

# ACTRIS CCRES

NF feedback on CCRES/CLU services National Facilities

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



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# Labelling step 1a

### **Resources :** <u>Labelling process</u>

Actions : Your station successfully passed Labelling Step 1A. Please provide feedback on the process below.

Station name	Contact/PI	Feedback on the process
RADO-Bucharest	Anca Nemuc	we have been working very closely with CCRES/CLU; help was provided every time we asked
MOL-RAO	Ulrich Görsdorf	Comprehensible guidelines, good support from CCRES
AGORA-Granada	Lucas Alados Arboledas	very fast and supportive feedback from CCRES. Labelling step 1A passed
Lampedusa	Giandomenico Pace	It went well, perhaps the exchange of information could be accelerated in some parts. However, in my case it took me a long time to get the support letter so that I had the right problems and interactions.
CIAO-Potenza	Marco Rosoldi	Clear guidelines, good support from CCRES to finalize the process
Payerne	Renaud Matthey	We have not passed yet the 1a-step. However, we would like to underline the quality and promptness of CCRES support to our questions during the preparation to enter this phase.
LACROS	Patric Seifert	<ul> <li>Labelling officially opened. But: Still waiting for guidelines for labeling of mobile exploratory platforms. LACROS is in general ready for labelling.</li> <li><u>https://actris-nf-labelling.out.ocp.fmi.fi/</u> provides no contact information. Would be nice to add a contact point for labelling-related issues. E.g. PI name of LACROS labelling is Patric Seifert.</li> </ul>
Mindelo	Annett Skupin	Labelling opened
Melpitz	Birgit Heese	Ready for labeling in Q2/2025
RADo-Galati	Mirela Voiculescu	We have passed step 1-a; it was somehow unclear and less informative in the beginning but it went well, we had support from CCRES.

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### Resources: <u>CCRES SOPs</u>

**Actions :** Make sure that SOPs provided by CCRES are implemented for your operational instruments. Please provide comments and feedback on instrument SOPs below.

Station name	Contact/PI	Feedback on the SOPs
RADO-Bucharest	Anca Nemuc/Razvan Pirloaga	SOPs implemented
Warsaw	Iwona Stachlewska/Maciej Karasewicz/Łucja Janicka	SOPs implemented except for the CDR and weather station
Lampedusa	Giandomenico Pace	Standard Operating Procedures are mostly implemented; automatic upload of meteo station and disdrometer is to be implemented yet
LACROS	Patric Seifert	SOPs implemented
Mindelo	Annett Skupin	SOPs implemented
MOL-RAO	Ulrich Görsdorf	SOPs implemented
Potenza	Marco Rosoldi	SOPs implemented except for the disdrometer whose installation is expected by the end of the current year
AGORA-Granada	Lucas Alados Arboledas	SOPs implemented, although some of them have slightly changed after labelling 1a acceptance (it was already discussed with CCRES and everything is OK)
Payerne	Renaud Matthey	SOPs implemented (details for MWR to be checked and confirmed, yet); upload of weather station remains to be implemented. SOPs are rather clear.
RADO Galati	Mirela Voiculescu	SOPs implemented

# EarthCARE Cal/Val

### **Resources :** <u>EarthCARE SOPs</u>

CRES

Actions : If your station is taking part in EarthCARE Cal/Val , make sure that SOPs provided by CCRES for DCR are implemented and data is sent. Please provide feedback below.

Station name	Contact/PI	Feedback on Cal/Val services
RADO-Bucharest	Anca Nemuc/Razvan Pirloaga	SOPs implemented and data sent
Lampedusa	Giandomenico Pace	automatic upload of meteo station and pluviometer is to be implemented yet
LACROS	Patric Seifert	SOPs implemented and data sent
Mindelo	Annett Skupin	SOPs implemented and data sent
MOL-RAO	Ulrich Görsdorf	SOPs implemented and data sent
Potenza	Marco Rosoldi	SOPs implemented and data sent
AGORA-Granada	Lucas Alados Arboledas	SOPs implemented and data sent
Payerne	Renaud Matthey	DCR data recorded since 23.10.2024, with data manually uploaded on CLU so far.; upload of weather station data remains to be implemented.



### Resources: Login Grafana Documentation Training session on Grafana

# Housekeeping Data monitoring

**Actions :** Read Grafana documentation and log in to monitor Housekeeping data for your station. Please provide feedback on training session, account login, information available in the table below.

