




Pilot Labeling Step 1b and 1c - NF Evaluation

Community Meeting January 15, 2026

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Director ACTRIS CAIS-ECAC

Conditions for the Application Labeling Step 1b

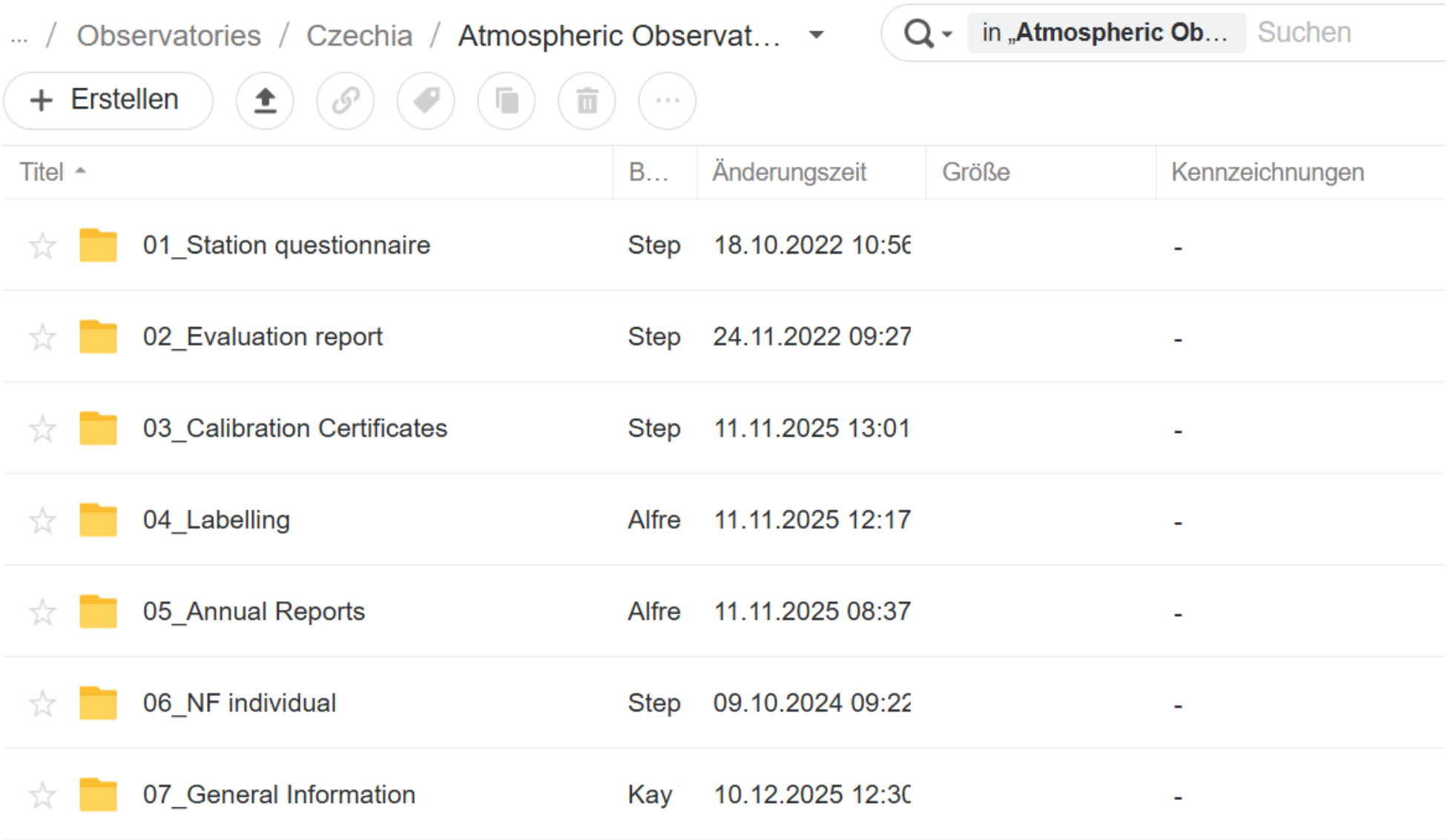
- For the Aerosol In-Situ Component, minimum 5 variables must be implemented´.
- 4 Variables are fixed – particle number concentration >10nm; particle number size distribution 10-800 nm; particle light scattering & backscattering coefficient; particle light absorption coefficient & equivalent black carbon.
- The 5th can be chosen from the other 8 variables, preferably a chemical one but not necessarily.
- ACTRIS compliant data must have been submitted for minimum 3/5 variables for at least 24 months out of the last 36 months
- Data is ACTRIS compliant if the instrument is ACTRIS compliant and the instrument has been successfully calibrated at a CAIS-ECAC lab, or the quality of chemical analysis was proven.
- NRT data must have been submitted for online instruments for minimum 3 months for which a NRT software is provided.
- Data submissions to ACTRIS DC In Situ must arrive and issues iterated out in time by deadline of May 31. (for the labeling 1c, before submitting the performance report).
- Data submissions must be complete, i.e., comprise all data levels required for the variable, usually levels 0 (quality flagged), 1, and 2.
- EBAS must confirm the submission of ACTRIS compliant data as declared.

