

Supplementary Information from Rachel Schwartz:

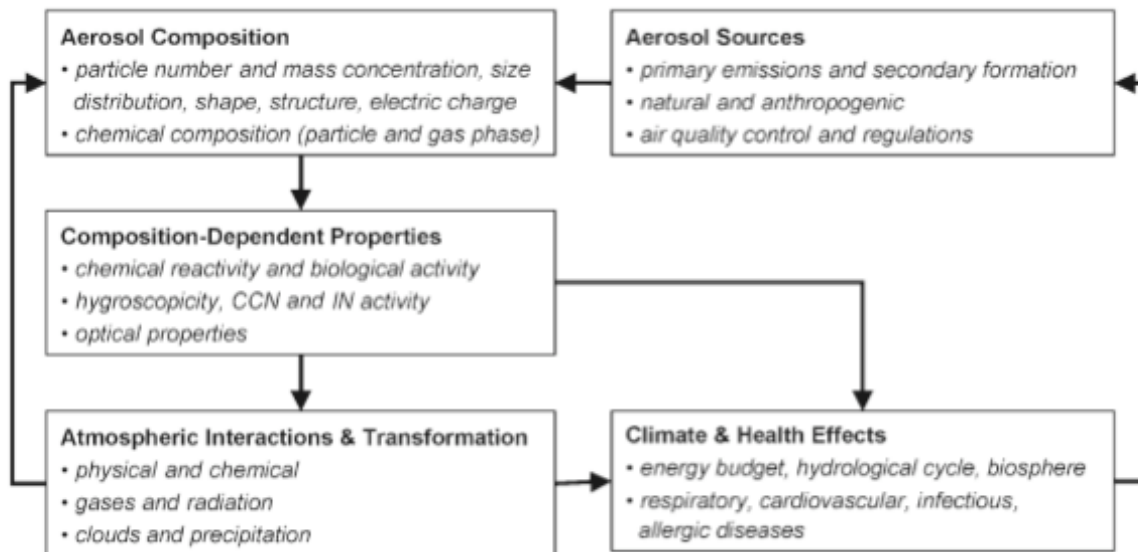


Figure 1 Interdependence and feedback between aerosol sources, composition, properties, interactions, and effects to society through climate and health are shown. [Pöschl 2005]

Pöschl U., Atmospheric Aerosols : Composition, Transformation, Climate and Health Effects. *Angew. Chem. Int. Ed.* **2005**, 44, 7520 – 7540, DOI: 10.1002/anie.200501122

