Supplemental Material

Surface ozone in the Colorado northern Front Range and the influence of oil and gas development during FRAPPE/DISCOVER-AQ in summer 2014

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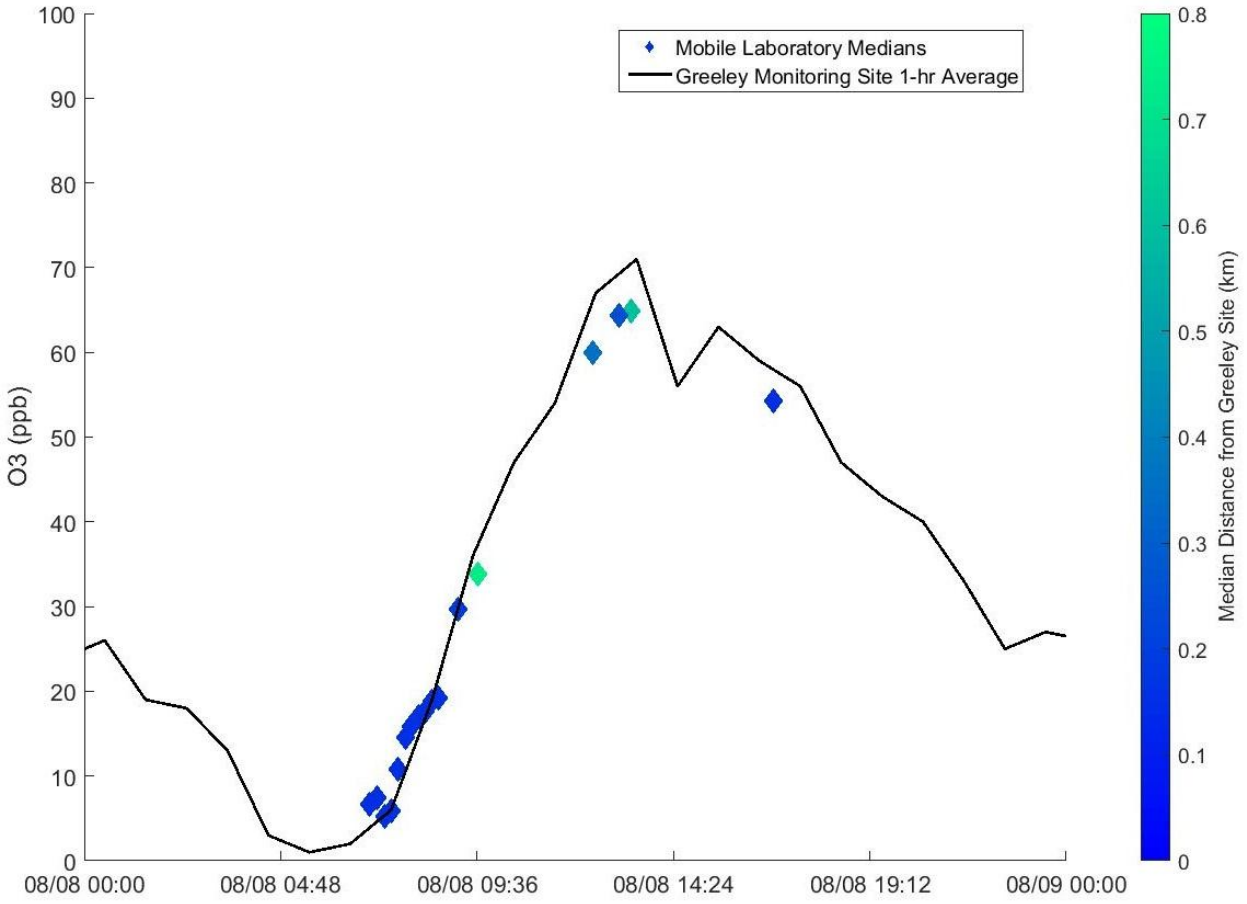

Figure S1. Comparison of mobile laboratory O_3 measurements with Greeley monitoring site on August 8, 2014.

