## $Metadata\ for\ ForestGEO\_sites\_data$

Column	Column Header	Description	Units
1/A	Site name	Site name	-
2/B	Alternate site name/ abbreviation	Site name abbreviation or alternate name by which the site may be known, if any	-
3/C	State/ Province	State/ province in which plot is located, if any	-
4/D	Country	Country	-
5/E	Biogeographic zone	Biogeographic zone, as described in Ref. <sup>1</sup> . Categories: Afrotropic, Australasia, Indo-Malay, Nearctic, Neotropic, Palearctic, Oceania	-
6/F	GCB#	ID number assigned in Ref. <sup>2</sup> .	-
7/G	Latitude	Latitude (center of plot). Negative values indicate southern hemisphere.	decimal degrees
8/H	Longitude	Longitude (center of plot). Negative values indicate western hemisphere.	decimal degrees
9/1	Elevation-min	minimum elevation within plot	m.a.s.l.
10/J	Elevation-max	maximum elevation within plot	m.a.s.l.
11 / K	Topographic relief	topographic relief within plot (difference between maximum and minimum elevations)	m
12/L	Location & Elevation notes	Any notes pertaining to geographic coordinates, elevation	-
13/M	n geographically distinct plots	Number of geographically distinct plots (typically one, but a few sites have multiple plots)	-
14 / N	Area	Plot area (sum of multiple plots)	ha
15 / O	Plot Dimensions	Plot dimensions ([x dimension] x [y dimension]), with multiple plots listed separately	m
16/P	Plot Area & Dimensions notes	Any notes pertaining to plot area & dimensions	-
17/Q	First ForestGEO census year	Year of the first census applying the CTFS-ForestGEO protocol. When census spanned multiple years, the first year is listed.	-
18/R	First census year	Year of the first census of all or part of the plot (using any protocol). This will commonly—but not always—be the same as the first ForestGEO census year.	-
19/S	Year added to network	Year that the plot joined the CTFS- ForestGEO network. This will commonly— but not always—be the first census year.	-
20 / T	Publication(s) describing site/plot	Publications describing the site/plot, if any	-
21 / U	Affiliated web links	URL(s) of any website(s) describing the site/plot (other than the description on the ForestGEO website).	-
22 / V	Number of Species	Number of species	-
23 / W	Number of Trees	Number of individual trees (genets; i.e., counting multi-stem individuals as one tree)	-

24 / X	Species & Number of trees notes	Any notes pertaining to numbers of species/	-
25 / Y	Forest Description	Description of forest type	-
26 / Z	FAO ecozone	FAO ecozone, based on Ref. <sup>3</sup>	-
27 / AA	Dominant vegetation type(s)	Categorical description of leaf type and phenology: Broadleaf Evergreen (BE); Broadleaf (drought/ cold) Deciduous-BdD/BcD; Needleleaf Evergreen (NE); (Needleleaf Deciduous-NC). Lists any PFT category represented by at least 10% of canopy trees, preferably in order of abundance. This is not necessarily formally quantified based on survey data.	-
28 / AB	Dominant Soil order(s)	Categorical following the USAD Soil Taxonomy System: Al: Alfisols; An: Andisols; E: Entisoils; Ge: Gelisols; In: Inceptisols; Ox: Oxisols; Ul: Ultisols; S; Spododols; Ve: Vertisols.	-
29 / AC	Soil Notes	Any notes giving additional information on soils	-
30 / AD	Köppen Climate zone	Köppen-Geiger climate zone, from Peel et al. 2007. Abbreviations are as follows: Aftropical rainforest; Am-tropical monsoon; Aw or As-tropical wet and dry/savanna; BWh-hot arid; BWk-cold arid; BSh-hot semi-arid; BSk-cold semi-arid; Ctemperate with dry summer (Cs_), dry winter (Cw_) or no dry season (Cf_) and hot summer (C_a), warm summer (C_b), or cold summer (C_c); Dcold (continental), with dry summer (Ds_), dry winter (Dw_) or no dry season (Df_) and hot summer(D_a), warm summer (D_b), cold summer (D_c), or very cold winter (D_d); ET-tundra; EF- ice cap. Based on Ref. <sup>4</sup>	-
31 / AE	MAT	Current best (based on judgment of site PIs) estimate of mean annual temperature. Source and time frame vary by plot. For sites where local data are not available or not reported, values are mean 1960-1990 climate from WorldClim at 30 arc-second resolution <sup>5</sup> . Additional climate information is available through the ForestGEO Climate Data Portal.	°C

32 / AF	MAP  Natural disturbance regime	Current best (based on judgment of site PIs) estimate of mean annual precipitation. Source and time frame vary by plot. For sites where local data are not available or not reported, values are mean 1960-1990 climate from WorldClim at 30 arc-second resolution <sup>5</sup> . Additional climate information is available through the ForestGEO Climate Data Portal.  Natural disturbance regime, with codes as follows: A-animal activity (destructive); D-Drought; E- Erosion; Fi-Fire; Fl-flood; H-hurricane/typhoon; Ic- Ice storms; In-insect outbreaks; L-landslides; PT-permafrost thaw; W-wind storms (local); '-'- no major natural	mm yr-1
34 / AH	Natural disturbance notes	disturbances.  Notes pertaining to the natural disturbance regime.	-
35 / AI	Past anthropogenic disturbances	Local anthropogenic disturbances prior to the establishment of the plot. Codes are as follows: Codes are as follows: F-farming; P-pasture; W-wood harvesting; CC-clear cut/complete clearing; B-burn; H-hunting; E-extraction of NTFP (non-timber forest products); I-invasive species; '-' no significant disturbances. Capital letters denote strong pressure; lowercase denote mild pressure.	-
36 / AJ	Current anthropogenic disturbances	Recent/ ongoing local anthropogenic disturbances. Codes are as follows: Codes are as follows: F-farming; P-pasture; W-wood harvesting; CC-clear cut/ complete clearing; B-burn; H-hunting; E-extraction of NTFP (non-timber forest products); I-invasive species; '-' no significant disturbances. Capital letters denote strong pressure; lowercase denote mild pressure.	-
37 / AK	Anthropogenic disturbance notes	Notes pertaining to the anthropogenic disturbance history	-
38 / AL	PII	Full name of principle investigator of plot, listed alphabetically by last name when there are more than one.	-
39 / AM	PI2	Full name of principle investigator of plot, listed alphabetically by last name when there are more than one.	-
40 / AN	PI3	Full name of principle investigator of plot, listed alphabetically by last name when there are more than one.	-
41 / AO	P14	Full name of principle investigator of plot, listed alphabetically by last name when there are more than one.	-

## References

- 1. Olson, D. M. *et al.* Terrestrial Ecoregions of the World: A New Map of Life on Earth. *BioScience* **51**, 933 (2001).
- 2. Anderson-Teixeira, K. J. *et al.* CTFS-ForestGEO: a worldwide network monitoring forests in an era of global change. *Glob. Change Biol.* **21,** 528–549 (2015).
- 3. FAO. *Global Ecological Zones for FAO Forest Reporting: 2010 update.* (FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, 2012).
- 4. Peel, M. C., Finlayson, B. L. & Mcmahon, T. A. Updated world map of the Köppen-Geiger climate classification. *Hydrol. Earth Syst. Sci. Discuss.* **4,** 439–473 (2007).
- 5. Hijmans, R. J., Cameron, S. E., Parra, J. L., Jones, P. G. & Jarvis, A. Very high resolution interpolated climate surfaces for global land areas. *Int. J. Climatol.* **25**, 1965–1978 (2005).