

The logo for ACTRIS and CCRES. It features a blue arc at the top. A vertical teal line descends from the center of the arc, ending in a teal circle. To the right of this line are three more teal circles of increasing size, arranged in a diagonal pattern. Below the arc, the word "ACTRIS" is written in a teal, sans-serif font, and "CCRES" is written in a blue, sans-serif font below it.

# ACTRIS CCRES

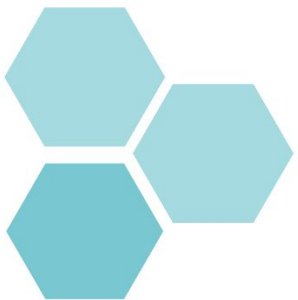
Introduction

**Martial Haeffelin, Elisa Villard**

*CCRES Workshop, Matera – November 7<sup>th</sup>, 2024*



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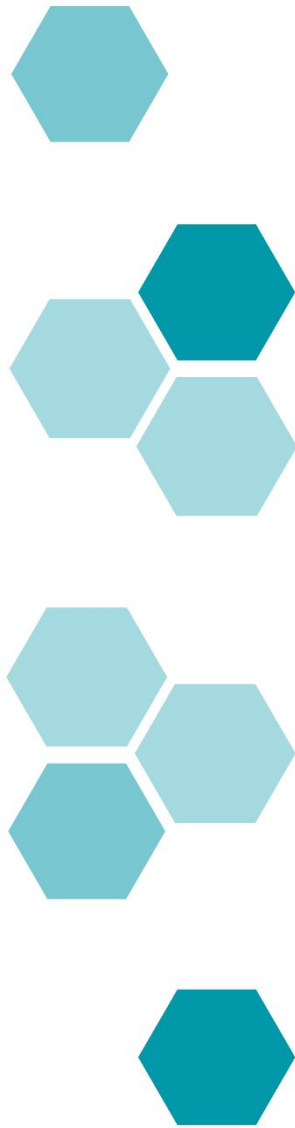
# WIFI

**Network :** CTEMT

**Password :** Comunedimatera1

# Introduction plan

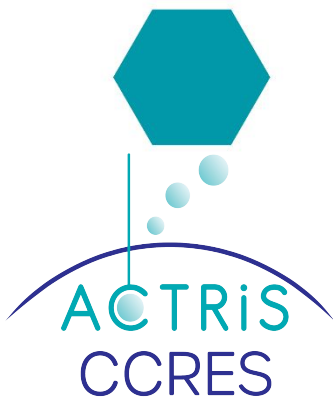
1. Workshop Agenda
2. Location
3. Workshop participants
4. NF instruments diversity
5. Access to CCRES/CLU operational web-based services
6. Upcoming CCRES/CLU events for the community



# Workshop Agenda

## Morning

09:00 – 09:10	<b>Introduction and workshop agenda</b>	M. Haeffelin, E. Villard (IPSL)	10'
09:10 – 10:30	<b>Doppler Cloud Radar operational services</b> <ul style="list-style-type: none"><li>• DCR calibration methods</li><li>• DCR calibration constant monitoring with disdrometer</li></ul>	J-C. Dupont, J-F. Ribaud (IPSL) Y. Grit (IPSL)	15' 15'
	<b>Microwave Radiometer operational services</b> <ul style="list-style-type: none"><li>• MWR data processing and monitoring</li></ul>	T. Marke (UCOL)	15'
	<b>Doppler Lidar operational services</b> <ul style="list-style-type: none"><li>• Doppler Lidar monitoring</li></ul>	E. O'Connor (FMI)	15'
	<b>HKD monitoring : Grafana</b> <ul style="list-style-type: none"><li>• Example of ALC monitoring</li></ul>	M-A. Drouin, M. Van Hove (IPSL)	20'
10:30 – 11:00	<b>Coffee break</b>		
11:00 – 11:20	<b>Labelling operational services</b> <ul style="list-style-type: none"><li>• Update on Labelling step 1a</li><li>• Labelling step 1b - ReOBS quality control procedure</li></ul>	E. Villard (IPSL) J-F. Ribaud (IPSL)	5' 15'
11:20 – 11:50	<b>New developments at CLU</b> (CloudNet Data Centre)	Ewan O'Connor (FMI)	30'
11:50 – 12:30	<b>Feedback from NF and discussion on CCRES/CLU services</b>	NF, all	40'



