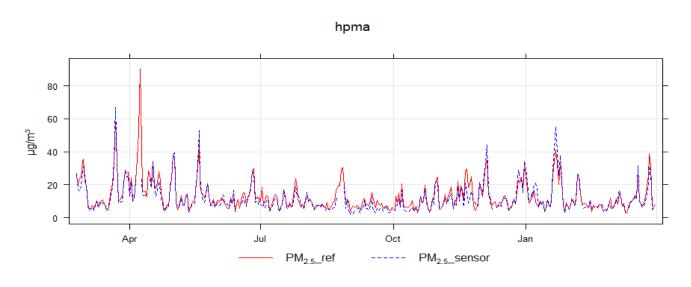
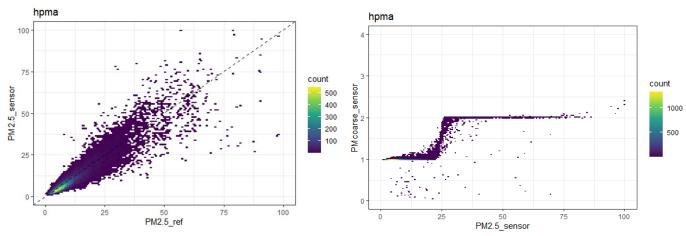


Honeywell HPMA115S0





Validation and data availability

All units had issues with **data spikes** Only 2 out of 5 units had >90% data

PM_{2.5} comparison with automatic reference

mean bias: $-1.0 \mu g/m^3$ R²: 0.84

PM₁₀ and PM_{coarse} performance

Very poor: only $PM_{2.5}$ sensor, uses basic algorithm to report PM_{10} /coarse fraction

PM_{2.5} between-sensor uncertainty

 $2.6 \,\mu g/m^3 \, or \, 22\%$

Effect of relative humidity (PM_{2.5})

sensor/ref x 1.7 (from 50% to 90% RH)

EU expanded uncertainty vs gravimetric ref. (PM_{2.5})

38% without calibration

15% after local calibration