

# Soil Profiles of Amazonia

## Summary:

Soil Profiles of Amazonia contains soil profile descriptions for 1,153 locations throughout Brazil. These data are primarily based on RADAMBRASIL surveys.

**Please note that this companion file is provided as historical background for the Pre-LBA RADAMBRASIL Project Data. Refer to the new data set user's guide for current data product descriptions.**

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## 1. Data Set Overview

Data Set Identification:  
Soil Profiles of Amazonia

Data Set Introduction:  
This data set consists of 30 spreadsheet files listing soil profile descriptions for 1,153 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 1,153 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

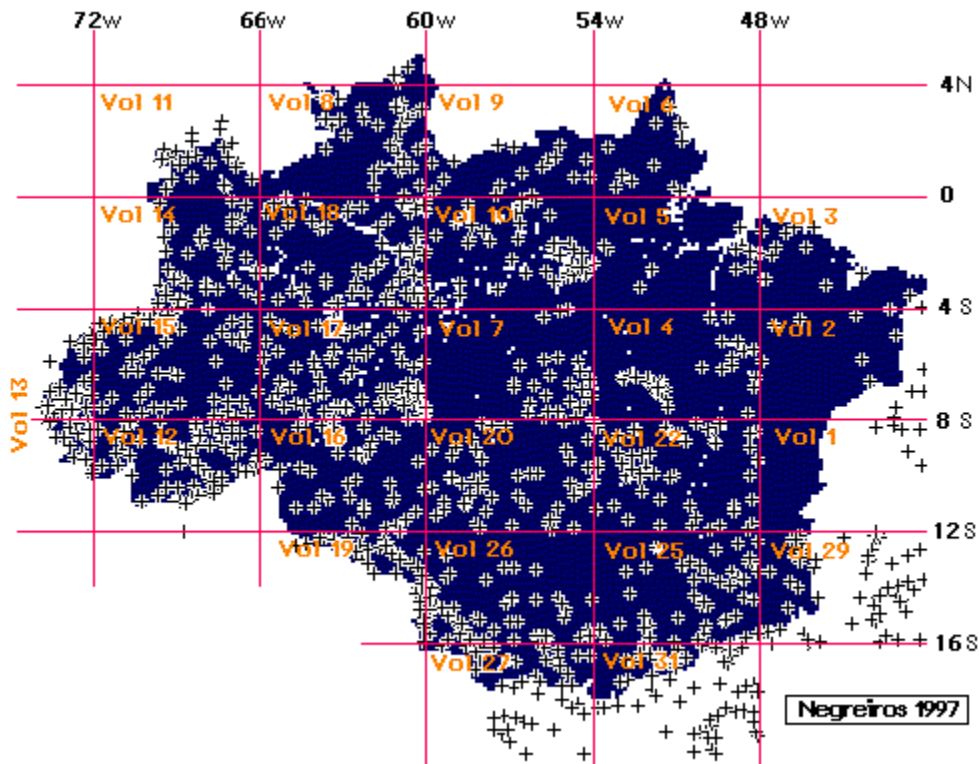
Tapajós

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:

### **Data File 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: Not Applicable

Data Format: Not Applicable

## **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: Not Applicable

Software Access: Not Applicable

## **15. Data Access**

Historical Contact Information:

1) Historical Source Data Contact:

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2) Historical Data Preparation Contact:

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## 16. Output Products and Availability

The **Pre-LBA RADAMBRASIL Project Data** are available through the Oak Ridge National Laboratory (ORNL) Distributed Active Archive Center (DAAC) [<http://daac.ornl.gov>].

**Data Archive Center:**

**Contact for Data Center Access Information:**

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Telephone: +1 (865) 241-3952

## 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

<b>Acronym</b>	<b>Definition</b>
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

Historical Document Revision Date: October 26, 2004

Document Review Date: Not Available

Document Curator: Not Available

Source Document URL:  
[http://whrc.org/LBA\\_data/Amaz\\_Soil\\_prof.htm](http://whrc.org/LBA_data/Amaz_Soil_prof.htm)