Plan Overview

A Data Management Plan created using DMPonline

Title: Variations in tree growth along a Neotropical seasonally-dry vegetation gradient (rainforest - savannah - dry forest) and its relationship with climate change

Creator: José Roberto Vieira Aragão

Principal Investigator: José Roberto Vieira Aragão

Data Manager: José Roberto Vieira Aragão

Affiliation: Other

Template: DCC Template

ORCID iD: 0000-0001-8035-9635

Project abstract:

Tropical forests provide crucial ecosystem services, as they work to maintain the balance of biogeochemical and hydrological cycles. Numerous researches have sought to understand how the tree growth of these forests has evolved in recent years, from the perspective of possible climate changes. However, most of these efforts cover short observation periods, which do not allow to assess whether differences in tree growth are linked to acclimatization or to variations in age and ontogeny of plants. Above all, there is no consensus regarding the potential damaging effects of the climate on vegetation, especially when considering the diversity of different forest types in tropical regions. In view of these problems, we seek to understand through the study of growth rings, functional attributes of wood, and modeling, how trees along a gradient of vegetation (wet forest-savanna-dry forest) respond to variations in climate. This information will be useful for the proper management and conservation of different types of tropical forests, in the face of climate change.

ID: 67516

Last modified: 27-03-2021

Grant number / URL: 2018/24514-7

Variations in tree growth along a Neotropical seasonally-dry vegetation gradient (rainforest - savannah - dry forest) and its relationship with climate change

Data Collection

What data will you collect or create?

We will create biological datasets including:
- Data on the individual trees (metadata)
- Tree growth data (from tree rings)
- Wood anatomical data (quantification of wood structures)
- Wood chemical data set (analyses of carbon isotopes)

The data format will be basically .xlsx or .txt and in the case of ring-width data we will use formats common to the field (text files in Tucson / Heidelberg formatting).

How will the data be collected or created?

We will follow the methods described in the ITRDB and IAWA data platforms, as well as in the publications of Fichtler E. and Brienen R.J.

The name of the files will be dendrograd_forXXXsXXXXXX - where forXXX will be the code of the type of vegetation studied and vXXXXXX the identification version of the site and studied samples.

The quality assurance will follow the ITRDB and IAWA Standard Methods. For isotopes, we will follow the pattern developed by Leader et al. 1997.

Documentation and Metadata

What documentation and metadata will accompany the data?

Metadata are collected using standardised forms in the field as well as in the lab. The metadata will include information about:
- Individual tree characteristics (diameter of the stem, tree height, light availability, etc.)
- How the samples was collected
- Which method has been used
- How the quality of the data was verified
- The date were the samples was collected
- Who was involved in the sampling and experimental phase with their contacts
- Data of partners and collaborators in the analyses

Ethics and Legal Compliance

How will you manage any ethical issues?

The data preservation and sharing will be conducted by storing those data in websites such as Dryad Digital Repository. All the participants are aware before participating in the research that these data will be shared.

How will you manage copyright and Intellectual Property Rights (IPR) issues?

We will publish the results in open access journals if funds are available.

Storage and Backup

How will the data be stored and backed up during the research?

The data before publication will be stored in clouds such as OneDrive or Google Drive.
After publication the data will be stored in websites such as Dryad Digital Repository or journals supplementary material.

How will you manage access and security?

The data will be shared trough the participant reserachers by allowing then to the clouds (OneDrive or Google Drive)

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

Samples will be preserved for further analyses and checks at the Dendroecology and Wood Biology Laboratory of the University of Campinas.
All the data will be retained and published in websites such as Dryad Digital Repository.

What is the long-term preservation plan for the dataset?

Dryad Digital Repository or similar as well as local data repository (Laboratory server and personal computers)

Data Sharing

How will you share the data?

The potential users will find our dataset especially through publications.

Are any restrictions on data sharing required?

We will need exclusive access until the manuscripts will be published

Responsibilities and Resources

Who will be responsible for data management?

The responsible for capturing data and implementing the DMP is José Roberto Vieira Aragão, PI of the PhD project, supervised by Peter Groenendijk.

What resources will you require to deliver your plan?

Resources will be needed to carry out laboratory analyses that will be required from São Paulo Research Foundation - FAPESP.