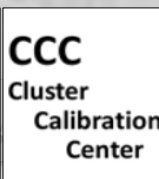


Progress in NF Labeling Step 1a & Step 1b/c

Community Meeting
ACTRIS Week, October 21, 2026

Alfred Wiedensohler, TROPOS, Germany
Director ACTRIS CAIS-ECAC



ACTRIS Labelling – Step 1a

At Step 1a: registration and planning

- Check that the general facility information is complete and up-to-date.
- Register the NF's measurement variables and instruments in the labelling portal.
- Register the 4 mandatory variables and at least 1 optional variable
- Finalize the upgrade plan based on the preliminary evaluation report
- Upload the commitment letter to the labeling portal

After completion of Step 1a: mandatory operational requirements

- NFs are required to participate in central calibration workshops for online instruments and interlaboratory comparisons for chemical analyses
- CFs assume responsibility for the quality assurance of registered NF measurements
- Implement the instruments and measurement for the registered variables
- Implement NRT submission for online instruments where logging software is available
- Submit ACTRIS-compliant data (Levels 0, 1 and 2) for all registered variables, within the agreed deadlines

ACTRIS Labelling – Step 1b/c

Demonstration of ACTRIS-compliant operation

- Confirm ACTRIS-compliant measurements and sampling procedures based on the final evaluation report
- Provide documentation of biennial calibration of online instruments at central calibration workshops
- Document participation in interlaboratory comparisons for chemical analyses

Performance report

- Support the responsible CF in preparing the performance report
- Provide an updated status of all registered measurement variables

Data submission requirements

- Submit 24 months of ACTRIS-compliant data from the preceding 36 months for at least 3 of the 5 registered variables and at least 3 months for the remaining 2 registered variables to reach 5 out of 5
- Submit all required data levels within the agreed submission deadlines
- Demonstrate operational NRT data submission for online instruments for at least 3 months

Template for the Performance Report

Template: Performance Report for Labeling Step 1b/c



ACTRIS National Facility - Performance Evaluation Aerosol In-Situ Observational Platform - **Name of the NF, Country**

NF information

Component PI	
Date of initial acceptance	
Start date of ACTRIS compliance for the entire component	

Summary performance report on ACTRIS compliant measurement and data submission

Performance report issued by	ACTRIS Center for Aerosol in-Situ Measurements and European Center for Aerosol Calibration & Characterization (CAIS-ECAC)
CAIS-ECAC responsible evaluator	Alfred Wiedensohler
Date of the performance report	
Time period covered by the report	
Measurement compliance	Compliance confirmed by the final upgrade report
Data compliance (24 month)	x out of 5 AIS variables with minimum 24 months compliant data submission during the evaluation period
NRT data compliance	x out of 5 AIS variables with minimum 3 months compliant NRT data submission during the evaluation period
CF recommendation	Recommendation to grant full label (Step1c)

Template: Performance Report for Labeling Step 1b/c

Detailed report

Mandatory variables/instruments:

Variable name	Associated instrument	ACTRIS compliant	Instrument PID (if available)	Instrument landing page (link if available)	First passed QA (date)	Latest passed QA (date)	Next required QA (year)
Aerosol particle number concentration DP50 >10 nm	CPC XXX	YES/NO	N/A	N/A	XXX	XXX	XX
Aerosol particle number size distribution – mobility diameter 10-800 nm	MPSS XXX	YES/NO	N/A	N/A	XXX	XXX	XXX
Aerosol particle light scattering & backscattering coefficient – multi-wavelength	Integrating Nephelometer XXX	YES/NO	N/A	N/A	XXX	XXX	XXX
Aerosol particle light absorption coefficient	Absorption Photometer XXX	YES/NO	N/A	N/A	XXX	XXX	XXX

Mandatory variables/data:

Variable name	Start date of ACTRIS compliant measurements	No. of months of compliant data submitted to EBAS	Data coverage (% of total expected)	Data submitted in time and QC <u>ok</u>	Start date NRT data submission (if applicable)	No. of months of NRT data submitted to EBAS	NRT Data submitted in time and QC <u>ok</u>
Aerosol particle number concentration DP50 >10 nm							
Aerosol particle number size distribution – mobility diameter 10-800 nm							
Aerosol particle light scattering & backscattering coefficient – multi-wavelength							
Aerosol particle light absorption coefficient							

Template: Performance Report for Labeling Step 1b/c

Optional variables/instruments:

At least one of the following variables must be implemented and data must have been submitted.

Variable name	Associated instrument	ACTRIS compliant	Instrument PID (if available)	Instrument landing page (link if available)	First passed QA (date)	Latest passed QA (date)	Next required QA (year)
Nano-particle number concentration (DP50 < 10 nm)	Nano-PC	YES/NO	N/A	N/A			
Nano-particle number size distribution < 10 nm	Nano-PSP	YES/NO	N/A	N/A			
Particle number size distribution - aerodynamic diameter 0.8 to 10 µm	APSS	YES/NO	N/A	N/A			
Cloud condensation nuclei number concentration	CCNC	YES/NO	N/A	N/A			
Mass concentration of particulate organic tracers	Filter	YES/NO	N/A	N/A			
Mass concentration of particulate organic and elemental carbon	Filter/Online	YES/NO	N/A	N/A			
Mass concentration of non-refractory particulate organics and inorganics within PM1 fraction	AMS/ACSM	YES/NO	N/A	N/A			
Mass concentration of particulate elements	Filter/Xact	YES/NO	N/A	N/A			

Optional variables/data:

