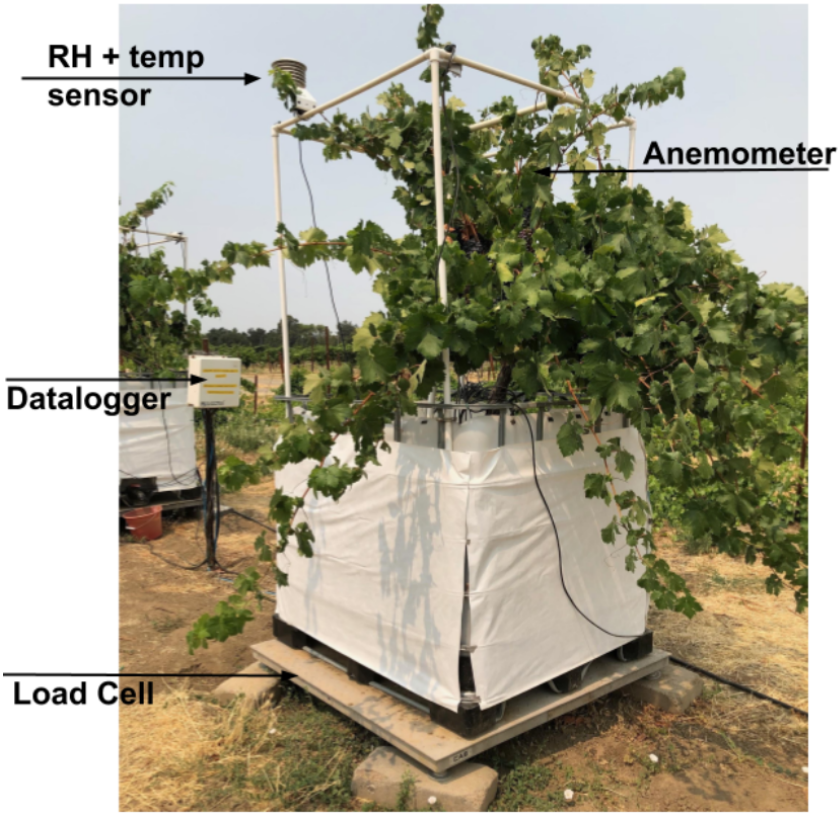
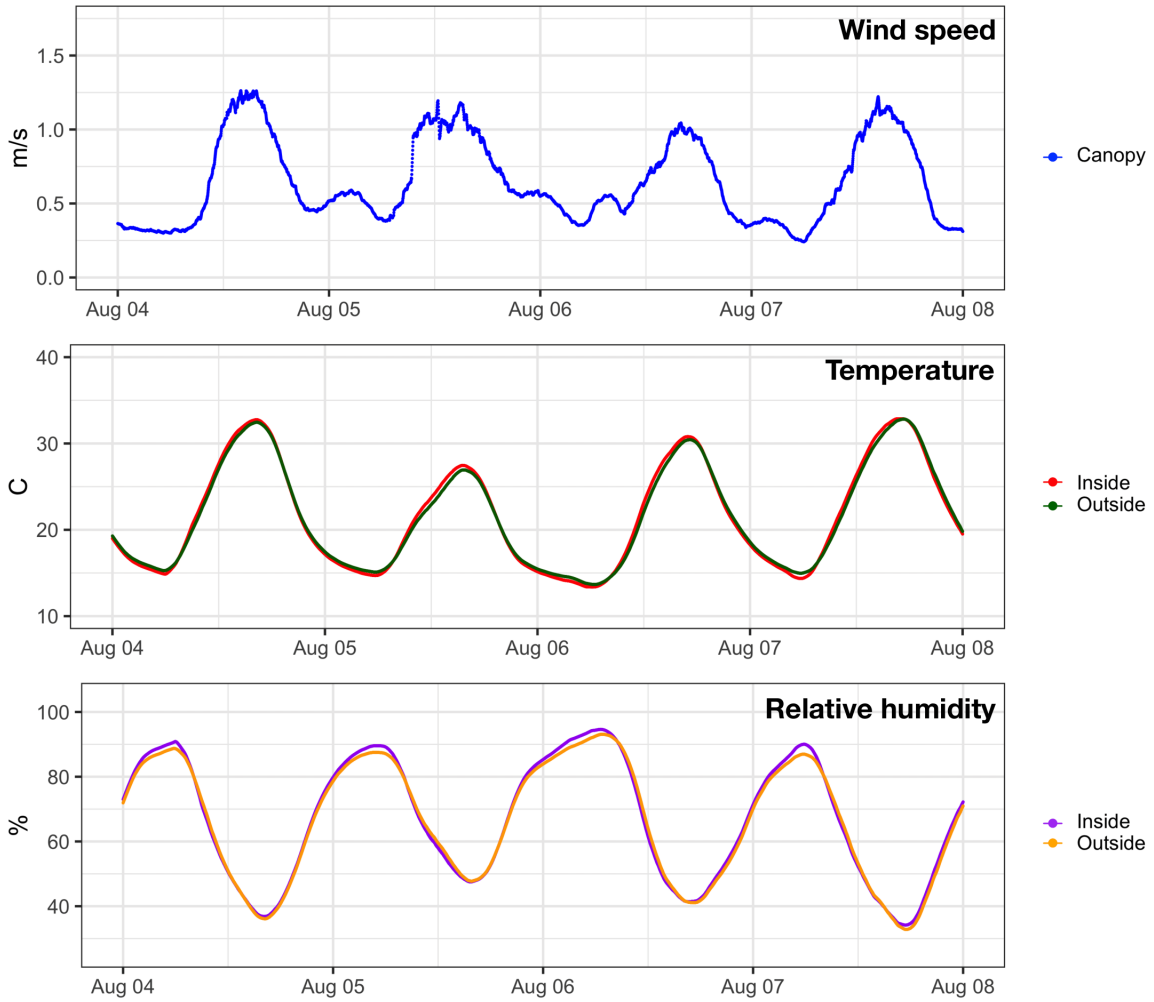
Jenkins, M., Mannsfeld, A., Nikzad, S., Lambert, J.-J., Miller, K., Burns, M., Earles, J.M. and Block, D.E. (2023). Novel algorithms for high-resolution prediction of canopy evapotranspiration in grapevine. *OENO One, 57*(3).
https://doi.org/10.20870/oeno-one.2023.57.3.7251