CAIS-ECAC Evaluation Report Labeling Step 1c

- The CAIS-ECAC (director) must provide an evaluation report to the Head Office and the General Assembly as part of the NFs application to receive the ACTRIS label. To collect information for the report the following points are needed:
- CAIS-ECAC has not established a data bank yet from which all necessary information can be extracted.
- For now, CAIS-ECAC will ask for basic information to be able to write an evaluation report confirming the conditions as described before.
- This is based on questionnaires for each individual AIS variable implemented at the NF.
- Furthermore, CAIS-ECAC needs a final upgrade report following the recommendations given in the final evaluation report of labeling step 1a.
- In this final upgrade report, the NF must declare that the measurement set-up is ACTRIS compliant.
- Finally, certificates must state that the instruments participated successfully in calibration workshops or laboratory intercomparisons were positive (passed).
- For each individual ACTRIS instruments, a PID table must have been filled out.
- Currently, 5 NFs showed their interest to serve as AIS “pilot stations” for labeling step 1c – Jungfraujoch, Kosetice, Barcelona, Hyytiälä, and Pallas.

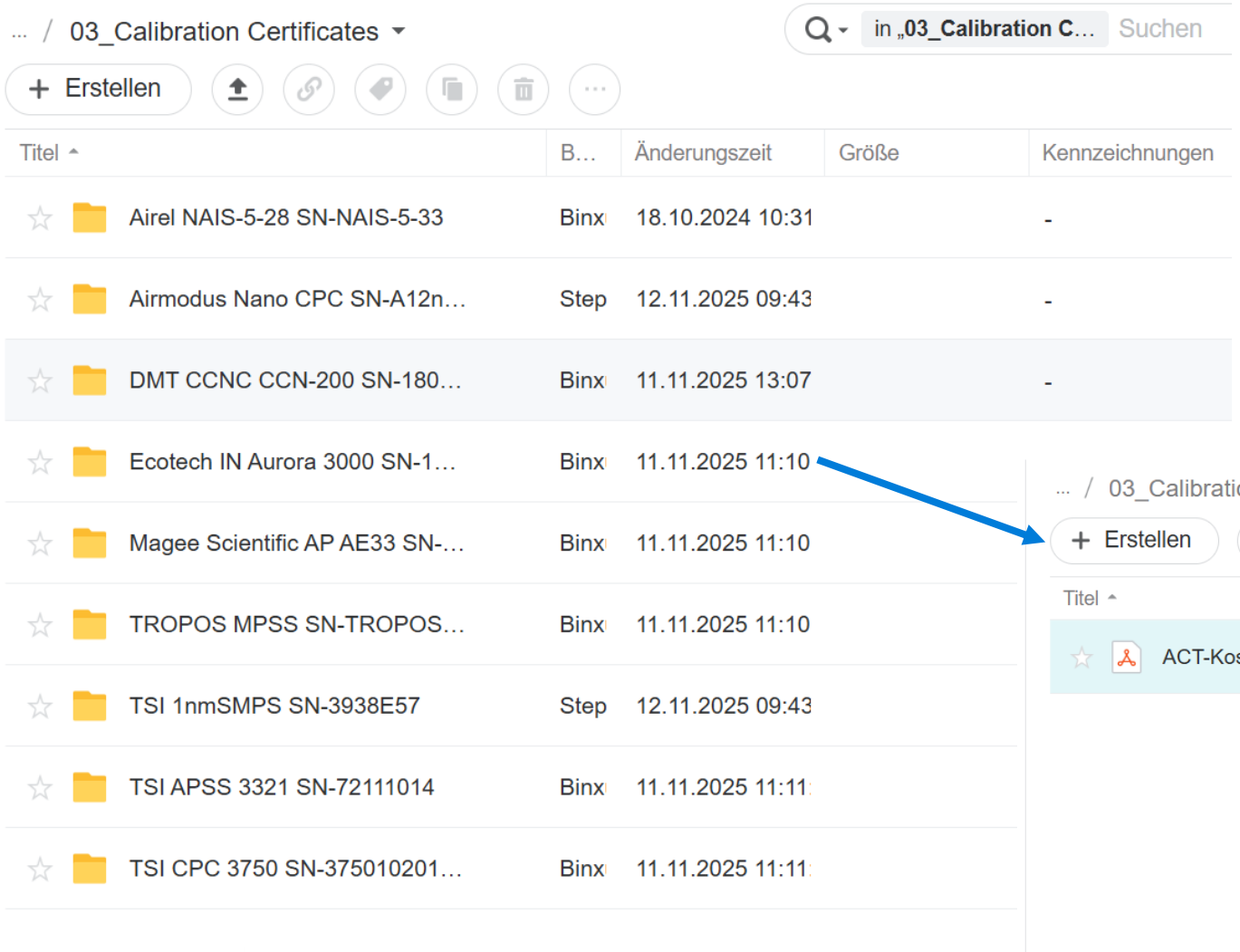
Example: National Atmospheric Observatory Kosetice