Variable name	Start date of ACTRIS compliant measurements	No. of months of compliant data submitted to EBAS	Data coverage (% of total expected)	Data submitted in time and QC OK	Start date NRT data submission (if applicable)	No. of months of NRT data submitted to EBAS	NRT Data submitted in time and QC OK
Nano-particle number concentration (DP50 < 10 nm)							
Nano-particle number size distribution < 10 nm							
Particle number size distribution - aerodynamic diameter 0.8 to 10 µm							
Cloud condensation nuclei number concentration							
Mass concentration of particulate organic tracers							
Mass concentration of particulate organic and elemental carbon							
Mass concentration of non-refractory particulate organics and inorganics within PM1 fraction							
Mass concentration of particulate elements							

Template: Performance Report for Labeling Step 1b/c

QA/QC of the Aerosol In-Situ Measurements

The implementation of the microphysical, optical, and chemical instruments have been done according to the ACTRIS standard procedures for aerosol in-situ measurements, and following the final evaluation report by CAIS-ECAC. The measurements of the different aerosol in-situ variables have been quality-assured by the CAIS-ECAC units. The certificates of the calibration workshops and/or interlaboratory intercomparison are currently only available under the protected area of the CAIS-ECAC server:

Following certificates have been issued:

CPC:

Certificate acronym(s)

X person attended the calibration workshop & and the hand-on training

MPSS:

Certificate acronym(s)

X people attended the calibration workshop & and the hand-on training in 2022.

IN:

Certificate acronym(s)

X person attended the calibration workshop & and the hand-on training

AP:

Certificate acronym(s)

X person attended the calibration workshop & and the hand-on training

Nano-CPC:

The CPC 3756 has not been sent yet to a calibration workshop

Others:

Certificate acronym(s)

X person attended the calibration workshop & and the hand-on training

Template: Performance Report for Labeling Step 1b/c

Challenges During the Reporting Period

- Details

General Remarks

The team of the - institution of the NF - is very experienced to perform the measurements as well as to evaluate and submit compliant data.

There are no relevant concerns from CAIS-ECAC.

Confirmation of ACTRIS-Compliant Measurements

The PI of - NF name - provided a final upgrade report confirming ACTRIS-compliant measurements of the reporting aerosol in-situ variables (see appendix).

Confirmation of Data Submission

The number of months of ACTRIS compliant data submitted to EBAS and the number of months of NRT data submission are confirmed by the ACTRIS DC.

References

N/A

Appendix

1. Final upgrade report based on the final elevation report (labeling step 1a)

Potential NF Candidates for Labeling Step 1b/c

National Facilities Potentially Ready for Labelling Step 1b/c

NFs Potentially Eligible for the ACTRIS Label (List Might Still Be Incomplete):

- ✓ ATOLL, France → Spring 2027
- ✓ Jungfraujoch, Switzerland → Spring 2027
- ✓ National Atmospheric Observatory Kosetice, Czechia → planned for Fall 2026
- ✓ SIRTa, France → Spring 2027
- ✓ Suchdol, Czechia → Spring 2027
- ✓ Vielsalm, Belgium → Spring 2027
- ✓ Bucharest, Romania → possibly in spring 2027
- ✓ Utö, Finland → in 2027
- ✓ Cabauw, The Netherlands → in 2027
- ✓ Ispra, EU → Fall 2027
- ✓ Birkenes → Spring 2027
- ✓ Payerne → 2028/2029
- ✓ Monte Cimone → Spring 2027
- ✓ SMEAR IV → Fall 2027
- ✓ Hoher Sonnblick → Spring 2027
- ✓ Hohenpeissenberg → possibly 2027

NFs (Observatories) for Labeling Step 1a Already Audited

National Facilities Potentially Ready for Labelling Step 1a

- ✓ Vienna, Austria (portal is open)
- ✓ Ukkel, Belgium
- ✓ BEO Mousalla, Bulgaria → in progress
- ✓ Risö, Denmark (portal is open) → beginning of 2027
- ✓ Villum Research Station, Denmark → beginning of 2027
- ✓ Marambio, Finland (portal is open) → 2027
- ✓ Zeppelin, Sweden & Norway
- ✓ Trollhaugen, Norway
- ✓ El Arenosillo, Spain
- ✓ Helmos, Greece (portal is open)
- ✓ Finokalia, Greece (portal is open)
- ✓ National Observatory Athens, Greece (portal is open)
- ✓ Athens-Demokritos, Greece (portal is open)
- ✓ Cape Verde → 2028

NFs (Observatories) to be Audited

National Facilities Still Awaiting an Audit

- ✓ Schmücke (Summit & 2 substations), Germany → in 2027
- ✓ Cape Verde, Germany → possibly in 2027 or 2028
- ✓ Pangea, Greece → not information
- ✓ Naples, Italy → no information
- ✓ Belsk, Poland → possibly in 2027
- ✓ Norunda, Sweden → next week
- ✓ Svartberget, Sweden → next week
- ✓ Östergarnsholm, Sweden → no information

Please, inform us when you are ready for an audit.

Chamber Community

Information from the Chamber Community

Information provided by Hendrik Fuchs:

- ✓ All remaining Chamber NFs intend to initiate Labelling Step 1a in 2026.
- ✓ The required documentation will be prepared until November 2026.
- ✓ Most NFs plan to start the labelling process between summer and autumn 2026.
- ✓ Most Chamber NFs operate aerosol in-situ instrumentation.

→ Request to the Chamber NFs:

- ✓ Please inform CAIS-ECAC when you are ready to receive and complete the aerosol in-situ questionnaire.