

Summary of correlations of sensor kits and sensor modules

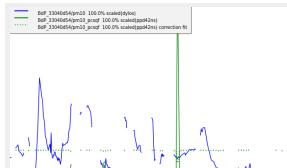
Sensorkits: BdP_33040d54 BdP_3f18c330 BdP_8d5ba45f

Report generated on: Mon Sep 18 20:44:20 CEST 2017

R-square and statistical summary

Measurement PM10 correlation key values

Correlation 1 - PM10 - kit BdP_33040d54 sensor type DYLOS with kit BdP_33040d54 sensor type PPD42NS:



nr samples 212, min= 1.00, max=1098.00

avg=34.81, std dev=111.94

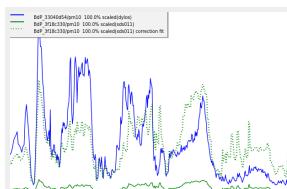
R-squared:

0.0043

Best fit polynomial coefficients:

[1.904e+02, -7.578e-02]

Correlation 2 - PM10 - kit BdP_33040d54 sensor type DYLOS with kit BdP_3f18c330 sensor type SDS011:



nr samples 476, min= 2.92, max=48.58

avg=20.18, std dev=10.28

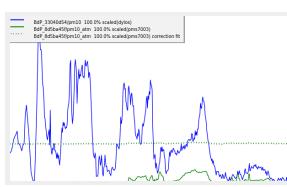
R-squared:

0.4167

Best fit polynomial coefficients:

[9.984e+00, 8.335e+00]

Correlation 3 - PM10 - kit BdP_33040d54 sensor type DYLOS with kit BdP_8d5ba45f sensor type PMS7003:



nr samples 476, min= 0.75, max=76.91

avg=28.24, std dev=19.26

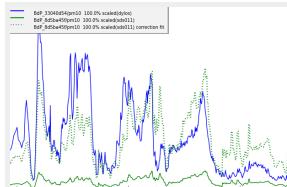
R-squared:

0.0001

Best fit polynomial coefficients:

[1.758e+02, 8.363e-02]

Correlation 4 - PM10 - kit BdP_33040d54 sensor type DYLOS with kit BdP_8d5ba45f sensor type SDS011:



nr samples 476, min= 3.58, max=65.50

avg=25.74, std dev=13.37

R-squared:

0.4557

Best fit polynomial coefficients:

[5.684e+00, 6.702e+00]

Correlation 5 - PM10 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_3f18c330 sensor type SDS011:



nr samples 107, min= 5.84, max=43.76

avg=19.60, std dev= 9.50

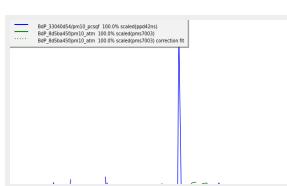
R-squared:

0.0010

Best fit polynomial coefficients:

[3.967e+01, -3.589e-01]

Correlation 6 - PM10 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_8d5ba45f sensor type PMS7003:



nr samples 107, min= 3.68, max=75.60

avg=21.27, std dev=18.77

R-squared:

0.0036

Best fit polynomial coefficients:

[2.543e+01, 3.388e-01]

Correlation 7 - PM10 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_8d5ba45f sensor type SDS011:



nr samples 107, min= 6.48, max=63.72

avg=24.62, std dev=12.29

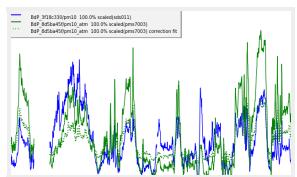
R-squared:

0.0018

Best fit polynomial coefficients:

[4.152e+01, -3.608e-01]

Correlation 8 - PM10 - kit BdP_3f18c330 sensor type SDS011 with kit BdP_8d5ba45f sensor type PMS7003:



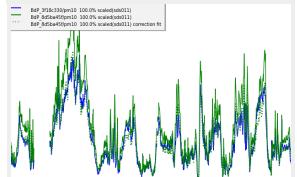
nr samples 1273, min= 0.62, max=88.44
avg=27.15, std dev=18.92

R-squared:

0.4215

Best fit polynomial coefficients:
[1.047e+01, 4.228e-01]

Correlation 9 - PM10 - kit BdP_3f18c330 sensor type SDS011 with kit BdP_8d5ba45f sensor type SDS011:



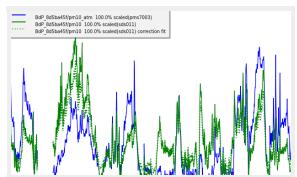
nr samples 1273, min= 3.25, max=83.89
avg=27.90, std dev=16.02

R-squared:

0.9467

Best fit polynomial coefficients:
[1.069e+00, 7.485e-01]

Correlation 10 - PM10 - kit BdP_8d5ba45f sensor type PMS7003 with kit BdP_8d5ba45f sensor type SDS011:



nr samples 1275, min= 3.43, max=87.12
avg=27.89, std dev=16.01

R-squared:

0.3711

Best fit polynomial coefficients:
[7.005e+00, 7.218e-01]

Measurement PM2.5 correlation key values

Correlation 11 - PM2.5 - kit BdP_33040d54 sensor type DYLOS with kit BdP_33040d54 sensor type PPD42NS:



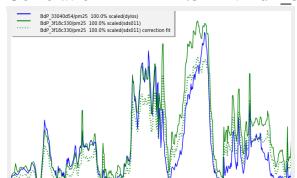
nr samples 472, min=206.36, max=704.36
avg=296.63, std dev=63.61

R-squared:

0.0000

Best fit polynomial coefficients:
[2.158e+03, 2.836e-02]

Correlation 12 - PM2.5 - kit BdP_33040d54 sensor type DYLOS with kit BdP_3f18c330 sensor type SDS011:



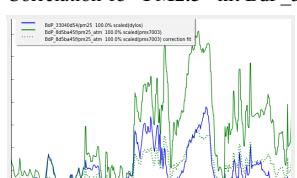
nr samples 476, min=340.92, max=8112.25
avg=2858.58, std dev=1982.87

R-squared:

0.8316

Best fit polynomial coefficients:
[-1.327e+02, 8.002e-01]

Correlation 13 - PM2.5 - kit BdP_33040d54 sensor type DYLOS with kit BdP_8d5ba45f sensor type PMS7003:



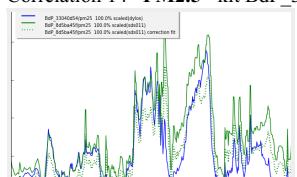
nr samples 476, min=134.83, max=14231.73
avg=5255.88, std dev=3708.16

R-squared:

0.6123

Best fit polynomial coefficients:
[2.248e+02, 3.672e-01]

Correlation 14 - PM2.5 - kit BdP_33040d54 sensor type DYLOS with kit BdP_8d5ba45f sensor type SDS011:



nr samples 476, min=559.55, max=9082.17
avg=3174.21, std dev=1971.07

R-squared:

0.7657

Best fit polynomial coefficients:
[-2.972e+02, 7.724e-01]

Correlation 15 - PM2.5 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_3f18c330 sensor type SDS011:



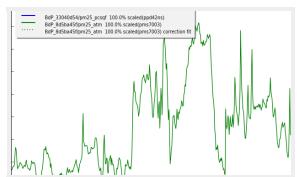
nr samples 501, min=330.00, max=8128.29
avg=2768.92, std dev=1984.82

R-squared:

0.0063

Best fit polynomial coefficients:
[3.066e+02, -3.315e-03]

Correlation 16 - PM2.5 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_8d5ba45f sensor type PMS7003:



nr samples 501, min=108.43, max=14321.75
avg=5062.45, std dev=3717.10

R-squared:

0.0235

Best fit polynomial coefficients:
[3.147e+02, -3.427e-03]

Correlation 17 - PM2.5 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_8d5ba45f sensor type SDS011:



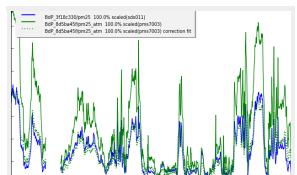
nr samples 501, min=535.86, max=9248.29
avg=3082.42, std dev=1978.18

