

AE.RSO3_Od - PTU and Ozone radiosondes, Cotonou

General information

Dataset name: AE.RSO3_Od - PTU and Ozone radiosondes, Cotonou
Created on: 2006-01-20

Contact(s)

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Period

Date begin (yyyy-mm-jj): 2005-01-17
Date end (yyyy-mm-jj): 2007-01-26

Project(s)

AMMA > AMMA-EOP

Data description

Abstract

Sampling the vertical distribution of ozone in the troposphere and in the stratosphere at the vicinity of Cotonou.
Characterisation of the seasonal (and interannual if possible) variations of ozone over equatorial Africa.
Assessment of transport pathways from the different source regions.
More over, this sounding aims to complement the SHADOZ network which provide no ozone data over continental equatorial Africa except Nairobi so far.
This network aims to characterize the ozone distribution in the tropics and thus to participate to the validation of the AURA satellite products.

Observing strategy

One sounding a week for the two years of the EOP (Dec. 2004-Nov. 2006) at fixed day and time. The frequency will be three times a week during the SOP (Jun-Aug 2006).
Links with other instruments. Coupling with ground based observations (AE.VAN_OR, AE.Aerosol_RW), aircraft data (SOP et MOZAIC if available) and satellite data (ex: AURA validation in the frame of SHADOZ).

Site information

Location name:	COTONOU
Platform type:	GROUND STATIONS
West bounding coordinate (°):	2.23
East bounding coordinate (°):	2.23
North bounding coordinate (°):	6.21
South bounding coordinate (°):	6.21
Altitude min:	10
Altitude max:	31520

Instrument 1 (RADIOSONDES)

Sensor

Instrument type:	RADIOSONDES
Manufacturer:	Vaisala
Model:	RS80

Measured parameter: Air Temperature

Parameter name:	Air Temperature
Parameter keyword:	Atmosphere > Atmospheric Temperature > Surface Temperature > Air Temperature
Unit:	Degrees Celsius - °C

Measured parameter: Wind Direction

Parameter name:	Wind Direction
Parameter keyword:	Atmosphere > Atmospheric Winds > Wind Direction
Unit:	degrees - degrees

Measured parameter: Wind Speed

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

Instrument 2 (OZONE SENSOR)

Sensor

Instrument type:	OZONE SENSOR
Manufacturer:	SPC
Model:	ECC-6A

Measured parameter: Ozone Mixing Ratio

Parameter name: Ozone Mixing Ratio
Parameter keyword: Atmosphere > Atmospheric Chemistry
Unit: part per million - ppm

Measured parameter: Ozone Partial Pressure

Parameter name: Ozone Partial Pressure
Parameter keyword: Atmosphere > Atmospheric Chemistry
Unit: millipascals - mPa

Data use information

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