Summary of correlations of sensor kits and sensor modules

Sensorkits: RIVM_807D3A9369F4 RIVM_30aea4ec7cf8 RIVM_30aea4505888 NL10131
Report generated on: Tue 19 May 15:00:20 CEST 2020

R-square and statistical summary

Measurement PM10 correlation key values

Correlation 1 - **PM10** - kit RIVM_807D3A9369F4 sensor type **PMSX003** with kit RIVM_30aea4ec7cf8 sensor type **SPS30**:

nr samples 3514, min= 1.00, max=145.00
avg=12.15, std dev=10.13
R-squared:
0.6725

Best fit polynomial coefficients:
[1.827e+00, 4.827e-01]

Correlation 2 - **PM10** - kit RIVM_807D3A9369F4 sensor type **PMSX003** with kit RIVM_30aea4505888 sensor type **SDS011**:

nr samples 1696, min= 1.60, max=143.90
avg=14.08, std dev=14.21
R-squared:
0.6959

Best fit polynomial coefficients:
[4.337e-01, 6.876e-01]

Correlation 3 - **PM10** - kit RIVM_807D3A9369F4 sensor type **PMSX003** with kit NL10131 sensor type **BAM1020**:

nr samples 3300, min=-5.81, max=149.07
avg=29.44, std dev=20.53
R-squared:
0.1111

Best fit polynomial coefficients:
[2.093e+01, 3.912e-01]

Correlation 4 - **PM10** - kit RIVM_30aea4ec7cf8 sensor type **SPS30** with kit RIVM_30aea4505888 sensor type **SDS011**:

nr samples 2091, min= 1.60, max=143.90
avg=14.78, std dev=15.60
R-squared:
0.8099

Best fit polynomial coefficients:
[7.368e-01, 1.198e+00]

Correlation 5 - **PM10** - kit RIVM_30aea4ec7cf8 sensor type **SPS30** with kit NL10131 sensor type **BAM1020**:

nr samples 4067, min=-5.81, max=149.07
avg=29.57, std dev=20.56
R-squared:
0.0911

Best fit polynomial coefficients:
[2.241e+01, 5.665e-01]

Correlation 6 - **PM10** - kit RIVM_30aea4505888 sensor type **SDS011** with kit NL10131 sensor type **BAM1020**:

nr samples 1563, min=-5.81, max=149.07
avg=24.21, std dev=18.34
R-squared:
0.1785

Best fit polynomial coefficients:
[1.703e+01, 4.753e-01]

Measurement PM2.5 correlation key values

Correlation 7 - **PM2.5** - kit RIVM_807D3A9369F4 sensor type **PMSX003** with kit RIVM_30aea4ec7cf8 sensor type **SPS30**:

nr samples 3514, min= 1.00, max=143.10
avg=11.77, std dev= 9.99
R-squared:
0.9713

Best fit polynomial coefficients:
[5.877e-01, 6.233e-01]

Correlation 8 - **PM2.5** - kit RIVM_807D3A9369F4 sensor type **PMSX003** with kit RIVM_30aea4505888 sensor type **SDS011**:

nr samples 1696, min= 0.90, max=115.00
avg=10.23, std dev=11.52
R-squared:
0.9219

Best fit polynomial coefficients:
[-9.553e-01, 6.643e-01]

Correlation 9 - **PM2.5** - kit RIVM_807D3A9369F4 sensor type **PMSX003** with kit NL10131 sensor type **BAM1020**:

nr samples 3534, min= 1.61, max=86.59
avg=12.69, std dev= 8.04
R-squared:
0.6335

Best fit polynomial coefficients:
[5.425e+00, 4.044e-01]

Correlation 10 - **PM2.5** - kit RIVM_30aea4ec7cf8 sensor type **SPS30** with kit RIVM_30aea4505888 sensor type **SDS011**:

nr samples 2091, min= 0.90, max=115.00
avg=10.88, std dev=13.16
R-squared:
0.9208

Best fit polynomial coefficients:
[-1.659e+00, 1.102e+00]

Correlation 11 - **PM2.5** - kit RIVM_30aea4ec7cf8 sensor type **SPS30** with kit NL10131 sensor type **BAM1020**:

nr samples 4341, min= 1.61, max=86.59
avg=12.84, std dev= 8.25
R-squared:
0.6418

Best fit polynomial coefficients:
[5.303e+00, 6.245e-01]

Correlation 12 - **PM2.5** - kit RIVM_30aea4505888 sensor type **SDS011** with kit NL10131 sensor type **BAM1020**:

nr samples 1712, min= 1.61, max=86.59
avg=11.55, std dev= 8.77
R-squared:
0.5648

Best fit polynomial coefficients:
[6.080e+00, 4.978e-01]