

IMPETUS_radiosondes

General information

Dataset name: IMPETUS_radiosondes
Created on: 2019-10-28

Contact(s)

Fink Andreas - KIT - Andreas.fink@kit.edu (PI or Lead scientist)

Period

Date begin (yyyy-mm-jj): 2002-04-24
Date end (yyyy-mm-jj): 2002-10-15

Project(s)

IMPETUS

Data description

Abstract

High-resolution radiosonde dataset from the IMPETUS campaign at Parakou, Benin. Period: 24 April - 15 October 2002.

Observing strategy

00 and 12 UTC, with 25 radiosondes at synoptic hours before rainfall events. Measurements every 2 seconds (i.e. approx 10 m altitude). The meta-information shows the availability of data (with German notes): black dots -> standard launch ; red dots -> additional launch prior to rain events ; blue dots: tests/2nd attempt.

References

Fink, A. H., D. G. Vincent, and V. Ermert, 2006: Rainfall Types in the West African Soudanian Zone during the Summer Monsoon 2002. Mon. Wea. Rev., 134 (8), 2143-2164, <http://journals.ametsoc.org/doi/pdf/10.1175/MWR3182.1>.

Instrument information

Sensor

Instrument type: RADIOSONDES
Manufacturer: Vaisala
Model: RS80

Geographic information

Parakou

Location name:	Parakou
Platform type:	RADIOSONDES
West bounding coordinate (°):	2.62
East bounding coordinate (°):	2.62
North bounding coordinate (°):	9.35
South bounding coordinate (°):	9.35

Measured parameters

Atmospheric Pressure Measurements

Parameter keyword:	Atmosphere > Atmospheric Pressure > Atmospheric Pressure Measurements
Unit:	hecto Pascal - hPa

Vertical Profiles

Parameter keyword:	Atmosphere > Atmospheric Temperature > Upper Air Temperature > Vertical Profiles
Unit:	degrees Kelvin - K

Humidity

Parameter keyword:	Atmosphere > Atmospheric Water Vapor > Water Vapor Indicators > Humidity
Unit:	percent - %

Derived parameters

Wind Speed

Parameter keyword:	Atmosphere > Atmospheric Winds > Wind Speed
Unit:	meter per second - m/s

Dew Point Temperature

Parameter keyword:	Atmosphere > Atmospheric Water Vapor > Water Vapor Indicators > Dew Point Temperature
Unit:	degrees Kelvin - K

Data use information

Use constraints:	Please inform the Point of Contact if you use the data for publication
Data policy:	IMPETUS data policy
Database:	IMPETUS