



*Supplement of*

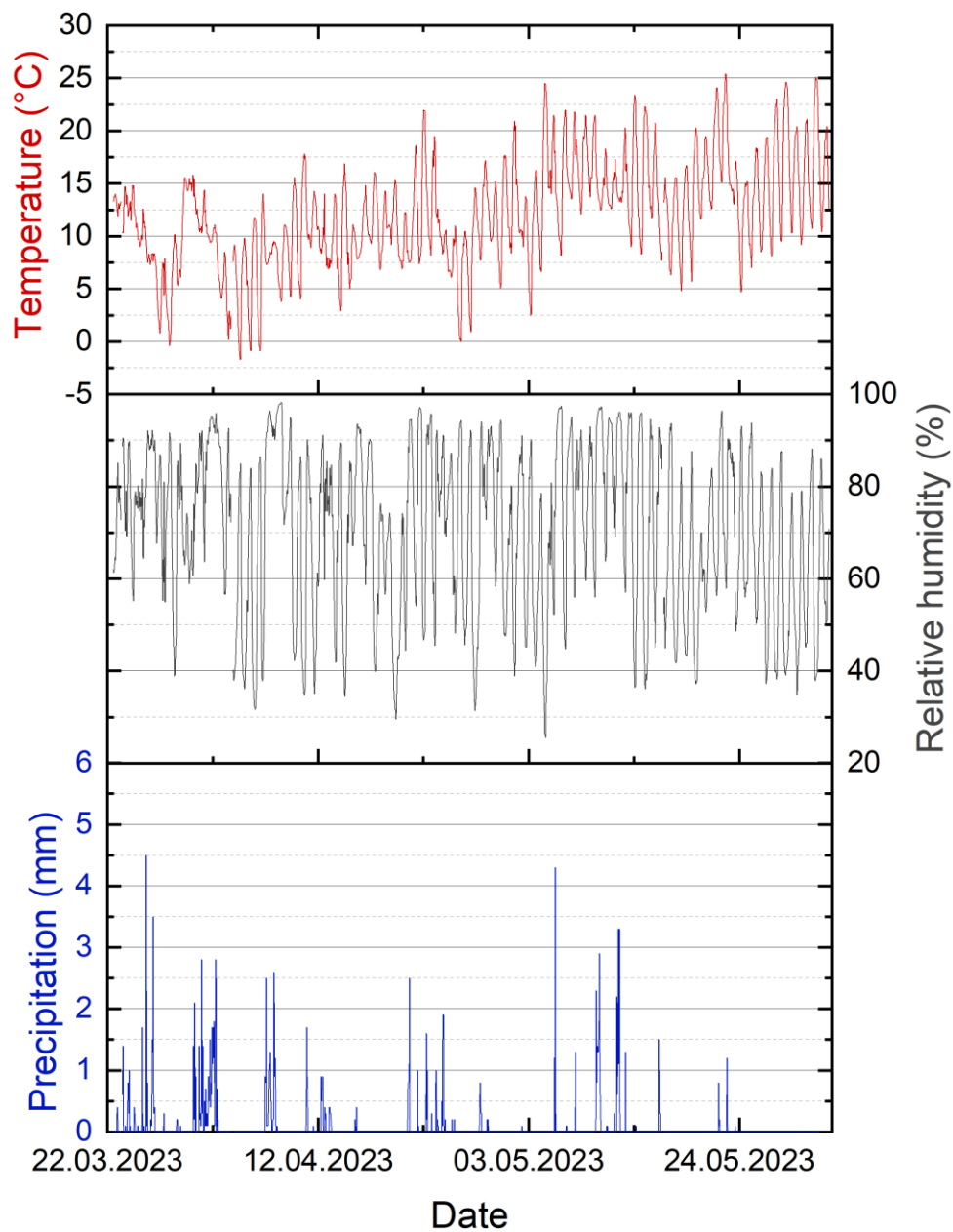
**Evaluation of a Partector Pro for atmospheric particle number size distribution and number concentration measurements at an urban background site**

