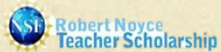
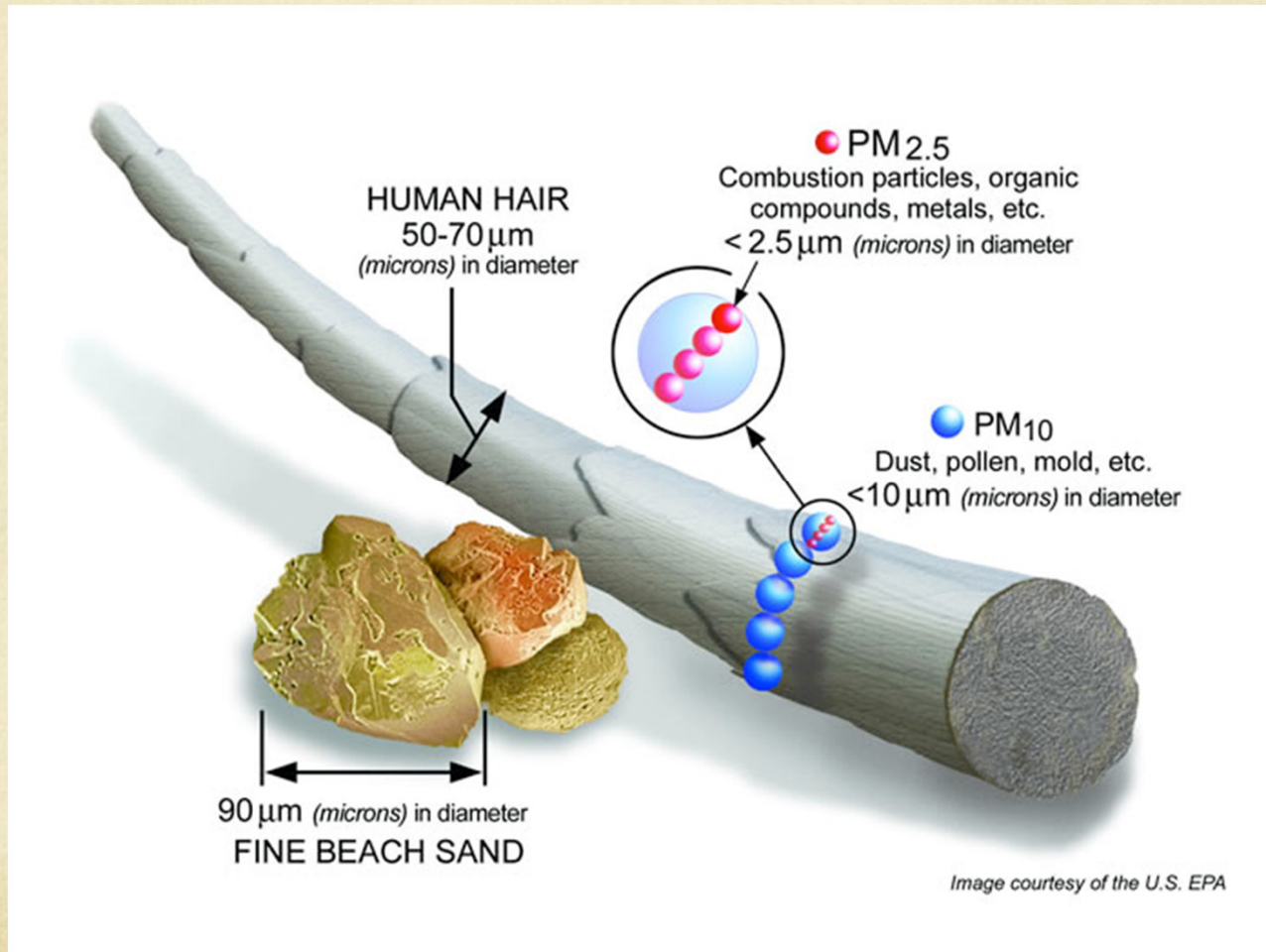