Comparison of mobile laboratory O_3 measurements (diamonds) with the Greeley monitoring site (black line showing hourly average O_3) for all time periods on August 8, 2014 when the mobile laboratory was <1 km from the Greeley site. Color coded diamonds show medians of the mobile laboratory measurements for 0-10 minute intervals (10 minutes when the measurement period nearby the Greeley site was >10 minutes) with colors indicating median distance from the Greeley site.

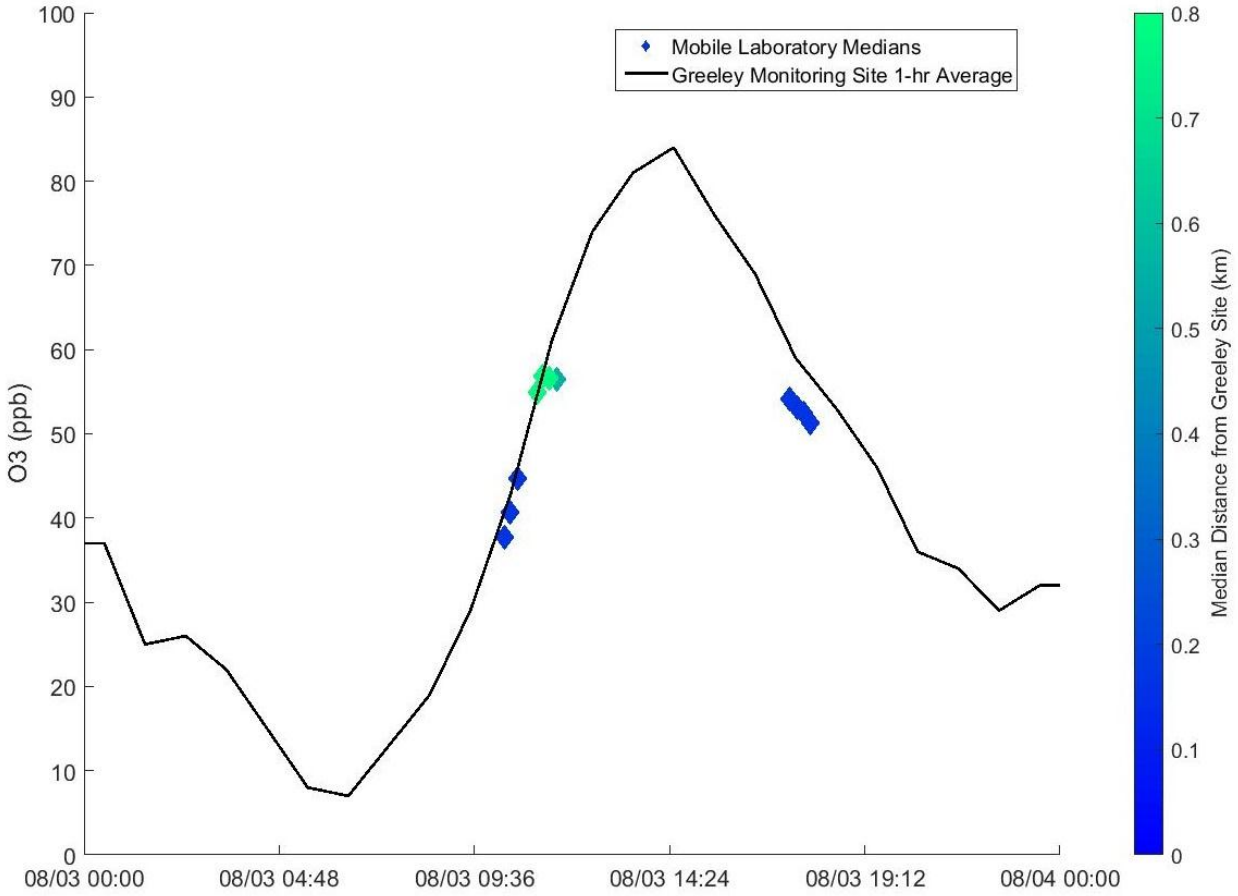

Figure S2. Comparison of mobile laboratory O_3 measurements with Greeley monitoring site on August 3, 2014.

