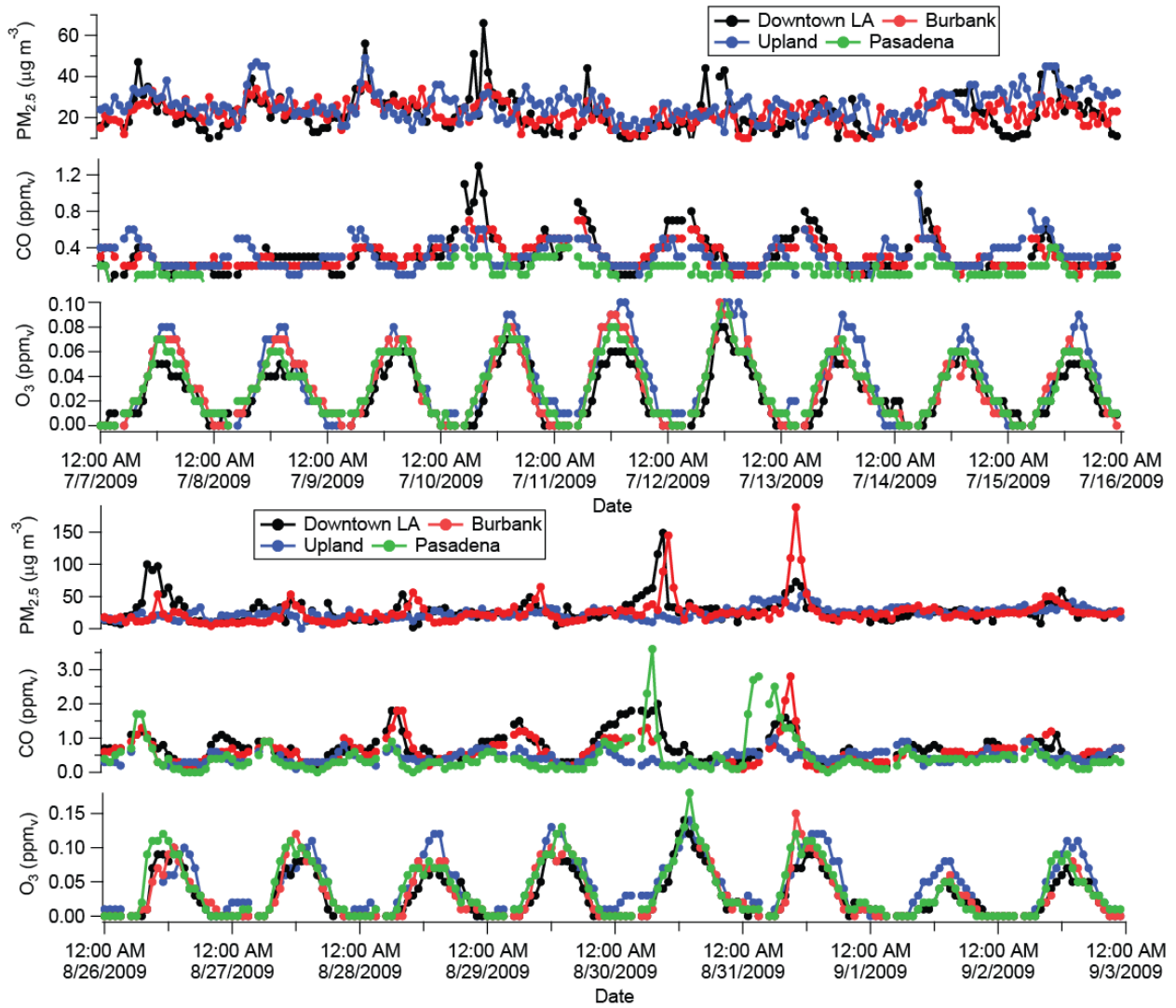


**Figure S1:** Ground station observations of PM<sub>2.5</sub>, CO and O<sub>3</sub> for the non-fire (top) and fire (bottom) period. The location of four stations (<http://www.arb.ca.gov>) can be found on the map in Fig. 1.



**Figure S2.** Number (top) and volume (bottom) size distributions over the course of (left) 10 July 2009, a day during the non-fire period, and (right) 31 August 2009, a heavily smoke-influenced day during the fire period.

