

Soil Profiles of Amazonia

Summary:

Soil Profiles of Amazonia contains soil profile descriptions for 1153 locations throughout Brazil. These data are primarily based on RADAMBRASIL surveys.

1. Data Set Overview

Data Set Identification: Soil Profiles of Amazonia

Data Set Introduction:

This dataset consists of 30 spreadsheet files listing soil profile descriptions for 1153 locations across Amazonia.

Objective/Purpose:

These data were collected and prepared in the current format as input to a rooting depth model which was used to produce a Amazon regional map of plant available water (Negreiros & Nepstad, 1994).

Summary of Parameters:

Soil Profiles

The data provided in these profiles were manually entered into spreadsheet form from a number of published volumes, maps, and articles (see REFERENCES).

Soil Profiles of the Brazilian Amazon contains 1153 soil profiles at varying locations (see DATA DESCRIPTION: Data Characteristics: Variable Description/Definition, for a complete listing).

Discussion: Not Available

Related Data Sets: Not Available

2. Investigator(s)

Investigator(s) Name and Title:

Gustavo Negreiros, Ane Alencar; Peter Schlesinger, M.A., Daniel Nepstad, Ph.D., Paul Lefebvre, M.S

Title of Investigation:

Source Data Title:

Soil Profiles of Amazonia

Data Preparation Title:

Land-use in Amazonia and the Cerrado of Brazil: State of Knowledge and GIS Database

Contact Information:

1) Source Data Investigator:

Gustavo Hees de Negreiros, Ane Alencar

2) Data Preparation Investigators:

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3. Theory of Measurements

Not Available

4. Equipment

Sensor/Instrument Description: Not Available

Collection Environment: Not Available

Source/Platform: Not Available

Source/Platform Mission Objectives: Not Available

Key Variables: Not Available

Principles of Operation: Not Available

Sensor/Instrument Measurement Geometry: Not Available

Manufacturer of Sensor/Instrument: Not Available

Calibration:

Specifications: Not Available

Tolerance: Not Available

Frequency of Calibration: Not Available

Other Calibration Information: Not Available

5. Data Acquisition Methods

Not Available

6. Observations

Data Notes: Not Available

Field Notes: Not Available

7. Data Description

Spatial Characteristics:

Spatial Coverage: Not Available

Spatial Coverage Map: These data are stored in 30 spreadsheet files according to the reference volume from which they were taken, which were organized administratively.

The administrative regions are:

São Francisco

Teresina

São Luiz

Araguaia

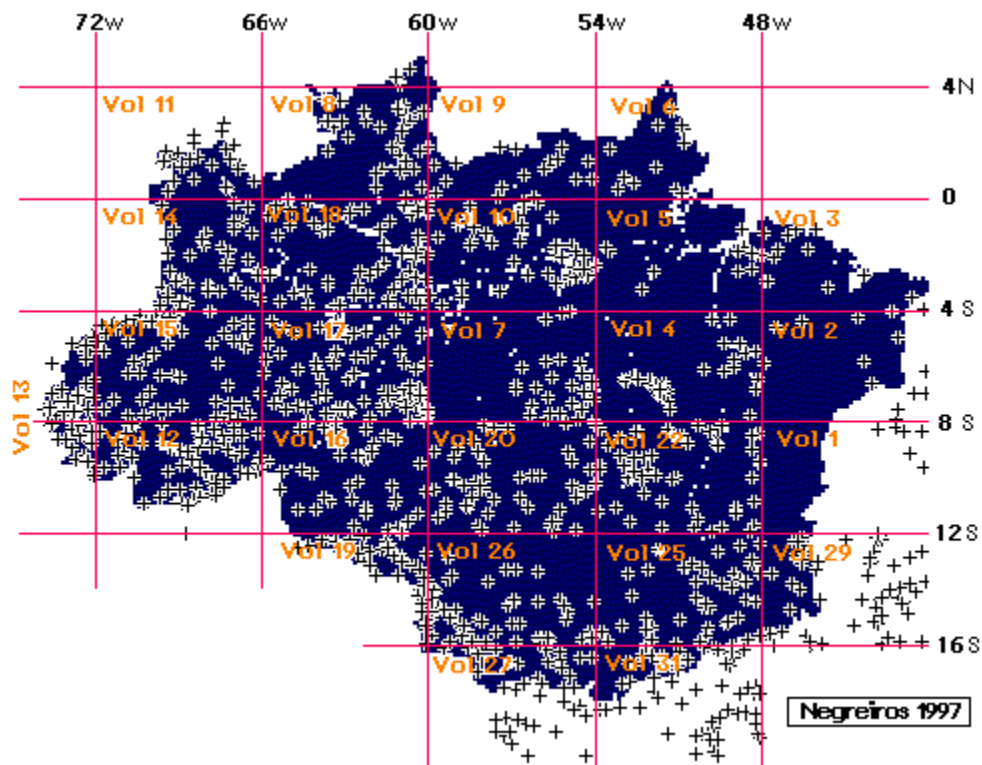
Belém

Macapá

Tapajós

Roraima
 Tumucumaque
 Santarém
 Pico da Neblina
 Rio Branco
 Javari
 Iça
 Jurua
 PortoVelho
 Purus
 Manaus
 Guaporé
 Juruena
 Tocantins
 Goiás
 Cuiabá
 Corumbá
 Brasília
 Goiania
 Projeto EMBRAPA/FAO
 São Félix do Xingú
 Polo Carajás
 Polo Tapajós

