Supplement

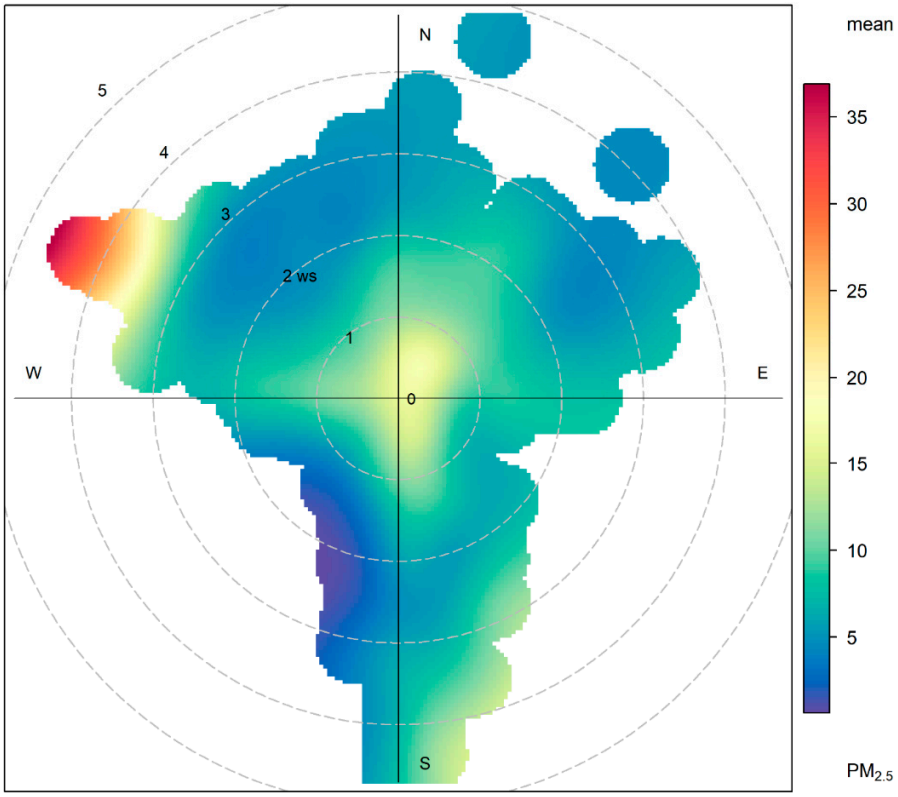

Figure S1. Fresno polar plot $PM_{2.5}$ 2013_2022

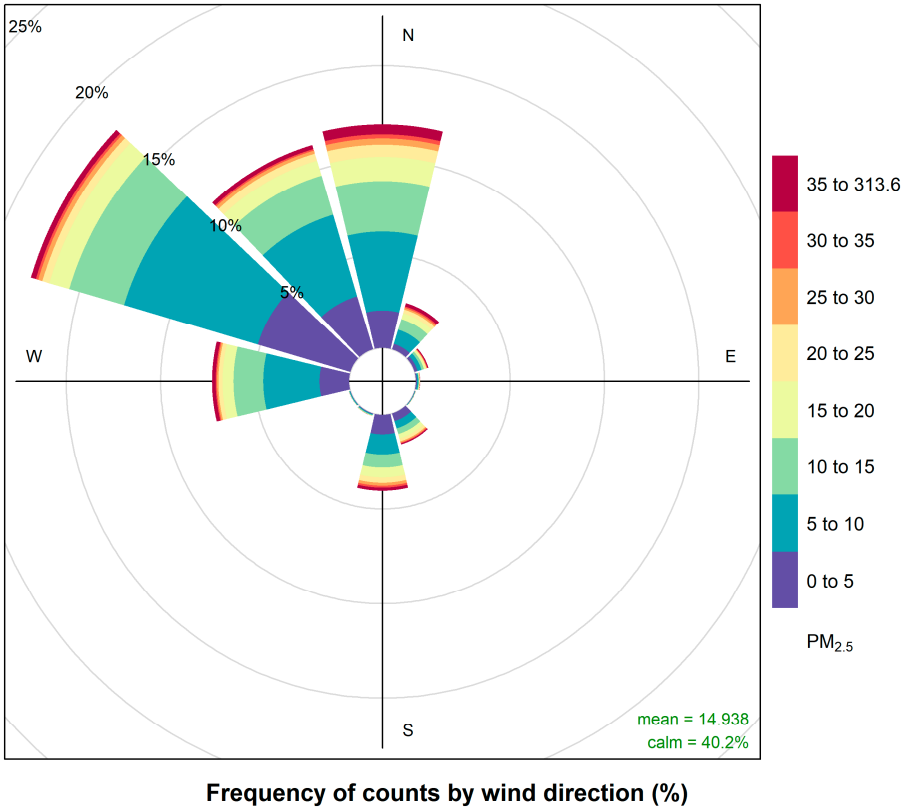

Figure S2. Fresno Garland pollution rose $PM_{2.5}$ 2013_2022

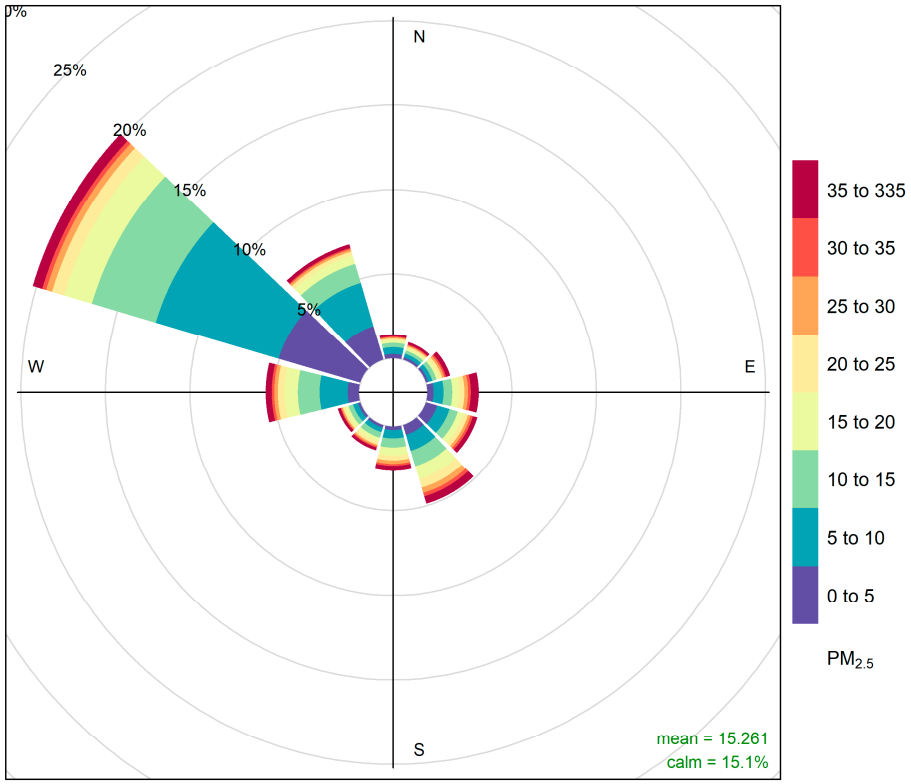

Figure S3. Clovis pollution rose $PM_{2.5}$ 2007_2022

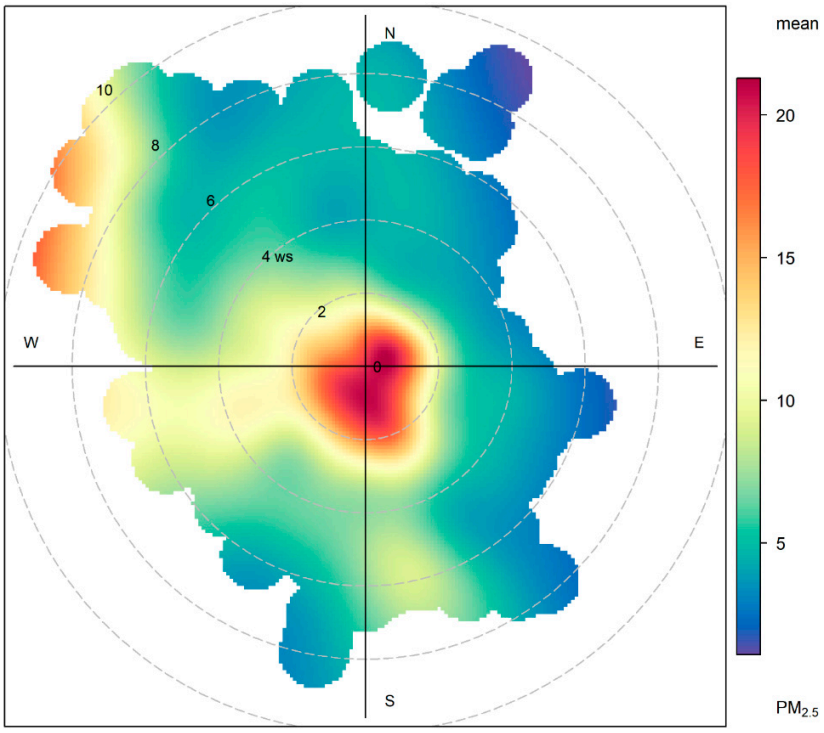

Figure S4. Clovis polar plot $PM_{2.5}$ 2007_2022

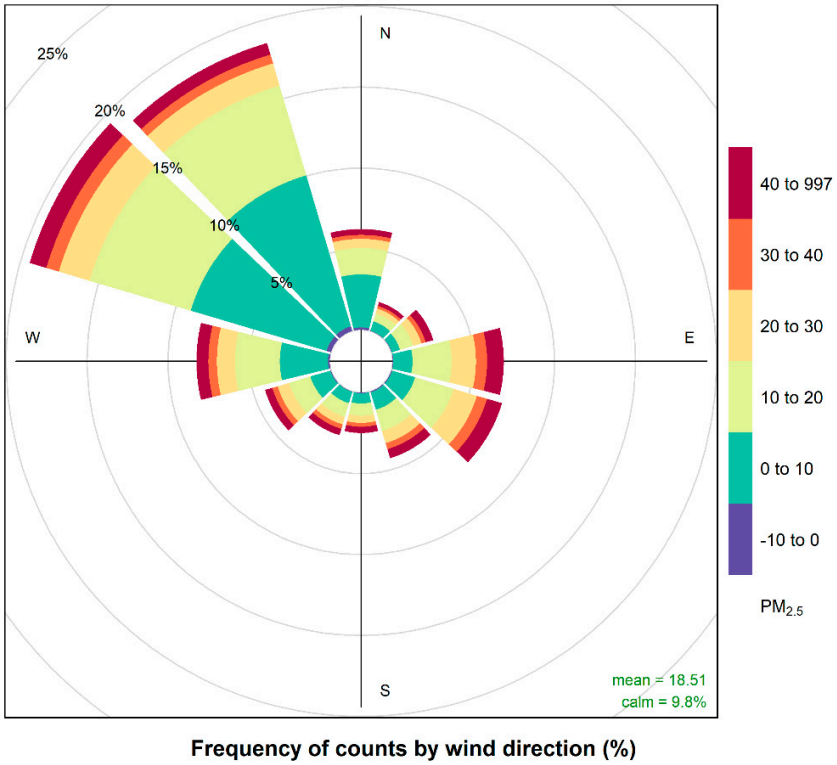

Figure S5. Bakersfield pollution rose $PM_{2.5}$ 2001_2022

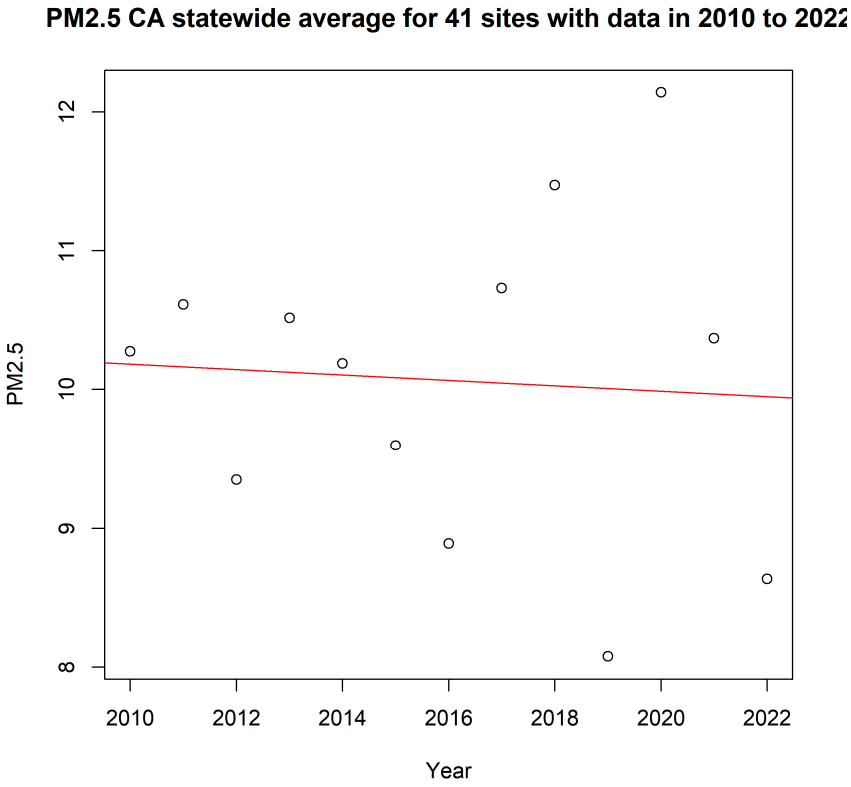

Figure S6. California $PM_{2.5}$ average for 2010 to 2022

Table S1. Number of days for each category of AQI for $PM_{2.5}$ 1999-2022

Bakersfield	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Year	134.1	112.7	154.7	89.6	55.5	70.0	85.7	77.7	85.8	99.3	195.5	92.2	80.3	86.5	111.7	101.9	107.8	66.4	101.8	98.5	59.1	150.7	72.3	58.1
