

# AS.Flux\_D - Energy balance station, Dano, Burkina Faso

## General information

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Dataset name: AS.Flux\_D - Energy balance station, Dano, Burkina Faso  
Created on: 2006-03-20

### Contact(s)

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Kalthoff Norbert - FZK - Norbert.kalthoff@imk.fzk.de (PI or Lead scientist)

### Period

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Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

### Project(s)

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AMMA > AMMA-SOP

## Data description

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### Abstract

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Continuous measurements of the energy balance of the earth's surface, meteorological parameters, precipitation and soil moisture. The energy balance and water balance components provide the information for the earth-atmosphere feedback and the information for the boundary layer growth. In combination with sodar, radiosoundings and satellite products (surface temperature) the development of the boundary layer relative to the occurrence of mesoscale convective systems will be investigated.

### Observing strategy

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Measurement station for radiation balance components, energy balance components, precipitation, pressure and soil moisture. Energy balance station, including 4 m masts and soil moisture profiles (1 m). Continuous observation with high temporal resolution (30 min) for SOP1a and Sop2a2

## Instrument information

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### Sensor

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Instrument type: ANEMOMETERS  
Manufacturer: Gill Technology Ltd.  
Model: Gill ultra sonic anemometer

## Geographic information

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### BONTIOLI

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Location name:	BONTIOLI
Platform type:	GROUND STATIONS
West bounding coordinate (°):	-3.0678
East bounding coordinate (°):	-3.0678
North bounding coordinate (°):	10.884
South bounding coordinate (°):	10.884

## Measured parameters

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### Humidity

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Parameter name:	Humidity
Parameter keyword:	Atmosphere > Atmospheric Water Vapor > Water Vapor Indicators > Humidity
Unit:	percent - %
Date begin (yyyy-mm-jj):	2006-06-01
Date end (yyyy-mm-jj):	2006-08-20

### Latent Heat Flux

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Parameter name:	Latent Heat Flux
Parameter keyword:	Atmosphere > Atmospheric Radiation
Unit:	Watt per square meter - W.m-2
Date begin (yyyy-mm-jj):	2006-06-01
Date end (yyyy-mm-jj):	2006-08-20

### Heat Flux

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Parameter name:	Heat Flux
Parameter keyword:	Land Surface > Soils
Unit:	Watt per square meter - W.m-2
Date begin (yyyy-mm-jj):	2006-06-01
Date end (yyyy-mm-jj):	2006-08-20

### Net Radiation

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Parameter name:	Net Radiation
Parameter keyword:	Atmosphere > Atmospheric Radiation > Net Radiation
Unit:	Watt per square meter - W.m-2
Date begin (yyyy-mm-jj):	2006-06-01
Date end (yyyy-mm-jj):	2006-08-20

## Outgoing Shortwave Radiation

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Parameter name: Outgoing Shortwave Radiation  
Parameter keyword: Atmosphere > Atmospheric Radiation  
Unit: Watt per square meter - W.m-2  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Sensible Heat Flux

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Parameter name: Sensible Heat Flux  
Parameter keyword: Atmosphere > Atmospheric Radiation  
Unit: Watt per square meter - W.m-2  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Incoming Shortwave Radiation

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Parameter name: Incoming Shortwave Radiation  
Parameter keyword: Atmosphere > Atmospheric Radiation  
Unit: Watt per square meter - W.m-2  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Air Pressure

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Parameter name: Air Pressure  
Parameter keyword: Atmosphere > Atmospheric Pressure  
Unit: millibars - mbar  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Surface Air Temperature

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Parameter name: Surface Air Temperature  
Parameter keyword: Atmosphere > Atmospheric Temperature > Surface Temperature  
Unit: Degrees Celsius - °C  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Air Temperature

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Parameter name: Air Temperature  
Parameter keyword: Atmosphere > Atmospheric Temperature > Surface Temperature > Air Temperature  
Unit: Degrees Celsius - °C  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Precipitation Amount

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Parameter name: Precipitation Amount  
Parameter keyword: Atmosphere > Precipitation > Precipitation Amount  
Unit: millimeters - mm  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Wind Speed

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Parameter name: Wind Speed  
Parameter keyword: Atmosphere > Atmospheric Winds > Wind Speed  
Unit: meters per second - m/s  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Net Ecosystem Exchange of Carbon Dioxide

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Parameter name: Net Ecosystem Exchange of Carbon Dioxide  
Parameter keyword: Land Surface > Soils  
Unit: micromoles per square meter per second  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Wind Direction

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Parameter name: Wind Direction  
Parameter keyword: Atmosphere > Atmospheric Winds > Wind Direction  
Unit: degrees - degrees  
Date begin (yyyy-mm-jj): 2006-06-01  
Date end (yyyy-mm-jj): 2006-08-20

## Data use information

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Use constraints: AMMA data policy