# Workshop Agenda

## Afternoon

12:30 – 13:30		Lunch break	
13:30 – 14:45	<b>New scientific results and technical developments : presentations from NFs</b>		
	<ul style="list-style-type: none"> <li>Showcases of wind lidar, cloud radar, and ceilometer synergy</li> </ul>	A. Nemuc (RADO-Bucharest)	10'
	<ul style="list-style-type: none"> <li>New dual-frequency cloud radar and Raman lidar at JOYCE: first observations and future perspectives</li> </ul>	B. Pospichal, L. Pfitzenmaier (JOYCE)	10'
	<ul style="list-style-type: none"> <li>Cloud Droplet Retrievals: Synergy of Ground-Based Remote Sensing and In-Situ Measurements at CLOUDNET Granada station</li> </ul>	M. Tolentino Da Silva (AGORA)	10'
	<ul style="list-style-type: none"> <li>Identifying Haze echoes in Cloudnet</li> </ul>	Johanna Roschke (Leipzig University)	10'
14:45 – 15:00	<b>Concluding remarks and calendar</b>	C. Knist, R. Leinweber, U. Görsdorf (MOL-RAO)	10'
		Martial Haeffelin (IPSL)	15'
15:00 – 15:30		Coffee break	
15:30 – 17:00	<b>EarthCARE joint session with CARS</b>		
	<ul style="list-style-type: none"> <li>EarthCARE Cal/Val pilot</li> </ul>	Holger Baars, Ulla Wandinger	
	<ul style="list-style-type: none"> <li>Evolution of ACTRIS aerosol and cloud remote sensing</li> <li>Discussion</li> </ul>	Lukas Pfitzenmaier (UCOL), Nathan Feuillard (IPSL) All	90'

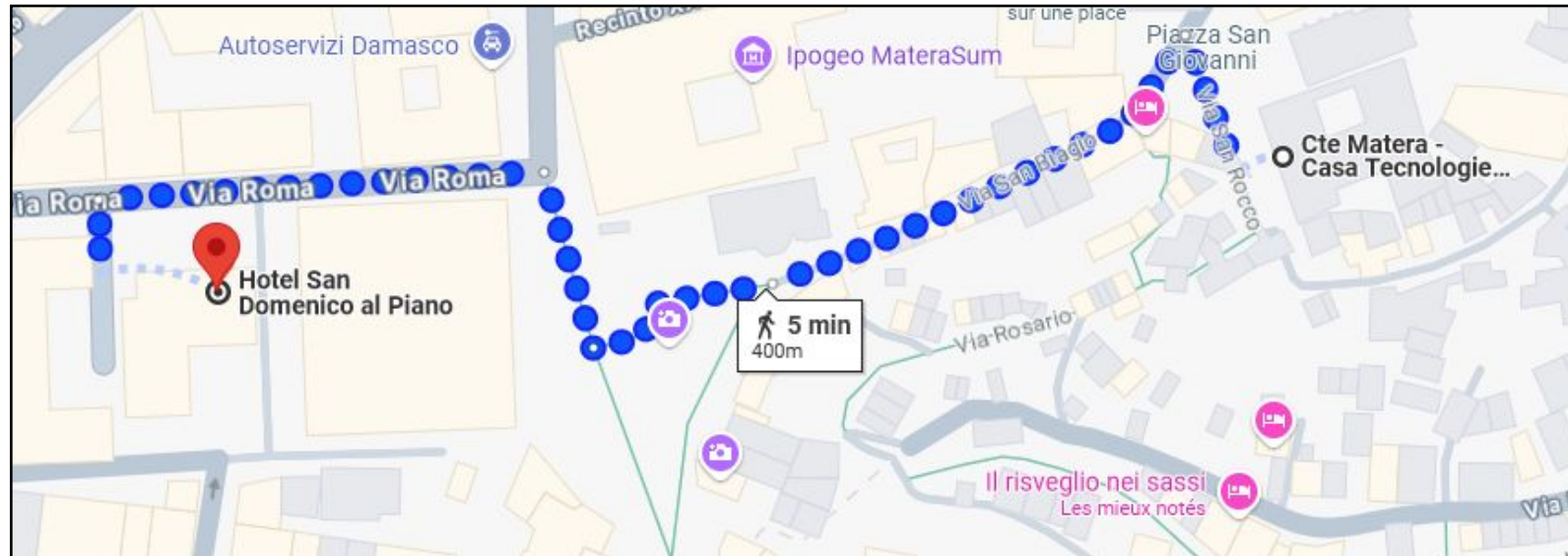


# Location

The workshop will be divided in two parts :

**From 9am to 3pm CET**, it will take place at the [Cte Matera - Casa Tecnologie Emergenti di Matera](#), via San Rocco 1, 75100, Matera.

