

Supplementary Information

Practical field calibration of portable monitors for mobile measurements of multiple air pollutants

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Table S1. Dates and walking routes for the portable monitor mobile measurements. The colour coding of the route names matches that shown in the map in Figure S1. RS – railway station; MS – monitoring station.

Date	Route	Replicate timings
Tue, 8 Feb 2016	Anniesland RS ↔ James Weir Bldg	Morning & Noon
Thu, 18 Feb 2016	Anniesland RS ↔ James Weir Bldg	Noon & Afternoon
Mon, 22 Feb 2016	Anniesland RS ↔ James Weir Bldg	Morning & Afternoon
Thu, 3 Mar 2016	Townhead MS ↔ Kings Park RS	Morning & Noon
Mon, 7 Mar 2016	Townhead MS ↔ Kings Park RS	Noon & Afternoon
Wed, 16 Mar 2016	Townhead MS ↔ Pollokshaws East RS	Morning & Noon
Tue, 22 Mar 2016	Townhead MS ↔ Pollokshaws East RS	Noon & Afternoon
Tue, 5 Apr 2016	Townhead MS ↔ Burgher St	Morning & Noon
Mon, 11 Apr 2016	Townhead MS ↔ Burgher St	Noon & Afternoon
Tue, 19 Apr 2016	Townhead MS ↔ Dumbarton Rd	Morning & Noon
Mon, 25 Apr 2016	Townhead MS ↔ Dumbarton Rd	Noon & Afternoon
Thu, 16 Jun 2016	Townhead MS ↔ Lambhill Cemetery	Noon & Afternoon
Tue, 21 Jun 2016	High St ↔ Bellahouston Park	Morning & Noon
Thu, 23 Jun 2016	High St ↔ Bellahouston Park	Noon & Afternoon
Tue, 5 Jul 2016	Townhead MS ↔ Maryhill Rd	Morning & Noon
Thu, 7 Jul 2016	Townhead MS ↔ Maryhill Rd	Noon & Afternoon
Tue, 12 Jul 2016	Townhead MS ↔ Lambhill Cemetery	Morning & Noon
Thu, 21 Jul 2016	Provanmill Rd ↔ Carmyle RS	Morning & Noon
Wed, 27 Jul 2016	Provanmill Rd ↔ Carmyle RS	Noon & Afternoon

Table S2: Comparison between pre- and post-walk O₃ concentrations measured by the reference analyser at the Glasgow Townhead AURN Monitoring Station and by the Aeroqual Aq4 monitor whilst standing adjacent to the monitoring station (raw, globally corrected, and locally corrected data). All concentrations in units of µg m⁻³. *n* indicates the number of 1-min Aeroqual Aq4 monitor values available within the 1 h average period for the reference analyser. The table does not include co-location period shorter than 15 min. [O₃]_{GLKP}: 1-h mean O₃ concentration reported by the reference analyser; for co-locations shorter than 1 h, the 1 h encompassing the co-location period was used. [O₃]_{Aq4}: summary of the uncorrected Aq4 O₃ 1-min values during the co-location (median [25%-ile, 75%-ile] (mean)); [O₃]_{Aq4_corr_glob}: summary of the Aq4 O₃ 1-min values corrected using the global linear calibration (median [25%-ile, 75%-ile] (mean)); [O₃]_{Aq4_corr_loca}: summary of the Aq4 O₃ 1-min values corrected using the local linear calibration (median [25%-ile, 75%-ile] (mean)).

Time (GMT)	<i>n</i>	[O ₃] _{GLKP}	[O ₃] _{Aq4}	[O ₃] _{Aq4_corr_glob}	[O ₃] _{Aq4_corr_loca}
3 Mar 2016 08:00	25	10.8	16.0 [10.0, 17.0] (14.0)	3.0 [-9.7, 5.1] (-1.2)	2.9 [-9.9, 5.1] (-1.4)
3 Mar 2016 13:00	29	49.2	39.0 [37.0, 40.0] (38.8)	51.4 [47.2, 53.5] (51.0)	52.2 [47.9, 54.3] (51.8)
3 Mar 2016 14:00	38	46.9	35.5 [35.0, 38.0] (36.1)	44.0 [43.0, 49.3] (45.4)	44.7 [43.6, 50.1] (46.1)
7 Mar 2016 11:00	50	68.7	47.0 [44.5, 48.0] (46.2)	68.2 [63.0, 70.3] (66.5)	69.3 [64.0, 71.5] (67.6)
7 Mar 2016 16:00	23	61.1	42.0 [41.0, 44.5] (42.0)	57.7 [55.6, 63.0] (57.8)	58.6 [56.5, 64.0] (58.7)
16 Mar 2016 13:00	19	48.9	39.0 [37.0, 40.0] (39.0)	51.4 [47.2, 53.5] (51.4)	52.9 [49.2, 54.7] (52.9)
16 Mar 2016 14:00	60	45.6	38.5 [35.8, 40.0] (37.9)	50.3 [44.5, 53.5] (49.1)	52.0 [46.8, 54.7] (50.9)
16 Mar 2016 15:00	19	52.8	41.0 [39.0, 42.5] (40.2)	55.6 [51.4, 58.8] (53.8)	56.6 [52.9, 59.4] (55.0)
5 Apr 2016 07:00	26	23.1	21.0 [19.3, 22.0] (19.9)	13.5 [9.8, 15.6] (11.2)	19.4 [16.1, 21.2] (17.3)
5 Apr 2016 12:00	23	72.3	45.0 [45.0, 48.5] (46.4)	64.0 [64.0, 71.4] (67.0)	64.1 [64.1, 70.6] (66.7)
5 Apr 2016 13:00	60	68.1	42.0 [39.0, 44.0] (42.0)	57.7 [51.4, 61.9] (57.8)	58.5 [52.9, 62.2] (58.5)
5 Apr 2016 14:00	31	61.4	36.0 [23.0, 40.0] (30.4)	45.1 [17.7, 53.5] (33.3)	47.3 [23.1, 54.7] (36.9)
19 Apr 2016 07:00	19	18.9	16.0 [15.5, 18.0] (16.9)	3.0 [1.9, 7.2] (5.0)	10.1 [9.1, 13.8] (11.8)
19 Apr 2016 12:00	34	63.8	43.0 [41.0, 45.0] (42.6)	59.8 [55.6, 64.0] (59.1)	60.3 [56.6, 64.1] (59.7)
19 Apr 2016 13:00	55	62.1	43.0 [39.5, 45.0] (41.5)	59.8 [52.4, 64.0] (56.7)	60.3 [53.8, 64.1] (57.6)
25 Apr 2016 10:00	57	73.3	51.0 [48.0, 53.0] (49.9)	76.6 [70.3, 80.9] (74.2)	74.2 [67.8, 78.5] (71.8)
25 Apr 2016 15:00	15	82.9	58.0 [57.0, 60.0] (56.7)	91.4 [89.3, 95.6] (88.7)	89.2 [87.1, 93.5] (86.5)
16 Jun 2016 10:00	38	43.6	34.0 [34.0, 35.8] (34.4)	40.9 [40.9, 44.5] (41.8)	57.1 [57.1, 60.7] (58.0)
16 Jun 2016 15:00	18	32.7	29.0 [29.0, 31.8] (30.2)	30.3 [30.3, 36.1] (32.9)	46.9 [46.9, 52.5] (49.4)
5 Jul 2016 07:00	17	32.1	24.0 [23.0, 25.0] (24.2)	19.8 [17.7, 21.9] (20.2)	4.7 [2.0, 7.3] (5.1)
5 Jul 2016 12:00	34	46.8	36.0 [35.0, 38.0] (36.6)	45.1 [43.0, 49.3] (46.4)	36.4 [33.8, 41.7] (38.1)
5 Jul 2016 13:00	41	42.1	35.0 [33.0, 39.0] (35.9)	43.0 [38.8, 51.4] (44.8)	33.8 [28.5, 44.4] (36.1)
7 Jul 2016 10:00	45	45.3	34.0 [32.0, 36.0] (33.9)	40.9 [36.7, 45.1] (40.6)	31.1 [25.8, 36.4] (30.8)
12 Jul 2016 07:00	24	27.0	23.0 [20.0, 26.0] (23.1)	17.7 [11.4, 24.0] (18.0)	2.0 [-5.9, 10.0] (2.3)
12 Jul 2016 12:00	42	44.6	36.5 [35.0, 38.8] (36.8)	46.1 [43.0, 50.9] (46.7)	37.8 [33.8, 43.7] (38.5)
12 Jul 2016 13:00	32	48.5	36.5 [36.0, 38.3] (36.8)	46.1 [45.1, 49.8] (46.8)	37.8 [36.4, 42.4] (38.7)
27 Jul 2016 10:00	59	35.8	30.0 [28.5, 32.0] (30.5)	32.4 [29.3, 36.7] (33.6)	20.5 [16.6, 25.8] (21.9)

