



Figure A.9: Boxplots of the raw ΔT_p for dry and wet periods of each experiment at each T_p height. Rows correspond to the experiment day; columns correspond to the experiment time category.



Figure A.10: ΔT_p and $T_{p,con}$ at each T_p height, lines showing the linear relationship for each experiment. The black outline indicates if the linear relationship is statistically significant (p < 0.05).

Experiment	PWimpact for KT
08M	-0.45
08A	+0.59
08E	-0.10
12M	-0.35
12A	-0.27
12E	-0.11
13M	+0.61
13A	-0.84
13E	-0.18

Table A2: PW_{impact} for K_T for all experiments.

Table A3: $\bar{\Delta}_{dry}$ and PW_{impact} for $T_{s,drvd}$ for all experiments.

Experiment	$\bar{\Delta}_{dry}$ (°C)	PW _{impact} (°C)
08M	-0.46	-4.38
08A	-2.24	-5.10
08E	-2.42	-2.14
12M	-0.48	-3.25
12A	-1.77	-3.77
12E	-1.83	-2.49
13M	-0.25	-6.84
13A	-1.77	-5.53
13E	-3.37	-2.24



Figure A.11: Boxplots of the ΔT_p for dry and wet periods of each experiment at each T_p height, corrected by detrending based on the linear relationship between ΔT_p and $T_{p,con}$ (Figure A.10). Rows correspond to the experiment day; columns correspond to the experiment time category.



Figure A.12: ΔT_p and u_{10} at each T_p height, lines showing the linear relationship for each experiment. The black outline indicates if the linear relationship is statistically significant (p < 0.05).



Figure A.13: Boxplots of the ΔT_p for dry and wet periods of each experiment at each T_p height, corrected by detrending based on the linear relationship between ΔT_p and u_{10} (Figure A.12). Rows correspond to the experiment day; columns correspond to the experiment time category.



Figure A.14: ΔT_p corrected based on the mean of before watering for each experiment. The transparent lines are the raw data, while the solid lines are the 5-minute running average. The dashed lines on (b) represented the mean of the wet period, where grey represents a statistically insignificant change (p > 0.05). Rows correspond to the experiment day; columns correspond to the experiment time category.



Figure A.15: The $T_{s,trns}$ of all experiments showing the evolution from before, during, and after the wet period (subplot rows) for control and experimental points along the transect (subplot columns). Rows correspond to the experiment day; columns correspond to the experiment time category.



Figure A.16: The $\Delta T_{s,trns}$ of all experiments where the wet refers to the mean $\Delta T_{s,trns}$ of the wet period, adjusted so the before watering difference is zero. The black outline indicates that the experimental points are statistically significantly lower than the control points (p < 0.05).



Figure A.17: $T_{s,drvd}$ for the control and experimental site with T_s for the experiment days: (a) 8th, (b) 12th, (c) 13th.



Figure A.18: (a) The mean surface energy balance of each experiment's control and experimental site before watering; (b) the Q_H and Q^* ratio for each experiment.



Figure A.19: The $\Delta Q_H/Q^*$ for the before watering (dry) and during wet (wet) time periods, along with their difference, for all experiments.