**Christof Asbach et al.**

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## Figures



15 **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>)**

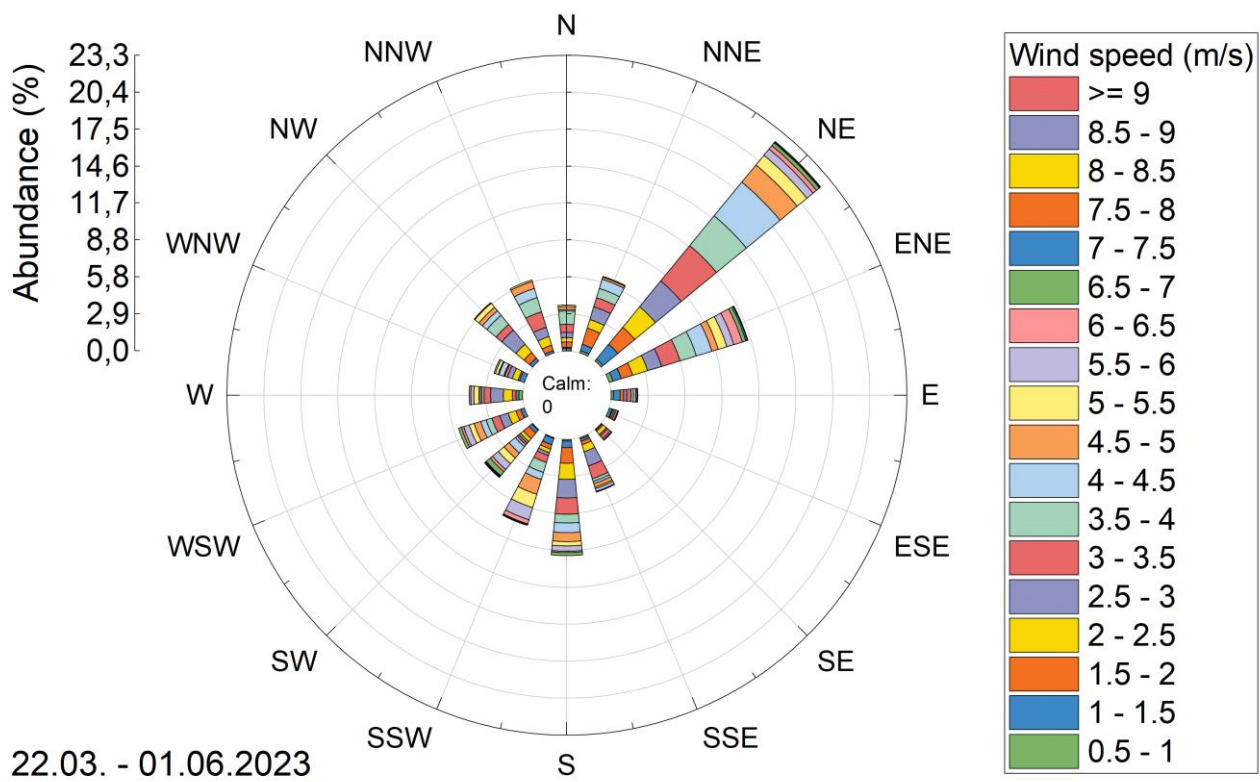
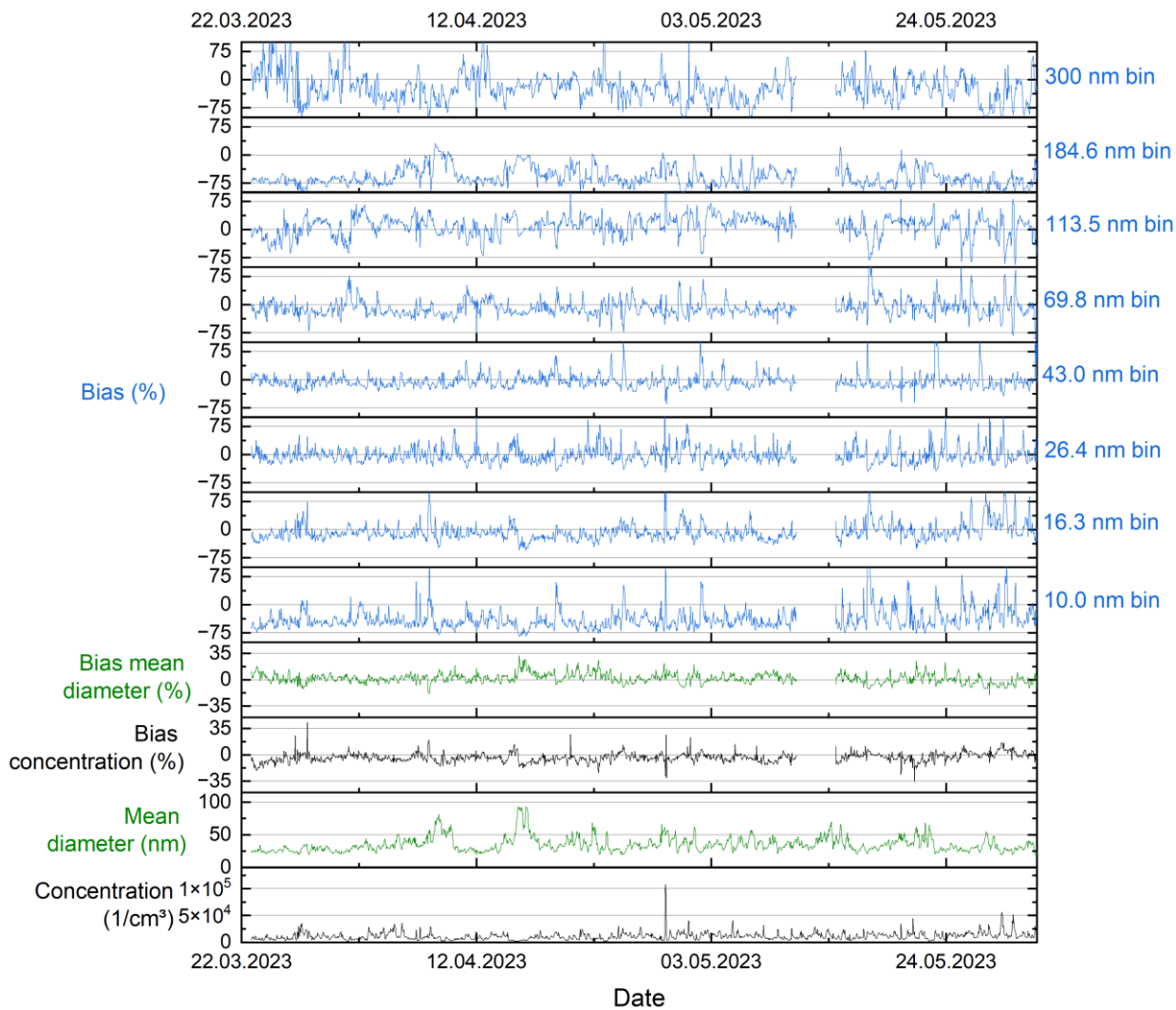
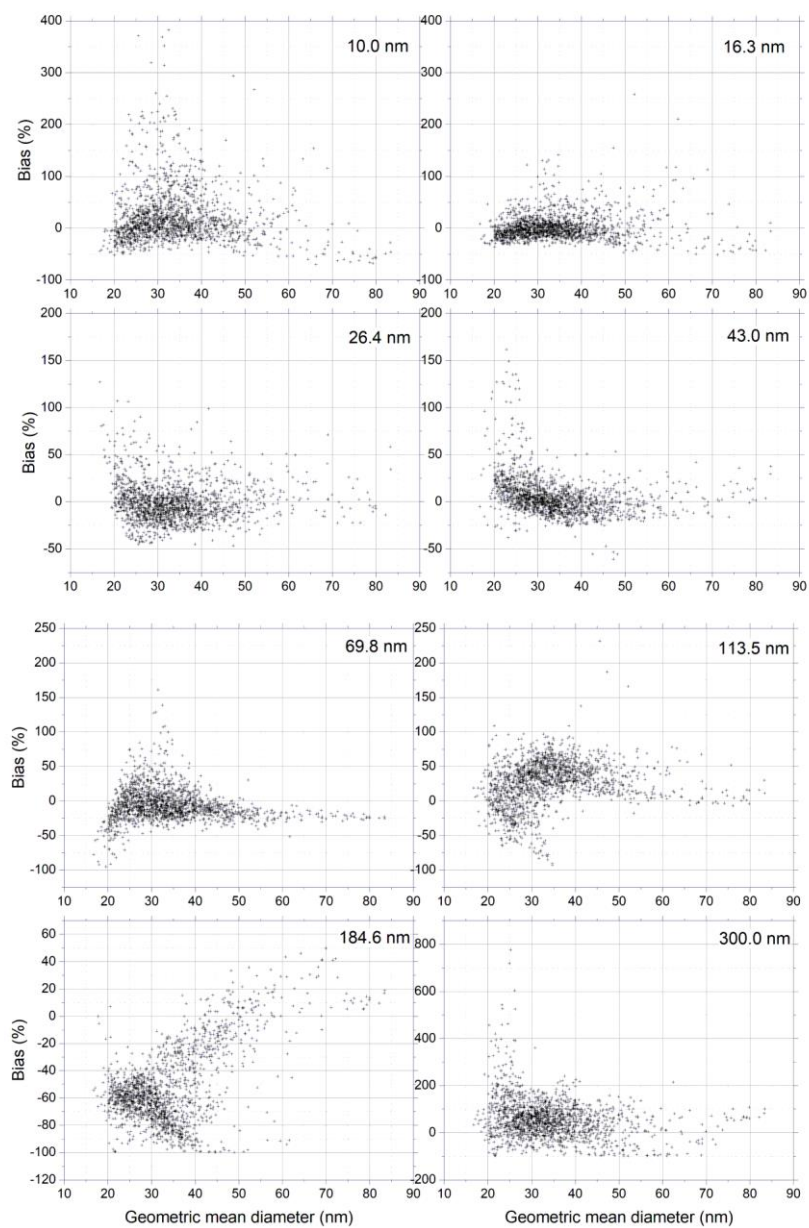