Table S3: Comparison between pre- and post-walk NO₂ concentrations measured by the reference analyser at the Glasgow Townhead AURN Monitoring Station and by the Aeroqual Aq2 monitor whilst standing adjacent to the monitoring station (raw, globally corrected, and locally corrected data). All concentrations in units of µg m⁻³. *n* indicates the number of 1-min Aeroqual Aq2 monitor values available within the 1 h average period for the reference analyser. The table does not include co-location period shorter than 15 min. [NO₂]_{GLKP}: 1-h mean NO₂ concentration reported by the reference analyser; for co-locations shorter than 1 h, the 1 h encompassing the co-location period was used. [NO₂]_{Aq2}: summary of the uncorrected Aq2 NO₂ 1-min values during the co-location (median [25%-ile, 75%-ile] (mean)); [NO₂]_{Aq2_corr_glob_mult}: summary of the Aq2 NO₂ 1-min values corrected using the global multiple linear calibration (median [25%-ile, 75%-ile] (mean)); [NO₂]_{Aq2_corr_loca_mult}: summary of the Aq2 NO₂ 1-min values corrected using the local multiple linear calibration (median [25%-ile, 75%-ile] (mean)).

Time (GMT)	<i>n</i>	[NO ₂] _{GLKP}	[NO ₂] _{Aq2}	[NO ₂] _{Aq2_corr_glob_mult}	[NO ₂] _{Aq2_corr_loca_mult}
3 Mar 2016 08:00	25	60.6	99.0 [82.0, 131.0] (109.8)	82.9 [32.0, 184.6] (117.2)	93.8 [15.7, 250.1] (146.5)
3 Mar 2016 13:00	29	24.5	100.0 [93.0, 104.0] (99.6)	33.3 [6.2, 43.0] (26.5)	26.3 [-14.1, 40.3] (15.3)
3 Mar 2016 14:00	37	27.9	100.0 [90.0, 105.0] (96.7)	34.6 [5.1, 45.5] (25.6)	26.3 [-18.7, 43.9] (12.8)
7 Mar 2016 11:00	50	10.1	93.5 [69.0, 108.8] (92.9)	-19.7 [-79.0, 29.1] (-10.5)	-51.9 [-145.6, 23.0] (-39.4)
7 Mar 2016 16:00	23	21.4	89.0 [87.0, 97.5] (89.6)	-7.7 [-19.3, 11.3] (-8.7)	-37.2 [-53.5, -7.0] (-38.3)
16 Mar 2016 13:00	19	20.4	90.0 [79.0, 98.5] (87.3)	-0.3 [-27.1, 18.0] (-7.2)	-8.1 [-45.1, 21.0] (-16.4)
16 Mar 2016 14:00	60	25.0	85.0 [76.8, 99.0] (87.2)	-7.1 [-33.2, 19.8] (-4.7)	-18.3 [-57.4, 22.1] (-13.7)
16 Mar 2016 15:00	19	20.1	82.0 [61.5, 98.5] (83.3)	-31.7 [-73.2, 22.8] (-21.1)	-47.8 [-110.7, 24.6] (-35.0)
5 Apr 2016 07:00	26	51.9	105.5 [95.3, 133.5] (117.7)	87.7 [60.1, 160.2] (123.6)	103.3 [64.8, 206.1] (152.8)
5 Apr 2016 12:00	23	15.4	109.0 [73.0, 120.0] (98.9)	33.6 [-60.9, 63.3] (5.1)	46.3 [-86.2, 88.1] (6.6)
5 Apr 2016 13:00	60	18.2	107.0 [88.3, 120.3] (102.0)	37.9 [-13.0, 84.3] (24.7)	48.0 [-19.0, 111.5] (30.8)
5 Apr 2016 14:00	31	27.6	94.0 [75.5, 112.0] (90.0)	29.9 [-20.4, 62.6] (22.0)	36.6 [-41.4, 80.7] (18.1)
19 Apr 2016 07:00	19	52.6	77.0 [75.0, 86.5] (79.3)	20.9 [15.7, 44.5] (27.2)	6.3 [-0.4, 42.5] (15.0)
19 Apr 2016 12:00	34	17.8	84.5 [58.5, 112.3] (87.5)	-23.7 [-94.0, 43.6] (-15.9)	-36.9 [-134.8, 60.0] (-25.8)
19 Apr 2016 13:00	55	15.1	97.0 [82.5, 113.0] (97.4)	8.8 [-25.4, 52.1] (13.5)	9.0 [-40.8, 70.3] (14.7)
25 Apr 2016 10:00	57	21.1	94.0 [58.0, 111.0] (88.9)	-11.7 [-106.8, 22.0] (-30.6)	-7.9 [-97.3, 21.8] (-27.5)
25 Apr 2016 15:00	15	11.4	108.0 [85.5, 123.5] (101.0)	13.1 [-65.5, 47.7] (-15.3)	12.0 [-63.8, 42.2] (-15.8)
16 Jun 2016 10:00	38	15.0	84.0 [77.0, 99.0] (92.1)	0.4 [-24.1, 32.0] (17.4)	-41.1 [-79.7, 11.6] (-12.7)
16 Jun 2016 15:00	18	21.2	83.5 [73.0, 95.5] (84.7)	-3.4 [-26.2, 37.0] (8.1)	-46.7 [-84.6, 17.2] (-29.4)
5 Jul 2016 07:00	17	21.2	92.0 [77.0, 95.0] (93.8)	41.6 [-2.0, 49.2] (47.9)	656.1 [-264.1, 796.7] (751.6)
5 Jul 2016 12:00	34	13.3	100.0 [80.3, 105.0] (94.1)	33.3 [-19.2, 45.9] (17.1)	721.1 [-427.8, 1035.8] (382.4)
5 Jul 2016 13:00	39	16.5	84.0 [73.5, 93.5] (84.5)	-8.0 [-34.9, 19.8] (-6.8)	-107.0 [-728.1, 387.5] (-141.3)
7 Jul 2016 10:00	45	9.8	83.0 [47.0, 102.0] (76.1)	1.0 [-105.6, 50.3] (-24.5)	-7.1 [-2207.4, 980.0] (-560.4)
12 Jul 2016 07:00	23	24.8	81.0 [70.5, 96.0] (82.8)	21.4 [-14.4, 49.2] (20.3)	93.7 [-560.9, 796.7] (148.8)
12 Jul 2016 12:00	42	13.3	79.5 [64.0, 106.5] (82.1)	-27.4 [-70.2, 45.9] (-15.6)	-498.3 [-1411.3, 1035.8] (-305.9)
12 Jul 2016 13:00	31	11.7	76.0 [52.0, 109.0] (83.2)	-22.5 [-88.9, 48.8] (-12.8)	-538.6 [-1966.5, 1132.3] (-245.1)
27 Jul 2016 10:00	59	14.3	66.0 [43.5, 102.0] (72.3)	-39.3 [-105.0, 61.7] (-26.1)	-986.6 [-2333.5, 1119.6] (-670.8)

