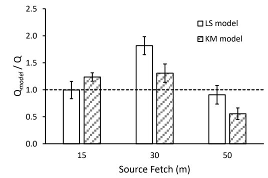
	Meteorological Measurements						Synthetic Source Information											EC Measured Flux		Synthetic Flux estimated from LS footprint				Synthetic Flux estimated from KM footprint			
							Corners of synthetic source (+x=east, +y=north): EC tower located at 0,0																				
Local Date - Time (yy-mm-dd hh:mm)	Windspeed at EC height of z=1.96 m (m/s)	friction velocity u* (m/s)	Obukhov stability length L (m)	Standard deviation of crosswind σ_v	Wind Direction (deg)	implied roughness length z0 (m)	x1 (m)	y1 (m)	x2 (m)	y2 (m)	x3 (m)	y3 (m)	x4 (m)	y4 (m)	Synthetic Source Area (m2)	Distance from EC tower to Source Center (m)	Tracer Release Rate Q (g CO_2 hr^{-1})	EC CO_2 flux during gas release (umol m^{-2} s^{-1})	Background (no gas release) CO_2 flux (umol m^{-2} s^{-1})	LS footprint value: EC flux / Q_{rel} (fraction)	Estimated Synthetic Source Emission Rate Q_{LS} (g CO_2 hr^{-1})	Q_{LS} standard deviation (g CO_2 hr^{-1})	Q_{LS}/Q - Ratio of Q_{LS} to true emission rate	Phitot (Integral of footprint function over considered domain %)	Footprint contribution of release area	Q_{KM}/Q Ratio of Q_{KM} to true emission rate	Distance category
26/10/2018 12:40	2.60	0.265	-46.7	0.6429	143.3	0.0337	-0.22	-6.70	7.29	-0.06	11.97	-9.02	3.12	-13.84	88.86	9.25	6562	47.221	0.894	0.1083	6141	605	0.94	0.853	0.100	1.18	15
26/10/2018 12:50	2.57	0.255	-103.0	0.664	151.7	0.0323	-0.22	-6.70	7.29	-0.06	11.97	-9.02	3.12	-13.84	88.86	9.25	6562	28.475	0.894	0.1348	2975	108	0.45	0.835	0.086	0.85	15
26/10/2018 13:00	2.75	0.214	-11.9	0.6524	142.3	0.0077	-0.22	-6.70	7.29	-0.06	11.97	-9.02	3.12	-13.84	88.86	9.25	6562	32.034	0.894	0.0631	7148	695	1.09	0.882	0.043	1.82	15
26/10/2018 13:10	2.31	0.233	-88.7	0.5462	140.4	0.0340	-0.22	-6.70	7.29	-0.06	11.97	-9.02	3.12	-13.84	88.86	9.25	6562	48.155	0.894	0.1078	6289	415	0.96	0.838	0.099	1.24	15
26/10/2018 13:20	1.65	0.226	-244.9	0.5197	154.7	0.1035	-0.22	-6.70	7.29	-0.06	11.97	-9.02	3.12	-13.84	88.86	9.25	6562	23.197	0.894	0.1390	2351	152	0.36	0.831	0.184	0.33	15
29/10/2018 17:20	2.49	0.211	68.0	0.5215	324.9	0.0204	-4.17	10.66	-9.78	2.25	-17.46	7.36	-11.63	15.65	92.16	14.02	9842	67.541	0.793	0.1114	8852	479	0.90	0.783	0.082	1.56	15
29/10/2018 17:30	3.02	0.230	37.4	0.6786	316.5	0.0133	-4.17	10.66	-9.78	2.25	-17.46	7.36	-11.63	15.65	92.16	14.02	9842	71.890	0.206	0.1149	9136	602	0.93	0.765	0.077	1.82	15
29/10/2018 17:40	2.70	0.200	21.0	0.5095	316.8	0.0144	-4.17	10.66	-9.78	2.25	-17.46	7.36	-11.63	15.65	92.16	14.02	9842	58.241	0.206	0.1137	7480	708	0.76	0.747	0.078	1.48	15
29/10/2018 17:50	2.36	0.186	19.3	0.425	315.3	0.0204	-4.17	10.66	-9.78	2.25	-17.46	7.36	-11.63	15.65	92.16	14.02	9842	46.179	0.206	0.1001	6736	478	0.68	0.747	0.094	0.98	15
29/10/2018 18:00	1.68	0.109	7.3	0.2238	311.9	0.0155	-4.17	10.66	-9.78	2.25	-17.46	7.36	-11.63	15.65	92.16	14.02	9842	23.059	0.206	0.0818	4119	465	0.42	0.716	0.048	0.99	15
