

**We have rewritten the abstract as following:**

*“Abstract. Aerosols emitted from wildfires are becoming one of the main sources of poor air quality in the US mainland. Their extinction in UVB (wavelength range 280-315 nm) is difficult to be retrieved using simple lidar techniques because of the impact of O<sub>3</sub> absorption and the lack of data about the lidar ratios at those wavelengths. Improving the characterization at these wavelengths will enable their monitoring with different instruments and also will permit to correct the aerosol impact on the ozone lidar data. The 2018 Long Island Sound Tropospheric Ozone Study (LISTOS) campaign in the New York City region brought a comprehensive set of instruments that enabled the characterization of lidar ratio for UVB aerosol retrieval. The NASA Langley High Altitude Lidar Observatory (HALO) produced the 532 nm aerosol extinction product along with the lidar ratio for this wavelength by using a high spectral resolution technique. The Langley Mobile Ozone Lidar (LMOL) is able to compute the extinction provided it has the lidar ratio at 292nm. The lidar ratio at 292nm and the Ångström Exponent (AE) between 292 nm and 532nm for the aerosols were retrieved by comparing the two observations using an optimization technique. We evaluate the aerosol extinction error due to the selection of these parameters, usually done empirically for 292nm lasers. This is the first known 292nm aerosol product inter-comparison between HALO and Tropospheric Ozone Lidar Network (TOLNet) ozone lidar. It also provided the characterization of the UVB optical properties of aerosol in the lower troposphere affected by transported wildfire emission.”*