

Academic Publishing Record

Rhys J. Whitley | September 2018

Fully Refereed Conference Proceedings

Vella, A., **Whitley, R.J.**, Armstrong, N., Dowd, A., Cline, J., 2006. Analysis of admixed CeO₂ Nanoparticles via TEM and X-ray Diffraction Techniques. Australian Institute of Physics.

Yunusa, I., **Whitley, R.J.**, Zeppel, M., Eamus, D., 2009. Simulation of Evapotranspiration and Vadose Zone Hydrology Using Limited Soil Data: A Comparison of Four Computer Models, in: 2009 Second International Conference on Environmental and Computer Science. IEEE, pp. 152–155. <https://doi.org/10.1109/ICECS.2009.95>

Refereed Journal Articles

Davis, T.W., Prentice, I.C., Stocker, B.D., Thomas, R.T., **Whitley, R.J.**, Wang, H., Evans, B.J., Gallego-Sala, A.V., Sykes, M.T., Cramer, W., 2017. Simple process-led algorithms for simulating habitats (SPLASH v.1.0): robust indices of radiation, evapotranspiration and plant-available moisture. Geoscientific Model Development 10, 689–708. <https://doi.org/10.5194/gmd-10-689-2017>

Eamus, D., Yunusa, I., Taylor, D., **Whitley, R.J.**, 2013. Design of store-release covers to minimize deep drainage in the mining and waste-disposal industries: results from a modelling analyses based on ecophysiological principles. Hydrological Processes 27, 3815–3824. <https://doi.org/10.1002/hyp.9482>

Fuentes, S., Palmer, A.R., Taylor, D., Zeppel, M., **Whitley, R.J.**, Eamus, D., 2008. An automated procedure for estimating the leaf area index (LAI) of woodland ecosystems using digital imagery, MATLAB programming and its application to an examination of the relationship between

remotely sensed and field measurements of LAI. *Functional Plant Biology* 35, 1070.

<https://doi.org/10.1071/FP08045>

Guyot, A., Fan, J., Oestergaard, K.T., **Whitley, R.J.**, Gibbes, B., Arzac, M., Lockington, D.A., 2017.

Soil-water content characterisation in a modified Jarvis-Stewart model: A case study of a conifer forest on a shallow unconfined aquifer. *Journal of Hydrology* 544, 242–253.

<https://doi.org/10.1016/j.jhydrol.2016.11.041>

Macinnis-Ng, C.M.O., Fuentes, S., O'Grady, A.P., Palmer, A.R., Taylor, D., **Whitley, R.J.**, Yunusa, I., Zeppel, M.J.B., Eamus, D., 2010. Root biomass distribution and soil properties of an open woodland on a duplex soil. *Plant and Soil* 327, 377–388. <https://doi.org/10.1007/s11104-009-0061-7>

Whitley, R.J., Beringer, J., Hutley, L., Abramowitz, G., De Kauwe, M.G., Duursma, R., Evans, B.,

Haverd, V., Li, L., Ryu, Y., Smith, B., Wang, Y.-P., Williams, M., Yu, Q., 2015. A model inter-comparison study to examine limiting factors in modelling Australian tropical savannas.

Biogeosciences Discussions 12, 18999–19041. <https://doi.org/10.5194/bgd-12-18999-2015>

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Moore, C., Ryu, Y., Scheiter, S., Schymanski, S.J., Smith, B., Wang, Y.-P., Williams, M., Yu, Q., 2017.

Challenges and opportunities in land surface modelling of savanna ecosystems. *Biogeosciences*

14, 4711–4732. <https://doi.org/10.5194/bg-14-4711-2017>

Whitley, R.J., Macinnis-Ng, C.M.O., Hutley, L.B., Beringer, J., Zeppel, M., Williams, M., Taylor, D.,

Eamus, D., 2011. Is productivity of mesic savannas light limited or water limited? Results of a simulation study. *Global Change Biology* 17, 3130–3149. <https://doi.org/10.1111/j.1365-2486.2011.02425.x>

Whitley, R.J., Medlyn, B., Zeppel, M.J.B., Macinnis-Ng, C.M.O., Eamus, D., 2009. Comparing the

Penman–Monteith equation and a modified Jarvis–Stewart model with an artificial neural network to estimate stand-scale transpiration and canopy conductance. *Journal of Hydrology*

373, 256–266. <https://doi.org/10.1016/j.jhydrol.2009.04.036>

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Whitley, R.J., Zeppel, M.J.B., Armstrong, N., Macinnis-Ng, C.M.O., Yunusa, I., Eamus, D., 2007. A modified Jarvis-Stewart model for predicting stand-scale transpiration of an Australian native forest. *Plant and Soil* 305, 35–47. <https://doi.org/10.1007/s11104-007-9399-x>

Yunusa, I.A., Eamus, D., Taylor, D., **Whitley, R.J.**, Gwenzi, W., Palmer, A.R., Li, Z., 2015. Partitioning of turbulent flux reveals contrasting cooling potential for woody vegetation and grassland during heat waves. *Quarterly Journal of the Royal Meteorological Society*.
<https://doi.org/10.1002/qj.2539>

Zeppel, M.J., Macinnis-Ng, C.M., Yunusa, I.A., **Whitley, R.J.**, Eamus, D., 2008. Long term trends of stand transpiration in a remnant forest during wet and dry years. *Journal of Hydrology* 349, 200–213. <https://doi.org/10.1016/j.jhydrol.2007.11.001>

Zhuang, W., Cheng, L., **Whitley, R.J.**, Shi, H., Beringer, J., Wang, Y., He, L., Cleverly, J., Eamus, D., Yu, Q., 2016. How energy and water availability constrain vegetation water-use along the North Australian Tropical Transect. *International Journal of Plant Production*.

Other Publication Outputs

Eamus, D., Yunusa, I.A.M., Grant, N., Li, Z., Macinnis-Ng, C.M.O., Taylor, D.T., **Whitley, R.J.**, Zeppel, M.J.B., 2011. The Efficacy of Revegetation in the Prevention of Deep Drainage at the Castlereagh Waste Disposal Site Final Report March 2011 Professor Derek Eamus and Isa Yunusa Zheng Li Cate Macinnis-Ng Rhys Whitley Melanie Zeppel (No. March). University of Technology Sydney, Sydney.

Whitley, R.J., Eamus, D., 2009. How much water does a woodland or plantation use: a review of some measurement methods (No. 6). Land & Water Australia, Canberra.