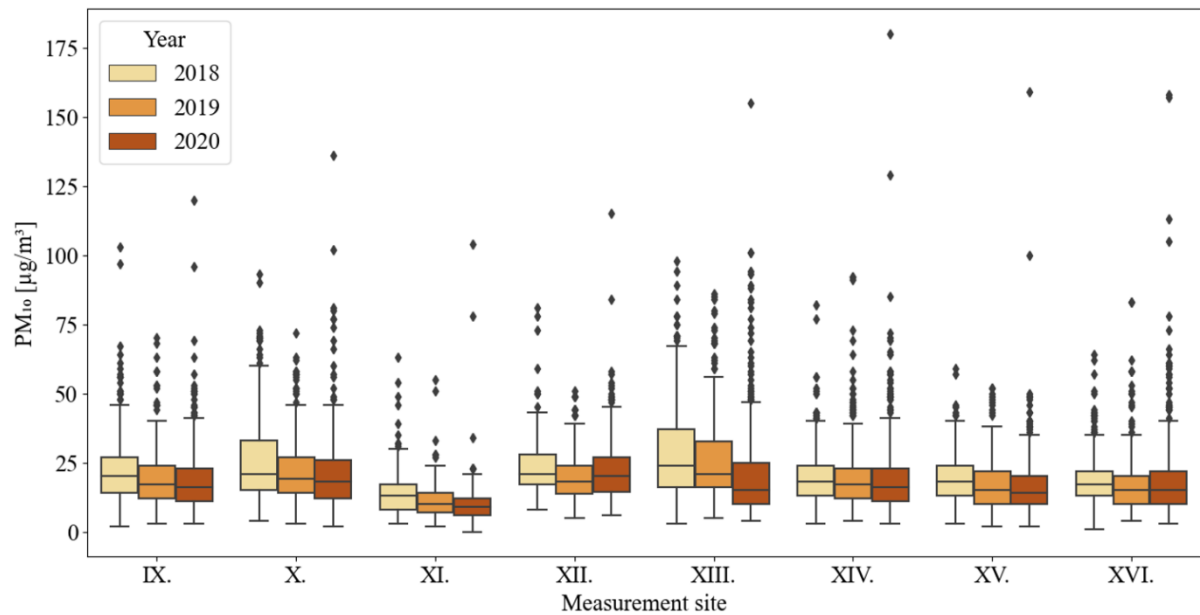
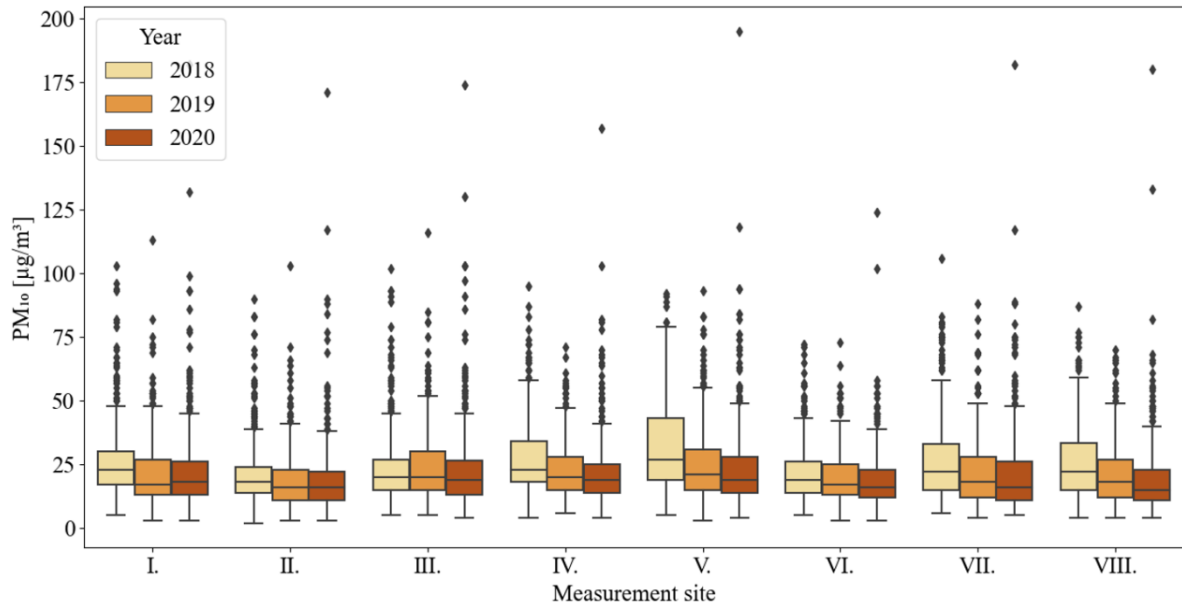