Station nar	me Contact/Pl	Feedback on HKD monitoring
Lampedus	<b>a</b> Giandomenico Pace	It might be useful to prepare an easy example (perhaps a video-tutorial) illustrating from scratch how to trigger an alarm. For example, no data is received within a certain time and Grafana sends an alarm by e-mail, or an instrument temperature sensor has a value above a threshold and Grafana sends an e-mail.
LACROS	Patric Seifert	Registration to Grafana successful and processing of Housekeeping data is working for RPG94 and MWR. Would be nice to have tutorials for how to make use of the monitoring. E.g., alterting.
MOL-RAO	Ulrich Görsdorf	Registration to Grafana successful and processing of Housekeeping data is working for CHM15k, RPG94 and HATPRO, Grafana monitoring is rarely used due to the use of a separate monitoring system (Check_mk) running at the observatory with alert functionality
Potenza	Marco Rosoldi	Successful Grafana login, data monitoring only works for Hatpro, training documentation provided on Grafana is nice and might be improved by adding specific examples for the various visualization and alarm tools
RADO Buchar	est Razvan Pirloaga	Registration to Grafana successful, implementation is on going
AGORA-Grand	ada Lucas Alados Arboledas	Registration was successful. Training session was quite clear, and the web interface seems to be user friendly
Payerne	Renaud Matthey	Participation to training session. Not much time dedicated to this aspect so far, hence no valuable feedback to be provided.
RADO Gala	ti Mirela Voiculescu/Daniel Constantin	There is Grafana access, housekeeping monitoring helpful but we are in the process of training/learning. The information was not clear about the use/need for it. Still exploring, no feedback available yet (a clear presentation of why is this necessary would have been helpful, when the first meetings took place. Some of us have a lot of other duties (teaching, projects, etc) and we cannot participate in all meetings.

# Instruments and data quality control - DCR monitoring

**Resources:** 

<u>CCRES operational services for NF website</u> Instruments and data quality control (DCR/disdrometer and MWR stability monitoring and monthly reports)

Actions: If your station has entered initial acceptance for labelling step 1a, access <u>CCRES services website</u> and <u>monitor the stability</u> <u>of operations and data quality</u> for your instruments (radars or disdrometers or MWR) by selecting the site and instrument.

Station name	Contact/PI	Feedback on DCR stability monitoring
Lampedusa	Giandomenico Pace	In a station like Lampedusa, with a lot of wind and little rainfall, there will not be many useful cases in a year. We will soon verify this
LACROS	Patric Seifert	potentially ready, but due to missing labeling for mobile exploratory platform not yet implemented. Would be great to have LACROS observations on the DCR monitoring page. For doing so, please consider to include mobile stations to the list of sites on the webpages.
MOL-RAO	Ulrich Görsdorf	Very useful for monitoring calibration stability, it would be welcome if our 94 GHz radar (data is also sent to CLU) could be added, time series of Ze differences for 'good' comparisons would be helpful
Potenza	Marco Rosoldi	The service is currently not operational, as the disdrometer has not yet been installed
AGORA-Granada	Lucas Alados Arboledas	Our dual frequency radar seems to have a bad stability year long. Daily monitoring have no visualization after April 2024 (why?). What means "No weather station data", in the title of long term monitoring histogram? (We have data in Cloudnet). Is there a documentation for DSD quality checks? Also, is there a documentation for the CDR calibration with DSD or some Training planed for a near future?
Payerne	Renaud Matthey	No feedback so far, as the radar was installed some weeks ago, with manual data load on CLU.



# Instruments and data quality control - Monthly Reports

### **Resources:**

<u>CCRES operational services for NF website</u> Instruments and data quality control (DCR/disdrometer and MWR stability monitoring and monthly reports)

Actions : First visualisations towards monthly reports are also available on the same page (by selecting the site). Please provide feedback below.

Station name	Contact/PI	Feedback on first visualisations towards Monthly Reports
Lampedusa	Giandomenico Pace	
LACROS	Patric Seifert	
MOL-RAO	Ulrich Görsdorf	
Potenza	Marco Rosoldi	
AGORA-Granada	Lucas Alados Arboledas	
RADo - Galati	Mirela Voiculescu	October looks ok, calibration was carried out on oct 16-th.



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# **MWR** calibration

**Resources :** <u>Calibration methods developed by CCRES</u>

Actions: If you took part in a CCRES MWR calibration training, please provide feedback below.

