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:
Peter Schlesinger / Dan Nepstad / Paul Lefebvre
Woods Hole Research Center
149 Woods Hole Rd
Falmouth, MA 02540
Phone: (508)540-9900
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
Araguáia
Belém
Macapá
Tapajós
Roraima
Tumucumaque
Santarém
Pico da Neblina
Rio Branco
Javari
Iça
Jurua
Porto Velho
Purus
Manaus
Guaporé
Juruena
Tocantins
Goiais
Cuiabá
Corumbá
Brasília
Goiania
Projeto EMBRAPA/FAO
São Félix do Xingu
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:
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
Phone:
Fax: 
Email: 
2) Data Preparation Contact:
Paul Lefebvre 
Woods Hole Research Center 
149 Woods Hole Rd. 
Falmouth, MA 02540 
Phone: (508)540-9900 
Fax: (508)540-9700 
Email: paul@whrc.org 
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


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.


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
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<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>DD</td>
<td>Decimal Degrees</td>
</tr>
<tr>
<td>FAO</td>
<td>United Nations Food and Agricultural Organization</td>
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<tr>
<td>EMBRAPA</td>
<td>Agricultural Research Corporation of the Ministry of Agriculture and Food Supply</td>
</tr>
<tr>
<td>SUDAM</td>
<td>Woods Hole Research Center</td>
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## 20. Document Information

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