By analyzing the data images downloaded from the ARM website, we are able to conclude that the aerosol particles contained in the smoke from the fires are flowing northward towards the United States and ultimately, Oklahoma. This is verified by the work of Dr. Meng-Dawn Cheng who calculated backward trajectories of air passing over the ARM field site on the days indicated.

There were special assumptions made about the data images which include:
- The areas where there are vertical white “spaces” indicate that the lidar system may have been shut down or went off-line.
- The white areas in the middle of the color coded images are areas where the backscatter count is very high.
- Areas where there is a black background with blobs of colored boxes indicate that there is some type of lower cloud attenuating the lidar pulse so that no real signals are being recorded.

This data was also compared to the Integrating Nephelometer at the ARM site. On the days when the Raman Lidar reported high aerosol haze low to the ground, the Nephelometer measurements were off the scale, meaning that the amount of aerosol particles in the haze layer were very high.