R-squared:

0.0089

Best fit polynomial coefficients:
[3.096e+02, -3.960e-03]

Correlation 18 - PM2.5 - kit BdP_3f18c330 sensor type SDS011 with kit BdP_8d5ba45f sensor type PMS7003:



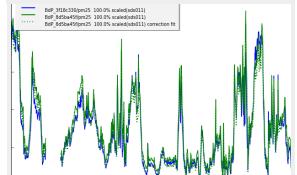
nr samples 1273, min=100.75, max=15916.88
avg=4988.69, std dev=3602.78

R-squared:

0.9263

Best fit polynomial coefficients:
[3.008e+02, 5.005e-01]

Correlation 19 - PM2.5 - kit BdP_3f18c330 sensor type SDS011 with kit BdP_8d5ba45f sensor type SDS011:



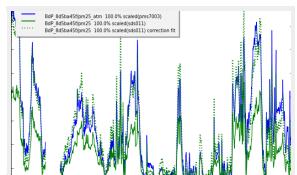
nr samples 1273, min=499.00, max=9222.50
avg=3186.81, std dev=1935.60

R-squared:

0.9592

Best fit polynomial coefficients:
[-2.235e+02, 9.480e-01]

Correlation 20 - PM2.5 - kit BdP_8d5ba45f sensor type PMS7003 with kit BdP_8d5ba45f sensor type SDS011:



nr samples 1275, min=535.86, max=9248.29
avg=3186.46, std dev=1940.68

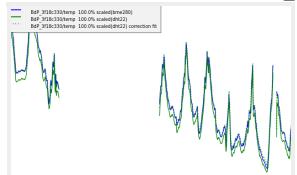
R-squared:

0.9378

Best fit polynomial coefficients:
[-7.559e+02, 1.802e+00]

Measurement TEMP correlation key values

Correlation 21 - TEMP - kit BdP_3f18c330 sensor type BME280 with kit BdP_3f18c330 sensor type DHT22:



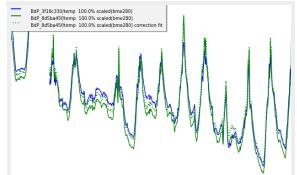
nr samples 874, min= 0.00, max=28.12
avg=18.63, std dev= 3.84

R-squared:

0.9713

Best fit polynomial coefficients:
[7.881e-01, 1.003e+00]

Correlation 22 - TEMP - kit BdP_3f18c330 sensor type BME280 with kit BdP_8d5ba45f sensor type BME280:



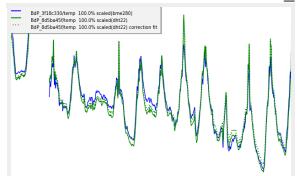
nr samples 1273, min=11.38, max=28.97
avg=18.58, std dev= 3.40

R-squared:

0.9600

Best fit polynomial coefficients:
[1.756e+00, 9.435e-01]

Correlation 23 - TEMP - kit BdP_3f18c330 sensor type BME280 with kit BdP_8d5ba45f sensor type DHT22:



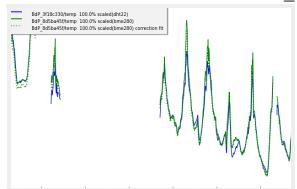
nr samples 1275, min= 0.00, max=29.17
avg=18.97, std dev= 3.38

R-squared:

0.9160

Best fit polynomial coefficients:
[1.684e+00, 9.279e-01]

Correlation 24 - TEMP - kit BdP_3f18c330 sensor type **DHT22** with kit BdP_8d5ba45f sensor type **BME280**:



nr samples 805, min=11.39, max=28.67

avg=18.62, std dev= 3.96

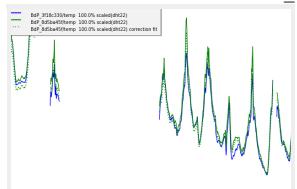
R-squared:

0.9440

Best fit polynomial coefficients:

[1.071e+00, 9.257e-01]