All the profiles are also provided in a single spreadsheet file: allprof.wq1



Spatial Resolution: 1:250,000

Projection:

Geographic, Units = DD, Spheroid = NAD27

Grid Description: Not Applicable

Temporal Characteristics:

Temporal Coverage: Not Available

Temporal Coverage Map: Not Available

Temporal Resolution: Not Applicable

Data Characteristics:

Parameter/Variable:

Soil Profile Descriptions

Variable Description/Definition:

Spreadsheet Fields

Profile Number #

RadamBrasil Source Volume #

Soil Profile #

Latitude (Degrees, Minutes, Seconds, Origin (S))

Longitude (Degrees, Minutes, Seconds, Origin (W))

Map Sheet (Reference code and UTM zone)

Classification

Parent Material

Horizon Symbol

Horizon Depth (Initial and final -- units=cm)

Texture analysis (% Coarse Gravel, Gravel, Coarse Sand, Fine Sand, Silt, Clay)

H₂SO₄ analysis (%SiO₂, %Al₂O₃, %Fe₂O₃)

PH, %C, %N, and %Organic Matter

Unit of Measurement: None

Data Source:

Soil Surveys conducted by RADAMBRASIL Project, EMBRAPA, EMBRAPA/FAO, and SUDAM (See REFERENCES for a complete listing)

Data Range: Not Available

Sample Data Record: Not Available

8. Data Organization

Data Granularity:

This dataset consists of X tarred and GNU-zipped files of the extension (.TAZ) comprising a total of X bytes.

Data Format:

Within each of the tarred and GNU-zipped files is a spreadsheet file in Quattro Pro for Windows Version 1.0

Format.

9. Data Manipulations

Formulae:

Derivation Techniques and Algorithms: Not Available

Data Processing Sequence:

Processing Steps: Not Available

Processing Changes: Not Available

Calculations:

Special Corrections/Adjustments: Not Available

Calculated Variables: Not Available

Graphs and Plots: Not Available

10. Errors

Sources of Error: Not Available

Quality Assessment:

Data Validation by Source: Not Available

Confidence Level/Accuracy Judgment: Not Available

Measurement Error for Parameters: Not Available

Additional Quality Assessments: Not Available

Data Verification by Data Center: Not Available

11. Notes

Limitations of the Data: Not Available

Known Problems with the Data: Not Available

Usage Guidance: Not Available

Any Other Relevant Information about the Study: Not Available

12. Application of the Data Set

Not Available

13. Future Modifications and Plans

Not Available

14. Software

Software Description:

Two softwares are required to read the files in this dataset:

the shareware tar program tar.exe

the GNU compression utility gzip.exe

Software Access:

The GNU-gzip program (gzip.exe) and shareware tar program (tar.exe) are available via Anonymous FTP from the following site: wuarchive.wustl.edu, in the directory, /systems/msdos/gnuish, files: gzip124x.zip and gnutar.zip

15. Data Access

Contact Information:

1) Source Data Contact:

Gustavo Negreiros

Title

Division

Data Center

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Email:

2) Data Preparation Contact:

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Data Center Identification: Not Applicable

Procedures for Obtaining Data: Not Available

Data Center Status/Plans: Not Applicable

16. Output Products and Availability

Not Applicable

17. References

Citations

Negreiros, G. H. de; Nepstad, D. C. 1994. Mapping deeply rooting forests of Brazilian Amazonia with GIS. Proceedings of ISPRS Commission VII Symposium - Resource and Environmental Monitoring. Rio de Janeiro. 7(a):334-338.

Source Publications:

Ministério das Minas e Energia 1981. Projeto RADAMBRASIL Volumes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 25, 26, 27, 29, and 31. Rio de Janeiro, Brasil.

EMBRAPA/FAO 1991 - Caracterização Físico Hídrica dos Principais Solos da Amazônia Legal: Volume I - Estado do Pará. Relatório Técnico. Belém PA Brasil (Aditivo).

Ministério das Minas e Energia & SUDAM 1976 - Reconhecimento Pedológico na Área de São Félix do Xingú. Belém, Pará, Brasil (Aditivo 1).

EMBRAPA/SNLCS 1984 - Levantamento de Reconhecimento de Solos e Aptida Agrícola das Terras da Área do Polo Carajás Estado do Pará. Boletim de Pesquisa No 29, Rio de Janeiro, Brazil (Aditivo 2)

EMBRAPA/SNLCS 1983 - Levantamento de Reconhecimento de Solos e Aptida Agrícola das Terras da Área do Polo Tapajós Estado do Pará. Boletim de Pesquisa No, Rio de Janeiro, Brazil (Aditivo 3)

18. Glossary of Terms

Not Available

19. List of Acronyms

Acronym	Definition
DD	Decimal Degrees
FAO	United Nations Food and Agricultural Organization
EMBRAPA	Agricultural Research Corporation of the Ministry of Agriculture and Food Supply
SUDAM	
WHRC	Woods Hole Research Center

20. Document Information

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http://www.whrc.org/ourwork/mapping/lba_datasets/index.html