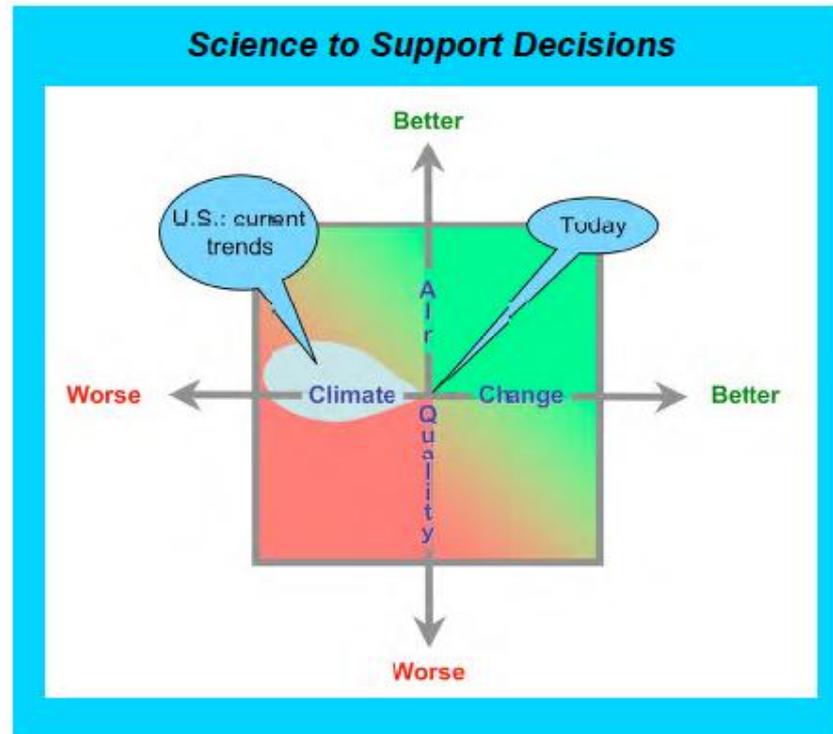


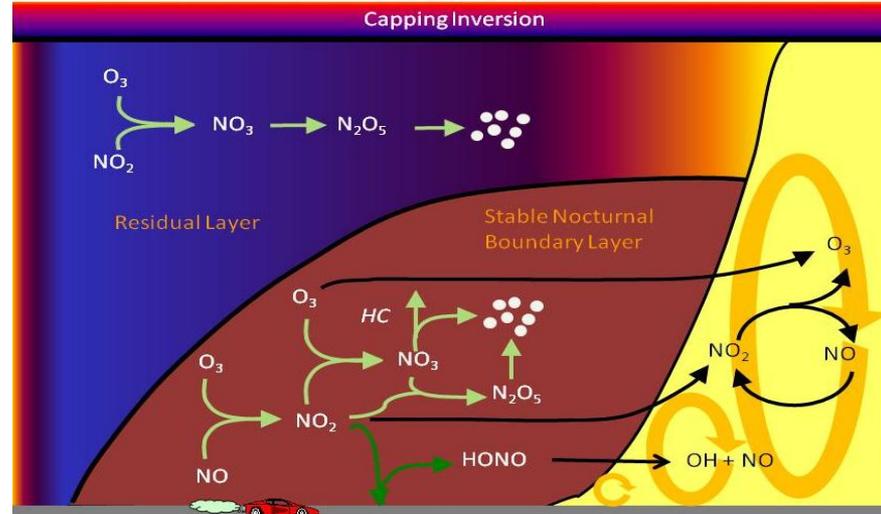
Atmospheric Chemistry and Transport



Science Questions

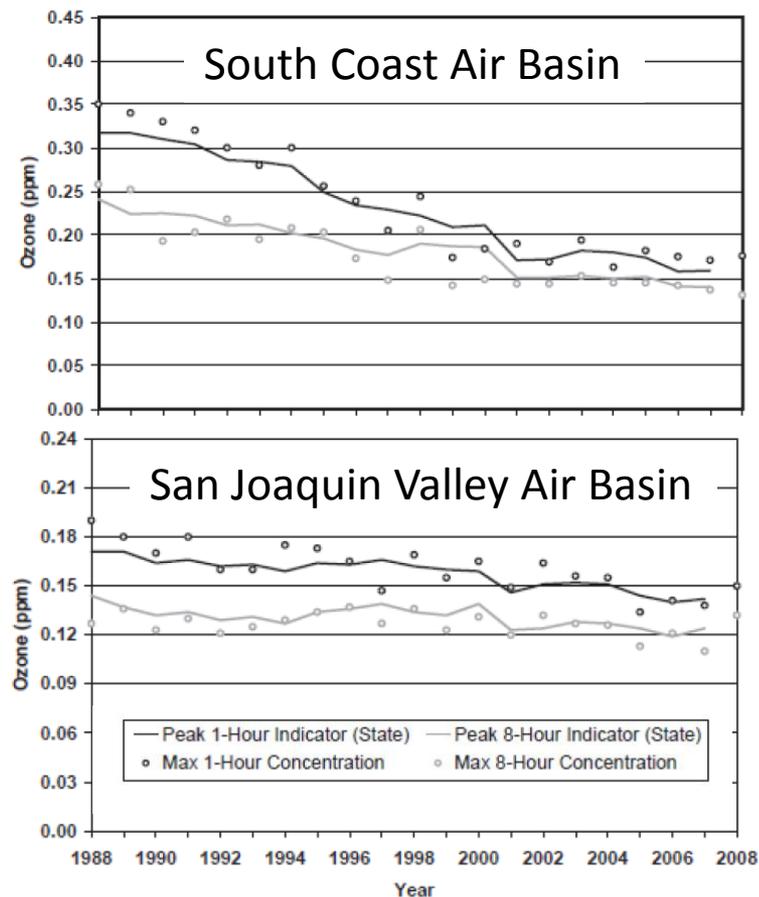
Nocturnal Chemistry:

- Change with altitude? Meteorology?
- NO_x and VOC loss?
- Influence on daytime ozone and aerosol?
- Formation of daytime radical precursors?



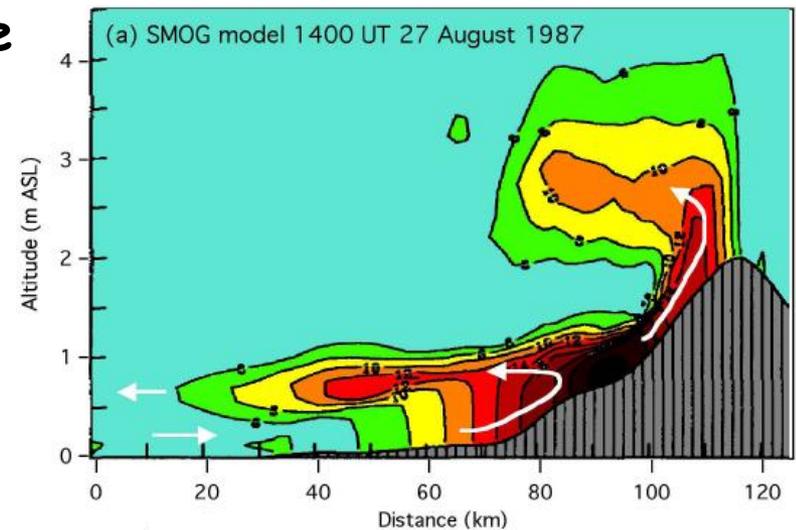
Ozone (and aerosol) formation in the Central Valley and South Coast Air Basin

- Radical precursors and HO_x budget?
- Role of chlorine?
- Influence of local and regional meteorology?
- Ozone sensitivity and its reaction to emission reduction?
- Natural vs. anthropogenic emissions?
- Regional differences in California?
- Fate of VOC's?
- Gas-to-particle conversion?



- **Ozone and pollutant transport at the surface and aloft**

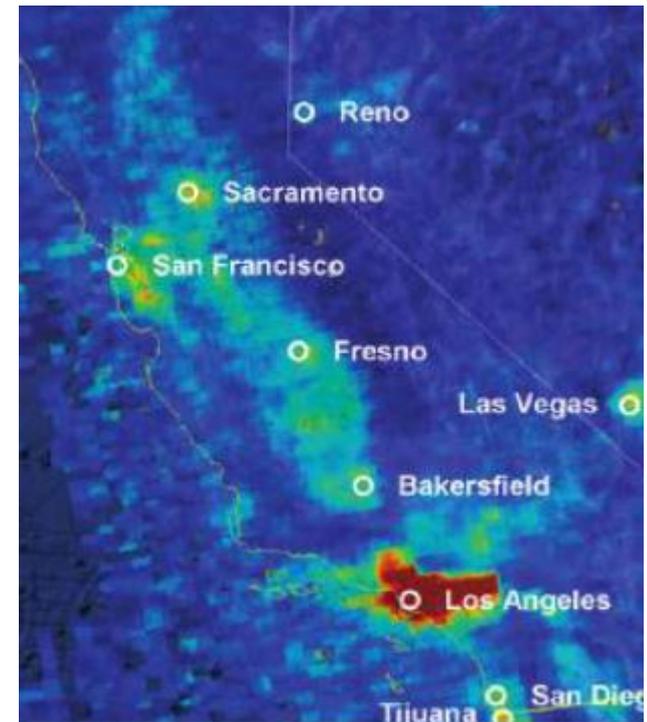
- Oceanic boundary conditions?
- Sources of high ozone concentrations aloft?
- Inflow and outflow of air in the SCAB and CV?
- Impact of long-range transport?



- **Chemistry and transport model?**

- How well is the complex meteorology captured?
- Are emissions accurately represented?
- Are physical/chemical processes missing in models?
- What is the optimal grid resolution?
- How well are aerosols described?

- **Aerosol Questions** → Jose's intro, tomorrow at 9:50am....



Session Organization