Max Daily Conc	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min daily Conc	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Good	109	122	128	122	123	114	129	111	104	93	147	209	145	239	140	151	182	177	174	161	245	136	194	140
Moderate	116	151	171	153	120	133	140	182	121	165	138	87	100	81	129	156	114	129	123	116	90	159	103	51
Unhealthy for	18	32	23	42	26	24	21	23	26	41	23	22	18	14	27	16	21	18	13	25	10	32	32	14
Unhealthy	27	24	21	26	1	9	10	10	22	12	16	5	12	7	17	23	6	3	13	11	2	11	8	1
Very Unhealthy	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Hazardous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
n	270	329	344	343	270	280	300	326	273	311	325	323	275	341	313	346	323	327	323	313	347	339	337	206
Clovis																								
Max Daily Conc	97.7	75.1	85.6	73.1	51.2	62.5	77.0	65.8	64.7	62.8	71.0	75.3	76.5	80.8	102.0	72.8	80.8	50.5	62.4	82.3	45.3	193.8	104.6	41.9
Min daily Conc	1.0	3.7	0.3	3.7	2.7	3.5	3.0	2.8	0.6	2.7	1.6	1.5	2.8	0.9	0.5	0.2	0.9	1.3	1.9	1.9	1.9	0.6	2.7	1.3
Good	26	38	32	36	20	37	40	31	51	50	134	183	168	174	171	190	152	195	213	212	148	194	195	58
Moderate	40	26	37	38	37	46	32	48	23	77	178	162	157	164	151	139	181	144	134	123	38	122	141	54
Unhealthy for	12	3	10	11	11	6	6	7	11	29	27	16	24	21	16	15	11	8	14	19	2	23	17	4
Unhealthy	4	3	4	1	0	2	4	2	4	1	3	4	14	4	7	11	5	0	4	7	0	15	6	0
Very Unhealthy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Hazardous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
n	82	70	83	86	68	91	82	88	89	157	342	365	363	363	345	355	349	347	365	361	188	356	359	116
Fresno																								
Max Daily Conc	136.0	160.0	110.0	84.0	63.0	71.0	86.0	71.0	103.8	79.5	82.3	58.3	77.3	93.4	103.2	97.7	63.8	53.5	76.5	96.9	47.1	168.7	100.0	43.3
Min daily Conc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Good	117	69	135	142	163	185	183	161	227	179	210	216	208	176	143	179	202	217	214	185	268	188	205	92
Moderate	94	74	123	116	133	114	116	153	72	137	110	105	95	138	176	154	144	129	117	146	93	138	130	46
Unhealthy for	24	28	30	34	33	27	22	28	40	47	27	20	24	61	32	13	9	17	17	23	4	24	24	3
Unhealthy	40	22	16	27	7	5	16	5	27	14	8	2	12	20	12	17	5	0	10	9	0	13	6	0
Very Unhealthy	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Hazardous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
n	275	194	304	319	336	331	337	347	366	377	355	343	339	395	363	363	360	363	358	363	365	364	365	141