

KIT_Doppler Lidar small_Save

General information

Dataset name: KIT_Doppler Lidar small_Save
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Period

Date begin (yyyy-mm-jj): 2016-06-21
Date end (yyyy-mm-jj): 2016-07-30

Project(s)

DACCIWA > WP1 - Boundary Layer Dynamics

Data description

Abstract

Data from Doppler lidar; parameters are radial velocity and carrier to noise ratio. Laser wavelength 1.54 micrometre.

Observing strategy

Continuous observation. The lidar was operated in vertical stare mode with 6.4 s integration time and a vertical range resolution of 20 m.

Instrument information

Sensor

Instrument type: BACKSCATTER LIDAR
Model: WINDCUBE8

Sensor resolution

Observation frequency: 0.16 Hz

Sensor location

Longitude (°): 2.4281

Latitude (°): 8.001

Height above ground (m): 166

Geographic information

Save

Location name: Save

Platform type: GROUND-BASED OBSERVATIONS

West bounding coordinate (°): 2.4281

East bounding coordinate (°): 2.4281

North bounding coordinate (°): 8.001

South bounding coordinate (°): 8.001

Altitude min: 166

Altitude max: 166

Measured parameter

Radial doppler velocity

Parameter name: Radial doppler velocity

Parameter keyword: Atmosphere > Atmospheric Winds

Unit: meter per second - m/s

Acquisition methodology and quality: Radial velocity is estimated from Doppler shift, i.e. the frequency difference between the transmitted and the returned signal, which occurs when the scattering target is moving. In this special device configuration, radial velocity is equal to vertical velocity. Positive values correspond to upward motions.

Data use information

Use constraints: The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 603502.

Data policy: DACCIIWA data policy

Database: Dacciwa database

Original data format(s): NetCDF