**From 3pm to 5pm CET**, the afternoon coffee break and joint session with CARS will be held at the [Hotel San Domenico al Piano](#), via Roma, 15, 75100 Matera, which is reachable by walk (5min) from the first location.





# Participants

95

PARTICIPANTS  
42 on-site

19

COUNTRIES

23

CRS NF REPRESENTED

Country of provenance

USA

3,2%

Switzerland

3,2%

Netherlands

3,2%

Spain

5,3%

Poland

5,3%

Greece

5,3%

Finland

6,4%

Romania

7,4%

Germany

21,3%

France

13,8%

Italy

12,8%

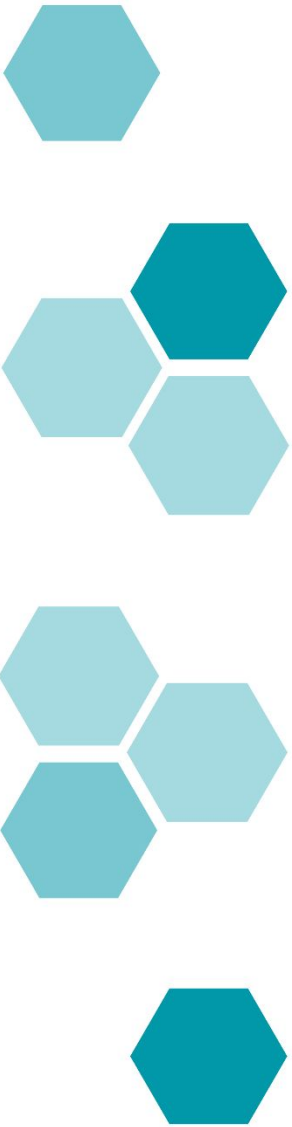
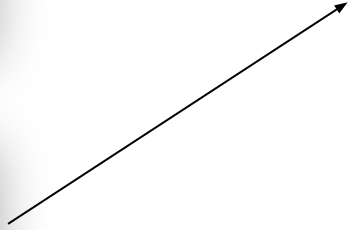
# National Facility Participants

**95** PARTICIPANTS  
42 on-site

**19** COUNTRIES

**23** CRS NF REPRESENTED

<b>Cyprus</b>	CARO
<b>Finland</b>	SMEAR II Pallas
<b>France</b>	SIRTA OPAR
<b>Germany</b>	JOYCE MOL-RAO München KLOCX LACROS
<b>Greece</b>	PANGEA
<b>Italy</b>	CIAO Potenza Lampedusa UNIAQ/CETEMPS
<b>Netherlands</b>	Cabauw
<b>Poland</b>	Rzecin Warsaw
<b>Romania</b>	RADO-Bucharest RADO-Galati RADO-Cluj
<b>Spain</b>	AGORA
<b>Switzerland</b>	Payerne
<b>UK</b>	Chilbolton





# NF instrument diversity in 2024

## Map of Cloud Remote Sensing Stations and instrumentation



# Access to CCRES/CLU web-based services



Website	Public	Purpose	Content
<b>ACTRIS EU</b> <a href="https://www.actris.eu/topical-centre/ccres">https://www.actris.eu/topical-centre/ccres</a>	<b>ACTRIS community</b>	Link with ACTRIS EU community	General information about ACTRIS and CCRES, communication and events
<b>CCRES Services</b> <a href="https://ccres.aeris-data.fr/">https://ccres.aeris-data.fr/</a>	Cloud Remote Sensing <b>National Facilities</b>	Access to CCRES operational services, technical website (working tool)	Resources and access to CCRES new operational services (SOPs, instrument calibration monitoring, housekeeping data, monthly data quality analyses, documentation on services..)
<b>CloudNet</b> <a href="https://cloudnet.fmi.fi/">https://cloudnet.fmi.fi/</a>	<b>All CloudNet users</b> (NFs, Scientists)	Access to data	Data processing and curation service for ground-based cloud remote sensing measurements. Includes CLU services and some CCRES services (e.g. instrument database).

