

Mixed Layer Evolution Observed by Radiosondes, Profilers, and LIDAR during MILAGRO

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To address many of the outstanding questions regarding the properties and effects of atmospheric particulate matter, it is necessary to understand its distribution in the atmospheric column. This in turn requires accurate information about the dynamic and thermodynamic structure of the atmospheric boundary layer. To provide this information, Pacific Northwest National Laboratory (PNNL) and Argonne National Laboratory (ANL) operated atmospheric profiling systems at sites including two locations on the Central Mexican Plateau. We have carried out a comparison of measurements of mixed layer depth as determined independently from collocated radiosonde, radar wind profiling, and lidar systems during the campaign. This poster provides a summary of that comparison as well as a description of the structure and evolution of the boundary layer at the sites known as T1 and T2 during MILAGRO.