

SPATIAL DISTRIBUTION OF ATMOSPHERIC AEROSOL COMPONENTS IN THE UNITED STATES**M.C. Green¹**, M.L. Pitchford², J. Xu¹, D. DuBois¹¹*Desert Research Institute, Las Vegas, USA*²*Air Resources Laboratory, National Atmospheric and Oceanic Administration, Las Vegas, USA*

Using speciated PM_{2.5} data from over 100 mainly rural or remote areas in the United States, we consider the spatial extent of elevated concentrations of the main components of aerosol haze: sulfate, nitrate, crustal, and carbonaceous particles. Sulfate aerosol is sub-continental scale in the eastern US, but regional scale in the western US. Crustal aerosol ranges from very local scale to sub-regional scale to intercontinental scale. Carbonaceous aerosol also ranges in scale depending upon the source of the aerosol- wildfires may impact a single site or many sites, especially during periods with numerous fires. Nitrate aerosol tends to be distributed regionally. We show that the scales vary substantially for individual days.