Thanks for addressing most of the reviewer concerns. Please address a remaining issues raised by reviewer "Thank you to the authors for addressing my concerns. I now recommend acceptance, but suggest three small additions. First, in the statement "e.g., CO production from HCHO photolysis and oxidation for 1 h is < 1% of CO concentrations in the plumes" please support this with a calculation, figure, citation, or other proof rather than a simple assertion. Second, please define what is meant by "reasonable fit" on line 354 and "meaningful fit" on line 366, as these are used to justify comparing two different types of fits but not given a standardized definition. Third, please include the bootstrapped uncertainty in R2 for Fig. S11 as done in Fig 3 so that the two figures can be fully compared with one another." in you revision. Thanks. Dubey

1. Changed to : e.g., CO production from HCHO photolysis and oxidation for 1 h is about 2.5 ppbv, which is < 1% of CO concentrations of 985 ppbv on average in the plumes.

2. Changed to "Because uncertainty weighted linear regression yields a low $r^2 = 0.08$ for Fig. S11a, unweighted (or equally weighted) bivariate linear regression is used."

    Changed to "$r^2 = 0.1$ from bivariate regression as uncertainty weighted linear regression does not yield a reasonable fit" to "$r^2 = 0.1$ from bivariate regression"

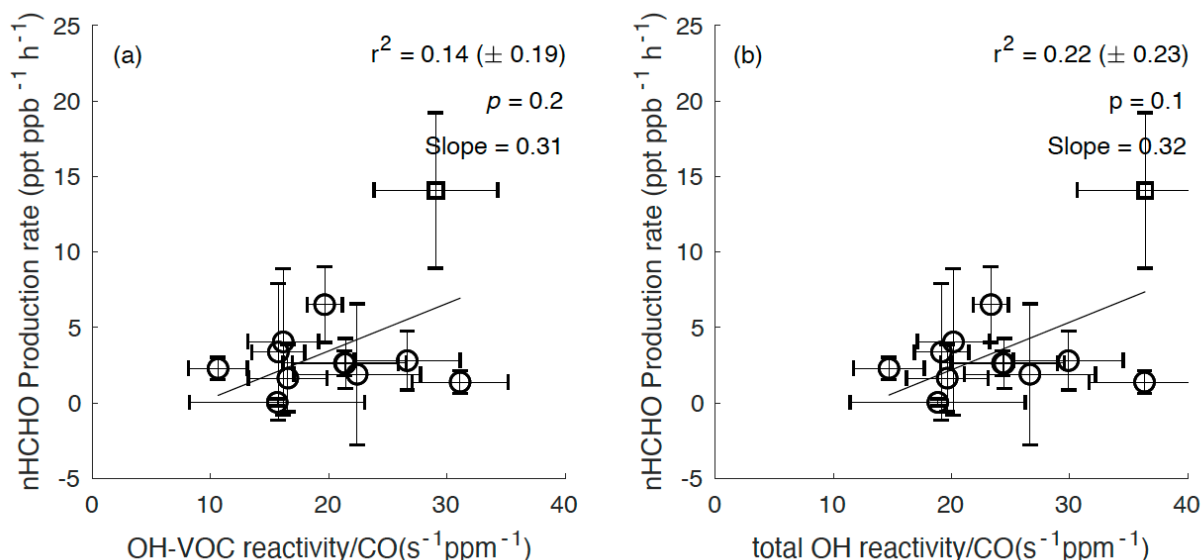3. Bootstrapped uncertainties are added to Fig. S11.

Figure S11. (a). Average nHCHO production rate vs. normalized OH-VOC reactivity (OH-VOC reactivity /CO) for the 12 plumes including 11 western US wildfire plumes (circles) and 1 eastern US wildfire plume (square). Unweighted bivariate linear regression was applied to fit the data. The unweighted (or equally weighted) bivariate linear regression yields a slope = 0.31, $r^2 = 0.14 \pm 0.19$, and $p = 0.2$ for the 12 wildfire plumes. (b) Average secondary nHCHO production rate vs. total OH reactivity/CO for the 12 plumes including 11 western US wildfire plumes (circles) and 1 eastern US wildfire plume (square). An unweighted (or equally weighted) bivariate linear regression yields a slope = 0.32, $r^2 = 0.22 \pm 0.23$, and $p = 0.1$ for the 12 wildfire plumes.