



Modeling PAH concentrations from wildfire in California

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³Department of Environmental and Occupational Health, UC, Irvine, CA, USA. ⁴Department of Mechanical and Aerospace Engineering, UC, Irvine, CA, USA IOA Base = 0.57IOA Fire = 0.70Obs. (₅m/gn) 200 NMB Base = -57.27% NMB Fire = -39.42%Base NME Base = 57.72% NME Fire = 47.36% California Mixed Ryegrass Validation 2016 Fort McMurray Wildfires **Polycyclic Aromatic Hydrocarbons** Napthalene Sep-08 Sep-15 Sep-22 Oct-01 Oct-08 Oct-15 Oct-22 Chrysene Naphthalene Emissions Silver Birch ₹ 15.0 · Veg. 12.5 Pyrene Coronene 10.0 Distribution C₁₆H₁₀ C24H12 Particle Phase PAH emissions (µg/kg) = Fire (1924 tons) = Non-Fire (178 tons) Sep-01 Sep-08 Sep-15 Sep-22 Oct-01 Oct-08 Oct-15 Oct-22 PM PAH Emissions μg/kg fuel burned Population **Emission** 31382.6 Deciduous Trees 13124.6 Exposure 80.0 💆 1653.2 by Veg. ₹ 0.06 TYPES OF TREES 0 3570 140 Kilometers С لتتتليينا = Fire (296 tons) = Non-Fire (63 tons) Sep-01 Sep-08 Sep-15 Sep-22 Oct-01 Oct-08 Oct-15 Oct-22 Naphthalene (ppt) **SMOKE CMAQ** 0.17 **Emission** Factor 0.14 0.13 0.12 0.09 0.08 0.07 0.06 0.05 0.02