**Boiling River temperature and relative humidity datasets README**

**Title:** Hotter temperatures reduce the diversity and alter the composition of woody plants in an Amazonian forest

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This dataset contains time-series air temperature, soil temperature, and relative humidity data collected from October 2021 to October 2022 at the Boiling River forest in Huánuco Department, Peru. This dataset is included in analyses reported in Fortier et al. (2024) *Global Change Biology*.

The following files are included:

**1) "tms\_data\_clean.csv"**

This is the full dataset of temperatures collected every 15 minutes from October 2021 to October 2022 across 13 TOMST TMS-4 loggers deployed at the Boiling River forest. TMS-4 loggers each have three sensors, including one at 15 cm aboveground, 2 cm aboveground, and 6 cm belowground.

------------- COLUMN DESCRIPTIONS -------------

Col. Variable Description

1. X or [nameless] Row index

2. Logger.ID Original TMS-4 logger ID

3. time Date and time (corrected to local time) (mm/dd/yyyy mm:ss)

4. Date Date (mm/dd/yyyy)

5. Latitude Latitude in decimal degrees

6. Longitude Longitude in decimal degrees

7. T1\_soil6 Soil temperature at 6 cm belowground (degC)

8. T2\_air2 Air temperature at 2 cm aboveground (degC)

9. T3\_air15 Air temperature at 15 cm aboveground (degC)

10. soil\_moisture\_count Raw soil moisture count

11. shake Shake (1=yes, 0=no)

12. errFlag Instrument error (if =1 the device couldn’t convert time from

PCF chip)

**2) "hobo\_data\_clean.csv"**

This is the full dataset of air temperatures and relative humidity collected every 20 minutes from October 2021 to October 2022 across 9 HOBO MX-2301 loggers deployed at the Boiling River forest.

------------- COLUMN DESCRIPTIONS -------------

Col. Variable Description

1. X or [nameless] Row index

2. Logger.ID Original HOBO logger ID

3. date\_time Date and time (corrected to local time) (mm/dd/yyyy mm:ss)

4. Date Date (mm/dd/yyyy)

5. Latitude Latitude in decimal degrees

6. Longitude Longitude in decimal degrees

7. Tair Air temperature (degC)

8. RH Relative humidity (%)

9. DewPt Dew point (degC)