



Intercomparison of Condensation Particle Counter

Project No.: CPC-2017-6-14

Basic information:

Location of the quality assurance: TROPOS, lab: 130

Delivery date: -

Setup in the laboratory: November 13, 2017

Comparison period: November 13, 2017

Principal Investigator	Home Institution	Participant	Instrument
Jenny Rissler	Lund University	---	SWE-LUND CPC; TSI CPC Model 3775 # 3775140102

TROPOS Reference Instrument: Electrometer: TSI model 3068B
70838596
(4% offset to PTB electrometer)

Additional Equipment:

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

Summary of Intercomparison:

Pre-status:

The TSI CPC Model 3775 was in good condition.

Final status:

The TSI CPC Model 3775 passed the target standards of ACTRIS and GAW.

On November 13, 2017, the CH-METAS CPC 3775 #70701277 participated in the TROPOS AEROMET CPC-Workshop.

1. Status of the wick: The wick was clean.
2. Status of the CPC: The CPC was working properly.
3. The flow rate was at 303.1 ccm.
4. Final CPC-Workshop: Compared to the electrometer the TSI CPC Model 3775 #3775140102 was 3% higher at 40 nm. The Dp50 is at 4.9 nm. The CPC efficiency curve corresponds to the standard.

Final status: Nov 13, 2017

Dp in nm	counting efficiency
40	1.03
30	1.02
20	0.99
15	0.97
13	0.91
11	0.90
10	0.88
9	0.84
8	0.79
7	0.73
6	0.62
5	0.50

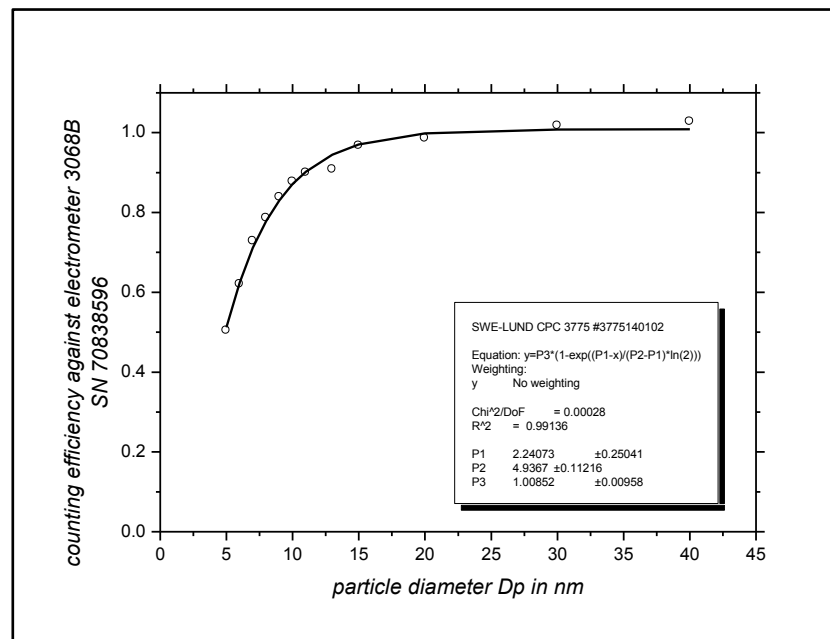


Figure 01: CPC efficiency curve based on Electrometer TSI 3068B. Serial number: 70838596



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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