

SUPPORTING MATERIAL

Platinum group elements in airborne particles in Mexico City

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Table S-1. PM₁₀ concentration, PGE concentrations and Os isotopic composition in all analyzed PM₁₀ samples (locations M).

Date	Location	PM ₁₀ ($\mu\text{g m}^{-3}$)	[Pt] (pg m^{-3})	[Pd] (pg m^{-3})	[Rh] (pg m^{-3})	[Ir] (pg m^{-3})	[Os] (pg m^{-3})	¹⁸⁷ Os/ ¹⁸⁸ Os
4/16/1991	M10	108	-	1.0	0.8	-	0.025	0.671
5/16/1991	M10	75	-	4.2	1.3	0.010	0.024	0.486
5/22/1991	M10	89	-	2.8	1.6	-	0.028	0.655
1/23/1993	M10	114	12.6	16.3	13.6	0.039	0.026	0.673
2/10/1993	M10	68	15.6	22.7	15.0	0.030	0.023	0.659
2/16/1993	M10	113	20.1	20.8	23.1	0.132	0.021	0.653
2/17/1994	M10	93	2.8	5.2	0.8	0.028	0.018	0.680
3/19/1994	M10	130	4.3	4.0	1.6	0.086	0.020	0.396
4/24/1994	M10	22	-	5.9	1.1	0.056	0.024	0.666
1/26/1997	M10	101	5.0	4.3	1.2	0.041	0.022	0.667
2/7/1997	M10	97	7.8	6.4	2.1	0.368	0.024	0.636
3/21/1997	M10	53	4.1	4.7	1.0	0.020	0.030	0.635
3/17/2000	M10	81	13.3	7.0	3.0	0.093	0.026	0.659
4/10/2000	M10	101	13.6	3.9	2.7	-	0.025	0.669
5/16/2000	M10	61	10.6	5.0	2.0	-	0.029	0.651
3/20/2003	M10	74	12.1	13.1	3.8	-	0.028	0.647
4/19/2003	M10	57	8.5	9.7	2.9	0.009	-	-
5/13/2003	M10	81	8.8	11.5	2.5	-	0.027	0.649
7/6/2003	M10	59	11.2	9.4	2.9	-	0.023	0.647
8/11/2003	M10	34	7.7	8.1	2.0	0.008	0.027	0.639
11/21/2003	M10	87	9.1	9.2	2.8	0.093	0.027	0.675
7/6/2003	P10	42	6.1	7.7	3.0	0.072	0.027	0.404
8/11/2003	P10	21	6.7	7.7	2.7	0.015	0.024	0.629
11/21/2003	P10	43	7.5	7.9	3.1	0.193	0.023	0.666
7/6/2003	T10	61	7.4	6.7	2.2	-	0.023	0.658
8/11/2003	T10	36	6.4	4.6	2.0	0.025	0.030	0.652
11/21/2003	T10	69	16.4	20.1	5.1	0.085	0.030	0.644
7/6/2003	X10	82	8.3	8.9	2.4	0.103	0.042	0.626
8/11/2003	X10	93	12.8	7.9	2.9	-	-	-
11/21/2003	X10	138	19.0	39.2	10.3	0.216	0.070	0.770
7/6/2003	C10	53	5.2	5.8	2.0	-	-	-
8/11/2003	C10	29	6.9	8.0	2.2	-	-	-
11/21/2003	C10	62	6.6	13.6	2.4	0.047	0.025	0.672

Table S-2. Sampling day weather conditions at the 5 sampling sites in the MCMA. Weather data obtained from the atmospheric monitoring network of Mexico City (<http://www.sma.df.gob.mx/simat/>).

