

Supplement to response to Reviewer 2 for submission:

Integration of tree hydraulic processes and functional impairment to capture the drought resilience of a semi-arid pine forest

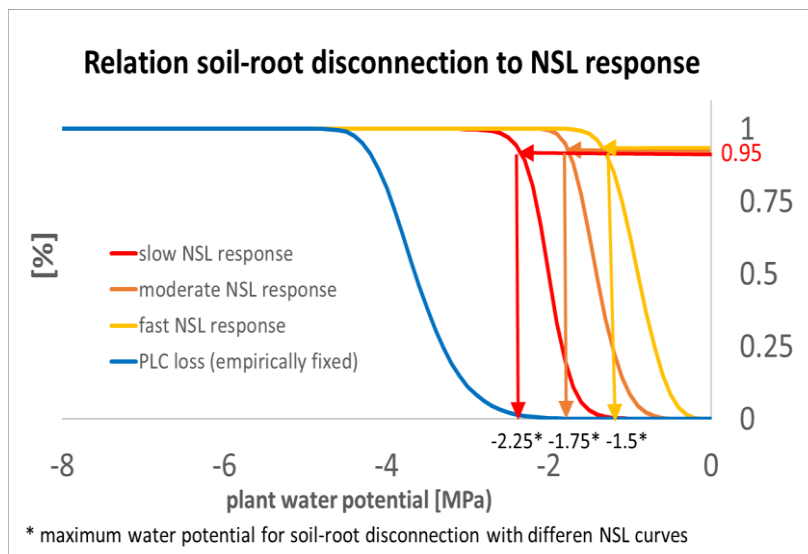


Figure R1: Determining safety margins with different NSL response curves. Assuming that soil-root disconnection occurs only after NSL response has reached a certain threshold (here 95%, approximately correlating with stomata closure), different NSL responses (defined by parameters  $A_{NSL}$  and  $PSI_{NSL}$ ) are representing different safety margins until loss of tissue conductance (PLC curve).

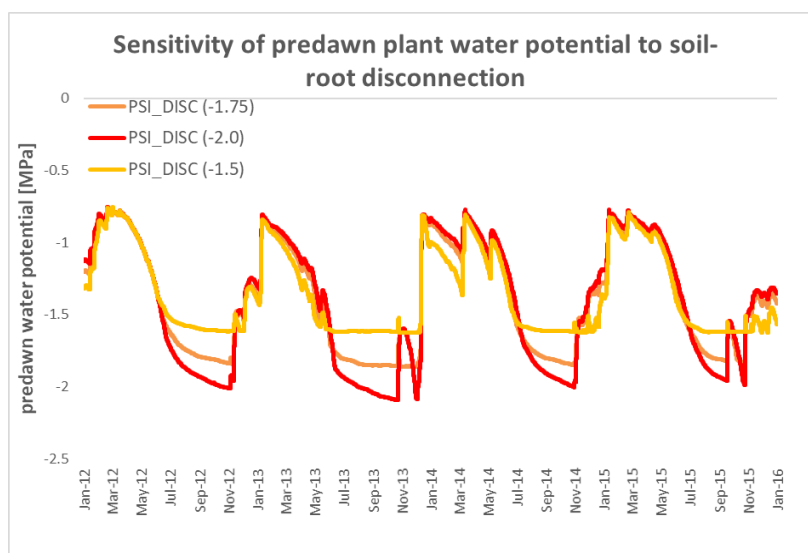


Figure R2: Sensitivity of predawn plant water potential to different thresholds of soil-root disconnection. Using the thresholds defined previously from NSL sensitivity analysis, different stress-related states and fluxes (here: predawn-water potential) are obtained for the Yatir forest site during the investigation period (2012 to 2015).

