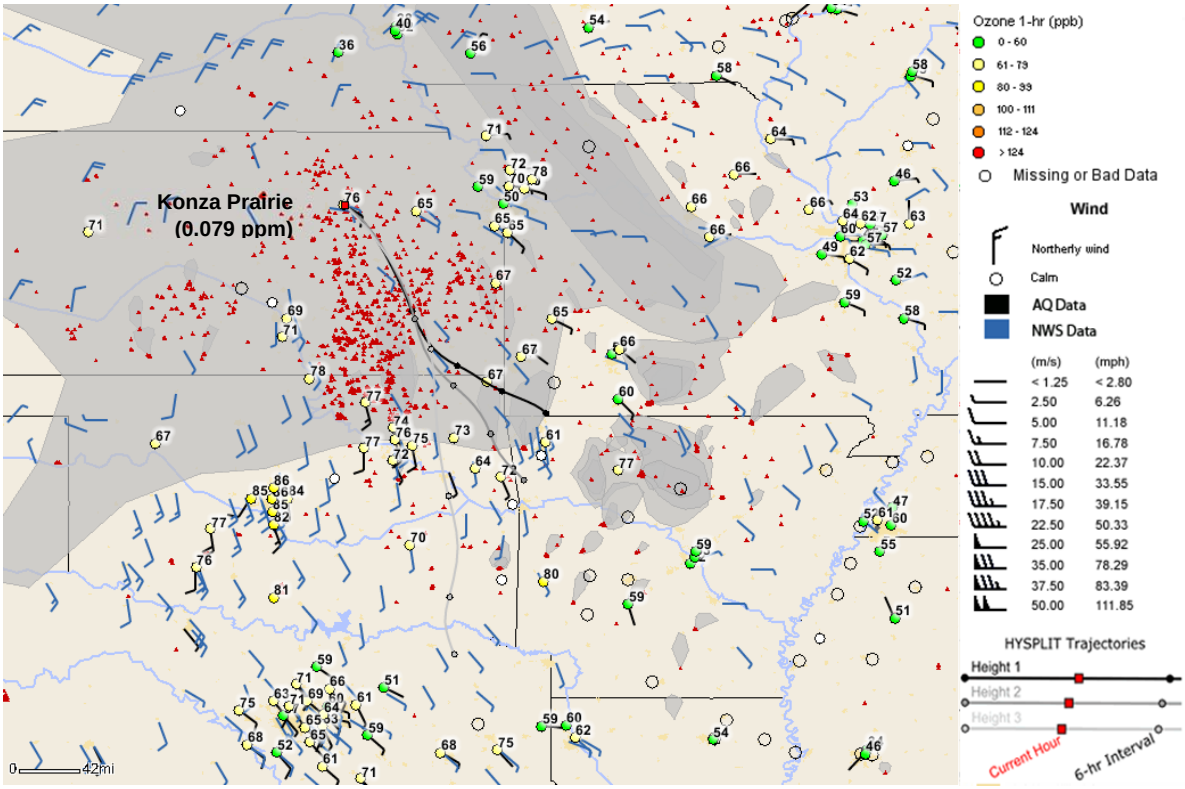

Figure C-34. 24-hour backward HYSPLIT trajectories ending at 18:00 on April 13, 2011.

