

INFOHYDRO

Brazil

Hydrological observation in the country are largely undertaken by [National Water Agency](#)

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Percentage of coverage represented by these data:

N/A

Last update:

15/02/2006

Preliminary information

Brazil

Main unit of institution name (*Base name of an institution, usually the name of the governing body*)

National Water Agency

Subordinate unit of institution name (*Part of a name of an institution that defines a subdivision or department or unit of the institution*)

Superintendency of Hydrological Information

Abbreviated name

ANA

Full mailing address (*of the Institution*)

Setor Policial, Área 5, Quadra 3, Bloco "M". CEP: 70610-200

Full location address (*of the Institution*). Indicate only if not the same then mailing address

Telephone number (*Central operator*)

55-61-21095400

Telefacsimile number (*Central operator*)

55-61-21095265

Electronic mail identifier (*E-mail address*)

Host system network address (*Web site address*)

www.ana.gov.br

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Preliminary information		Brazil
Protocol options (<i>Code, word or phrase that specifies capabilities that are supported by a service provider ; "yes" -If activity undertaken - "no" otherwise</i>)	General Hydrology	yes
	Hydropower	no
	Agriculture	no
	Water supply	no
	Flood control	no
	Pollution control	no
	Navigation	no
	Others (<i>please specify</i>)	Regulate Water Usage
Coverage	National (<i>if not leave blank</i>)	yes
	Other (Regional, State, Province...)	
Types of stations operated	Hydrometric	yes
	Groundwater	no
	Climate	no
	Snow	no
	Lake levels	no
	Glaciers	no
	Estuaries	no
	Ice thickness	no
	Soil Moisture	no
	Sediment	yes
	Water quality	yes
Bio diversity	no	
Geographical Descriptors	Area of country or region (State) (<i>km²</i>)	8.547.403 km2
	Mean Annual Precipitation (<i>mm</i>)	
	Standard Deviation of Annual Precipitation (<i>mm</i>)	
	General climate (<i>Tropical,sub-tropical, Arid, semi-arid, temperate etc...</i>)	

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Pluviographs - Continuous Precipitation Recording		Brazil
Number of sites at which recordings are taken (<i>Number of sites currently operating</i>)		2156
Level of responsibility for national coverage (<i>Yes if "National" or specify "Other" but not both</i>)	National (<i>if not leave blank</i>)	yes
	Other (<i>Regional, State, Province...</i>)	
Tabular information on the number of stations operated for different time periods (<i>Number of sites currently operating</i>)	Less than 5 years	369
	5 years to 10 years	400
	11 years to 30 years	481
	Greater than 30 years	554
Method of transmission of data from sites and number of sites using this method of transmission (<i>Number of sites currently operating</i>)	Telephone	
	Radio	
	Satellite	
	Others (<i>Please specify and give number operating</i>)	878 telemetric stations and 1278 post collected
Method used to estimate precipitation (<i>Number of sites currently operating</i>)	Tipping Bucket	
	Siphon	
	Others (<i>Please specify and give number operating</i>)	
Number of radar stations located in the country (<i>Number of sites</i>)		
Date that this information was last updated (<i>month and year</i>)		12-2005
Are the data: Available in an electronic medium (<i>yes or no</i>)		no
Stored in a database (<i>yes or no</i>)		no

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Daily Precipitation		Brazil
Number of sites at which recordings are taken (<i>Number of sites currently operating</i>)		6962
Level of responsibility for national coverage (<i>Yes if "National" or specify "Other" but not both</i>)	National (<i>if not leave blank</i>)	yes
	Other (<i>Regional, State, Province...</i>)	
Tabular information on the number of stations operated for different time periods (<i>Number of sites currently operating</i>)	Less than 5 years	613
	5 years to 10 years	566
	11 years to 30 years	1470
	Greater than 30 years	4312
Method of transmission of data from sites and number of sites using this method of transmission (<i>Number of sites currently operating</i>)	Telephone	
	Radio	
	Satellite	
	Post/Collected	6962
	Others (<i>Please specify and give number operating</i>)	
Date that this information was last updated (<i>month and year</i>)		12-2005
Are the data: Available in an electronic medium (<i>yes or no</i>)		no
Stored in a database (<i>yes or no</i>)		no

