

Supplemental Table S6. Mercury isotopic composition of precipitation samples.

Sample Date	Hg Conc.				$\delta^{204}\text{Hg}$	$2\sigma$	$\delta^{202}\text{Hg}$	$2\sigma$	$\delta^{201}\text{Hg}$	$2\sigma$	$\delta^{200}\text{Hg}$	$2\sigma$	$\delta^{199}\text{Hg}$	$2\sigma$	$\Delta^{204}\text{Hg}$	$2\sigma$	$\Delta^{201}\text{Hg}$	$2\sigma$	$\Delta^{200}\text{Hg}$	$2\sigma$	$\Delta^{199}\text{Hg}$	$2\sigma$
(yymmdd)	(pg/g)	$n_1$	$n_2$	%Rec.	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)	(‰)
100925	3.7	1	1	78.3	-1.66	0.17	-0.74	0.06	-0.11	0.08	-0.18	0.08	0.32	0.06	-0.55	0.11	0.45	0.06	0.19	0.06	0.50	0.06
101014	17.6	1	1	102.3	-0.85	0.17	-0.39	0.06	0.32	0.08	-0.03	0.08	0.72	0.06	-0.26	0.11	0.61	0.06	0.17	0.06	0.82	0.06
101025	7.5	1	1	98.3	-0.19	0.17	0.06	0.06	0.44	0.08	0.29	0.08	0.66	0.06	-0.28	0.11	0.40	0.06	0.26	0.06	0.64	0.06
101029	4.0	1	1	102.3	-0.59	0.17	-0.41	0.06	0.19	0.08	-0.02	0.08	0.17	0.06	0.03	0.11	0.50	0.06	0.19	0.06	0.28	0.06
101118	7.9	1	1	103.0	-0.53	0.17	-0.23	0.06	0.09	0.08	-0.01	0.08	0.11	0.06	-0.18	0.11	0.26	0.06	0.11	0.06	0.16	0.06

Notes: Sample date refers to the date of precipitation event. Here,  $n_1$  denotes the number of separate analyses on an individual preparation, and  $n_2$  denotes the number of individual preparations (procedural replicates, see *Methods*). The percent recovery (%Rec) shows recovery of mercury during the purge and trap procedure for preparation of samples for isotopic analysis. The  $2\sigma$  for all samples shows either the 2SD of average of session averages for UM-Almaden, or the 2SE of average of session averages for procedural standards and reference materials, whichever uncertainty was largest (see *Methods: Mercury Isotope Analysis: Reporting Analytical Uncertainty*).