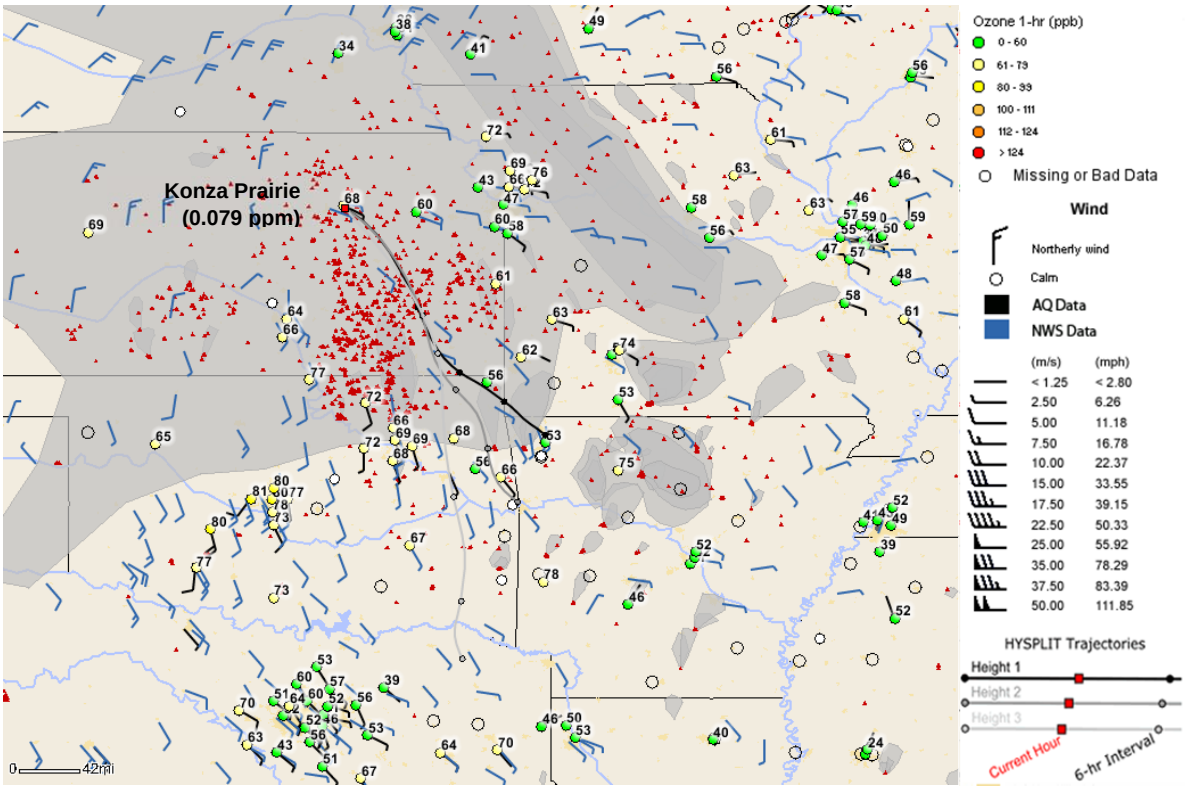

Figure C-35. 24-hour backward HYSPLIT trajectories ending at 19:00 on April 13, 2011.

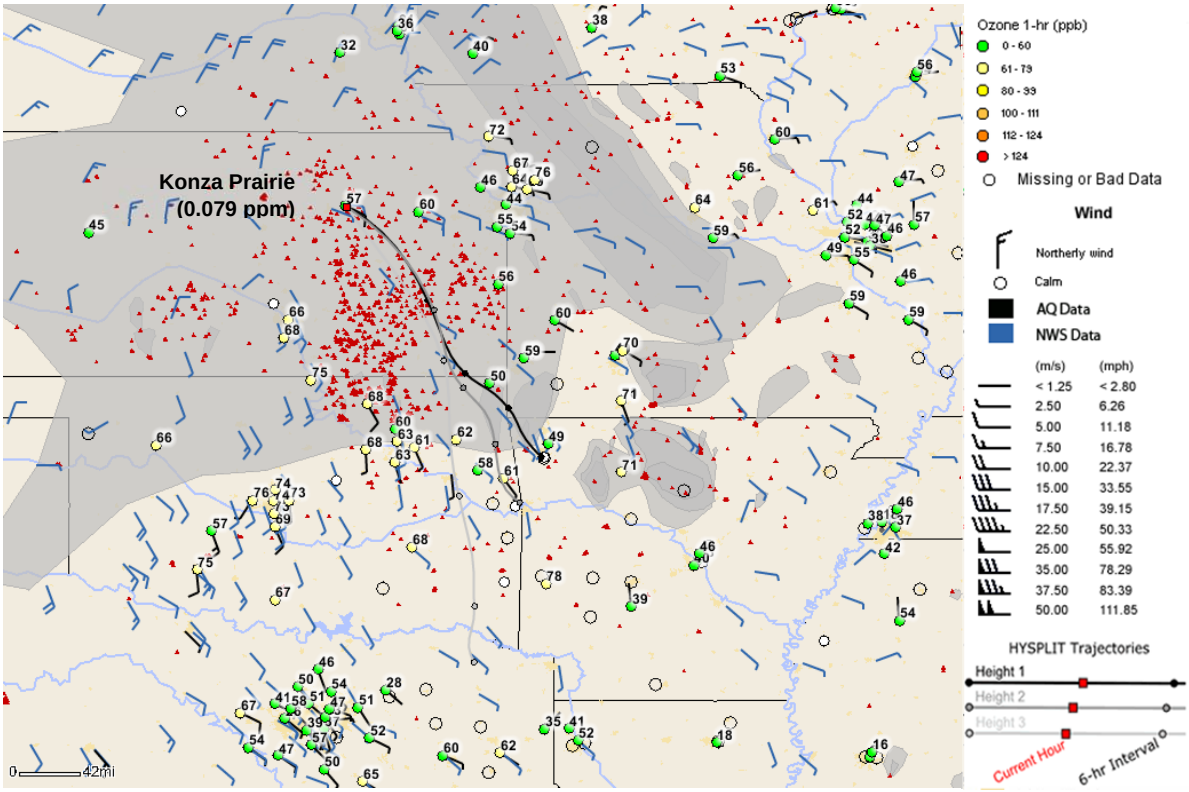

Figure C-36. 24-hour backward HYSPLIT trajectories ending at 20:00 on April 13, 2011.