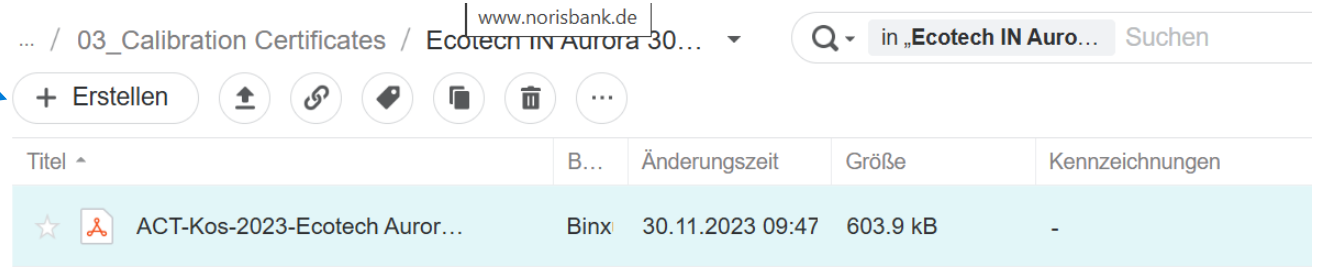
Example: National Atmospheric Observatory Kosetice



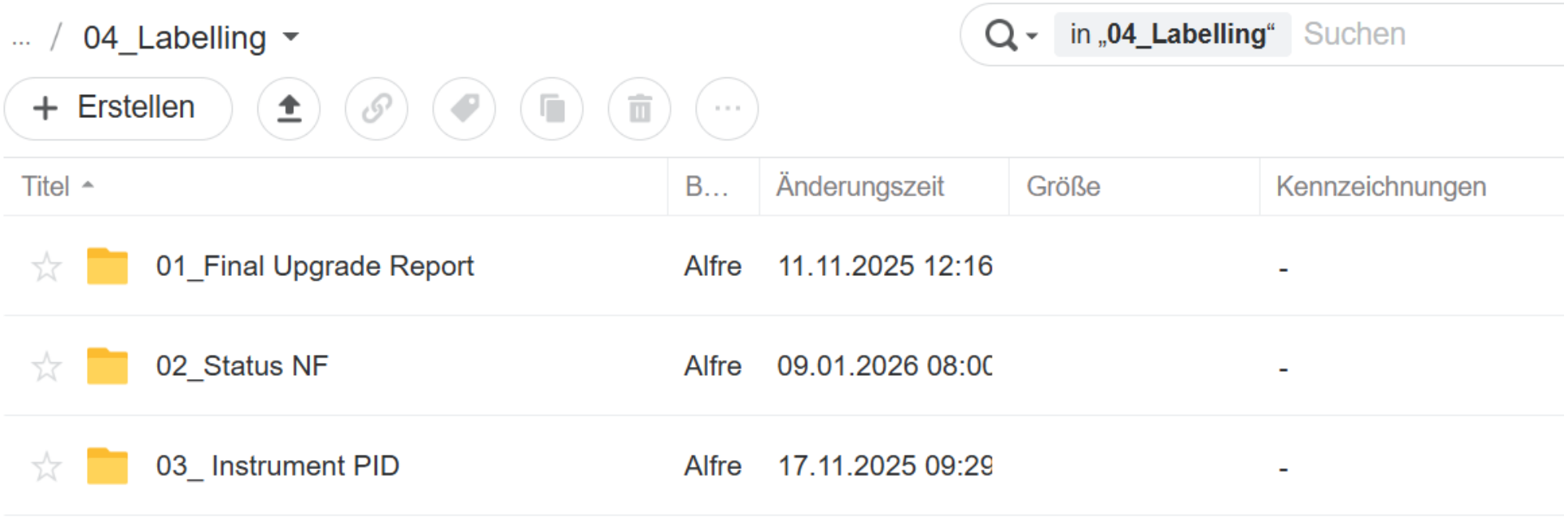
Titel	B...	Änderungszeit	Größe	Kennzeichnungen
01_Station questionnaire	Step	18.10.2022 10:56		-
02_Evaluation report	Step	24.11.2022 09:27		-
03_Calibration Certificates	Step	11.11.2025 13:01		-
04_Labelling	Alfre	11.11.2025 12:17		-
05_Annual Reports	Alfre	11.11.2025 08:37		-
06_NF individual	Step	09.10.2024 09:22		-
07_General Information	Kay	10.12.2025 12:30		-