31/10/2018 14:20	1.29	0.164	-5.7	0.3353	292.7	0.0448	-4.17	10.66	-9.78	2.25	-17.46	7.36	-11.63	15.65	92.16	14.02	9842	117.743	0.288	0.0393	43721	5181	4.44	0.899	0.194	1.00	15
31/10/2018 15:00	1.61	0.107	-9.8	0.3021	295.9	0.0030	-4.17	10.66	-9.78	2.25	-17.46	7.36	-11.63	15.65	92.16	14.02	9842	59.774	0.288	0.0688	12682	1459	1.29	0.885	0.048	2.08	15
31/10/2018 15:20	0.85	0.121	-15.7	0.3347	284.8	0.0857	-4.17	10.66	-9.78	2.25	-17.46	7.36	-11.63	15.65	92.16	14.02	9842	79.368	0.288	0.0452	25664	2923	2.61	0.884	0.130	1.03	15
22/10/2018 16:20	3.70	0.345	-84.1	0.92	149.9	0.0246	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	19.331	0.737	0.1256	2506	214	0.76	0.838	0.104	1.10	15
22/10/2018 16:30	3.57	0.387	-107.2	0.7668	147.4	0.0454	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	25.838	0.737	0.1202	3499	226	1.07	0.836	0.164	0.94	15
22/10/2018 16:40	3.33	0.298	-78.8	0.7666	149.3	0.0204	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	21.360	0.737	0.1298	2679	242	0.82	0.838	0.103	1.22	15
22/10/2018 16:50	3.95	0.375	-208.8	0.7902	138.1	0.0280	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	33.790	0.737	0.1505	3656	209	1.11	0.823	0.148	1.38	15
22/10/2018 17:00	2.67	0.261	-84.3	0.7387	153.0	0.0303	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	17.362	0.737	0.1159	2440	365	0.74	0.839	0.106	0.97	15
22/10/2018 17:10	2.76	0.292	-193.1	0.8321	151.9	0.0431	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	17.661	0.737	0.1201	2395	123	0.73	0.827	0.118	0.90	15
22/10/2018 17:20	3.39	0.408	1225.4	0.8574	151.8	0.0712	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	19.877	0.737	0.1299	2492	154	0.76	0.816	0.157	0.77	15
22/10/2018 17:30	2.77	0.254	123.0	0.6027	148.5	0.0272	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	23.522	0.737	0.1565	2447	115	0.75	0.794	0.120	1.23	15
22/10/2018 17:40	2.59	0.215	45.5	######	147.7	0.0199	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	21.450	0.737	0.1685	2073	147	0.63	0.773	0.111	1.24	15
22/10/2018 17:50	2.79	0.254	53.7	######	149.6	0.0293	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	22.617	0.737	0.1541	2391	133	0.73	0.780	0.107	1.34	15
22/10/2018 18:00	2.84	0.185	19.4	######	147.2	0.0069	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	15.678	0.737	0.1374	1858	167	0.57	0.740	0.053	2.00	15
22/10/2018 18:10	2.01	0.223	21.8	######	148.3	0.0846	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	25.492	0.737	0.1504	2760	146	0.84	0.766	0.143	1.16	15
22/10/2018 18:20	1.45	0.094	13.4	######	136.5	0.0085	3.18	-9.51	11.69	-3.87	16.53	-13.28	7.95	-18.21	102.79	14.92	3281	11.331	0.737	0.106	1733	95	0.53	0.728	0.051	1.52	15
29/10/2018 15:10	4.49	0.502	-128.6	######	306.5	0.0519	-27.03	14.71	-27.99	4.82	-38.01	8.26	-35.71	17.92	96.76	34.16	9842	37.168	0.793	0.022	25755	2929	2.62	0.835	0.031	2.20	30