# Access to CCRES/CLU web-based services

**ACTRIS CCRES website**  
**CCRES services website**  
**CLU data website**



<https://www.actris.eu/topical-centre/ccres>

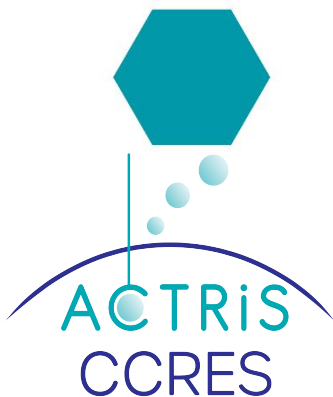
<https://ccres.aeris-data.fr/>

<https://cloudnet.fmi.fi/>

Access general information about CCRES units, services, procedures and news.



Services	Operation support	Frequency	User	Link to the service
1. Methods	Quality assurance guidelines and procedures for calibrating and operating the instruments and processing the observation data. Tools for controlling the quality of measurements to develop, update and implement central processing of observation data.	1 update/year	<ul style="list-style-type: none"> <li>NF</li> <li>External users</li> </ul>	<ul style="list-style-type: none"> <li>Doppler Cloud Radar</li> <li>Microwave radiometer</li> <li>Doppler lidar</li> <li>ALC</li> <li>Disdrometer</li> </ul>
2. Calibration	Provision of network-wide accurate calibration of the instruments following harmonized protocols and tools to put all measurements on a common absolute scale.	TBD	<ul style="list-style-type: none"> <li>NF</li> <li>External users</li> </ul>	TBD



# Access to CCRES/CLU web-based services

**ACTRIS CCRES website**



<https://www.actris.eu/topical-centre/ccres>

**CCRES services website**



<https://ccres.aeris-data.fr/>

**CLU data website**



<https://cloudnet.fmi.fi/>

Access CCRES operational services and documentation (beta version).

Find all newsletter for NFs with latest news on CCRES/CLU services



ABOUT CCRES

NATIONAL FACILITIES

INSTRUMENTS AND DATA QUALITY CONTROL

Contact Service status

**CCRES NEWSLETTER**



You are operating a Cloud Remote Sensing National Facility ?

Access here CCRES operational services.

**Instruments and Data Quality Control**

Monitor the stability of operations and data quality for your instruments

Access DCR/DD calibration stability monitoring, MWR stability monitoring and monthly reports

**Housekeeping Data Monitoring**

Track instrument parameters of your facility

Access Grafana tool

**CloudNet Data Portal**

Access data processing and curation service for ground-based cloud remote sensing measurements

Access data portal

**Documentation**

Read documentation about CCRES operational services for National Facilities

Access documentation about Grafana tool, and soon instrument/data quality control and SOPs





# Access to CCRES/CLU web-based services

**CCRES services website**



<https://ccres.aeris-data.fr/>

**ACTRIS CCRES website**



<https://www.actris.eu/topical-centre/ccres>

**CLU data website**



<https://cloudnet.fmi.fi/>

Access all ACTRIS Cloud Remote Sensing data. CloudNet hosts data processing and curation service for ground-based cloud remote sensing measurements.

**Cloudnet** DATA PORTAL Search data Visualise data Documentation Sites Instruments Publications Contact

ACTRIS Cloudnet

Welcome to ACTRIS Cloudnet data portal

The ACTRIS Cloudnet data portal provides a data processing and curation service for ground-based cloud remote sensing measurements. This includes centralised processing, quality control, provenance, data harmonisation and archiving.

The data portal is developed by the Cloud Remote Sensing Data Centre Unit (CLU) as part of the ACTRIS research infrastructure, and is hosted at the Finnish Meteorological Institute.

Search and download data View data visualisations Read documentation

CCRES services →



# Upcoming CCRES/CLU events for the community

## Hyttiälä training school and calibration campaign in September 2025

### Dates :

- Training school from **15 to 20 Sept 2025** (40 persons incl. 10 CCRES/CLU)
- Calibration campaign DCR/DD from **22 to 26 Sept. 2025** (10 persons)

**Location** : Hyttiälä Forest Station

<https://www.helsinki.fi/en/research-stations/hyhtiala-forest-station>

**Training school target public** : Priority given to CRS NFs and travel expenses covered for 10 students. Open to PhD students/researchers/expert scientists....

Accommodation expenses will be covered for ACTRIS NF participants (30 people max).

**Program** : 10 lecturers from CCRES/CLU and external for morning sessions and afternoons dedicated to hands-on/group work.

Topics covered : CCRES services, instrument calibration, quality control, CloudNet products, Cal/Val, scientific applications, Cloud properties...

**Open to suggestions !**







**Thank you**