550

Evaluation of a Partector Pro for atmospheric size distribution and number concentration measurements at an urban background site

Christof Asbach[1], Ana Maria Todea[1], Heinz Kaminski[1]

555   [1] Filtration & Aerosol Research Department, Institut für Umwelt & Energie, Technik & Analytik e. V. (IUTA), 47229 Duisburg, Germany

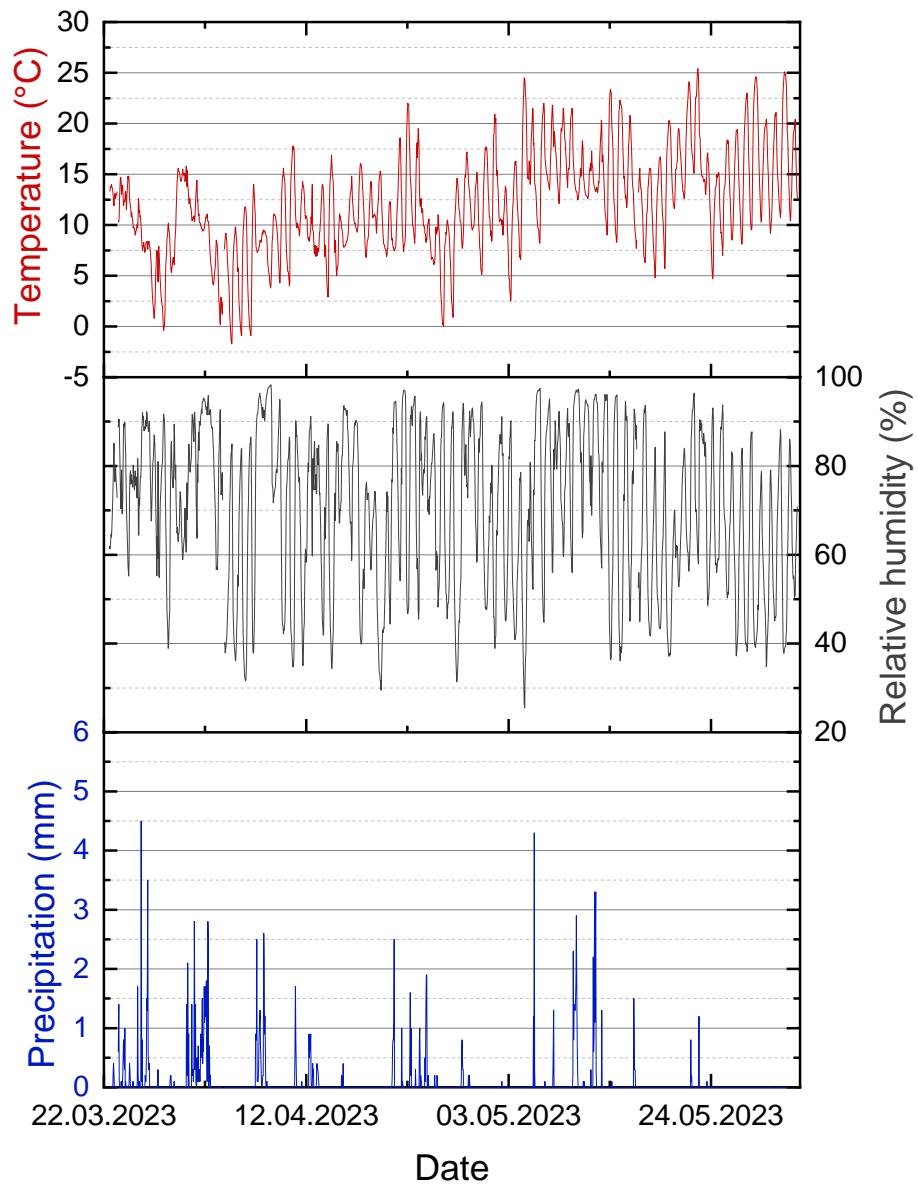
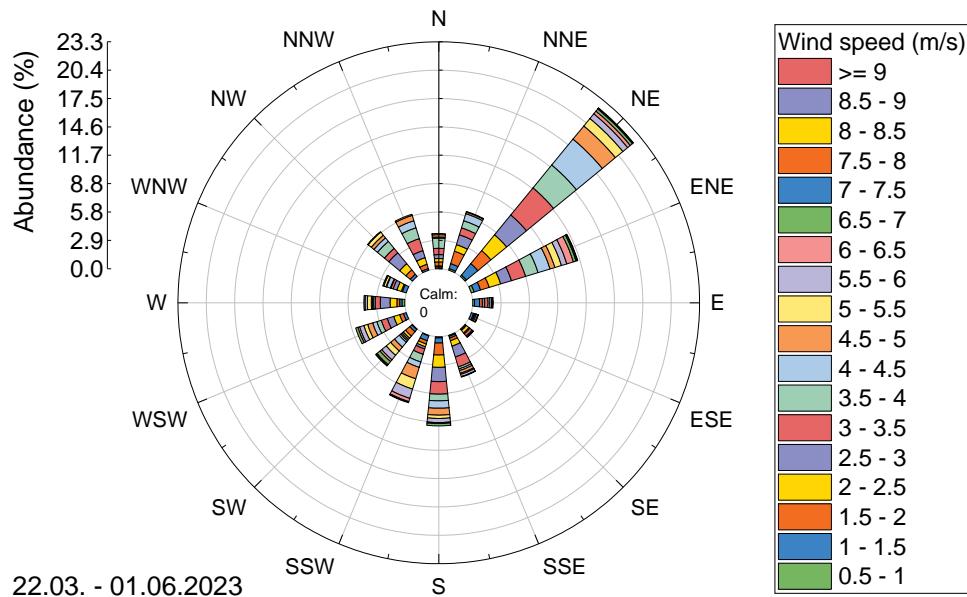
Correspondence to: Christof Asbach (asbach@@iuta.de)