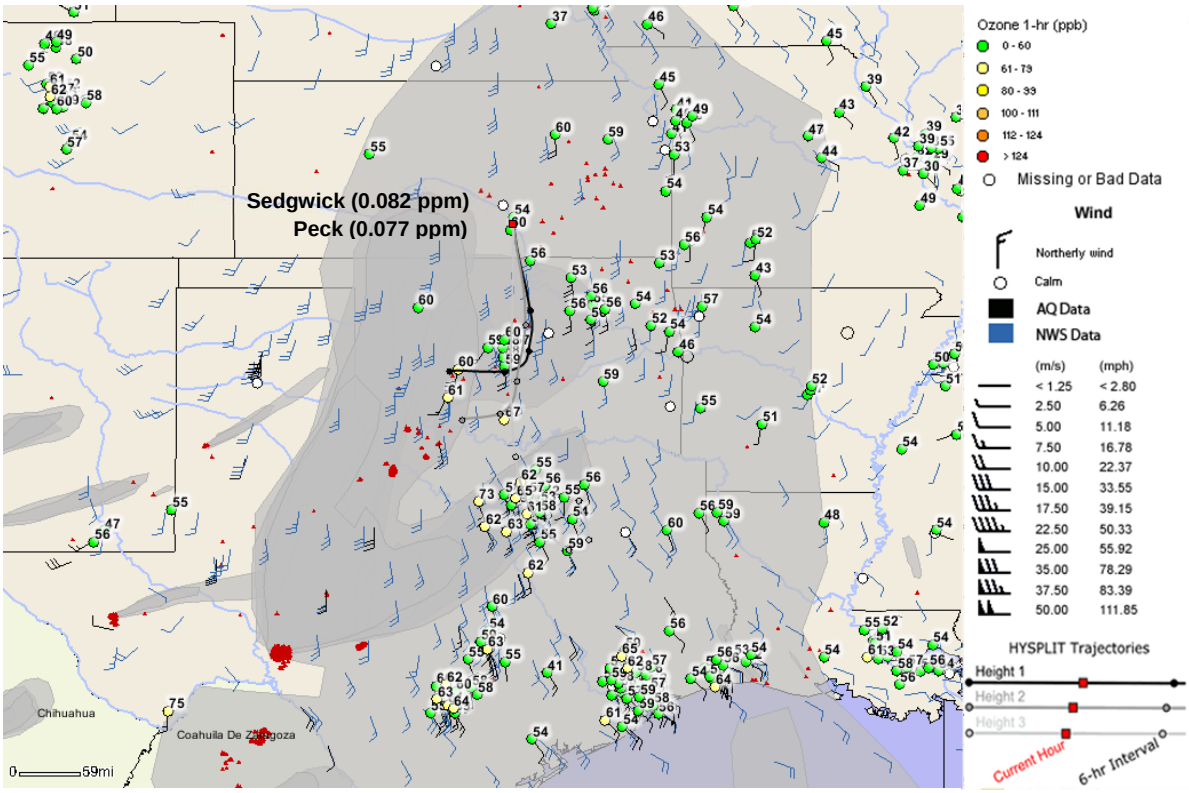

Figure C-37. 24-hour backward HYSPLIT trajectories ending at 10:00 on April 29, 2011.

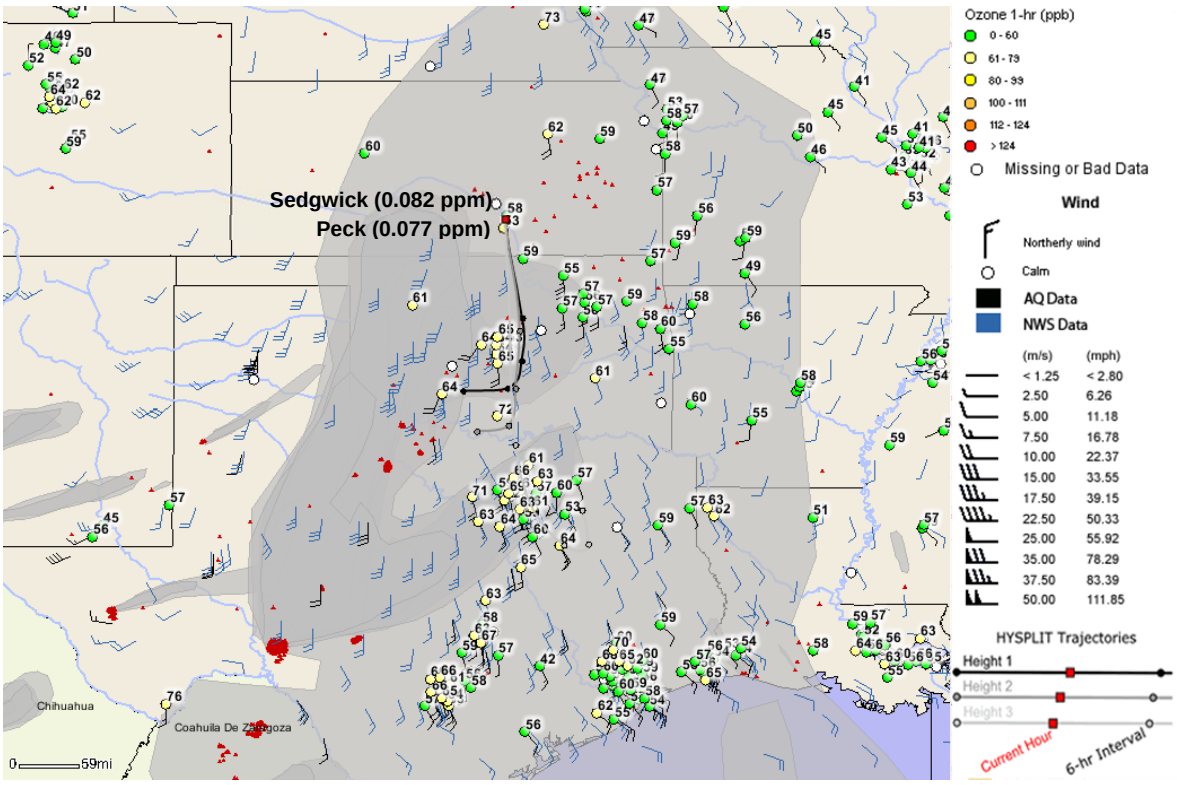

Figure C-38. 24-hour backward HYSPLIT trajectories ending at 11:00 on April 29, 2011.