Calibration Certificates





Labeling


... / 04_Labelling
in „04_Labelling“ Suchen
+ Erstellen
Titel
B…
Änderungszeit
Größe
Kennzeichnungen
01_Final Upgrade Report Alfre 11.11.2025 12:16 -
02_Status NF Alfre 09.01.2026 08:0(-
03_ Instrument PID Alfre 17.11.2025 09:29 -

Final Upgrade Report

- Download the word (or pdf) file of the final evaluation report labeling step 1a.
- Edit in the word file, describing the complete NF upgrade based on the recommendation to become ACTRIS compliant.
- Upload the final upgrade report to the CAIS-ECAC server.
- Declare that the entire set-up is ACTRIS compliant.

Evaluation Report - Aerosol In-Situ Measurements
National Atmospheric Kosetice Observatory

Observatory details

Station name	National Atmospheric Kosetice Observatory (NAOK)
Principal Investigator	Jakub Ondracek
Home Institution	Institute of Chemical Process Fundamentals, AS CR
Country	Czech Republic
GAW ID	KOS
EBAS ID	CZ0003R
Date	July 12, 2022
Reviewer	Alfred Wiedensohler

Overall evaluation

Result: The National Atmospheric Kosetice Observatory is ready for the initial acceptance of the labeling process.

Status NF

... / 04_Labelling / 02_Status NF

in „02_Status NF“ Suchen

+ Erstellen

Titel	B…	Änderungszeit	Größe	Kennzeichnungen
01_ Status_PNC_DP50 =10nm	Alfre	09.01.2026 08:12	2.2 kB	-
02_ Status_PNSD_10-800 nm	Alfre	09.01.2026 08:15	2.1 kB	-
03_ Status_Scattering_multi-w…	Alfre	09.01.2026 08:15	2.1 kB	-
04_ Status_Absorption	Alfre	09.01.2026 08:16	2 kB	-
05_ Status_PNSD_0.8-10µm	Alfre	09.01.2026 08:17	1.9 kB	-
06_ Status of CCN _NC	Alfre	09.01.2026 08:17	1.9 kB	-
07_ Status_PNC_DP50<10 nm	Alfre	09.01.2026 08:17	2.1 kB	-
08_ Status_PNSD_1-10nm	Alfre	09.01.2026 08:18	2.1 kB	-
09_ Status_Non-Refr._InOrg+…	Alfre	09.01.2026 08:06	2 kB	-
10_ Status_OCEC	Alfre	09.01.2026 08:22	2.4 kB	-

