This Andes\_AGB.xlxs file was generated on 2021-02-19 by Alvaro Duque et al.

Andean\_AGB.xlsx submitted with DOI https://doi.org/10.5061/dryad.59zw3r26f.

GENERAL INFORMATION

Title manuscript: *Old-growth Andean forests as globally important carbon sinks and future carbon refuges*.

URL: https://www.nature.com/articles/s41467-021-23955-7

1. Title of Dataset: Aboveground carbon stocks and dynamics in Andean forests.xlxs

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3. Date of data collection (single date, range, approximate date)

Between 1991 and 2018.

4. Geographic location of data collection

 Subtropical and tropical Andes

5. Information about funding sources that supported the collection of the data:

Dirección de Investigaciones de la Universidad Nacional de Colombia Sede Medellín (DIME).

Swiss Agency for Development and Cooperation (SDC), Grant/Award Number: PA0042-C011-0031

Universidad de las Américas Research Grant: FGE.FCC.19.15.

COLCIENCIAS (Convocatoria 767).

US National Science Foundation (DEB-0101775, DEB-0743457 and DEB-1836353)

National Geographic Society (NGS 7754-04 and NGS 8047-06)

The Living Earth Collaborative and various other organizations and individuals.

US National Science Foundation (DEB LTREB 1754664).

ERC Advanced Grant 291585 (“T-FORCES”).

US National Science Foundation (DEB 1753621)

Institute of International Education Fulbright Fellowship.

Swiss Cooperation through the Programa Bosques Andinos conducted by CONDESAN

SHARING/ACCESS INFORMATION

 Freely available

DATA & FILE OVERVIEW

File List:

1. Data employed in the analyses
2. Phylogenetic tree employed to calculate phylogenetic diversity indexes

4. Are there multiple versions of the dataset? no

METHODOLOGICAL INFORMATION

1. Description of methods used for collection/generation of data:

Duque et al. In press. Old-growth Andean forests as globally important carbon sinks and future carbon refuges. Nature Communications

2. Methods for processing the data:

See the paper

3. Instrument- or software-specific information needed to interpret the data:

All analyses carried out in this study were done employing the R package

4. People involved with sample collection, processing, analysis and/or submission:

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DATA-SPECIFIC INFORMATION FOR: Andes\_AGB.xlsx

1. Number of variables: 36

2. Number of cases/rows: 119

3. Variable List:

|  |  |  |
| --- | --- | --- |
| **Legend** | **Definition** | **Units** |
| Plot name | Plot name |   |
| Country | Country |   |
| Plot area | Plot area |   |
| Latitude | Latitude | ° |
| Longitude | Longitude | ° |
| Elevation | Elevation | m asl |
| MAT | Mean Annual temperature | °C |
| MAP | Mean Annual Precipitation | mm y-1 |
| PC1 temperature | Axis 1 PCA temperature |   |
| PC2 temperature | Axis 2 PCA temperature |   |
| PC1 precipitation | Axis 1 PCA precipitation |   |
| PC2 precipitation | Axis 2 PCA precipitation |   |
| Time | Time between first and last measurement | year |
| year.1 | Year of initial census |   |
| year.f | Year of final census |   |
| AGB1\_t\_ha | Initial aboveground biomass stock | Mg/ha |
| AGBf\_t\_ha | Final aboveground biomass stock | Mg/ha |
| CAGB1\_t\_ha | Aboveground carbon stock in the first census | Mg C/ha |
| CAGBf\_t\_ha | Final aboveground carbon stock | Mg C/ha |
| m\_Cagb\_t\_ha\_yf | Aboveground carbon mortality between first and last measurement | Mg C/ha/year |
| r\_Cagb\_t\_ha\_yf | Aboveground carbon recruitment between first and last measurement | Mg C/ha/year |
| g\_Cagb\_t\_ha\_yf | Aboveground carbon growth between first and last measurement | Mg C/ha/year |
| p\_Cagb\_t\_ha\_yf | Aboveground carbon productivity between first and last measurement | Mg C/ha/year |
| n\_Cagb\_t\_ha\_yf | Aboveground carbon net change between first and last measurement | Mg C/ha/year |
| Ind.1 | Initial number of stems | ha |
| Ind.f | Final number of stems | ha |
| Dq.1 | Initial quadratic mean diameter | cm |
| Dq.f | Final quadratic mean diameter | cm |
| meanWD | Mean wood density per plot (Chave et al. 2006, 2009) | g/cm3 |
| WD.p1 | Mean initial Wood density (basal area weighted) | g/cm3 |
| WD.pf | Mean final Wood density (basal area weighted) | g/cm3 |
| Beta | Size-discriminat parameter |   |
| TR | Thermophilization rate between first and last measurement | °C/year |
| PD | Phylogenetic diversity |   |
| Species | Species richness (observed per plot) |   |
| AM:EM | Symbiotic root associations SRA [LN(AM.prop + 1) - LN(EM.prop + 1)] |   |

4. Missing data codes: NA

5. Specialized formats or other abbreviations used: NA