Table S4: Comparison between pre- and post-walk PM_{2.5} concentrations measured by the reference analyser at the Glasgow Townhead AURN Monitoring Station and by the MicroPEM MP618N monitor whilst standing adjacent to the monitoring station (raw, globally corrected, and locally corrected data). All concentrations in units of $\mu\text{g m}^{-3}$. n indicates the number of 1-min MicroPEM MP618N monitor values available within the 1 h average period for the reference analyser. The table does not include co-location period shorter than 15 min. [PM_{2.5}]_{GLKP}: 1-h mean PM_{2.5} concentration reported by the reference analyser; for co-locations shorter than 1 h, the 1 h encompassing the co-location period was used. [PM_{2.5}]_{MP618N}: summary of the uncorrected MP618N PM_{2.5} 1-min values during the co-location (median [25%-ile, 75%-ile] (mean)); [PM_{2.5}]_{MP618N_corr_glob}: summary of the MP618N PM_{2.5} 1-min values corrected using the global linear calibration (median [25%-ile, 75%-ile] (mean)); [PM_{2.5}]_{MP618N_corr_loca}: summary of the MP618N PM_{2.5} 1-min values corrected using the local linear calibration (median [25%-ile, 75%-ile] (mean)).

Time (GMT)	n	[PM _{2.5}] _{GLKP}	[PM _{2.5}] _{MP618N}	[PM _{2.5}] _{MP618N_corr_glob}	[PM _{2.5}] _{MP618N_corr_loca}
3 Mar 2016 08:00	36	4.2	8.8 [3.4, 10.5] (7.7)	5.3 [2.0, 6.3] (4.6)	5.8 [3.3, 6.5] (5.2)
3 Mar 2016 13:00	29	2.5	3.0 [3.0, 3.3] (3.1)	1.8 [1.8, 2.0] (1.9)	3.2 [3.2, 3.3] (3.2)
7 Mar 2016 11:00	58	1.9	0.8 [0.5, 1.3] (1.0)	0.5 [0.3, 0.8] (0.6)	2.2 [2.1, 2.4] (2.3)
7 Mar 2016 16:00	23	2.8	2.8 [2.3, 4.1] (3.3)	1.7 [1.4, 2.5] (2.0)	3.1 [2.9, 3.7] (3.3)
16 Mar 2016 13:00	19	-0.7	3.3 [3.0, 3.4] (3.2)	2.0 [1.8, 2.1] (1.9)	1.1 [0.9, 1.2] (1.0)
16 Mar 2016 14:00	60	-0.2	3.9 [3.0, 5.2] (4.2)	2.3 [1.8, 3.1] (2.5)	1.5 [0.9, 2.3] (1.6)
16 Mar 2016 15:00	18	-1.9	3.3 [3.0, 3.8] (3.6)	2.0 [1.8, 2.3] (2.1)	1.1 [0.9, 1.4] (1.3)
22 Mar 2016 09:00	35	2.5	2.4 [1.5, 3.1] (3.1)	1.5 [0.9, 1.9] (1.9)	-1.9 [-2.6, -1.4] (-1.4)
22 Mar 2016 10:00	60	0.5	1.7 [1.0, 2.2] (2.0)	1.0 [0.6, 1.3] (1.2)	-2.5 [-2.9, -2.1] (-2.3)
22 Mar 2016 11:00	60	3.1	4.6 [3.8, 5.4] (4.7)	2.7 [2.2, 3.2] (2.8)	-0.4 [-1.0, 0.1] (-0.4)
22 Mar 2016 16:00	22	2.0	4.7 [4.0, 4.9] (4.6)	2.8 [2.4, 2.9] (2.8)	-0.4 [-0.8, -0.2] (-0.4)
22 Mar 2016 17:00	20	2.8	5.7 [4.9, 6.6] (5.8)	3.4 [2.9, 4.0] (3.4)	0.3 [-0.2, 1.0] (0.4)
5 Apr 2016 07:00	34	11.2	1.9 [1.2, 2.8] (2.5)	1.1 [0.7, 1.7] (1.5)	1.0 [0.7, 1.4] (1.3)
5 Apr 2016 12:00	23	3.9	2.3 [1.6, 3.0] (2.3)	1.4 [1.0, 1.8] (1.4)	1.2 [0.9, 1.6] (1.2)
5 Apr 2016 13:00	60	4.8	1.3 [1.0, 2.3] (1.7)	0.8 [0.6, 1.4] (1.0)	0.7 [0.6, 1.2] (0.9)
11 Apr 2016 10:00	58	7.6	4.0 [2.8, 5.1] (4.2)	2.4 [1.7, 3.0] (2.5)	0.5 [-0.8, 1.5] (0.6)
11 Apr 2016 15:00	15	15.6	27.9 [27.3, 29.5] (28.2)	16.6 [16.3, 17.6] (16.8)	24.9 [24.3, 26.6] (25.2)
19 Apr 2016 07:00	32	9.4	12.6 [11.1, 15.4] (13.2)	7.5 [6.6, 9.1] (7.8)	9.2 [7.7, 12.1] (9.8)
19 Apr 2016 12:00	34	6.8	7.3 [6.5, 9.0] (7.5)	4.4 [3.9, 5.3] (4.5)	3.9 [3.0, 5.5] (4.1)
19 Apr 2016 13:00	43	8.7	6.7 [5.6, 8.3] (6.9)	4.0 [3.3, 5.0] (4.1)	3.2 [2.1, 4.9] (3.4)
25 Apr 2016 10:00	49	5.0	4.8 [3.0, 6.3] (5.0)	2.8 [1.8, 3.7] (3.0)	1.2 [-0.6, 2.8] (1.5)
25 Apr 2016 15:00	15	3.5	3.0 [2.0, 3.4] (3.0)	1.8 [1.2, 2.0] (1.8)	-0.6 [-1.6, -0.2] (-0.6)
16 Jun 2016 10:00	38	3.5	1.2 [0.8, 1.8] (1.4)	0.7 [0.5, 1.1] (0.8)	-2.2 [-2.6, -1.4] (-1.9)
16 Jun 2016 15:00	18	5.1	1.7 [1.1, 2.0] (1.7)	1.0 [0.7, 1.2] (1.1)	-1.5 [-2.2, -1.2] (-1.5)
5 Jul 2016 07:00	18	7.4	1.8 [1.3, 2.1] (1.7)	1.1 [0.8, 1.3] (1.0)	-1.4 [-2.0, -1.1] (-1.5)
5 Jul 2016 12:00	34	4.3	1.8 [1.4, 2.4] (1.9)	1.1 [0.9, 1.5] (1.2)	-1.5 [-1.8, -0.7] (-1.3)
5 Jul 2016 13:00	43	4.3	2.2 [1.8, 3.0] (2.5)	1.3 [1.1, 1.8] (1.5)	-1.0 [-1.4, -0.1] (-0.7)
7 Jul 2016 10:00	43	3.9	4.0 [3.2, 5.1] (4.4)	2.4 [1.9, 3.0] (2.6)	1.5 [0.1, 3.4] (2.1)
12 Jul 2016 07:00	24	4.8	3.5 [2.6, 4.5] (3.7)	2.1 [1.6, 2.7] (2.2)	0.7 [-0.8, 2.4] (1.0)
12 Jul 2016 12:00	42	4.8	1.7 [1.0, 2.4] (1.8)	1.0 [0.6, 1.4] (1.1)	-2.5 [-3.6, -1.2] (-2.2)
12 Jul 2016 13:00	31	4.0	0.8 [0.8, 1.5] (1.1)	0.5 [0.5, 0.9] (0.7)	-4.0 [-4.0, -2.7] (-3.4)
27 Jul 2016 10:00	59	2.0	0.9 [0.5, 1.5] (1.0)	0.6 [0.3, 0.9] (0.6)	0.9 [0.4, 1.5] (0.9)

