

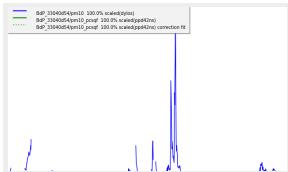
Summary of correlations of sensor kits and sensor modules

Sensorkits: BdP_33040d54 BdP_3f18c330 BdP_8d5ba45f
Report generated on: Mon Oct 2 16:33:13 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 783, min= 1.00, max=327.00

avg=22.15, std dev=29.72

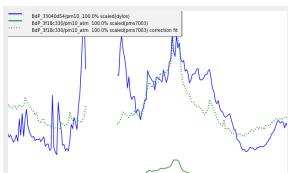
R-squared:

0.0004

Best fit polynomial coefficients:

[2.953e+02, -4.047e-01]

Correlation 2 - PM10 - kit BdP_33040d54 sensor type DYLOS with kit BdP_3f18c330 sensor type PMS7003:



nr samples 185, min= 5.86, max=80.38

avg=24.96, std dev=15.20

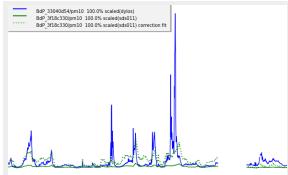
R-squared:

0.3919

Best fit polynomial coefficients:

[1.321e+02, 4.478e+00]

Correlation 3 - PM10 - kit BdP_33040d54 sensor type DYLOS with kit BdP_3f18c330 sensor type SDS011:



nr samples 1208, min= 5.00, max=248.88

avg=58.85, std dev=42.29

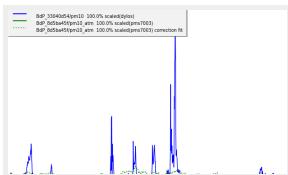
R-squared:

0.2041

Best fit polynomial coefficients:

[-5.290e+01, 6.425e+00]

Correlation 4 - PM10 - kit BdP_33040d54 sensor type DYLOS with kit BdP_8d5ba45f sensor type PMS7003:



nr samples 1210, min= 6.38, max=206.57

avg=86.60, std dev=45.96

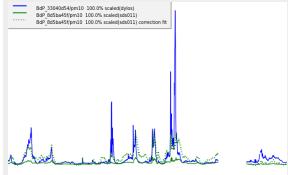
R-squared:

0.0944

Best fit polynomial coefficients:

[-2.279e+01, 4.019e+00]

Correlation 5 - PM10 - kit BdP_33040d54 sensor type DYLOS with kit BdP_8d5ba45f sensor type SDS011:



nr samples 1209, min= 6.00, max=402.25

avg=82.89, std dev=69.53

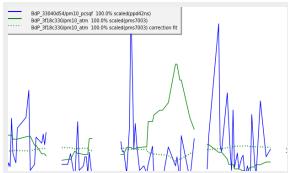
R-squared:

0.2916

Best fit polynomial coefficients:

[-6.197e+01, 4.669e+00]

Correlation 6 - PM10 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_3f18c330 sensor type PMS7003:



nr samples 86, min= 6.39, max=77.29

avg=23.87, std dev=14.83

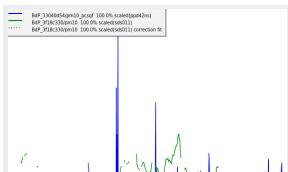
R-squared:

0.0108

Best fit polynomial coefficients:

[2.409e+01, -1.416e-01]

Correlation 7 - PM10 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_3f18c330 sensor type SDS011:



nr samples 341, min= 6.89, max=213.36

avg=55.40, std dev=43.47

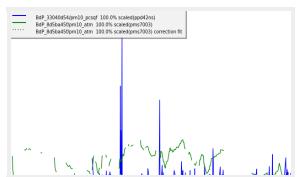
R-squared:

0.0002

Best fit polynomial coefficients:

[2.292e+01, 1.336e-02]

