

Supplement to:
From initiation of convective storms to their impact —
the Swabian MOSES 2023 campaign in southwestern
Germany

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Table 1: Overview of all measuring locations (part 1)

Description	Device Name	Device Type
KITcube main site Villingen Schwenningen 48.05627° N 8.48715° E	WTX WLS8 RPG Ka/W HATPRO G4 MW41 SkyInsight CHM15k Nimbus Cimel GPSgreen+ WSN CRNS S3 DA10	Doppler Lidar Doppler Lidar FMCW Cloud Radar Microwaveradiometer Energy balance station Radiosonde station (RS41-SGP sondes) Infrared Sky Imager SONA Ceilometer Sun Photometer GNSS receiver soil moisture network cosmic-ray neutron sensing station Humidity DIAL (temporarily)
SolarCube Lindach 48.5929° N 9.5309° E	SolarCube	gravimeter cosmic-ray neutron sensing station soil moisture network
Precipitation Radar Bonndorf 47.82509° N 8.34781° E	Meteor50DX Parsivel	X-Band radar Distrometer Cloud Camera soil moisture network
Autolauncher Köestlach 47.51134° N 7.26196° E	AS41	Autolauncher (RS41-SGP sondes)
Energy balance station Weilheim 48.62142° N 9.51094° E	Parsivel	Energy balance station Distrometer soil moisture network
Energy balance station Dettingen unter Teck, airfield 48.60997° N 9.47076° E	Parsivel	Energy balance station Distrometer soil moisture network
Mesostation Albbruck 47.58579° N 8.12995° E	WLS200S Mobotix S16 Parsivel	Doppler Lidar Cloud camera Met. Tower GNSS receiver Distrometer

Table 2: Overview of all measuring locations (part 2)

Description	Device Name	Device Type
Schönau im Schwarzwald 47.78484° N 7.89735° E	Parsivel	Distrometer soil moisture network
Mesostation Fischerbach 48.28240° N 8.10526° E	WLS200S Mobotix S16 Parsivel	Doppler Lidar Cloud camera Met. Tower GNSS receiver Distrometer
Mesostation Weil am Rhein 47.58864° N 7.60778° E	WLS200S Mobotix S16 Parsivel	Doppler Lidar Cloud camera Met. Tower GNSS receiver Distrometer
Mesostation Schallstadt 47.96723° N 7.77336° E	WLS200S Mobotix S16 Parsivel	Doppler Lidar Cloud camera Met. Tower GNSS receiver Distrometer
Mesostation Schallstadt 48.38670° N 8.58491° E	WLS7 Parsivel	Doppler Lidar Met. Tower GNSS receiver Distrometer
Mesostation Titisee-Neustadt 47.92093° N 8.18374° E	WLS200S Mobotix S16 Parsivel	Doppler Lidar Cloud camera Met. Tower GNSS receiver Distrometer
Doppler Lidar Schaffhausen 47.69002° N 8.62027° E	WLS200S	Doppler Lidar
Aerosol sensor Mt. Feldberg* 47.87362° N 8.00411° E 1494 m a.s.l.	LR111-ESS-D200, Raymetrics PINE, Bilfinger HR-ToF-AMS, Aerodyne CHARON-PTR-MS 4000, Ionicon AE33, Magee Scientific O341M, AS32M Environment 3756, 3776, TSI SMPS, Palas Fidas200, Palas APS, TSI WS700, Lufft Aerosol and INP container	Scanning Aerosol Lidar Portable Ice Nucleation Experiment Aerosol Mass Spectrometer Proton Transfer Reaction Mass Spectrometer Aethalometer Gas monitors O ₃ , NO ₂ , CO ₂ Condensation particle counters Scanning mobility particle sizer Optical particle counter Aerodynamic particle sizer Compact meteorology sensor 20' and 8' containers with PM _{2.5} and TSP inlets

*Please note, the DWD is operating various additional instruments on Mt. Feldberg including a radar (<https://cdc.dwd.de/rest//metadata/station/html/812300243367>).

Table 3: List of sites equipped with only one Parsivel distrometer

Location	latitude	longitude
Schönwald im Schwarzwald	48.09264°	8.19664°
Blumberg	47.83791°	8.55067°
Eggingen	47.69891°	8.38836°
Hilzingen	47.76169°	8.77777°
Ochsenwang	48.57717°	9.51813°
Jesingen	48.64013°	9.49256°
Tuttlingen	47.96904°	8.78445°
Neidlingen	48.58575°	9.55580°
Rottweil	48.17215°	8.63561°