

Soil Map of Brazil

Summary:

The Soil Map of Brazil consists of a digital version of the MAPA DE SOLOS DO BRASIL (EMBRAPA, 1981) which was digitized at the U.S. Geological Survey's EROS Data Center, Sioux Falls, South Dakota, in 1992. Seventy soil groups are defined.

1. Data Set Overview

Data Set Identification:

Soil Map of Brazil

Data Set Introduction:

The Soil Map of Brazil consists of a digital version of the MAPA DE SOLOS DO BRASIL (EMBRAPA, 1981) which was digitized at the U.S. Geological Survey's EROS Data Center, Sioux Falls, South Dakota, in 1992.

Objective/Purpose: Not Available

Summary of Parameters:

Associated Soil Groups

There is no information accompanying this dataset summarizing the creation of the soil groups mapped.

Seventy soil groups are defined (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:

Norman Bliss, Ph.D.; Peter Schlesinger, M.A., Daniel Nepstad, Ph.D., Paul Lefebvre, M.S.

Title of Investigation:

Source Data Title:

Soil Map of Brazil

Data Preparation Title:

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

Contact Information:

1) Source Data Investigator:

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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

These data were acquired from the UNEP/GRID World Wide Web site at the US Geologic Survey EROS Data Center. See [Environmental Datasets](#)

6. Observations

Data Notes: Not Available
Field Notes: Not Available

7. Data Description

Spatial Characteristics:

Spatial Coverage:

Location

Min X	-73.9777
Max X	-29.29609
Min Y	-33.77586
Max Y	5.239861

In decimal degrees of Longitude and Latitude

Spatial Coverage Map: Not Available

Spatial Resolution:

Source data: 1:5,000,000 scale

Planimetry based on map of Brazil 1:5,000,000 scale

Projection:

Geographic, Units = DD, Spheroid = Clarke 1866

Grid Description: Not Applicable

Temporal Characteristics:

Temporal Coverage:

The source data were published in numerous volumes and maps originally at a scale of 1:1,000,000 over a period of 15 years, starting in 1973.

Temporal Coverage Map: Not Applicable

Temporal Resolution: Not Applicable

Data Characteristics:

Parameter/Variable:

Associated Soil Groups

Variable Description/Definition:

- 1 Latossolo Vermelho - Escuro Distrofico
- 2 Latossolo Vermelho - Escuro Distrofico e Eutrofico
- 3 Latossolo Vermelho - Escuro Eutrofico
- 4 Latossolo Roxo Distrofico
- 5 Latossolo Roxo Distrofico e Eutrofico
- 6 Latossolo Vermelho - Amarelo Distrofico
- 7 Latossolo Vermelho - Amarelo Distrofico e Eutrofico
- 8 Latossolo Humico Distrofico
- 9 Latossolo Amarelo Distrofico
- 10 Latossolo Bruno Distrofico
- 11 Terra Roxa Estruturada Distrofica
- 12 Terra Roxa Estruturada Distrofica e Eutrofica
- 13 Terra Roxa Estruturada Eutrofica
- 14 Terra Roxa Estruturada Similar Distrofica e Eutrofica
- 15 Terra Roxa Estruturada Similar Eutrofica
- 16 Terra Bruna Estruturada Distrofica
- 17 Terra Bruna Estruturada Distrofica e Eutrofica
- 18 Podzolico Vermelho - Amarelo Distrofico Tb
- 19 Podzolico Vermelho - Amarelo Distrofico Tbta
- 20 Podzolico Vermelho - Amarelo Eutrofico Tb
- 21 Podzolico Vermelho - Amarelo Eutrofico Tbta
- 22 Podzolico Vermelho - Amarelo Eutrofico Ta
- 23 Podzolico Plintico Distrofico Tb
- 24 Podzolico Plintico Eutrofico Tb
- 25 Podzolico Plintico Eutrofico Ta
- 26 Podzolico Bruno - Acinzentado Distrofico
- 27 Podzolico Bruno - Acinzentado Eutrofico
- 28 Podzol (Indiscriminados)
- 29 Brunizem
- 30 Brunizem Avermelhado