SUPPLEMENTARY DATA



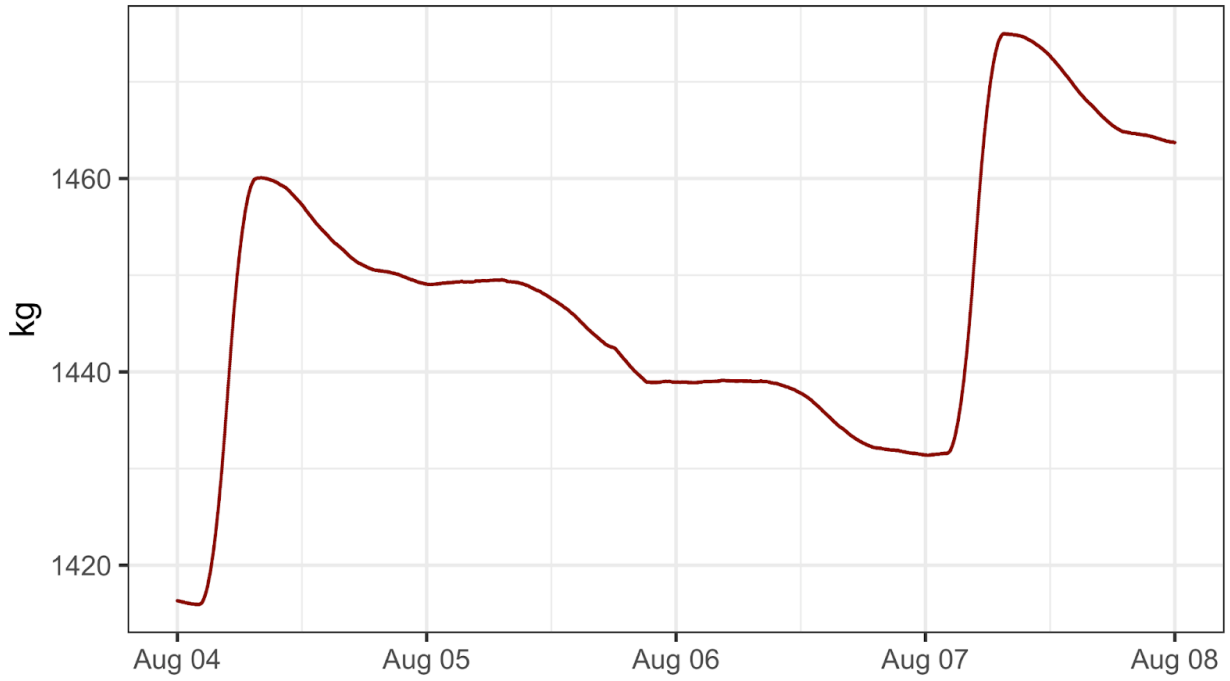
Supplementary Figure 1. Lysimeter grape vines

[a]Potted grapevine lysimeter used for HRI model validation. Note: a second relative humidity (RH) and temperature (temp) sensor is out of view, in the centre of the canopy.



