

Additional File 1

Expected lag times for each crater and vent

We estimated the lag times for the infrasound arrivals at KREB station to those at EBQ7 station from South Crater vents (Y1, Y2a, Y2b, and Y3) and West Crater vents (W1–W7). We assumed the atmospheric temperature to be in the range of 272–296 K (see the main text for details). They are summarized in Table A1.

		<i>Iwo-yama South Craters</i>				<i>Iwo-yama West Crater</i>						
		Y1	Y2a	Y2b	Y3	W1	W2	W3	W4	W5	W6	W7
Sound velocity [m/s]	330	1.62	1.58	1.55	1.53	0.59	0.66	0.75	0.73	0.79	0.85	0.73
	331	1.62	1.57	1.55	1.53	0.59	0.66	0.74	0.73	0.79	0.85	0.73
	332	1.61	1.57	1.54	1.52	0.59	0.65	0.74	0.73	0.78	0.85	0.72
	333	1.61	1.56	1.54	1.52	0.59	0.65	0.74	0.73	0.78	0.84	0.72
	334	1.60	1.56	1.53	1.51	0.59	0.65	0.74	0.73	0.78	0.84	0.72
	335	1.60	1.55	1.53	1.51	0.58	0.65	0.73	0.72	0.78	0.84	0.72
	336	1.59	1.55	1.52	1.50	0.58	0.65	0.73	0.72	0.77	0.84	0.71
	337	1.59	1.55	1.52	1.50	0.58	0.64	0.73	0.72	0.77	0.83	0.71
	338	1.58	1.54	1.51	1.49	0.58	0.64	0.73	0.72	0.77	0.83	0.71
	339	1.58	1.54	1.51	1.49	0.58	0.64	0.73	0.72	0.77	0.83	0.71
	340	1.57	1.53	1.50	1.48	0.58	0.64	0.72	0.71	0.77	0.83	0.71
	341	1.57	1.53	1.50	1.48	0.57	0.64	0.72	0.71	0.76	0.82	0.70
	342	1.56	1.52	1.50	1.48	0.57	0.64	0.72	0.71	0.76	0.82	0.70
	343	1.56	1.52	1.49	1.47	0.57	0.63	0.72	0.71	0.76	0.82	0.70
	344	1.56	1.51	1.49	1.47	0.57	0.63	0.71	0.70	0.76	0.82	0.70
345	1.55	1.51	1.48	1.46	0.57	0.63	0.71	0.70	0.75	0.81	0.70	

Table A1. Table of the expected lag times in seconds.