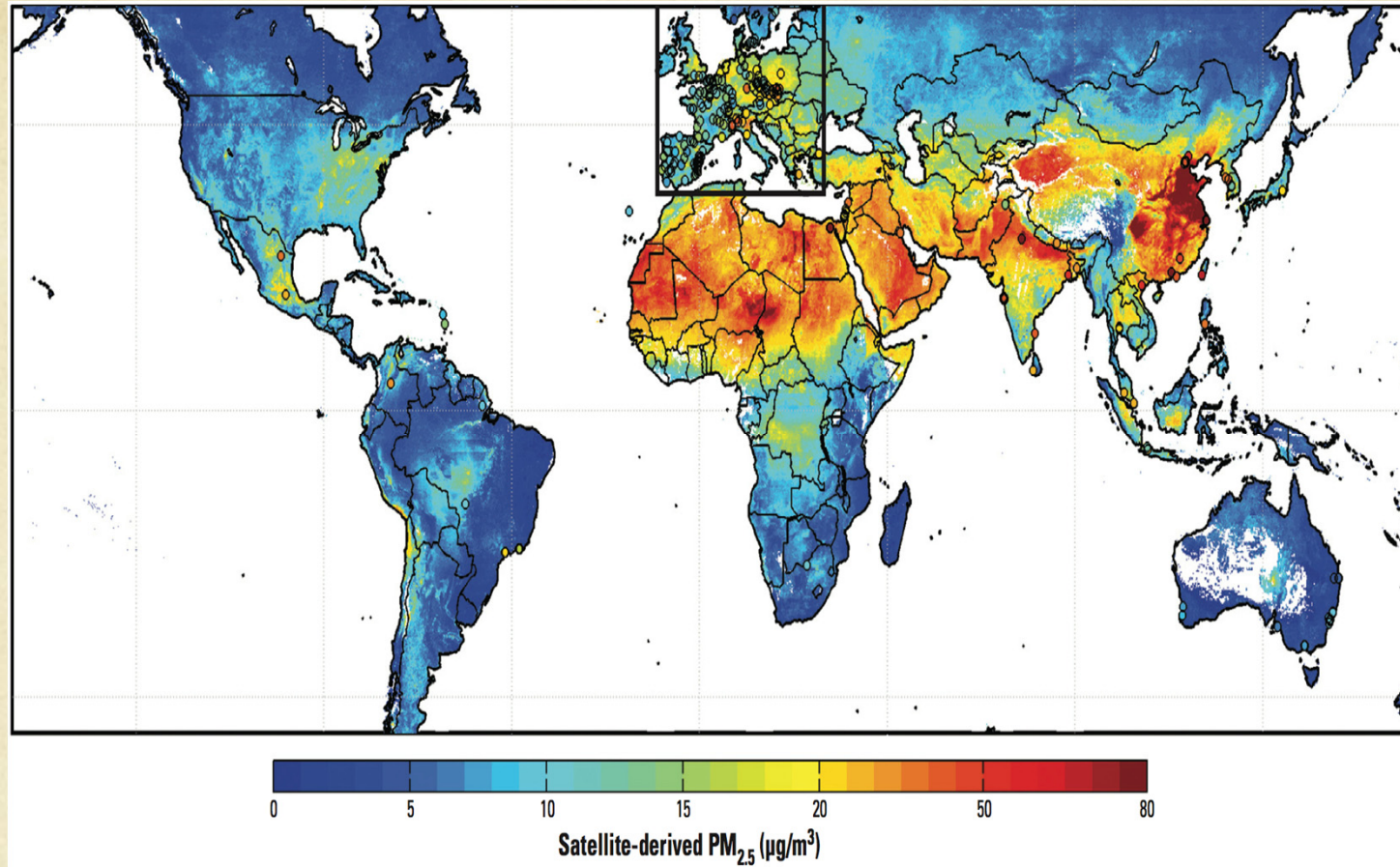
Juxtaposing NASA's **AERONET AOD** with **CARB PM** data
over the San Joaquin Valley to facilitate Multi-angle
Imaging SpectroRadiometer (MISR) PM pollution research

JPL Final Presentation
August 8th, 2013
By John Kanemoto



What is Particulate Matter (PM)

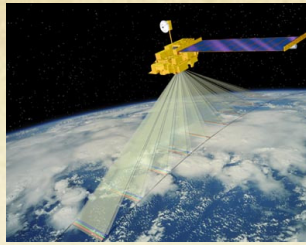




$$M_{2.5,d,\Delta z} = \left[\frac{4}{3} \left(\frac{r_{2.5,d,\Delta z,eff}}{r_{2.5,\Delta z,eff}} \right)^3 \left(\frac{\rho_{2.5,d,\Delta z} r_{2.5,\Delta z,eff} f_{2.5,\Delta z}}{Q_{2.5,e,\Delta z} \Delta z} \right) \right] \tau$$

*van Donkelaar, A. , Martin, R. , Brauer, M. , Kahn, R. , Levy, R. , et al. (2010). Global estimates of ambient fine particulate matter concentrations from satellite-based aerosol optical depth: Development and application. *Environmental Health Perspectives*, 118(6), 847-855.

What is our Goal?



Multi-angle Imaging
SpectroRadiometer
(MISR)

MISR Function

California Air Resources
Board (CARB)

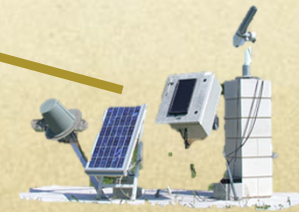
AERosol RObotic NETwork
(AERONET)