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Evaporation		Brazil
Recording frequency (<i>Instantaneous, seconds, minutes, hours, days, etc.</i>)		Days
Number of sites at which recordings are taken (<i>Number of sites currently operating</i>)		354
Level of responsibility for national coverage (<i>Yes if "National" or specify "Other" but not both</i>)	National (<i>if not leave blank</i>)	yes
	Other (<i>Regional, State, Province...</i>)	
Tabular information on the number of stations operated for different time periods (<i>Number of sites currently operating</i>)	Less than 5 years	4
	5 years to 10 years	12
	11 years to 30 years	74
	Greater than 30 years	257
Method of transmission of data from sites and number of sites using this method of transmission (<i>Number of sites currently operating</i>)	Telephone	
	Radio	
	Satellite	
	Post/Collected	354
	Others (<i>Please specify and give number operating</i>)	
Method used to estimate evaporation (<i>Yes -If activity undertaken- No, otherwise</i>)	Direct measurement	yes
	Indirect calculation	no
Date that this information was last updated (<i>month and year</i>)		12-2005
Are the data: Available in an electronic medium (<i>yes or no</i>)		no
Stored in a database (<i>yes or no</i>)		no

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Stage non-recording		Brazil
Recording frequency (<i>Instantaneous, seconds, minutes, hours, days, etc.</i>)		Twice a day
Number of sites at which measurements are taken (<i>Number of sites currently operating</i>)		593
Level of responsibility for national coverage (<i>Yes if "National" or specify "Other" but not both</i>)	National (<i>if not leave blank</i>)	yes
	Other (<i>Regional, State, Province...</i>)	
Tabular information on the number of stations operated for different time periods (<i>Number of sites currently operating</i>)	Less than 5 years	45
	5 years to 10 years	53
	11 years to 30 years	259
	Greater than 30 years	236
Method of transmission of data from sites and number of sites using this method of transmission (<i>Number of sites currently operating</i>)	Telephone	
	Post/Collected	593
	Others (<i>Please specify and give number operating</i>)	
Method used to estimate stage (<i>Yes -If activity undertaken. -No- otherwise</i>)	Gauge-board	yes
	Others (<i>Please specify</i>)	
Date that this information was last updated (<i>month and year</i>)		12-2005
Are the data: Available in an electronic medium (<i>yes or no</i>)		no
Stored in a database (<i>yes or no</i>)		no

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Stage recording		Brazil
Recording frequency (<i>Instantaneous, seconds, minutes, hours, days, etc.</i>)		Continuous, hours
Number of sites at which recordings are taken (<i>Number of sites currently operating</i>)		343
Level of responsibility for national coverage (<i>Yes if "National" or specify "Other" but not both</i>)	National (<i>if not leave blank</i>)	yes
	Other (<i>Specify if Regional, State, Province...</i>)	
Tabular information on the number of stations operated for different time periods (<i>Number of sites currently operating</i>)	Less than 5 years	142
	5 years to 10 years	118
	11 years to 30 years	30
	Greater than 30 years	24
Method of transmission of data from sites and number of sites using this method of transmission (<i>Number of sites currently operating</i>)	Telephone	
	Radio	
	Satellite	
	Post/Collected	
	Others (<i>Please specify and give number operating</i>)	286 telemetric stations and 57 post collected
Method used to estimate stage (<i>Yes -If activity undertaken. -No- otherwise</i>)	Gauge-board	no
	Float Well	no
	Gas-pressure	no
	Others (<i>Please specify</i>)	
Date that this information was last updated (<i>month and year</i>)		12-2005
Are the data: Available in an electronic medium (<i>yes or no</i>)		no
Stored in a database (<i>yes or no</i>)		no