Comparison of mobile laboratory O_3 measurements (diamonds) with the Greeley monitoring site (black line showing hourly average O_3) for all time periods on August 3, 2014 when the mobile laboratory was <1 km from the Greeley site. Color coded diamonds show medians of the mobile laboratory measurements for 0-10 minute intervals (10 minutes when the measurement period nearby the Greeley site was >10 minutes) with colors indicating median distance from the Greeley site.

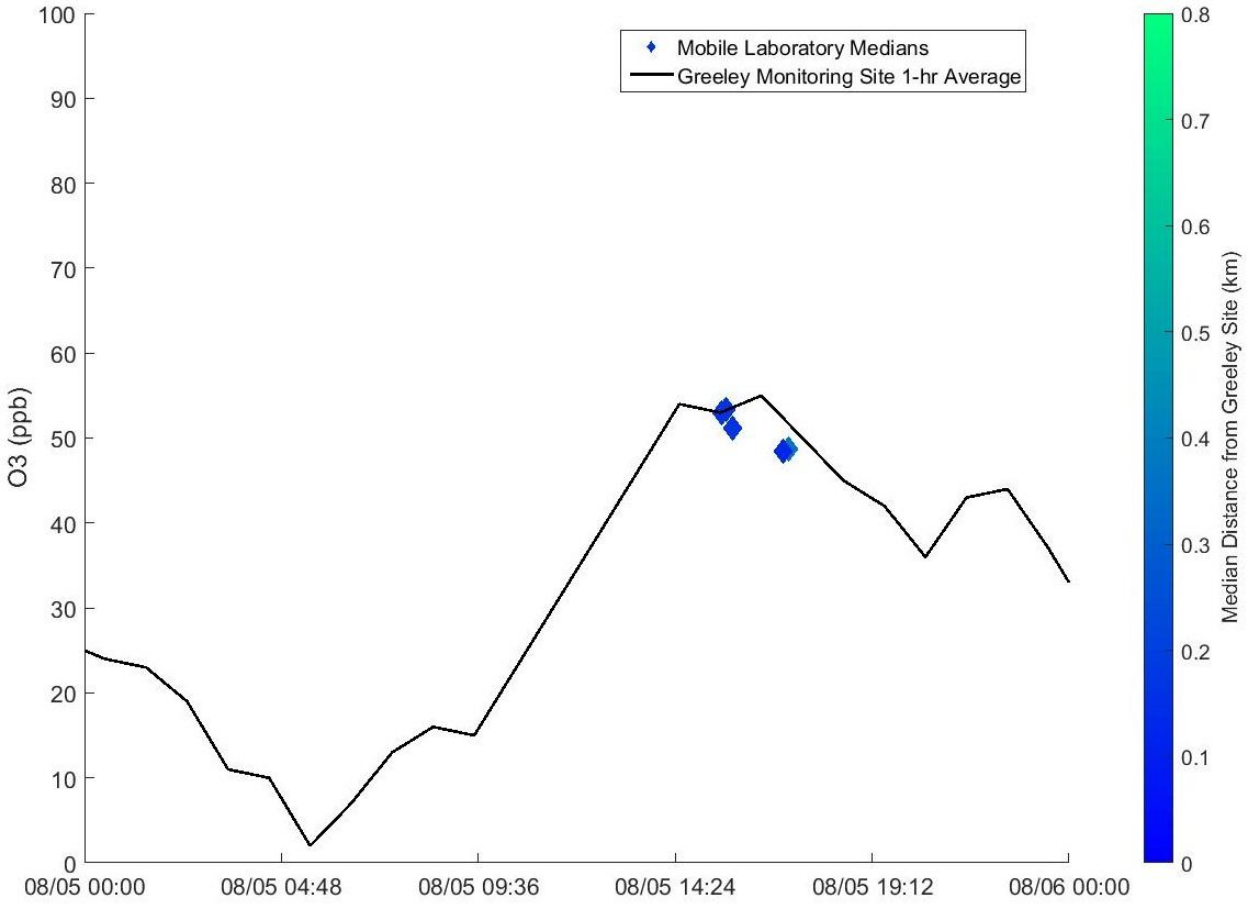

Figure S3. Comparison of mobile laboratory O_3 measurements with Greeley monitoring site on August 5, 2014.

