

Downwind Measurements of Mexico City Plume by Lidar

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In an effort to study the downwind dispersion and evolution of the pollutant plume from Mexico City, a vertically staring elastic lidar was mounted on the bed of a truck and used to track the plume. Using the meteorological predictions from the modeling team in Veracruz, routes were planned using major roads along the expected path of the plume. The lidar gives the relative particulate concentrations with height along the route. The team also stopped periodically along the route to deploy a multiwavelength solar radiometer (POM1) and a solar spectrometer. We expect these instruments to provide information on the particulate size distribution and complex index of refraction as well as some information on the total column concentrations of several chemical species. Data will be presented.