29/10/2018 15:20	3.87	0.494	-101.2	######	307.1	0.0793	-27.03	14.71	-27.99	4.82	-38.01	8.26	-35.71	17.92	96.76	34.16	9842	26.352	0.793	0.019	21784	5091	2.21	0.842	0.030	1.65	30
29/10/2018 15:30	4.42	0.413	-89.4	######	292.2	0.0250	-27.03	14.71	-27.99	4.82	-38.01	8.26	-35.71	17.92	96.76	34.16	9842	38.309	0.793	0.044	13467	1175	1.37	0.836	0.055	1.30	30
29/10/2018 15:40	4.45	0.454	-79.7	######	312.9	0.0355	-27.03	14.71	-27.99	4.82	-38.01	8.26	-35.71	17.92	96.76	34.16	9842	14.925	0.793	0.017	13866	1042	1.41	0.841	0.024	1.13	30
29/10/2018 15:50	4.41	0.423	-82.6	######	312.6	0.0279	-27.03	14.71	-27.99	4.82	-38.01	8.26	-35.71	17.92	96.76	34.16	9842	20.557	0.793	0.015	21087	7672	2.14	0.839	0.022	1.71	30
29/10/2018 16:00	4.75	0.425	-106.8	######	309.8	0.0210	-27.03	14.71	-27.99	4.82	-38.01	8.26	-35.71	17.92	96.76	34.16	9842	20.329	0.793	0.020	15820	2984	1.61	0.832	0.026	1.46	30
26/10/2018 15:00	1.83	0.180	-5.5	######	137.6	0.0175	6.31	-28.38	16.32	-26.48	18.25	-35.54	8.60	-37.93	96.01	34.38	6562	6.196	0.894	0.014	6942	1410	1.06	0.897	0.029	0.56	30
26/10/2018 15:10	2.31	0.260	-15.9	######	138.3	0.0406	6.31	-28.38	16.32	-26.48	18.25	-35.54	8.60	-37.93	96.01	34.38	6562	10.548	0.894	0.011	14111	3286	2.15	0.881	0.028	0.98	30
26/10/2018 15:30	1.76	0.242	-17.4	######	156.2	0.0778	6.31	-28.38	16.32	-26.48	18.25	-35.54	8.60	-37.93	96.01	34.38	6562	9.482	0.894	0.012	11685	3238	1.78	0.882	0.032	0.77	30
29/10/2018 12:40	2.64	0.296	-25.1	######	283.6	0.0438	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	6562	4.844	0.793	0.006	11768	5799	1.79	0.870	0.016	0.81	50
29/10/2018 13:00	3.52	0.410	-52.9	######	280.3	0.0559	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	6562	0.710	0.793	0.009	1143	461	0.17	0.853	0.017	0.11	50
29/10/2018 13:10	2.97	0.393	-42.8	######	301.7	0.0821	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	6562	5.031	0.793	0.005	15997	4601	2.44	0.860	0.010	1.29	50
29/10/2018 13:20	3.52	0.381	-42.3	######	285.6	0.0417	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	6562	7.908	0.793	0.012	9748	5279	1.49	0.857	0.020	1.08	50
29/10/2018 13:30	3.39	0.347	-51.3	######	294.7	0.0347	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	6562	9.578	0.793	0.013	11309	4667	1.72	0.851	0.018	1.47	50
29/10/2018 13:40	3.87	0.386	-38.8	######	292.0	0.0302	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	6562	10.978	0.793	0.012	13832	3632	2.11	0.857	0.020	1.50	50
29/10/2018 13:50	4.19	0.481	-101.9	######	304.3	0.0563	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	8202	6.671	0.793	0.007	13765	5530	1.68	0.838	0.011	1.35	50
29/10/2018 14:00	4.22	0.366	-43.5	######	307.0	0.0167	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	2.059	0.793	0.010	3249	1866	0.33	0.852	0.011	0.34	50
07/11/2018 13:40	2.28	0.221	-25.9	######	296.2	0.0249	22.06	-55.30	17.95	-47.71	26.20	-42.68	30.92	-51.13	95.80	54.09	9842	7.430	-0.830	0.012	9166	1740	0.93	0.867	0.019	0.69	50