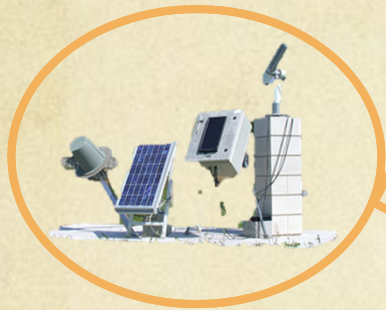
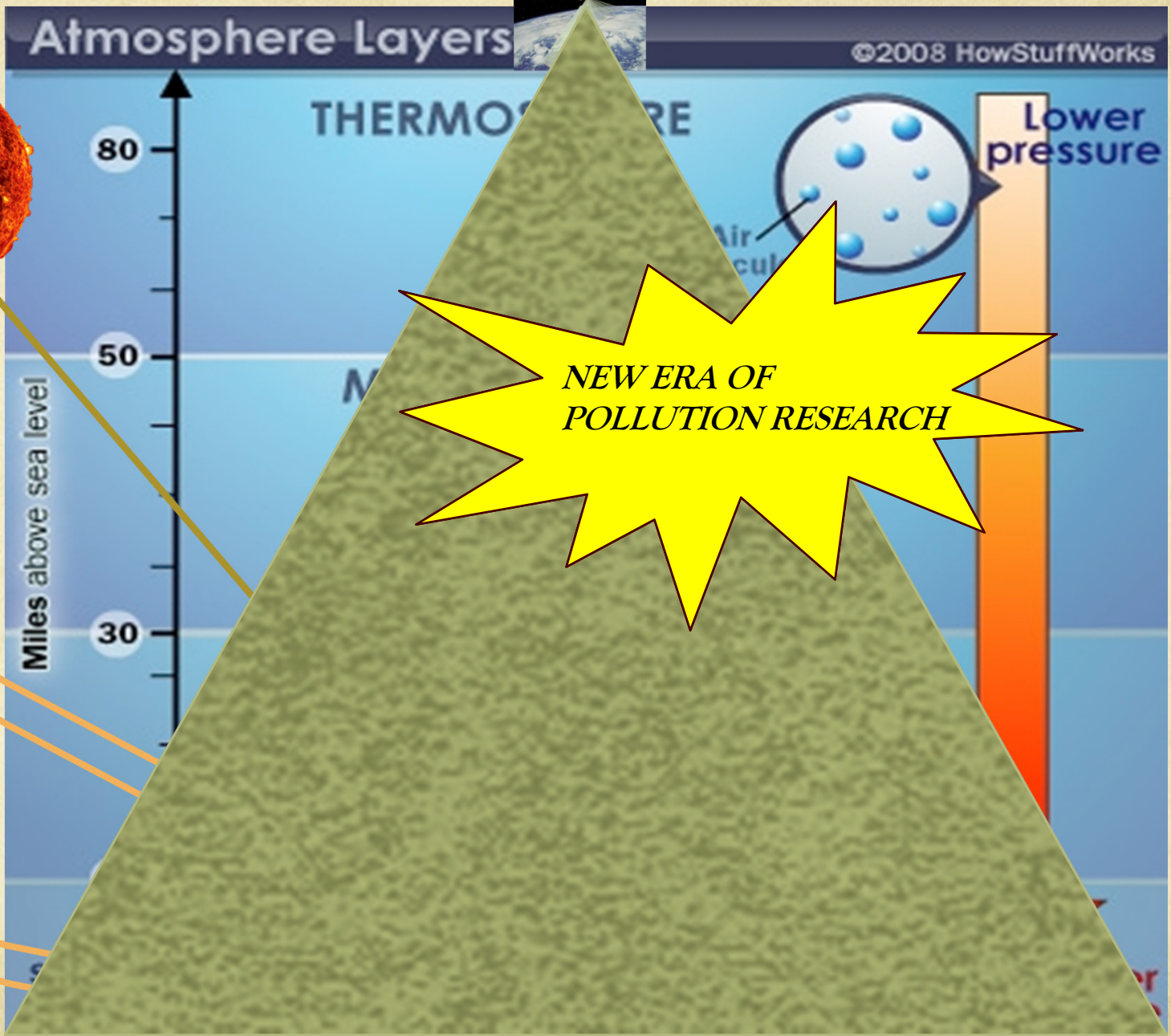


⇒ Micrograms per
Cubic Meter
($\mu\text{g}/\text{m}^3$)

