atmosphere

Supplementary Information

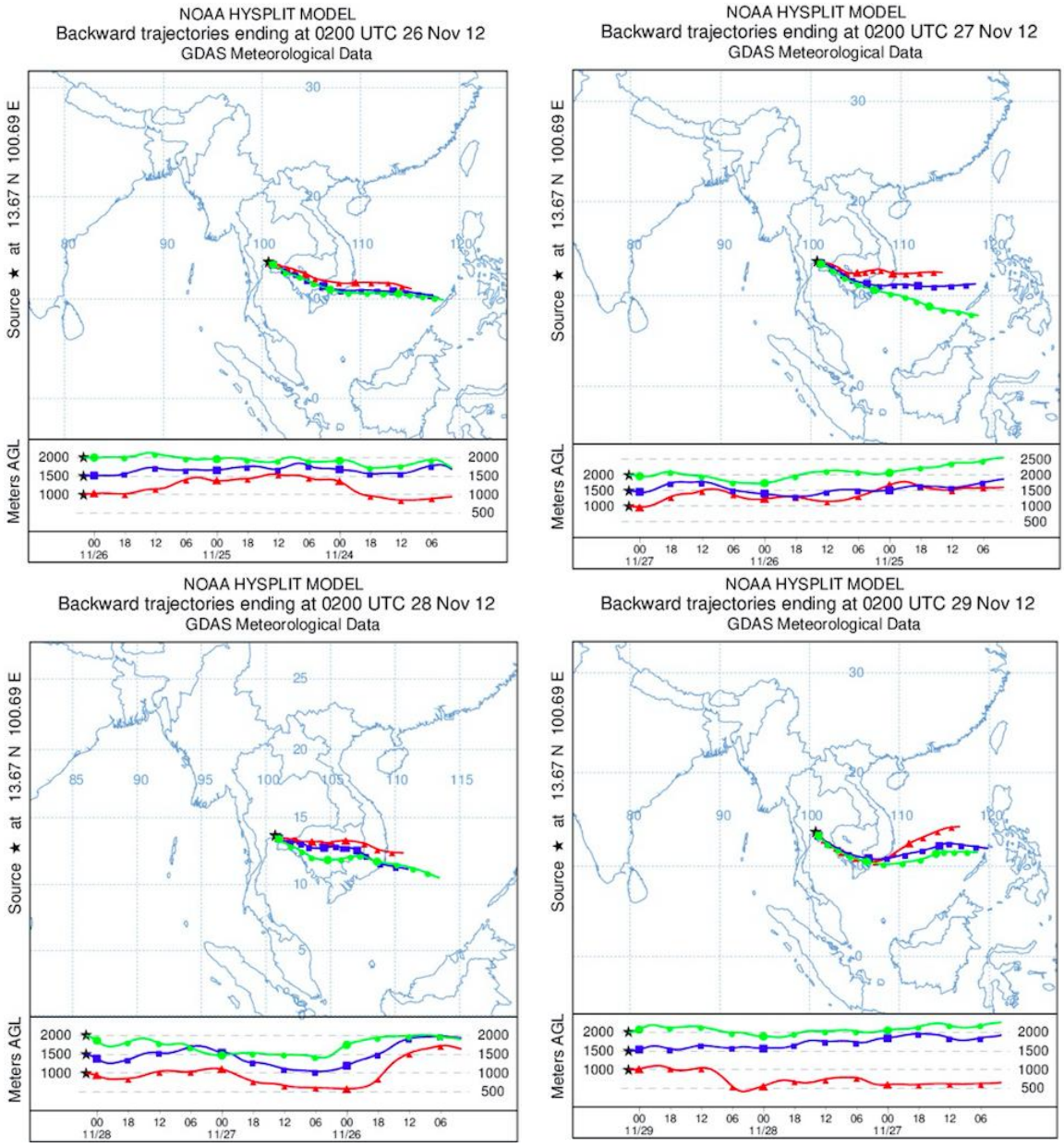

Figure. S1. Back-trajectory analysis from 26 November to 29 November 2012.