Table S5: Comparison between pre- and post-walk BC concentrations measured by the reference analyser at the Glasgow Townhead AURN Monitoring Station and by the microAeth MA1204 monitor whilst standing adjacent to the monitoring station (raw, globally corrected, and locally corrected data). All concentrations in units of $\mu\text{g m}^{-3}$. n indicates the number of 1-min microAeth MA1204 monitor values available within the 1 h average period for the reference analyser. The table does not include co-location period shorter than 15 min. $[\text{BC}]_{\text{GLKP}}$: 1-h mean BC concentration reported by the reference analyser; for co-locations shorter than 1 h, the 1 h encompassing the co-location period was used. $[\text{BC}]_{\text{MA1204}}$: summary of the uncorrected MA1204 1-min values during the co-location (median [25%-ile, 75%-ile] (mean)); $[\text{BC}]_{\text{MA1204_corr_glob}}$: summary of the MA1204 1-min values corrected using the global linear calibration (median [25%-ile, 75%-ile] (mean)); $[\text{BC}]_{\text{MA1204_corr_loca}}$: summary of the MA1204 1-min values corrected using the local linear calibration (median [25%-ile, 75%-ile] (mean)).

Time (GMT)	n	$[\text{BC}]_{\text{GLKP}}$	$[\text{BC}]_{\text{MA1204}}$	$[\text{BC}]_{\text{MA1204_corr_glob}}$	$[\text{BC}]_{\text{MA1204_corr_loca}}$
3 Mar 2016 08:00	32	1.7	1.7 [1.6, 1.9] (1.8)	1.6 [1.4, 1.7] (1.6)	1.5 [1.4, 1.7] (1.6)
3 Mar 2016 13:00	29	0.5	0.5 [0.4, 0.7] (0.6)	0.5 [0.4, 0.6] (0.5)	0.5 [0.4, 0.6] (0.5)
3 Mar 2016 14:00	34	0.5	0.7 [0.6, 0.8] (0.7)	0.6 [0.5, 0.7] (0.6)	0.6 [0.5, 0.7] (0.6)
7 Mar 2016 11:00	54	0.4	0.3 [0.2, 0.3] (0.3)	0.2 [0.2, 0.3] (0.3)	0.2 [0.2, 0.3] (0.3)
7 Mar 2016 16:00	23	0.5	0.5 [0.5, 0.6] (0.5)	0.4 [0.4, 0.5] (0.4)	0.4 [0.4, 0.5] (0.5)
16 Mar 2016 13:00	19	0.5	0.5 [0.4, 0.7] (0.5)	0.5 [0.3, 0.6] (0.4)	0.5 [0.3, 0.6] (0.5)
16 Mar 2016 14:00	60	0.9	0.7 [0.5, 0.8] (1.0)	0.6 [0.5, 0.7] (0.9)	0.6 [0.5, 0.7] (0.9)
16 Mar 2016 15:00	17	0.5	0.6 [0.5, 0.8] (0.7)	0.5 [0.4, 0.7] (0.6)	0.5 [0.5, 0.7] (0.6)
5 Apr 2016 07:00	31	1.1	1.4 [1.3, 1.6] (1.5)	1.2 [1.1, 1.4] (1.3)	1.2 [1.1, 1.4] (1.3)
5 Apr 2016 12:00	23	0.3	0.4 [0.2, 0.5] (0.3)	0.3 [0.2, 0.4] (0.3)	0.3 [0.2, 0.4] (0.3)
11 Apr 2016 10:00	59	0.7	0.7 [0.5, 0.9] (0.7)	0.6 [0.4, 0.8] (0.6)	0.6 [0.4, 0.8] (0.6)
11 Apr 2016 15:00	15	0.7	1.3 [1.1, 1.5] (1.3)	1.1 [1.0, 1.3] (1.2)	1.1 [1.0, 1.3] (1.2)
19 Apr 2016 07:00	31	1.8	2.1 [2.0, 2.3] (2.2)	1.9 [1.8, 2.1] (1.9)	1.8 [1.8, 2.0] (1.9)
19 Apr 2016 12:00	34	0.5	0.6 [0.5, 0.7] (0.6)	0.5 [0.5, 0.6] (0.6)	0.5 [0.5, 0.6] (0.6)
19 Apr 2016 13:00	55	0.5	0.5 [0.3, 0.7] (0.6)	0.5 [0.2, 0.6] (0.5)	0.5 [0.2, 0.6] (0.5)
25 Apr 2016 10:00	50	0.9	0.7 [0.2, 1.0] (0.6)	0.7 [0.1, 0.9] (0.6)	0.7 [0.2, 0.9] (0.6)
25 Apr 2016 15:00	15	0.5	0.2 [0.2, 0.3] (0.4)	0.2 [0.1, 0.3] (0.3)	0.2 [0.2, 0.3] (0.3)
16 Jun 2016 10:00	38	0.3	0.5 [0.4, 0.5] (0.5)	0.4 [0.3, 0.5] (0.4)	0.5 [0.5, 0.6] (0.6)
16 Jun 2016 15:00	18	1.1	1.2 [1.1, 1.3] (1.3)	1.1 [1.0, 1.2] (1.1)	1.4 [1.3, 1.6] (1.6)
5 Jul 2016 07:00	19	0.7	0.8 [0.7, 1.0] (0.8)	0.7 [0.6, 0.9] (0.7)	0.9 [0.8, 1.2] (1.0)
5 Jul 2016 12:00	34	0.4	0.5 [0.5, 0.6] (0.5)	0.4 [0.4, 0.5] (0.5)	0.6 [0.5, 0.7] (0.6)
5 Jul 2016 13:00	41	0.6	0.5 [0.5, 0.7] (0.6)	0.4 [0.4, 0.6] (0.5)	0.6 [0.5, 0.8] (0.7)
7 Jul 2016 10:00	48	0.5	0.0 [0.0, 0.2] (0.3)	0.0 [0.0, 0.2] (0.2)	0.0 [0.0, 0.2] (0.3)
12 Jul 2016 07:00	26	0.7	0.8 [0.7, 1.0] (0.8)	0.7 [0.6, 0.9] (0.7)	0.9 [0.8, 1.2] (0.9)
12 Jul 2016 12:00	42	0.4	0.5 [0.4, 0.6] (0.5)	0.4 [0.4, 0.5] (0.4)	0.5 [0.5, 0.6] (0.6)
12 Jul 2016 13:00	31	0.4	0.4 [0.3, 0.5] (0.4)	0.3 [0.3, 0.4] (0.3)	0.4 [0.4, 0.5] (0.4)
27 Jul 2016 10:00	59	0.4	0.4 [0.3, 0.5] (0.4)	0.3 [0.2, 0.4] (0.3)	0.4 [0.3, 0.5] (0.3)