560

Figure S 1: Temperature, relative humidity and precipitation during the measurement period (data courtesy of LANUV: https://www.lanuv.nrw.de/umwelt/luft/immissionen/aktuelle-luftqualitaet/wetterdaten)

565   **Figure S 2: Wind rose at the measurement station Mülheim-Styrum during the measurement period (data courtesy of LANUV:**
https://www.lanuv.nrw.de/umwelt/luft/immissionen/aktuelle-luftqualitaet/wetterdaten)

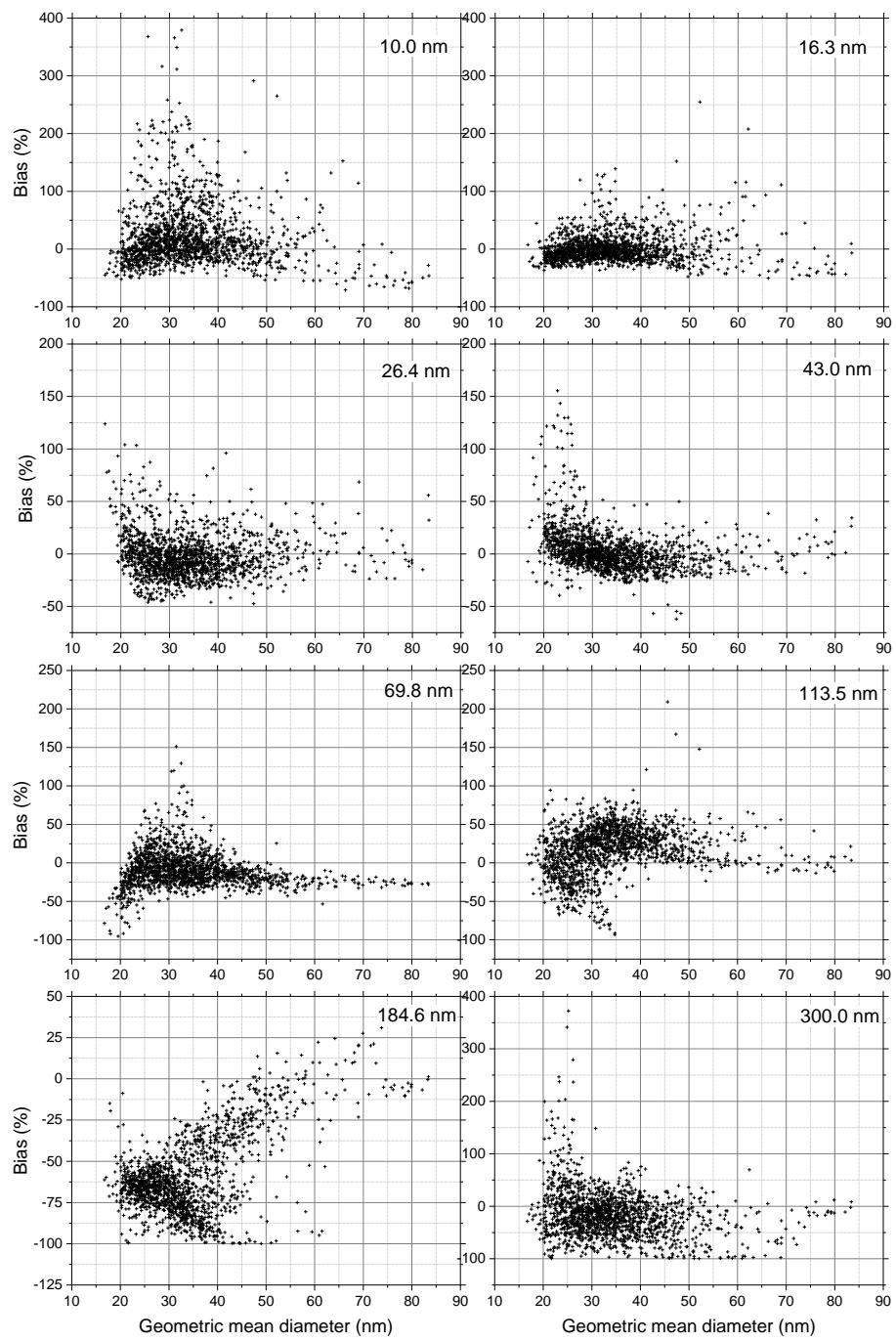



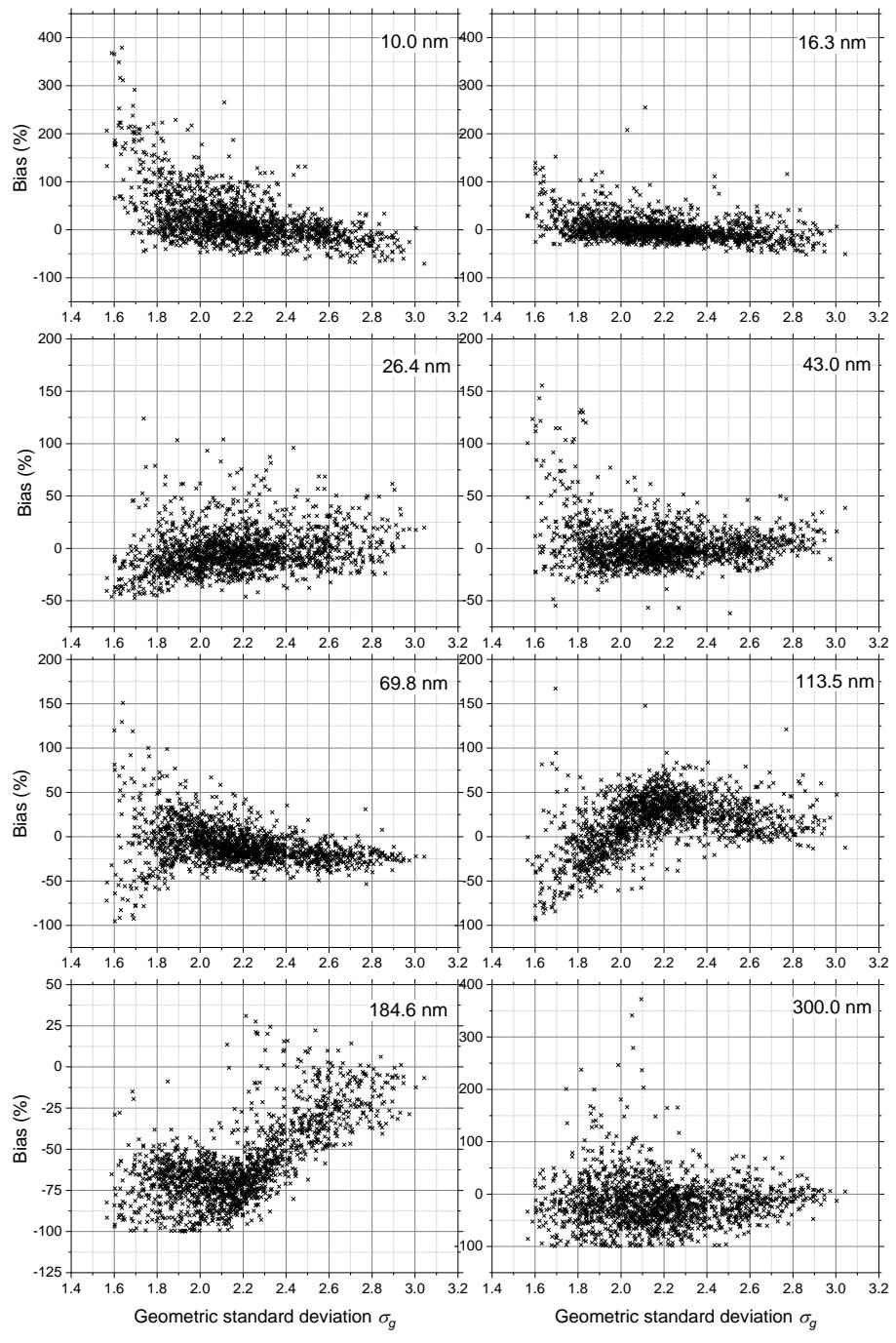
Figure S 3: Bias of the hourly average concentrations measured by the eight individual size bins of the Partector as a function of the geometric mean diameter, measured with the MPSS

