



## TNA User Report

*The completed and signed form below should be returned by email to [eurochamp2020@lisa.u-pec.fr](mailto:eurochamp2020@lisa.u-pec.fr)*

Project title	Intercomparison of absorption photometer
Name of the accessed calibration center	TROPOS, Lab 121
Number of users in the project	2, Bas Henzing and Marcel Moerman
Project objectives (max 100 words)	Our MAAP (167) is the absorption photometer of the CBAUW observatory that is part of ACTRIS. It needs to fulfill the requirements of the network, by regular calibration.
Description of work (max 100 words):	Status and noise check, flow calibration, comparison to reference MAAP. The optical cell is cleaned.

Principal Investigator's and group's information	
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User status <sup>3</sup>	ACA
New user	No

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New user	No

<sup>1</sup> Physics; Chemistry, Earth Sciences & Environment; Engineering & Technology; Mathematics; Information & Communication Technologies; Material Sciences; Energy; Social sciences; Humanities.

<sup>2</sup> UNI= University and Other Higher Education Organisation;

RES= Public Research Organisation (including international research organisations and private research organisations controlled by public authority);

SME= Small and Medium Enterprise;

PRV= Other Industrial and/or Profit Private Organisation;

OTH= Other type of organization.

<sup>3</sup> UND= Undergraduate; PGR= Post graduate; PDOC= Post-doctoral researcher; RES= Researcher EXP= Engineer; ACA= Academic; TEC= Technician.

<sup>4</sup> Reproduce the table for each user who accessed the infrastructure

## Trans-National Access (TNA) Scientific Report

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### Instructions

Please limit the report to max 5 pages, you can include tables and figures. Please make sure to address any comments made by the reviewers at the moment of the project evaluation (if applicable, in this case you were informed beforehand). Please do not alter the layout of the document and keep it in Word version. The report will be made available on the [eurochamp.org](http://eurochamp.org) website. Should any information be confidential or not be made public, please inform us accordingly (in this case it will only be accessible by the European Commission, the EUROCHAMP-2020 project partners, and the reviewers). Please include:

- Introduction and motivation
- Scientific objectives
- Reason for choosing the calibration facility
- Method and experimental set-up
- Data description
- Preliminary results and conclusions
- Outcome and future studies
- References

**Name of the PI: Bas Henzing**

**Calibration center's name and location: ECAC TROPOS Leipzig**

**Campaign name and period: AP-2020-2-2**

**Text:**

#### **Introduction**

TNO operates aerosol instrumentation at the Dutch CBAUW station that is part of the ACTRIS network. Regular calibration of instrumentation is required and provided by TROPOS.

#### **Scientific objectives**

Calibration to reach harmonized reliable data.

#### **Reason for choosing the calibration facility**

Nearby, part of ACTRIS, and known highly skilled people

#### **Method and experimental set-up**

Instrument inspection, check of flow, leaks, instrument settings, and noise. Comparison to reference instrument

#### **Data description**

The calibration resulted in the following correlation parameters:

Wavelength [nm]	Slope	Error	R <sup>2</sup>
660	0.907	0.003	0.998

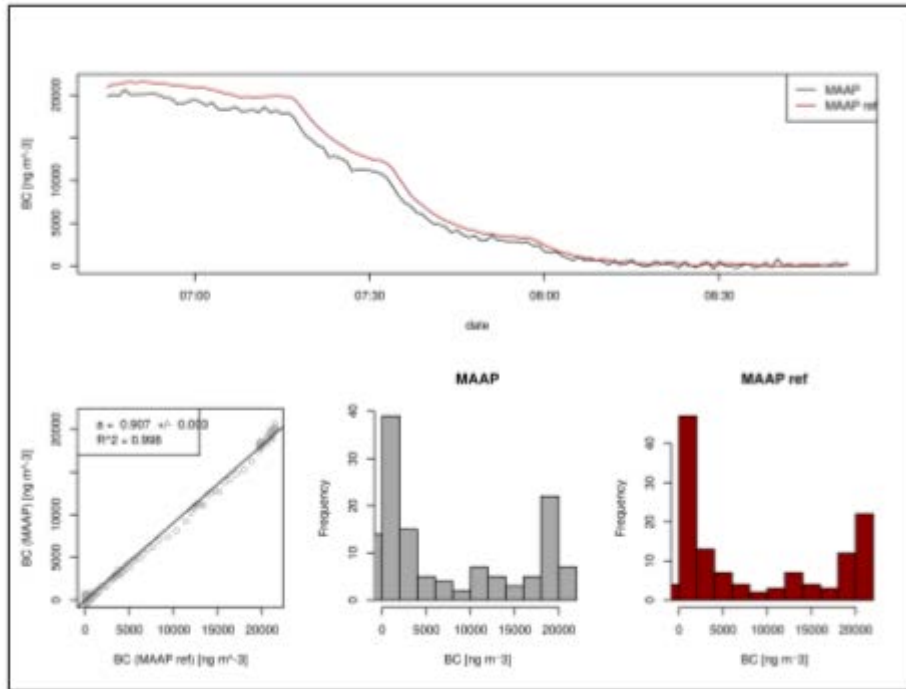


Figure: example of results: correlation of eBC coefficient from MAAP (167) and reference MAAP.

### Preliminary results and conclusions

Overall assessment lead to the conclusion that the instrument meets the requirements

### Outcome and future studies

Next calibration latest in two years