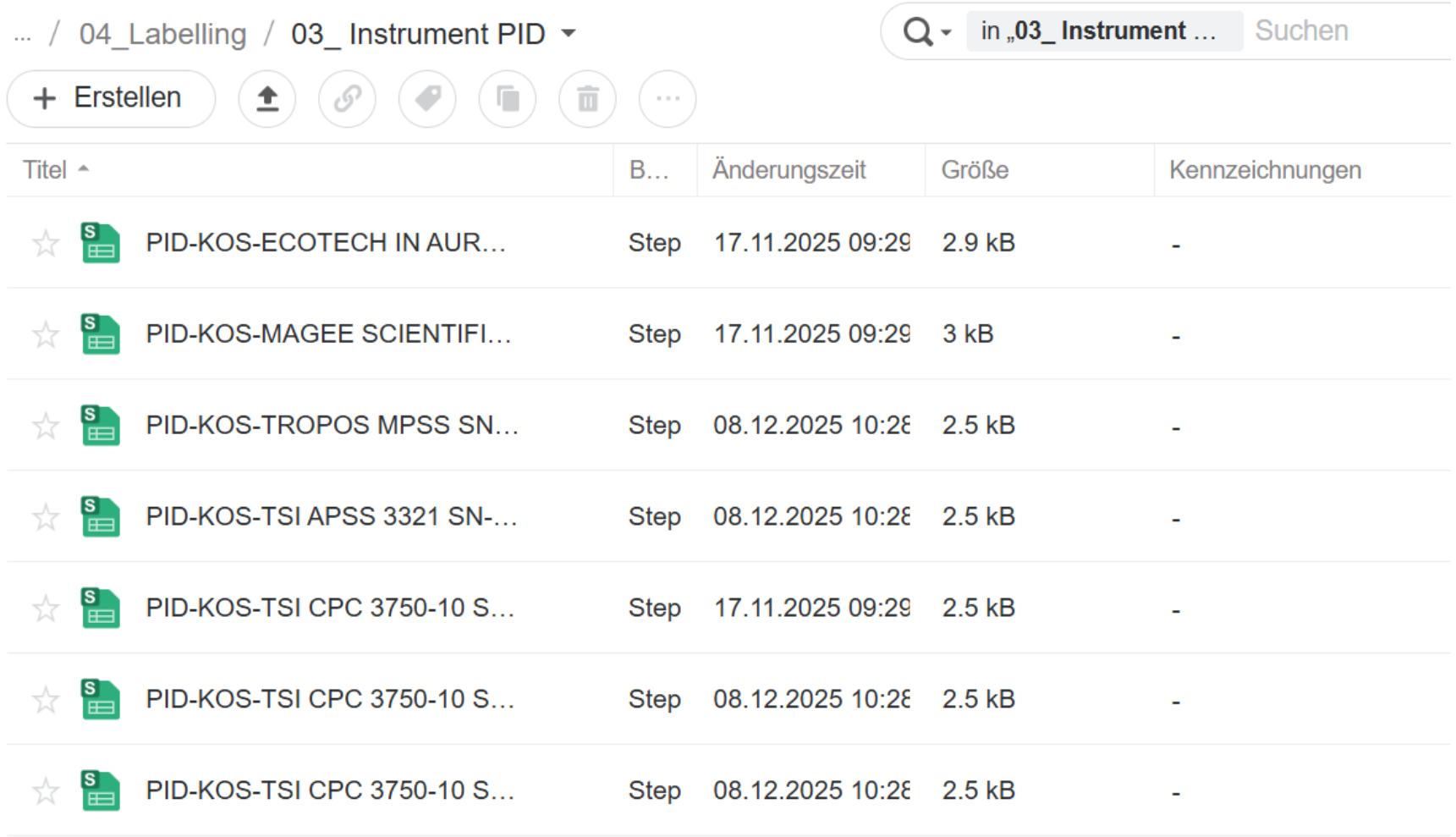
Status NF – Example: PNC >10nm (CPC)

fx Aerosol Particle Number Concentration

	A	B	C	D	E	F	G
1	**Aerosol Particle Number Concentration DP50 = 10 nm**		**Comments**		**Dropdown list parameters**		
2							
3	**Sampling ACTRIS compliant**	N/A	choose dropdown list		TSI 3750-10 CEN	passed	Y
4	Start ACTRIS compliance (incl. Sampling, conditioning etc.)	DD/MM/YYYY	Fixed date		TSI-3750	failed	N
5					TSI 3772	N/A	N/A
6	**CPC-1 type**	N/A	choose dropdown list		Grimm 5410-0.6/5412-0.6 CEN		
7	Serial number				Grimm 5410-1.0/5412-1.0 CEN		
8	PID	Acronym			Grimm 5421 CEN		
9	Start ACTRIS compliant measurements	DD/MM/YYYY			Airmodus A20 CEN		
10	End ACTRIS compliant measurements	DD/MM/YYYY	if applicable		AVL UPM CEN		
11	Start ACTRIS NRT measurements	DD/MM/YYYY			N/A		
12	Last calibration	DD/MM/YYYY					
13	Q/A Report	Acronym					
14	Performance	N/A	choose dropdown list				
15	Data submission to EBAS (ACTRIS compliant)	N/A	choose dropdown list				
16	Number of months Level2 data available @EBAS						
17	Number of months NRT-submitted						
18							

Fill the form: date for ACTRIS compliant sampling; date start of measurements, date start of NRT; calibration certificate; PID; number of months of compliant data at EBAS; months of NRT data submission