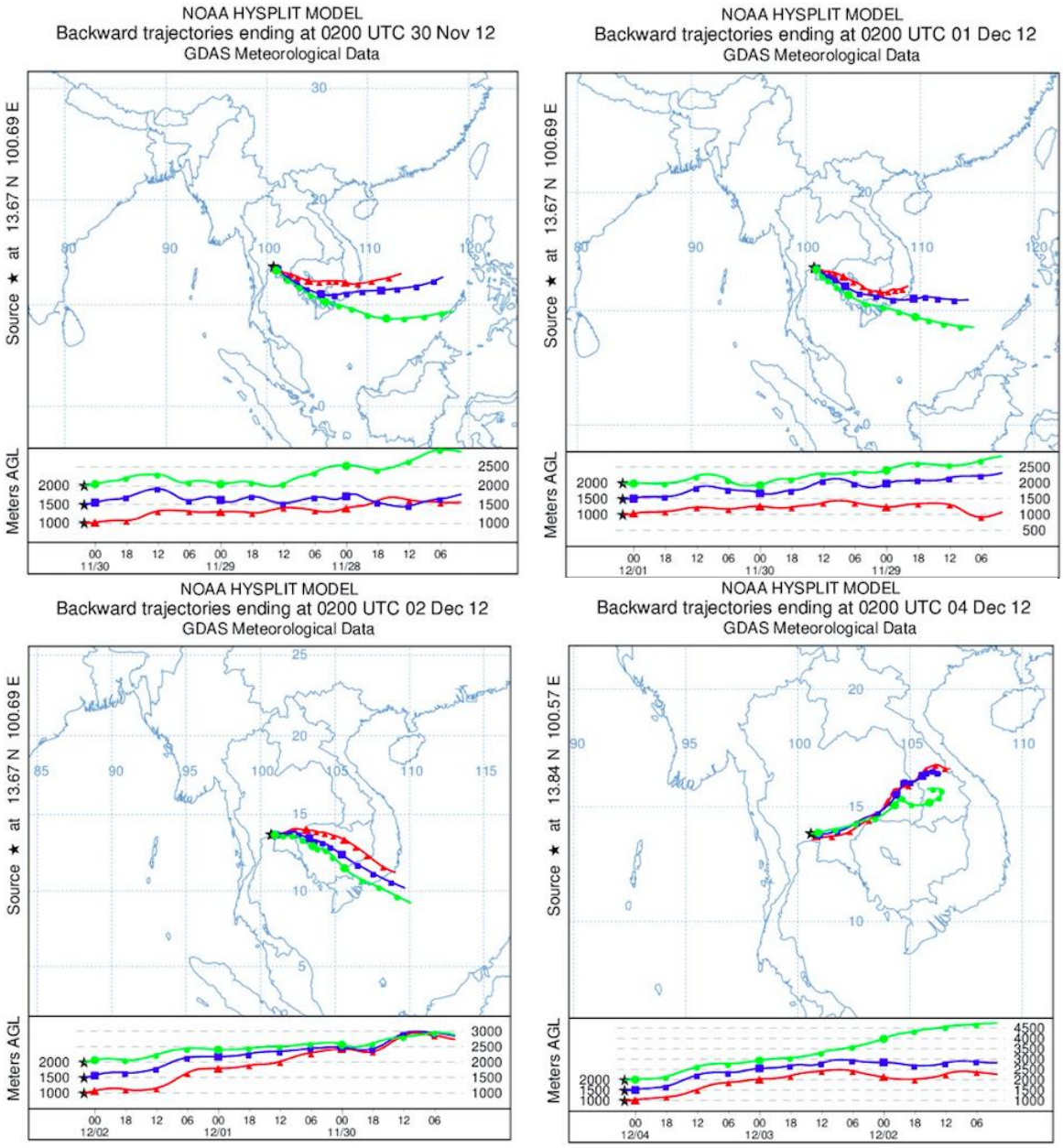

Figure S2. Back-trajectory analysis from 30 November to 4 December 2012.