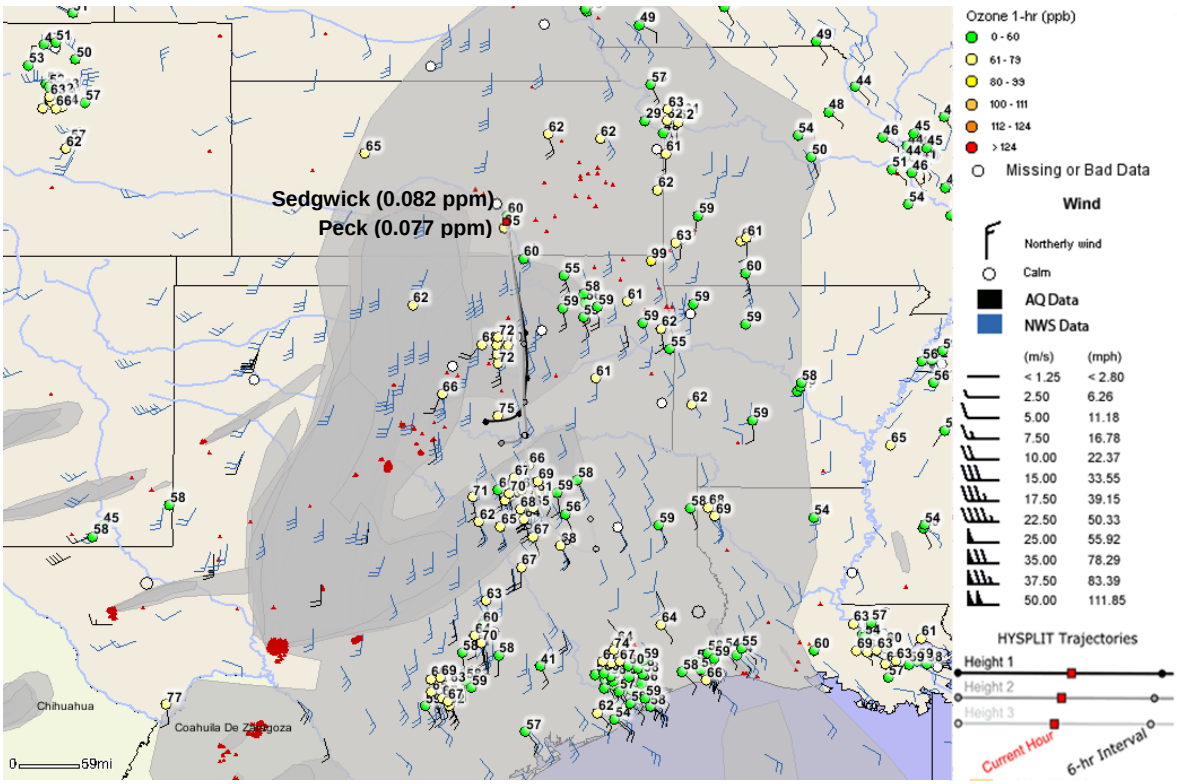

Figure C-39. 24-hour backward HYSPLIT trajectories ending at 12:00 on April 29, 2011.

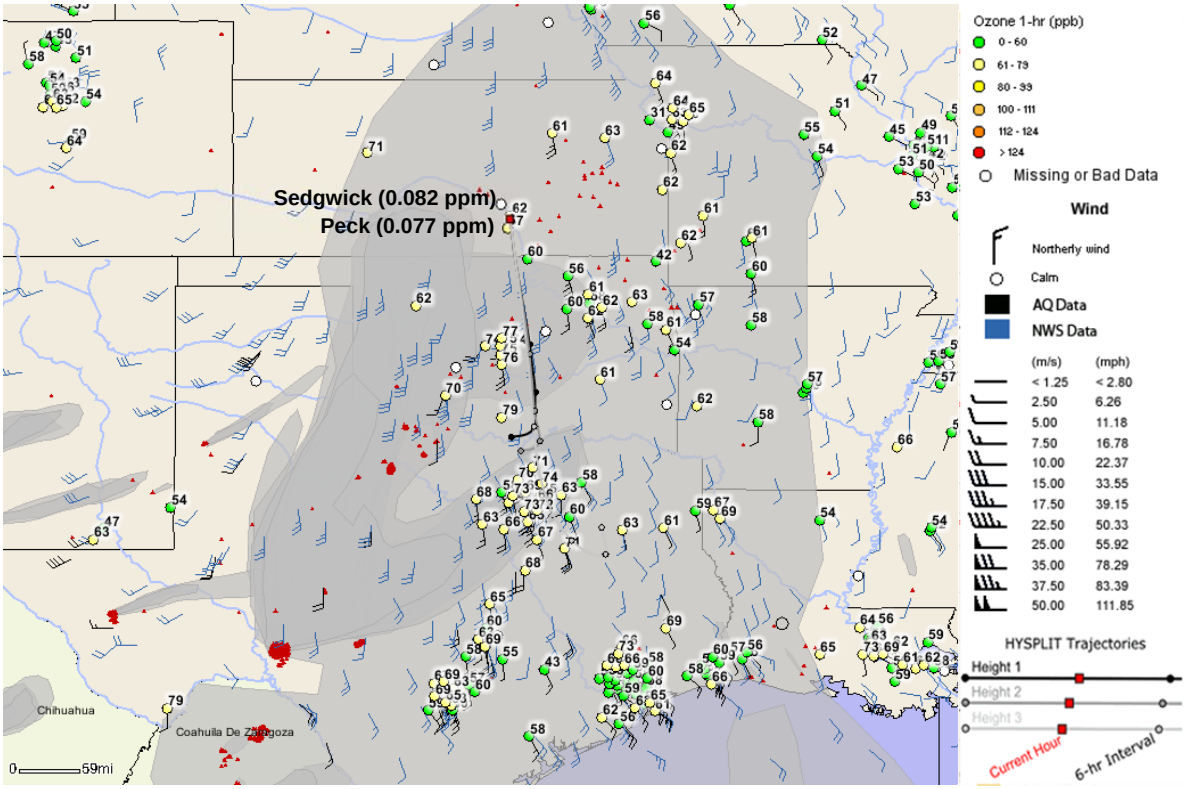

Figure C-40. 24-hour backward HYSPLIT trajectories ending at 13:00 on April 29, 2011.

