



**Figure S1.** Vertical profile of air temperature (solid black line, degree C) and water vapor mixing ratio (dashed blue line, mmole H<sub>2</sub>O mole air<sup>-1</sup>). The vertical profile was obtained approximately 10 km upwind of the Williams Fire from 15:23:29–15:30:30 LT. The surface elevation beneath the vertical profile was approximately 370 m msl. Note the temperature inversion and sharp water vapor decrease between 800–950 m a.m.s.l.