Table S1: Measurement station IDs, altitude, latitude (X)/longitude (Y)*, measurement type, area type, and the area's characteristics.

ID	Altitude (m)	X	Y	Measurement type	Area Types	Characteristic of the area	Meteorology
I.	341	42.434	51.0145	Background	Urban	Residential, Commercial	No
II.	343	45.9098	50.9954	Background	Urban	Residential	No
III.	341	46.1911	51.0090	Traffic	Urban	Residential	No
IV.	316	54.9921	51.5635	Traffic	Urban	Residential, Commercial	No
V.	287	49.9699	51.0861	Traffic	Urban	Residential, Commercial, Industrial	No
VI.	226	50.6432	51.1004	Background	Urban	Residential, Industrial	No
VII.	296	50.2744	51.0948	Background	Suburban	Residential, Commercial, Industrial	No
VIII.	260	51.3787	50.7202	Background	Urban	Residential	No
IX.	437	45.1000	51.2175	Background	Urban	Residential	No
X.	235	59.1195	51.6712	Background	Rural	Agricultural	No
XI.	584	48.8923	50.4529	Background	Rural	Natural	No
XII.	99	48.9981	51.4798	Industrial	Rural	Residential, Agricultural	No
XIII.	286	52.0238	51.2013	Background	Urban	Residential	No
XIV.	158	39.5568	50.8975	Background	Urban	Residential, Commercial	No
XV.	389	50.8928	13.5147	Background	Urban	Residential, Commercial, Industrial	No
XVI.	101	39.9568	50.4408	Background	Urban	Residential	No
XVII.	149	39.5582	50.8975	Traffic	Urban	Residential	No
XVIII.	284	52.1035	51.2052	Traffic	Urban	Residential	No
XIX.	236	58.8584	51.6770	Traffic	Urban	Residential, Commercial	No
XX.	240	52.2888	12.2129	Background	Urban	Commercial, Industrial	Yes
XXI.	286	52.2511	51.2107	Traffic	Urban	Residential, Commercial	Yes
XXII.	392	45.4084	51.1036	Background	Suburban	Residential, Commercial	Yes
XXIII.	408	50.4133	51.3596	Industrial	Suburban	Residential, Industrial	Yes

XXIV.	345	46.2313	51.0144	Background	Urban	Residential, Commercial	Yes
XXV.	327	54.8068	51.7283	Background	Urban	Residential	No

* <https://discomap.eea.europa.eu/App/AirQualityMeasurements/index.html> (05/28/2022)



