Figure S1: Absorption cross section of HONO with the 355-nm emission from the third harmonic of the Nd:YLF laser highlighted.
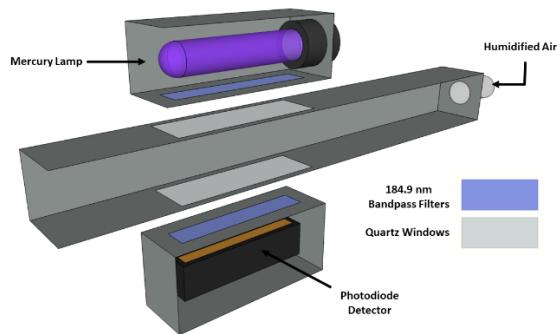
Figure S2: Diagram of the water vapor photolysis calibration source.
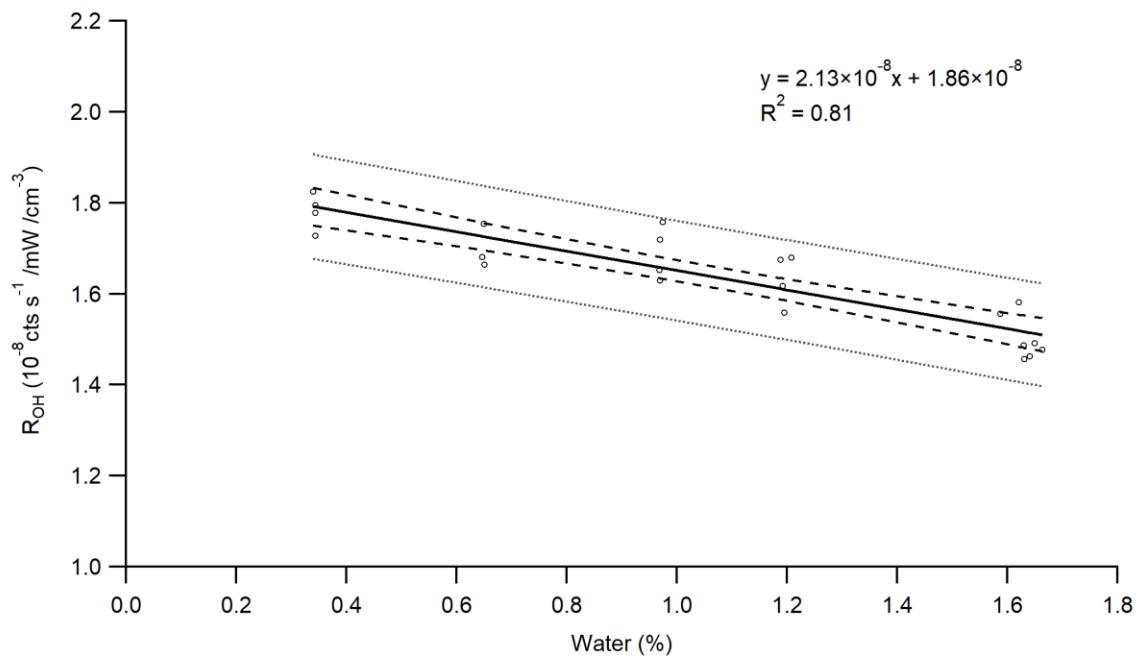
Figure S3: Plot of instrumental sensitivity to OH (R_{OH}) dependence on water vapor. The dashed lines represent a 95% linear fit confidence interval and the dotted lines represent a 95% prediction interval.
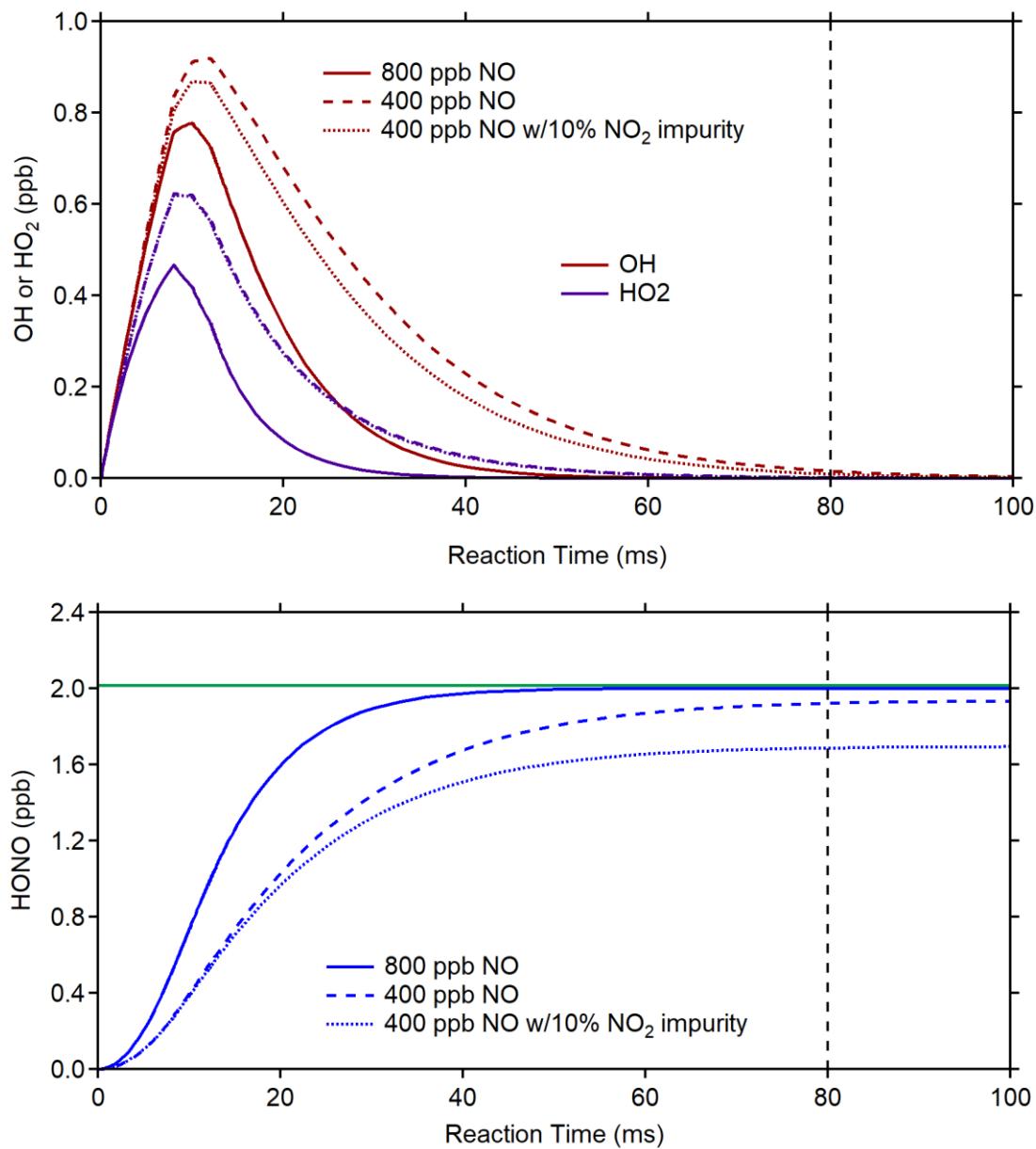
Figure S4: Photolysis efficiency (PE) calibration modeling. The black dashed line represents the approximate reaction time between the onset of radical production from 184.9-nm photolysis of water and the exit of the calibration source, at a flow rate of 10 SLPM, and the green line represents the total radicals produced in the photolysis region in the absence of NO.