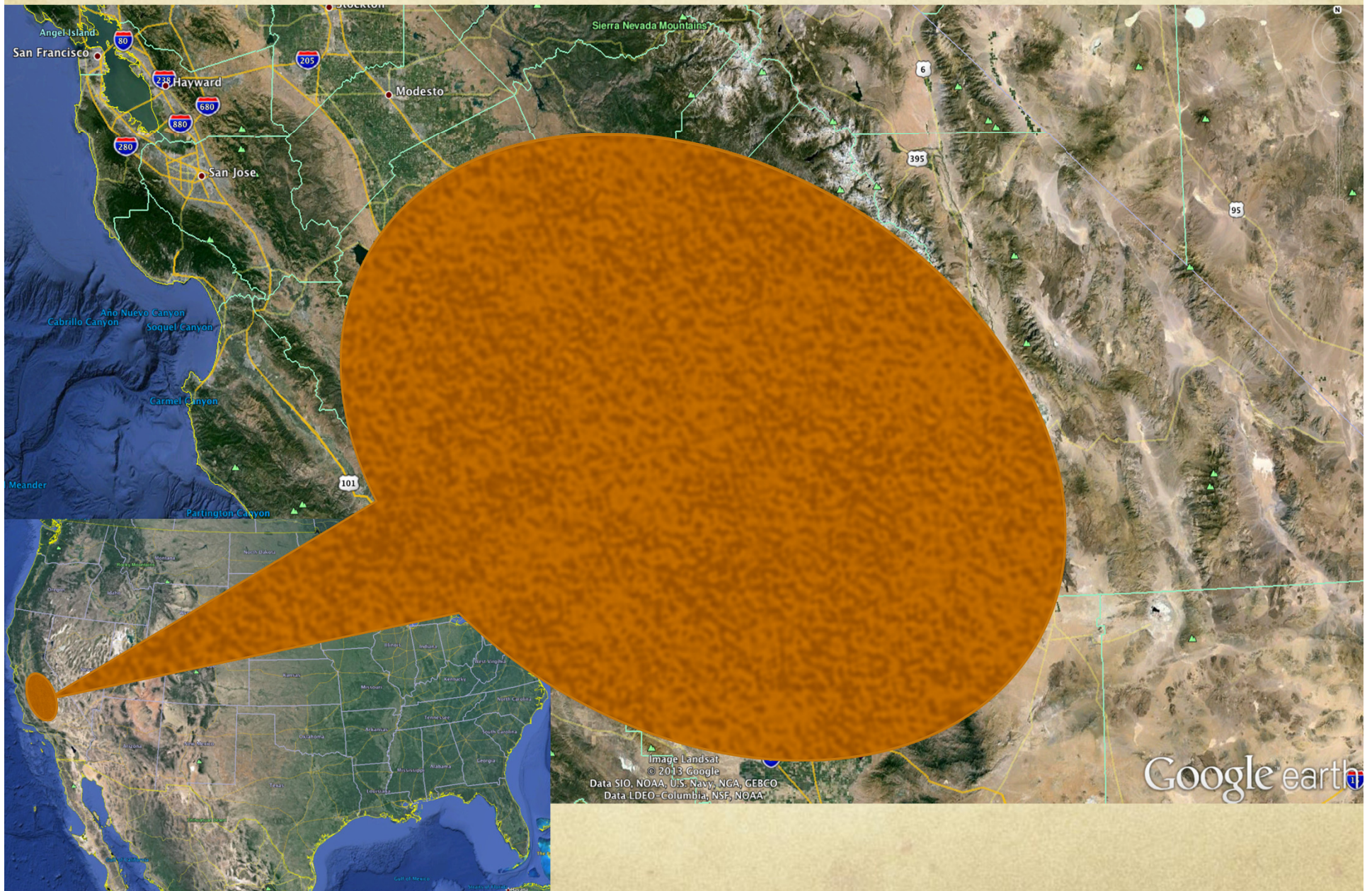


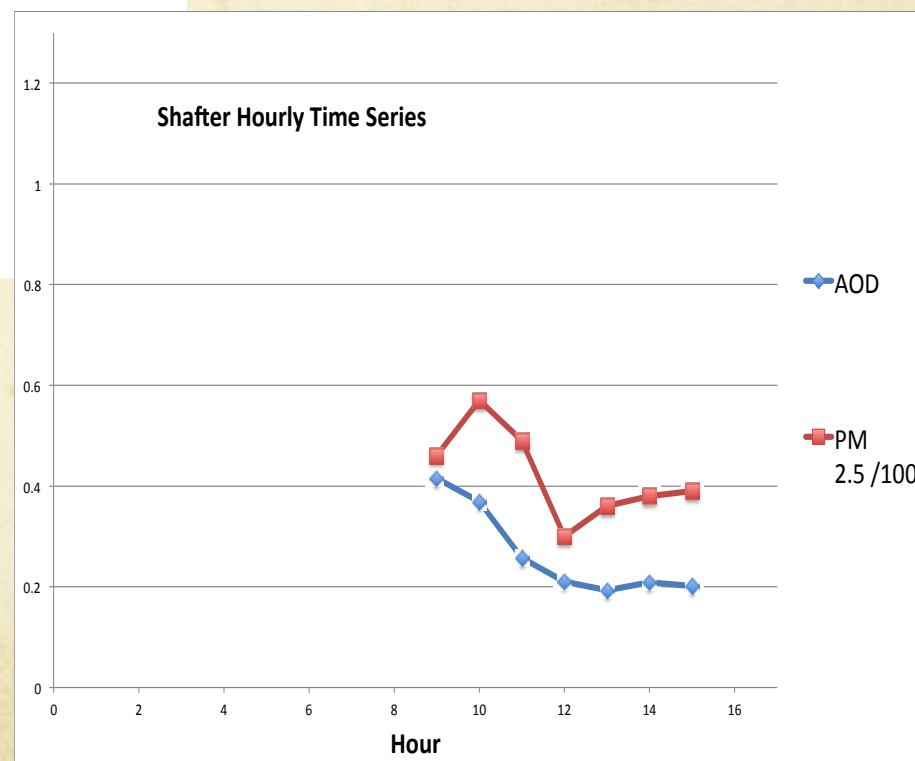
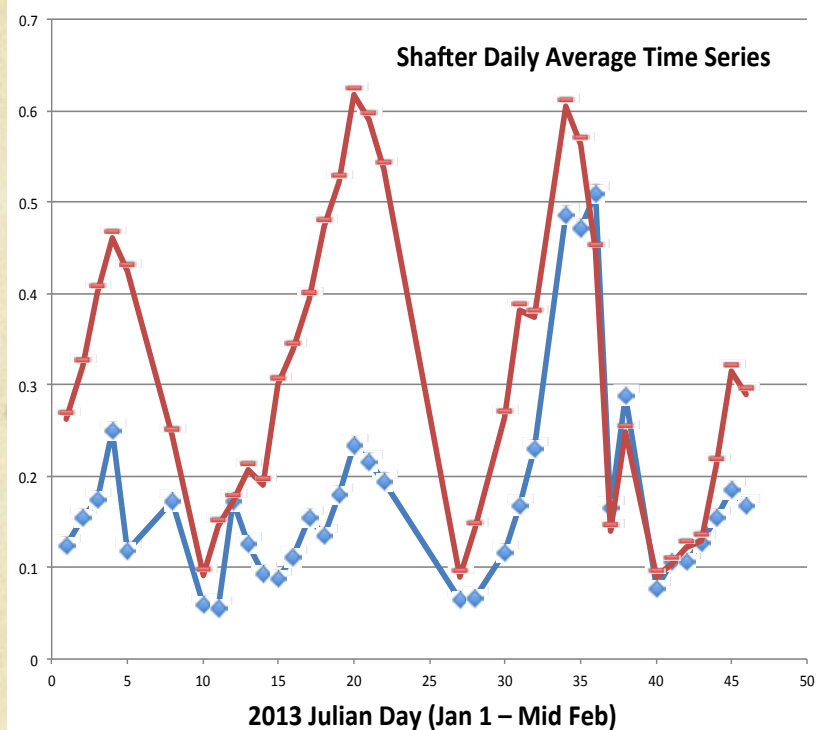
www.bostonbikesforboston.com



