Abstract:

Currently, the smog problem in the San Joaquin Valley air basin is classified by the EPA as "severe". Emissions of smog-forming pollutants on the valley floor, coupled with days of extreme heat and light winds contribute to an unhealthy level of air pollution. A major source of emissions is automobiles, and therefore measures to reduce emissions need to be implemented into a regional transportation plan. However, the effects of these measures on air pollution is not easily determined, and so computer simulations must be done. We'll review the science of air quality, the health effects of air pollution, and how our simulation results can affect public policy.