



Cloud Remote Sensing Data Centre - CLU

Ewan O'Connor, Simo Tukiainen, Tuomas Siipola, Niko Leskinen

Lauri Kangassalo, Anniina Korpinen

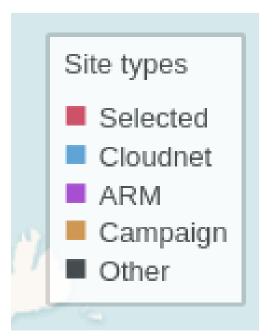
CLU Data Centre status

- Automated processing operation continues...
- ACTRIS CLU (Cloudnet) has moved to centralised processing
 - Raw data (Level 0, including spectra)
 - NF -> CLU
 - All further processing performed at CLU
 - Permits full provenance chain and archive
- Implemented new data transfer procedure for upload
 - Enables more efficient and rapid update and version control
 - Real-time processing
 - All sites using this route for current data





Station Overview - Global

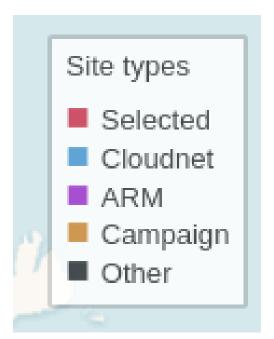








Station Overview – European long-term

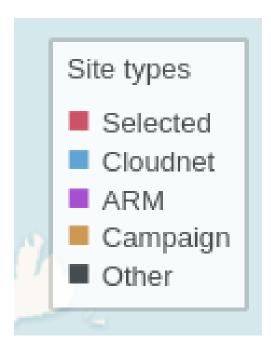


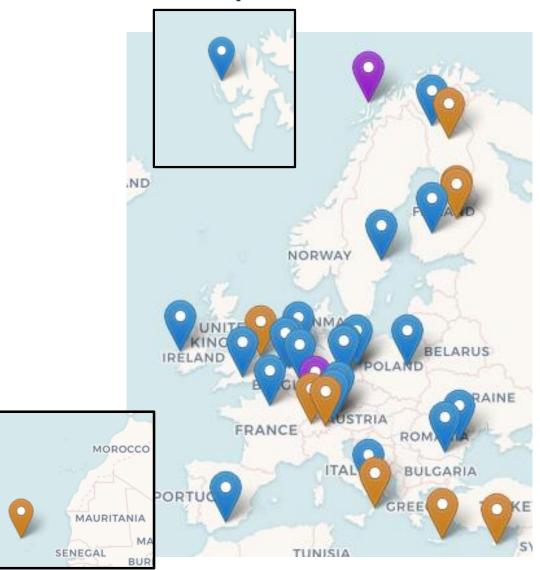






Station Overview - European all









Raw file types

ID	Instrument		File extension / descrip	tion
mira	METEK MIRA-35 cloud radar	*.mmclx fil	es. These can be compressed,	e.g., *.mmclx.gz.
rpg-fmcw-94, rpg- fmcw-35	RPG cloud radars	*.LV1 and	compressed *.Lvo files.	
ct25k , cl31 , cl51	Vaisala ceilometers	*.DAT files	. File extension may be differen stem.	t depending on
c161d	Vaisala CL61-D ceilometer	Non-concat	enated *.nc files.	
chm15k , chm15x	Lufft ceilometers	*.nc files. both.	Either non-concatenated or con	catenated files but not
hatpro	RPG HATPRO microwave radiometer		*.Lwp binary files, but other file temperatures, water vapour, ho	
radiometrics	Radiometrics MP3014 microwave radiometer	*.csv files		
copernicus	Copernicus cloud radar	*.nc files.		
galileo	Galileo cloud radar	*.nc files	ID	Instr
basta	BASTA cloud radar	Daily *.nc		mou
			h = 1	ADM HCDI

*.log file

*.txt file

*.hpl , B

*.nc files

OTT Parsivel2 disdrometer

Thies LNM disdrometer

Halo Photonics Doppler

PollyXT Raman lidar

lidar

parsivel

thies-lnm

lidar

pollyxt

halo-doppler-



ID	Instrument	Possible file extensions	Format	
hsrl	ARM HSRL	*.nc files produced by ARM / Ed Eloranta.	netCDF	
mpl	ARM or MPLnet Micropulse Lidar	*.nc files produced by ARM or similar.	netCDF	
wls100s, wls200s, wls400s	Leosphere windcube long-range scanning Doppler lidars	*.nc files.	netCDF	

Format

netCDF

binary

text

netCDF

netCDF

binary

CSV

netCDF

Raw file types

ID	Instrument	File extension / description	Format
mira	METEK MIRA-35 cloud radar	*.mmclx files. These can be compressed, e.g., *.mmclx.gz.	netCDF
rpg-fmcw-94, rpg- fmcw-35	RPG cloud radars	*.LV1 and compressed *.LV0 files.	binary
ct25k , cl31 , cl51	Vaisala ceilometers	*.DAT files. File extension may be different depending on collection system.	text
c161d	Vaisala CL61-D ceilometer	Non-concatenated *.nc files.	netCDF
chm15k , chm15x	Lufft ceilometers	*.nc files. Either non-concatenated or concatenated files but not both.	netCDF
hatpro	RPG HATPRO microwave radiometer	At least the *.Lwp binary files, but other files are fine too (brightness temperatures, water vapour, housekeeping).	binary
radiometrics	Radiometrics MP3014 microwave radiometer	*.csv files.	CSV
copernicus	Copernicus cloud radar	*.nc files.	netCDF
galileo	Galileo cloud radar	*.nc files.	netCDF
basta	BASTA cloud radar	Daily *.nc files.	netCDF
parsivel	OTT Parsivel2 disdrometer	*.log files.	text
thies-lnm	Thies LNM disdrometer	*.txt files.	text
halo-doppler- lidar	Halo Photonics Doppler lidar	*.hpl , Background*.txt and system_parameters*.txt files.	text
pollyxt	PollyXT Raman lidar	*.nc files.	netCDF



Updates to include VAD scan files for wind

Updates to include other files for full UKöln processing

Discussion on formats