Persistent Instrument Identifier (PID)



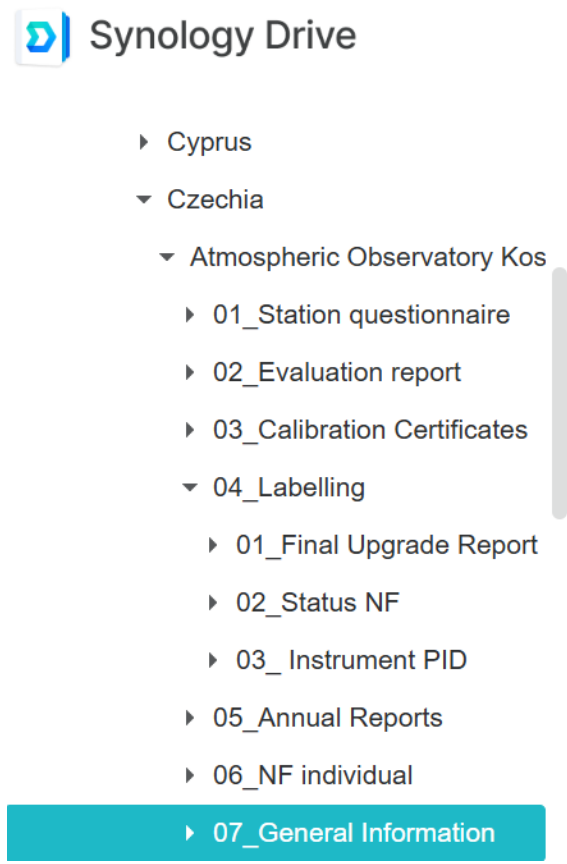
Titel	B...	Änderungszeit	Größe	Kennzeichnungen
PID-KOS-ECOTECH IN AUR...	Step	17.11.2025 09:29	2.9 kB	-
PID-KOS-MAGEE SCIENTIFI...	Step	17.11.2025 09:29	3 kB	-
PID-KOS-TROPOS MPSS SN...	Step	08.12.2025 10:28	2.5 kB	-
PID-KOS-TSI APSS 3321 SN-...	Step	08.12.2025 10:28	2.5 kB	-
PID-KOS-TSI CPC 3750-10 S...	Step	17.11.2025 09:29	2.5 kB	-
PID-KOS-TSI CPC 3750-10 S...	Step	08.12.2025 10:28	2.5 kB	-
PID-KOS-TSI CPC 3750-10 S...	Step	08.12.2025 10:28	2.5 kB	-

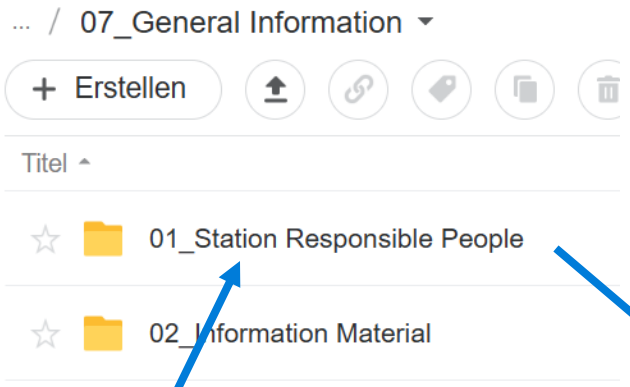
Persistent Instrument Identifier (PID) – Example CPC

