DATA INDEX FOR BIOMASS-BIODIVERSITY STUDY IN VALDEPOZA AND LLANO DE SAN MARUGÁN

DATA	DESCRIPTION
A	vertical spatial patterns-vertical species profile. This index takes into account the presence of each species in different tree height zones. Range: ≥ 0 (0 for a single-layered pure stand). The more heterogeneous the vertical profile, the higher A becomes.
A.st	a variable for the calculation of A
Atmp	a variable for the calculation of A
B2_7_kg	biomass weight (kg) for medium branch (B2_7) according to Ruiz-Peinado equations
B2_kg	biomass weight (kg) for thin branches (B2) according to Ruiz-Peinado equations
B7_kg	biomass weight for thick branch (B7) according to Ruiz-Peinado equations
Bs_B7.q.p_kg	biomass weight for stem and thick branch of Quercus pyrenaica according to Ruiz-Peinado equations
Bs_kg	biomass weight (kg) for stem (Bs) according to Ruiz-Peinado equations
B_kg	total biomass weight calculation for whole tree (kg)
B	total biomass weight calculation for whole tree (Mg)
country	country where the Marteloscope is settled
Crownbase_height_m	height at the crown base in meters
D	species richness-Berker-Parker index. The reciprocal of the index, 1/D, is often used, so that an increase corresponds to an increase in diversity
DBH_cm	diameter at breast height in centimeters
distij	distance from tree i (reference or target tree) to every tree for the calculation of Mi
Even	richness and evenness-Evenness index.It ranges from 0 to 1 (1 is complete evenness)
G_m2ha	Stand basal area in square m per hectare
Health	health (healthy)
Hzones.qd	height zones for quadrants (three in this case). A takes uses this value for the account of the presence of each species in different height zones
Hzones.st	height zones (three in this case). A takes uses this value for the account of the presence of each species in different height zones
martelo	Marteloscope name
Mi	species composition-Mingling index. Range: 0–1. In case of selecting 3 neighbours, the index takes the values 0, 0.33, 0.67 or 1.0. The higher the value, the more the species are intermingled. Low values indicate stands with large groups of only one tree species (segregation). Number of tree neighbors=3
microhabitat	microhabitat (others)
MS	species intermingling-spatial diversity status. It ranges from 0–1. A reference tree of a common species is more likely to have

neighbours of the same species, which is reflected by low MS values. On the other hand, a rare species is likely to produce a high proportion of high MS values. MS is especially sensitive to rare tree species.

Term	Description
MVij	variable that helps for the calculation of Mi index, as it tells if a neighbouring tree is the same species mixture variable Mi=0, if not, Mi=1.
quadrant	quadrant (from 1 to 16 quadrants)
quality	quality (injury, inclinated…)
S	species composition-Species Segregation index.The ranges is $1 \geq S \geq -1$. Values greater than 0 indicate a trend towards segregation (below, association) and the index reaches 1 when all the surronding trees are the same species
shannon	species richness - Shannon index. It ranges from 0 to ln (S). When all abundance is concentrated in one species, its value reduces to 0
simpson	species richness - Simpson index. It ranges $0 \leq D \leq 1$. The value increases with species diversity
social_status	social status (dominant, codominant, dominate,suppressed)
species	*species (Pinus nigra, Pinus sylvestris, Quercus pyrenaica)*
spNum	a cardinal number related to field species
TH	vertical spatial patterns-Height Differentiation Index. Range: 0–1. (0 means that neighbouring trees have an equal height, whereas values close to 1 present high differentiation in height)
THij	the variability in height between i-th reference tree to each neighboring trees (j-1…n) and describes vertical distribution of tree height
Total_height_m	total height in meters
tree	tree identification number
utmX	X coordinate
utmY	Y coordinate
V_m3	volume in m3
Vij	for the calculation of Mi , it is a binary output which equals to 1 if the j-th neighbouring tree is not the same species as the reference tree and Vij=0 otherwise.
W	horizontal distribution pattern-Uniform Angle Index. The value of W ranges from 0 to 1. In case of selecting 3 neighbours, the index take the values 0, 0.33, 0.67 or 1.0.The value of W increases from regular to clumped pattern (regular < random < clumped). Number of tree neighbors=3