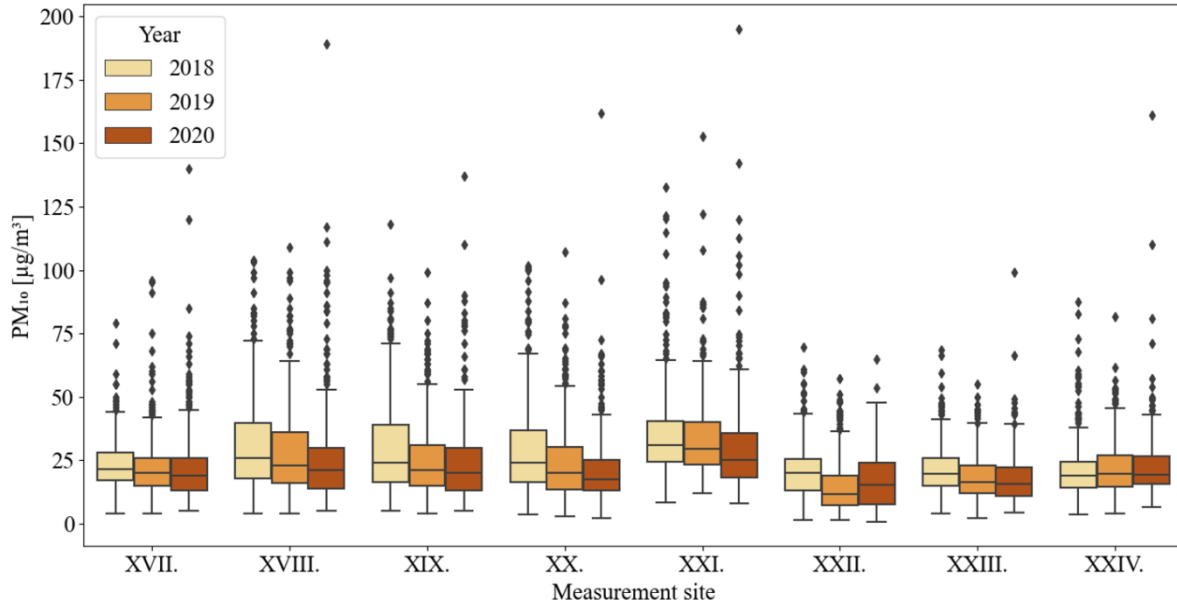


Fig. S1: Distribution of PM₁₀ from 24 measurement locations during 2018, 2019 and 2020.

Table S2: The average daily value with Standard Deviation (SD), minimum and maximum values and the range before, after and during the first and second lockdowns in 2018, 2019 and 2020. The precipitation data include the information about the percentage changes related to the highest values in particular periods.

		Before	During I.	After	During II.
		WS [m/s]			
2018	Average daily value with SD	1.50 ± 0.58	1.63 ± 0.35	1.27 ± 0.24	1.40 ± 0.44
	Range	2.61	2.11	1.41	2.20
	Min	0.72	1.09	0.86	0.66
	Max	3.33	3.20	2.27	2.86
2019	Average daily value with SD	1.40 ± 0.64	1.56 ± 0.41	1.38 ± 0.29	1.20 ± 0.35
	Range	3.05	2.1	1.61	1.44
	Min	0.79	0.96	0.92	0.77
	Max	3.84	3.06	2.53	2.17
2020	Average daily value with SD	1.51 ± 0.43	1.69 ± 0.36	1.37 ± 0.29	1.22 ± 0.39
	Range	1.85	1.8	1.2	1.62
	Min	0.82	1.06	0.82	0.74
	Max	2.67	2.86	2.02	2.36

		P [mm]			
2018	Sum value	243.00	318.00	608.00	206.00
2019	Sum value	176.00	362.00	509.00	330.00
2020	Sum value	135.00	166.00	702.00	258.00

Table S3: Frequency statistics per wind direction in the periods in 2018, 2019, 2020.

Wind direction (m/s)	Before	During lockdown		After	During lockdown II.
		I.	II.		
2018					
< 150	11 (15.5 %)	44 (55.0 %)	53 (37.9 %)	20 (26.7 %)	
150 – 200	26 (36.6 %)	17 (21.3 %)	48 (34.3 %)	27 (36.0 %)	
200 – 250	22 (31.0 %)	18 (22.5 %)	32 (22.9 %)	15 (20.0 %)	
250 – 300	11 (15.5 %)	0	6 (4.3 %)	12 (16.0 %)	
> 300	1 (1.4 %)	1 (1.3 %)	1 (0.7 %)	1 (1.3 %)	
2019					
< 150	14 (19.7 %)	28 (35.0 %)	65 (46.4 %)	25 (33.8 %)	
150 – 200	29 (40.8 %)	29 (36.3 %)	45 (32.1 %)	29 (39.2 %)	
200 – 250	24 (33.8 %)	17 (21.3 %)	28 (20.0 %)	15 (20.3 %)	
250 – 300	4 (5.6 %)	4 (5.0 %)	1 (0.7 %)	5 (6.8 %)	
> 300	0	2 (2.5 %)	1 (0.7 %)	0	
2020					
< 150	19 (26.8 %)	33 (41.3 %)	58 (41.4 %)	21 (28.4 %)	
150 – 200	30 (42.3 %)	24 (30.0 %)	50 (35.7 %)	30 (40.5 %)	
200 – 250	14 (19.7 %)	19 (23.8 %)	31 (22.1 %)	21 (28.4 %)	
250 – 300	8 (11.3 %)	3 (3.8 %)	1 (0.7 %)	2 (2.7 %)	
> 300	0	1 (1.3 %)	0	0	

Table S4: t-test and F-test analysis of wind speed between years.