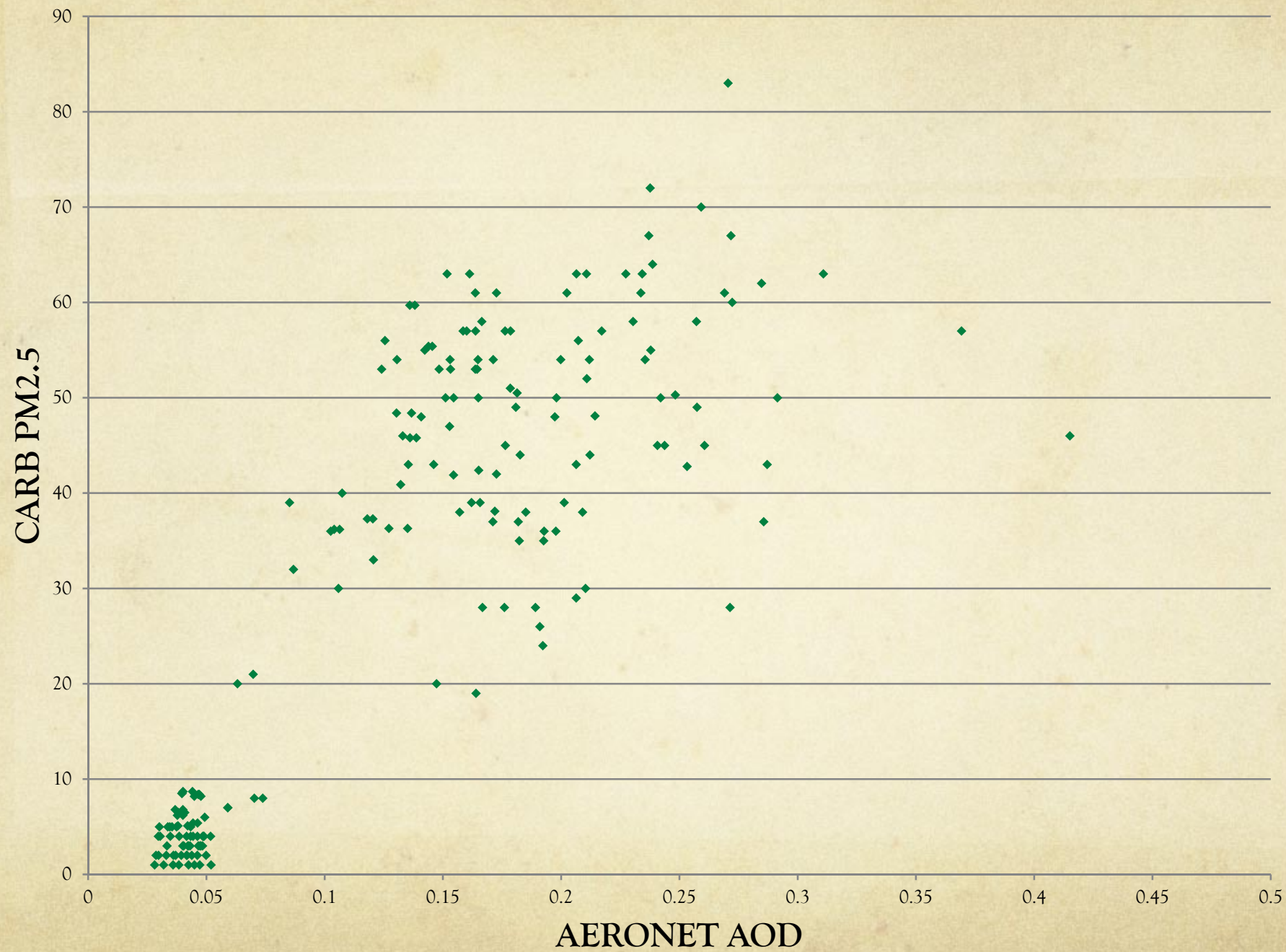


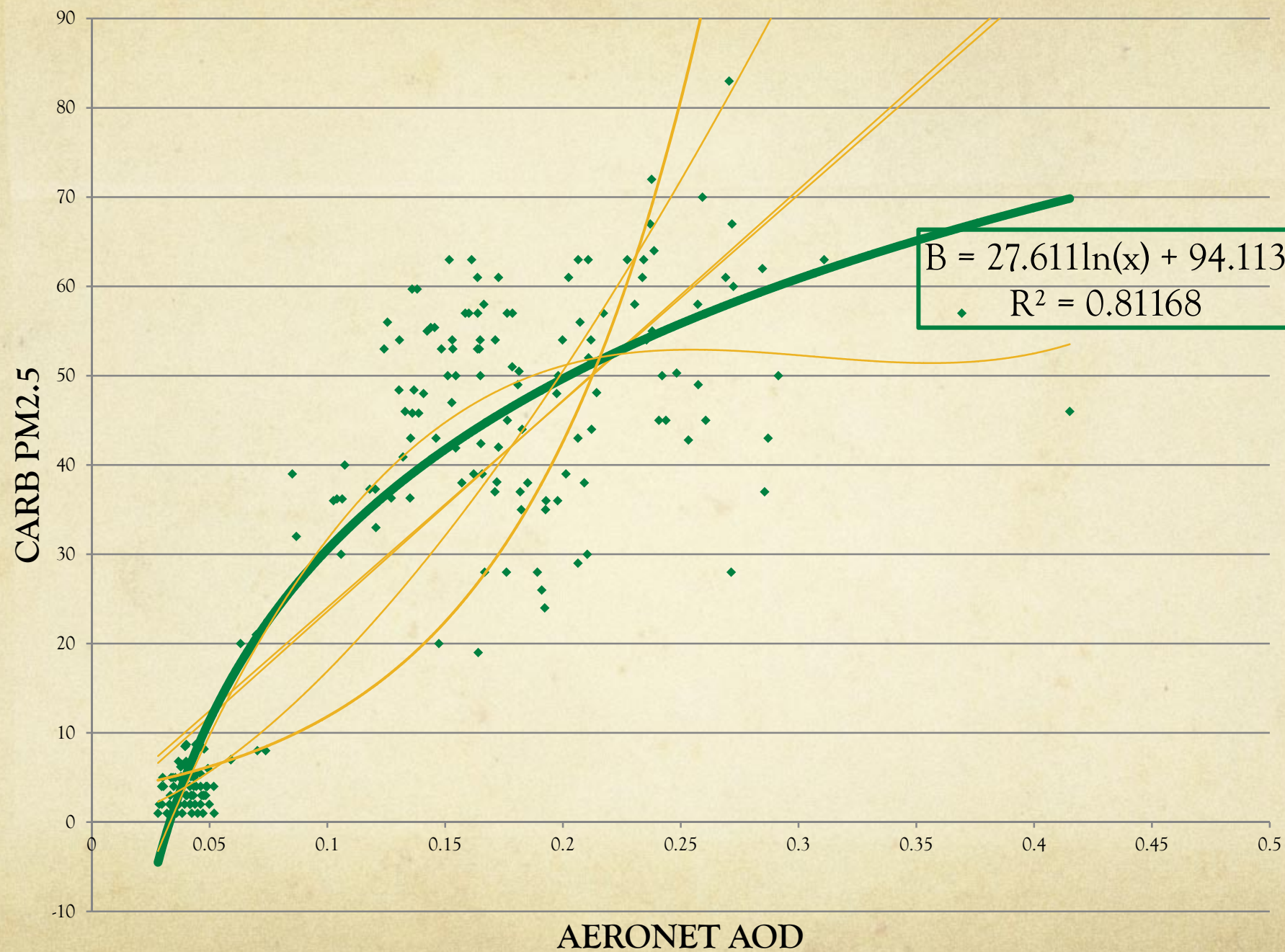