Station name	Contact/PI	Feedback on MWR calibration training
RADO-Bucharest	Florica Toanca/Razvan Pirloaga	calibration is performed regularly as specified in SOPs
Warsaw	Maciej Karasewicz	The practical calibration training was a great complement to the theoretical knowledge gained during the course
Lampedusa	Giandomenico Pace	Well done
MOL-RAO	Christine Knist	Well done
AGORA - Granada	Lucas Alados Arboledas	The calibration is being performed following the training specifications
Payerne	Renaud Matthey	The calibration training was quite useful and instructing, with appreciated support and instructions from the MWR staff.
RADO-Galati	Daniel Constantin	Calibration done on Oct 16.



### **CLU** services

Resources: CloudNet data portal

Actions : Access <u>CloudNet</u> data portal and select your station in the list of sites. Please provide feedback below information that you can access through the portal.

Station name	Contact/PI	Feedback on CLU services
RADO-Bucharest	Razvan Pirloaga/Victor Nicolae	all good
Warsaw	Maciej Karasewicz	the portal is accessible
Lampedusa	Giandomenico Pace	I find it very complete and well done. Is there a way for an NF to download the data produced from the same NF without selecting individual files manually?
Mindelo	Annett Skupin	accessible
LACROS sites (currenty Leipzig)	Patric Seifert	portal is accessible. Information is up-to-date. Good to have the redirecting links, such as to the labeling website. However, the labelling website does not provide contact information. Would be good to add it there.
MOL-RAO	Ulrich Görsdorf	Portal is very useful for monitoring the proper functioning of all Cloudnet instruments in near real time, especially great is the display on smartphones, also all other functions such as downloading the data, various links to the instructions,
Potenza	Marco Rosoldi	All relevant data and metadata can be easily inspected and downloaded. In addition, all tools, codes and services are well documented.
AGORA-Granada	Lucas Alados Arboledas	Data are well organized and it is very useful for daily monitoring
Payerne	Renaud Matthey	Excellent work and support. Data upload through "cloudnet-submit" Python package, which makes rather easy the upload process, and positive data download test with the API. Portal is well designed and pleasant to navigate through. operates nicely well. Wished improvements: 1) Would be very nice to have the possiblity to pass from one day to the next one by a single mouse clic for a given instrument/product. 2) Radar and lidar plots are artistic, but bearly readable due to the implemented colormap.
RADO-Galati	Daniel Constantin	All good, info available in cloudnet.

# **Training/consultancy sessions**

### **Resources :**

<u>Consultancy on weather station/raingauge requirements</u>

Actions: If you have participated to CCRES consultancy session on Weather Stations, please provide feedback below. Any suggestion for future training topics is welcome.



Station name	Contact/PI	Feedback on sessions
RADO-Bucharest	Anca Nemuc/Razvan Pirloaga	a lot of discussions were going on for a while but finally all problems solved; rain gauge calibration procedures not fully understood; more info needed
Lampedusa	Giandomenico Pace	comparison between WXT stations and standard weather station very interesting
MOL-RAO	ulrich Görsdorf	from my point of view, the importance of the quality of the weather station sensors is overrated, as far as I understood, the information is mainly used to decide when the conditions are right for a radar - disdrometer comparison, no high-precision measurements are required for this purpose
AGORA-Granada	Lucas Alados Arboledas	the session was useful, although some of the new requirements discussed (appearing later in the SOPs version of september 2024) were more restrictive than the previous requirements passed for labelling step 1a (e.g. need for heater for rain gauge, wind vane accuracy). Moreover, some of those requirements may be somehow "flexible" depending on the site, according to later discussions with CCRES, so this should be clarified in the SOPs
Payerne	Renaud Matthey	Useful and interesting session.



# Workshops

**Resources:** 

<u>June 2024 online workshop sessions</u> <u>October 2023 Heraklion (Greece) workshop sessions</u> <u>All CCRES/CLU workshop presentations</u>

Actions: If you have participated to CCRES workshops (online or physical), please provide feedback below.

Station name	Contact/PI	Feedback on workshops
RADO-Bucharest	Anca Nemuc	very useful info; fruitful discussions; interesting study cases with problems at different stations
Warsaw	Maciej Karasewicz	The training was very fruitful, with valuable substantive advice, properly structured, and additionally complemented by essential practice in instrument maintenance
MOL-RAO	Christine Knist / Ulrich Görsdorf	very useful for sharing information and presenting CCRES activities and new tools that are useful for the NFs for the proper operation of Cloudnet instruments, more results on scientific analysis would be desired
AGORA-Granada	Lucas Alados Arboledas	Workshops are very useful for keeping people up to date about different works each station are developing, and different problems they encountered
Payerne	Renaud Matthey	Workshops are very useful to get an oveview of what is going on, necessary to be implemented or paid attention to. The presentations are well prepared; it is important to have access to them to deepen some aspects that were not fully understood during the session.





Thank you