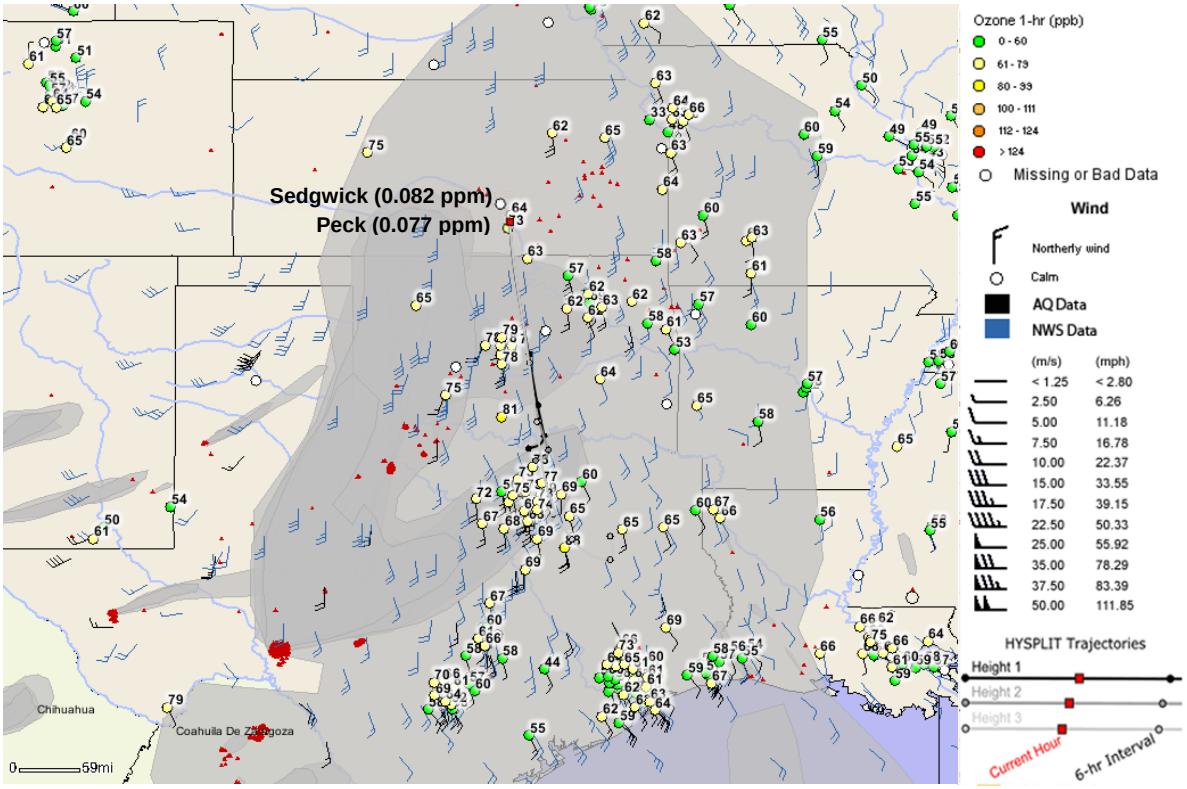

Figure C-41. 24-hour backward HYSPLIT trajectories ending at 14:00 on April 29, 2011.

