AS.Dust_ST_flux - Wind erosion fluxes and dust properties measurements, Banizoumbou, Niamey meso-scale site

General information

Dataset name:	AS.Dust_ST_flux - Wind erosion fluxes and dust properties measurements, Banizoumbou, Niamey meso-scale site
Created on:	2006-01-12

Contact(s)

Rajot Jean-louis - IRD Niger - jeanlouis.rajot@ird.fr (PI or Lead scientist)

Period

Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Project(s)

AMMA > AMMA-SOP

Data description

Abstract

- To measure size resolved dust fluxes in the Sahel related to soil uses and climate variations.
- To assess dust (and nutriments balances) in the Sahel.
- To characterize dust radiative impact related to dust sources and to dust physical and chemical properties.
- In complement with rain gauge measurement, to characterize particulate/dissolved partition of dust and cloud condensation nuclei.

Observing strategy

Continuous measurements during SOP 0, 1 and 2 (except automatic rain gauge just for SOP 1) especially within local erosion events – simultaneous ground based and aircraft measurements.

Measurement station of wind erosion fluxes and dust physical-chemical characteristics:

-Two isokinetic samplers (PIP) equipped with 7 sampling outlets (3 bulk filtration lines, 1 cascad impactor, 1 size optical analyzer (GRIMM), 1 spectral aethalometer (MAGEE 7 λ) 1 spectral Nephelometer (3 λ).

- Meteorological mast (10 Anemometer, 1 wind vane, 4 air temperature, 2 RH).
- Wet and dry deposition samplers.
- 50 poles with 3 sand catchers each (BSNE), 4 saltation samplers (Saltiphone, Sensit).
- Automatic rain gauge.

Instrument information

Sensor

Instrument type:	ANEMOMETERS
Manufacturer:	Magee Scientific
Model:	AE31

Geographic information

BANIZOUMBOU

Location name:	BANIZOUMBOU
West bounding coordinate (°):	2.665
East bounding coordinate (°):	2.665
North bounding coordinate (°):	13.541
South bounding coordinate (°):	13.541

Measured parameters

Carbonaceous Aerosols at 0,37 µm

Parameter name:	Carbonaceous Aerosols at 0,37 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Carbonaceous Aerosols at 0,66 µm

Parameter name:	Carbonaceous Aerosols at 0,66 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Carbonaceous Aerosols at 0,52 µm

Parameter name:	Carbonaceous Aerosols at 0,52 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Carbonaceous Aerosols at 0,59 µm

Parameter name:	Carbonaceous Aerosols at 0,59 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12

Date end (yyyy-mm-jj):	2006-07-17

Carbonaceous Aerosols at 0,47 µm

Parameter name:	Carbonaceous Aerosols at 0,47 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Carbonaceous Aerosols at 0,95 µm

Parameter name:	Carbonaceous Aerosols at 0,95 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Carbonaceous Aerosols at 0,88 µm

Parameter name:	Carbonaceous Aerosols at 0,88 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Scattering Coefficient at 0.45 µm

Parameter name:	Scattering Coefficient at 0.45 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Scattering Coefficient at 0.55 µm

Parameter name:	Scattering Coefficient at 0.55 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Scattering Coefficient at 0.7 µm

Parameter name:	Scattering Coefficient at 0.7 µm
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Total Suspended Particles

Parameter name:	Total Suspended Particles
Parameter keyword:	Atmosphere > Aerosols
Date begin (yyyy-mm-jj):	2006-01-12
Date end (yyyy-mm-jj):	2006-07-17

Data use information

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