



**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. The surface elevation beneath the vertical profile was approximately 370 m msl. Note the temperature inversion and sharp water vapor decrease between 800 m and 950 m.