570

Figure S 4: Bias of the hourly average concentrations measured by the eight individual size bins of the Partector as a function of the geometric standard deviation, measured with the MPSS

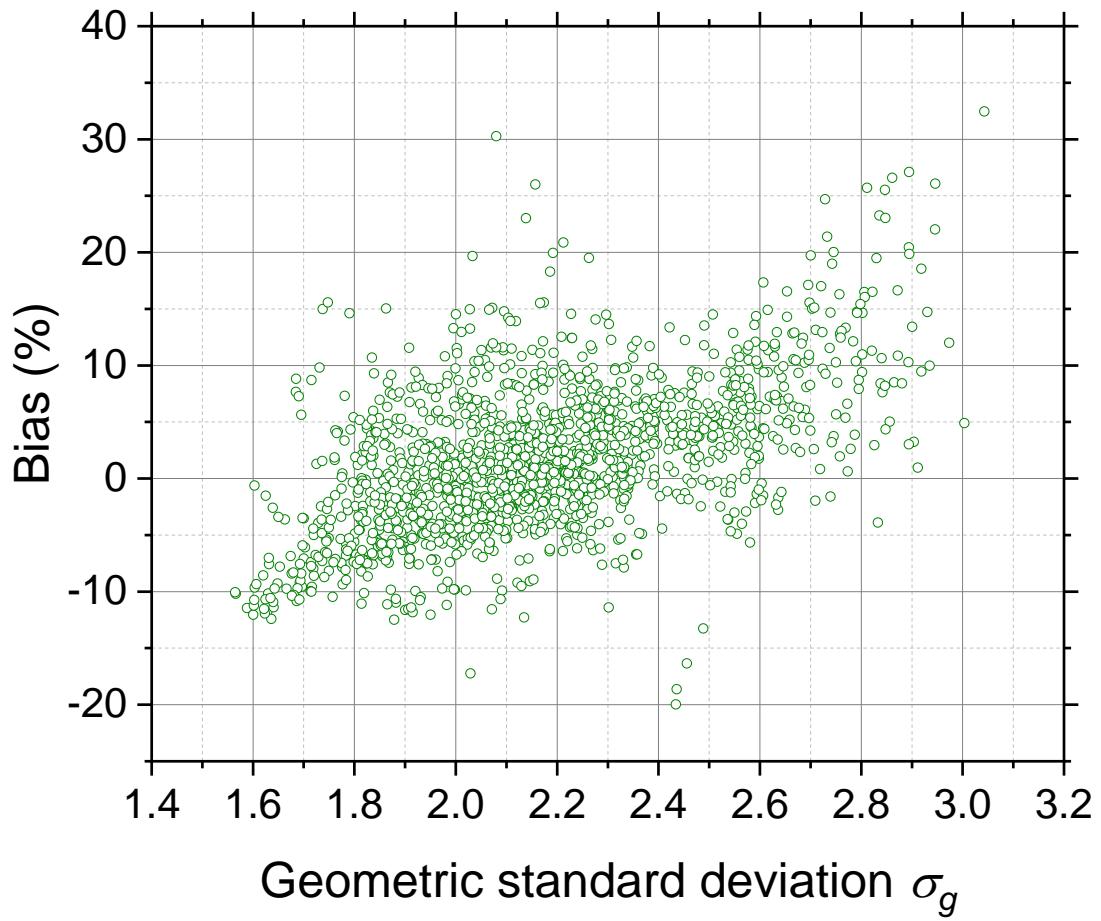



Figure S 5: Bias of the hourly average geometric mean particle size, determined by the Partector Pro as a function of the geometric standard deviation of the aerosol, determined by the MPSS

575