Correlation 8 - PM10 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_8d5ba45f sensor type PMS7003:



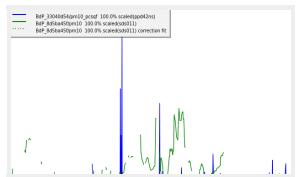
nr samples 343, min= 6.93, max=194.25
avg=80.31, std dev=48.01

R-squared:

0.0022

Best fit polynomial coefficients:
[2.018e+01, 4.400e-02]

Correlation 9 - PM10 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_8d5ba45f sensor type SDS011:



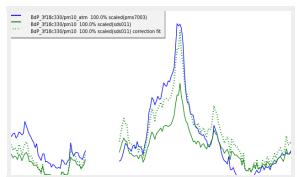
nr samples 343, min= 8.29, max=329.00
avg=77.68, std dev=66.92

R-squared:

0.0004

Best fit polynomial coefficients:
[2.265e+01, 1.367e-02]

Correlation 10 - PM10 - kit BdP_3f18c330 sensor type PMS7003 with kit BdP_3f18c330 sensor type SDS011:



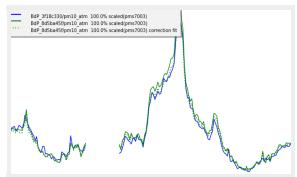
nr samples 184, min= 6.12, max=52.00
avg=19.58, std dev= 8.48

R-squared:

0.8067

Best fit polynomial coefficients:
[-6.645e+00, 1.614e+00]

Correlation 11 - PM10 - kit BdP_3f18c330 sensor type PMS7003 with kit BdP_8d5ba45f sensor type PMS7003:



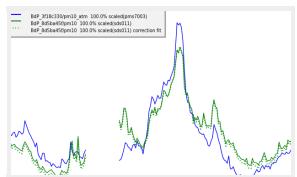
nr samples 184, min= 6.38, max=87.50
avg=26.14, std dev=16.43

R-squared:

0.9867

Best fit polynomial coefficients:
[8.572e-01, 9.215e-01]

Correlation 12 - PM10 - kit BdP_3f18c330 sensor type PMS7003 with kit BdP_8d5ba45f sensor type SDS011:



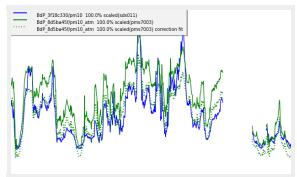
nr samples 184, min= 6.86, max=68.75
avg=26.09, std dev=13.19

R-squared:

0.8007

Best fit polynomial coefficients:
[-2.009e+00, 1.033e+00]

Correlation 13 - PM10 - kit BdP_3f18c330 sensor type SDS011 with kit BdP_8d5ba45f sensor type PMS7003:



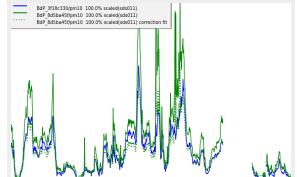
nr samples 1208, min= 5.75, max=209.88
avg=86.65, std dev=45.94

R-squared:

0.8323

Best fit polynomial coefficients:
[-1.393e+01, 8.399e-01]

Correlation 14 - PM10 - kit BdP_3f18c330 sensor type SDS011 with kit BdP_8d5ba45f sensor type SDS011:



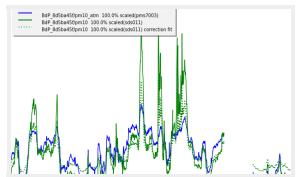
nr samples 1208, min= 6.62, max=398.12
avg=83.01, std dev=69.84

R-squared:

0.8905

Best fit polynomial coefficients:
[1.141e+01, 5.715e-01]

