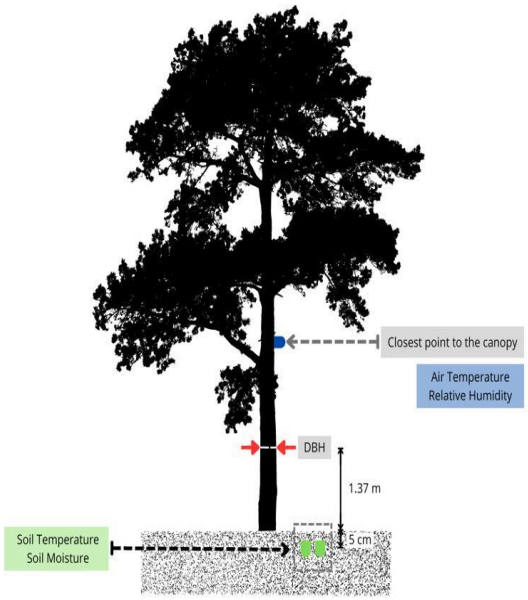
Description

This document serves as a reference to the dataset containing cross regional Eucalyptus data, specifically from Stellenbsoch, South Africa, and Leiria, Portugal, recorded by ten generic wireless dendrometer and environmental sensing systems. Data is stored in a file called "eucalyptus_growth_and_environmental_data_V3.csv". Table 1 is an adapted codebook for the dataset and contains all the information pertaining to each parameter. Table 2 details the metadata.

Hardware setup



Tables

Table 1: Codebook

Index	Value Type	Unit	Description
DateTime	DateTime	yyyy/mm/dd HH:MM:SS (UTC +02:00)	The date and time of when the measurement was taken.
Device_id	String	-	Unique identifier for each measurement device (each node).
Dendro_Corrected	Numeric	µm	Measurement of the tree stem variation in micrometres, at breast height (DBH), 1.37 m above ground.
Air Temp	Numeric	°C	Air temperature near the canopy in degrees Celsius. Measured at the start of the canopy.
Air Hum	Numeric	%	Relative humidity near the canopy, expressed as a percentage. Measured at the start of the canopy.
Soil Temp	Numeric	°C	Soil temperature at the measurement location in degrees Celsius. Measured 5cm below soil surface.
Soil Moisture	Numeric	% VWC	Soil moisture level at the measurement location, expressed as percentage volumetric water content (VWC). Measured 5cm below soil surface.
VPD	Numeric	kPa	The Vapour Pressure Deficit (of the air) Calculated using the Tetens equation and temperature and humidty measurements, expressed as kilopascals.

Table 2: Metadata

Device_id	Species	Initial Diameter	Location	Measurement Frequency	Battery	Irrigation
GWD1	E. grandis x urophylla	<10cm	Stellenbosch, South Africa	6 minutes	5000mAh 3.7V Li-Po	Unirrigated
GWD2	E. grandis x urophylla	<10cm	Stellenbosch, South Africa	11 minutes	5000mAh 3.7V Li-Po	Unirrigated
GWD3	E. grandis x urophylla	<10cm	Stellenbosch, South Africa	6 minutes	5000mAh 3.7V Li-Po	Unirrigated
GWD4	E. grandis x urophylla	<10cm	Stellenbosch, South Africa	6 minutes	5000mAh 3.7V Li-Po	Irrigated
GWD5	E. grandis x urophylla	<10cm	Stellenbosch, South Africa	6 minutes	5000mAh 3.7V Li-Po	Irrigated
GWD6	E. grandis x urophylla	<10cm	Stellenbosch, South Africa	6 minutes	5000mAh 3.7V Li-Po	Irrigated
GWD7	E. globulus	>20cm	Leiria, Portugal	6 minutes	5000mAh 3.7V Li-Po	Unirrigated
GWD8	E. globulus	>20cm	Leiria, Portugal	6 minutes	5000mAh 3.7V Li-Po	Unirrigated
GWD9	E. globulus	>20cm	Leiria, Portugal	6 minutes	5000mAh 3.7V Li-Po	Unirrigated
GWD10	E. globulus	>20cm	Leiria, Portugal	6 minutes	5000mAh 3.7V Li-Po	Unirrigated