Comparison of mobile laboratory O_3 measurements (diamonds) with the Greeley monitoring site (black line showing hourly average O_3) for all time periods on August 5, 2014 when the mobile laboratory was <1 km from the Greeley site. Color coded diamonds show medians of the mobile laboratory measurements for 0-10 minute intervals (10 minutes when the measurement period nearby the Greeley site was >10 minutes) with colors indicating median distance from the Greeley site.

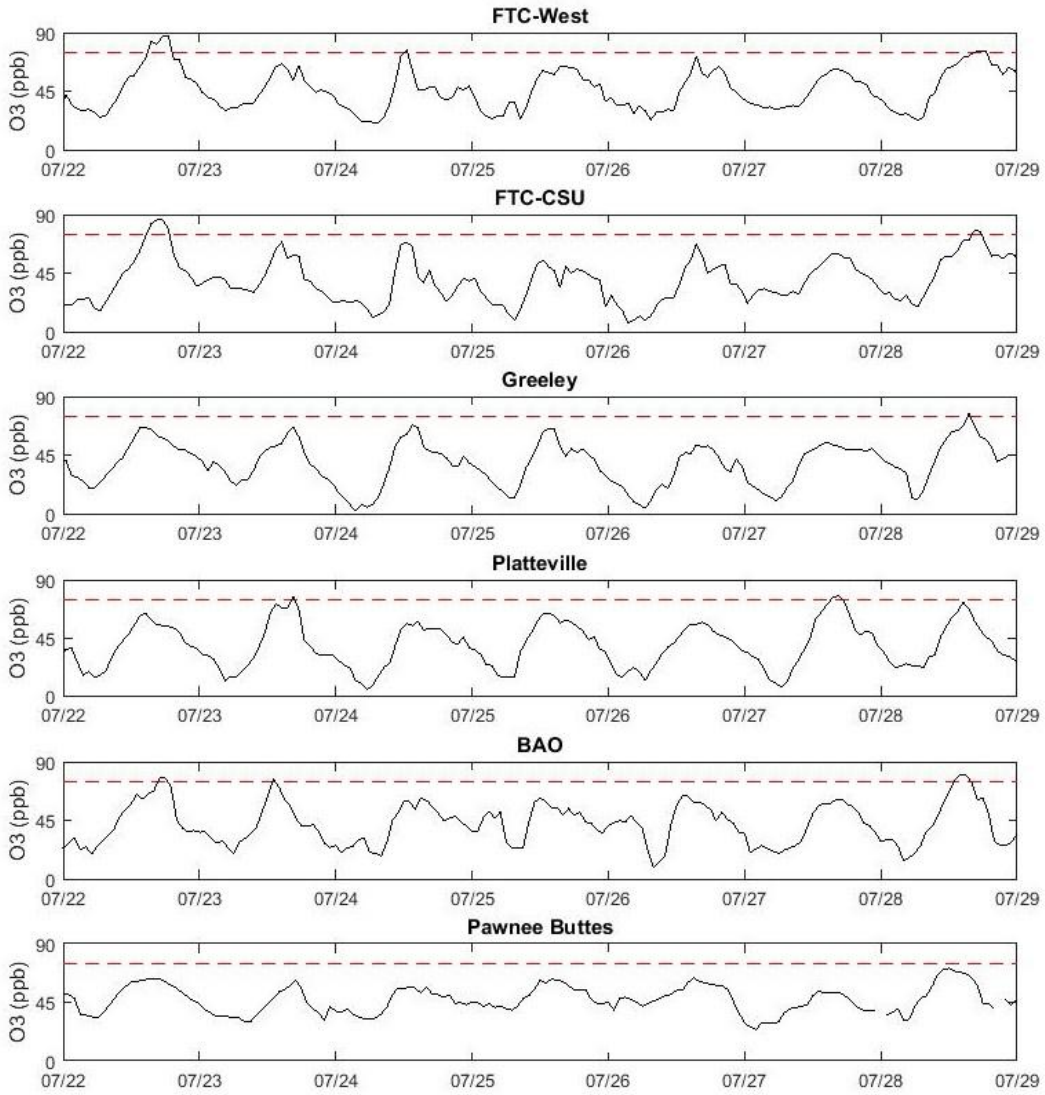

Figure S4. O_3 measurements at six surface sites for a week in July 2014.

