Table 2. Wilcoxon signed-rank paired t-tests of Vcmax, Jmax, and TPU with and without curve fitting, aggregated at the tree level for the full data set, the subset of data without overshoot, and the full dataset without a potentially influential leaf. The Wilcoxon signed-rank test tests whether the median of the paired differences differs from a hypothetical zero. The ‘median difference estimate’ (MDE) is a location parameter for the median difference (SS minus DAT), with an approximate 95% confidence interval. The test statistic ‘V’ refers to the sum of the positive-signed rank differences. Stars next to a given p-value represent the degree of significance (\*: p < 0.05; \*\*: p < 0.01; \*\*\* p < 0.001; \*\*\*\* = p < 0.0001). The effect size is the Z statistic divided by √n, where n is the sample size. Note the small sample size makes comparisons strongly underpowered for the TPU comparison (indicated with \* in the first column).

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| **Comparison** | **MDE**  (μmol CO2 m−2**·**s−1) | **V Statistic** | **p-value** | **Effect Size**  (μmol CO2 m−2**·**s−1) | **95% CI of the MDE**  (μmol CO2 m−2**·**s−1) |
| **DAT vs. SS: TPU-Enabled** | | | | | |
| Vcmax (n = 13 pairs) | 0.73 | 65 | 0.19 | 0.378 | -0.51, 2.02 |
| Jmax (n = 13 pairs) | 6.36 | 90 | < 0.01\*\*\* | 0.863 | 3.64, 10.91 |
| **DAT vs. SS: No TPU** | | | | | |
| Vcmax (n = 13 pairs) | 1.60 | 78 | 0.02\*\* | 0.630 | 0.25, 3.35 |
| Jmax (n = 13 pairs) | 9.24 | 91 | < 0.01\*\*\* | 0.882 | 4.17, 17.5 |
| **DAT vs. SS: TPU-Enabled, Only Curves without Overshoot** | | | | | |
| Vcmax (n = 9 pairs) | 0.97 | 38 | 0.08 | 0.612 | -0.10, 2.16 |
| Jmax (n = 9 pairs) | 4.77 | 44 | < 0.01\*\* | 0.849 | 2.11, 7.15 |
| **DAT vs. SS: No TPU, Only Curves without Overshoot** | | | | | |
| Vcmax (n = 9 pairs) | 1.86 | 41 | 0.03\* | 0.731 | 0.25, 3.55 |
| Jmax (n = 9 pairs) | 4.86 | 45 | < 0.01\*\* | 0.889 | 2.11, 9.91 |