Air Quality, CAMx and Ozone formation

Currently, the development of an ozone attainment strategy involves many simulations with the photochemical grid model to determine which source regions, source categories, and emission types (i.e., VOC and NOx) must be controlled to reduce ozone most effectively. In this study, a regional photochemical modeling experiment was set up to simulate a high ozone episode of August 30, 2015 in order to evaluate the impact of various emissions sources on ozone concentrations over El Paso, TX region. The base case simulation showed reasonable model performance by capturing the peaks and the diurnal variability of observed ozone concentrations in th El Paso area. A comprehensive impact assessment of emissions sources to the ozone concentration has been evaluated within the study domain. Through a source apportionment analysis of emissions influencing the jourly ozone concentrations, NOx and VOC limited areas were identified