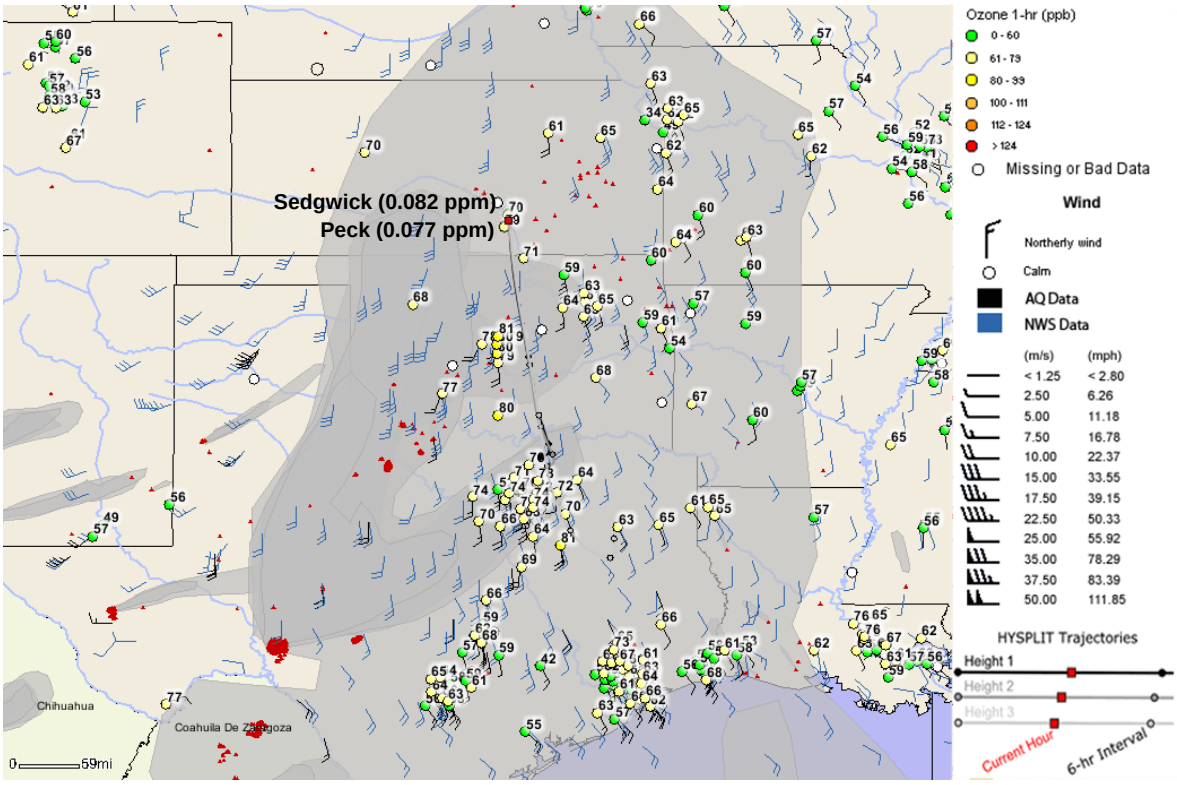

Figure C-42. 24-hour backward HYSPLIT trajectories ending at 15:00 on April 29, 2011.

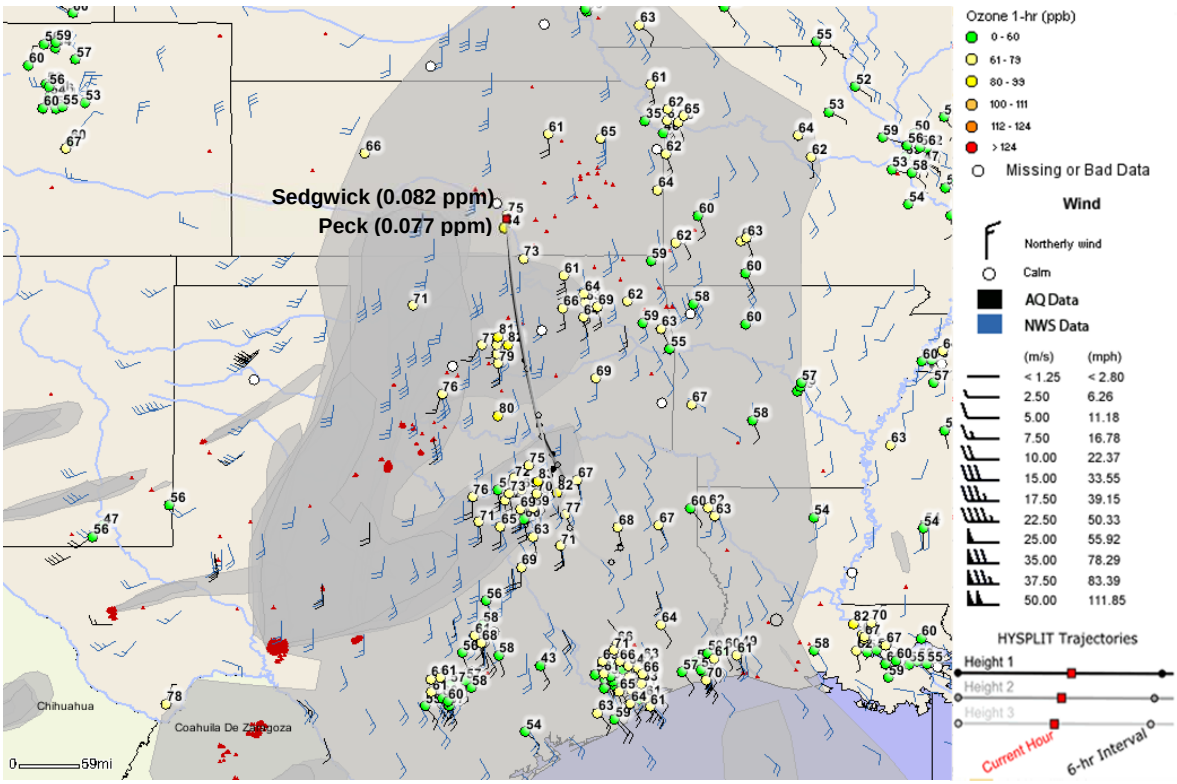

Figure C-43. 24-hour backward HYSPLIT trajectories ending at 16:00 on April 29, 2011.