Hourly average O_3 measurements at surface monitoring stations from July 22 to July 28, 2014 for FTC-West, FTC-CSU, Greeley, Platteville, BAO 6 m, and Pawnee Buttes. Dashed red lines indicate a mixing ratio of 75 ppb.

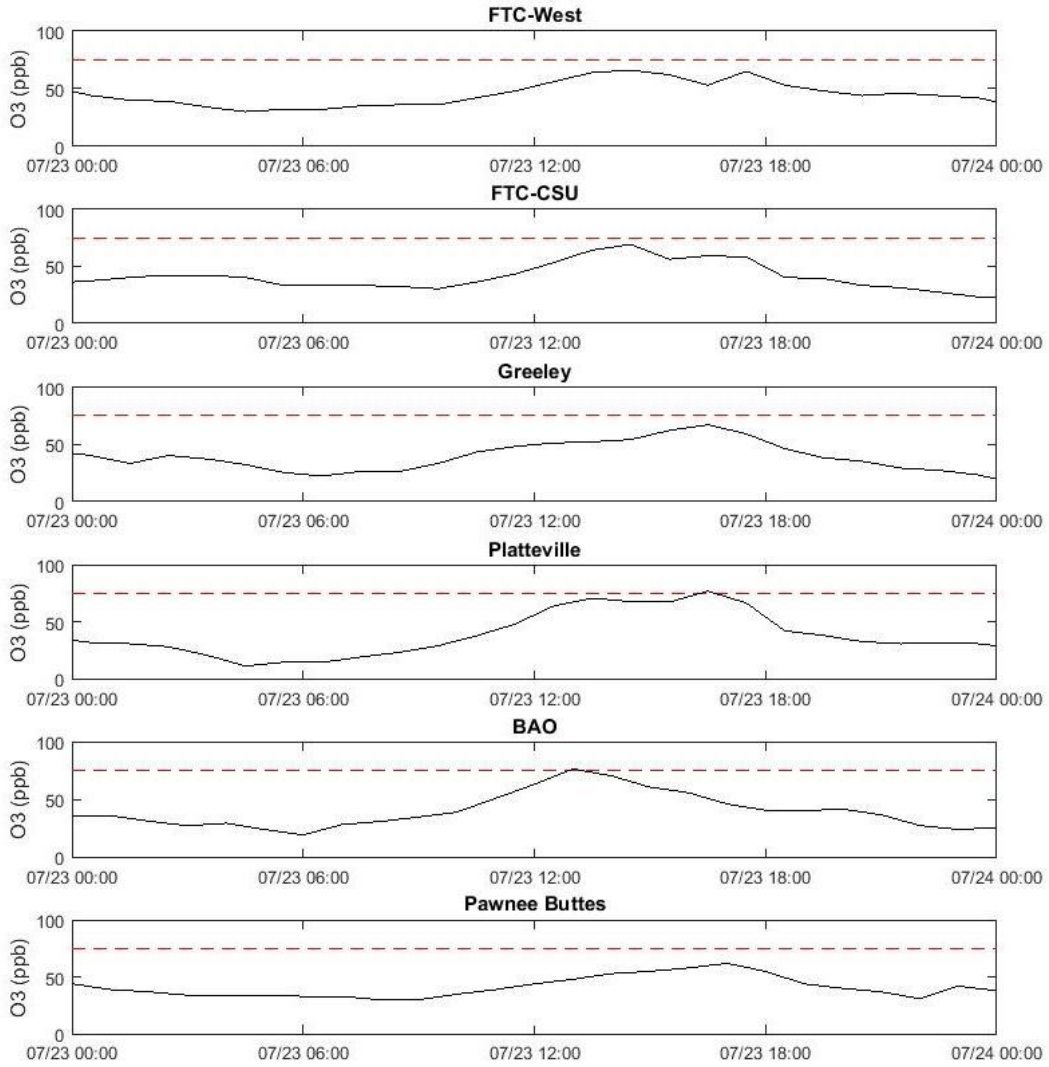

Figure S5. O_3 measurements at six surface sites on July 23, 2014.