Figure S1: A map of the boundary of Glasgow showing the walking routes (coloured lines) for mobile measurements with the O₃, NO₂, PM_{2.5} and BC portable monitors. Also shown is the location of the Glasgow Townhead urban background air quality monitoring station, the principal traffic routes (A-roads), and traffic counting points, the latter colour-coded by annual-average daily number of total motor vehicles (dft.gov.uk/traffic-counts).

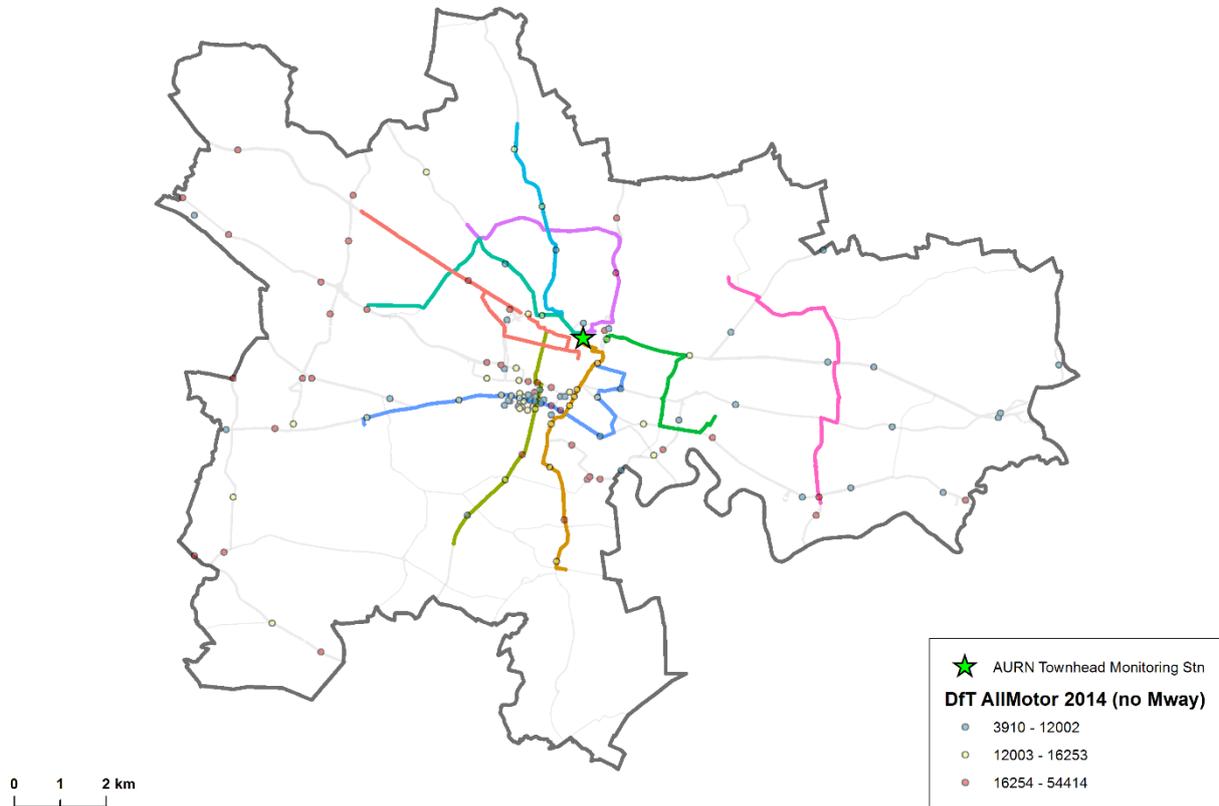


Figure S2: Scatterplots of (a) Aeroqual $[O_3]_{Aq3}$, and (b) Aeroqual $[O_3]_{Aq4}$ monitor outputs versus reference analyser concentrations at Glasgow Townhead AURN monitoring station ($[O_3]_{GLKP}$) for each calibration co-location period separately.