Figure S 2: Wind rose at the measurement station Mülheim-Styrum during the measurement period (data courtesy of LANUV: <https://www.lanuv.nrw.de/umwelt/luft/immissionen/aktuelle-luftqualitaet/wetterdaten>)

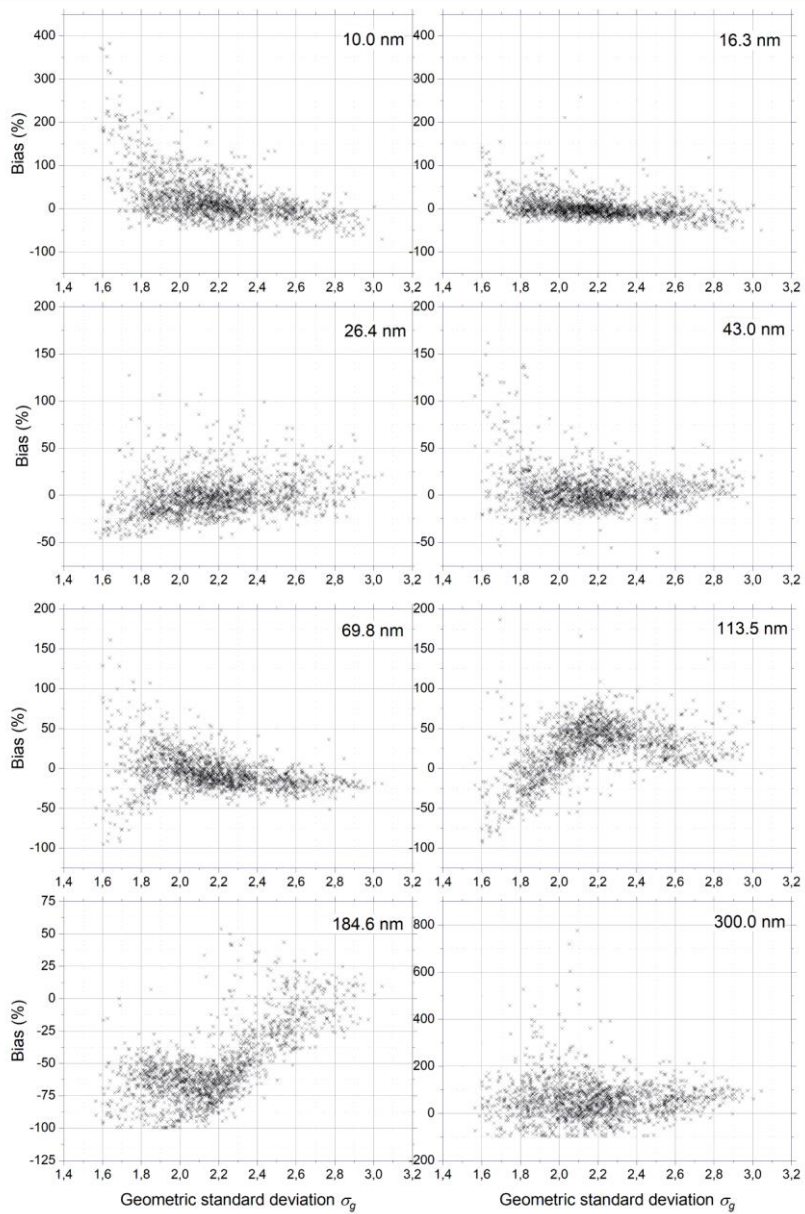
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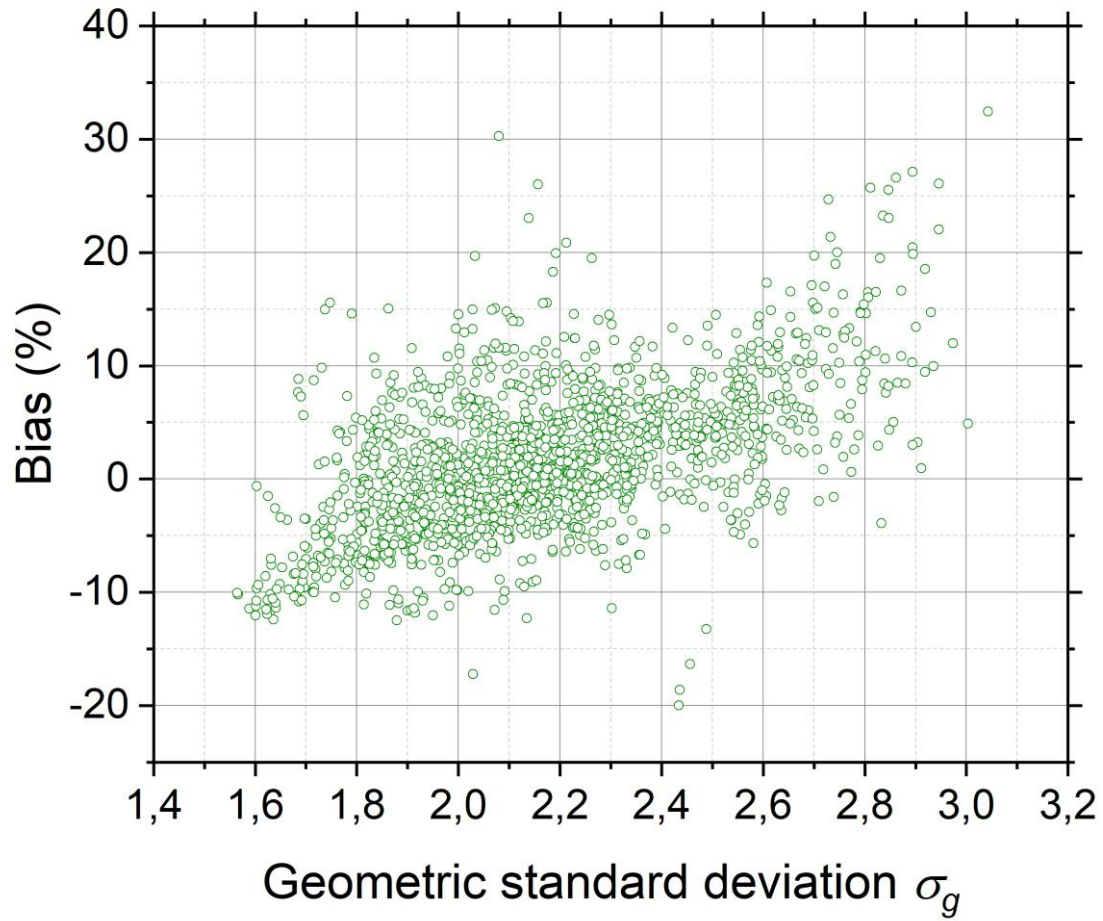
25 **Figure S 3: Time series of the bias of the concentration measurement in each Partector Pro size bin as well as of the mean particle diameter and the total particle concentration measured by the Partector Pro; Time series of the total number concentration and the mean diameter are provided at the bottom for reference**



30 **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 mean diameter, measured with the MPSS**



**Figure S 5: 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 6:** 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