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Discharge non-recording		Brazil
Recording frequency (<i>Instantaneous, seconds, minutes, hours, days, etc.</i>)		twice a day
Number of sites at which measurements are taken (<i>Number of sites currently operating</i>)		2051
Level of responsibility for national coverage (<i>Yes if "National" or specify "Other" but not both</i>)	National (<i>if not leave blank</i>)	yes
	Other (<i>Regional, State, Province...</i>)	
Tabular information on the number of stations operated for different time periods (<i>Number of sites currently operating</i>)	Less than 5 years	411
	5 years to 10 years	206
	11 years to 30 years	509
	Greater than 30 years	925
Method of transmission of data from sites and number of sites using this method of transmission (<i>Number of sites currently operating</i>)	Telephone	
	Post/Collected	2051
	Others (<i>Please specify and give number operating</i>)	
Method used to determine stage (<i>Yes -If activity undertaken- No, otherwise</i>)	Direct measurement (<i>Gauge Boards</i>)	yes
	Indirect calculation	no
Method used to estimate discharge (<i>Yes -If activity undertaken. -No- otherwise</i>)	Rating Curve	yes
	Others (<i>Please specify</i>)	
Date that this information was last updated (<i>month and year</i>)		12-2005
Are the data: Available in an electronic medium (<i>yes or no</i>)		no
Stored in a database (<i>yes or no</i>)		no

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Discharge recording		Brazil
Recording frequency (<i>Instantaneous, seconds, minutes, hours, days, etc.</i>)		Continuous, Hours
Number of sites at which recordings are taken (<i>Number of sites currently operating</i>)		1161
Level of responsibility for national coverage (<i>Yes if "National" or specify "Other" but not both</i>)	National (<i>if not leave blank</i>)	yes
	Other (<i>Regional, State, Province...</i>)	
Tabular information on the number of stations operated for different time periods (<i>Number of sites currently operating</i>)	Less than 5 years	468
	5 years to 10 years	286
	11 years to 30 years	192
	Greater than 30 years	126
Method of transmission of data from sites and number of sites using this method of transmission (<i>Number of sites currently operating</i>)	Telephone	
	Radio	
	Satellite	
	Post/Collected	
	Others (<i>Please specify and give number operating</i>)	772 telemetric stations and 389 pluviograph stations
Method used to determine stage (<i>Yes -If activity undertaken- No, otherwise</i>)	Gauge-board	no
	Float Well	no
	Gas-pressure	no
	Others (<i>Please specify</i>)	
Method used to estimate discharge (<i>Yes -If activity undertaken- No,</i>	Rating Curve	no
	Others (<i>Please specify</i>)	
Date that this information was last updated (<i>month and year</i>)		12-2005
Are the data: Available in an electronic medium (<i>yes or no</i>)		no
Stored in a database (<i>yes or no</i>)		no

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Sediment		Brazil
Recording frequency (<i>Instantaneous, seconds, minutes, hours, days, etc.</i>)		Campaign
Number of sites at which recordings are taken (<i>Number of sites currently operating</i>)		635
Level of responsibility for national coverage (<i>Yes if "National" or specify "Other" but not both</i>)	National (<i>if not leave blank</i>)	yes
	Other (<i>Regional, State, Province...</i>)	
Tabular information on the number of stations operated for different time periods (<i>Number of sites currently operating</i>)	Less than 5 years	144
	5 years to 10 years	194
	11 years to 30 years	277
	Greater than 30 years	20
Date that this information was last updated (<i>month and year</i>)		12-2005
Are the data: Available in an electronic medium (<i>yes or no</i>)		no
Stored in a database (<i>yes or no</i>)		no

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Water quality		Brazil
Data routinely measured (Yes -if activity undertaken. -No- otherwise)	Water Temperature	no
	Air Temperature	no
	pH	no
	Specific Conductivity	no
	Dissolved Oxygen	no
	Turbidity	no
	Major ions	no
	Metals	no
	Organics	no
	Pesticides	no
	Herbicides	no
	Mercury	no
	Phenols	no
	Nutrients	no
BOD & COD	no	
POPs	no	
	Others (Please specify)	
Number of sites at which recordings are taken (Number of sites currently operating)		2877
Level of responsibility for national coverage (Yes if "National" or specify "Other" but not both)	National (if not leave blank)	yes
	Other (Regional, State, Province...)	
Tabular information on the number of stations operated for different time periods (Number of sites currently operating)	Less than 5 years	1254
	5 years to 10 years	647
	11 years to 30 years	876
	Greater than 30 years	50
Date that this information was last updated (month and year)		12-2005
Are the data: Available in an electronic medium (yes or no)		no
Stored in a database (yes or no)		no