Correlation 15 - PM10 - kit BdP_8d5ba45f sensor type PMS7003 with kit BdP_8d5ba45f sensor type SDS011:



nr samples 1208, min= 5.88, max=403.50
avg=82.94, std dev=69.81

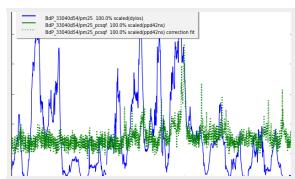
R-squared:

0.7042

Best fit polynomial coefficients:
[4.077e+01, 5.526e-01]

Measurement PM2.5 correlation key values

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



nr samples 1342, min=131.38, max=1254.43

avg=336.84, std dev=114.12

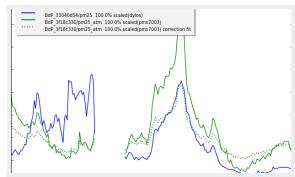
R-squared:

0.0892

Best fit polynomial coefficients:

[1.998e+03, 1.702e+01]

Correlation 17 - PM2.5 - kit BdP_33040d54 sensor type DYLOS with kit BdP_3f18c330 sensor type PMS7003:



nr samples 185, min=1022.14, max=14664.75

avg=4608.93, std dev=2821.33

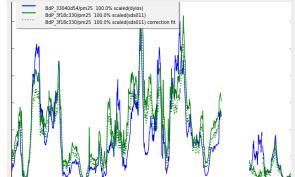
R-squared:

0.2715

Best fit polynomial coefficients:

[1.687e+03, 4.666e-01]

Correlation 18 - PM2.5 - kit BdP_33040d54 sensor type DYLOS with kit BdP_3f18c330 sensor type SDS011:



nr samples 1208, min=733.25, max=34527.00

avg=9968.92, std dev=6786.83

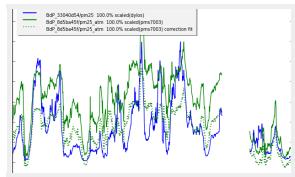
R-squared:

0.7386

Best fit polynomial coefficients:

[-1.812e+02, 8.409e-01]

Correlation 19 - PM2.5 - kit BdP_33040d54 sensor type DYLOS with kit BdP_8d5ba45f sensor type PMS7003:



nr samples 1210, min=1042.25, max=37171.86

avg=14836.14, std dev=7334.29

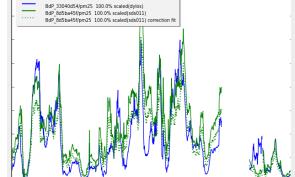
R-squared:

0.5711

Best fit polynomial coefficients:

[-1.942e+03, 6.838e-01]

Correlation 20 - PM2.5 - kit BdP_33040d54 sensor type DYLOS with kit BdP_8d5ba45f sensor type SDS011:



nr samples 1209, min=1010.00, max=39234.25

avg=10807.58, std dev=7222.87

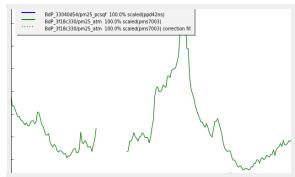
R-squared:

0.7198

Best fit polynomial coefficients:

[-2.232e+02, 7.798e-01]

Correlation 21 - PM2.5 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_3f18c330 sensor type PMS7003:



nr samples 185, min=1066.88, max=14677.38

avg=4609.78, std dev=2812.02

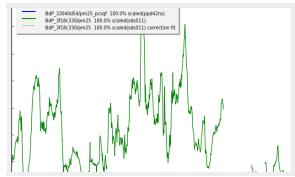
R-squared:

0.0200

Best fit polynomial coefficients:

[3.551e+02, -4.648e-03]

Correlation 22 - PM2.5 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_3f18c330 sensor type SDS011:



nr samples 1207, min=739.38, max=34633.90

avg=9979.87, std dev=6781.47

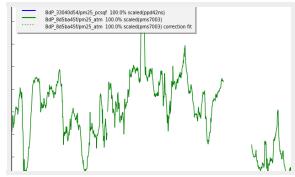
R-squared:

0.1602

Best fit polynomial coefficients:

[2.685e+02, 6.910e-03]

Correlation 23 - PM2.5 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_8d5ba45f sensor type PMS7003:



nr samples 1208, min=1082.33, max=37514.38

avg=14844.31, std dev=7338.39

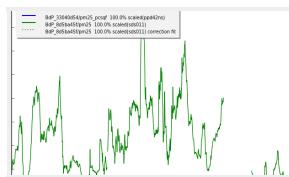
R-squared:

0.0894

Best fit polynomial coefficients:

[2.667e+02, 4.769e-03]

Correlation 24 - PM2.5 - kit BdP_33040d54 sensor type PPD42NS with kit BdP_8d5ba45f sensor type SDS011:



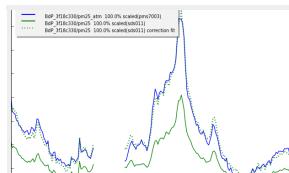
nr samples 1208, min=986.00, max=39216.25
avg=10809.68, std dev=7232.86

R-squared:

0.1676

Best fit polynomial coefficients:
[2.659e+02, 6.624e-03]

Correlation 25 - PM2.5 - kit BdP_3f18c330 sensor type PMS7003 with kit BdP_3f18c330 sensor type SDS011:



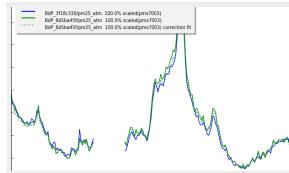
nr samples 184, min=866.00, max=8190.14
avg=2584.43, std dev=1475.32

R-squared:

0.9838

Best fit polynomial coefficients:
[-3.072e+02, 1.902e+00]

Correlation 26 - PM2.5 - kit BdP_3f18c330 sensor type PMS7003 with kit BdP_8d5ba45f sensor type PMS7003:



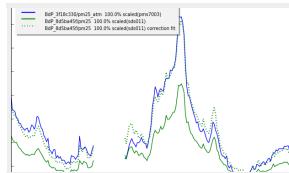
nr samples 184, min=1042.25, max=15339.25
avg=4788.44, std dev=3012.67

R-squared:

0.9887

Best fit polynomial coefficients:
[1.373e+02, 9.337e-01]

Correlation 27 - PM2.5 - kit BdP_3f18c330 sensor type PMS7003 with kit BdP_8d5ba45f sensor type SDS011:



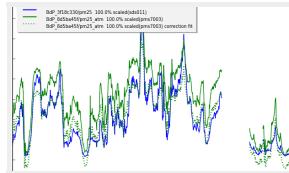
nr samples 184, min=1022.00, max=8957.88
avg=3024.07, std dev=1695.87

R-squared:

0.9621

Best fit polynomial coefficients:
[-3.398e+02, 1.636e+00]

Correlation 28 - PM2.5 - kit BdP_3f18c330 sensor type SDS011 with kit BdP_8d5ba45f sensor type PMS7003:



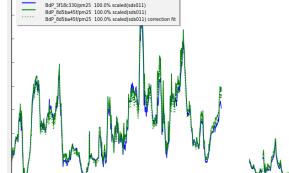
nr samples 1208, min=1084.75, max=37411.00
avg=14841.57, std dev=7325.91

R-squared:

0.9063

Best fit polynomial coefficients:
[-3.120e+03, 8.819e-01]

Correlation 29 - PM2.5 - kit BdP_3f18c330 sensor type SDS011 with kit BdP_8d5ba45f sensor type SDS011:



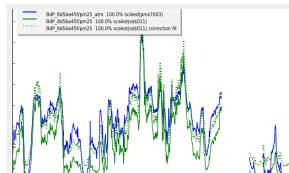
nr samples 1208, min=919.75, max=39084.00
avg=10806.79, std dev=7215.18

R-squared:

0.9790

Best fit polynomial coefficients:
[-8.919e+01, 9.307e-01]