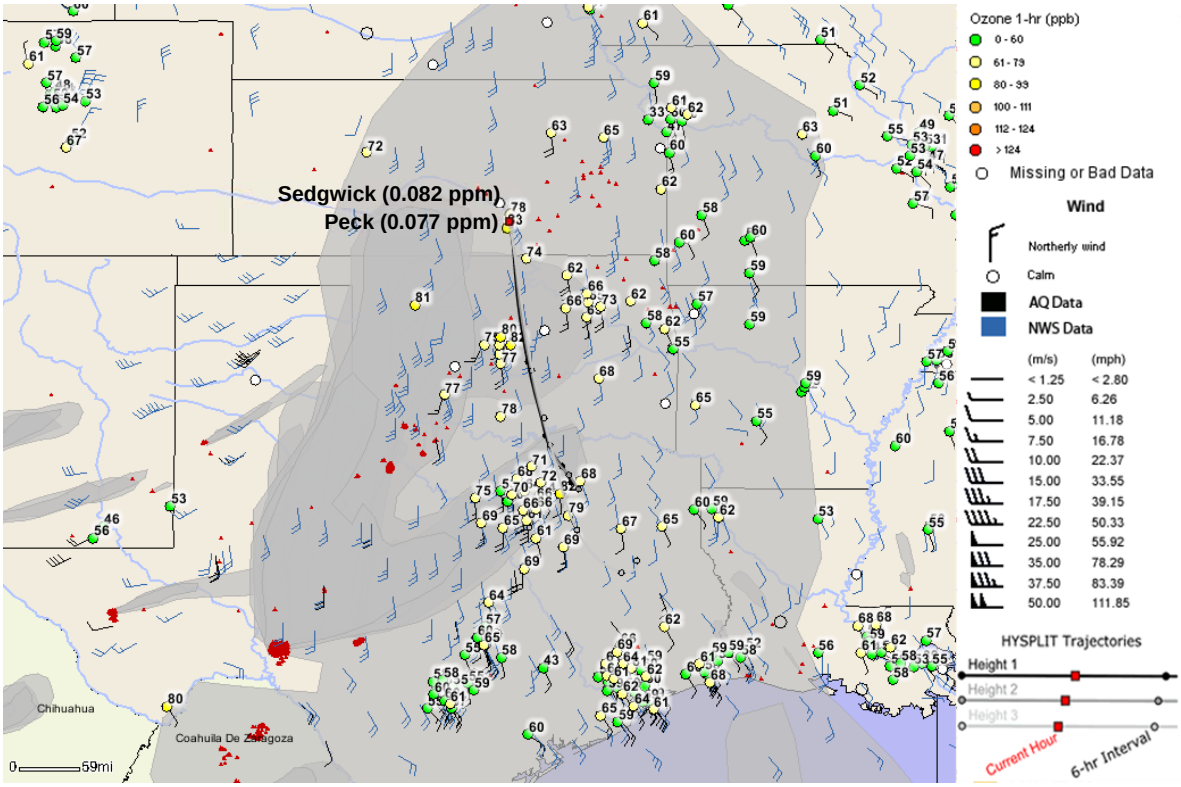

Figure C-44. 24-hour backward HYSPLIT trajectories ending at 17:00 on April 29, 2011.

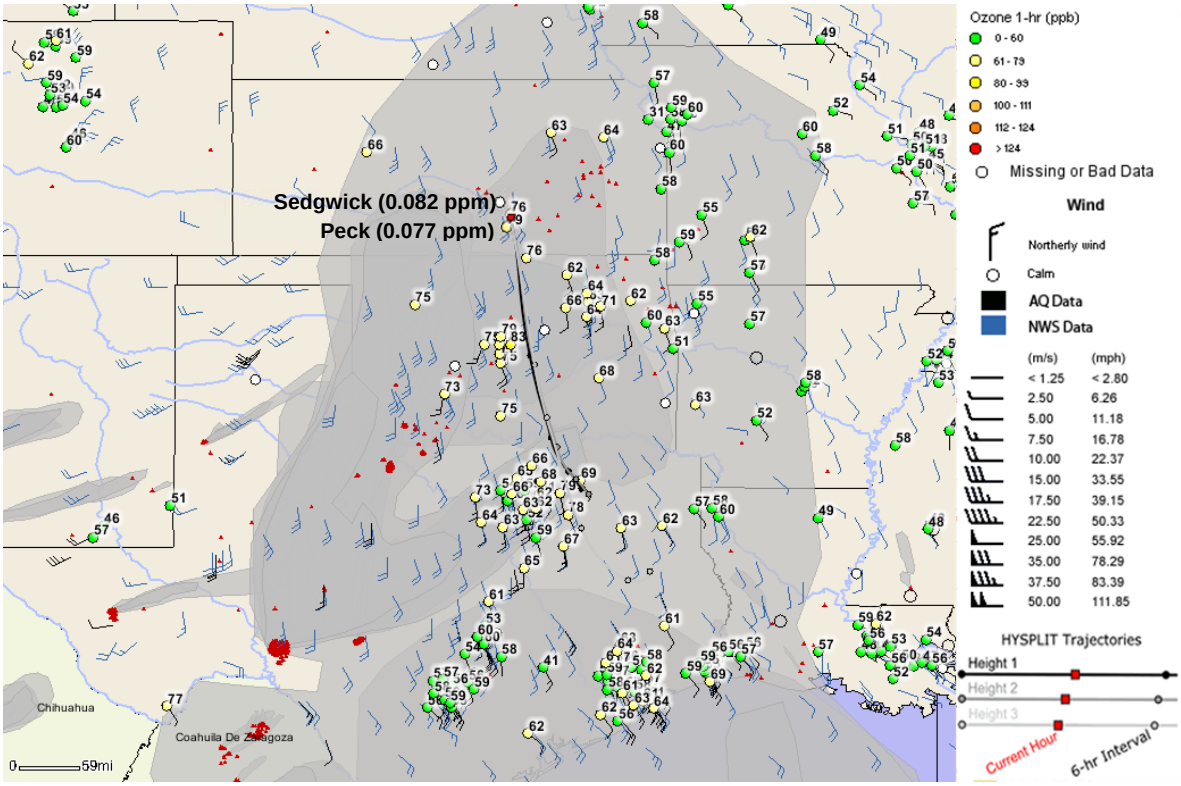

Figure C-45. 24-hour backward HYSPLIT trajectories ending at 18:00 on April 29, 2011.