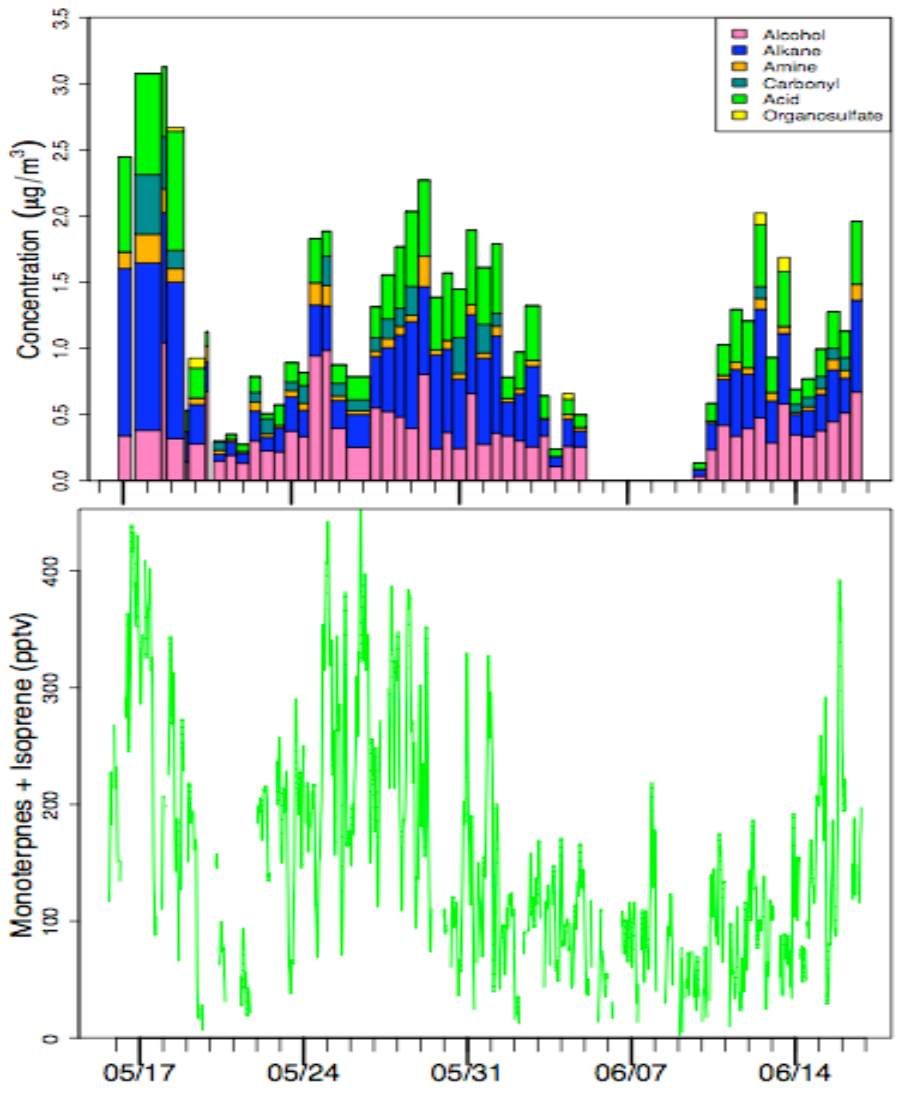


Figure 2 Time series of a) organic functional group measurements by FTIR with alcohol (hot pink), alkane (blue), carbonyl (teal), amine (orange), acid (green), and organosulfur (yellow) b) BVOCs (monoterpenes + isoprene) concentrations over the one month study.

