Ozone-Water Vapor Correlative Measurements as seen by lidar during the Measurements of Humidity in the Atmosphere and Validation Experiments (MOHAVE) 2009 Campaign

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The MOHAVE 2009 campaign took place at the Jet Propulsion Laboratory (JPL) Table Mountain Facility on October 11-27, 2009. This campaign allowed a thorough evaluation of the JPL Raman Lidar measurements throughout the troposphere (ground to 20 km). Simultaneous and ozone measurements from the JPL co-located tropospheric and stratospheric ozone lidars allowed to study the relationship between ozone and water vapor up to 14-15 km at very short time scales.

Results using both the nightly mean and the ten minute-integrated lidar profiles will be shown, revealing outstanding short-time variability, and allowing, for example, the precise tracking of several stratospheric dry intrusions and upper tropospheric troughs.