

AS.D-F20-WIND - WIND Doppler Lidar measurement

General information

Dataset name: AS.D-F20-WIND - WIND Doppler Lidar measurement
Created on: 2006-10-31

Contact(s)

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Period

Date begin (yyyy-mm-jj): 2006-06-30
Date end (yyyy-mm-jj): 2006-07-14

Project(s)

AMMA > AMMA-SOP

Data description

Abstract

Investigation of mesoscale wind fields, in particular monsoon flow and interactions with major African circulations. Combined operations with LEANDRE II aboard F-F20 in order to derive water vapour fluxes.

Observing strategy

Airborne Doppler lidar aboard DLR F20. The laser beam (in thermal IR) of the sounding beam is transmitted through the bottom window of the aircraft and conically scanned (full cone angle of 60 degrees). Vertical profiles of horizontal wind are retrieved from the line-of-sight wind velocities measured by the lidar during one full scan rotation. The profiles extend from the surface to 1km below the aircraft. The vertical resolution is 250 meters, the horizontal resolution is about 4km.

Instrument information

Sensor

Instrument type: WIND PROFILERS
Manufacturer: DLR

Geographic information

DLR-FALCON 20

Location name:	DLR-FALCON 20
Platform type:	AIRCRAFT
West bounding coordinate (°):	-9.3512
East bounding coordinate (°):	9.6338
North bounding coordinate (°):	34.3341
South bounding coordinate (°):	13.5134
Altitude min:	625
Altitude max:	8875

Measured parameters

Wind Direction

Parameter name:	Wind Direction
Parameter keyword:	Atmosphere > Atmospheric Winds > Wind Direction
Unit:	degrees - degrees
Date begin (yyyy-mm-jj):	2006-06-30
Date end (yyyy-mm-jj):	2006-07-14

Wind Speed

Parameter name:	Wind Speed
Parameter keyword:	Atmosphere > Atmospheric Winds > Wind Speed
Unit:	meters per second - m/s
Date begin (yyyy-mm-jj):	2006-06-30
Date end (yyyy-mm-jj):	2006-07-14

Data use information

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