Hourly average O_3 measurements at surface monitoring stations on July 23, 2014 for FTC-West, FTC-CSU, Greeley, Platteville, BAO 6 m, and Pawnee Buttes. Dashed red lines indicate a mixing ratio of 75 ppb.

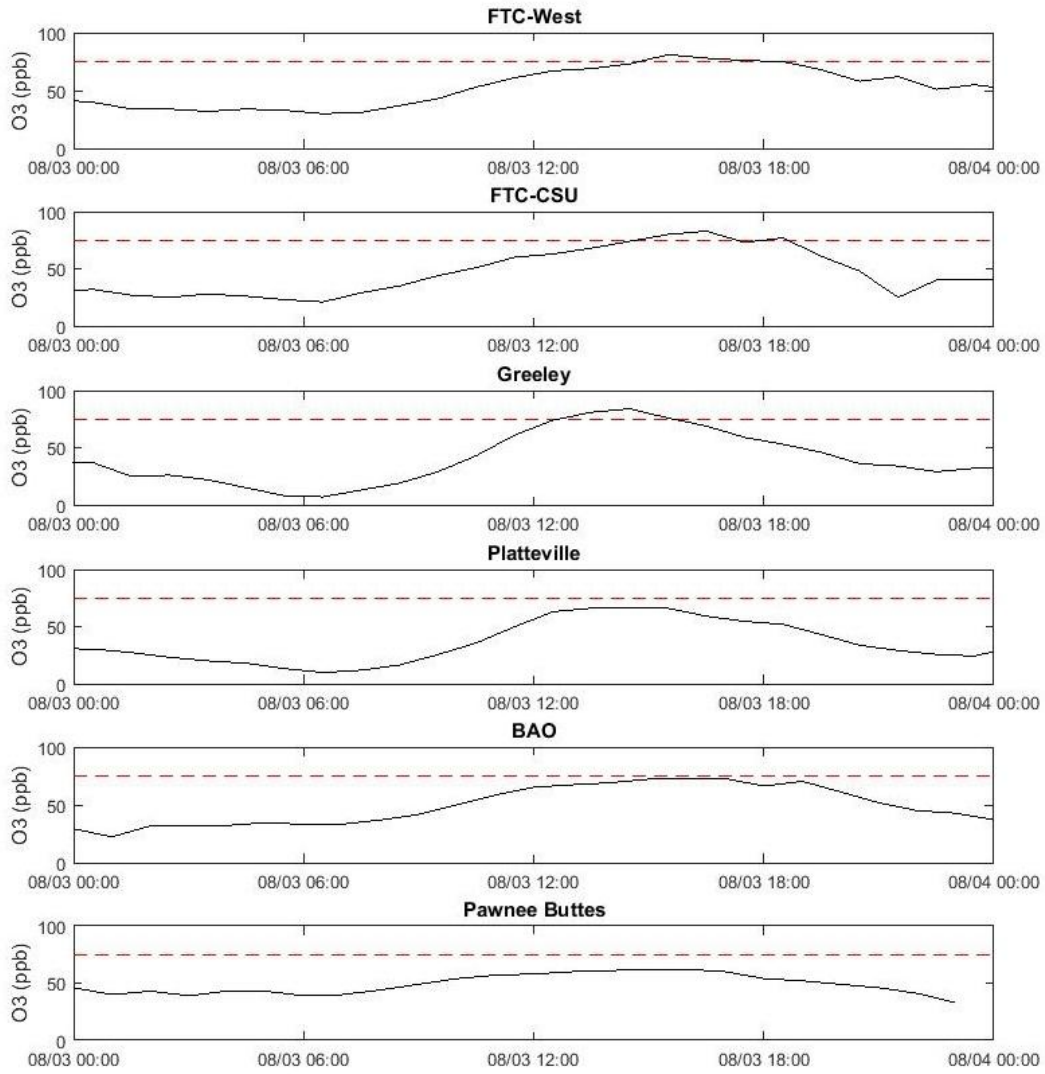

Figure S6. O_3 measurements at six surface sites on August 3, 2014.

Hourly average O_3 measurements at surface monitoring stations on August 3, 2014 for FTC-West, FTC-CSU, Greeley, Platteville, BAO 6 m, and Pawnee Buttes. Dashed red lines indicate a mixing ratio of 75 ppb.