Date	Parameter	Sampling site				
		M10	P10	T10	X10	C10
3/20/2003 (Thursday)	Temperature (°C)	18.5	-	-	-	-
	Relative humidity (%)	23	-	-	-	-
	Wind direction	241	-	-	-	-
	Wind Speed (m s ⁻¹)	1.6	-	-	-	-
4/19/2003 (Saturday)	Temperature (°C)	21.4	-	-	-	-
	Relative humidity (%)	47	-	-	-	-
	Wind direction	178	-	-	-	-
	Wind Speed (m s ⁻¹)	1.3	-	-	-	-
5/13/2003 (Tuesday)	Temperature (°C)	20.8	-	-	-	-
	Relative humidity (%)	44	-	-	-	-
	Wind direction	220	-	-	-	-
	Wind Speed (m s ⁻¹)	2.0	-	-	-	-
7/6/2003 (Monday)	Temperature (°C)	17.6	16.7	16.4	17.6	17.7
	Relative humidity (%)	69	70	76	74	67
	Wind direction	182	217	267	158	155
	Wind Speed (m s ⁻¹)	1.3	1.1	1.5	1.2	0.8
8/11/2003 (Monday)	Temperature (°C)	18.3	17.0	18.2	18.6	17.6
	Relative humidity (%)	62	64	53	61	62
	Wind direction	147	138	161	113	133
	Wind Speed (m s ⁻¹)	1.2	1.1	1.9	1.7	0.9
11/21/2003 (Friday)	Temperature (°C)	17.2	16.0	16.5	17.1	16.6
	Relative humidity (%)	38	42	32	40	41
	Wind direction	113	199	229	116	127
	Wind Speed (m s ⁻¹)	0.7	1.0	1.5	1.2	0.7

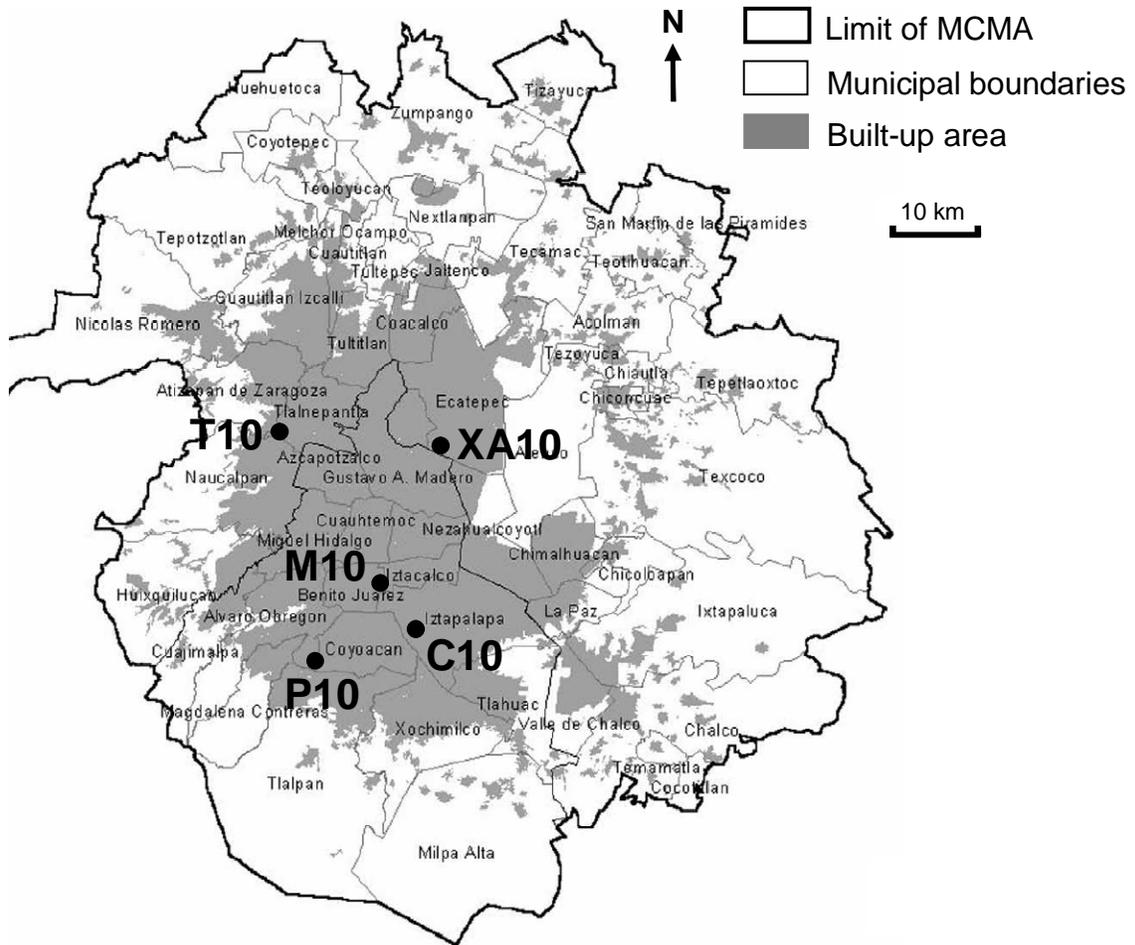


Figure S-1. Location of sampling sites in the MCMA.