Supplementary Figure 2. Biometeorological sensor data

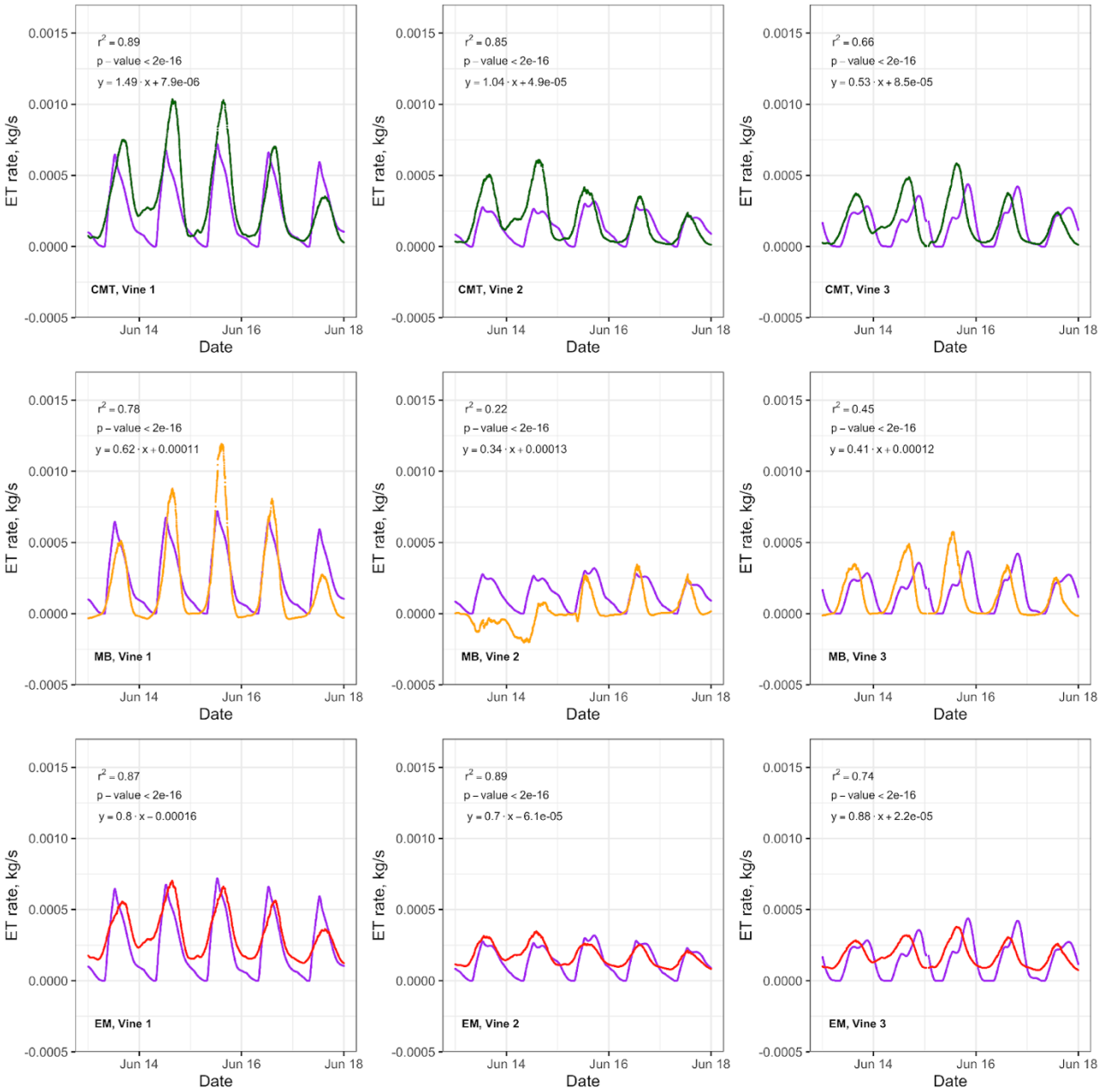
[a] (top) Wind speed inside the canopy, over time, with spikes during daylight hours and mild wind at night. (middle) Air temperature inside and outside the canopy, over time, with maxima around solar noon and minima just before sunrise. (bottom) Relative humidity inside and outside the canopy, over time, with maxima just before sunrise and minima around solar noon. Data from August 2020.



Supplementary Figure 3. Load cell data

[a]Data from the load cell, smoothed using a 180 minute moving average filter to remove noise. The periods of high positive (+) slope are irrigation events, the flat periods are nighttime when little to no ET is occurring, and the periods of negative (-) slope are daytime when ET rate is highest. Data from August 2020.

Jenkins, M., Mannsfeld, A., Nikzad, S., Lambert, J.-J., Miller, K., Burns, M., Earles, J.M. and Block, D.E. (2023). Novel algorithms for high-resolution prediction of canopy evapotranspiration in grapevine. *OENO One, 57*(3).
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Supplementary Figure 4. Predicted and measured ET rates over time, expanded

[a]Each plot shows the ET rate of water as determined by the load cell and by one the HRI models for a 5 day period in June 2022. In all figures the purple line represents the load cell measured ET rate. In the top row the green lines are CMT predicted ET rate, in the middle row the yellow lines are MB predicted ET rate, and in the bottom row the red lines are EM predicted ET rate.