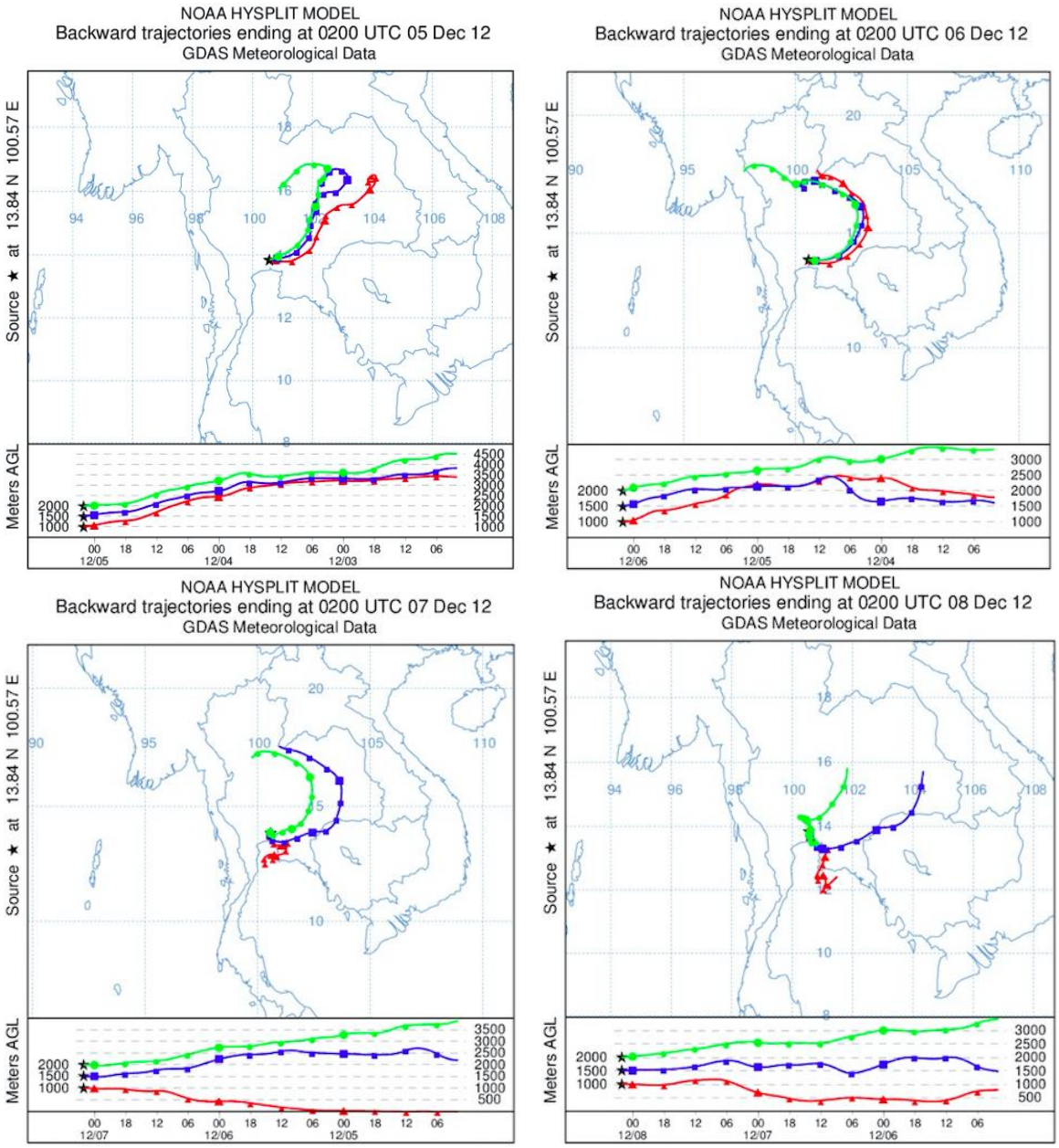

Figure S3. Back-trajectory analysis from 5 December 8 to December 2012.