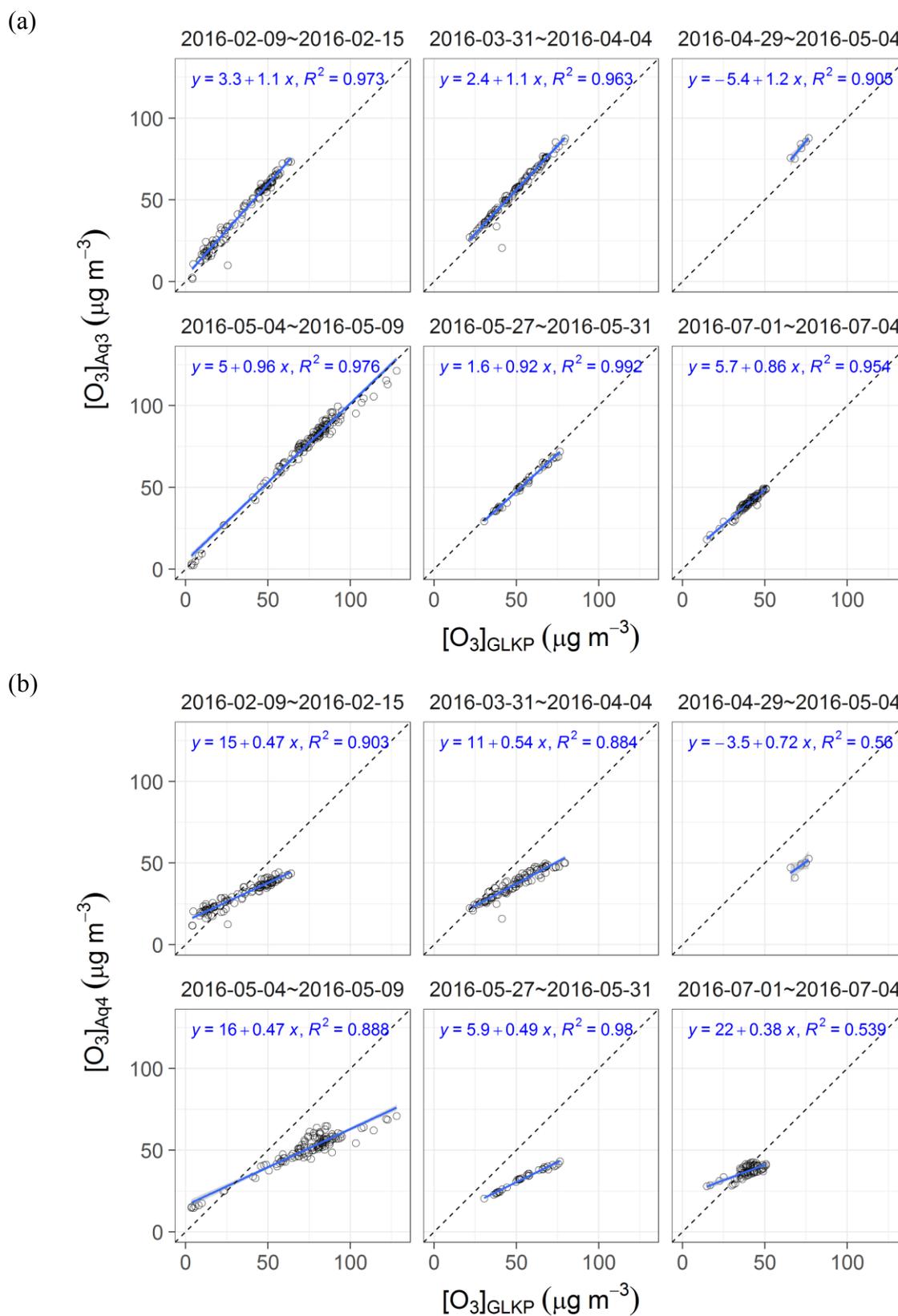


Figure S3. Scatter plots of (a) MicroPEM MP586N and (b) MicroPEM MP618N $PM_{2.5}$ monitors versus reference analyser concentrations at the Edinburgh St. Leonards AURN monitoring station ($[PM_{2.5}]_{ED3}$) for each calibration co-location period individually.

