

Ozone pollution in the Uinta Basin is attenuating.

Marc Mansfield, Seth Lyman
Utah State University Uintah Basin
marc.mansfield@usu.edu
435-828-4272

Elevated winter ozone concentrations have been detected in the Uinta Basin of Eastern Utah starting in 2010. Since then, measurements have occurred each winter season at many sites. The Basin is currently designated at marginal non-attainment for ozone and will advance to moderate non-attainment within perhaps a year. When controlled for meteorology, we find that ozone concentrations in the presence of snow cover have exhibited a statistically significant downward trend at the rate of about 3 ppb per year, and if this trend continues, will be at background concentrations shortly. We also find that daily exceedances of the NAAQS show a statistically significant downward trend of about 4 days per year. When controlled for meteorology, ozone concentrations in the absence of snow cover are below background levels and have been climbing, which we take as evidence for NO_x titration whenever snow is not present. Possible reasons for these trends will also be presented.