

## An Overview of the 2013 Las Vegas Ozone Study (LVOS)

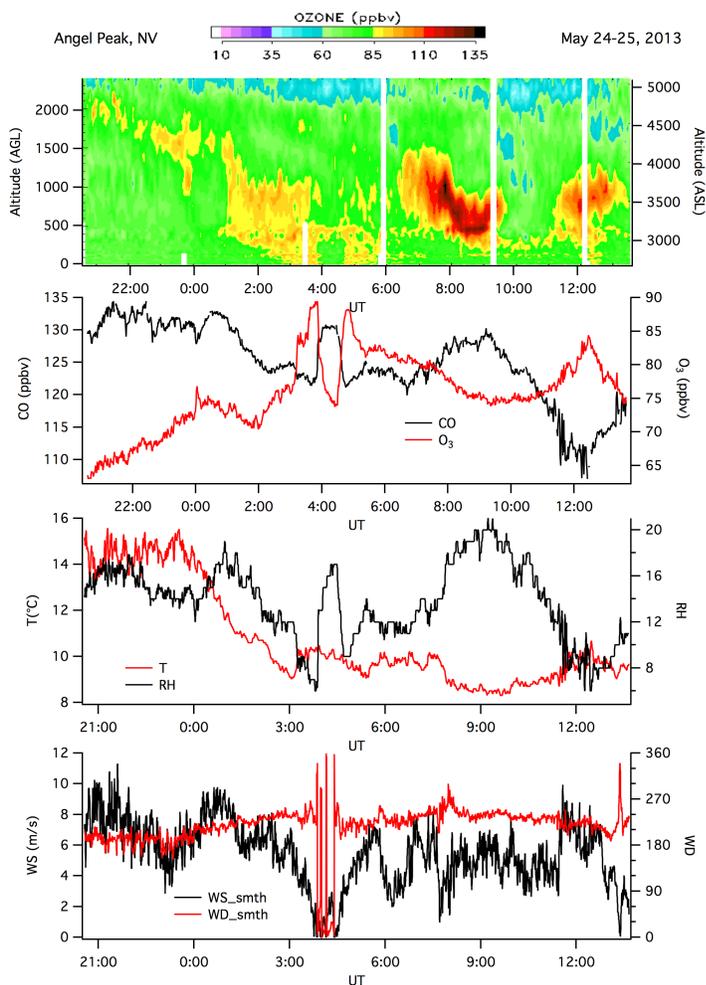
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The NOAA ESRL Chemical Sciences Division deployed the TOPAZ O<sub>3</sub> and aerosol lidar together with instruments for the *in situ* measurement of O<sub>3</sub>, CO, and meteorological parameters to Angel Peak, NV (2.7 km above sea level) as part of the LVOS in the late spring of 2013. The primary purpose of this study, which ran from May 19 to June 28, was to investigate the influence of long-range transport on springtime surface ozone concentrations in Las Vegas and surrounding Clark County, with emphasis on the role of stratosphere-to-troposphere transport. The influences of Asian pollution plumes, wildland fires, and urban pollution from southern California were also examined. The Angel Peak measurements are compared with other measurements made within Clark County and surrounding areas, satellite observations, and O<sub>3</sub> and CO distributions predicted by the FLEXPART dispersion model. In this presentation, I will give an overview of the LVOS campaign, and show examples of how these sources influenced surface ozone, and in some cases contributed to exceedances of the current National Ambient Air Quality Standard.



**Figure 1.** Time-height ozone curtain plot and *in situ* measurements from Angel Peak, NV showing the approach of a stratospheric intrusion to the surface on the night of May 24-25, 2013.