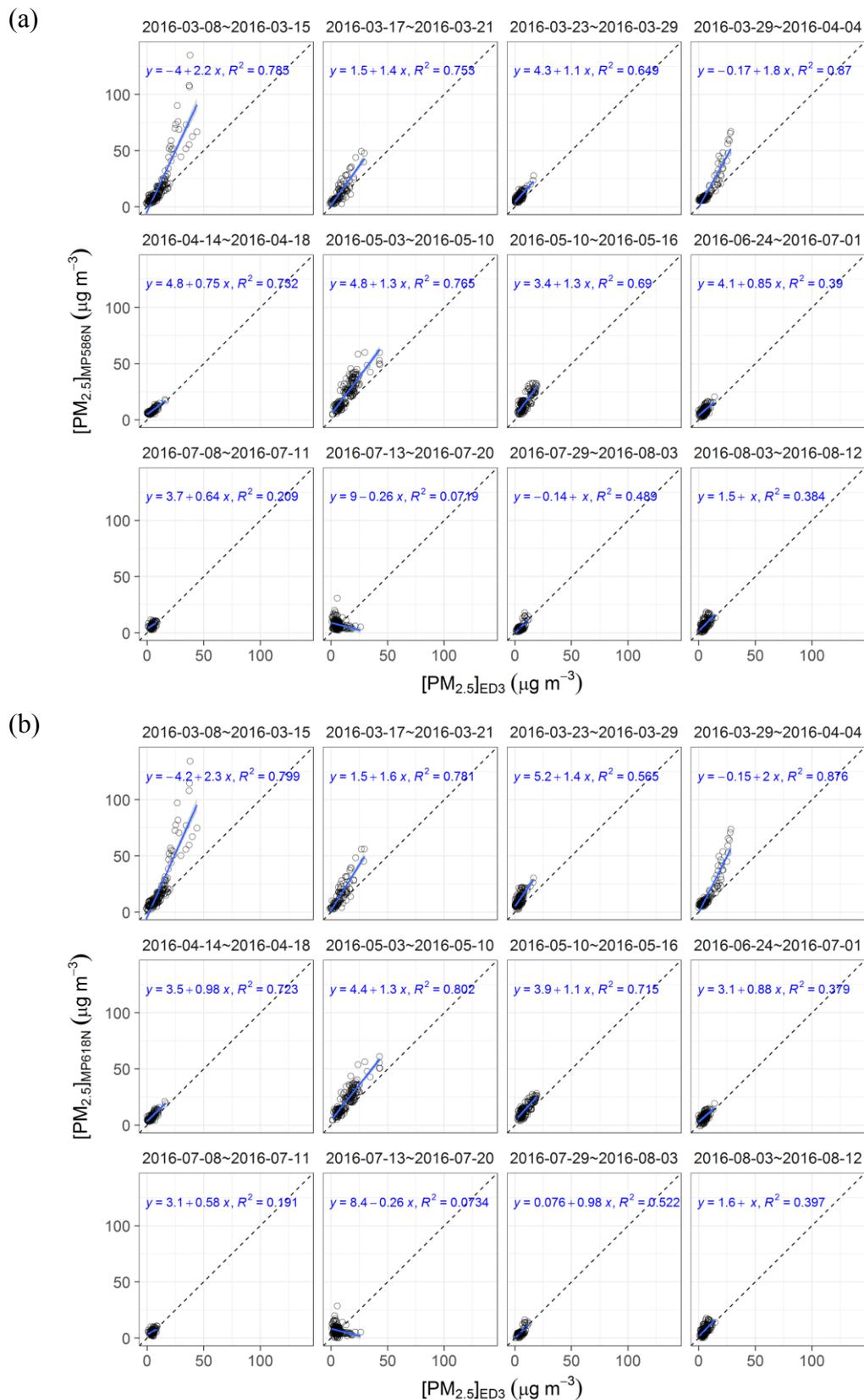


Figure S4: Scatter plots of (a) microAeth AE51 MA1303 and (b) microAeth AE51 MA1204 BC monitors versus reference analyser concentrations at the Glasgow Townhead AURN monitoring station ($[BC]_{GLKP}$) for each calibration co-location period individually.

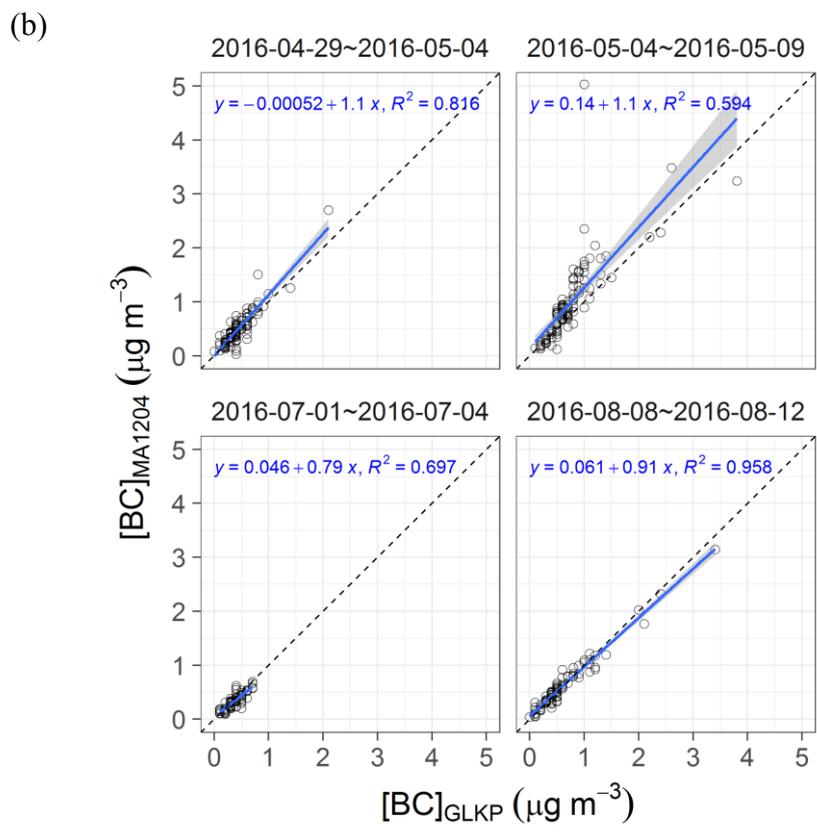
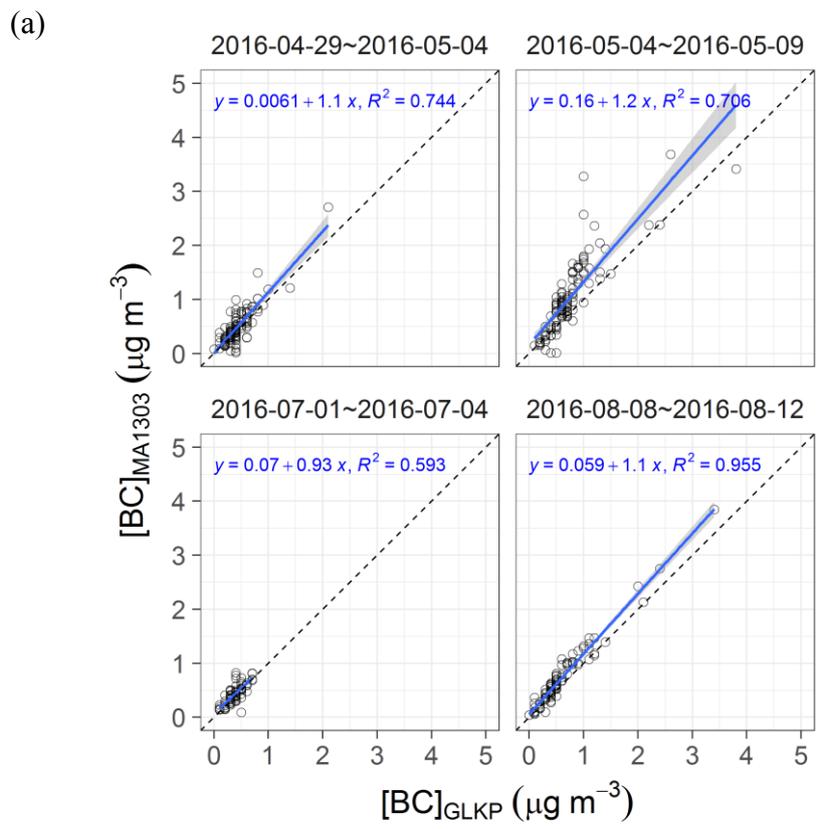


Figure S5: Comparison of locally and globally corrected $[O_3]_{Aq4}$ concentrations for each mobile measurement date. All concentrations in units of $\mu\text{g m}^{-3}$.