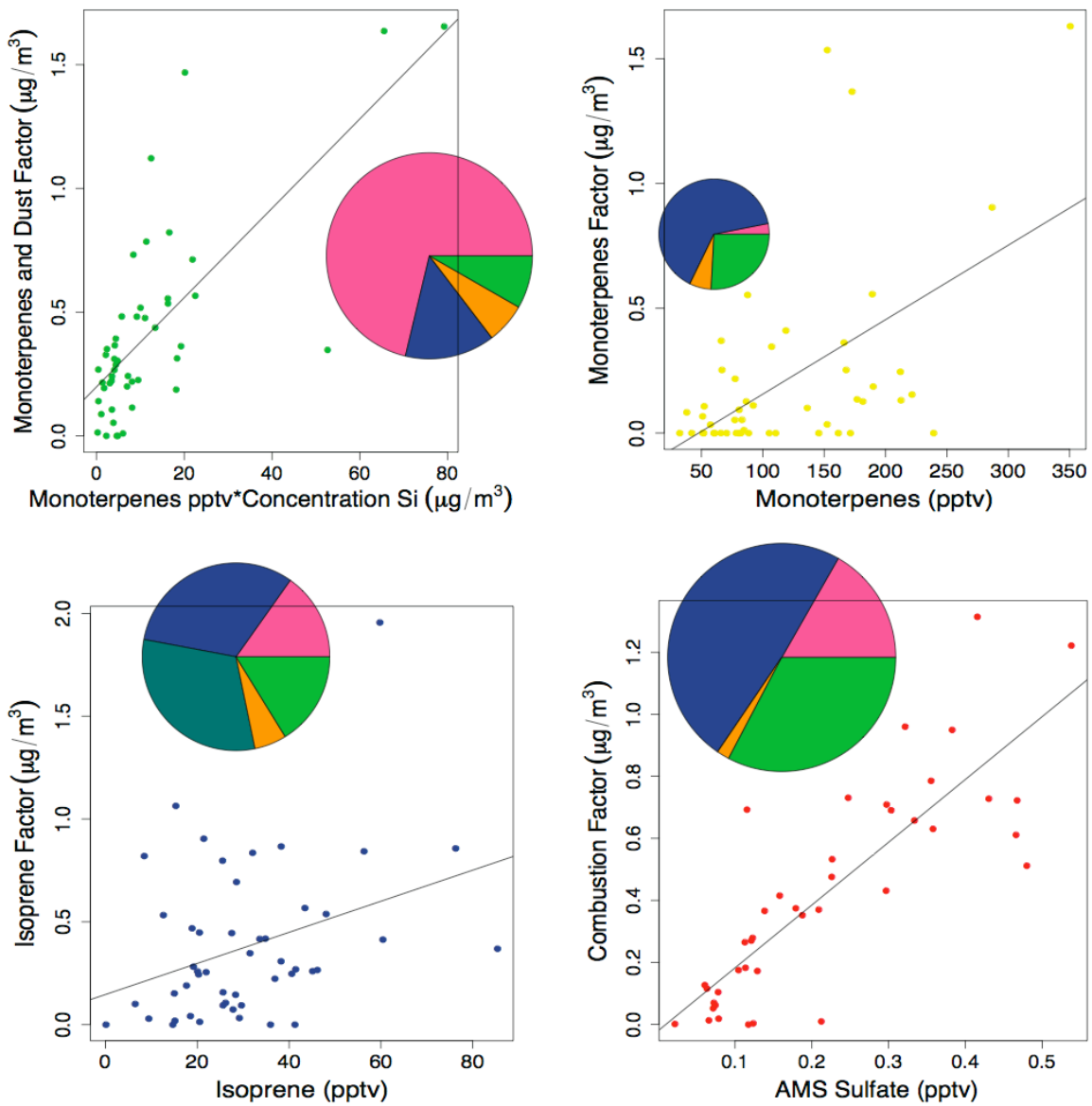


Figure 3 The OM is represented by four factors from PMF analysis. The composition of the factors are shown in the pie charts (with same color scheme as in Figure 2). The size of the pie represented each factors contribution to the total OM. A key correlation that assisted in the identification of each factor is shown under each pie.

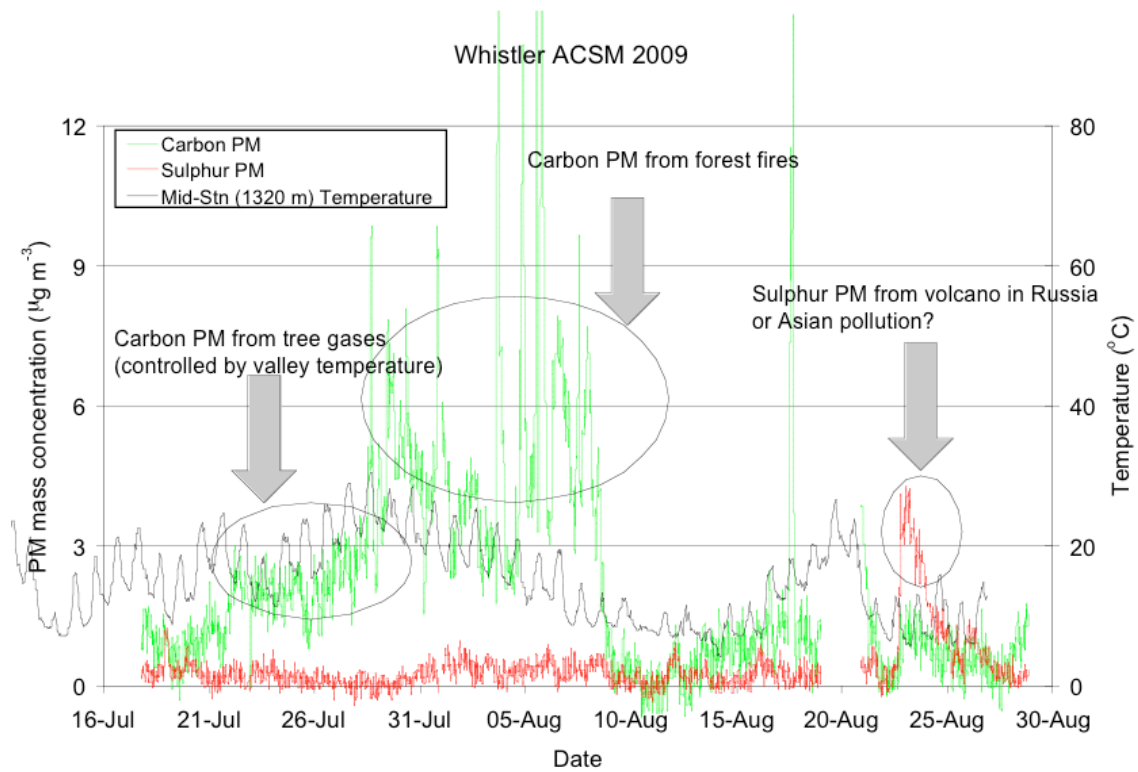


Figure 4 Preliminary results of particulate matter (PM) mass concentrations and likely sources by Aerosol Chemical Speciation Monitor (ACSM) at Whistler Peak 2009.