

AE.Dust_ST - Mineral dust monitoring station network

General information

Dataset name: AE.Dust_ST - Mineral dust monitoring station network
Created on: 2006-01-19

Contact(s)

Chatenet Bernadette - LISA - chatenet@lisa.univ-paris12.fr (PI or Lead scientist)
Marticorena Béatrice - LISA - Beatrice.Marticorena@lisa.u-pec.fr (PI or Lead scientist)
Rajot Jean-louis - IRD Niger - jeanlouis.rajot@ird.fr (PI or Lead scientist)

Period

Date begin (yyyy-mm-jj): 2005-01-15
Date end (yyyy-mm-jj): 2011-01-01

Project(s)

AMMA > AMMA-EOP

Data description

Abstract

To follow mineral dust climatology in the Sahel related to Monsoon cycle. To obtain strong sets of data to constrain dust emission/transport/deposition models (CHIMERE-Dust – RAMS) giving a mineral dust budget at the Sahelian scale.

Observing strategy

Continuous monitoring during at least EOP period. Possible reinforcement of observation during SOP.

Site information

Location name: AE.Dust_ST
Platform type: GROUND STATIONS
West bounding coordinate (°): -16.959
East bounding coordinate (°): 2.632
North bounding coordinate (°): 14.394
South bounding coordinate (°): 13.275
Altitude max: 282

Instrument 1

Sensor

Manufacturer: Rupprecht & Patashnick
Model: TEOM 1400A (PM10)

Measured parameter: PM10 Aerosol Mass Concentration

Parameter name: PM10 Aerosol Mass Concentration
Parameter keyword: Atmosphere > Aerosols
Unit: microgramm per cubic meter - $\mu\text{g.m}^{-3}$

Instrument 2

Sensor

Manufacturer: Vaisala
Model: 50Y

Measured parameter: Air Temperature

Parameter name: Air Temperature
Parameter keyword: Atmosphere > Atmospheric Temperature > Surface Temperature > Air Temperature
Unit: Degrees Celsius - $^{\circ}\text{C}$

Measured parameter: Humidity

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

Instrument 3 (RAIN GAUGES)

Sensor

Instrument type: RAIN GAUGES
Manufacturer: EML
Model: ARG100

Measured parameter: Precipitation Amount (previous 24 hours)

Parameter name: Precipitation Amount (previous 24 hours)
Parameter keyword: Atmosphere > Precipitation
Unit: millimeter - mm

Instrument 4 (ANEMOMETERS)

Sensor

Instrument type: ANEMOMETERS
Manufacturer: Gill Technology Ltd.
Model: Windsonic

Measured parameter: Wind Direction

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

Measured parameter: Standard Deviation of Wind Direction

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

Measured parameter: Wind Speed

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

Data use information

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