31 Solos Brunos Nao Calcicos (Indiscriminados)
32 Planossolo Distrofico e Eutrofico Tb
33 Planossolo Eutrofico Ta
34 Planossolo Molico
35 Planossolo Solodico
36 Solonetz - Solodizado (Indiscriminados) 37 Solonchak
38 Solos Salinos Indiscriminados Costeiros
39 Cambissolo Distrofico Tb
40 Cambissolo Distrofico Tbta
41 Cambissolo Distrofico e Eutrofico Tbta
42 Cambissolo Eutrofico Tb
43 Cambissolo Eutrofico Tbta
44 Cambissolo Eutrofico Ta
45 Cambissolo Humico Tb
46 Cambissolo Humico Tbta
47 Laterita Hidromorfica Distrofica Tb
48 Laterita Hidromorfica Distrofica e Eutrofica Ta
49 Laterita Hidromorfica Eutrofica Tbta
50 Lateritas Hidromorficas Indiscriminadas
51 Solos Gley Distroficos
52 Solos Gley Distroficos e Eutroficos
53 Solos Gley Eutroficos
54 Areias Quartzosas Distroficas
55 Areias Quartzosas Marinhas
56 Areias Quartzosas Hidromorficas
57 Vertissolos (Indiscriminados)
58 Solos Litolicos Distroficos
59 Solos Litolicos Distroficos e Eutroficos
60 Solos Litolicos Eutroficos
61 Solos Litolicos Humicos 62 Rendzina
63 Regossolo Distrofico
64 Regossolo Distrofico e Eutrofico
65 Regossolo Eutrofico
66 Solos Aluviais Distroficos e Eutroficos
67 Solos Aluviais Eutroficos
68 Solos Concrecionarios Indivisos Distroficos
69 Solos Concrecionarios Indivisos Distroficos e Eutroficos
70 Water

Unit of Measurement: Soil Groups

Data Source:

The source of this data set was the UNEP/GRID Sioux Falls, South Dakota World Wide Web site:

<http://grid2.cr.usgs.gov>

The documentation with the digital version of this map credits: Brazilian Agency for Agricultural Research Associated with the Ministry of Agriculture National Soil Survey and Mapping Service

Data Range:

1-70

Sample Data Record: Not Applicable

8. Data Organization

Data Granularity:

A general description of data granularity as it applies to the IMS appears in the EOSDIS Glossary.

This dataset consists of a single tarred and GNU-zipped of the filename BRSOL11D.taz comprised of 2,075,476 8-bit bytes.

Data Format:

Within the tarred and GNU-zipped file is a compressed file in Arc Info Interchange (.E00) Format - BRSOL11D.E00, which when decompressed will comprise 6,840,095 8-bit bytes, and a copy of the online readme file distributed with this dataset by UNEP/GRID-Sioux Falls (BRSOL11D.HTM).

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:

See the file BRSOL11D.htm included with this dataset.

Any Other Relevant Information about the Study:

According to the readme file attached to these data:

"The information contained in the map is highly generalized. The scale is very small and there is not soil uniformity in large expanses. The map units are predominantly associations of several soil types; of these, only the principal ones are specified within each map unit. The naming of each map unit is given according to the areal importance of those soil types that are contained in each association. Soil types with little areal importance are not listed.

The composition of the map units is not entirely consistent across the full range of the map, nor is the precision of the map unit boundaries uniform."

12. Application of the Data Set

Not Available

13. Future Modifications and Plans

Not Applicable

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:

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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

Some of the information about this dataset was extracted directly from the readme meta-files on the UNEP/GRID
Sioux Falls, SD World Wide Web site:

<http://grid2.cr.usgs.gov/data/brsoil11d.html>

The original map was prepared by:

Ministério da Agricultura, Instituto Brasileiro de Desenvolvimento Florestal, Secretária de Planejamento e
Coordenação da Presidência da Republica, Fundação Instituto Brasileiro de Geografia e Estatística - IBGE

Coordinated and planned by M.N. Camargo and executed together with J. Olmos I.L., F. Palmieri, T.E. Rodrigues,
P.K.T. Jacomine, E.P. Mothci, R.O. Potter, A.P. de Carvalho, M.J. Rauen, H.G. dos Santos, S.C.P. Pessoa, J.A.M.
do Amaral.

This version of the map was made available by and digitized by:

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18. Glossary of Terms

Not Available

19. List of Acronyms

Acronym	Definition
ASCII	American Standard Code for Information Interchange
DD	Decimal Degrees
EMBRAPA	Brazilian Agricultural Research Corporation, of the Ministry of Agriculture and Food Supply
EROS	Earth Resources Observation Systems
GNU	GNU's not UNIX
GRID	Global Resources Information Database
UNEP	United Nations Environment Program

20. Document Information

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Document Curator:

Not Available

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