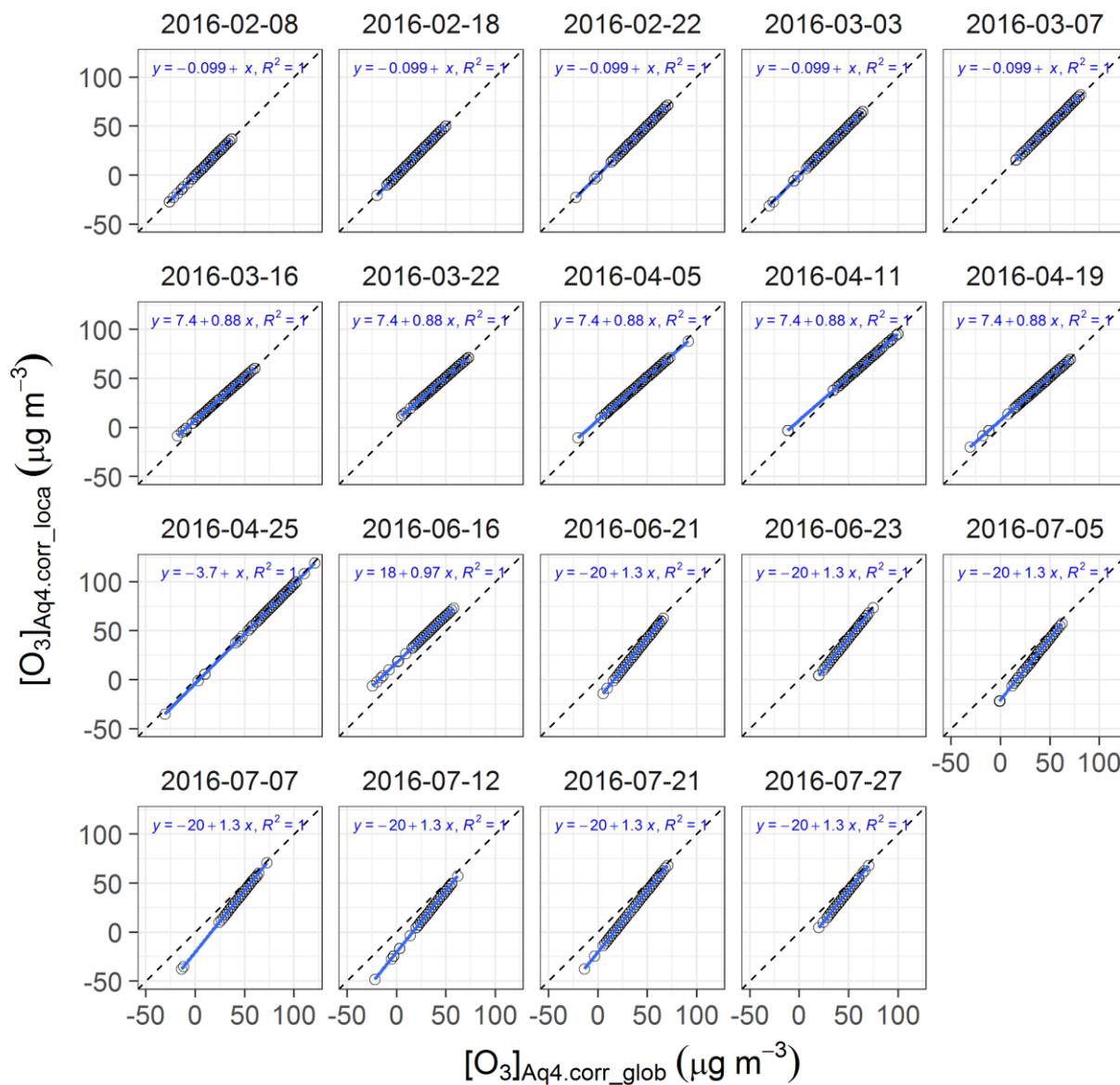


Figure S6: Comparison of locally and globally corrected $[PM_{2.5}]_{MP618N}$ concentrations for each mobile measurement date. All concentrations in units of $\mu g m^{-3}$.

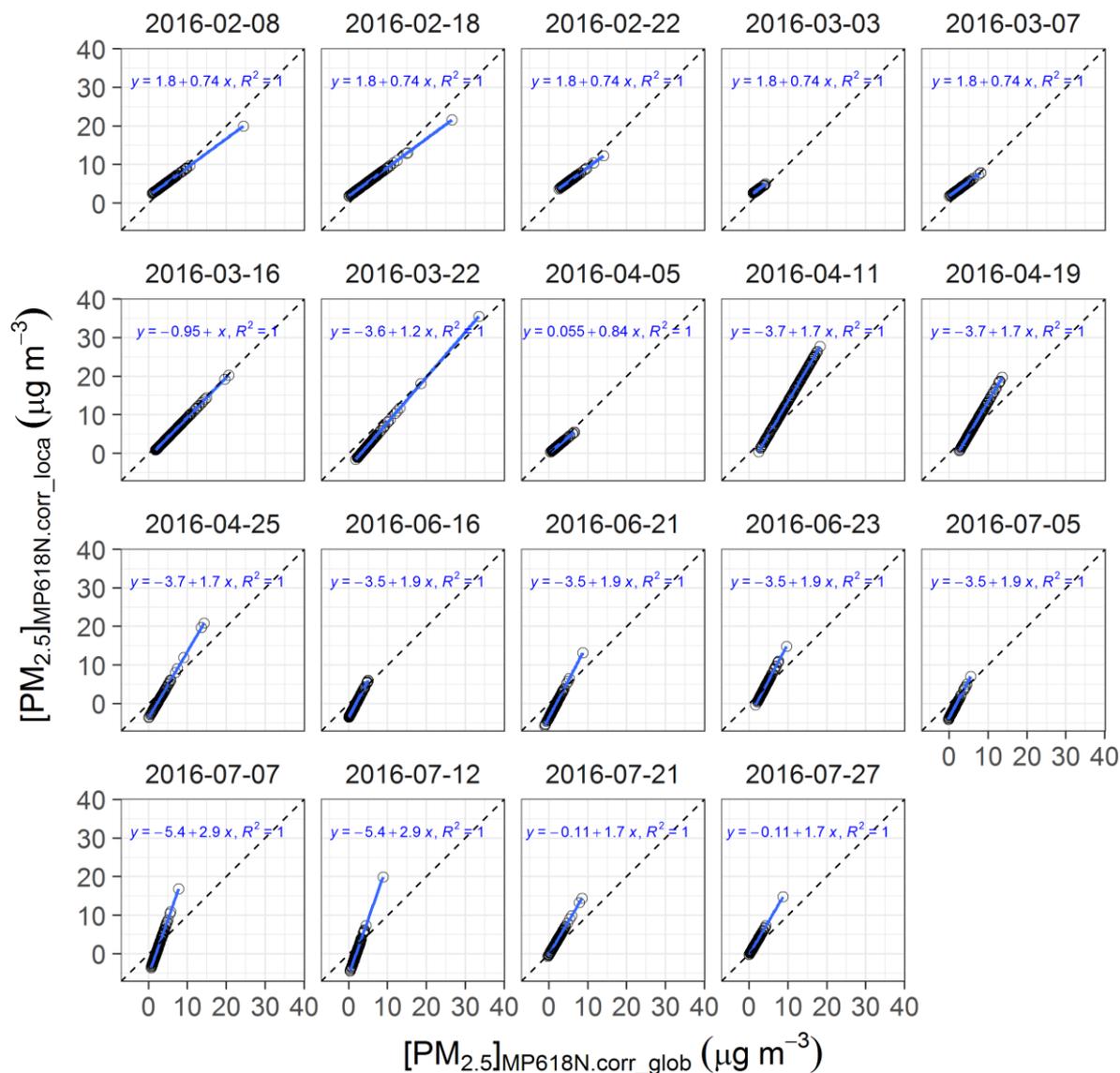


Figure S7: Comparison of locally and globally corrected $[BC]_{MA1204}$ concentrations for each mobile measurement date. All concentrations in units of $\mu\text{g m}^{-3}$.