fx Cz, Kosetice

	A	B	C	D	E	F	G	H	I	J	K
1	Cz, Kosetice										
2	TSI 3750			Please fill in the yellow boxes. Thank you!							
3	SN: 375010180401										
4											
5											
6											
7		PROPERTY	OBLIGATION	DEFINITION	Instrument specific values						
8	1	Identifier	m	Unique string that identifies the instrument instance							
9	1.1.	IdentifierType	m	Type of the identifier							
10	2	SchemaVersion	m	Version number of the PIDINST schema used in this record	v1.0						
11	3	LandingPage	m	A landing page that the identifier resolves to							
12	4	Name	m	condensation particle counter							
13	5	Owner	m	Institution(s) responsible for the management of the instrument. This may include the legal owner, the operator, or an institute providing access to the instrument.							
14	5.1.	ownerName	m	Full name of the owner							
15	5.2.	ownerContact	o	Contact address of the owner							
16	5.3.	ownerIdentifier	o	Identifier used to identify the owner							
17	5.4.	ownerIdentifiertype	o	Type of the identifier							
18	6	Manufacturer	m	The instrument's manufacturer(s) or developer. This may also be the owner for custom build instruments							
19	6.1.	manufacturerName	m	Full name of the manufacturer							
20	6.2.	manufacturerIdentifier	o	Identifier used to identify the manufacturer							
21	6.3.	manufacturerIdentifierTyp	o	Type of the identifier							
22	7	Model	r	condensation partilce counter							
23	7.1.	modelName	r	TSI 3750 CEN							
24	7.2.	modelIdentifier	o	Identifier used to identify the model							
25	7.3.	modelIdentifierType	o	Type of the identifier							
26	8	Description	r	Technical description of the device and its capabilities							
27	9	Instrument	r	Classification of the type of the instrument							
28	9.1.	InstrumentSerialNumber	o	Serial number							
29	10	maesuredVariable	r	particle number concentration							
30	11	Data	r	Dates relevant to the instrument							
31	11.1.	dataType	r	Manufacturing date							
32	12	relatedIdentifier	r	Identifiers of related resources							
33	12-Jan.	valid from	r	beginning							
34	12-Feb.	valid to		end							
35	12-März	relatedIdentifierType	r	Type of the identifier							
36	12-Apr.	relation Type	r	Description of the relationship							
37	12-Mai	relatedIdentifierName	o	A name for the related resource, may be used to give a hint on the content of that resource							
38	13	**Other information**									
39	13.1.	Firmware	o	number	04-02-05						
40	14	**instrument state**									
41	14.1.	state description	m	state of the instrument at the station or in the calibration workshop	in-situ						
42	14.2.	state valid from	m	date of beginning							
43	14.3.	state valid to	m	end date							
44	14.4.	pulse height	m	signal intensity							
45	14.5.	inlet flow (nominell)	m	operational flow							
46	14.6.	aerosol flow (actual)	m	volume flow setpoints							
47	14.7.	Condenser Temperature	m								
48	14.8.	Saturator Temperature	m								
49	14.9.	Critical Orifice Pressure	m								
50	14.10.	Aerosol Nozzle Pressure	m								
51	14.11.	Laser Current	m								
52	14.12.	Optic temperature	m								

Station Responsible People





1	Czech Republic					
2		Name	Email		Access given	Comment
3	Kosetice	Saliou Mbengue	mbengue.s@czechglobe.cz	individuell		
4		Lenka Suchankova	suchankova.l@czechglobe.cz	individuell		
5		Petr Roztocil	roztocil@icpf.cas.cz	individuell	ECAC-Unit-head	
6		Radek Lhotka	lhotka@icpf.cas.cz	individuell		
7		Jakub Ondracek	Ondracek@icpf.cas.cz	individuell	ECAC-Unit-head	
8						
9						
10	The station PI(s) is (are) responsible that access this list is up-to-date					
11						

Individual Zoom Meetings - Labeling Step 1c

I would like to have individual meeting with the responsible people of the 5 AIS “pilot stations” in the coming weeks

- Jungfraujoch
- Kosetice
- Barcelona
- Hyytiälä
- Pallas

The final evaluation report must be given to the Head Office end of March.

Performance Evaluation- Labeling Step 1c

ACTRIS National Facility - Performance Evaluation
Aerosol In-Situ Observational Platform

NF short name

NF information

Component PI (name & contact): Name & Surname, email address
Date of initial acceptance: MM/YYYY
Start date of ACTRIS compliance for the entire component: MM/YYYY

Summary report on compliance year(s): YYYY - YYYY

Report issued by	ACTRIS Center for Aerosol in-Situ Measurements and European Center for Aerosol Calibration & Characterization	
Time period covered by the report	DD/MM/YYYY - DD/MM/YYYY	
Date of the report	DD/MM/YYYY	
Data compliance	**X months** with compliant data out of total XX months during the evaluation period	Yes
Instrument compliance	Calibration of instruments	Yes
General compliance	**Positive evaluation** according to requirements for the aerosol in-situ component.	