2013: January - February

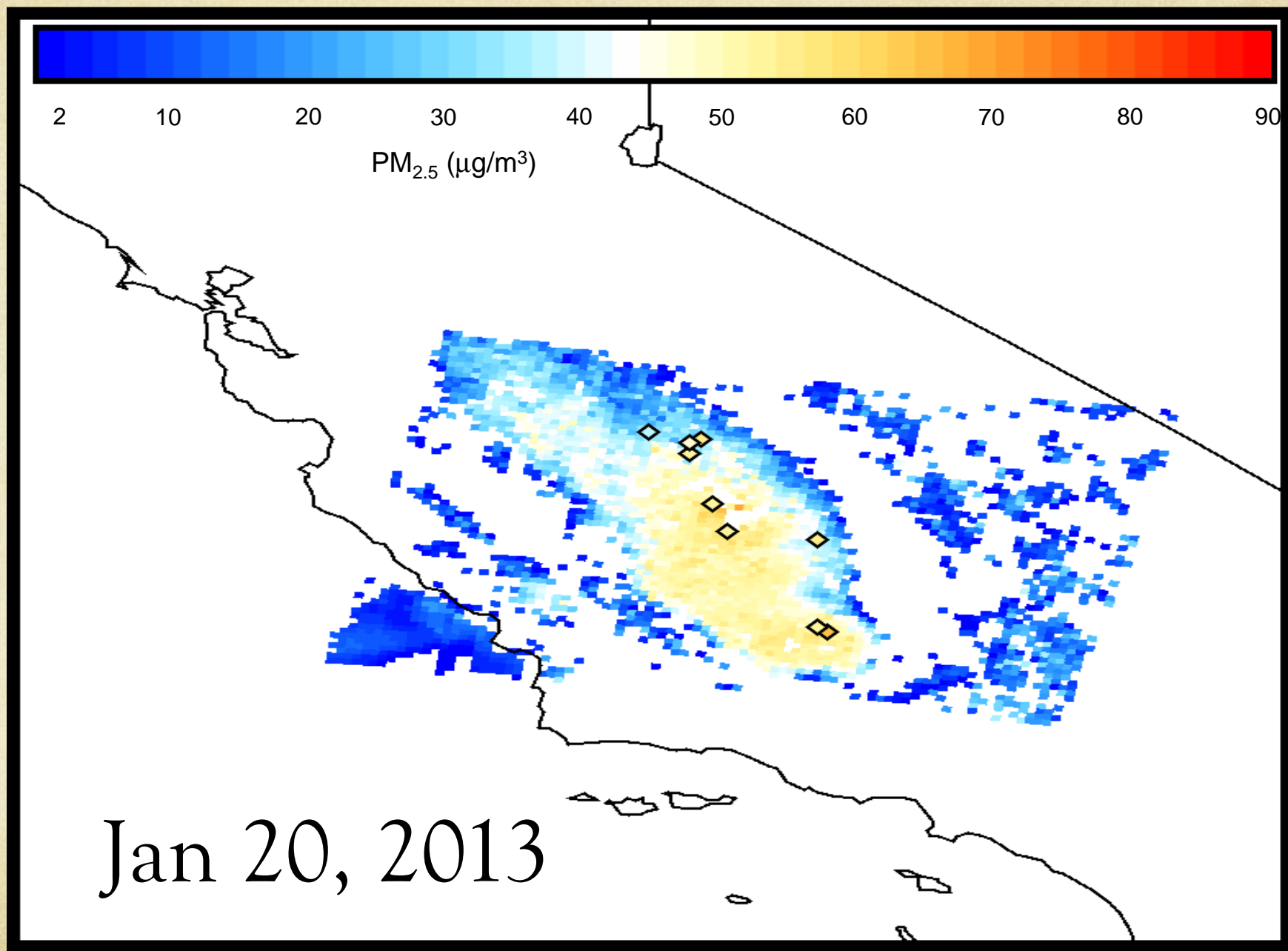


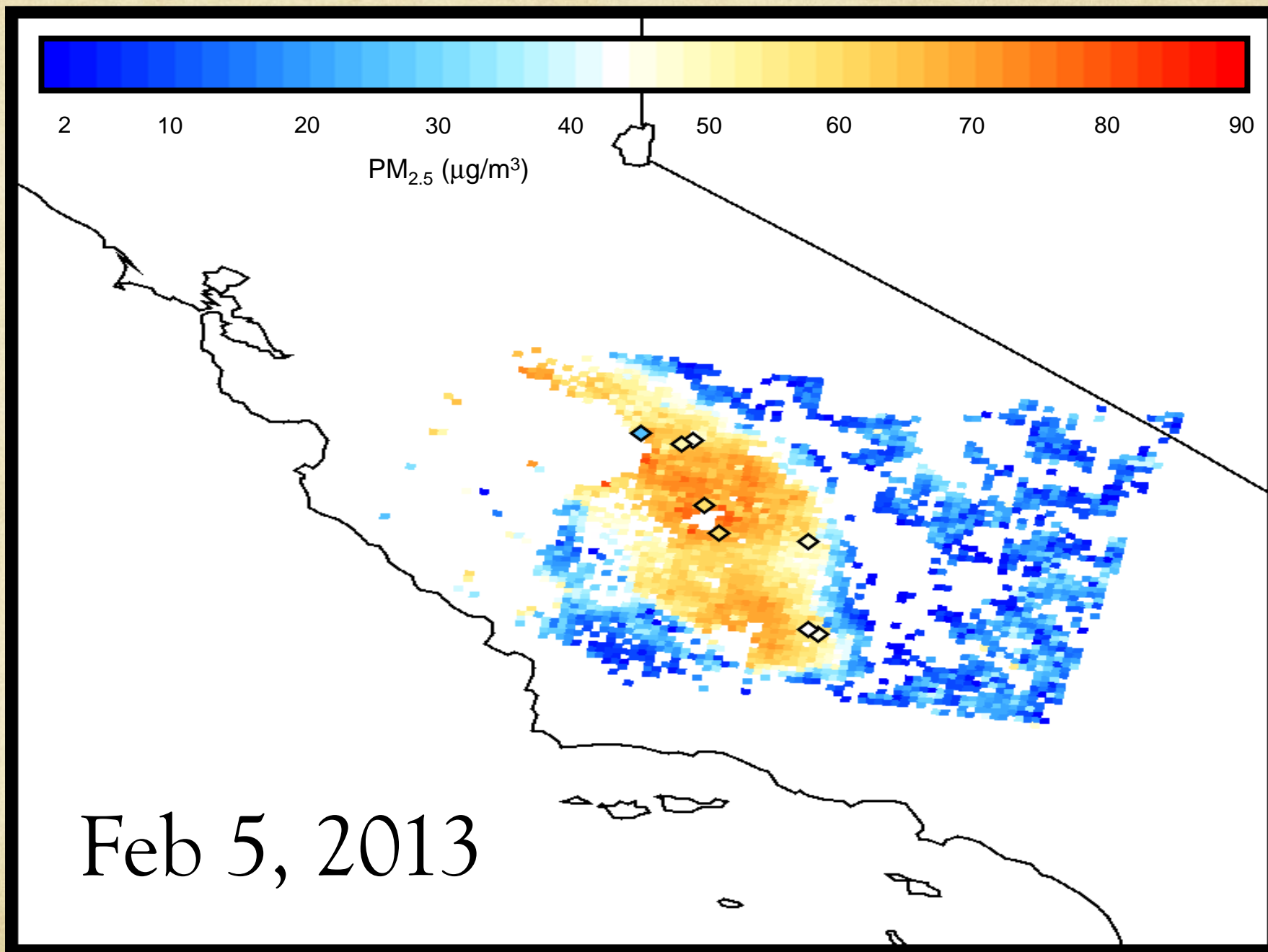