	Sample size (n)	t-test		F-test	
		2020:2019	2020:2018	2020:2019	2020:2018
Before	71	0.34	0.23	0.85	0.76
During I.	82	0.62	0.78	0.61	< 0.05
After	139	< 0.05	< 0.05	< 0.05	< 0.05
During II.	75	0.51	< 0.05	< 0.05	< 0.05

Table S5: t-test and F-test analysis of precipitation accumulation between years

	Sample size (n)	t-test		F-test	
		2020:2019	2020:2018	2020:2019	2020:2018
Before	71	0.58	0.21	< 0.05	0.23
During I.	82	< 0.05	< 0.05	< 0.05	0.11
After	139	0.81	0.62	0.55	< 0.05
During II.	75	0.43	0.47	0.89	0.71

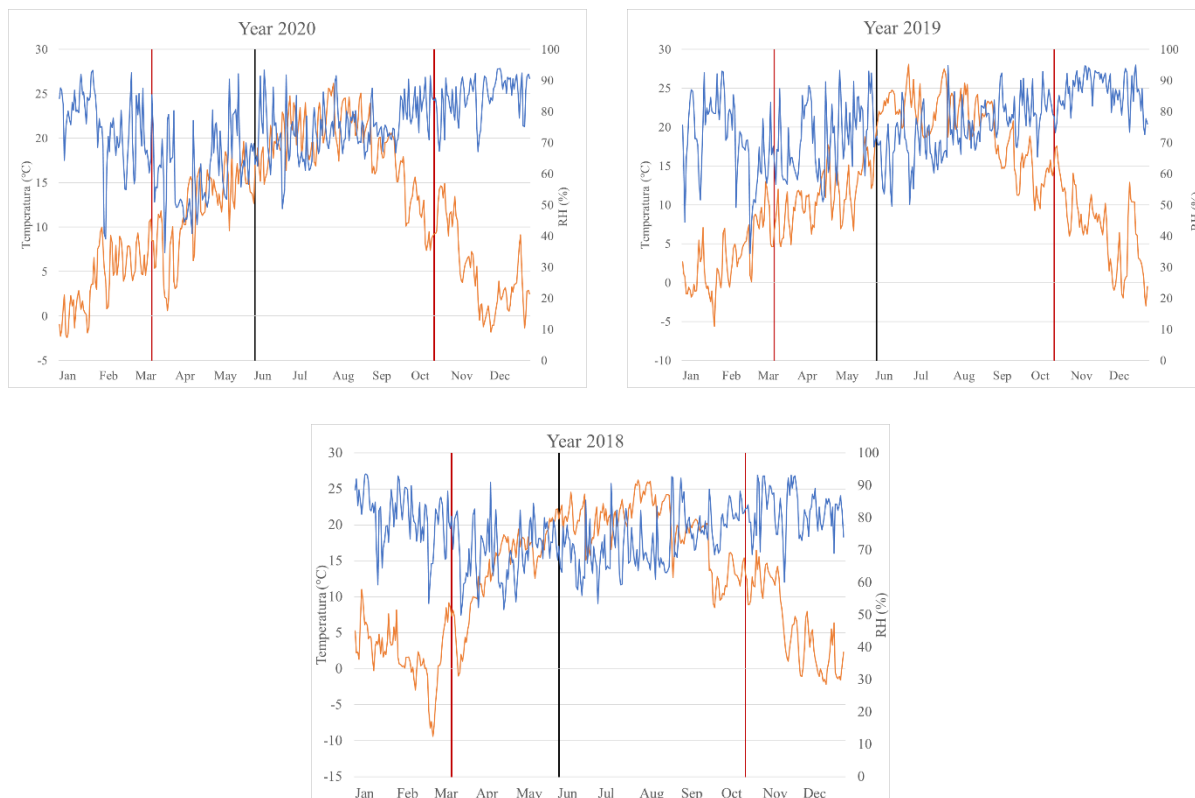


Fig. S2: Daily average temperatures and RH at 5 measurement stations in 2018, 2019 and 2020.