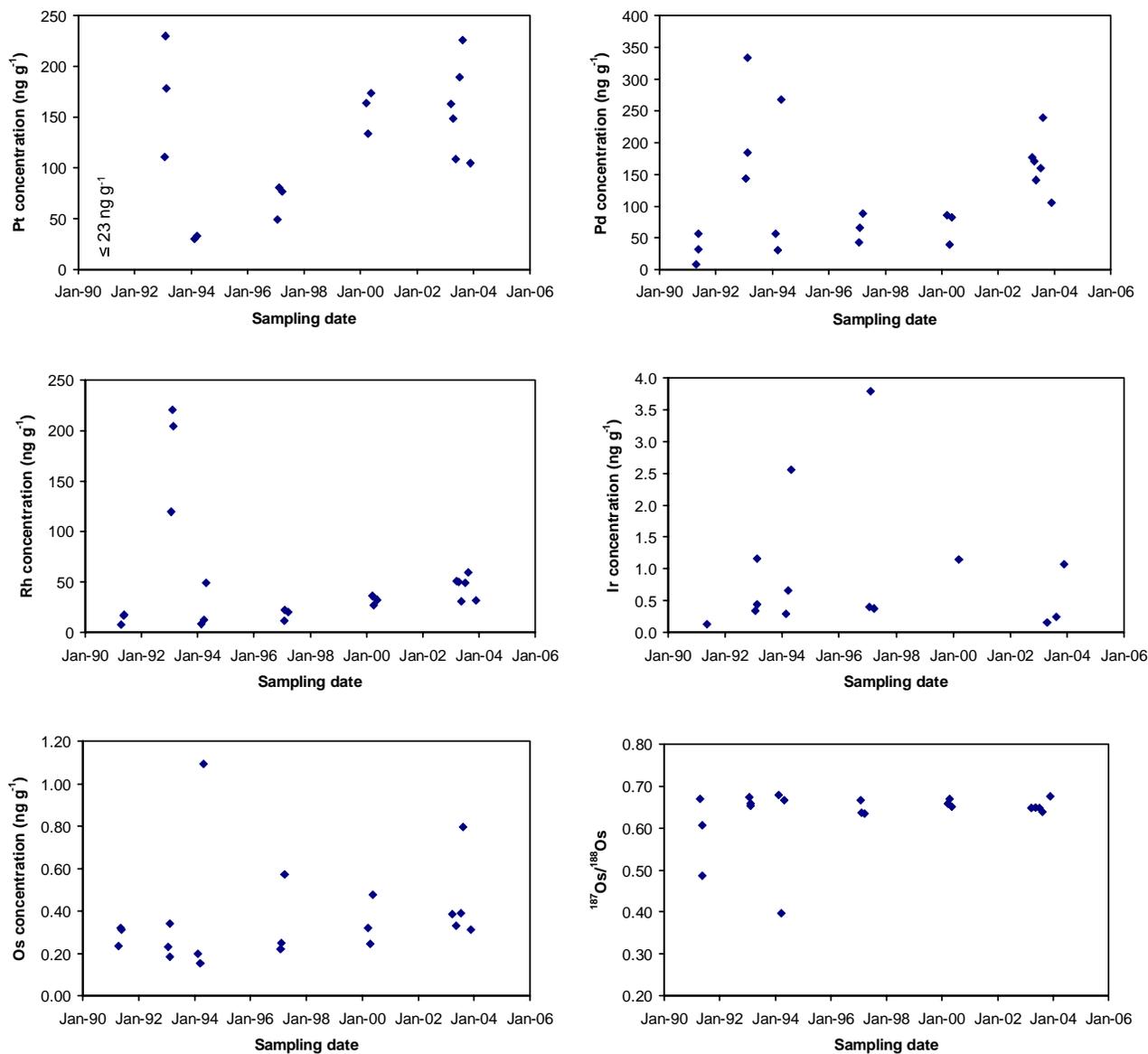


Figure S-2. PGE concentrations relative to PM_{10} mass and $^{187}\text{Os}/^{188}\text{Os}$ at the Merced site.