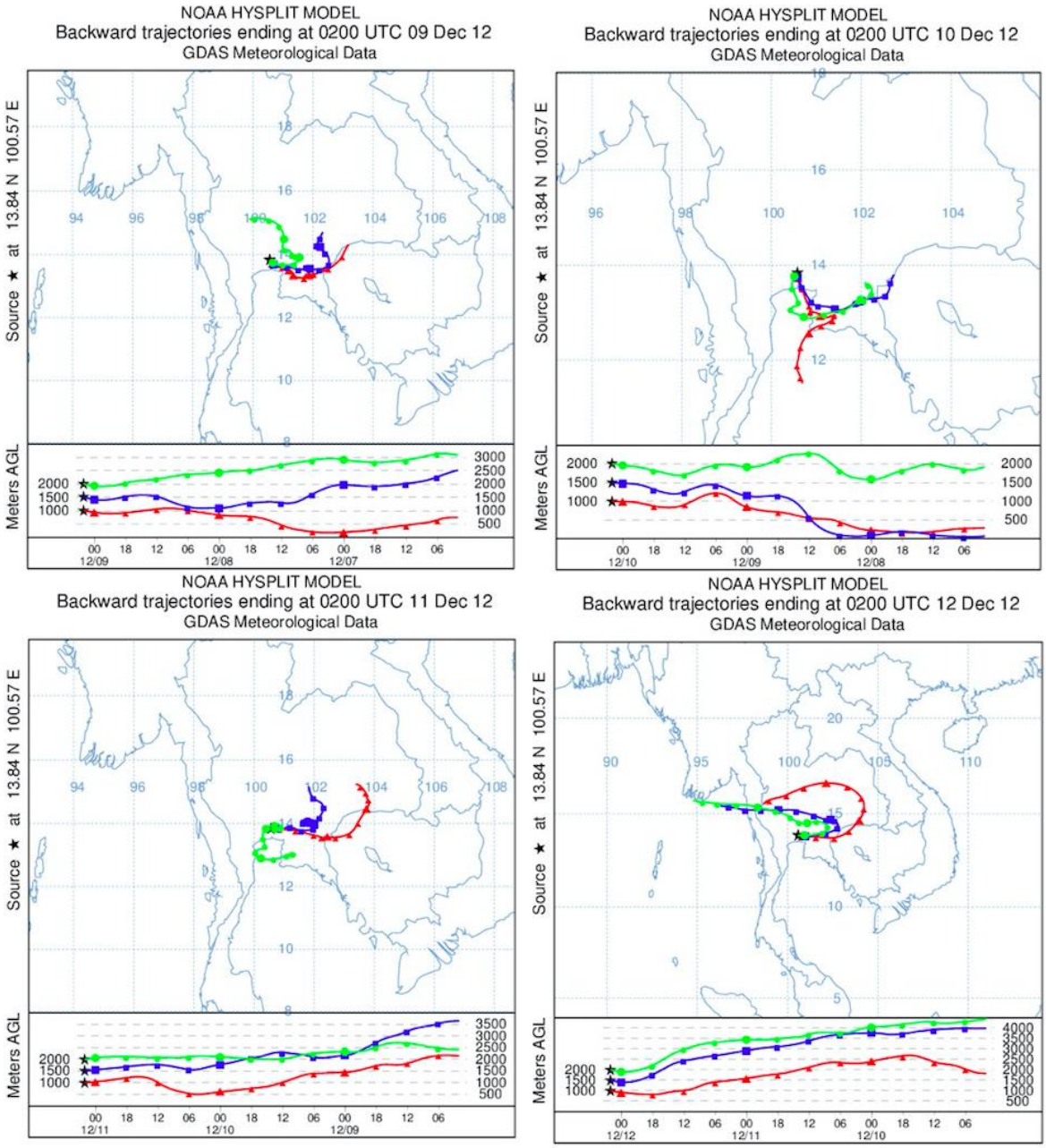

Figure S4. Back-trajectory analysis from 9 December to 12 December 2012.

