

Measurements of the micrometeorological tower located in Rollesbroich

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Dataset information

Measurement frequency: 1 sec

Averaging interval: 10 min

Period: 01.01.2009 - 31.12.2009

Location: Rollesbroich (50°37'24.34" N, 6°18'22.81" E, 514 m asl)

The timestamp is given in UTC and refers to the end of the measuring interval.

Data was checked for plausibility.

Missing values in time series are given as "-9999.9".

If sensible and latent heat flux measurements were required, please contact.

Variables

Name	Unit	Variable	Instrument manufacturer
R	W m^{-2}	global radiation in 2.6 m	CM3, Kipp & Zonen, Delft, Netherlands
Q	W m^{-2}	net radiation in 2.6 m	NR-LITE, Kipp & Zonen, Delft, Netherlands
G	W m^{-2}	soil heat flux in -0.08 m	HFP01, Hukseflux Thermal Sensors, Delft, Netherlands
precip	$\text{mm}^{-10\text{Min}}$	precipitation in 1 m	RM 200 Standard, Nivus, Eppingen, Germany
T_soil	$^{\circ}\text{C}$	soil temperature in -0.05 m	PT100, EcoTech, Bonn, Germany
Ta_2m	$^{\circ}\text{C}$	air temperature in 2 m	HygroClip, Rotronic, Ettlingen, Germany
Ta_3.5	$^{\circ}\text{C}$	air temperature in 3.5 m	HygroClip, Rotronic, Ettlingen, Germany
Ta_5m	$^{\circ}\text{C}$	air temperature in 5 m	HygroClip, Rotronic, Ettlingen, Germany
RH_2m	%	relative humidity in 2 m	HygroClip, Rotronic, Ettlingen, Germany
RH_3.5	%	relative humidity in 3.5 m	HygroClip, Rotronic, Ettlingen, Germany
RH_5m	%	relative humidity in 5 m	HygroClip, Rotronic, Ettlingen, Germany
wind_2m	m s^{-1}	wind velocity in 2 m	compact, Thies Climate, Göttingen, Germany
wind_5m	m s^{-1}	wind velocity in 5 m	compact, Thies Climate, Göttingen, Germany
SWC_10cm	$\text{m}^3 \text{m}^{-3}$	soil water content in -0.1 m	ML2x ThetaProbe, Delta-T Devices, Cambridge, UK
SWC_30cm	$\text{m}^3 \text{m}^{-3}$	soil water content in -0.3 m	ML2x ThetaProbe, Delta-T Devices, Cambridge, UK
SWC_60cm	$\text{m}^3 \text{m}^{-3}$	soil water content in -0.6 m	ML2x ThetaProbe, Delta-T Devices, Cambridge, UK

Table 1: Variables measured at the meteorological tower in Rollesbroich