

AS.PROF_Od - Tropospheric microwave profiler, Nantchagori, Ouémé meso-scale site

General information

Dataset name: AS.PROF_Od - Tropospheric microwave profiler, Nantchagori, Ouémé meso-scale site
Created on: 2006-01-10

Contact(s)

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Period

Date begin (yyyy-mm-jj): 2006-01-12
Date end (yyyy-mm-jj): 2007-01-22

Project(s)

AMMA > AMMA-SOP

Data description

Abstract

Continuous sampling of the vertical distribution of temperature and humidity at Djougou/Nangatchori, Benin in the troposphere with highest vertical resolution in the boundary layer. Raw brightness temperatures will be used for the validation of microwave satellite observations. In combination with windprofiler, radiosoundings and satellite products the development of the boundary layer relative to the occurrence of mesoscale cloud clusters will be investigated. Furthermore, cloud liquid water path together with cloud base height by ceilometer and information on precipitating particles by radar will provide insight into the cloud microphysics.

Observing strategy

Continuous observation with high temporal resolution (<10 s) for one year of the EOP (Jan. 2005-Dec. 2006). Frequent performance of boundary layer scans during the SOP (Jun-Aug 2006).

Instrument information

Sensor

Manufacturer:	Radiometer Physics
Model:	HATPRO Profiler

Geographic information

NANGATCHORI

Location name:	NANGATCHORI
Platform type:	GROUND STATIONS
West bounding coordinate (°):	1.741
East bounding coordinate (°):	1.741
North bounding coordinate (°):	9.647
South bounding coordinate (°):	9.647
Altitude min:	415
Altitude max:	415

Measured parameters

Equivalent Potential Temperature

Parameter name:	Equivalent Potential Temperature
Parameter keyword:	Atmosphere > Atmospheric Temperature > Surface Temperature > Maximum/Minimum Temperature
Unit:	Degrees Celsius - °C
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2007-01-22

Potential Temperature

Parameter name:	Potential Temperature
Parameter keyword:	Atmosphere > Atmospheric Temperature > Surface Temperature > Potential Temperature
Unit:	Degrees Celsius - °C
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2007-01-22

Air Temperature

Parameter name:	Air Temperature
Parameter keyword:	Atmosphere > Atmospheric Temperature > Surface Temperature > Air Temperature

Unit: Degrees Celsius - °C
Date begin (yyyy-mm-jj): 2006-01-12
Date end (yyyy-mm-jj): 2007-01-22

Liquid Water Path

Parameter name: Liquid Water Path
Parameter keyword: Atmosphere > Atmospheric Water Vapor
Unit: gramm per square meter - g.m-2
Date begin (yyyy-mm-jj): 2006-01-12
Date end (yyyy-mm-jj): 2007-01-22

Integrated Water Vapor

Parameter name: Integrated Water Vapor
Parameter keyword: Atmosphere > Atmospheric Water Vapor
Unit: kilograms per square meter
Date begin (yyyy-mm-jj): 2006-01-12
Date end (yyyy-mm-jj): 2007-01-22

Humidity

Parameter name: Humidity
Parameter keyword: Atmosphere > Atmospheric Water Vapor > Water Vapor Indicators > Humidity
Unit: percent - %
Date begin (yyyy-mm-jj): 2006-01-12
Date end (yyyy-mm-jj): 2007-01-22

Data use information

Use constraints: AMMA data policy
Data policy: AMMA data policy