

S2 Table.

Sample ID	Lab number	Tufa type	²³⁸ U ng/g	²³⁰ Th/ ²³⁸ U	2s	²³⁴ U/ ²³⁸ U	2s	²³² Th/ ²³⁸ U	2s	²³⁰ Th/ ²³² Th	U-Th age (ka)	2s	% error
18-10.2	UME190515-620	dome	174	0.088	0.001	2.443	0.006	0.013409	0.000268	6.5	3.0	0.9	30
GHN-2	UMD160926-401	cascade	75	0.184	0.002	2.728	0.009	0.005083	0.000089	36.2	7.3	0.3	4.1
GHS-5	UMD160926-436	cascade	263	0.251	0.002	1.866	0.007	0.054496	0.000692	4.6	10.7	4.9	45.8
17-8.1	UMD180821-622	terrace	363	0.707	0.002	1.895	0.003	0.008000	0.000104	88.4	48.3	0.7	1.4
17-8.2	UMD180821-629	terrace	273	0.528	0.002	1.894	0.003	0.002214	0.000019	238.3	34.4	0.2	0.6
17-8.3	UME190515-202	terrace	321	0.621	0.002	1.896	0.005	0.000184	0.000004	3367.7	41.8	0.2	0.5
17-8.4	UME190515-252	terrace	298	0.641	0.003	1.903	0.005	0.000142	0.000003	4516.0	43.2	0.3	0.7
17-8.5	UME190515-255	terrace	307	0.618	0.003	1.895	0.005	0.000127	0.000003	4858.7	41.6	0.3	0.7
17-8.6	UME190515-535	terrace	459	0.503	0.004	1.899	0.006	0.002320	0.000046	216.6	32.5	0.4	1.2
GHN-1	UMD160926-523	rim pool	236	0.576	0.005	1.863	0.006	0.000805	0.000072	716.3	39.1	0.4	1.0
GHN-1.2	UME190515-307	rim pool	234	0.543	0.005	1.859	0.006	0.000080	0.000002	6818.5	36.6	0.4	1.1
GHN-1.3	UME190515-370	rim pool	240	0.551	0.005	1.868	0.007	0.000051	0.000001	10846.4	37.0	0.4	1.1
GHS-6	UMD160926-446	rim pool	212	0.864	0.007	1.914	0.007	0.020890	0.000507	41.3	60.4	1.8	3.0
GHS-6.1	UMD160926-438	rim pool	180	0.852	0.005	1.913	0.007	0.016957	0.000394	50.3	59.7	1.5	2.5
GHS-6.2	UME190515-547	rim pool	190	0.873	0.003	1.928	0.005	0.003473	0.000069	251.3	61.9	0.5	0.8
GHS-6.3	UME190516-210	rim pool	158	0.798	0.003	1.882	0.004	0.050119	0.001002	15.9	53.1	4.2	7.9
18-7	UME190515-298	terrace	847	0.749	0.003	1.833	0.005	0.014829	0.000297	50.5	53.5	1.3	2.4
18-13.1	UME190515-641	cascade	249	1.174	0.003	2.654	0.007	0.017183	0.000344	68.3	58.6	1.0	1.7
18-13.2	UME190515-647	cascade	226	1.313	0.003	2.742	0.007	0.014022	0.000280	93.6	65.0	0.8	1.2
18-13.3	UME190515-648	cascade	132	1.287	0.004	2.646	0.007	0.002075	0.000041	620.5	67.2	0.4	0.6
18-13.4	UME190515-651	cascade	195	1.483	0.004	2.933	0.008	0.011902	0.000238	124.6	69.8	0.7	1.0
18-14.1	UME190515-401	cascade	83	1.308	0.009	2.644	0.009	0.005376	0.000108	243.4	68.4	0.7	1.0
18-14.2	UME190515-405	cascade	139	1.219	0.006	2.551	0.008	0.026423	0.000528	46.1	64.3	1.6	2.5
18-14.3	UME190515-411	cascade	98	1.351	0.008	2.705	0.009	0.003077	0.000062	439.1	69.4	0.7	1.0

18-14.4	UME190515-502	cascade	180	1.481	0.006	2.876	0.008	0.031531	0.000631	47.0	70.6	1.7	2.4
18-15.1	UME190515-381	cascade	137	1.319	0.007	2.668	0.008	0.001688	0.000034	781.0	68.5	0.6	0.9
18-15.2	UME190515-383	cascade	95	1.317	0.011	2.587	0.010	0.001764	0.000035	746.9	71.3	0.9	1.3
18-15.3	UME190515-389	cascade	313	1.522	0.005	2.940	0.008	0.006626	0.000133	229.7	72.3	0.5	0.7
18-17.1	UME190516-208	cascade	154	2.176	0.006	3.194	0.006	0.074913	0.001498	29.0	102.9	3.2	3.1
18-17.2	UME190516-233	cascade	148	2.085	0.007	3.102	0.006	0.047194	0.000944	44.2	102.1	2.1	2.1
18-17.3	UME190516-235	cascade	142	2.217	0.006	3.289	0.006	0.023170	0.000463	95.7	103.3	1.1	1.1
18-16.1	UME190516-259	cascade	164	2.586	0.008	3.614	0.007	0.078583	0.001572	32.9	110.6	3.0	2.7
18-16.2	UME190516-283	cascade	177	2.404	0.007	3.476	0.007	0.054789	0.001096	43.9	105.9	2.2	2.1