Correlation 30 - PM2.5 - kit BdP_8d5ba45f sensor type PMS7003 with kit BdP_8d5ba45f sensor type SDS011:



nr samples 1208, min=877.62, max=39216.25
avg=10798.06, std dev=7237.84

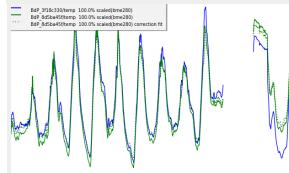
R-squared:

0.9001

Best fit polynomial coefficients:
[4.453e+03, 9.615e-01]

Measurement TEMP correlation key values

Correlation 31 - TEMP - kit BdP_3f18c330 sensor type BME280 with kit BdP_8d5ba45f sensor type BME280:



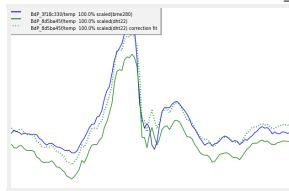
nr samples 1209, min=11.84, max=27.76
avg=18.50, std dev= 3.82

R-squared:

0.8953

Best fit polynomial coefficients:
[2.173e+00, 9.002e-01]

Correlation 32 - TEMP - kit BdP_3f18c330 sensor type **BME280** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 122, min=14.50, max=19.73

avg=16.13, std dev= 1.12

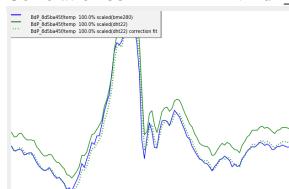
R-squared:

0.9287

Best fit polynomial coefficients:

[-1.183e-01, 1.050e+00]

Correlation 33 - TEMP - kit BdP_8d5ba45f sensor type **BME280** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 122, min=14.50, max=19.71

avg=16.15, std dev= 1.14

R-squared:

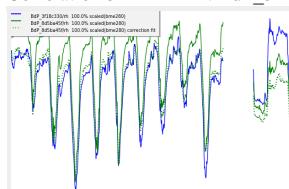
0.9775

Best fit polynomial coefficients:

[-6.783e-01, 1.014e+00]

Measurement RH correlation key values

Correlation 34 - RH - kit BdP_3f18c330 sensor type **BME280** with kit BdP_8d5ba45f sensor type **BME280**:



nr samples 1209, min=32.99, max=77.15

avg=63.62, std dev= 9.23

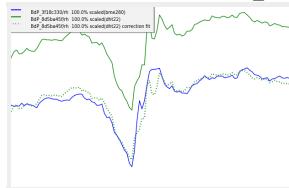
R-squared:

0.7546

Best fit polynomial coefficients:

[7.507e+00, 8.096e-01]

Correlation 35 - RH - kit BdP_3f18c330 sensor type **BME280** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 122, min=59.69, max=77.38

avg=72.60, std dev= 3.91

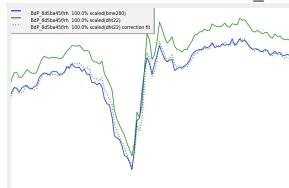
R-squared:

0.8965

Best fit polynomial coefficients:

[-3.808e+00, 9.135e-01]

Correlation 36 - RH - kit BdP_8d5ba45f sensor type **BME280** with kit BdP_8d5ba45f sensor type **DHT22**:



nr samples 122, min=59.71, max=77.53

avg=72.62, std dev= 3.95

R-squared:

0.9730

Best fit polynomial coefficients:

[2.502e+00, 9.351e-01]

Measurement PHA correlation key values

Correlation 37 - PHA - kit BdP_3f18c330 sensor type **BME280** with kit BdP_8d5ba45f sensor type **BME280**:

nr samples 1209, min=101076.39, max=102289.84

avg=101787.23, std dev=283.11

R-squared:

0.9993

Best fit polynomial coefficients:

[3.021e+02, 9.966e-01]