

Data Set Citation

When using this data, please cite the data package

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Surface weather stations and lightning data

rachelalbrecht.7.2

General Information

Title:Surface weather stations and lightning data

Identifier:rachelalbrecht.7.2

Abstract:Surface weather stations and lightning data for diurnal and monthly composities. Objectives: Study the influence of river breezes in the development of deep convection using lightning strokes as a proxy for deep convection. Experimental Design: - Two surface weather stations: 1 (one) at Ponta Pelada airport (North of Negro, Solimões and Amazonas rivers conjunction) and 1 (one) at GoAmazon T2 Site (west of Solimões River) - Lightning strikes from Vaisala Inc. Global Lightning Detection network (GLD360) Methods: - Lightning strikes by hour of the day to show diurnal cycle - Use GoAmazon IOP1 (Feb-Mar 2014) and IOP2 (Sep-Oct 2014) as "monthly" variations (i.e., IOP1 == Wet season and IOP2 == Dry season)

Keywords:

lightning strokes

wind direction

wind speed

Data Table, Image, and Other Data Details:

Metadata download

[Ecological Metadata Language \(EML\) File](#)

Data Table:

Name:

GLD360_iop2.csv

Physical Structure Description:

Object Name:

GLD360_iop2.csv

Size:

16262611 byte

Text Format:

Number of Header Lines:

1

Record Delimiter:

#x0A

Attribute Orientation:

column

Simple Delimited:

Field Delimeter:

,

Number Of Records:

442179

Online Distribution Info:

[ecogrid://knb/rachelalbrecht.3.1](#)

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accuracy Assessment	Coverage	Method
lon		longitude in degrees		ordinal	Def degree					
lat		latitude (degree)		ordinal	Def degree					

t	time stamp in UTC	dateTime
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Data Table:

Name:

GLD360_iop1.csv

Physical Structure Description:

Object Name:

GLD360_iop1.csv

Size:

2078445 byte

Text Format:

Number of Header Lines:

1

Record Delimiter:

#x0A

Attribute Orientation:

column

Simple Delimited:

Field Delimeter:

,

Number Of Records:

56517

Online Distribution Info:

ecogrid://knb/rachelalbrecht.4.1

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accuracy Assessment	Coverage	Method
lon		longitude (degree)		ordinal	Def degree					
lat		latitude (degree)		ordinal	Def degree					
t		time in UTC		dateTime						

Data Table:

Name:

T2 weather station

Physical Structure Description:

Object Name:

T2_2014.csv

Text Format:

Attribute Orientation:

column

Simple Delimited:

Field Delimeter:

,

Online Distribution Info:

ecogrid://knb/rachelalbrecht.9.1

Attribute(s) Info:

Name	Column Label	Definition	Type of Value	Measurement Type	Measurement Domain	Missing Value Code	Accuracy Report	Accuracy Assessment	Coverage	Method
time		Time in local time		dateTime						
Rain		1-minute accumulated rain in mm		nominal	Def mm					

temperature		air temperature in Celsius		interval	Unit celsius					
					Type real					
relative humidity		relative humidity of air		nominal	Def %					
pressure		air pressure in mbar		ratio	Unit millibar					
					Type natural					
Wind Speed		Wind Speed at 2.5m		interval	Unit metersPerSecond					
					Type natural					
Wind Direction		Wind Direction at 2.5m in degree		nominal	Def degree					

Data Table:

Name:

Ponta Pelada Airport Weather Station

Physical Structure Description:

Object Name:

Vento_Ponta_Pelada-2014.csv

Text Format:

Attribute Orientation:

column

Simple Delimited:

Field Delimiter:

,

Online Distribution Info:

<ecogrid://knb/rachelalbrecht.11.1>

Attribute(s) Info:

Involved Parties

Data Set Creators

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Data Set Characteristics

Geographic Region:	
Geographic Description:	GoAmazon2014/2015 Field Experiment Region (T3 position +/- 1.5 degrees)
Bounding Coordinates:	West: -60.5 degrees

		East: -58.125 degrees
		North: -1.625 degrees
		South: -4.0 degrees

Time Period:	
Begin:	2014-02-12
End:	2014-12-12

Time Period:	
Begin:	2014-02-12
End:	2014-03-12

Time Period:	
Begin:	2014-09-12
End:	2014-10-12

Sampling, Processing and Quality Control Methods

Step by Step Procedures	
Step 1:	
Description:	Rainy season types Data is separated into rainy seasons: Wet season = Feb-Mar Transition = Sep-Oct
Instrument(s):	R-CRAN
Sampling Area And Frequency:	Wet season = Feb-Mar Dry-to-Wet season = Sep-Oct
Sampling Description:	Weather station is by minute Lightning data is instanteneous

Data Set Usage Rights

Lightning data is proprietary and cannot be shared. Surface weater stations are public available and can be shared.

Access Control:		
Auth System:	knb	
Order:	allowFirst	
Allow:	[read]	public