

Intercomparison of Condensation Particle Counter

Project No.: CPC-2018-4-4

Basic information:

Location of the quality assurance: TROPOS, lab: 130

Delivery date: -

Setup in the laboratory: June 6, 2018

Comparison period: June 6, 2018

Principal Investigator	Home Institution	Participant	Instrument
	Staatliche Betriebsgesellschaft für Umwelt und Landwirtschaft (BfUL) Altwahnsdorf 12, 01445 Radebeul Telefon: +49 351 8312-501 www.smul.sachsen.de/bful	---	DE-BFUL MPSS Dresden-Nord; TSI CPC Model 3025 # 1321

TROPOS Reference Instrument: Electrometer: TSI model 3068B
70838596

Additional Equipment:

- Bubble flow meter 'Gilibrator', Gilian (Sensidyne)

Summary of Intercomparison:

Pre-status:

The TSI CPC Model 3025 was in good condition.

Final status:

The TSI CPC Model 3025 passed the quality standards of ACTRIS and GAW.

On June 6, 2018, the DE-BFUL MPSS Dresden-Nord 3025 #1321 participated in the TROPOS ACTRIS-2 CPC-Workshop.

1. Status of the wick: The wick was clean.
2. Status of the CPC: The CPC was working properly.
3. Final CPC-Workshop: The TSI CPC Model 3025 reached 100% efficiency at 40 nm. The Dp50 is lower than 5 nm. The CPC efficiency curve corresponds to the standard.

Final status: 06.06.2018

Dp in nm	counting efficiency
40	1.03
30	1.01
20	0.99
15	0.96
13	0.95
11	0.92
10	0.90
9	0.88
8	0.85
7	0.81
6	0.77
5	0.69

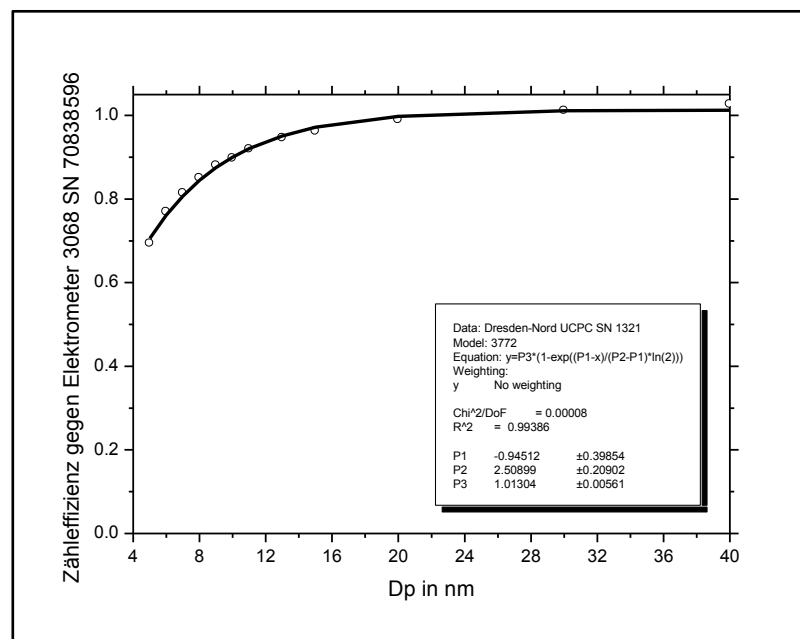


Figure 01: CPC efficiency curve based on Electrometer TSI 3068B. Serial number: 70838596

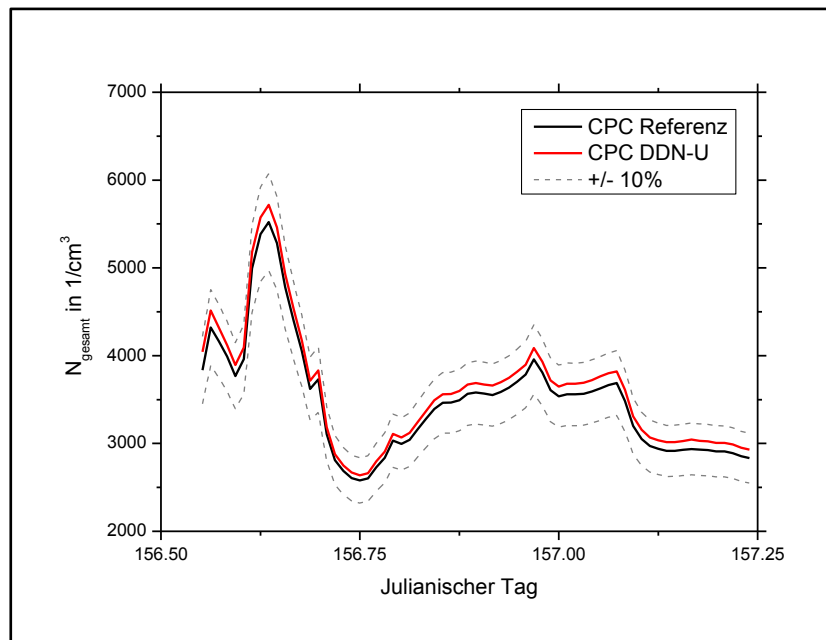


Figure 02: Inter-comparison of ambient air conditions between Reference CPC and CPC DDN-U.



**Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin**
Nationales Metrologieinstitut



Kalibrierschein Calibration Certificate

Gegenstand:
Object: Aerosol Elektrometer
ID-Nummer: TSI_3068B_70838596

Hersteller:
Manufacturer: TSI Incorporated

Typ:
Type: 3068B

Kennnummer:
Serial No.: 70838596

Auftraggeber:
Applicant: AG 3.23 - Herr Nowak, Tel.: 3228

Anzahl der Seiten:
Number of pages: 4

Geschäftszeichen:
Reference No.: PTB AG 2.11-1461323527-0327

Kalibrierzeichen:
Calibration mark: 20790 PTB 16

Datum der Kalibrierung:
Date of calibration: 22.04.2016

Im Auftrag:
On behalf of PTB: Braunschweig, 04. Mai. 2016

Im Auftrag:
On behalf of PTB:

391 008 n

Dr. B. Schumacher

Siegel
Seal



C. Rohrig

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