CF recommendation

Recommendation to continue in Step1b / Recommendation to grant full label (Step1c) / Recommendation to maintain the label (Step2)

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Detailed report

Data provision of mandatory variables

Variable name	Associated instrument	No. of months of compliant data during the evaluation period	Data coverage (% of total expected) during the evaluation period[1]	Data submitted in time and QC ok
Aerosol particle number concentration DP50 >10 nm	Instrument associated to variable 1	X	XX%	Yes/No
Aerosol particle number size distribution – mobility diameter 10-800 nm	Instrument associated to variable 2	X	XX%	Yes/No
Aerosol particle light scattering & backscattering coefficient – multi-wavelength	Instrument associated to variable 3	X	XX%	Yes/No
Aerosol particle light absorption coefficient	Instrument associated to variable 4	X	XX%	Yes/No

Instrumentation/method

Instrument type/method	Start date of ACTRIS compliant measurements	Start date NRT data submission (if applicable)	Instrument PID (if available)	Instrument landing page (link if available)	Latest passed QA (date)	Next required QA (year)
Aerosol particle number concentration DP50 >10 nm	DD/MM/YYYY	DD/MM/YYYY	XXX	Link	DD/MM/YYYY	YYYY
Aerosol particle number size distribution – mobility diameter 10-800 nm	DD/MM/YYYY	DD/MM/YYYY	XXX	Link	DD/MM/YYYY	YYYY
Aerosol particle light scattering & backscattering coefficient – multi-wavelength	DD/MM/YYYY	DD/MM/YYYY	XXX	Link	DD/MM/YYYY	YYYY
Aerosol particle light absorption coefficient	DD/MM/YYYY	DD/MM/YYYY	XXX	Link	DD/MM/YYYY	YYYY

At least one more variable must me selected from the list of optional variables.

[1] Calculated for the months of compliant data during the calendar year (months with zero datasets to be excluded if not reported as exceptions e.g. due to weather, instrument failure or instrument deployed for calibration)

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Performance Evaluation- Labeling Step 1c

Data provision of optional variables

Variable name	Associated instrument	No. of months of compliant data during the evaluation period	Data coverage (% of total expected) during the evaluation period[2]	Data submitted in time and QC ok
Nano-particle number concentration (DP50 < 10 nm)	Instrument	X	XX%	Yes/No
Nano-particle number size distribution < 10 nm	Instrument	X	XX%	Yes/No
Particle number size distribution - aerodynamic diameter 0.8 to 10 µm	Instrument	X	XX%	Yes/No
Cloud condensation nuclei number concentration	Instrument	X	XX%	Yes/No
Mass concentration of particulate organic tracers	method	X	XX%	Yes/No
Mass concentration of particulate organic and elemental carbon	Instrument or method	X	XX%	Yes/No
Mass concentration of non-refractory particulate organics and inorganics within PM1 fraction	Instrument	X	XX%	Yes/No
Mass concentration of particulate elements	Instrument or method	X	XX%	Yes/No

Instrumentation/method

Instrument type/method	Start date of ACTRIS compliant measurements	Start date NRT data submission (if applicable)	Instrument PID (if available)	Instrument landing page (link if available)	Latest passed QA (date)	Next required QA (year)
Nano-particle number concentration (DP50 < 10 nm)	DD/MM/YYYY	N/A	XXX	Link	DD/MM/YYYY	YYYY
Nano-particle number size distribution < 10 nm	DD/MM/YYYY	N/A	XXX	Link	DD/MM/YYYY	YYYY
Particle number size distribution - aerodynamic diameter 0.8 to 10 µm	DD/MM/YYYY	DD/MM/YYYY	XXX	Link	DD/MM/YYYY	YYYY
Cloud condensation nuclei number concentration	DD/MM/YYYY	N/A	XXX	Link	DD/MM/YYYY	YYYY
Mass concentration of particulate organic tracers	DD/MM/YYYY	N/A	N/A	N/A	DD/MM/YYYY	YYYY
Mass concentration of particulate organic and elemental carbon	DD/MM/YYYY	N/A	XXX	Link	DD/MM/YYYY	YYYY
Mass concentration of non-refractory particulate organics and inorganics within PM1 fraction	DD/MM/YYYY	DD/MM/YYYY	XXX	Link	DD/MM/YYYY	YYYY
Mass concentration of particulate elements	DD/MM/YYYY	N/A	N/A	Link	DD/MM/YYYY	YYYY

[2] Calculated for the months of compliant data during the calendar year (months with zero datasets to be excluded if not reported as exceptions e.g. due to weather, instrument failure or instrument deployed for calibration)

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General comments regarding QA/QC of the instruments:

Describe here shortly, for each instrument: implementation of operation and quality assurance procedures, implementation of software tools provided by the TC, failures or technical problems faced, participation to calibrations, participation to training sessions and QA workshops

Other considerations

Write here other relevant things, if any: how experienced the team is, how constant the data provision is, if the TC has concerns or not.

References

Potential reference to the document describing requirements and methodology for the calculation of % data coverage.

Appendix

.. possibly explaining how data coverage etc. are calculated (maybe to a later stage, nit during piloting)

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