

Milestone 5.7: New NFs and RPFs reached the level of ACTRIS standards

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1 Introduction

The ACTRIS Implementation Project (ACTRIS-IMP) supported potential new National Facilities (NFs) and Regional Partner Facilities (RPFs) to enable them to meet the technical standards of ACTRIS. NFs comprise observational and exploratory platforms within the countries that are part of ACTRIS ERIC. They undergo the ACTRIS labelling process to prove their compliance with the ACTRIS requirements. Afterwards, the ACTRIS Data Centre (DC) provides their data under the ACTRIS label. RPFs represent platforms in countries outside of ACTRIS ERIC, which are technically fully compliant with the ACTRIS requirements. The DC makes those data available as ACTRIS-compliant data. Furthermore, the DC hosts data from stations that contribute ACTRIS variables by following ACTRIS standards. These stations are neither NFs nor RPFs, e.g., because they are not fully equipped with the required ACTRIS instrumentation. They often belong to national or international networks dedicated to specific observations.

<u>Deliverable D5.3</u> summarized the support activities organized for the new facilities by ACTRIS-IMP. A list of identified potential RPFs was provided as well. When new facilities reach the level of ACTRIS standards, their data can be found in the ACTRIS database. In the following, we provide some information on new data sets that became available via the ACTRIS DC in recent years, in order to demonstrate that new facilities reached the level of ACTRIS standards during ACTRIS-IMP. In Section 2, potential new NFs and new contributing stations are listed. Section 3 shows RPFs, for which ACTRIS-compliant data are available via the DC. Most of them have been connected to ACTRIS already in the past, but their RPF status has been newly defined within ACTRIS-IMP.

2 Data from potential new NFs and contributing stations

Table 1 list new data sets that became available in the course of ACTRIS-IMP. The table contains potential new NFs (labelling planned or in progress) as well as new contributing stations.

Table 1. New data sets submitted to the ACTRIS DC under ACTRIS-IMP.

In-situ data sets submitted to ACTRIS-EBAS			
EBAS station code	Station	First data set delivered	
AT0002R	002R Illmitz 2023		
CY0002R	Agia Marina Xyliatou Cyprus	2021-08	
DE0008R	Schmücke	2023-01	
DE0061B	Annaberg-Buchholz	2020-05	
DE0066K	Leipzig-Eisenbahnstrasse	nbahnstrasse 2020-02	
DE0067K	Leipzig-Mitte	2020-04	
ES0019U	Barcelona (Palau Reial)	2021-04	
FI0036R	Pallas (Matorova) 2021-04		
FI0038U	Kumpula 2021-04		

FR0027U	Villeneuve d'Ascq 2020-10		
GB0048R	Auchencorth Moss 2020-08		
GB1055R	Chilbolton Observatory 2020-08		
GR0004U	Athens NOA 2023-11		
IT0015U	Lecce (ECO) 2021-11		
PL0010U	AGH University Krakow 2021-05		
SE0023R	Norunda Tornet 2020-11		
Remote sensing data sets submitted to ACTRIS-Cloudnet and/or ACTRIS-EARLINET			
GAW ID	Station	First L2 data set delivered	
CVO	Cabo Verde Atmospheric Observatory 2021-06		
-	RADO-Galati 2022-02		
-	Leipzig-LIM	2020-12	
-	Pallas Supersite Kenttärova 2022-08		

3 Data from potential Regional Partner Facilities

The following table provides an overview of data sets that became available from the identified potential Regional Partner Facilities in the course of ACTRIS-IMP

Table 2. Data from potential Regional Partner Facilities submitted to the ACTRIS DC during ACTRIS-IMP.

- 01.2021	Variables Ammonium Chloride Nitrate Organic mass Sulfate	Instrumentation Aerosol Mass Spectrometry
-01.2021	Chloride Nitrate Organic mass	Aerosol Mass Spectrometry
	Nitrate Organic mass	
	Organic mass	
	_	
	Sulfate	
ata set	Variables	Instrumentation
-01.2021	Ammonium	Aerosol Mass Spectrometry
	Chloride	
	Nitrate	
	Organic mass	
	Sulfate	
		Nitrate Organic mass

University Colleg	ge of Dublin (Ireland)		
Topical Centre	Date of data set	Variables	Instrumentation
CAIS-ECAC	09.2018 - 03.2019	Ammonium	Aerosol Mass Spectrometry
	09.2019 – 12.2022	Chloride	
		Nitrate	
		Organic mass	
		Sulfate	
Tartu University	(Estonia)		
Topical Centre	Date of data set	Variables	Instrumentation
CAIS-ECAC	12.2017 - 03.2018	Elemental carbon	High-volume sampler
		Organic carbon	
		Total carbon	
NA	(Dalida)		
Mount Chacaltay	1		
Topical Centre	Date of data set	Variables	Instrumentation
CAIS-ECAC	01.2011 – 12.2022	Aerosol absorption	Aethalometer
	01.2011 – 12.2022	Particle number	SMPS
	01.2012 – 12.2021	Aerosol backscatter	Nephelometer
	01-2015 – 12.2022	Aerosol absorption	Filter absorption
Evers (Dertugal)			
Evora (Portugal)	D. C. C. L. C.	V. 2-11.	
Topical Centre	Date of data set	Variables	Instrumentation
CARS	05.2009 – 12.2023	Aerosol extinction	Multiwavelength Raman lidar
		Aerosol backscatter	
		Aerosol depolarization	