Correlation 25 - TEMP - kit BdP_3f18c330 sensor type **DHT22** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 806, min= 0.00, max=28.98

avg=18.95, std dev= 3.94

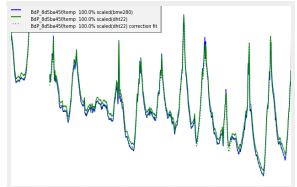
R-squared:

0.8955

Best fit polynomial coefficients:

[1.109e+00, 9.076e-01]

Correlation 26 - TEMP - kit BdP_8d5ba45f sensor type **BME280** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 1275, min=11.86, max=29.11

avg=18.99, std dev= 3.34

R-squared:

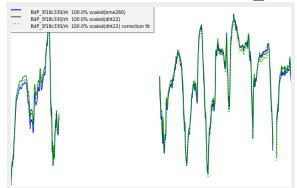
0.9933

Best fit polynomial coefficients:

[-6.737e-01, 1.014e+00]

Measurement RH correlation key values

Correlation 27 - RH - kit BdP_3f18c330 sensor type **BME280** with kit BdP_3f18c330 sensor type **DHT22**:



nr samples 874, min= 0.00, max=75.25

avg=57.73, std dev= 9.46

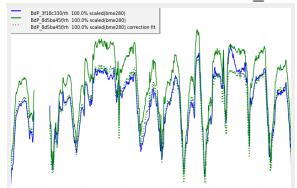
R-squared:

0.9486

Best fit polynomial coefficients:

[-5.124e-01, 9.923e-01]

Correlation 28 - RH - kit BdP_3f18c330 sensor type **BME280** with kit BdP_8d5ba45f sensor type **BME280**:



nr samples 1273, min=34.39, max=80.56

avg=63.15, std dev=10.26

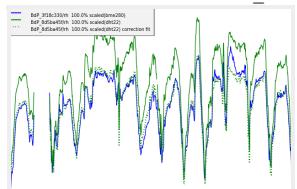
R-squared:

0.9505

Best fit polynomial coefficients:

[2.910e+00, 8.584e-01]

Correlation 29 - RH - kit BdP_3f18c330 sensor type **BME280** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 1275, min= 0.00, max=84.86

avg=65.00, std dev=11.04

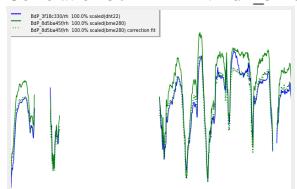
R-squared:

0.9332

Best fit polynomial coefficients:

[5.767e+00, 7.900e-01]

Correlation 30 - RH - kit BdP_3f18c330 sensor type **DHT22** with kit BdP_8d5ba45f sensor type **BME280**:



nr samples 805, min=33.72, max=80.46

avg=61.76, std dev=10.79

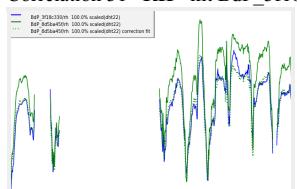
R-squared:

0.9085

Best fit polynomial coefficients:

[4.842e+00, 8.508e-01]

Correlation 31 - RH - kit BdP_3f18c330 sensor type **DHT22** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 806, min= 0.00, max=84.85

avg=63.59, std dev=11.64

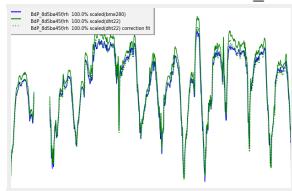
R-squared:

0.8885

Best fit polynomial coefficients:

[7.834e+00, 7.792e-01]

Correlation 32 - **RH** - kit BdP_8d5ba45f sensor type **BME280** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 1275, min=32.41, max=84.92

avg=65.04, std dev=10.89

R-squared:

0.9926

Best fit polynomial coefficients:

[2.116e+00, 9.382e-01]

Measurement PHA correlation key values

Correlation 33 - **PHA** - kit BdP_3f18c330 sensor type **BME280** with kit BdP_8d5ba45f sensor type **BME280**:

nr samples 1273, min=99237.40, max=101598.51

avg=100506.19, std dev=710.81

R-squared:

0.9999

Best fit polynomial coefficients:

[-4.014e+02, 1.004e+00]