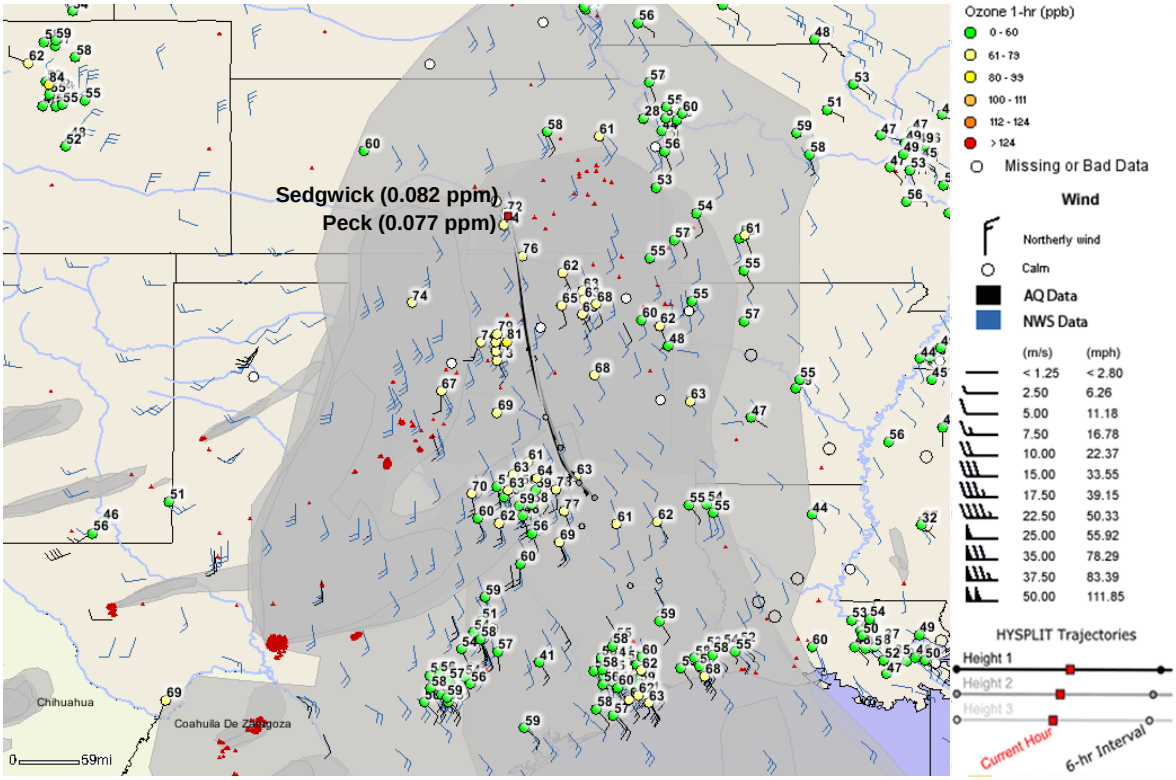

Figure C-46. 24-hour backward HYSPLIT trajectories ending at 19:00 on April 29, 2011.

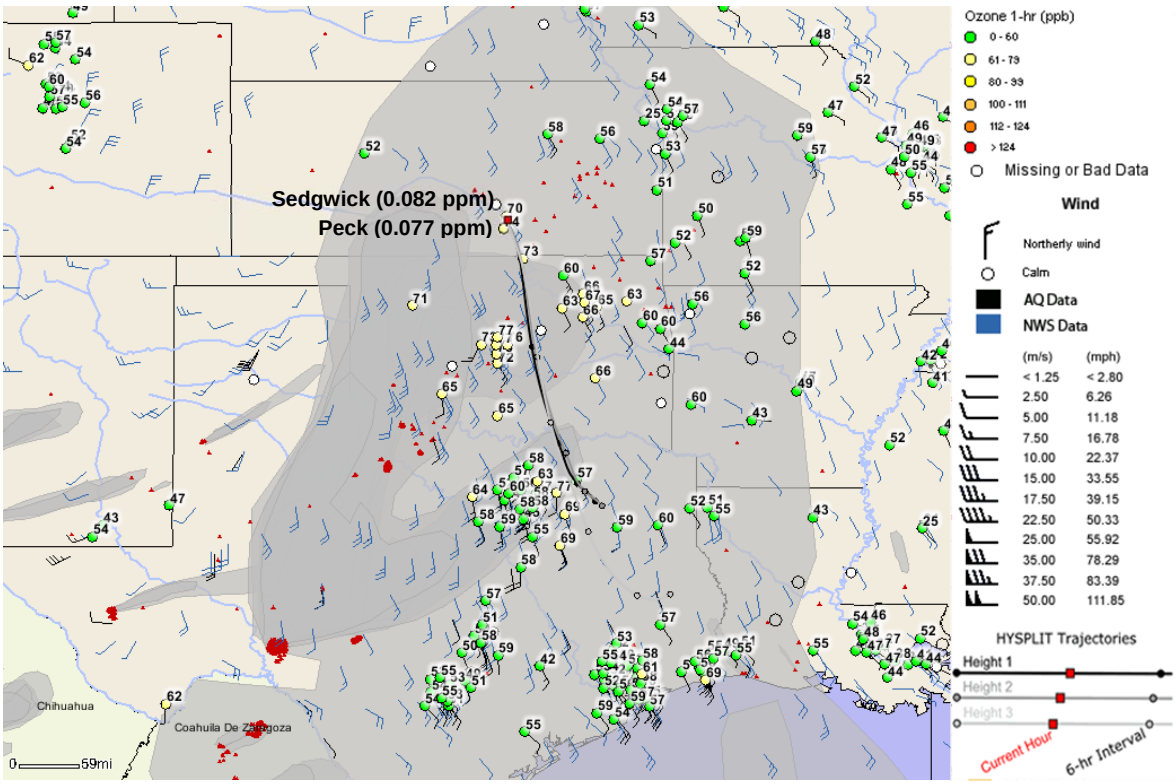

Figure C-47. 24-hour backward HYSPLIT trajectories ending at 20:00 on April 29, 2011.