07/11/2018 13:50	2.25	0.280	-54.6	######	300.3	0.0690	22.06	-55.30	17.95	-47.71	26.20	-42.68	30.92	-51.13	95.80	54.09	9842	4.959	-0.830	0.006	13336	7044	1.35	0.853	0.012	0.76	50
07/11/2018 15:30	2.32	0.281	-150.6	######	272.7	0.0683	22.06	-55.30	17.95	-47.71	26.20	-42.68	30.92	-51.13	95.80	54.09	9842	1.054	-0.830	0.009	1698	710	0.17	0.833	0.010	0.19	50
07/11/2018 16:00	2.32	0.228	-5611.7	######	282.8	0.0338	22.06	-55.30	17.95	-47.71	26.20	-42.68	30.92	-51.13	95.80	54.09	9842	2.563	-0.830	0.020	1971	316	0.20	0.811	0.020	0.25	50
07/11/2018 16:10	1.48	0.116	50.2	######	274.2	0.0144	22.06	-55.30	17.95	-47.71	26.20	-42.68	30.92	-51.13	95.80	54.09	9842	0.523	-0.830	0.004	2238	1381	0.23	0.773	0.014	0.07	50
07/11/2018 16:20	1.77	0.133	50.6	######	281.8	0.0115	22.06	-55.30	17.95	-47.71	26.20	-42.68	30.92	-51.13	95.80	54.09	9842	0.755	-0.830	0.021	553	159	0.06	0.773	0.025	0.06	50
19/11/2018 13:30	2.07	0.165	26.3	######	274.6	0.0193	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	0.358	-0.057	0.008	654	224	0.07	0.757	0.015	0.05	50
19/11/2018 13:40	2.32	0.169	15.5	######	270.2	0.0153	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	0.551	-0.057	0.001	7883	17357	0.80	0.738	0.011	0.11	50
19/11/2018 13:50	2.70	0.238	33.9	######	271.2	0.0279	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	0.788	-0.057	0.003	4009	2998	0.41	0.768	0.011	0.14	50
19/11/2018 14:00	2.32	0.199	22.7	######	274.0	0.0288	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	0.468	-0.057	0.006	1249	684	0.13	0.755	0.014	0.07	50
19/11/2018 14:10	2.04	0.194	29.1	######	273.8	0.0409	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	0.283	-0.057	0.002	2325	4853	0.24	0.766	0.013	0.04	50
19/11/2018 14:20	2.12	0.172	17.3	######	273.1	0.0248	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	0.279	-0.057	0.004	1015	665	0.10	0.745	0.014	0.04	50
19/11/2018 14:30	2.27	0.218	19.5	######	271.7	0.0504	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	4.624	-0.057	0.002	28819	24573	2.93	0.756	0.012	0.82	50
19/11/2018 14:40	2.32	0.220	25.9	######	272.6	0.0420	-46.96	11.45	-57.01	13.14	-54.97	22.96	-46.11	21.40	95.80	54.09	9842	0.784	-0.057	0.002	4913	7421	0.50	0.763	0.012	0.13	50
13/11/2018 14:50	1.30	0.115	5.8	######	166.9	0.1159	22.06	-55.30	17.95	-47.71	26.20	-42.68	30.92	-51.13	88.97	54.87	9842	4.061	-0.035	0.008	7345	2491	0.75	0.736	0.012	0.65	50
14/11/2018 12:10	1.36	0.069	14.8	######	143.4	0.0015	22.06	-55.30	17.95	-47.71	26.20	-42.68	30.92	-51.13	88.97	54.87	9842	9.875	0.157	0.012	11717	3026	1.19	0.722	0.015	1.31	50

Dist	LS model	KM model	Nobs
15	0.99	1.24	26
30	1.82	1.31	9
50	0.91	0.56	24

Ref Line	
0	1
1	1
2	1
3	1
4	1

	Std dev	Std dev	Std err	Std err
Dist	LS	KM	LS	KM
15	0.82	0.40	0.161	0.078
30	0.50	0.51	0.167	0.170
50	0.85	0.53	0.173	0.108

	QLS	QKM
Average (all obs)	1.08	0.97
Count	59	59
STD DEV	0.84	0.58
STD ERR	0.11	0.08