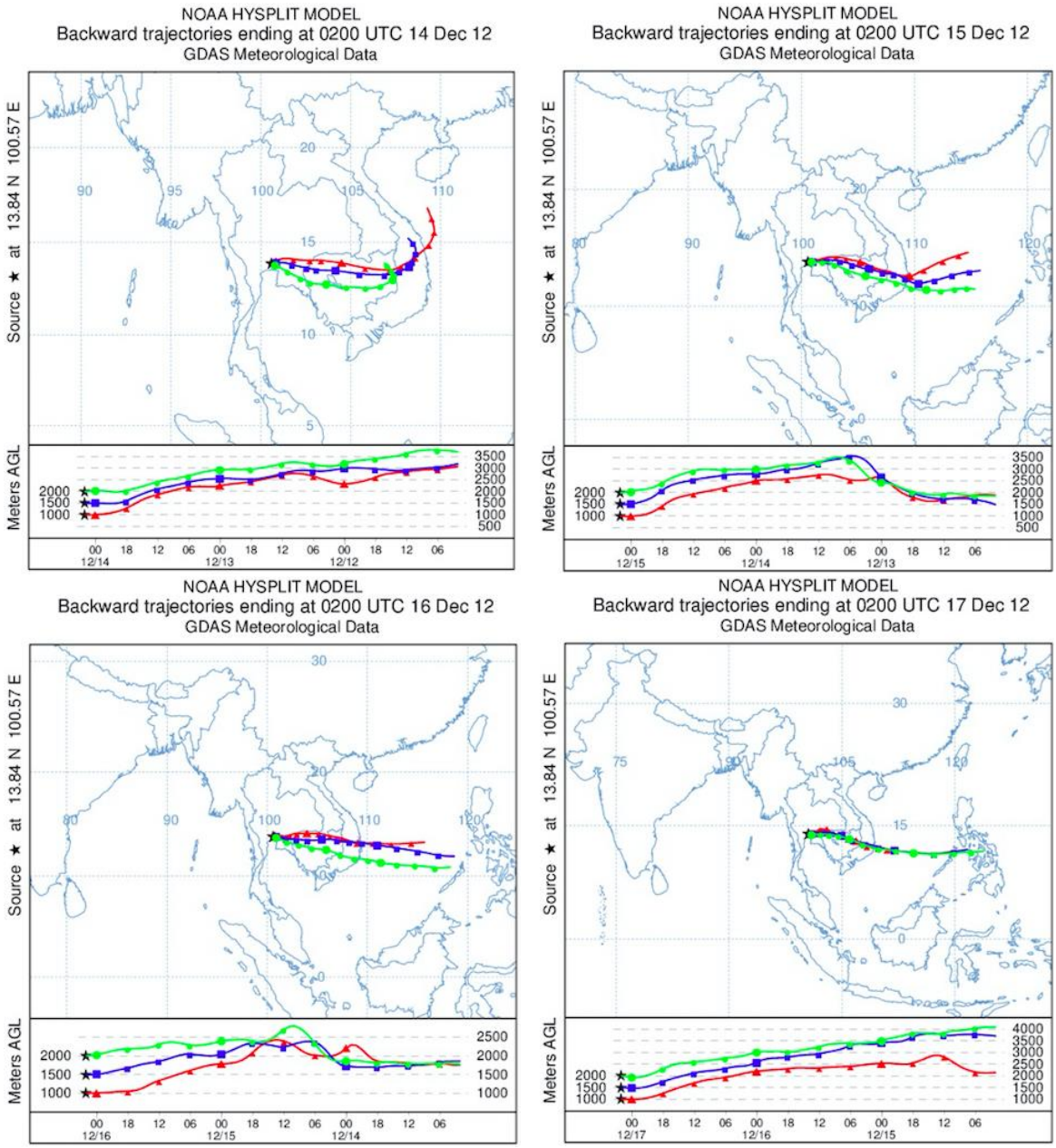

Figure S5. Back-trajectory analysis from 14 December to 17 December 2012.

Table S1. Analytical performance obtained by ICP-MS.

Element	Analytical Mode [a]	Mass/Charge	Detection Limit [b]	Unit	Standard Solution
Li	NG	7	4.72	ng L^{-1}	XSTC-331
Be	NG	9	2.70	ng L^{-1}	XSTC-331
Na	H2	23	1.30	µg L^{-1}	XSTC-331
Mg	He	24	0.427	µg L^{-1}	XSTC-331
Al	He	27	0.117	µg L^{-1}	XSTC-331
K	H2	39	1.02	µg L^{-1}	XSTC-331
Ca	H2	40	0.601	µg L^{-1}	XSTC-331
Sc	He	45	1.35	ng L^{-1}	XSTC-1
V	He	51	0.927	ng L^{-1}	XSTC-331
Cr	He	53	5.28	ng L^{-1}	XSTC-331
Mn	He	55	9.11	ng L^{-1}	XSTC-331
Fe	He	56	73.9	ng L^{-1}	XSTC-331
Co	He	59	0.937	ng L^{-1}	XSTC-331
Ni	He	60	10.6	ng L^{-1}	XSTC-331
Cu	He	63	15.0	ng L^{-1}	XSTC-331
Zn	He	66	40.0	ng L^{-1}	XSTC-331
As	He	75	2.66	ng L^{-1}	XSTC-331
Se	H2	78	11.5	ng L^{-1}	XSTC-331
Rb	He	85	4.13	ng L^{-1}	XSTC-331
Sr	He	88	1.96	ng L^{-1}	XSTC-331
Y	He	89	2.50	ng L^{-1}	XSTC-1
Zr	He	90	0.171	ng L^{-1}	XSTC-8
Mo	He	95	1.75	ng L^{-1}	XSTC-8
Cd	He	111	2.25	ng L^{-1}	XSTC-331
Sn	He	118	1.53	ng L^{-1}	XSTC-7
Sb	He	121	0.494	ng L^{-1}	XSTC-7
Cs	He	133	0.922	ng L^{-1}	XSTC-331
Ba	He	137	2.13	ng L^{-1}	XSTC-331
Tl	He	205	0.657	ng L^{-1}	XSTC-331
Pb	He	208	1.44	ng L^{-1}	XSTC-331
Bi	He	209	10.5	ng L^{-1}	XSTC-331

[a] Determination was performed under three different analytical modes. NG = non-gas mode, which was performed without collision/reaction cell system.

[b] Values were defined as three times the standard deviation of ten calibration blank analyses. H_2 = reaction mode using hydrogen gas. He = collision mode using helium gas.