

AE.VHF_O - VHF strato-tropospheric radar, Ouémé meso-scale site

General information

Dataset name: AE.VHF_O - VHF strato-tropospheric radar, Ouémé meso-scale site
Created on: 2005-12-13

Contact(s)

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Period

Date begin (yyyy-mm-jj): 2006-04-25
Date end (yyyy-mm-jj): 2007-11-07

Project(s)

AMMA > AMMA-EOP

Data description

Abstract

Documentation of the atmospheric circulation in clear air and precipitation over 2 cycles of the 3 stages of the monsoon : Flux of energy and humidity in the free troposphere and lower stratosphere. Documentation and fine-scale analysis of the easterly jet. Study and characterisation of atmospheric waves in the tropical regions, including source, flux, periodicity and wavelength. Turbulent exchanges deduced mostly from the Doppler spectral width. Stratospheric-tropospheric exchanges. Studies of the deep and precipitant convection.

Observing strategy

Continuous atmospheric sounding with 6° antenna beamwidth successively pointed toward 4 perpendicular directions at 15° from the zenith and vertically. A 10 to 15 mm cycle provides the 3-dimensional wind profile along with turbulence parameters above the radar. The radar will be operated in an unattended automatic mode. Low and high alternated modes should allow covering a 1 km to 21 km vertical range.

Instrument information

Sensor

Instrument type:	WIND PROFILERS
Manufacturer:	Meteo-France
Model:	45MHz Doppler radar

Geographic information

Nangatchori

Location name:	Nangatchori
Platform type:	GROUND STATIONS
West bounding coordinate (°):	1.7411
East bounding coordinate (°):	1.7411
North bounding coordinate (°):	9.6472
South bounding coordinate (°):	9.6472
Altitude min:	428
Altitude max:	428

Measured parameters

V Wind component

Parameter name:	V Wind component
Parameter keyword:	Atmosphere > Atmospheric Winds
Unit:	meters per second - m/s
Date begin (yyyy-mm-jj):	2006-04-25
Date end (yyyy-mm-jj):	2007-11-07

Vertical Wind Motion

Parameter name:	Vertical Wind Motion
Parameter keyword:	Atmosphere > Atmospheric Winds > Vertical Wind Motion
Unit:	meters per second - m/s
Date begin (yyyy-mm-jj):	2006-04-25
Date end (yyyy-mm-jj):	2007-11-07

U Wind component

Parameter name:	U Wind component
Parameter keyword:	Atmosphere > Atmospheric Winds
Unit:	meters per second - m/s
Date begin (yyyy-mm-jj):	2006-04-25

Date end (yyyy-mm-jj):

2007-11-07

Data use information

Use constraints:	AMMA data policy
Data policy:	AMMA data policy
Original data format(s):	ascii text