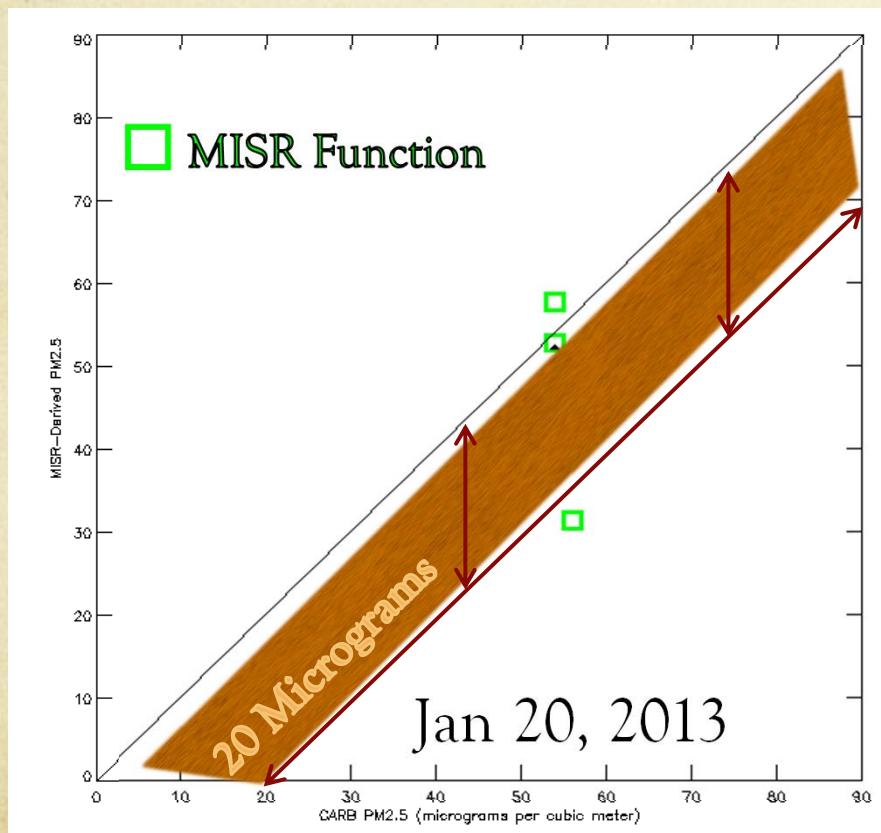






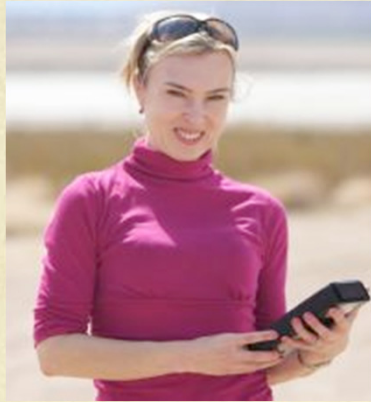






Thank You

Research Mentor: Olga Kalashnikova



Co Mentor: Michael Garay

