

Derived variables

1) BasalArea (m²)

A tree's basal area is the cross-sectional area of the stem at 1.3 m above ground.

$$BA = (DBH/200)^2 \times \pi \quad (\text{with DBH the diameter at breast height})$$

2) AG_Biomass

Above Ground Biomass (Chave et al. (2014))

Improved allometric models to estimate the above ground biomass of tropical trees (Global Change Biology, Vol. 20, No. 10, p. 3177-3190)

$$AGB = 0.0673 (WD \times DBH^2 \times Height)^{0.976}$$

(with WD the wood density, default value used of 0.615 t/m³ and Height the tree Height)

$$3) \text{ BoleVolume} = \text{Basal Area} \times \text{Bole Height}$$

$$4) \text{ StemVolume} = \text{Basal Area} \times \text{Tree Height}$$

5) The suffix **_HA** means that the value has been calculated per hectare

Units

DBH: cm

BoleHeight: m

TreeHeight: m

CrownDiameter: m

BasalArea: m²

AG_Biomass: Kg

BoleVolume: m³

StemVolume: m³