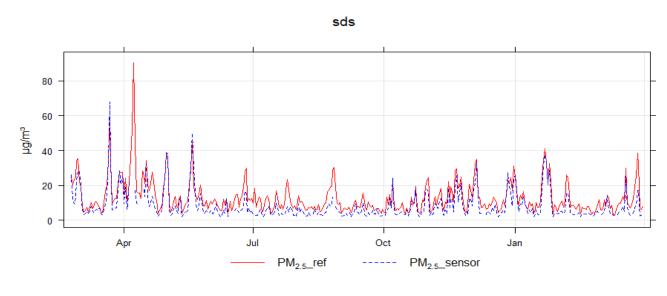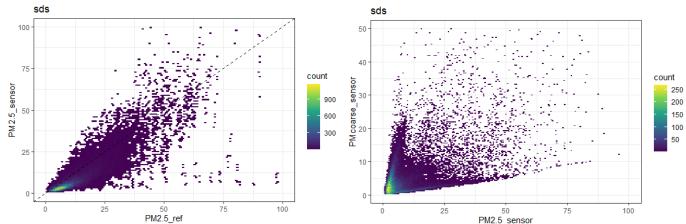# Nova Fitness SDS011

VAQUUMS

Validation and data availability
Some issues with signal spikes and flat or max values
Availability between 71% and 92%

$PM_{2.5}$ comparison with automatic reference
mean bias: -3.9 µg/m³　　　**R^2 : 0.72**

PM_{10} and PM_{coarse} performance
Sensor occasionally picks up some PM_{coarse}
but correlation is very poor

$PM_{2.5}$ between-sensor uncertainty
2.4 µg/m³ or **27%**

Effect of relative humidity ($PM_{2.5}$)
sensor/ref **x 2.1** (from 50% to 90% RH)

EU expanded uncertainty vs gravimetric ref. ($PM_{2.5}$)
35% without calibration
21% after local calibration