

Figure captions

Figure S1. Species Hg monitoring in Nyingchi

Figure S2 Trajectories during ISM1 period

Table captions

Table S1 Statistical metrics of species Hg, meteorological factors, and other pollutants

Table S2 Cluster concentration & ratio during PISM and ISM1-3 periods

Figure S1



Figure S2

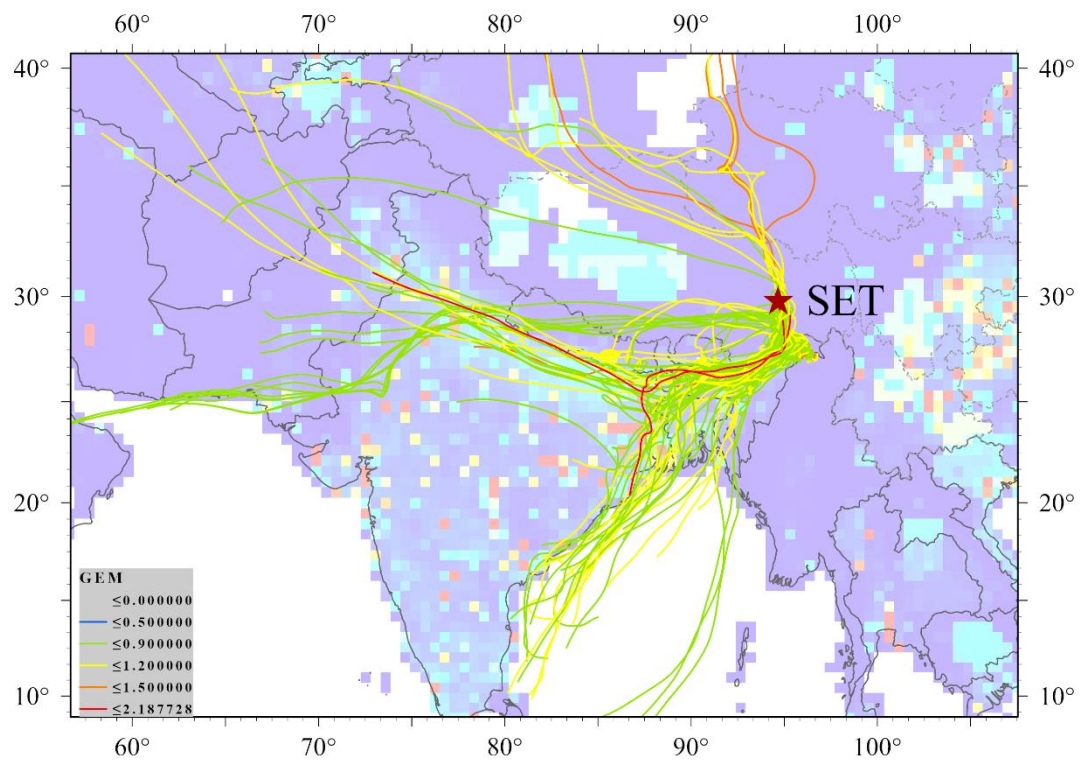


Table S1 Statistics metrics of species Hg, meteorological factors and other pollutants

Period	Statistics	GEM	PBM	GOM	Temp	Hum	Wind_Speed	Solar_Rad.	CO	NO ₂	O ₃	PM _{2.5}	SO ₂
		(ng)	(pg)	(pg m ⁻³)	(°C)	(%)	(m s ⁻¹)	(W m ⁻²)	(mg)	(µg m ⁻³)	(µg m ⁻³)	(µg m ⁻³)	(µg)
PISM	mean	1.2	11.37	13.5	6.05	72.63	0.61	182.35	0.46	6.77	86.5	8.69	3.76
	sd	0.35	4.79	7.28	5.46	22	1.04	282.68	0.18	3.2	22.68	4.42	2.88
	median	1.17	10.91	13.57	5.8	82	0	11	0.45	6	88	8	3
	min	0.5	0.3	0.62	-9.3	14	0	0	0.2	3	20	1	1
	max	5.13	24.58	48.06	20.7	96	6.3	1346	3.8	24.5	156	59	64.5
ISM1	mean	0.92	15.43	18.24	8.6	81.85	0.69	162.79	0.38	7.19	87.27	11.31	7.54
	sd	0.23	7.92	29.16	3.5	15.14	1.09	248.07	0.07	2.94	23.26	7.63	0.9
	median	0.9	15.07	10.9	7.9	88	0	25	0.4	6	88.5	9.5	7.5
	min	0.5	0.38	0.9	-2.2	16	0	0	0.2	3	26	1	6
	max	2.59	50.21	270.24	20.2	96	6.7	1502	0.6	22	147.5	55	27
ISM2	mean	0.92	7.88	13.54	12.9	85.7	0.29	164.7	0.44	7.38	55.27	6.62	8.61
	sd	0.18	3.4	5.51	3.1	12.56	0.73	246.89	0.06	2.72	25.58	1.84	1.75
	median	0.91	7.35	12.92	12.2	92	0	28	0.45	6.5	52	6.5	8.5
	min	0.5	1.29	3.64	-0.1	36	0	0	0.3	3	6	3	5
	max	2.1	29.32	105.04	23.9	97	6.7	1503	0.7	19.5	136.5	19	38.5
ISM3	mean	1.04	3.85	6.01	13.97	80.71	0.17	199.79	0.36	6.71	50.34	6.58	7.21
	sd	0.21	3.59	4.95	4.43	16.52	0.54	298.95	0.06	2.53	22.26	2.05	4.06
	median	1.03	2.36	4.39	12.7	89	0	14	0.35	6	49.5	6.5	8
	min	0.52	0.01	0.03	3.8	27	0	0	0.25	4	6.5	1.5	4
	max	1.82	16.12	25.72	27.7	97	5.4	1394	0.55	20.5	114	23.5	75.5

Table S2

Period	GEM	Ratio
PISM	1.05	61.28%
	1.20	10.64%
	1.21	24.68%
	1.10	3.40%
ISM1	0.88	61.45%
	0.88	9.54%
	0.96	29.01%
ISM2	0.81	3.17%
	0.90	70.34%
	0.94	19.40%
	1.01	4.85%
	1.00	2.24%
ISM3	1.12	46.20%
	1.13	5.98%
	1.05	2.72%
	0.97	45.11%