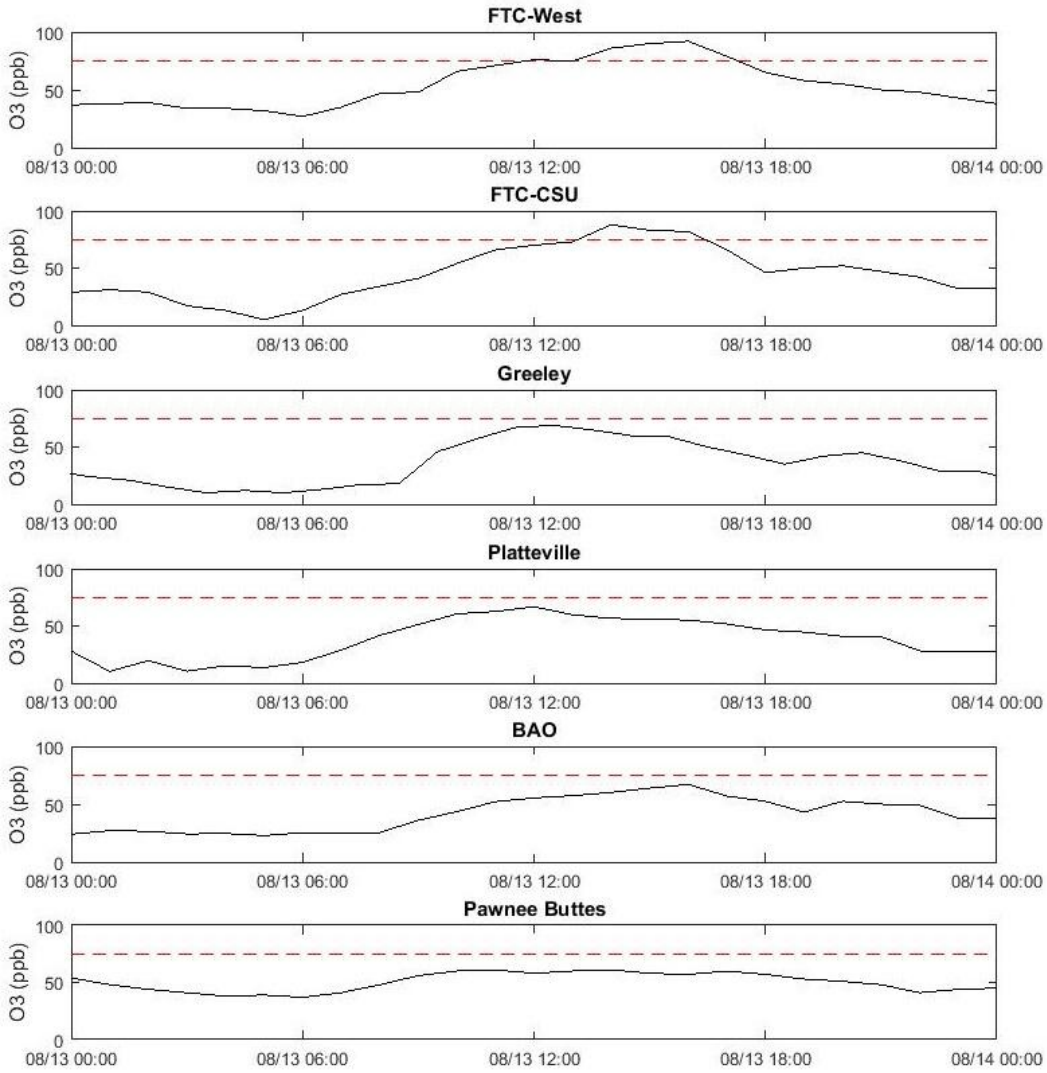

Figure S7. O_3 measurements at six surface sites on August 13, 2014.

Hourly average O_3 measurements at surface monitoring stations on August 13, 2014 for FTC-West, FTC-CSU, Greeley, Platteville, BAO 6 m, and Pawnee Buttes. Dashed red lines indicate a mixing ratio of 75 ppb.