TMCF project dendrometer data

**Variables:**

Radius: Raw growth measurement in micrometers, adjusted so that the initial reading is zero. This means the number would have to be added to the tree radius at that time to represent the actual tree radius.

TWD (tree water deficit): The difference between the Radius and the previous maximum value (micrometers). Always negative or zero. Growth only occurs when the TWD is zero (Zweifel et al. 2016). This variable calculated by the proc\_dendro\_L2() function in treenetproc.

Growth: The total increment of irreversible growth (actual wood production) that occurs, measured in micrometers. This value never declines, it just stays flat while the TWD is negative. Then when TWD is zero again, Growth increases at the same rate as Radius. This variable calculated by the proc\_dendro\_L2() function but I had to modify it so it doesn’t re-start every calendar year (because that doesn’t make sense in tropical systems).

**References:**

Zweifel et al. 2016: <https://nph.onlinelibrary.wiley.com/doi/full/10.1111/nph.13995>

* Explains the zero growth concept

Knusel et al. 2021: <https://www.mdpi.com/1999-4907/12/6/765>

* Introduces the R package used to process data and calculate growth stats